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**An LF-driven Theory of Scrambling in
Hungarian Infinitival Constructions**

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Introduction

The present study is the result of an attempt to reconcile the claim that infinitival clauses in Hungarian project a full-fledged CP with apparent counterexamples. Hungarian infinitival clauses can have typical left peripheral projections of their own, which in a lot of cases can only appear in the strict order also found in finite clauses. In other cases, however, infinitival embedded clauses do not show these restrictions, moreover, constituents of the finite clause can also appear interspersed with constituents of the infinitival clause, which suggests that the infinitival clause may not be so independent after all. Very often it is the case that sentences containing infinitival complements show mono-clausal and bi-clausal properties at the same time. This indicates that we need some kind of a clause union mechanism to account for the behaviour of these structures. Restructuring that accounts for these data cannot be mono-clausal since it would fail to explain the bi-clausal properties of the structures under discussion. Adopting Hinterhölzl's (1999, 2006) bi-clausal approach to restructuring and his scope-based account of scrambling, an analysis will be proposed that captures the seemingly contradictory properties of the relevant infinitives. The dissertation argues that the claim that infinitival clauses in Hungarian are also full-fledged CPs can be maintained. To account for the word order differences I propose that in Hungarian infinitival clauses, as opposed to finite ones, the verb can overtly move to the head position of QP as well, while in finite clauses the verb can move to the head position of FP only. The order within the C-domain of infinitives is also restricted, different orders arise after movement to the scrambling field of the finite verb has taken place, which is driven by scope considerations. Movement to the finite clause is made possible after restructuring, which is necessitated by the temporal deficiency and the embedded nature of the infinitival clause.

It is a central problem of Hungarian and of scrambling languages in general that during the derivation a string has to be associated with a structure that is partly configurational, partly apparently flat, which raises important methodological questions for earlier generative frameworks. To my knowledge the first account for Hungarian where the symptoms of configurationality and non-configurationality displayed by one and the same string can be coherently accounted for is that of É. Kiss (2007) who claims

that in the framework of phase theory there are means to avoid violating basic tenets of generative grammar. The mechanism proposed by her assumes “the collapse of the lexically extended verb phrase after its head had been extracted into a functional head position, and the possible reordering of the major constituents of the flattened verbal projection in observance of Behaghel’s (1932) Law of Growing Constituents” (É. Kiss 2007). The present dissertation offers an alternative to her analysis, where the primary aim is also accounting for the observed configurational – non-configurational dichotomy. Based on evidence coming from the structure of sentences containing infinitival embedded clauses I argue that it is the scrambling field in the left periphery of the finite clause where constituents of the finite and the infinitival clause can co-occur. The resulting word order is argued to be motivated by considerations of scope and information structure, where Behaghel’s Law of Growing Constituents can also play a role as a phonological filter once LF requirements have been taken care of.

This study presents an LF-driven approach to scrambling. One of the central problems of approaches to scrambling is that it seems impossible to identify whether scrambling is the result of A-movement or A’-movement (or whether it is the result of movement at all (Corver and Riemsdijk 1994)). The emergence of the problem itself might suggest that the attempt to account for scrambling in terms of these familiar mechanisms is simply misguided. It is impossible to make a difference because this is not the relevant difference, but a completely different mechanism is responsible for free word order phenomena. Following Bobaljik and Wurmbrand (to appear) I also claim that an account that takes LF first and derives PF from LF can give a more straightforward account of the data both in Hungarian and cross-linguistically. Mechanisms responsible for structure building and scrambling mechanisms operate based on different principles. Scrambling mechanisms are either supported by particular morphological properties of a given language (which, then, is going to be a language allowing scrambling) or not. In the latter case, the result is a language with rigid word order disallowing scrambling.

The approach is completely in line with general properties of the Hungarian language and other languages that are claimed to “wear their LFs on their sleeves”. However, even in these languages, the surface order of constituents does not always reflect scopal order. To explain this it will be proposed, again following mainly

Bobaljik and Wurmbrand (to appear) that different constraints can block the scope-based ordering of constituents. The study includes an extensive discussion of what these constraints can be in Hungarian and how exactly they work, where information structure considerations also play a central role.

A proper account of scrambling should not only account for the motivation of scrambling but also provide mechanisms deriving its effects. The dissertation proposes that word order in the scrambling field is the result of two independent sources: a) the partial ordering restrictions of Bouma (2003) that linearise constituents based on their scope properties and b) mechanisms that interact with scope, e.g. information structure considerations or restrictions on word order.

Scrambling, then, is not assumed to be an optional process, but defined by the scope and information structure properties of constituents. Apparent optionality arises when a given constituent is specified for neither scope nor information structure. In this case the algorithm sensitive only to the aforementioned features will place them in different positions in the linear string, since it will not affect interpretation. If there is considerable difference in the phonological weight of these constituents with no relevant LF features, Behaghel's Law may apply (É. Kiss 2007).

The underlying assumptions of the dissertation start out from a minimalist perspective where core structure and structural relationships are defined based the familiar notions X-bar Theory (in a more restricted version, that of Bare Phrase Structure), and feature checking mechanisms. Scrambling, however, does not easily fit into the minimalist account, either understood as optional free base-generation of constituent order or as a scope-driven process.

In this study, following Hinterhölzl (1999) and lots of other proposals (for detailed discussion see e.g. Corvert and Riemsdijk 1994) I also argue against the optional nature of scrambling, but a scope-driven account also runs into a well-known problem, that of relativity: scope features are not absolute features, constituents have wide or narrow scope relative to each other. Scope features, thus, have properties different from the features that can undergo checking in the structure-building component. For this reason I propose that scrambling should be described as driven by mechanisms that are different from the mechanisms of the structure-building component, and actually follow it in languages with the appropriate properties. I will

remain agnostic about the exact nature of these properties throughout the dissertation, but I share similarly non-committed proposals of previous approaches in assuming them to be morphological in nature and at least related to overt Case-marking.

Another problem well-established in the literature and partly, but not exclusively related to scope, is the problem of look-ahead in languages reflecting scope in the surface order of strings: if LF proceeds either independently of PF or following it, how is it possible that LF-related information can be reflected in word order. Similar problems emerge when we make an attempt to account e.g. for stress-assignment to focussed constituents: when main stress is assigned to the focussed constituent, information about which constituent is focussed should, but under most of the accounts is not supposed to be available at the relevant point of the derivation. An approach claiming that it is LF that defines PF has no difficulty in accounting for these types of data.

The present study argues for an LF-driven account of scrambling based on Hungarian data containing infinitival embedded clauses, which can offer more insight about what may be going on in the scrambling field. On the one hand, infinitival clauses are claimed to have an internal structure of their own, on the other hand they can appear in several positions in the sentence. Which constituents can move and where can be especially revealing, among others from the perspectives of a scrambling theory. As a result, we can come up with an account that can connect the different types of scrambling as well. In Hungarian generative grammar the mechanism of scrambling is usually introduced to account for only the word order of constituents in the post-verbal field, and constituents moving to the left periphery of the clause to check their operator features are claimed to be distinct from the process of scrambling. In the present study I work with a broader conception of scrambling that includes operator-movement to the left periphery. The subsequent chapters present data and discussions that support this approach.

In what follows I briefly review the structure of the dissertation and the main claims of the individual chapters.

The study is divided into two main parts. The first part presents the constructions relevant for my discussion from Hungarian, Italian, Basque, West Germanic and

Swedish. A number of Hungarian structures containing infinitival embedding are introduced and described for which I offer an account in the second part of the dissertation. Besides offering an empirically rich discussion, this part also presents different approaches to restructuring, since the data attested call for a clause union analysis in spite of the claim that infinitival clauses have their own independent structure, which I am not going to refute in the present study either.

Chapter 2, where I present the relevant properties of Hungarian infinitival constructions, is dominantly descriptive in nature. Since I claim that the underlying structure of infinitival clauses is actually the structure that underlies finite clauses as well, a short account of the structure of finite clauses initiates the discussion. The claim that the underlying structure of finite and infinitival clauses is the same, however, does not mean that the constructions themselves behave the same way, but the expectation is that even the differences can be derived from a common base. In this study I propose that differences between finite and infinitival clauses are the result of the obligatorily embedded nature of infinitival constructions¹. A comparative line of thought is going to be maintained throughout the dissertation, and some novel differences pointed out and discussed. Special emphasis is laid on the left periphery of finite and infinitival clauses in which I follow the strict structural restriction on topic(s), quantified element(s), focussed constituent order (Rizzi 1997, Beghelli and Stowell 1997, Szabolcsi 1997 for Hungarian).

The chapter presents data that constitute the subject matter of the present study and points out the central problems the dissertation aims to solve in later chapters. One of the core questions hinges on the mono-clausal–bi-clausal dichotomy in accounts of restructuring, so a substantial portion of the chapter is devoted to constructions that

¹ As also concluded by Bartos (2002) in his discussion of root infinitives, where circumstantial modality infinitives are claimed to be embedded into a Mod projection functioning as a superordinate clause. In (i), the sentence is fully grammatical without the bracketed constituent, which then seems to be a root infinitive. The meaning of the sentence and further factors discussed in Bartos, however, call for the Mod-analysis. (Here I disregard complexities to do with command infinitives.)

- (i) A hátsó sor-ok-ban is jól (lehet) hallani, amit mondasz.
 the back row-PL-INESS too well (possible) hear-INF what-ACC say-2SG
 ‘It can be heard well even in the back rows what you are saying.’

support either a mono-clausal or a bi-clausal account of sentences containing embedded infinitives and points out potential problems either of them face.

The discussion includes problems related to word order, constructions containing a focussed constituent either in the finite or the infinitival clause, agreement between the finite verb and the object of its infinitival complement, and a peculiar construction to my knowledge first discussed in Szabolcsi (2005) where an infinitival clause seemingly contains a nominative subject of its own, which is rather unexpected under general accounts of Case assignment.

I also define how restructuring is understood in the present work. I claim that restructuring results in a number of processes, what unifies them being that they are all the results of clause union having taken place. Restructuring itself then is supposed to make all those processes possible and is understood as clause union, the movement of the infinitival T-head to the TP of the finite clause (Roberts 1997, Hinterhölzl 1999). The resulting structure is defined by properties and requirements of both the finite and infinitival clause interacting in complex ways. Under the assumptions of the present dissertation more constructions are claimed to undergo restructuring than previously assumed. The main effects of restructuring are claimed to be the following:

- (1) a. the formation of verbal complexes;
- b. relatively “free” word order based on É. Kiss (2003);
- c. agreement between the finite verb and the object of the infinitive.

Chapter 3 discusses major aspects of restructuring. After a short introduction to approaches to restructuring I turn to German and Hungarian, first presenting previous mono-clausal accounts. One of the aims of this dissertation is a cross-linguistic outlook, among others to justify the claims made in the present study. Before a detailed account of the German and Hungarian data, this time from a bi-clausal perspective, I also discuss Swedish, Basque and Italian restructuring constructions, some of which turn out to be relevant for Hungarian restructuring as well. The second part of the chapter argues that restructuring can be best explained starting from a bi-clausal account and presents evidence in favour of the bi-clausal analysis. At this point of the discussion I rely heavily on both data and analyses provided in Hinterhölzl (1999, 2006). Taking the ideas of Hinterhölzl (1999, 2006) as a starting point and contrasting previous accounts of Hungarian restructuring I claim that infinitival clauses all undergo restructuring. I

point out that a much broader class of verbs than previously assumed portray restructuring properties. Especially interesting in this respect is how to account for the four verbs defined as the restructuring verbs of Hungarian by Tóth (2000), which includes the three verbs defined as the auxiliaries of the Hungarian language in Kenesei (2000, 2001).

Having introduced the data and the problems we face when trying to account for them, in Part II an attempt is made to explain the empirical facts. I propose that much of the word order variation observed is driven by requirements of scrambling mechanisms, where scrambling is understood not to be an optional operation but motivated by scope and information structure considerations. Since these clearly have an effect on word order in Hungarian, following Bobaljik and Wurmbrand (to appear) I show that an account where LF precedes and defines PF has several advantages over the standard minimalist model.

In Chapter 4, sketches of the bi-clausal analysis are outlined and it also focuses on how to account for some of the word order facts attested in restructuring constructions. It is argued that infinitival clauses do have the same left peripheral structure as finite clauses in spite of apparent counter-examples where focussed constituents appear in a position preceding quantified expressions. To account for this I propose that in infinitival clauses, as opposed to finite ones, checking of Q can be overt as well, besides the checking of the F feature. Infinitival clauses are Tense-deficient, which triggers clause-union (T-to-T movement first proposed in Roberts (1997)). Clause union opens the way for the scrambling of specific constituents. Since scrambling is an overt phenomenon, whatever precedes it must also be overt. This is what not simply explains overt checking of Q but makes it necessary as well. To account for the focus-quantified expression order I follow Bouma (2003), who proposes that operators are ordered with the help of partial ordering restrictions sensitive only to scope properties. This explains why topics and other constituents without scope features can appear in different parts of the sentence. I claim that scope-driven reordering takes place in the scrambling field, this is what the actual purpose of scrambling is, which then is argued not to be optional in nature.

This approach to scrambling actually raises more questions than it answers. Chapter 5 is devoted to making an attempt to answer at least some of them. The central problem of scrambling, the main reason why the phenomenon has still not found a straightforward way of treatment within the Minimalist Program lies in the very specific nature of the features that are claimed to drive scrambling operations cross-linguistically. If there is an identifiable trigger at all, it is to do with considerations of scope, information structure or both. Scope features and information structure features can hardly be claimed to be lexical, they have to be defined somehow during the derivation. Thinking in terms of the interfaces of the Minimalist Program this leads to the following paradoxical situation: scope features are handled by the LF part of the derivation, but must be known in advance to be able to come up with the appropriate phonological representation, at least in the languages that allow this kind of scrambling operations. Chapter 5 discusses a number of approaches to scrambling, and discards a potential account for Hungarian, connecting the phenomenon of scrambling with OV word order. Out of the approaches to scrambling, two are considered in detail: Gelderen's (2003) PF-driven and Bobaljik and Wurmbrand's LF-driven accounts. Besides claiming that LF has priority over PF, Bobaljik and Wurmbrand also argue that the Information Structure component should also be dealt with at LF. This is an issue where their approach conflicts with Gelderen's (2003). With the help of Hungarian data, where information structure considerations very often have an effect on scope interpretation on the one hand and structure on the other, I show that Bobaljik and Wurmbrand's account can describe the data very straightforwardly and also make the right predictions. Arguing against Reinhart (2005) the advantages of the LF-first approach are pointed out. The overall conclusion of the chapter is that an LF-driven account fares better in describing the Hungarian data as well, including the Szabolcsi-type sentences containing seemingly nominative subjects of infinitives, which can also be traced back to be motivated by LF considerations, where the nominative subject only apparently functions as the subject of an infinitive.

Bobaljik and Wurmbrand's (to appear) analysis is an essentially representational approach, however, there are hints at the necessity of a derivational component. Chapter 6 aims at showing that structure is indeed necessary for the approach to make the right predictions, actually, a number of constraints turn out to refer to structural

considerations. This is the chapter where everything is supposed to fall into place and previously unexplained phenomena are also accounted for. There are far fewer novel ideas presented here, rather, the aim of the chapter is to show that the proposals of the study are reconcilable with already existing proposals, hence the title “Putting pieces of the puzzle together”. This is the chapter that provides the missing structure-building component and offers an account of preverb climbing, verb-object agreement, the behaviour of Hungarian auxiliaries and the verb *látszik* ‘seem’, the only verb which is classified as a restructuring verb by Tóth (2000) besides the auxiliaries of Kenesei (2001). According to my proposal, the semantic difference between the raising verb *látszik* ‘seem’ and other, ordinary restructuring verbs on the one hand can be explained by the very simple event structure of the verb *látszik* ‘seem’, following É. Kiss (2004a, 2005). Differences between *látszik* ‘seem’ and the auxiliaries, on the other hand, can be explained by claiming that while auxiliaries inherit the event structure of their verbal complements, the structure of *látszik* ‘seem’ is not affected by the type of the verb it takes. Moreover, auxiliaries themselves always introduce a further aspect of the event (accidental, habitual, future), so the construction containing them will always contain an event with a complex event structure. The event structure of *látszik* ‘seem’ is always simple. The presence/absence of a PredP projection on top of the VP can account for why we find differences between how preverbs can move in these constructions. Preverb climbing in verbal complexes is going to be motivated by the phonological requirement of stress-avoiding verbs. This part of the analysis also discusses a problem with dominant approaches that either separate PF and LF, or claim that PF defines LF. Based on the problems identified I further argue for an LF-driven approach.

In discussing verb-object agreement I point out an alternative analysis to that of moving the object of the infinitive to the AgrOP or vP of the finite clause as proposed by den Dikken (2004). The chapter finishes with some sample derivations for the different types of restructuring constructions discussed in the dissertation. I also point out directions for further research, especially with regard to the treatment of the preverb.

Chapter 7 briefly summarises the dissertation.

**Part I: Infinitival constructions in Hungarian and
cross-linguistically**

Chapter 1 Properties of Hungarian infinitival constructions

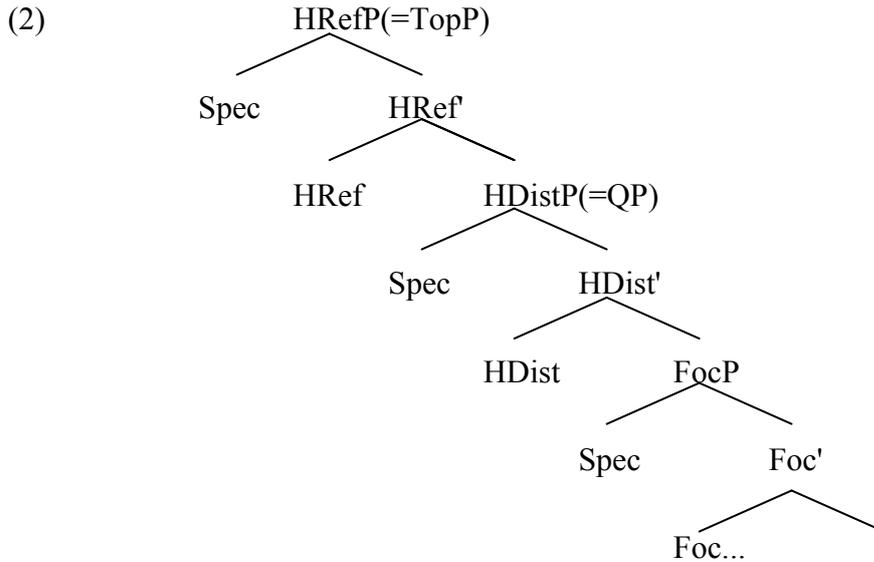
1.1 The left periphery in Hungarian: general introduction

In his seminal work on the left periphery Rizzi (1997, but see also Grohmann 2000 and references cited therein) differentiates three layers of clausal architecture: (1) the V-domain, or the lexical layer comprising the verbal projection with the VP-shell in it, (2) the T-domain, that is the functional layer containing the functional categories that check the inflectional features of the predicate and (3) the C-domain or the Left Periphery, hosting complementisers and serving as a kind of operator field – it is in this layer that we find information about the illocutionary force, the finiteness and the information structure of the clause. The order of the constituents in the left periphery is restricted.

Hungarian is a distinctly discourse-configurational language where both topic/comment and focus/background divisions are reflected in surface syntax (e.g. É. Kiss 1987, 1995, 2002, Surányi 2002a). Once present, topic and focus appear in functional projections of their own, TopP and FocP respectively, having distinct syntactic properties: whereas the TopP projection is recursive, FocP is not (at least not in the preverbal domain). Topics are fronted with an optional phonological stress, foci are fronted to the immediate left of the verb and bear emphatic stress. As far as their discourse properties are concerned, topics are strictly discourse-old, while foci may be discourse-old or discourse-new. Topic and Focus constituents have fixed positions in Hungarian sentence structure in the left periphery with a restriction on ordering according to which Topic constituents must precede Focus constituents.

Out of the current syntactic models where we find functional projections for topic and focus in the C-domain (Szabolcsi 1997, É. Kiss 1998, Puskás 2000) in the present study I adopt Szabolcsi's (1997) approach following Beghelli and Stowell's (1997) theory of scope, defining a strict order of constituents in the preverbal field. The representation for Hungarian is along the lines in (2), defining a strict hierarchy of topic, quantifier, and focus constituents in this order.²

² For the sake of simplicity, I am going to use the terms TopP and QP instead of RefP and DistP in the paper.



In what follows first I introduce the basic facts about Hungarian finite clauses and then turn to the discussion of infinitival structures.

1.1.1 Finite clauses

As mentioned in section 1.1, the order of constituents in the preverbal field is strictly fixed in Hungarian clauses. The topic constituent is followed by the quantifier which in turn is followed by a focus occupying a position directly preceding the verb. The word order where the focussed element precedes the quantifier is not possible (3a,b):

- (3) a. A diákok minden mondatot CSAK LFG-BEN elemezték.
 the students every sentence-ACC only LFG-in analyzed
 ‘The students analyzed every sentence only in LFG.’
- b. *A diákok CSAK LFG-BEN minden mondatot elemezték.
 the students only LFG-in every sentence-ACC analyzed

In a neutral sentence finite verbs and their particles appear in a particle–verb order

(4). However, when there is a focussed constituent present in the structure, the particle must follow the finite verb (5).³

- (4) Mari el-veszítette a kulcsot.
 Mary PV-lost the key-ACC

³ Capital letters = Focus, PV = preverb.

- (5) Mari A KULCSOT veszítette el, nem a pénztárcát.
 Mary the key-ACC lost PV not the purse-ACC
 ‘It was the key that Mary lost, not the purse.’

1.1.2 Infinitival clauses

As argued in Dalmi (2004) and Kenesei (2005a), infinitival constructions must be classified as full-fledged CPs for the following reasons:

- (i) infinitival complements have TopP and FP slots in the left periphery, where arguments of the infinitival verb can land (6);
- (ii) clausal NegP is projected within infinitival complements (7);
- (iii) the order of constituents in the preverbal domain of the infinitival clause shows the same restrictions we find in finite clauses (8).

- (6) András meg-tanította a diákokat [CP[TopP a mondatot
 Andrew PV-taught the students-ACC the sentence-ACC
 [FP CSAK LFG-BEN [AGRP elemezni PRO]]].
 only LFG-in analyze-INF
 ‘Andrew taught the students to analyze sentences ONLY IN LFG.’

- (7) Szeretném a pénzemet nem el-költeni PRO a hónap végéig.
 would-like the my-money-ACC not PV-spend-INF the month end-till
 ‘I would like not to spend my money until the end of the month.’

- (8) *András meg-tanította a diákokat
 Andrew PV-taught the students-ACC
 [CP [FP CSAK LFG-BEN [TopP a mondatot [AGRP elemez-ni PRO]]]].
 only LFG-in the sentence-ACC analyze-INF
 ‘Andrew taught the students to analyze sentences ONLY IN LFG.’

As the examples indicate, the C-domain is present in infinitival complements as well, with the same restriction on constituent order as we find in finite clauses. Sentence (6) shows that the TopP precedes FP in infinitival clauses as well, similarly to finite clauses discussed in section 1.1.1. Moreover, sentence (8) indicates that the TopP must precede FP, the reverse order leads to ungrammaticality. Sentence (7) is an example for

an infinitival clause containing a negative constituent, where negation can only be understood as referring to the infinitive.

Based on the sentences above we can conclude that infinitival clauses very much behave like finite clauses with regard to the functional projections they can have and the ordering restrictions on them.

In what follows I present data in which constituents typically associated with different types of functional projections fail to obey the strict left peripheral order in infinitival clauses. These observations to my knowledge have not been described earlier and are examples of cases that blur the clean picture about the structure of infinitives presented above. The question arises whether or not these apparently exceptional infinitivals also contain a full-fledged CP-domain. In case they do, we want to identify the factors that yield the unexpected patterns.

In (9a) QP precedes TopP, an order which is unexpected on the view that there are strict ordering restrictions in the left periphery. Whereas the grammaticality of (9a) has a lower status, with a focussed constituent present in the sentence (9b), the reverse order of the quantifier and the Topic Phrase becomes fully legitimate. Moreover, with a focussed constituent present before the finite verb, the subject of the main clause can freely appear among the constituents of the infinitival clause indicating a mono-clausal structure (9c).^{4, 5}

⁴ Section 3.1 will give a short summary about the rules concerning the positioning of preverbs, which does not affect the grammaticality judgments here.

⁵ Actually, it can be questioned whether the constituent *Marinak* is a topic in (9). It certainly cannot be a focussed constituent, and its properties do not qualify it for another quantified expression, either. Irrespective of its status in the sentence, the point is that this word order is not available for simple finite sentences:

- i) *Péter minden könyv-et Mari-nak oda-adott.
Peter every book-ACC Mary-DAT PV-gave

In a neutral sentence the constituent *Marinak* would surface in a post-verbal position (ii) (and, as predictable, several other positions would be available for it in a non-neutral sentence which I do not intend to discuss here. The word order of i), however, would never be attested):

- ii) Péter minden könyv-et oda-adott Mari-nak.
Peter every book-ACC PV-gave Mary-DAT
'Peter gave every book to Mary.'

- (9) a. ?Péter oda akar [Q_Pminden könyvet] [Top_PMarinak] adni.
 Peter PV want-3SG every book-ACC Mary-DAT give-INF
 ‘Peter wants to give every book to Mary.’
- b. Péter TEGNAP akart minden könyvet Marinak oda-adni.
 Peter yesterday wanted every book-ACC Mary-DAT PV-give-INF
 ‘Peter wanted to give every book to Mary YESTERDAY.’
- c. TEGNAP akart (Péter) minden könyvet (Péter) Marinak (Péter) oda-adni (Péter).
 yesterday wanted every book-ACC Peter Mary-DAT PV-give-INF
 ‘It was yesterday that Peter wanted to give every book to Mary.’

The infinitival structures presented in the previous sections thus show contradictory properties. On the one hand, the CP-domain must be present, as evidenced by the possibility of inserting topic, focus, and quantifier phrases within the infinitive. On the other hand, the possibility of matrix elements to appear in the embedded clause and embedded elements to appear in the matrix clause seems incompatible with a full-blown CP-structure and suggests that there is no clausal boundary between the infinitive and the finite structure.

The present study is an attempt to capture these seemingly contradictory properties of infinitives in a uniform analysis. Following Hinterhölzl (1999, 2006) and Wiklund (2006, 2007), and contrary to Wurmbrand (2001), I am going to argue that restructuring can affect full CPs. A very natural assumption, to my knowledge first stated explicitly by Wiklund (2006), is that the effects of restructuring in a given language depend on certain language-specific factors. As argued in the literature on restructuring, Hungarian restructuring effects can be one or more of the following:

- (10) a. the formation of verbal complexes;
 b. relatively “free” word order based on É. Kiss (2003);
 c. agreement between the finite verb and the object of the infinitive.

If defined as above, in Hungarian most of the infinitival structures show restructuring effects. Thus, the question that should be addressed is not when restructuring occurs in the constructions under discussion, but when and why restructuring does not seem to take place in some of them. I propose that certain factors

related to scope interpretation (to be specified later) can blur some effects of restructuring (but not others), resulting in a structure where the infinitive surfaces with typical left periphery constituents. Thus, seemingly non-restructured infinitivals on the surface may in fact involve restructuring upon closer investigation.

In what follows I review the different types of verbs taking infinitival clauses as their complements as described by Kálmán-Kálmán-Nádasdy-Prószéky (1989). The discussion will be preceded by a short background to the history of restructuring and I also provide a brief cross-linguistic outlook. This way we will have a general view of the phenomena that we also have to deal with in the present study. Once this is done, we can turn to a more thorough discussion of restructuring and its effects in Hungarian.

1.2 Verbs with infinitival complements

1.2.1 Central properties of verbs selecting infinitives across languages

In most studies on infinitival constructions it has been noted that only a small subset of verbs can take infinitival complements. This set of verbs of course varies across languages, but, as claimed by Wurmbrand (2001) there is a subset of them that seems to display similar behaviour cross-linguistically: modal verbs, motion verbs, aspectual verbs and causatives show effects of restructuring in different languages such as German, Dutch, Spanish, Italian and Japanese. Infinitival complements of factive and propositional predicates, on the other hand, do not tend to undergo restructuring.

One of the first extensive studies on infinitival constructions was carried out by Gunnar Bech (1955). He observed that certain infinitives in German function as independent clauses, whereas others do not exhibit clausal behaviour. This phenomenon was first studied from a generative perspective by Evers (1975) focusing on German and Dutch and introducing the process of verb raising to account for the word order patterns in certain types of infinitival constructions, a clearly mono-clausal account. This study was followed by Aissen and Perlmutter (1976) who proposed a clause union analysis for Spanish and Rizzi's (1976, 1978) restructuring analysis for Italian data, where restructuring is understood as an optional rule whereby a bi-clausal structure is transformed into a mono-clausal one.

Since then restructuring in the Germanic and Romance languages has been studied most extensively with approaches varying between mono-clausal, bi-clausal and multidimensional. Most of the approaches, even bi-clausal accounts, seemed to share the assumption that restructuring infinitives are smaller than a CP until Hinterhölzl's (1999, 2006) analysis of Germanic and Wiklund's (2006, 2007) for Scandinavian. This latter is the path I am also going to follow in the present discussion claiming that Hungarian infinitival clauses, analysed as CPs in most of the approaches studying infinitival constructions, undergo restructuring in spite of being full CPs.

The main questions that have to be answered for a successful account of restructuring are the following:

1. Which of the verbs can take infinitival complements?
2. Which of the verbs taking infinitival complements undergo restructuring?
3. What are the effects of restructuring?
4. What is the structure of restructuring infinitives?
5. What is the motivation for restructuring?

1.2.2 Hungarian verbs taking infinitival complements

Turning to Hungarian, let us first consider the first question. In doing so, I present the classification of different types of infinitival constructions as described by Kálmán et al. (1989), the first systematic and exhaustive account of Hungarian verbs taking infinitival complements.

Kálmán et al. (1989) define the helping verbs of the Hungarian language on a strictly distributional basis.⁶ According to this approach only those verbs can be regarded as helping verbs which do not bear stress under neutral circumstances, they illustrate some kind of a clitic behaviour: they encliticise to the word preceding them to avoid being stressed (11a). In such constructions the helping verb (in this case *akar* 'want') cannot be stressed at all, it is pronounced together with the infinitive as one

⁶ Both Kálmán et al. (1989) and Kenesei (2001) present alternative approaches to what makes an auxiliary an auxiliary. There are a number of different views, which I am not going to discuss in the present paper, the interested reader is advised to consult the two articles mentioned and references cited therein. For the sake of convenience I am going to use the term 'helping verb' when I refer to Kálmán et al.'s auxiliaries based on merely distributional criteria, and reserve the term 'auxiliary' for Kenesei's auxiliaries based on semantic considerations.

phonological word. One of the options for the helping verb to achieve this effect is occupying a position between the particle of the infinitive (the infinitival complement of the stress-avoiding verb) and the infinitive itself (11b), this way the helping verb appears in a position without stress. If the helping verb is preceded by a constituent with main stress, such as a focussed constituent, the preverb-helping verb-infinitive order does not come about: the focussed constituent saves the helping verb from appearing in a stressed position (11c).

- (11) a. Mari nyer-ni akar.
 Mary win-INF wants
 ‘Mary wants to win.’
- b. Mari meg akarja nyer-ni a versenyt.
 Mary PV wants win-INF the competition
 ‘Mary wants to win the competition.’
- c. MARI akarja meg-nyer-ni a versenyt.
 Mary wants PV-win-INF the competition.
 ‘It is Mary who wants to win the competitions.’

The behaviour of ‘heavy’ verbs, which do not avoid stressed positions, differs from this (12). As *imád* ‘love, adore’ is not a stress-avoiding verb it does not need to encliticise to a preceding verb, nor does it trigger what is called particle climbing: the particle belonging to the infinitive appears together with it, the particle-finite verb-infinitive order does not, actually cannot arise (12c).

- (12) a. Mari imád nyer-ni.
 Mary loves win-INF
 ‘Mary loves winning.’
- b. Mari imádja meg-nyer-ni a versenyeket.
 Mary loves PV-win-INF the competitions-ACC
 ‘Mary loves winning competitions.’
- c. *Mari meg imádja nyer-ni a versenyeket.
 Mary PV loves win-INF the competitions-ACC

This defines the following list of verbs as the helping verbs of the Hungarian language:

- (13) *akar* ‘want’, *bír* ‘be able to’, *fog* ‘will’, *kell* ‘have to, must’ *kellene* ‘should’, *kíván* ‘wish’, *lehet* ‘may, might’, *mer* ‘dare’, *óhajt* ‘wish’, (*szabad* ‘be allowed’), *szándékozik* ‘intend’, *szeretne* ‘would like’, *szokott* ‘usually does’, *talál* ‘happen to do something accidentally’, *tetszik* ‘like’, *tud* ‘can, know’

The question arises what property of verbs like *szeretne* ‘would like’ and *akar* ‘want’ differentiate it from other verbs that are not on this list, e.g. *szeret* ‘like’ or *imád* ‘love, adore’. It can be stated in general that the distributional approach does not give a satisfactory account of what makes an auxiliary an auxiliary. Later approaches return to this problem and this is why we maintain using the term helping verb when talking about Kálmán et al.’s group of auxiliaries as defined in their stress-based account, and reserve the term auxiliary for verbs that can be argued to have auxiliary-like properties from a semantic and syntactic perspective as well, to be discussed in 5.2.1. There we are going to see that Hungarian has only three auxiliary verbs in the strict sense of the word, as argued by Kenesei (2000, 2001): *fog* ‘will’, *szokott* ‘usually does’, and *talál* in the ‘happen to do something’ sense of the verb. Interestingly, this is a subset of the verbs Tóth (2000) identifies as the restructuring verbs of Hungarian: *fog* ‘will’, *szokott* ‘usually does’, and *talál* ‘happen to do something’ and *látszik* ‘seem’. Section 5.2 discusses properties of these verbs and also makes an attempt to account for the special status of *látszik* ‘seem’.

In the next section, we discuss those properties of infinitival constructions in general that suggest a mono-clausal, or, alternatively, bi-clausal structure.

1.3 Evidence for a bi-clausal structure

1.3.1 Word order in infinitival clauses

As many have noted in the literature (e.g. Kenesei 1989, Brody 1990, 1995b, Koopman and Szabolcsi 2000, É. Kiss 1987, 2002), one important difference between Hungarian finite and infinitival clauses is that whereas in finite clauses focus and negation cannot

be separated from the verb by the verb's modifier⁷ (*haza* 'home' in the examples that follow) (14), (15), in infinitival clauses they can be ((16), (17) for negation, (18), (19) for focus):

- (14) Péter nem ment haza.
Peter not went home
'Peter did not go home.'
- (15) *Péter nem haza ment.⁸
Peter not home went
'Peter did not go home.'
- (16) Jobb lenne nem haza-menni.
better would-be not home-go-INF
'It would be better not to go home.'
- (17) Jobb lenne nem menni haza.
better would-be not go-INF home
(same)
- (18) Jobb lenne CSAK KEDDEN haza-menni.
better would-be only Tuesday-on home-go-INF
'It would be better to go home only on TUESDAY.'
- (19) Jobb lenne CSAK KEDDEN menni haza.
better would-be only Tuesday-on go-INF home
(same)

According to Koopman and Szabolcsi (2000) negation and focus occupy the same respective positions both in finite and infinitival clauses, because "in neither case can anything simply intervene between them and *hazamenni/menni haza* 'home-go-INF/go-INF home'".

⁷ Verbal modifiers come in different types. Besides particles they can be bare nominals, adverbials or adjectives. The behavior of particles with respect to focalization has already been pointed out in 1.1.1.

⁸ Of course the sentence is grammatical if *haza* 'home' is understood as the focus of the sentence leading to the following interpretation: It was not home where Peter went (but somewhere else). This is irrelevant for our present purposes.

As indicated in section 1.1, focussed constituents in Hungarian occupy a position in the left periphery, FP, within which the focussed constituent itself occupies the specifier position. In general the verb is assumed to move to the head position of the FP, leaving behind even its verbal modifier, resulting in the verb–particle order attested e.g. in (5). As É. Kiss (2002, Ch.3) points out, ellipsis and coordination facts indicate that the verb does not sit in F(oc) in clauses involving a preverbal focus. For arguments that her analysis along these lines is inconclusive see Surányi (2009), who argues that the Preverbal focus > inverted verb order is to be accounted for in terms of a specifier-head relation.

To account for the difference between finite and non-finite clauses Brody (1995b) proposes that in finite clauses V-to-F movement is obligatory, whereas in non-finite clauses it is optional. This analysis supports Koopman–Szabolcsi (2000) in predicting that focussed constituents will occupy the same position in finite and non-finite structures.⁹

1.3.1.1 A difference between finite and infinitival clauses

While the prediction that focussed constituents occupy the same position in finite and infinitival clauses seems to be borne out in most of the cases, sentence (20), first discussed in Szécsényi (2007), shows that an *every*-phrase can very easily intervene between the focus and the verb in an infinitival clause, the result is clearly grammatical:

- (20) Jobb lenne CSAK KEDDEN minden előadásra be-menni.
 better would-be only Tuesday-on every lecture PV-attend-INF
 ‘It would be better to attend every lecture only on Tuesday.’

Of course, it is also grammatical to say:

- (21) Jobb lenne minden előadásra CSAK KEDDEN bemenni.
 better would-be every lecture only Tuesday-on PV-attend-INF

where the quantifier is followed by the focussed constituent, but there is a difference in meaning in terms of scope: in (21) we have a certain number of lectures all of which we would like to attend on Tuesday (context: e.g. students preparing the schedule for the next semester), whereas (20) means that we could attend every lecture on Tuesday,

⁹ For counterarguments see Surányi (to appear).

every lecture on Wednesday, etc, and we would like to attend every lecture only on Tuesday, not on other days.

When an *every*-phrase is inserted between the focus and the verb, prefix–verb inversion leads to ungrammaticality, indicating unanimously that the *only*-phrase cannot occupy a focus position related to the infinitive in terms of the standard analysis (22).

- (22) *Jobb lenne CSAK KEDDEN minden előadásra menni be.
 better would-be only Tuesday-on every performance watch-INF PV

At this point it has to be noted that the word order attested in the infinitival clause in (20) is never grammatical in a finite clause with focus, exactly because in that case the focussed constituent has to occupy the canonical focus position preceding the verb. Inversion of the prefix and the verb is obligatory (23c,d):

- (23) a. *CSAK KEDDEN minden előadást meg-néztem.
 only Tuesday-on every performance-ACC PV-watched-1SG
- b. *CSAK KEDDEN minden előadást néztem meg.
- c. CSAK KEDDEN néztem meg minden előadást.
 only Tuesday-on watched-1SG PV every performance-ACC
 ‘I watched every performance only on Tuesday.’
- d. *CSAK KEDDEN meg-néztem minden előadást.

Evidence that the focus, the quantifier, and the infinitival verb form a constituent in (20) comes from (24), where the constituent with focus interpretation cannot be understood as occupying the focus position of the finite verb:

- (24) [CSAK KEDDEN minden előadást meg-nézni] nem volt jó ötlet.
 only Tuesday-on every performance-ACC PV-watch-INF not was good idea
 ‘It was not a good idea to watch every performance only on Tuesday.’

An alternative might be to analyze the focussed constituent in (20) as an instance of post-verbal focus, but sentence (24) also rules out this possibility, more so because

we find post-verbal focus only when we also have a preverbal one.¹⁰ We return to this option in the next section, subsection 1.4.2.

1.4 The mono-clausal analysis and the problems it encounters

1.4.1 Almost free word order

In order to see what may underlie the possibility of the word order pattern illustrated in (9c), I now review the full variation that can be detected in the ordering of the constituents of the sentence:

- (25) a. TEGNAP akart Péter minden könyvet oda-adni Marinak.
 yesterday wanted Peter every book-ACC PV-give-INF Mary-DAT
 ‘It was yesterday that Peter wanted to give every book to Mary.’
 b. TEGNAP akart minden könyvet Péter oda-adni Marinak.
 c. TEGNAP akart minden könyvet oda-adni Péter Marinak.
 d. TEGNAP akart minden könyvet oda-adni Marinak Péter.

For reasons of space I list only a subset of the possible orders here, what we actually find is that basically every permutation of the post-verbal constituents is possible,^{11,12} similarly to the possible orders of (non-quantificational) DPs in the German Mittelfeld, as claimed by Hinterhölzl (1999). Based on the grammaticality of these sentences we can conclude that the focus appears in the focus position preceding the finite verb, the order of the rest of the constituents is essentially free. This seems to indicate that we are dealing with a mono-clausal structure here, where the focussed constituent is directly followed by the verb, with no further restriction on the order of elements in the post-verbal field.

É. Kiss (2003) differentiates three relevant fields of the Hungarian sentence, which may offer an explanation for the orders attested in (25):

¹⁰ For an analysis of structures containing multiple foci see É. Kiss (1998), Kenesei (1989, 2009), Surányi (2002a, 2007, to appear) and example (112) in the present paper.

¹¹ Some orders may be less preferred, but by no means ungrammatical.

¹² Since there is no considerable difference in the phonological weight of the non-quantificational constituents, Behaghel’s Law of Growing Constituents is not expected to be decisive in these sentences (see also fn. 13).

1. In the argument field following the verb word order is essentially free, influenced only by the specificity feature of the arguments to a certain extent as illustrated in (26) and (27): the sentences are more natural if a specific argument precedes a non-specific one.¹³ According to several works of É. Kiss (e.g. 1987, 2002) the post-verbal free order is the consequence of a flat VP in which the arguments mutually c-command each other.

(26) Tegnap felhívta Pétert egy ügyvéd.
 yesterday called Peter-ACC a lawyer
 ‘Yesterday a lawyer called up Peter.’

(27) ?Tegnap felhívta egy ügyvéd Pétert.

2. In the operator field we find a strictly ordered hierarchy of aspectualiser, focus, and distributive quantifier positions, where the placement of constituents determines both their operator function and their scope.

3. The initial topic field is different from the operator field, lacking any scopal effect due to the [+referential], [+specific] interpretation.

Based on É. Kiss (2003) and the sentences listed in (25) it seems that these structures should be analyzed as mono-clausal. The only thing we need to assume for this is that the infinitival verb and its arguments become arguments of the finite verb (for an HPSG analysis of the phenomenon see Szécsényi T. (1997, 2009) for Hungarian, and Bouma (2003) for Dutch).

However, when the infinitival clause contains a focus of its own the matrix subject cannot separate the infinitive and the focussed constituent as illustrated in (28):¹⁴

¹³ In more recent work it has been substituted by Behaghel’s law of Growing Constituents according to which it is the lightest constituent that follows the verb immediately, and the heaviest one stands the furthest away from it.

¹⁴ Though it has to be pointed out that there is considerable native speaker variation in judgements.

- (28) TEGNAP akarta (Péter) CSAK EBBEN AZ ÉTTEREMBEN (*Péter)
 yesterday wanted Peter only this-in the restaurant-in Peter
 meg-kóstolni (Péter) a halászlét (Péter).
 PV-taste-INF Peter the fish-soup-ACC Peter
 ‘It was yesterday that Peter wanted to taste fish soup only in this restaurant.’

That the focussed constituent and the infinitival verbs cannot be separated by an intervening constituent suggests that the infinitival clause has an internal structure which is preserved even when restructuring takes place. However, before we proceed, first we have to point out that this structure cannot be an instance of some kind of a post-verbal focus, since in Hungarian constituents understood as focus can also appear in focus positions related to the preceding verb. In order to see this, in the next section we turn to sentences that contain more than one focussed element.

1.4.2 Pre-verbal and post-verbal foci

Whereas *holnap* ‘tomorrow’ understood as focus sounds more natural if it occupies the focus position preceding the finite verb (29), there are other constituents that seem to be able to appear in the focus position of the infinitive equally naturally. The *only*-phrase in (30) seems to occupy the focus position of *ebédelni* ‘to have lunch’:

- (29) a. ?Péter szeretne HOLNAP enni étteremben / étteremben enni.
 Peter would-like tomorrow eat-INF restaurant-in / restaurant-in eat-INF
 b. Péter HOLNAP szeretne étteremben enni.
 Peter tomorrow would-like restaurant-in eat-INF
 ‘Peter would like to eat in a restaurant TOMORROW.’
- (30) Péter szeretne ezután CSAK ÉTTEREMBEN ebédelni.
 Peter would-like from-now only restaurant-in lunch-INF
 ‘Peter would like to have lunch only in restaurants from now on.’

Holnap ‘tomorrow’ and the *only*-phrase can appear together in the same sentence (31), and the ungrammaticality of (32) suggests that here we are dealing with a structure where *holnap* ‘tomorrow’ occupies the focus position of the finite verb and *csak étteremben* ‘only in restaurant’ occupies the canonical focus position directly preceding the infinitival verb.

- (31) HOLNAP szeretne Péter CSAK ÉTTEREMBEN enni.
tomorrow would-like Peter only restaurant-in eat-INF
'Peter would like to eat only in restaurants TOMORROW.'
- (32) *HOLNAP szeretne CSAK ÉTTEREMBEN Péter enni.
tomorrow would-like only restaurant-in Peter eat-INF

However, as pointed out in Szécsényi (2007), the *every*-phrase can directly precede the infinitive in these structures, too, separating the focussed constituent from the verb (33) and in this case even *Péter* can freely scramble into different positions in the clause (34), (35).

- (33) HOLNAP szeretne Péter CSAK EBBEN AZ ÉTTEREMBEN
tomorrow would-like Peter only this-in the restaurant-in
minden fogást kipróbálni.
every dish-ACC try-INF
'Peter would like to try every dish only in this restaurant TOMORROW.'
- (34) HOLNAP szeretne CSAK EBBEN AZ ÉTTEREMBEN Péter
tomorrow would-like only this-in the restaurant-in Peter
minden fogást kipróbálni.
every dish-ACC try-INF
(same)
- (35) ?HOLNAP szeretne CSAK EBBEN AZ ÉTTEREMBEN
tomorrow would-like only this-in the restaurant-in
minden fogást Péter kipróbálni.
every dish-ACC Peter try-INF
(same)

Sentences (34) and (35) seem to indicate that the *only*-phrase does not occupy a focus position related to the infinitive. At this point there is another option we can consider. The second focus can be an instance of post-verbal focus, when focus occupies a focus position following the verb as discussed in É. Kiss (1998). The following sentences illustrate this:

neutral order:

- (36) Péter el-kezde^tt tegnap énekelni.
 Peter PV-started yesterday sing-INF
 ‘Peter started to sing yesterday.’

constructions involving more than one focus:

- (37) PÉTER kezdett el TEGNAP énekelni.
 Peter started PV yesterday sing-INF
 ‘PETER started singing YESTERDAY (and not Paul two days ago).’
- (38) TEGNAP kezdett el PÉTER énekelni.
 yesterday started PV Peter sing-INF
 ‘It was yesterday that it was Peter who started singing.’
- (39) TEGNAP kezdett el PÉTER a gyerekeknek énekelni.
 yesterday started PV Peter the children-DAT sing-INF
 PETER started to sing to the children YESTERDAY.

Based on (37) and (38) it is hard to judge what position the second focus occupies, and the question arises whether there is a difference between the meaning of the two sentences, but (39), where an extra argument of the infinitive is inserted, clearly shows that the second focus does not need to appear in a focus position related to the infinitive. The second focus in (39) is argued to occupy the specifier position of a second FP related to the finite verb that ends up after the verb due to the obligatory Focus-checking. As a result, the finite verb ends up in the head position of the highest FP. In (39) we have a structure very similar to the one in (32), still, one is grammatical, the other is not. It is true that in both sentences we have the structure Focus–V_{fin}–Focus, however, there is a difference in what kind of a constituent occupies the second Focus position. In (39) this position is occupied by the subject of the finite verb, in (32) by a constituent of the embedded clause. This seems to indicate that somehow the constituent occupying the second focus position in (32) is still related to the Focus position of the infinitival verb. The analysis proposed in Chapter 3 captures this difference as well.

To conclude this section we can say that the presence of two foci in (33)–(35) does not necessarily call for a bi-clausal analysis, either, though it has to be pointed out that the ungrammaticality of (32) is left unexplained in a mono-clausal account. Since sentences (32) and (41), repeated here for the sake of convenience and contrast, seem to

have a very similar structure at first sight, accounting for the difference between the grammaticality judgements of these sentences is going to be a central aim of this dissertation.

- (40) *HOLNAP szeretne CSAK ÉTTEREMBEN Péter enni.
tomorrow would-like only restaurant-in Peter eat-INF
- (41) TEGNAP kezdett el PÉTER a gyerekeknek énekelni.
yesterday started PV Peter the children-DAT sing-INF
PETER started to sing to the children YESTERDAY.

1.4.3 Verb–object agreement

Hungarian is a language where transitive verbs agree with both their subjects and objects. If the verb takes a definite object, there is a definite inflectional ending on the verb, too. If the object is indefinite, the inflectional ending on the verb changes (both in singular and plural, for reasons of space I give only the singular part of the paradigm):

- | | | | |
|------------------------------|-------------|--------------------------------|--------------|
| (42) a. Néz-ek | egy filmet. | a'. Néz-em | a filmet. |
| watch-1SG-INDEF | a film-ACC | watch-1SG-DEF | the film-ACC |
| 'I am watching a film.' | | 'I am watching the film.' | |
| b. Néz-el | egy filmet. | b'. Néz-ed | a filmet. |
| watch-2SG-INDEF | a film-ACC | watch-2SG-DEF | the film-ACC |
| 'You are watching a film.' | | 'You are watching the film.' | |
| c. Néz-ø | egy filmet. | c'. Néz-i | a filmet. |
| watch-3SG-INDEF | a film-ACC | watch-3SG-DEF | the film-ACC |
| 'He/she is watching a film.' | | 'He/she is watching the film.' | |

Whenever a transitive verb subcategorizes for an intransitive infinitival complement it appears with indefinite agreement (43). It is easily explained under the assumptions of Bartos (2000), according to which a verb can appear in its definite inflectional paradigm only if the syntactic category of its object is DP. This can account for the appearance of the indefinite paradigm with intransitive infinitival complements, since the infinitive itself is obviously not a DP.

- (43) Szeretné-k úszni.
would-like-1SG-INDEF swim-INF
'I would like to swim.'

Compare with:

- (44) a. Szeretné-k egy könyvet. a'. Szeretné-m a könyvet.
 would-like-1SG-INDEF a book-ACC would-like-1SG-DEF the book-ACC
 'I would like (to have) a book.' 'I would like (to have) the book.'

If the infinitival complement has an object of its own, the finite verb agrees with the embedded object:

- (45) a. Szeretné-k meg-venni egy könyvet.
 would-like-1SG-INDEF PV-buy-INF a book-ACC
 'I would like to buy a book.'
- a'. Szeretné-m meg-venni a könyvet.
 would-like-1SG-DEF PV-buy-INF the book-ACC
 'I would like to buy the book.'

It is argued in É. Kiss (1987) that agreement between the finite verb and the complement of its infinitival complement clearly suggests a mono-clausal structure. This kind of agreement will therefore serve as a reliable tool for testing whether restructuring takes place in a sentence containing an infinitival complement or not. However, we will not take this agreement as evidence that the structure also started out as mono-clausal.

Returning to examples similar to those introduced in section 1.2, we can see that restructuring takes place even in those sentences that are claimed to be made up of two independent CPs, where a finite clause contains an infinitival complement:

- (46) Péter szeret-ne
 Peter would-like-3SG-INDEF
 [minden nap CSAK MARINAK el-énekelni egy dalt].
 every day only Mary-DAT PV-sing-INF a song-ACC
 'Peter would like to sing a song every day only to Mary.'
- (47) Péter szeret-né
 Peter would-like-3SG-DEF
 [minden nap CSAK MARINAK el-énekelni ezt a dalt].
 every day only Mary-DAT PV-sing-INF this-ACC song-ACC
 'Peter would like to sing this song every day only to Mary.'

Agreement between the finite verb and the object of its infinitival complement even when left peripheral projections are present in the embedded clause, indicates, contrary to Wurmbrand (2001), that restructuring can affect whole CPs. This is argued for in Hinterhölzl (1999, 2006) to account for West Germanic restructuring data, and also in Wiklund (2006, 2007) in her analysis of Swedish copying constructions. Section 2.2 will present the main points of a bi-clausal analysis of the German and Swedish data. Before we turn to Chapter 2 and a discussion of restructuring, I present the last issue the present study aims to focus on.

1.4.4 A mysterious construction: infinitival clauses with a nominative subject?

Another problem related to infinitival constructions is discussed in Szabolcsi (2005, 2007). As attested in sentences (48)-(50) (Szabolcsi's (5), (6), (7)) infinitival clauses appear with what seems to be a nominative subject related to the infinitive itself.

(48) Nem szeretnék [én is elcsúszni].
 not would.like-1SG I-NOM too slip-INF
 'I wouldn't like for it to be the case that I, too, slip.'

(49) Nem akarok csak én menni busszal.
 not want-1SG only I-NOM go-INF bus-with
 'I don't want to be the only one to take the bus.'

(50) Jobb szeretnék nem én menni busszal.
 better would.like-1SG not I-NOM go-INF bus-with
 'I'd prefer for it not to be me who takes the bus.'

This is highly problematic from the perspective of Universal Grammar, since, according to traditional analyses, nominative case can only be assigned by finite inflection, which is not supposed to be present in an infinitival clause. As discussed by Szabolcsi (2005), the construction has the properties in (51).

- (51) Properties of constructions (seemingly?) containing nominative infinitival subjects
- the subject of the infinitive has to be a pronoun
 - the matrix clause cannot have a subject of its own
 - the subject of the infinitive agrees with the finite verb in person and number
 - the matrix verb has to be a subject control verb or *fog* ‘will do’.¹⁵

As pointed out by Szabolcsi, potential analyses in terms of a) backward control (following Polinsky and Potsdam 2002, Hornstein 1999, and more recently for Hungarian Bartos (2006)), or b) analysing the subject as not a real subject but an emphatic element both face problems, and can account for only a subset of the observed empirical facts.

Considering the properties in (51), we can make the following observations: (51b) and (51c) would make it possible for us to claim that the nominative subject is actually the subject of the finite verb, but that leaves (51a) to account for. However, as indicated by (52), (51a) is not necessarily true.

- (52) Nem akartak csak a fiúk busszal menni/menni busszal.
 not wanted-3PL only the boys bus-with go-INF/go-INF bus-with
 ‘The boys did not want it to be the case that only they go by bus.’

In recent work Bartos (2006) and Szabolcsi (2007) points out an additional property of the construction in question, namely considerable differences in the interpretation depending on whether the nominative subject appears in a position preceding the finite verb or the infinitive (53)-(55). This is going to play a central role in the analysis proposed in Chapter 3, here I only present the data.

¹⁵ Szabolcsi (2005) argues that sentences like i) are ungrammatical, adding that it is immaterial in what order the infinitival and matrix clauses appear in and whether we consider substituting the nominative constituent with a dative subject (which, as we have seen, is licensed in an infinitival clause). However, concerning the latter I (and my informants as well) do not share her intuition concerning this. The sentence becomes fully grammatical, if we use a dative subject in the infinitival clause as illustrated in ii). It has to be noted though that the dative complement of the finite verb (bracketed in i)) cannot appear in the construction, but I suggest it is for independent reasons. In ii) the dative constituent is the subject of the infinitive (see Tóth (2000)).

- *Jó lenne (nekem/neked) [csak én menni busszal].
 good would.be I-for/you-for only I-NOM go-INF bus-with
 ‘It would be good (for me/for you) if only I took the bus.’
- Jobb lenne [csak Péternek busszal menni/menni busszal].
 better would.be only Peter-DAT bus-with go-INF/go-INF bus-with
 ‘It would be better if only Peter went by bus.’

- (53) a. Nem akar csak ő menni busszal.
 not want-3SG only he/she-NOM go-INF bus-with
 ‘He/She doesn’t want to be the only one to take the bus.’
- b. Csak ő nem akar busszal menni.
 only he/she-NOM not want bus-with go-INF
 ‘It is only him/her who does not want to take the bus.’
- (54) a. El-felejt-ett-em én is alá-ír-ni.
 PV-forgot-PAST-1SG I-NOM too under-write-INF-DEF
 ‘I’ve forgotten about also signing it (resulting in me being one of the signers)’
- b. Én is el-felejt-ett-em alá-ír-ni.
 I-NOM too PV-forgot-PAST-1SG under-write-INF-DEF
 ‘I’ve also forgotten to sign it (similarly to others).’
- (55) a. El-kezd-t-e nem ő kapni a szerepeket.
 PV-began-PAST-3SG.DEF not he/she get-INF the roles
 ‘It began that he/she did not get roles.’
- b. Nem ő kezdte el kapni a szerepeket.
 not he/she began-PAST-3SG.DEF PV get-INF the roles
 ‘It was not him/her who began to get the roles.’

Szabolcsi (2007) argues that the constituents that appear in different positions depending on interpretation cannot appear in a post-verbal position since in a simple sentence it leads to ungrammaticality (56).

- (56) a. Nem én kapok szerepeket.
 not I-NOM get-1SG roles
 ‘It is not me who gets roles.’
- b. *Szerepeket kapok nem én.
 roles get-1SG not I-NOM

Based on (56) Szabolcsi (2007) draws the conclusion that the constituent *nem én* ‘not me’ belongs to the infinitival clause. She also argues that it cannot be the result of clause union either, since not only restructuring verbs like *want* and *seem*, but also non-restructuring ones (*hate*, *begin*) participate. The conclusion then has to be that the

constructions in the b) examples above must have genuine overt infinitival subjects. To account for the empirical facts observed Szabolcsi (2007) makes the following proposal:

(57) Nominative Assignment

- a) Infinitival subjects in all languages may get Nominative Case by long-distance Agree[ment] with a finite INFL (there is no “weak/strong feature parameter” here).
- b) The Bottleneck is the Finite Subject
An overt infinitival subject is possible if the finite subject can legitimately be “missing” or if both subjects can be pronounced simultaneously. It is in this respect that languages differ.

The parametric difference that accounts for cross-linguistic variety is assumed to be related to the pro-drop parameter. Without going into further details concerning the restrictions on the availability of a nominative subject in infinitival clauses let me point out one important aspect of the constructions this account fails to capture: the constituents that show this behaviour (appearing in the finite or the infinitival clause depending on interpretation) are all constituents that target left-peripheral positions of the clause. This is the property that connects these constructions, and, since left peripheral positions have an obvious connection to the interpretation of the sentence, it should not be left an unexplained, accidental property. In the ideal case the analysis of these constructions should also account for why this should be so.¹⁶

One of the reasons why it is problematic to account for the data above is to do with restructuring. The present work, however, argues that restructuring is not restricted to the verbs that have been assumed to undergo restructuring so far (stress-avoiding verbs in É. Kiss (1999), or the four verbs *szokott* ‘usually does’, *fog* ‘will (do)’, *talál* ‘happen to (do something)’ and *látszik* ‘seem’ in Tóth (2000)). The phenomenon of restructuring can be accounted for under a broader construal of the term. In my proposal restructuring takes place every time a predicate takes an infinitival complement due to the deficient nature of either the embedded infinitival clause or the transitivity of the

¹⁶ In more recent work Szabolcsi (to appear) does point out that “the nominative DPs under investigation are scope taking operators or are modified by scope taking particles like ‘too’ and ‘only’” (Szabolcsi to appear:3). She argues that the nominative DPs in the constructions have the status of infinitival subject claiming that “person-number agreement with a tensed verb allows the nominative DP to be overt” (Szabolcsi to appear:3), but remains agnostic about the details of the account. The analysis proposed in 6.1 accounts for this as well, maintaining that the nominative DP is the subject of the finite verb.

main verb selecting it that manifests in the definiteness agreement discussed in 1.4.3. In this approach, therefore, sentences in (48)-(50) and (53)-(55) can (actually must) be claimed to undergo restructuring resulting in clause union. This solves the restructuring problem, and the approach to scrambling discussed in 4.3 can account for the word order facts and interpretation as well. However, prior to this, we also have to discuss some details of related issues like restructuring, so further details of the proposal will be introduced later. The next chapter focuses on different approaches to restructuring and argues that contrary to dominant approaches, restructuring can affect full CPs as well. This claim is going to be supported by both Hungarian and cross-linguistic data.

To conclude this chapter, we can say that some structures containing infinitival embedded clauses exhibit mono-clausal and bi-clausal properties at the same time, an observation made in the 1980s. Other infinitival clauses seem to be relatively independent containing e.g. their own left peripheral constituents, but under closer scrutiny they also reveal characteristics of restructuring. This calls for a bi-clausal, rather than a mono-clausal account of restructuring. Alternative accounts and further details are introduced in Chapter 2.

In light of the present chapter we can sum up our objective as follows: the dissertation aims at giving an account for the following patterns found in sentences containing an infinitival embedded clause:

- (58) a. the formation of verbal complexes;
 b. relatively “free” word order based on É. Kiss (2003);
 c. agreement between the finite verb and the object of the infinitive;
 d. embedded infinitival clauses apparently containing a nominative subject;
 e. properties of constructions containing auxiliaries;
 f. properties of constructions containing the verb *látszik* ‘seem’

Chapter 2 Approaches to restructuring

Whereas it is relatively easy to define infinitive-taking verbs, question number two introduced in 1.2.1, which of the infinitives actually undergo restructuring, poses a challenge. To a great extent it depends on how we define our criteria for restructuring, and even in the Hungarian linguistic literature we find different approaches to the phenomenon. In my opinion, however, these accounts focus only on a subpart of restructuring, which, as I claim, is the result of independent processes, and only if we put the different parts of the puzzle together and put restructuring into a broader perspective can we come up with a fully coherent view of the phenomenon.

In the first part of this chapter I present approaches to restructuring in German and Hungarian. The second part discusses bi-clausal proposals in German and Swedish and points out problems mono-clausal analyses might face in Italian and Basque. In the third part evidence for the bi-clausal property of German restructuring is presented based on Hinterhölzl (1999, 2006), then I go on to argue for a bi-clausal structure in the case of Hungarian.

2.1.1 Restructuring in German and Hungarian

German patterns together with Hungarian in a number of infinitival structures. The two languages are strikingly similar with respect to verbal complex formation, for a detailed comparative study see É. Kiss and van Riemsdijk (2004). Restructuring in German is often claimed to have a mono-clausal underlying structure. If we review the literature on Hungarian data we find that most of the predicates that are restructuring predicates in German take full CP infinitival complements in Hungarian. Taking into consideration this difference together with the difference in the assumed base word-order of the two languages (OV for German, VO for Hungarian), the similarity becomes harder and harder to account for. To be able to compare the two languages, in what follows I give a short summary of restructuring in German as analyzed by Wurmbrand (2001) and have a look at recent accounts of Hungarian infinitival clauses, offering some more evidence for the bi-clausal treatment of Hungarian infinitival structures.

2.1.1.1 Restructuring in German

Wurmbrand (2001) differentiates restructuring vs. non-restructuring predicates in German based on the following criteria:

- (59) a) the infinitival clause contains only the VP-layer, therefore it has
 b) no embedded subject
 c) no embedded tense
 d) no embedded negation
 e) no embedded structural case

Actually, in her work we do not find a binary opposition of restructuring vs. non-restructuring predicates, the distinction is more fine-grained. Restructuring is further classified into subcategories of lexical and functional restructuring, and the criteria above pertain to the strictest type of restructuring only. The crucial difference between restructuring and non-restructuring predicates is that non-restructuring predicates take CP complements, whereas restructuring predicates (lexical or functional) take a reduced complement which can be analysed as small as a VP.

In the case of lexical restructuring, for example, the infinitival complement of certain predicates (like *erlauben* ‘allow’, *versuchen* ‘try’ or *untersagen* ‘prohibit’¹⁷) is a VP. Since structural accusative case can be assigned only in the presence of a vP, the object of the infinitive cannot be assigned case. For this reason, the object of the infinitival verb has to leave the infinitive and, similarly to passive structures, move to the object position of the main verb ((60) Wurmbrand 2001, her (7), p. 21).

- (60) weil Hans den Traktor zu reparieren versuchte
 since John the tractor-ACC to repair tried
 ‘since John tried to repair the tractor’

The ultimate evidence for movement comes from so-called Long Passive structures, where the object of the infinitive appears in nominative case and shows agreement with the finite verb ((61), where the infinitive itself does not however show passive morphology).

- (61) dass der Traktor und der Lastwagen zu reparieren versucht wurden
 that [the tractor and the truck]-NOM to repair tried were
 ‘that they tried to repair the tractor and the truck’

¹⁷ For the complete list of restructuring verbs in German see (Wurmbrand 2001), where Dutch, Italian, Spanish and Japanese data can also be found.

The difference between functional and lexical restructuring is that in the case of functional restructuring the thematic properties of the sentence are determined by the embedded verb, the matrix verb either carrying a modal meaning (e.g. *müssen* ‘must’) or functioning as a light verb, with a transparent meaning (e.g. *gehen* ‘go’). The position of these verbs is either in a vP above VP or in functional projections above these (AuxP, ModP). Since a vP is present in the structure, movement of the infinitival object does not take place, but the subject of the embedded verb can move to the subject position of the finite verb.

2.1.1.2 Restructuring in Hungarian: Tóth (2000)

Tóth (2000) claims that Hungarian and German modals involve different syntactic structures, the former taking clausal (CP) infinitival complements, the latter only a vP/VP-complement.

If we compare Hungarian and German embedded infinitives we find that the subject of some Hungarian modals can check dative Case within the infinitival clause itself. The ability to assign dative Case to the subject of the infinitival clause goes hand in hand with the option of inflecting the infinitive (62).

- (62) Nem kell [az ebédnek délre kész lenni(-e)].
 not must the lunch-DAT noon-by ready be-INF-3SG
 ‘Lunch does not have to be ready by noon.’

As pointed out by Tóth (2000), if restructuring is defined by the criteria in Wurmbrand (2001) we find very few restructuring verbs in Hungarian: *látszik* ‘seem’, *szokott* ‘usually does’, *talál* ‘happen to do something accidentally’, and *fog* ‘will’. Interestingly, this set of verbs includes what Kenesei (2000, 2001) classifies as auxiliaries of the Hungarian language, which number three: *fog* ‘will’, *szokott* ‘usually does’ and *talál* ‘happen to do something accidentally’. Since the present dissertation claims that restructuring is a phenomenon broader than what is identified as restructuring in Tóth (2000), in the ideal case we expect to be able to identify factors that account for the different behaviour of Tóth’s restructuring verbs as well. Notably, the explanation should also account for the behaviour of *látszik* ‘seem’, so the account should not (or not exclusively) rely on the auxiliary – non-auxiliary distinction. The characteristics of Hungarian restructuring verbs (that we will have to explain differently) according to Tóth (2000) are the following:

- (63) a. they are raising verbs;
 b. they cannot take inflected infinitives (whereas in other cases¹⁸ inflection on the infinitive is optional, see e.g. (62));
 c. dative Case cannot be checked in the infinitival clause: the subject must move to the matrix clause to check its Case features, it always surfaces with nominative Case morphology and never with dative Case¹⁹;
 d. there is no embedded negation found in the complement of these predicates.

The sentences in (64) illustrate the properties listed above. For the sake of contrast, I also provide

(65), a sentence containing an infinitive which is not assumed to undergo restructuring by Tóth (2000).

- (64) a. A szoba nem látszik ki-takarítva len-ni(*-e)
 the room-NOM not seems PV-cleaned be-INF(-3SG)
 ‘The room does not seem to have been cleaned.’

- b. *A szoba látszik nem ki-takarítva len-ni(*-e)
 the room-NOM seems not PV-cleaned be-INF(-3SG)

- (65) Most szabad [a szobának nem ki-takarítva len-ni-e].
 now may the room-DAT not PV-cleaned be-INF-3SG
 ‘Now it is possible for the room not to be cleaned.’

In (64) the subject of the embedded infinitive, *szoba* ‘room’ appears in nominative Case, which can only come from the finite clause. Negation can appear only in the finite clause, and the presence of the inflection on the infinitive leads to ungrammaticality. As illustrated by

¹⁸ Not all the other cases. It has to be pointed out that there are a number of infinitival constructions besides the four restructuring verbs of Tóth (2000) where the infinitive cannot be inflected.

¹⁹ Again, it has to be emphasised that a nominative subject (together with the lack of inflection on the infinitive, see fn. 18 is not enough to qualify a construction containing an embedded infinitival clause as a restructuring construction. The properties listed in (63) all have to be met. At times it may be difficult to distinguish a restructuring construction from a non-restructuring one. In (i) we have a construction very similar to what we find in (64a), still, *akar* ‘want’ is not a restructuring verb. It has a nominative subject, dative case is not available in the infinitive resulting in the unavailability of inflection on the infinitival verb, and negation in the infinitival clause is also excluded in this particular case. So what we are actually left with to define restructuring is the raising-verb criterion.

- (i) Péter nem akar moziba menni(*-e).
 Peter- NOM not wants cinema-to go-INF(-3SG)
 ‘Peter doesn’t want to go to the cinema.’

(65) and also (62), some verbs taking infinitival complements can appear with dative subjects within the infinitival clause.²⁰ This ability goes hand in hand with the option of having an inflected infinitive in the embedded clause. In

(65) negation appears in the infinitival clause as expected, since *szabad* ‘may’ is not a restructuring verb in the sense of Tóth (2000).

However, there are other structures as well where we find evidence for restructuring taking place, as pointed out by Puskás (2000):

(66) Nem akarok senkit meg-hívni.
not want-1SG nobody-ACC PV-invite-INF
‘I don’t want to invite anybody.’

(67) Senkit nem akarok meghívni. (Tóth 1995)
(same)

Puskás (2000) argues that based on the grammaticality of (67) we can conclude that some infinitives can undergo some sort of reanalysis in Hungarian, giving rise to the apparent counterexamples to the clause-boundedness of n-words. If we assume that the two clauses have been restructured, the grammaticality of sentence (67) is expected, so this example indicates that restructuring in Hungarian is not restricted to the main predicates listed above as conforming to Wurmbrand’s (2001) criteria.²¹ Under the assumptions of the present study this is not unexpected.

2.1.2 É. Kiss’s (1999) reanalysis

In the Hungarian linguistic literature we find evidence that the presence or absence of focus before the verb may result in the deletion of phrasal boundaries. In her analysis of verbal complex formation É. Kiss (1999) argues that different types of complex

²⁰ It is not the purpose of the present study to account for how dative Case arises, how it correlates with agreement-marking on the infinitive, and whether the dative marked DPs are part of the infinitival clause or not. For different approaches to dative infinitival subjects (if that’s what they are) and agreement-marked infinitives see Komlósy (1992), Dalmi (1983, 1995, 2004, 2005), Tóth (2000), É. Kiss (2001, 2002), Szécsényi (2002), Rákosi (2006) and Rákosi – Laczkó (2008).

²¹ Though, as Surányi (reviewer’s comments on KSZ’s dissertation) notes, (67) shows nothing as long as movement of universal quantifiers is available independently of restructuring, but then (66) can still be argued to indicate restructuring, so the claim that restructuring can be found in other constructions as well can be maintained.

predicates are the result of the presence or lack of reanalysis²² in a structure, which, in turn, is conditioned by the presence or the lack of a focussed constituent. She defines reanalysis along the following lines:

Reanalysis: In a construction in which XP is an immediate constituent of a Y projection, and YP is an immediate constituent of a Z projection, XP is reanalyzed as an immediate constituent of the Z projection if the phrasal boundary YP is deleted (or is made transparent).

Sentences (68a-b) illustrate reanalysis where the particle *szét* ‘apart’, originally belonging to the verb *szedni* ‘take’ forming the complex verb *szétszedni* ‘to take apart’. The particle obligatorily moves to the position preceding the finite verb *fogja* ‘will’. As sentence (69) shows, reanalysis does not take place when a focussed constituent precedes the verb.

Reanalysis in the neutral sentence:

(68) a. János *szét fogja akarni kezdeni szedni a rádiót.*

John apart will want-INF begin-INF take-INF the radio-ACC
‘John will want to begin to take apart the radio.’

b. *János *fogja akarni kezdeni szét-szedni a rádiót.*

John will want-INF begin-INF apart-take-INF the radio-ACC

No reanalysis triggered due to the presence of a focussed constituent:

(69) JÁNOS *fogja akarni kezdeni szét-szedni a rádiót.*

John will want-INF begin-INF apart-take-INF the radio-ACC
‘It is John who will want to begin to take the radio apart.’

The finite verb in (68), *fogja* ‘will’ is a verb identified as a stress avoiding verb by Kálmán et al. (1989). These verbs are characterized by not being able to bear primary stress in a sentence, there must be a constituent preceding it that saves it from getting stress. There are several ways to achieve this; one of them is illustrated in sentence (68): the particle of the embedded verb *szét-szedni* ‘take apart’ moves to the position directly preceding the stress avoiding verb.

²² The term ‘reanalysis’ will be used for the transparency phenomena related to verbal complexes as described by É. Kiss (1999). I reserve the term ‘restructuring’ for the deletion of clause boundaries as discussed in the present paper, which is meant to cover a broader set of phenomena.

In general we can claim that in the verbal complexes above reanalysis is driven by the stress avoiding verb's need to avoid getting stressed. There is a difference between the behaviour of stress avoiding verbs like *fog* 'will' and "heavy" verbs like *imád* 'love, adore', which must be stressed. If a focussed constituent precedes a stress avoiding verb, reanalysis does not take place, for the focussed constituent saves the verb from getting stress. This second way to save a stress avoiding verb from getting stressed is illustrated in (69), where the focussed constituent, *JÁNOS* 'John' bears emphatic stress, so the stress avoiding verb no longer receives stress.

If reanalysis can also apply to the data in (9), we can explain how the observed word order comes about by assuming that reanalysis opens the way to free scrambling of the constituents of the main clause and the embedded clause. However, the properties of clause union occurring in embedded infinitives are different from the reanalysis taking place in verbal complexes. While in verbal complex formation focus could save a structure from reanalysis (by saving the stress-avoiding verb from getting stressed), this is not the case with the embedded infinitival clauses under discussion: focus can be present in the sentence, and clause union still happens, there is no difference in the behaviour of stress-avoiding verbs and heavy verbs. Sentence (70) contains a heavy verb, *el-felejtett* 'forgot', but the sentence is grammatical with exactly the same pattern we have in (9c).

- (70) TEGNAP felejtett el (Pál) egy könyvet (Pál) oda-adni (Pál) Mari-nak (Pál).
 Yesterday forgot PV a book-ACC Paul PV-give-INF Mary-DAT
 'It was yesterday that Paul forgot to give a book to Mary.'

Returning to sentences (68) and (69), we can see that the presence of a focussed constituent does not trigger movement of the particle. In sentence (71) the focussed constituent is a time adverbial and the particle appears together with the verb, which is expected, since the stress avoiding verb is saved from stress by the focussed adverbial preceding it.

- (71) János HOLNAP fogja akarni kezdeni szét-szedni a rádiót.
 John tomorrow will want-INF begin-INF apart-take-INF the radio-ACC
 'John will want to begin to take apart the radio TOMORROW.'

The verb particle *szét* ‘apart’ appears together with the verb it belongs to. This would lead to the assumption that no restructuring happened this time, however, this is not supported by the grammaticality of the following sentence, which leads us back to the problem of the present work, also illustrated by sentences (9c) and (70):

- (72) HOLNAP fogja (Pál) akarni kezdeni (Pál) szét-szedni (Pál) a rádiót (Pál).
 tomorrow will Paul want-INF begin-INF take-apart-INF the radio
 ‘Paul will want to begin to take apart the radio TOMORROW.’

As sentence (72) shows, the subject of the finite clause can appear in several positions in the construction when a focussed constituent precedes the finite stress avoiding verb. The lack of particle movement does not mean that no restructuring takes place in the sentence.

2.1.3 Interim summary

In the preceding two sections I have briefly reviewed two well-known approaches to Hungarian restructuring, pointing out that a broader generalisation may be in order since a wider set of data seem to portray clause-union effects than originally assumed. Tóth’s (2000) analysis does not seem to account for all the restructuring data, and, though É. Kiss (1999) nicely captures the essence of verbal complex formation, the analysis can be further generalised to allow for other clause union effects where the verbal complex data also fit in.

The next sections shed some light on the mono-clausal vs. bi-clausal debate surrounding restructuring from a cross-linguistic perspective and discuss data that turn out to have some relevance for Hungarian as well.

2.2.1 Swedish

Wiklund (2005, 2006, 2007) claims that restructuring can affect full CPs based on the data in (75)-(77), based on which she claims that copying in Swedish is a reflex of restructuring. The data illustrate three construction types in Swedish the common properties of which are that two (or potentially more) verbs share identical inflectional endings and only one overt object can appear in the sentence, in the position preceding the first verb. Based on this Wiklund concludes that the morphology of the second verb depends on the first, agreement of the two forms is a top-down process, and inflectional morphology on the second verb is semantically vacuous, among others because the second form, though finite in form, does not license an overt subject.²⁴ However, other properties of these constructions make them look different, so much so, that they are commonly held to illustrate three different construction types of the Swedish language.

The construction-type in (75) is referred to as a TMA-copying construction, where TMA stands for Tense/Mood/Aspect. In this construction the linking element *o* (to be discussed later) can appear, and the construction has an infinitival alternate. Copying is not restricted, e.g. present and imperative forms can copy as well. In (76) we have an instance of what is called the participle copying construction. There can be no linking element present and copying is restricted to the past participle form of the verb. Finally, (77) illustrates what is traditionally called pseudo coordination. It shares with TMA copying constructions the availability of the linking element *o*, but differs from it in not having an infinitival alternative.

- (75) Han försökte *o* skrev ett brev.
 he try.PAST *o* write.PAST a letter
 ‘He tried to write a letter.’

²⁴ Another type of evidence supporting the claim that the inflection on the second verb is semantically vacuous comes from the meaning of these constructions. Sentence i), similarly to sentence ii), an infinitival construction does not imply that the activity has actually been carried out, the addition of ‘and he did not succeed’ does not lead to ungrammaticality.

- i) Han prövade *o* stekte en fisk men lyckades inte.
 he try.PAST *o* fry.PAST a fish but succeeded not
 ‘He tried to fry a fish, but he did not succeed.’
 ii) Han prövade att steka en fisk men lyckades inte.
 he try.PAST *att* fry.PAST a fish but succeeded not
 (same)

- (76) Han hade kunnat skrivit.
 he had can.PPC write.PPC
 ‘He had been able to write.’
- (77) Han satt o skrev dikter.
 he sit.PAST o write.PAST poem.PL
 ‘He was writing poems (in a sitting position).’

The properties of the three constructions are summarised in Table 1.

	infinitival alternative	copy all forms	linking element
a: TMA-copying construction	+	+	+
b: Participle copying construction	+	–	–
c: Pseudo coordination	–	+	+

The main claim of the study is that “the construction-types are three surface variants of one and the same phenomenon, involving complementation and semantically vacuous inflection on the embedded verb(s)” (p. 2.) The three constructions are assumed to be the result of restructuring based on a) evidence coming from distribution facts, namely that the set of restructuring verbs across languages and copying verbs in Swedish is the same and b) the observation that both phenomena are sensitive to tense: neither restructuring nor copying can happen in a finite environment.

Concerning the status of the linking element *o*, which is homophonous to the coordinating conjunction (*och*), and for this reason has been analysed as one in a number of approaches, Wiklund makes the claim that it is a complementiser. She presents a number of arguments, each convincing enough in itself to support her proposal, one of them being the fact that in the case of multiple embedding it is the first *o* that cannot be dropped, dropping it leads to ungrammaticality (78a). In this respect the behaviour of *o* is parallel with that of the Swedish infinitival marker *att* (78b). In coordinated constructions it is dropping of the conjunction element in all but the first coordination results in ungrammaticality (78c).

- (78) a. *Han pröver börjar o läser.
 he try.PRES start.PRES o read.PRES

- b. *Han prövar börja att läsa
 he try-PRES start.INF att read.INF
- c. *Han malar o skriver läser
 he paint.PRES o write-PRES read.PRES
 ‘He paints, writes, and reads.’

[Wiklund, 2005. p. 17. ex. (30), (31)]

An alternative traditional view analyses *o* as a colloquial variant of the infinitival marker *att* (see (78b)). However, *att* never appears in copying constructions, so this analysis is soon discarded. In Wiklund’s analysis *o* is a complementiser that, similarly to the infinitival marker *att* resides in the head position of CP (for arguments see Wiklund (2005)). Placing *o* into the C-head position plays a central role in Wiklund’s analysis of restructuring, and explaining the variation in the three constructions.

Contrary to Wurmbrand (2001) Wiklund (2005, 2006, 2007) claims that restructuring may involve bi-clausal configurations, the trigger for restructuring being the need for external Tense valuation from the matrix functional domain. Thus, in her analysis only those verbs undergo restructuring that do not have an independent Tense valuation. These verbs differ in the size of the complement they subcategorise for, and this is what distinguishes participle copying vs. TMA-copying verbs: copying of a given form is possible only in case the embedded clause contains the corresponding functional projection, where copying is understood as a reflex of dependencies between functional heads of the same label. TMA-copying complements in this approach simply contain more functional structure than participle copying structures. The presence of the linking element *o* indicates that the size of a TMA copying complement is as big as a CP, whereas participle copying constructions involve only an AspP. Since the linking element *o* and Tense appear in positions higher than that, it is predicted that only the participle forms can appear in this type of copying construction.

This leaves only the pseudo coordination structures to account for. Lack of the infinitival alternative in pseudo coordination constructions is explained following Ramchand (2004) under the assumption that in these constructions lexical verbs are used as light verbs. They have a transparent meaning, the meaning of the sentence comes from the embedded verb: ‘The matrix verb associates to structure via its v-category feature alone + a pseudo coordinate clause is merged within the event structure

of the matrix predicate as rhematic material.’) This analysis is reminiscent of Cinque’s (2004) restructuring analysis (see next section), where restructuring is explained with reference to the functional nature of the matrix predicate. The data discussed in Wiklund, and the Hungarian data presented in this dissertation also show, however, that – while a group of restructuring phenomena can be explained with the help of the functional approach – copying, therefore restructuring cannot be reduced to the functional status of the matrix verb.

2.2.2 Italian

As pointed out by Rizzi (1978) in Italian there is a group of verbs (modals, aspectuals and motion verbs) taking infinitival complements that exhibit similar behaviour, for which he introduces a restructuring rule in Italian syntax that transforms an underlying bi-clausal structure into a simple sentence.

The following, seemingly unrelated processes are all claimed to be the results of restructuring (after Rizzi 1978):

A) unstressed pronouns originating in an infinitival clause cliticised to the main verb (79b) (not available for non-restructuring verbs (80b)):

- (79) a. Piero verrà a parlarti di parapsicologia.
 ‘Piero will come to speak to you about parapsychology.’
- b. Piero ti verrà a parlare di parapsicologia.
 (same)
- (80) . Piero deciderà di parlarti di parapsicologia.
 ‘Piero will decide to speak to you about parapsychology.’
- b. *Piero ti deciderà di parlare di parapsicologia.
 (same)

B) with restructuring verbs the direct object of the embedded clause can become the main subject in impersonal *si* sentences.

- (81) a. Finalmente si comincerà a costruire **le nuove case**.
 ‘Finally *si* will begin to build the new houses.’

- b. Finalmente **le nuove case** si cominceranno a costruire.
(same)

C) auxiliary switch: restructuring verbs can optionally take the auxiliary *essere* ‘be’ when their embedded verb requires it.

- (82) a. Mario **ha** voluto tornare a casa.
‘Mario has wanted to come back home.’
- b. Mario **è** voluto tornare a casa.
(same)
- c. Mario **è/*ha** tornato a casa.
‘Mario has come back home.’

Rizzi (1978) proposes a verbal complex formation process to account for the data, whereby the main verb and the infinitive, starting from a bi-clausal structure, are reanalysed as a simple sentence along the following lines:

- (83) a. [Piero [verrà [a parlarti di parapsicologia]]] RESTRUCTURING →
‘Piero will come to speak to you about parapsychology.’
- b. [Piero [**ti** verrà a parlare] di parapsicologia]
(same)

More recently Cinque (2004) has proposed a mono-clausal account of restructuring built on his 1999 proposal according to which there is a richly articulated and rigidly ordered hierarchy of functional projections in the clause. The proposal is meant to be universal and is built on the following assumptions: restructuring verbs are always functional; since their meaning corresponds to the functional hierarchy proposed in Cinque (1999), these verbs occupy a position in the functional portion of the clause as a distinct functional head. As a result, in these constructions the finite verb is always functional and not lexical.

One of the consequences of this proposal is that restructuring verbs then are not supposed to be able to assign thematic roles since they cannot have arguments of their own, this way excluding both external and internal arguments. This construal of restructuring restricts restructuring verbs to raising verbs and excludes subject control

(similarly to object control, which is, as Cinque puts it “conspicuously absent” from restructuring).

While I find Cinque’s (2004) arguments for a mono-clausal account of Italian restructuring convincing in general,²⁵ I cannot accept it as a universal proposal for restructuring. On the one hand it is due to the fact that there are cases where restructuring affects a bi-clausal structure as we have seen for example in the case of Swedish above, and it is not obvious how to account for those data in a mono-clausal account, on the other hand because of the cases of subject control which I find difficult to analyse as raising. Kenesei (2001) argues convincingly that a number of verbs taking infinitival complements in Hungarian, qualifying as restructuring verbs in the present proposal take agentive subjects which renders a raising analysis inappropriate.

Also, there are cases where it can be argued that a restructuring verb does have a DP object. Following den Dikken, Larson and Ludlow (1996) Cinque claims that in these cases there is an abstract verbal complement, in the case of *want* paraphrasable as HAVE where the resulting structure is the following:

- (84) Gianni vuole [_{XP} HAVE [_{DP} una bicicletta]]
 Gianni wants HAVE a bicycle
 ‘Gianni would like (to have) a bicycle.’

While the proposal is intuitively very appealing, I would like to point out that there is an alternative analysis that suggests a different analysis, which the Hungarian data seem to confirm. As we have seen in 1.4.3, if the infinitival complement has an object of its own, the finite verb agrees with the embedded object:

- (85) = (45)
 a. Szeretné-k meg-venni egy könyvet.
 would-like-1SG-INDEF PV-buy-INF a book-ACC
 ‘I would like to buy a book.’
 a'. Szeretné-m meg-venni a könyvet.
 would-like-1SG-DEF PV-buy-INF the book-ACC
 ‘I would like to buy the book.’

²⁵ Thought I have to remark at this point that it is not completely clear for me how to account for the auxiliary switch phenomenon; here a biclausal account where the infinitive has its own functional structure may fare better.

Definiteness agreement is a nominal feature and this offers a proposal whereby the infinitival clause itself can function as the object of the finite verb.

2.2.3 Basque

Though restructuring in Basque in general is argued to be mono-clausal (Arregi and Molina-Azaola 2004, Haddican 2005) and fit into the pattern proposed by Cinque (2004) and Cardinaletti and Shlonsky (2004), Haddican (2005) points out that it is not the case that restructuring in Basque is always and everywhere between a main verb and a higher functional head of the same functional sequence. Following Wurmbrand (2001, 2004), Haddican (2005) argues that lexical restructuring must also be admitted, however, it has to be pointed out that his interpretation of lexical restructuring is substantially different from Wurmbrand's. As we have seen in 2.1.1.1, what Wurmbrand terms as lexical restructuring is the case when the complement of a restructuring verb is as small as a VP, and, as a result, the embedded VP does not even qualify as an accusative Case assigner. The way Haddican uses the term "lexical restructuring" is rather in terms of the functional vs. lexical dichotomy, as he puts it: "lexical verbs in V may, under certain conditions, restructure with a small verbal complement", which is argued to be at least as big as an AspP.

Let us consider some of the schoolbook examples of Basque restructuring. Basque is an ergative-absolutive language. As pointed out by Arregi and Molina-Azaola (2004), in Basque restructuring contexts the finite verb (the auxiliary in the functional proposal) agrees with both the embedded dative and absolutive arguments (86). In this respect it can be compared with the definiteness agreement between the finite verb and the object of its infinitival complement attested in Hungarian.

- (86) Berak [zuri babak egiten] amaitu dautsuz.
 he.E [you.D beans.A do.INF] finished AGR_A(3P). AGR_D(2S). AGR_E(3S)
 'He finished cooking the beans for you.'
 [Arregi and Molina-Azaola 2004, ex. (1)]

There are a number of points where the Basque restructuring pattern may diverge from this typical pattern. A class of restructuring verbs allow only for long distance agreement of the dative (87). The explanation Arregi and Molina-Azaola (2004) offer for this is straightforward: this class of verbs require an absolutive subject and for this

reason absolutive agreement with the embedded object is excluded. Actually, the existence of this pattern constitutes their main argument for adopting Bhatt's (2005) version of the Split Theory of Case and agreement according to which Case and agreement are the result of separate but related operations. What it amounts to in (87) is that the constituent *babak* 'beans.ABS' does not show overt agreement on the finite verb.

- (87) Berak [zuri babak egiten] hasi jatzu.
 he.A [you.D beans.A do.INF] begun AGR_A(3S). AGR_D(2S)
 'He began cooking the beans for you.'
 [Arregi and Molina-Azaola 2004, ex. (2)]

Another, more problematic structure is the one where negation can appear within the embedded infinitival clause, where it has to be assumed that certain restructuring verbs in Basque "take non-finite complements that are not plausibly merged in the same functional sequence as the verb with which they restructure" (Haddican 2005:189).

- (88) Saiatuko naiz ez horretan pentsa-tzen
 try-FUT AUX not that-in think-tzen
 'I'm going to try not to think about that.'
 [Haddican 2005, ex. 21.]

The availability of restructuring across negation is a property that distinguishes Basque restructuring from restructuring in Italian.²⁶ As Haddican remarks, following Wurmbrand (2001) and Cardinaletti and Shlonsky (2004), it is not clear why Basque should differ from other languages in permitting restructuring across negation. In this dissertation I propose that, among others, scope interpretation can affect the resulting word order if properties of a given language allow it, and the Basque restructuring pattern with negation seems to confirm this. If negation were not in the embedded infinitival clause in (88), the meaning of the sentence would be different in terms of scope ('I'm not going to try to think about that.'). Something very similar can be

²⁶ To account for this it is proposed that in Italian there is no NEG position available low enough in the functional sequence, where negation is understood as a diagnostic of an iterated clausal functional sequence. Based on this Italian restructuring can be argued to be truly monoclausal as opposed to restructuring in Basque which can be argued to allow both monoclausal and biclausal restructuring, similarly to Swedish.

claimed about the Hungarian examples with an apparent nominative subject, as we have seen in 1.4.4.

2.2.4 German

In what follows, due to lack of space, I will focus only on the main arguments of Hinterhölzl's (1999) bi-clausal analysis. The author adopts Kayne's (1994) antisymmetry hypothesis assuming that all phrase structure is right-branching and movement is only to the left.²⁷ The approach has welcome consequences for the problems resulting from the OV approach as well, and the theoretical considerations which may seem stipulative at first sight can also be supported with empirical evidence.

Hinterhölzl (1999) adopts a bi-clausal approach to restructuring. In his analysis, restructuring breaks down into movement of the infinitival AspP and the infinitival TP into different designated positions in the matrix clause. These movements are cyclic and happen for licensing purposes. Hinterhölzl shows how these movements can be derived from a general theory of sentential complementation, assuming that "the complementiser is essential for rendering a sentential complement (a TP) into an argument. [T]he event denoted by an infinitive is not anchored with respect to a local Tense-predicate but is directly dependent in its interpretation on the matrix verb" (Hinterhölzl 1999 p. 65). It is this dependency between the matrix verb and the infinitival Tense-head that is mediated by the complementiser. "[T]he complementiser in general serves as a place holder for the various conditions that a verb imposes on its embedded clause. In particular, [...] the complementiser serves as a place holder for the I-selectional features of the higher verb and thus becomes essential for licensing the infinitival V(P) as well." The motivation of movement in restructuring infinitives is the presence of a defective complementiser. For this reason, the temporal dependency between the matrix verb and the infinitive must be fixed by a movement relation.

²⁷ The present dissertation is not committed to the antisymmetry approach. In this I agree with Bobaljik (2004), who points out that "the accounts that subscribe to the framework [...] deny the central tenet of the extended headedness approaches, namely that headedness alone can be a point of possible cross-linguistic variation. [...] All current alternative theories, based on the Antisymmetry proposals, retain headedness parameters in some guise [...]. It is a weakness of these approaches that, in the absence of surprising correlations or new generalizations, the essentially straightforward point of language variation evidenced by headedness tends to be obscured by a series of curiously unrelated stipulations" (Bobaljik 2004:132, 135). Nothing important hinges on this in the present work, however, as the proposed analysis starts out from a VO order anyway.

The novelty of the approach lies in pointing out that replacing the traditional Verb Raising (VR) and Verb Projection Raising (VPR) analyses with an analysis of West-Germanic according to which West Germanic as a VO language, offers a more adequate account of the position of participial, infinitival and IPP (*infinitivus pro participio*) complements. At the same time, the striking similarity between the verbal complexes of West-Germanic and those of Hungarian, a language with underlying VO order, becomes much easier to explain, since under these assumptions we have to derive the similar constructions from similar underlying structures, full-fledged CPs containing head-initial projections.

In this bi-clausal approach mono-clausal properties of restructuring are accounted for by T-to-T head-movement that has the effect of unifying the two TP-domains (Roberts 1997). T-incorporation in restructuring contexts creates a single Extended Projection uniting two clauses, where arguments of the embedded clause may freely undergo A-movement into the matrix clause. In the next section I present data from West-Germanic languages and the way Hinterhölzl (2006) derives the order attested in them.

2.3 West-Germanic: the derivation

In standard Dutch certain verbs taking infinitival complements trigger what is traditionally called Verb Raising (89).

- (89) dat ik Jan een liedje hoor zingen
 that I Jan a song hear sing
 ‘that I hear Jan sing a song
 [Hinterhölzl, 1999, p. 14]

The rightward movement of the infinitive (90) was first proposed by Evers (1975) to accommodate this order with the OV-based approach to Dutch.

- (90) dat ik [Jan een liedje t_R] hoor zingen_R

In West Flemish we find Verb Projection Raising where we find VR in standard Dutch, the difference between the two being that in VPR it is not only the verb that can be moved, but also V' (91b), or the full VP together with clitics, adverbs and sentential negation (91c-d), therefore a VPR- structure must be at least as big as an IP:

- (91) a. da Marie Jan nen boek t_R wilt geven_R
 that Marie Jan a book wants to give
 ‘that Marie wants to give Jan a book’
- b. da Marie Jan t_R wilt [nen boek geven]_R
 that Marie Jan wants a book give
- c. da Marie t_R wilt [Jan nen boek geven]_R
 that Marie wants Jan a book give
- d. da Valere wilt [ze morgen nen boek geven]
 that Valere wants her tomorrow a book give
 ‘that Valere wants to give her a book tomorrow’

A problematic aspect of both OV and VO approaches is how to account for the position of the infinitival marker. An infinitival sequence, like *zu lesen*, ‘to read’ seems to be a head-initial structure. There are two ways to accommodate it with an SOV approach: assuming either that the infinitival marker “is not an independent head but rather a verbal affix (Haider 1993) (...) or that the infinitival verb undergoes rightward head-movement to (right)-adjoin to the head-final infinitival marker in the IP-domain.”

What is problematic for a VO approach in this respect is how to account for the leftward movement of APs, PPs and other non-DP VP-internal constituents.²⁸ Support for the antisymmetry approach comes from West Flemish and Afrikaans:

- (92) West Flemish:
 mee Valere **te** [willen [dienen boek kuopen]] **een**
 with Valere to want that book buy have
 ‘with Valere having wanted to buy that book’
 [data taken from Haegeman (1995)]
- (93) Afrikaans:
 Die banke moes oop gewees het, om dit gister **te** [kan betaal] **het**
 the bank should open been have it yesterday to can buy have
 ‘The bank should have been open to have been able to buy it yesterday.’
 [data taken from Donaldson (1993)]

²⁸ The Case-licensing movement of DP arguments is completely justified in the minimalist framework.

The fact that material can intervene between the infinitival marker and the infinitival verb unambiguously shows that the infinitival marker cannot be a verbal affix. Movement of the verb cannot be head movement, either, as in (92) it contains a phrase-size constituent (*dienen boek* ‘that book’). Based on this Hinterhölzl draws the conclusion that infinitival structures are head-initial heading a functional projection of their own which Hinterhölzl labels F1P.

Returning to the problem of leftward movement let us consider the following sentence:

- (94) dat Jan [Marie het boek morgen] wilde [geven]
 that Jan Marie the book tomorrow wanted give
 ‘that Jan wanted to give Marie the book tomorrow’

The example shows that DPs and adverbs precede the selecting verb, whereas the infinitive itself (and, when present, the sentential complement of the infinitive also) follows it. Hinterhölzl (1999) argues that although the simplest way to account for this structure would be to say “that the bracketed constituents preceding the matrix verb have been moved individually via scrambling from the embedded clause into the matrix clause”, this solution is untenable for the following reasons:

- verb particles, small clause predicates and idiomatic expressions cannot argument-scramble, but can appear in VR constructions.²⁹
- adverbs do not scramble. They can only undergo movement as part of a larger phrase (e.g. Cinque 1999).³⁰

Having disqualified the scrambling analysis Hinterhölzl bases his analysis on the following assumptions:

- a. coherent infinitives are full CP complements.
- b. a CP has the following structure:

- (95) L NPs [S-AdvS [Neg [S-NPs [VP-AdvS [Pred⁰ [F1P zu [F2P V [F3P CP [VP]]]]]]]]]]³¹

²⁹ These constituents can undergo focus-scrambling, however, it goes together with a special intonation pattern which is lacking in VR structures.

³⁰ That it may not be a universal restriction is suggested in Bailyn (2001, 2004), who argues that adjuncts scramble in Russian. Shields (2005) discusses this in detail.

Now let us see how we get from an underlying structure in (a) to the sentence in (b), where everything but the infinitive itself has been moved (and not scrambled) from the embedded clause to the matrix clause:

- (96) a. [dat vaak [_{VP} Jan wil [_{CP}... [_{lang} [_{F1P} 0 [_{VP} PRO lezen het boek]]]]]]
- b. dat Jan het boek vaak lang wil lezen
that Jan the book often long wants read
'that Jan often wants to read the book for a long time'

The derivational procedure is the following:

- (97) a. Step 1: the nominal arguments leave the VP for reasons of licensing before Spell-out (short scrambling):
[dat vaak Jan [wil [_{CP} [_{TP} PRO het boek_i lang [_{F1P} [_{VP} lezen t_i]]]]]]
- b. Step 2: F1P that has been emptied up to the verb is moved into [Spec,CP] in the embedded clause:
[dat vaak Jan wil [_{CP} [_{F1P} lezen t_i] [_{TP} PRO het boek_i lang t_{F1P}]]]
- c. Step 3: the remaining TP of the infinitival is moved into [Spec,PredP] in the matrix clause:
[dat vaak Jan [_{PredP} [_{TP} PRO het boek lang t_{F1P}] wil [_{CP} lezen t_{TP}]]]
- d. Step 4: the infinitival Tense-head head-adjoins to the matrix Tense-head unifying the two TP-domains by creating a single Extended Projection (Roberts 1997).
- e. Step 5 (optional): T-to-T head-movement opens the way for long-scrambling of the matrix subject and the embedded direct object:
[dat Jan_i het boek_i vaak t_i [_{PredP} [_{TP} PRO t_j lang] wil lezen]]

In German the dependent infinitive usually precedes the finite verb, therefore an extra step is necessary to account for this difference between German and Dutch,

³¹ Where L-NP stands for Long-Scrambled NPs (moving for reasons of specificity) and corresponds to the traditional TP. S-NP stands for Short-Scrambled NP (nominals move here for reasons of purely formal licensing), S-Adv for sentential adverbs. F1P is the position of the infinitival marker and moved particle-phrases. PredP hosts Small Clauses, idiomatic expressions and directional PPs. F2P is a functional projection dominating the licensing projection for CPs and CP complements are licensed in F3P.

namely that after F1P-movement into [Spec,CP] the infinitive overtly moves to the left of the matrix verb, leaving behind its CP-complement. In Dutch this is assumed to be a covert operation.

As far as West Flemish is concerned Hinterhölzl claims that “VR- and VPR-constructions are basically the same differing only in the amount of structure that can be pied-piped by F1P-movement into [Spec,CP] of the infinitival.”

To sum up, the VO-approach to verbal complexes in German has several advantages over an OV-analysis, among others that it does not have to make use of right-adjunction, it provides a relatively simple solution for the distribution of adverbs and CP-complements in VR, and the differences between Dutch, German and West Flemish can be easily derived. Hinterhölzl convincingly argues that, especially in bigger verb-clusters, assuming TP-movement to take place is essential even in an OV approach, so the VO approach proves to be less costly, as it can do without the extraposition operation.

2.3.1 West-Germanic: evidence for a bi-clausal structure

Arguments for a bi-clausal analysis of West Germanic sentences containing infinitival embedded clauses come from i) the positioning and interpretation of temporal adverbials (98), and ii) binding facts (99).

- (98) a. weil Peter mich schon lange heute besuchen wollte
 since Peter me already for-a-long-time today visit wanted
 ‘already for a long time has Peter wanted to visit me today’
- b. *weil mich Peter schon lange heute besucht hat
 since me Peter already for-a-long-time today visited has
- c. *weil das Peter schon lange heute wollte
 since that Peter already for-a-long-time today wanted
- d. weil mich Peter heute schon lange besucht hat
 since me Peter today already for-a-long-time visited has
 [Hinterhölzl, 2006:132, ex. (8)]

One of the core assumptions here shared by a number of linguists is that a simple clause allows for only one independent adverbial of time. (98) further illustrates that the

order of time adverbials in a restructuring construction is even different from the order that is attested in a simple clause as is illustrated by the *schon lange heute* ‘already for a long time today’ order in (98a), the simple sentence, and the *heute schon lange* ‘today already for a long time’ order in (98d), the restructuring construction.

The following sentences indicate that there are two distinct binding domains in coherent infinitives of ECM-verbs:

- (99) a. weil er_i ihn^{*i/j} sie nicht waschen ließ
 since he him her not wash let
 ‘he_i did not let him^{*i/j} wash her’
- b. weil er_i sie ihn_{i/j} nicht waschen ließ
 since he her him not wash let
 ‘he_i did not let her wash him_{i/j}’
- c. *weil er_i sie sich_i nicht waschen sah
 since he her himself not wash saw
 ‘he did not see her wash himself’
- d. weil er_i sich_i sie nicht waschen sah
 since he himself her not wash saw
 ‘he did not see himself wash her’
- e. weil er sie_i sich_i nicht waschen sah
 since he her herself not wash saw
 ‘he did not see her wash herself’

[Hinterhölzl, 2006, p. 134, ex. (11), (12)]

Sentences (99a) and (99b) show that the embedded subject must be disjoint from the matrix subject, but the embedded object can be coreferent with it. In (99c) the matrix subject fails to license an anaphoric embedded object, (99d) illustrates that matrix subjects can license an embedded anaphoric subject. In (99e) an embedded anaphoric object is licensed by the embedded subject. These data show that there must be two distinct binding domains, the embedded TP and the matrix TP. That negation in the most natural interpretation has matrix scope indicates that the embedded subject and object have moved into the matrix TP as a result of restructuring.

According to Hinterhölzl (1999, 2006) all these facts can be easily accommodated into a bi-clausal approach if we assume that ECM-subjects are case-licensed in the matrix TP, objects are Case-licensed in the embedded TP, and the principle at work as far as pronominal binding is concerned is the following (Hinterhölzl 1999, 2006):

- (100) Pronouns and anaphors are interpreted in their Case-licensing positions (i.e., they must be reconstructed into their Case-licensing position before the Binding theory applies at LF).

2.3.2 Evidence for a bi-clausal structure in Hungarian

In the case of Hungarian it is relatively straightforward to argue for a bi-clausal structure even in the case of restructuring as we have seen in 1.3. What supports the bi-clausal approach in the case of Swedish is the presence of the C head. In Hungarian we find left peripheral constituents in restructuring infinitives. As far as temporal adverbials are concerned, it is relatively easy to find infinitival constructions involving more than one temporal adverbial with the expected interpretation in Hungarian as well. The binding facts, however, are much more intriguing. However, there are other data that also call for a bi-clausal analysis.

In a neutral sentence two independent adverbials of time sound slightly unnatural (101), but the oddity is not syntactic in nature, it is to do with the two contrasting time adverbials appearing next to each other.

- (101) ??Tegnap HOLNAP/MÁSNAP akartam Pétert meg-látogatni.
yesterday tomorrow/the following day wanted Peter-ACC PV-visit-INF
'Yesterday I wanted to visit Peter tomorrow.'

The situation improves considerably when the two time adverbials are not adjacent, e.g. focus can have this effect (102).

- (102) TEGNAP akartam Pétert [HOLNAP/MÁSNAP meg-látogatni].
yesterday wanted Peter-ACC tomorrow/the following day PV-visit-INF
'It was yesterday that I wanted to invite Peter tomorrow.'

Turning to binding we are facing a serious problem: several proposals (e.g. É. Kiss 1987, 2002) argue for a flat VP in Hungarian based on arguments coming from Binding Principle C:

- (103) a. *Felhívta a fiúk_i anyja őket_i.
 called the boys mother them
 ‘The boys_i’ mother called them_i.’
- b. *Felhívták (ők_i) a fiúk_i anyját.
 called they the boys mother-ACC
 ‘They_i called the boys_i’ mother.’

The examples are intended to show that both subject and object pronouns can c-command the rest of the DP, hence, the VP is flat in Hungarian. Obviously, this conclusion would be devastating for the present proposal: if the structure is flat scrambling can only be the result of base generation. If this is so, it is hard, if not impossible to motivate movement from the infinitival clause to the scrambling field of the finite verb.

That the Hungarian VP may not be flat after all is pointed out by Kenesei (2005b), where he presents data about the binding properties of epithet DPs to show that subject–object asymmetry does exist in Hungarian, too (104).

- (104) a. Péter be-lopakodott, de a kis hülye_i anyukája rögtön észre-vette (őt_i).
 Peter PV-sneaked but the little idiot mom at-once PV-saw him
 ‘Peter sneaked in, but the little idiot_i’s mom saw him_i at once.’
- b. *Péter be-nézett, de (ő_i) nem vette észre a kis hülye_i anyukáját.
 Peter PV-looked but he not saw PV the little idiot mom-ACC
 ‘*Peter looked in, but he_i didn’t see the little idiot_i’s mom.’

Another way to overcome the binding problem is proposed e.g. in É. Kiss (1987, 1994), or, more recently in Rákosi (2006): we can assume that certain phenomena like past participle formation and, relevantly for us, anaphoric binding are “directly sensitive to the thematic structure of the predicates involved and not to presumed configurational asymmetries” (Rákosi 2006:17). However, he uses this argument to maintain the flat VP approach for Hungarian, and can be an argument against Kenesei’s data as well, so this in itself does not necessarily give the satisfactory result.

Besides Kenesei, Surányi (2006b) also argues convincingly against the flat VP approach, claiming that a scrambling analysis can also derive the effects formerly attributed to a flat VP structure (e.g. the lack of Weak Cross-Over and Superiority

effects, free post-verbal constituent order, binding phenomena, etc.), moreover, it is empirically superior to the flat VP analysis. Evidence for a configurational vP and against the flat VP approach among others comes from i) the scope-taking properties of non-increasing QPs (105) and ii) movement out of subjects (106).

i) Scope-taking of non-increasing QPs: a *few*-QP functioning as an object cannot scope over a universal QP functioning as a subject, but a *few*-QP functioning as a subject can scope over a universal QP functioning as an object:

(105) TAVALY végzett el...

last-year did-3SG PV...

a. minden diák kevés kurzust. (S>O, *O>S)

every student-NOM few course-ACC

‘It was last year that every student did few courses.’

b. kevés diák minden kurzust. (S>O, O>S)

few student-NOM every course-ACC

‘It was last year that few students did every course.’

ii) Movement out of subjects: subjects, but not objects and other complements are CED islands (Condition on Extraction Domain, barring extraction out of adjuncts):

(106) a. ?Melyik tisztviselővel_i olvastál [egy interjút t_i]?
which official-with read-2SG an interview-ACC

‘Which official did you read an interview with?’

b. *Melyik tisztviselővel_i állította [egy interjú t_i] hogy nő a GDP?
which official-with claimed an interview that grows the GDP

‘With which official did [an interview t_i] claim that the GDP is growing?’

Both sets of data are hard to account for under the assumption that subjects and objects are both complements of the verb, but these asymmetries are expected if the A-position of the subject is assumed to be higher than the A-position of the complements.

In recent work É. Kiss (2007) also argues for a hierarchical structure in Hungarian where a detailed discussion can be found of further properties suggesting a configurational or a non-configurational structure for Hungarian. One of the central

questions of the study is how to account for the observed asymmetry between how Hungarian respects the Binding principles: whereas, as we have seen in (103), Binding Principle C calls for a flat VP analysis, Binding principle A suggests a bi-clausal structure, whereby an anaphor is assumed to be bound by an antecedent preceding it in the argument hierarchy (subject > object/dative > instrument > location). The sentences in (107) illustrate this at work. The phase-theoretical account of É. Kiss (2007) argues that contrary to the local checking of anaphors, it is sufficient to check Binding principle C in the highest phase where the vP is already flattened and the subject and the object are sisters.

(107) a. Péter és Kati észrevette egymás-t.

Peter and Kate noticed each-other-ACC

b. *Pétert és Katit észrevette egymás.

Peter-ACC and Kate-ACC noticed each-other-NOM

Besides what we have seen so far, further support for the bi-clausal analysis may come from the availability of left peripheral projections within the infinitival clause itself, as illustrated e.g. in (3).³² Also, in the structures under discussion there can be two domains of negation, which may be a further argument for a bi-clausal structure (108).

(108) Péter nem fogja nem szeretni a tanárt.

Peter not will not like-INF the teacher-ACC

‘Peter won’t dislike the teacher.’

Even in this case, the finite verb shows agreement with the object of the infinitive. In (109) the definite object is missing, so the finite verb shows indefinite agreement, the agreement that surfaces when the infinitive has no object.

(109) Péter nem fog nem szeretni táncolni.

Peter not will-3SG-INDEF not like-INF dance-INF

‘Peter won’t dislike dancing.’

³² My analysis does not directly necessitate the presence of left-peripheral projections internal to the infinitival clause itself, since I claim they appear in the scrambling field of the finite clause. However, I take the inseparability of the focus of the infinitive and the infinitive to indicate that the infinitive moves to FP in the infinitival clause prior to moving to the scrambling field of the finite clause.

These data taken together with (46) and (47), where the sentences show mono-clausal (object agreement) and bi-clausal (left peripheral projections within the infinitive) properties at the same time, call for an analysis that can connect the bi-clausal and mono-clausal structures. Hinterhölzl's approach, which claims that restructuring infinitives are also full CPs has a lot of potential in solving this problem. The question that arises now is why in a number of cases constituents base-generated in the embedded clause fail to occupy these projections in the infinitival clause in Hungarian sentences. I assume that the primary target of left peripheral constituents is in the CP-layer of the finite verb, which is the result of restructuring. The motivation for restructuring taking place, similarly to Hinterhölzl (1999, 2006) and Wiklund (2006, 2007), is that the tense-interpretation of the infinitive depends on the matrix verb, and, for example agreement between the matrix verb and the object of the infinitive can be argued to be the manifestation of this dependency from the side of a transitive verb, and for this reason not present in every restructuring context. According to my proposal constituents base-generated in the infinitival CP have to leave the CP due to restructuring taking place, motivated by the tense deficiency of the infinitival clause, but prior to this, scope relations can be established in the respective left peripheral projections of the infinitival clause, which have to be preserved after movement as well. This is completely in line with general assumptions about the way Hungarian works: scope interpretation seems to be a driving force in Hungarian sentence formation, explicitly formulated by the linguistic community into the statement "Hungarian wears its LF on its sleeve" (e.g. Koopman and Szabolcsi 2000). The following sentences justify this:

- (110) a. Nem akartalak CSAK TÉGED meg-látogatni.
 not wanted-1SG only you-ACC PV-visit-INF
 'I didn't want to visit only you.'
- b. CSAK TÉGED nem akartalak meg-látogatni.
 only you-ACC not wanted-1SG PV-visit-INF
 'It is only you I did not want to visit.'

When scope interpretation is not at stake, constituents tend to move to the left periphery of the finite CP:

- (111) HOLNAP szeretne Péter étteremben enni.
 tomorrow would-like Peter restaurant-in eat-INF
 ‘Peter would like to eat in restaurants TOMORROW.’

2.3.3 Summary

The cross-linguistic observations indicate that Hungarian is not the only language where the data call for a restructuring-analysis where the infinitival constructions in question are CPs. However, we have also seen data based on which I would hesitate to argue for a universal bi-clausal account of restructuring. Italian may be a language where restructuring can be truly mono-clausal as evidenced by the unavailability of negation within the infinitival clause, though Cinque’s functional analysis seems to need refinements at certain points such as the exclusion of subject control or transitive verbs from entering a restructuring construction.

A very natural assumption to my knowledge first explicitly expressed by Wiklund (2005) is that restructuring effects are dependent on language-specific (mainly morphological) factors. In this account of restructuring, languages can select from a whole array of strategies to satisfy the needs of a Tense-deficient infinitival clause on the one hand, and turning an embedded clausal constituent into the complement of a matrix verb on the other, these two in turn resulting in the so-called clause-union phenomena. The functional proposal in the form discussed in Cinque (2004) may handle the Italian data well, but the analysis fails to capture properties of Swedish restructuring, which uses the strategy of copying the relevant functional material. If this is correct, we expect a number of language specific differences in sentences containing embedded infinitives, which, upon closer inspection, reveal characteristics of restructuring. It is not surprising therefore to find differences in German restructuring, which in turn will be different from Basque, Italian and Hungarian restructuring effects, as we have seen in this chapter.

Though the presence of a C head may not always be as obvious as it is in the case of Swedish, the binding data do argue for two distinct domains in German, and in Hungarian the presence of left peripheral elements, more precisely the inseparability of the focus and the infinitive also call for an analysis where the restructured constituent is bigger than a vP/VP. The function of the covert C head is as defined in Hinterhölzl’s (1999) theory of sentential complementation, turning the infinitival clause into a

complement of the finite verb. In 5.4 I argue that in Hungarian it overtly manifests in the definiteness agreement between the (transitive) finite verb and the object of the infinitive, which I assume to be mediated by the C-head.

Part II: Explaining the Hungarian data

Chapter 3 Partial ordering restrictions and scrambling

As Wiklund (2005) claims, the effects of restructuring depend on language-specific factors. In West-Germanic we find long-distance scrambling, VR or VPR, verb cluster formation and different patterns of IPP effects. In Hungarian we also have verb clusters, free post-verbal word-order and agreement between the finite verb and the object of its infinitival complement. That we have no object agreement in German is not surprising, since German verbs do not show agreement with their object in general. The absence of the IPP effect or anything similar is not surprising in Hungarian, since Hungarian verbs taking non-finite verb forms invariably take infinitives. Hungarian word order is driven by considerations of logical relationships, which results in the availability of typical left peripheral projections even within an infinitival clause undergoing restructuring. These properties of the two languages offer some insights into the differences in the derivation of restructuring itself.

My primary aim in this chapter is to offer an analysis for how the word orders presented so far come about, with special emphasis on the unexpected FP–QP order. In doing so I assume that sentences containing finite verbs taking an infinitival complement always start out as bi-clausal. The infinitival clause is a full CP with all the left peripheral projections present. Information established within the infinitival clause including scope must be preserved even after restructuring taking place. I assume that scope relations can be read off the infinitival clause in the form of partial ordering restrictions. The constituents defined this way end up in the scrambling field of the finite verb in the order defined by these partial ordering rules. The only proposal I have to make in order to account for the word order facts is that in Hungarian infinitival clauses the verb can move not only to the head position of FP, but the head position of QP as well.

To account for agreement between Hungarian finite verbs and the object of their infinitival complements we have to assume movement taking place from the infinitival clause to the finite verb. The questions we have to answer are which constituent moves there and how. One option would be to say that it is the infinitival object itself that undergoes movement. However, as we have seen in (43), if the infinitive has no object, the finite verb shows indefinite conjugation. Hungarian intransitive verbs also

demonstrate the indefinite agreement pattern. Therefore I propose that it is actually the infinitival CP (which must be emptied due to prior scrambling operations) that moves to the specifier position of the finite AgrOP/vP, the projection where its definiteness feature can check the definiteness feature of the transitive verb.

What results in the clause union effects is the movement of the infinitival T to the finite clause, whereby constituents of the infinitival clause are reanalysed as constituents of the finite clause. This explains the tendency of embedded constituents to appear in the left peripheral projections of the finite verb. However, as observed, the restrictions on the order of left peripheral constituents in infinitival embedded clauses differ from those of the finite clause, can be overridden by scopal factors: quantified expressions can appear between the focussed constituent and the verb, which, in the normal case is not separable from the infinitive itself. One straightforward solution to handle this problem is to assume that a QP can appear in infinitival structures after FP. Actually, this is not a completely unnatural stipulation, since we already have the means to derive such an order: É. Kiss (1998) argues that post-verbal operators appear due to a sequence of TopP–QP–FP projections in the left periphery. The reason why we can have only one focus before the verb (but see Kenesei (2009) for a systematic exception) is that the verb undergoes movement to the head position of the topmost FP (112).

- (112) [_{FP} Anna_i [_F dicsérte_m [_{FP} Marit_j t_m [_{TP} tegnap_k t_m [_{TP} t_m t_i t_j t_k]]]]]]
 Anna-NOM praised Mary-ACC yesterday
 ‘ANNA praised MARY yesterday (and Peter John).’

All we need to assume to be able to generate the word order attested in (33) repeated here for the sake of convenience as (113) is that in infinitival clauses, as opposed to finite clauses, QP can check [–T] overtly. Thus, QP is different from FP which can check [±T]. In the infinitival clause, since Q can check [–T] overtly, movement to the FP can take place after movement to QP. In a finite clause this order could not arise, as [+T] is not checked by Q. Movement from QP to FP is made possible in infinitival clauses by the availability of TopP–QP–FP sequences in the left periphery. With respect to this there is no difference between the structure of the left periphery of finite and infinitival constructions. The difference results from the assumption that in finite clauses the resulting surface order is one where a number of the operators ends up in a position after the finite verb as opposed to the infinitival construction, where the

partial ordering restrictions operating in the scrambling field place the infinitive into a position that follows the left peripheral operator positions. Prior to moving to the scrambling field the infinitive checks the operator features of the constituents of the infinitival clause.

- (113) HOLNAP szeretne Péter CSAK EBBEN AZ ÉTTEREMBEN
 Tomorrow would-like Peter only this-in the restaurant-in
 minden fogást ki-próbálni.
 every dish PV-try-INF
 ‘Peter would like to try every dish in this restaurant TOMORROW.’

To be able to see how exactly this works out let us first consider derivations of different structures containing embedded infinitives. Following Surányi (2006b) I claim that Hungarian clauses contain a scrambling field, but the infinitival data seem to suggest that it is not in the T-domain, but higher, in the left periphery of the clause. The dissertation argues for a scrambling field above AgrSP which calls for further justification. I also leave it to further research to determine whether scrambling targets positions already argued for in linguistic analysis (similarly to scrambling targeting independently existing clitic licensing positions in Hinterhölzl’s (2006) analysis), but let me note that Koopman and Szabolcsi’s (2000) Licensing Positions for CPs, and (recursively) for DPs seem to be promising in this respect.

In the analysis of the motivation for scrambling I follow Hinterhölzl (2006). He claims that one type of trigger for scrambling involves scope features of arguments, which are relational properties, thus inherently non-lexical. He proposes “an extension of the minimalist framework that allows for the introduction of non-lexical features in the course of the derivation to account for this aspect of scrambling” (Hinterhölzl 2006:215). In his analysis scrambling targets positions already existing independently, namely the licensing positions of weak pronouns. One type of trigger for scrambling can be for reasons of scope taking, therefore one type of the non-lexical features should be scope features.

I argue that scope relations can be read off the infinitival CP and these relations determine the order of constituents in the scrambling field of the finite clause after restructuring takes place driven by the temporal deficiency of the infinitive. The infinitival CP has the same structure as the finite CP, the difference is in the checking

procedure. Scope orders created in the infinitival CP must be preserved, constituents without scope can appear freely, since they cannot destroy already determined scope relations. Following Bouma (2003) I propose that scope relations can be preserved in the form of partial ordering restrictions. These partial ordering restrictions define the order of scrambled constituents. The arrows in the tree representations leading to the scrambling field of the finite verb define the order of the relevant constituents based on the order defined by these ordering restrictions.

At this point an obvious question presents itself: what is the internal structure of this scrambling field like? Though what is crucial for me in the present proposal is the mere existence of a scrambling field somewhere in the derivation, which has been argued for on independent grounds, and nothing hinges on its internal organisation, some remarks are still in order concerning the question. One of the main questions is whether the scrambling field is a flat structure without any hierarchical organisation or we can assume some kind of structure building taking place there as well. Since the restructuring and scrambling process described in the present work applies in the course of the transformational derivation, meaning that it is preceded and followed by transformational operations, the question is far from trivial and if we want to come up with a coherent proposal this also has to be addressed. The outcome of the operation of the partial ordering restrictions is a structure different from the usual hierarchical organisation of clause structure, but proposing a hybrid syntactic representation where there is an unstructured part within a hierarchically organised construction would raise methodological concerns as well. Since I propose that the process taking place within the scrambling field is different from both A- and A-bar movement it is not surprising that the resulting structure is also different from the most well-known mechanisms of structure building. The structural representation that I find the easiest to reconcile with my proposal is Hornstein and Nunes's (2008) treatment of adjunction as concatenation without labelling. Scrambling then would be a series of adjunction structures in the scrambling field where the order of the concatenated constituents is defined by the partial ordering restrictions. This is a point where I diverge from Hornstein and Nunes and allow for concatenation to be part of the structure building process, actually, to be part of a structure built on top of the concatenated part of the construction. This is a major diversion since Hornstein and Nunes claim that "adjunction structures are simpler

than structures involving complements and specifiers” and that “the critical difference between complements and adjuncts is that the former *requires* integration into structures with labels while the latter does not”, which “gives adjunction structures greater grammatical latitude, in some respects.” This means that turning something into a complement is more costly, and there is an option of leaving adjuncts as they are without integration into the structure (for empirical justification see Hornstein and Nunes (2008)). What goes on in the scrambling field, however, is a different kind of structure building that, if properties of the language allow it, breaks up already existing structure and reorganises it according to the partial ordering restrictions introduced above, and obviously does not run through only adjuncts. Moreover, adjuncts that end up in the scrambling field must be integrated into the structure first to receive their scope/information structure features (if they have any) prior to moving to the scrambling field. That is, in the present proposal I only adopt the structural representation without the background assumptions of the authors (which I consider very well-motivated for adjuncts).

In the next section I present some sample derivations that illustrate the way the proposed analysis works.

3.1 Ordering rules at work

This section shows only the part of the derivations that are relevant for the partial ordering restrictions. To ease the clarity of the presentation, agreement and event structure properties of the constructions in question are not indicated at all (including the complications around the placement of the preverb). For a more complete analysis see Chapter 6.

Sentence (28) repeated here as (114) contains an embedded infinitive with a focus of its own. It is indicated by the positions available for the subject of the finite verb: it cannot surface between the focus and the infinitival verb. In this case it is only the focussed constituent which has scope in the infinitival structure. Since in order to have the focus interpretation, the relevant features of the constituent that occupies the specifier position of the FP have to be checked by the verb, the focussed constituent moves together with the verb to the scrambling field. Since *Péter* is a constituent

without scope, it can appear in several positions excluding the position between the focussed constituent and the verb. I assume that the inseparability of the two is due to the specifier-head relation between the two elements that is necessary for the focus-interpretation of the focussed constituent, that is, they undergo movement to the scrambling field as one constituent (FP), where Spec,FP cannot undergo scrambling on its own. Since the object of the sentence does not have scope either, the prediction is that it can also appear in the positions available for ‘Peter’, which is borne out. Talking about the object of sentence (114), an important question arises: based on the alternative word orders we have to conclude that the definite DP *a halászlét* ‘the fish soup-ACC’ is in the scrambling field of the sentence, but there is no obvious motivation for its movement, since it is neither scope-bearing nor topic/focus. To account for this I propose that the whole infinitival clause has to be emptied for licensing purposes that can again be derived from the deficient nature of the infinitive. This emptying procedure is assumed to be carried out in the form of individual movement of the constituents of the infinitival clause to the left periphery of the finite clause (unless requirements of the finite verb define it otherwise)

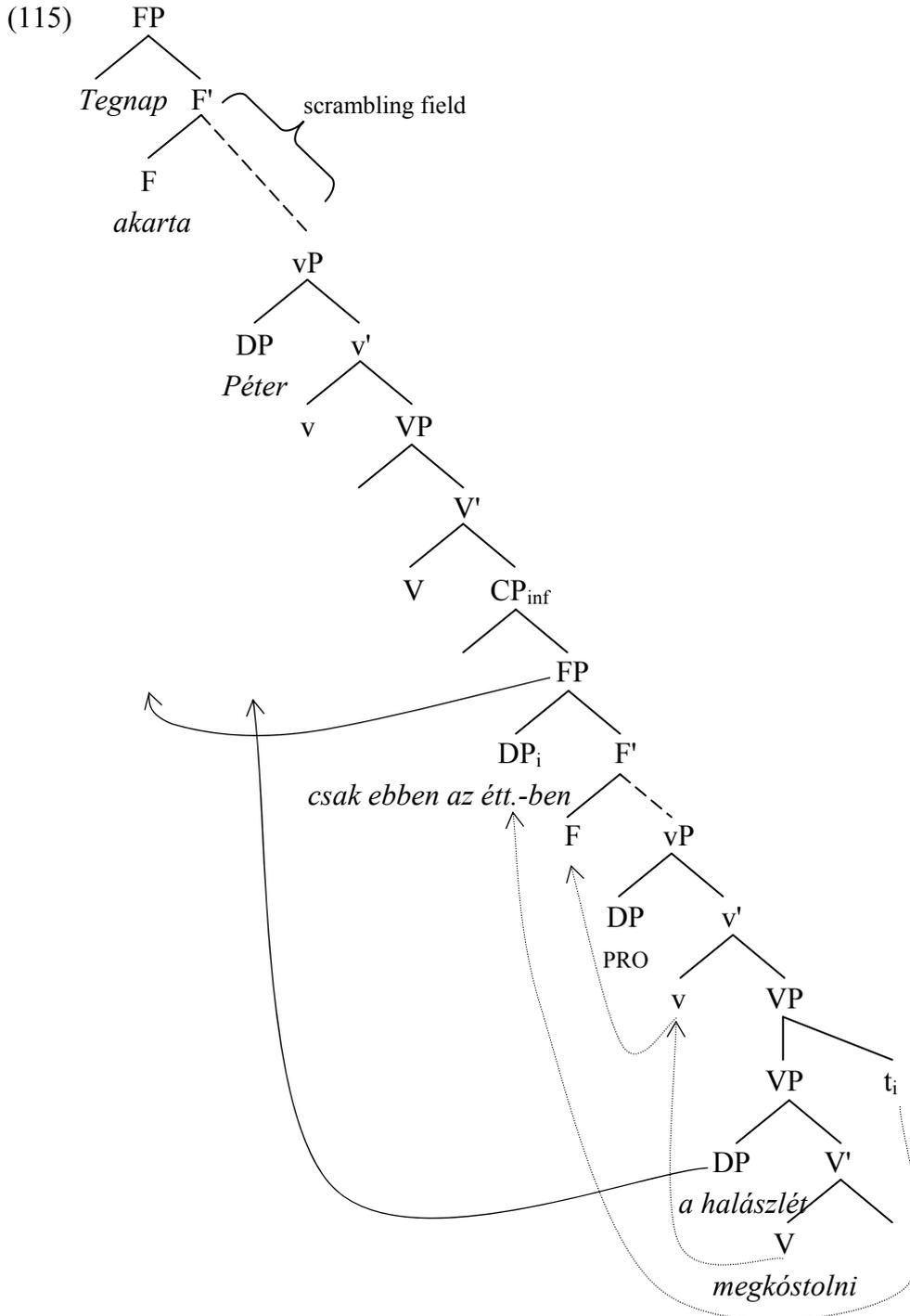
(114) = (28)

TEGNAP akarta (Péter) CSAK EBBEN AZ ÉTTEREMBEN (*Péter)
 Yesterday wanted Peter only this-in the restaurant-in Peter

meg-kóstolni (Péter) a halász-lé-t (Péter).

PV-taste-INF Peter the fish-soup-ACC Peter

‘It was yesterday that Peter wanted to taste fish soup only in this restaurant.’



In sentence (117) the infinitival embedded clause contains a QP and an FP in the expected order. It is at this point that movement of the verb to Q becomes important. This movement is not unmotivated, since the distributive vs. cumulative reading of a quantifier may depend on the verb as well. In finite clauses it is assumed to be a covert operation. That it has to be overt in infinitival clauses can be explained by scope factors

again: since scope relationships are established within the infinitival CP, and these relationships have to be defined before movement to the scrambling field takes place it cannot be a covert operation: scrambling can only be overt movement, so the preceding movement also has to be overt. Moreover, if the verb moves to Q from F, it is predicted that [Spec,FP] will not move together with the verb, and, as a result, the subject of the finite verb can also appear in the position between them. The [Spec,QP] constituent can leave the QP alone, since in that case scope interpretation is possible without the verb, as opposed to focussing. The scope relations established in the infinitival CP that determine the order of constituents in the scrambling field of the finite verb are given in (116). At this point syntax fails to be able to encode the scope properties of the infinitival clause satisfactorily, since due to syntactic requirements (the checking of the Q head) the derivation diverges from the considerations of semantics. In (116) we find the ordering restriction $FP > V$ in spite of the fact that the verb is raised into a position c-commanding the focus. However, the movement of the verb is not motivated by establishing a new scope interpretation, the movement is exclusively syntactic in nature, driven by feature checking. According to (Bouma 2003 based on Copestake et al. 2001) the infinitival verb has to be in the scope of its own left peripheral constituents. Something very similar is stated in Newson (2004) in a more general form. Discussing the organisation of the language faculty, and arguing for gradient alignments instead of structure building as the grammatical mechanism for organising syntactic expressions he claims the following:

“[S]emantic interpretation and syntactic organisation are indirectly related, mediated through the input. Syntactic organisation only needs to reflect semantic facts to the extent that the semantic relationships stated in the input are faithfully encoded in the syntactic expression. Given that faithfulness constraints may be violated, it follows that the syntactic expression does not have to directly reflect semantic relationships.”

(Newson 2004:138)

Though the claim is made within a different theoretical framework, that of Alignment Syntax, this assumption is certainly something linguistic theories in general should take into consideration. The main lesson we can conclude from it is that we do not have to take the assumed isomorphism between semantic and syntactic structure at face value, since semantics and syntax have largely different objectives. We could say

that the behaviour of the verb in the infinitival clauses under discussion in the present dissertation supports this claim.

For this reason, and also in order to provide a means for the technical handling of the claim, I propose the introduction of a default zero value for the infinitival verb that also differentiates it from constituents with no scope.

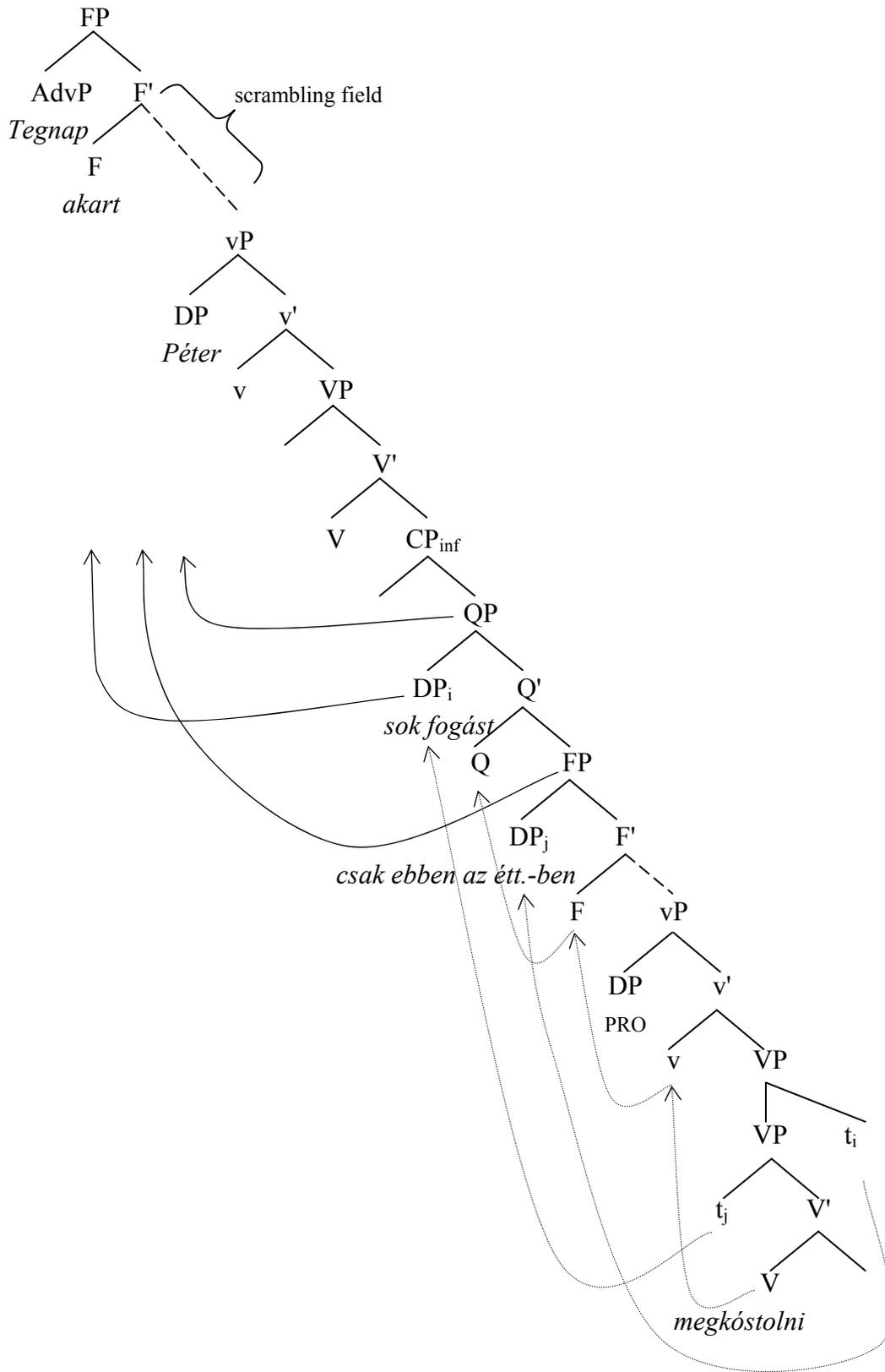
(116) $DP_Q > FP; DP_Q > V; FP > V$

Again, constituents with no scope can appear freely in the structure, that is why *Péter* can appear in the positions indicated.

(117) TEGNAP akart (Péter) sok fogást (Péter)
 Yesterday wanted Peter many dish-ACC Peter

CSAK EBBEN AZ ÉTTEREMBEN (Péter) megkóstolni (Péter).
 only this-in the restaurant-in Peter PV-taste-INF Peter
 ‘It was yesterday that Peter wanted to taste a lot of dishes only in this restaurant.’

(118)

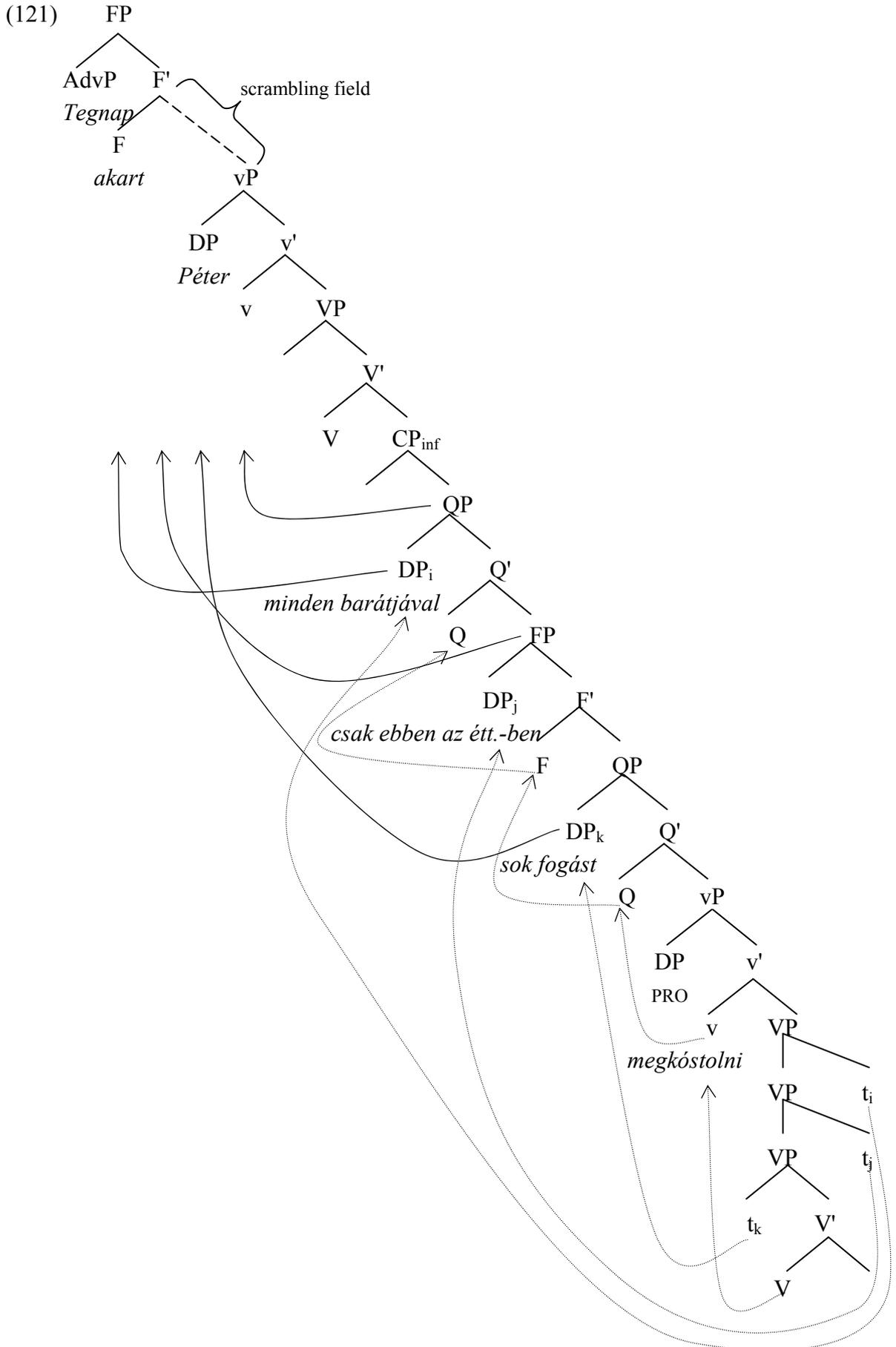


Sentence (120) contains a focussed constituent and two quantifiers, one preceding the focus, one following it. In this case the QP is argued to be able to appear between the FP and the VP exactly because in infinitival clauses the verbal head can move to Q, and from this position it can move further on to F (and then to the higher Q position). As indicated earlier, the TopP–QP–FP sequence is iterative, the second QP belongs to the second TopP–QP–FP sequence. These iterated sequences are necessary for identifying the scope relationships based on the structure of the infinitival clause bearing in mind the restriction on the default scope value of the infinitival verb that has to be in the scope of all its left peripheral constituents. The scope ordering restrictions this time are as given in (119).

- (119) $DP_{Qi} > FP$ $FP > DP_{Qj}$
 $DP_{Qi} > DP_{Qj}$ $FP > V$
 $DP_{Qi} > V$ $DP_{Qj} > V$

- (120) TEGNAP akart (Péter) minden barátjával (Péter)
 Yesterday wanted Peter every his-friend-with Peter

CSAK EBBEN AZ ÉTTEREMBEN (Péter) sok fogást (Péter) megkóstolni.
 only this-in the restaurant-in Peter many dish-ACC Peter PV-taste-INF
 ‘It was yesterday that Peter wanted to taste a lot of dishes with all of his friends only in this restaurant.’



Now let us consider the case when we only have a focussed constituent followed by a quantifier in the infinitival clause, that is, a higher quantifier is not present. Such a structure is found e.g. in (33) repeated here for the sake of convenience as (122).

(122) = (33)

HOLNAP szeretne Péter CSAK EBBEN AZ ÉTTEREMBEN
 Tomorrow would-like Peter only this-in the restaurant-in

minden fogást ki-próbálni.

every dish PV-try-INF

‘Peter would like to try every dish in this restaurant TOMORROW.’

It is in this structure that the ordering restrictions on scope relationships play a crucial role. The ordering restrictions in such a structure are a subset of the ordering restrictions in (119), namely the second column on the list, not containing reference to DP_{Qi} . The importance of the ordering rules lies in the following: in the derivation V ends up in the head position of FP . Since there is no higher QP in the structure, this is its ultimate position in the left periphery, so it should move together with the focussed constituent, a move not supported by empirical evidence. The ordering restrictions that determine the order of constituents in the scrambling field of the finite verb take care of this: the verb is in the scope of the quantifier, which is in the scope of focus, so the quantifier appears between the focussed constituent and the infinitive.

Finally, let us return to the problematic sentences that contain seemingly similar multiple foci structures (sentences (32) and (39) for the sake of convenience repeated as (123) and (124)).

(123) *HOLNAP szeretne CSAK ÉTTEREMBEN Péter enni.
 Tomorrow would-like only restaurant-in Peter eat-INF
 ‘It is tomorrow that Peter would like to eat only in a restaurant.’

(124) TEGNAP kezdett el PÉTER a gyerekeknek énekelni.
 yesterday started PV Peter the children-DAT sing-INF
 ‘PETER started to sing to the children YESTERDAY.’

Based on the derivations above, the contrast between (123) and (124) is predictable: *Péter*, belonging to the finite verb can easily appear in the post-verbal focus

position related to that verb. The *only*-phrase, however, the scope properties of which are determined in the infinitival clause, moves to the scrambling field of the finite verb together with the infinitive, so nothing can appear between the two.

3.2 Potential problems of the approach

3.2.1 The scope of topics

In section 3.1 the DP constituents without scope were all definite DPs and throughout the dissertation there have been hints at topics not being able to participate in scopal ordering and, as a result, can end up in different positions of the linear string. This is what can be drawn from É. Kiss (2003) where topics are defined as [+specific] [+referential] constituents. However, if topics can be [-referential] as well, as assumed in Szabolcsi (1997) and Gécseg (2006), further remarks are in order. Topics that are [-referential] can of course have scope, namely that part of the clause that follows them (where contrastive topics are, of course, excluded). Under such a notion of topichood topics are not excluded from the partial ordering of constituents, actually the operation automatically extends to them without further complications. The partial ordering restrictions reflect scopal order, as expected. This is illustrated in the sentence pairs in (125).

- (125) a. TEGNAP akar-tam egy diák-om-at minden résztvevőnek bemutat ni.
 yesterday wanted-1SG a student-my-ACC every participant introduce-INF
 ‘It was yesterday that I wanted to introduce a student of mine to every participant.’
 $\exists > \forall$
- b. TEGNAP akartam minden résztvevőnek egy diákomat bemutatni.
 yesterday wanted-1SG every participant a student-my-ACC introduce-INF
 $\forall > \exists$

Thus the question whether topics are scope-bearing elements depends on how exactly we define topics. Under a broader construal of topichood the proposed analysis naturally extends to scope-bearing topics as well.

3.2.2 Partial ordering restrictions and matrix elements

Another question is related to the scope-bearing elements of the finite clause appearing in the post-verbal domain of the finite verb. Do the partial ordering restrictions see them? Since restructuring results in clause union the expectation is that there should be no difference between elements of the finite and the infinitival clause in this respect, which is borne out by the data (126).

(126) a. Holnap szeretné sok gyerek csak eb-ben az étterem-ben
tomorrow would.like many children only this-in the restaurant-in

megkóstol ni/kóstol-ni meg a halászlét
PV-taste-INF/taste-INF PV the fish soup

‘A lot of (the) children would like to taste the fish soup only in this restaurant tomorrow.’

a lot of children > only in this restaurant

b. Holnap szeretné csak eb-ben az étterem-ben sok gyerek
tomorrow would.like only this-in the restaurant-in many children

megkóstol-ni a halászlét
PV-taste-INF the fish soup
only in this restaurant > a lot of children

Though the data unambiguously show that the partial ordering restrictions work on elements of both the finite and the infinitival clause, a further important problem arises. In the sentences in (126) the matrix clause has no focus of its own and this raises the question of the exact positioning of the scrambling field. So far we have claimed that the scrambling field is somewhere in the left periphery. This pair of data suggests that it should be lower, more precisely that there should be a scrambling field under the neutral position of the finite verb. Alternatively, it could be suggested that the verb is above the scrambling field in a neutral clause as well (see Surányi (to appear) for a proposal along these lines). The reason why I would hesitate to place the scrambling field lower than the left periphery of the clause is that the partial ordering restrictions operate on scope and information structure features, which is typical left peripheral

information. A third alternative, that the finite verb itself is in the scrambling field as well, is proposed in 6.5.

The existence of such constructions might even be understood as indicating that the infinitival clause may not have a left periphery of its own after all. There are two reasons why I would not resort to the one left periphery per sentence approach. On the one hand, it would be difficult to explain why we have the PV-V/V-PV alternation in the infinitive directly following its focus in (126a). Under the assumption that the constituent *csak ebben az étteremben* ‘only in this restaurant’ is the focus of the infinitive and this feature is checked by the infinitive itself (the result of which being the inseparability of the two) accounting for this empirical observation is straightforward. On a similar train of thought, and this constitutes the second argument for wanting to maintain a left periphery for the infinitive, when the finite verb has a focussed constituent in its own left periphery, it is again the infinitive that can check the focus feature of its focussed constituent as also indicated by the inseparability of the focussed constituent and the infinitive.

3.2.3 Scrambling field above FP?

Another, similar problem the proposal outlined above faces is related to those infinitival constructions that appear with a seemingly nominative subject of their own, as discussed in 1.4.4 repeated here as (127)

- (127) a. [Nem akar [csak ő menni busszal/busszal menni]]
 not want only he/she-NOM go-INF by-bus
 ‘He/she does not want to be the only one to go by bus.’
- b. [Csak ő nem akar [busszal menni]]
 only he/she-NOM not want by-bus go-INF
 ‘It is only him/her who does not want to go by bus.’

In the proposal I remained agnostic about the exact positioning of the scrambling field (apart from the assumption that it should be somewhere in the lower part of the left periphery), however, the infinitival clauses where a nominative subject appears could force us to draw a rather peculiar conclusion. Obviously, we would not like to claim that in those particular constructions infinitival clauses do have nominative subjects, we would not like to come up with a solution as peculiar as that. However, as it has already

been pointed out, and is clear from the examples themselves as well, there is a crucial difference between the meanings of the two sentences in (127), and this meaning difference can be accounted for in terms of scope. The partial ordering restrictions could account for this difference, but for this we would have to assume that the field relevant for the operation of these partial ordering rules (our scrambling field) is somewhere in the higher part of the left periphery, presumably above FP, since the nominative subject has to receive focus interpretation first, preferably from the finite verb, the domain it also checks its case feature in. In order for this to take place the focus interpretation has to be assigned to the DP first in the respective position, and scrambling can apply only after this has been carried out. In this construction we have a conflict of interests in terms of information structure and scope considerations, and scope considerations seem to have priority. It is all the more problematic as we have just seen that the scrambling field should at the same time be under the neutral position of the finite verb, which obviously cannot be as high as the position we would need to account for the data discussed in the present section. It is not exactly clear how to account for this in terms of scrambling, or whether there are alternative proposals we could entertain. This implies that we have reached a point in the discussion where we cannot escape a discussion of the phenomenon of scrambling for a better understanding of the data above to which we will return.

Chapter 4 The end of the story: scrambling mechanisms

4.1 Introduction

The analysis proposed in Chapter 3 gives only the beginning of the derivations and leaves a part of it almost literally “hanging in the air”. As we have seen, this raises questions of central importance: what exactly goes on in the scrambling field and where is it? How do scrambling mechanisms define word order? Considering the phenomenon of scrambling from a broader perspective other issues crop up as well: what are the languages that allow scrambling? Which property of these languages makes scrambling possible? What triggers scrambling and what factors determine the resulting word order? These are the questions we are turning to now.

The first part of the chapter presents different accounts of scrambling and weighs whether they are able to give a satisfactory account of the Hungarian data introduced in the first part of the dissertation. After considering dichotomies like OV vs. VO underlying word order, optional vs. feature-driven scrambling, and A'-movement vs. A'-movement I introduce a recent proposal that claims the priority of LF and show that out of the different approaches presented, this is the one that manages to capture the problematic aspects of the Hungarian constructions this work focuses on.

Returning to the proposal made in Chapter 3, we have to think over whether the partial ordering restrictions account for all the phenomena scrambling analyses can handle, and, even more importantly, we should also consider the question whether all scrambling phenomena are the result of a single operation or whether the different patterns are the results of different operations, which should not be surprising either, given the fact that scrambling goes together with a multitude of different phenomena.

In order to be able to do this, first we consider different approaches to scrambling. Proposals aiming to account for free word order phenomena are so many in number and vary so much in the nature of the solutions proposed that it is extraordinarily difficult even to compare them. Moreover, word order phenomena that go under the term ‘scrambling’ do not even make a uniform set. Nevertheless, the issues that keep recurring can be instructive and having a look at them may bring us closer to the motivations and mechanisms of scrambling in general and scrambling in Hungarian in particular, so this is where we turn to now.

4.2 Approaches to scrambling

The approaches to scrambling can be compared along different dimensions. There are approaches according to which scrambling correlates with basic word-order (e.g. Corver and Riemsdijk 1997, Haider and Rosengren 1998, Neeleman and Reinhart 1998, Neeleman and Weerman 1999). According to certain proposals the emphasis is on the semantically vacuous, moreover, completely optional nature of scrambling (Fukui 1993, Saito 1989, Saito and Fukui 1998), which is highly problematic from a minimalist perspective, where movement is triggered by some kind of a feature-checking mechanism (Chomsky 1993, 1995). Therefore, the task of the linguist is to identify those features that account for the different word orders arising as the result of scrambling, at the same time avoiding the obvious problem: one would need features the number of which increases with every new element added to the sentence, moreover, these features should not be present in languages not allowing scrambling (or, if they are present, there should be an account for what blocks scrambling in those cases). As is predictable, once the approach to scrambling as an optional process has to be abandoned, variation concerns the nature of the features that are supposed to account for the effects of scrambling. In this respect two main groups can be identified: the relevant feature is either the property of LF (Hinterhölzl 2006) or that of PF (Neeleman and Reinhart 1998, van Gelderen 2003). The PF approaches argue that scrambling operations are motivated by information structure considerations, the LF approaches claim that scrambling is driven by scope interpretation or e.g. specificity. Considering the Hungarian constructions under discussion we can see that actually both information structure *and* scope have an effect on word order, so in the ideal case we would need an analysis that connects the two.

Scope is clearly an LF phenomenon, but opinions differ with respect to information structure. Vallduvi (1992) proposes a third interface level, FF (Functional Form) besides PF and LF for the disambiguation of discourse functions. Most of the approaches, however, following Occam's razor, claim that if discourse properties can be accounted for without evoking a third interface level, that should be the preferred analysis. In the light of this, there are proposals for treating information structure as either an LF (Uriagereka 1995, Steedman 2000, Bobaljik and Wurmbrand to appear) or a PF phenomenon (Chomsky 1995, van Gelderen 2003). Within the former we can

mention a slightly different approach, that of Brody (1981), which deals with information structure at a post-LF level, LF' (LF prime).

As we have seen, the motivation for scrambling (if there is any at all, that is) is argued to be related to scope interpretation, information structure, or both of these. Since there is no agreement on exactly what triggers scrambling (again noting that there may be no trigger at all according to certain accounts), we expect a multitude of mechanisms that are supposed to account for the resulting linear reorderings of constituents and this is exactly what we find: certain accounts propose a base-generation solution to scrambling, which in minimalist terms may translate into the lack of merger as suggested by Hoffman (1996). Another potential type of analysis is in terms of a movement approach, but once movement is introduced, there is another dimension along which approaches to scrambling can be distinguished, namely whether movement is assumed to be A- or A'-movement, since scrambling has been shown to have properties of both. I cannot detail discussions of the A/A'-bar dichotomy in the present work but would like to refer those interested to two volumes extensively studying this and related questions (Corver and Riemsdijk 1994, 1997, Grewendorf and Sternefeld 1990). An important remark is in order though at this point of the discussion concerning the A- vs. A'-movement problem. The mere emergence of the problem itself might suggest that the attempt to account for scrambling in terms of these familiar mechanisms is simply misguided. It is impossible to make a difference because this is not the relevant difference, but a completely different mechanism is responsible for free word order phenomena. In section 4.3 I present an alternative proposal along these lines.

In the next subsections I present the main ideas of representatives of different approaches to scrambling and point out what they can handle well and what their weaknesses are.

4.2.1 Scrambling and the word-order parameter- Hungarian as an SOV language?

According to Corver and Riemsdijk's (1997) approach to scrambling phenomena the availability of scrambling in a given language depends on the value of the head-parameter of that language, and is a property of OV languages. Based on a corpus of 23 languages they find that "scrambling is frequent in head-final languages, and rare or even absent in head-initial languages" (Corver-Riemsdijk, 1997). Scrambling in head-

initial languages is very often found when the head-initial classification of the given language can be questioned easily: Hungarian as a free word-order language where it is relatively hard to define the base word order could be mentioned as one of the examples. At this point the question arises whether Hungarian could be an SOV language. If some evidence were found that Hungarian was misclassified as far as its headedness-parameter is concerned, the phenomenon of scrambling available in the language would be accounted for in this approach. In fact, we do find proposals for analyzing Hungarian as an SOV language: with regard to preverb climbing phenomena Ackema (2004) argues that an analysis of Hungarian as an SOV language would easily get rid of several problems a VO approach faces, among others it could easily account for why we find so many parallels between free word order phenomena of German and Dutch and those of Hungarian. Marácz (1989) also treats Hungarian as an SOV language.

However, there are also approaches pointing to the other direction: if we find languages which are indisputably SVO and use scrambled structures, we can claim that the generalization about the correlation between the headedness parameter of a language and the availability of scrambling does not hold. Costa (1998) claims that Portuguese is such a language, moreover, there have been proposals put forward which claim that German and Dutch themselves have an underlying VO base order (Zwart 1993, Hinterhölzl 1997, 1999, 2006).³³ It is not the aim of the present study to argue for or against Corver and Riemsdijk (1997), the issue, just like the underlying order of the languages discussed here, is an intricate one and definitely calls for further investigation.

³³ Haider (2004) argues that the edge effect is one of the tests that can be applied reliably to decide whether we are dealing with head-initial or head-final structures. The edge effect is “typical for adjunction to head-initial projections, caused by properties of head-initial structures, rather than OV/VO-specific parametrisation”. The following structures illustrate how the constraint works:

- (i) a. He has (much more) carefully (*than anyone else) analyzed it.
 b. Er hat es [sehr viel sorgfältiger als jeder andere] analysiert.
 c. als niemand luider (dan Jan) kan roepen
 ‘if noone louder than Jan can shout’

As Haider (2004) puts it “the edge effect is the reflex of a constraint against post-head material in a phrase that serves as a preverbal adverbial constituent. Material on the left is allowed, but not on the right hand-side of the head of the preverbal adverbial phrase”.

to be continued

4.2.2 Hinterhölzl's scope-driven analysis of scrambling

Out of the approaches that claim that scrambling is not optional but triggered, Hinterhölzl's (2006) scope-driven account is of crucial importance for the present work. Arguing against the optionality account of Haider and Rosengren (1998), Hinterhölzl (2006) points out that scrambling can be more successfully explained assuming that it is triggered by certain features, which, as he argues, in the case of German are specificity and scope.

To be able to handle scope as well, which is especially problematic due to its relational nature, Hinterhölzl introduces the features [w], [i] and [n] (for wide, intermediate and narrow, but, of course the system is open to further refinements if need be, such as the introduction of several intermediate scope constituents that are ordered with respect to each other) claiming that it is these features that drive the derivation. He admits that these features cannot be part of the numeration since they are non-lexical, but it is exactly this property he makes use of when proposing that [... non-lexical features can be assigned to any head in the course of the derivation] (p. 57).

One of the central notions of the analysis is that DPs are equipped with scope features as defined by the intentional purposes of the speaker. Scope features are assigned to extended projections of the verb obeying the regular economy conditions: if

If we consider German we can see that there is an edge effect for adnominal attributes in German but not for preverbal adverbials, since NPs are head-initial but VPs are head-final projections:

- (ii) a. eine [viel größere (*als ich dachte)] Summe
 'a much bigger (*than I thought) sum'
 b. ein [unzufriedener (*damit) Syntaktiker]
 'an unsatisfied (*it-with) syntactician'

Returning to Hungarian we would also expect a difference between NPs and VPs, for in Hungarian, as opposed to German, NPs are assumed to be head-final, and VPs head-initial. Therefore, we would expect the edge effect to apply for preverbal adverbials, but not for adnominal attributes. This is not what we find in sentences iii:

- (iii) a. (Sokkal) óvatosabban (*mint bárki más) elemezte a problémát.
 much-more carefully (than anyone else) analyzed-3SG the problem
 b. egy sokkal nagyobb (*mint gondoltam) összeg.
 'a much bigger (than thought-1SG) sum'

Irrespective of whether we are testing a VP or an NP, the edge effect seems to work.. The conclusion we can draw from this is rather contrary to what we expected. The test does not predict a difference between NPs and VPs, moreover, it predicts both of them to have a head-initial structure. With regard to the scrambling approach presented above this state of affairs is highly unwelcome. Due to the highly controversial nature of the OV proposal we are not going to pursue it further either.

the unscrambled order of the arguments meets the scopal order, scope features are assigned to the already existing structure. Scrambling is required exactly when the scope properties of the arguments are different from the order they occupy in their Case-licensing positions. The assignment of scope features has to meet the following, quite natural condition:

(128) Hinterhölzl's Scope Filter:

- a. A head assigned the feature [w] must c-command a head assigned the feature [n].
- b. A head assigned the feature [i] must c-command a head assigned the feature [n] and be c-commanded by a head assigned the feature [w].

The two structures in (129) illustrate the proposal.

(129) a. weil jeder mindestens eine Frau liebt
since everyone-NOM at least one woman-ACC loves

b. weil mindestens eine Frau jeder liebt
since at least one woman-ACC everyone-NOM loves

[Hinterhölzl 2006, ex. 55]

In a) the scope features are directly assigned and checked in the case positions, since it is the subject that scopes over the object, scrambling is not necessary. In b), where it is the object that has wide scope, only one scope feature can be assigned and checked in a Case-position, the [w] feature of the object has to be assigned to a higher head to meet the requirements of the Scope Filter in (128).

It is argued that the scope features introduced are not purely semantic in nature, they behave more like formal features: they are not interpreted directly, but rather provide information about potential interpretation. This is supported by the fact that for a group of German speakers sentence (129b) can be ambiguous, which means that the scope-bearing element can be interpreted either in its scope or its base position.

Hinterhölzl claims that the proposal presented above is far from being replacing one optional mechanism with another, namely optional assignment of scope features. Instead of freely assigned scope features which are filtered later by interface requirements Hinterhölzl argues that interface features should be able to trigger syntactic operations. Since in his proposal scope features are defined by the intention of the speaker, their assignment cannot be an optional process.

4.2.3 Gelderen's IS approach to scrambling

Another line of research that should also be considered in the present work is Gelderen's (2003) approach to scrambling. In her study she makes an attempt to provide both a universal motivation for scrambling and mechanisms to account for cross-linguistic variation. In doing so she claims that mechanisms for scrambling in different languages depend on various other parameters active in a given language, which can also result in different patterns in different constructions of one and the same language. Although we will have to discard her analysis for reasons partly mentioned already, partly discussed later, the problems she discusses are definitely worth considering and bring us closer to explaining the Hungarian data which, as pointed out by Gelderen herself do not fit into any of the patterns proposed by her.

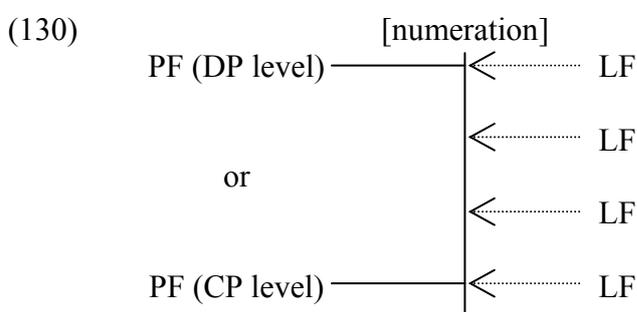
Considering the motivation for scrambling she claims that "[it] is the same across languages: scrambling is motivated by information structure considerations, a set of rules that are active in the PF-component of grammar" (Gelderen 2003:5). The properties that account for a) differences in the availability of scrambling, and b) once scrambling is available what accounts for the different patterns attested, are claimed to be fundamental differences in the Case-system of different languages (unfortunately this discussion is rather vague but Gelderen presents arguments for the availability of a feature that accounts for differences between scrambling and non-scrambling languages on the one hand, and different patterns of scrambling in scrambling-languages on the other; her arguments, intuitively very well-grounded are based on differences in the richness of the Case-system).

The central idea that accounts for cross-linguistic variation is the availability or lack of Early Spell-Out in a given language. Following Hoffman's (1996) lack of merger analysis, Gelderen claims that in certain languages unmerged structures can reach PF without causing a crash.³⁴ Russian is such a language due to the richness of its

³⁴ For this type of analysis to work one has to assume that the Single-Rootedness constraint that claims that a syntactic tree cannot consist of more than one root node holds only at LF. Gelderen's (2003) argument is the following: „[t]he purpose of structure-building is [...] that structure is necessary for LF to interpret a given string, as dictated by compositional semantics. It is trivially not PF that requires syntactic structure, but LF. Feature checking [...] cannot occur without structure. For two elements to enter into the kind of relation that will lead to their features being checked against one another, it is imperative that the two elements are part of the same syntactic structure at a particular point in the to be continued

Case-system. Her notion of Early Spell-Out is different from the idea proposed in Epstein et al. (1998): while in Epstein et al. there are as many Spell-Out points as there are to LF, Gelderen argues that there are only two such points universally, the DP and the CP, that is, structure can be spelt out either after the nominal or the verbal domain has been created, which is, as Gelderen herself remarks, reminiscent of Chomsky's (2001) Strong Phases. The availability of Early Spell-Out in Russian distinguishes it from English, where Early Spell-Out is not available, and this is what accounts for the lack of scrambling in English.

Her analysis is a T-model illustrated in (130).



In light of the above, some of the properties of an Early Spell-Out language are predicted to be the following:

- (131) a. free constituents order, where no order is impossible, but depending on context there will be a strong preference for a given order. The main idea is that unmerged structures will be linearised by information structure considerations.
 b. there will be an ambiguity in structures that can arise both as the result of completely built structure (Spell-Out at the CP phase) or as the result of linearised unmerged structures.
 c. elements of the lower clause cannot appear in the higher clause, since the matrix verb selects the embedded CP “ready-made”. Syntactic movement can move embedded constituents to the matrix clause, but it will obviously exclude most of the word-order patterns that would otherwise be available.
 d. difference in the freedom of word order in matrix and embedded clauses
 e. if two quantifiers undergo Early-Spell-Out, they will always be ambiguous irrespective of surface order.

derivation. In this view, structure is built for LF reasons and the building of structure in turn results in configurations where features can be checked. [...] [T]he building of structure underlies the feature checking mechanism, i.e. feature checking is related to the Merge operation.” (Gelderen 2003:9)

Returning to Hungarian we can see that while property a) could in principle describe Hungarian, properties d) and e) are clearly not true for it:

–what d) predicts is that word order in embedded clauses will be more restricted, as they have to be spelt out at the CP phase in order for them to be able to function as complements of the matrix verb. Gelderen shows that it is not true for Hungarian, word order variation in an embedded clause shows the same possibilities as finite clauses do. We have seen above (e.g.) that word order in infinitival clauses actually shows greater freedom than that of finite ones.

–according to e) scope ambiguity could not be resolved if two quantifiers reach PF unmerged, the outcome is an ambiguous construction. According to Gelderen’s analysis this is what we expect to find in the post-verbal domain of Hungarian sentences, where disambiguation is possible through overt syntactic movement.

These obviously exclude Hungarian from the group of Early Spell-Out languages. However, languages that allow scrambling do not necessarily have to be Early Spell-Out languages, as Gelderen’s analysis of Japanese data shows: the way information structure considerations are treated in a non Early Spell-Out language like Japanese is in the form of so-called phonologically driven movement. This can be deduced from the following: since Japanese scrambling results in modified information structure and is a result of syntactic movement, it must be a type of movement that has phonological motivations but takes place in syntax. Since scrambling also has an effect on the LF-side on the derivation we also have evidence for treating this type of movement as syntactic movement, it does not have to be stipulated.

In Japanese scrambling can cross clause-boundaries, just like in Hungarian. Based on Ishii (2001) Gelderen argues that the motivation for Japanese scrambling, similarly to Russian, can be information structure considerations, since scrambling in Japanese can change the focus possibilities of a sentence as shown in (132), where in sentence (a) the focus is the object, but in sentence (b) it is the subject.

(132) a. Taroo-ga sono HONO-O katta
 Taroo-NOM that book-ACC bought
 ‘Taro bought that book.’

b. Sono hono-o TAROO-GA katta
 that book-ACC Taroo-NOM bought
 ‘Taro bought that book.’

[Gelderen 2003:105, her ex. 8]

One of the reasons why Japanese cannot be considered an Early Spell-Out language (besides the obvious, namely its strictly head-final property) is that scrambling modifies scope ambiguities. In the neutral SOV order scope is rigid, reflecting the surface order (133a, taken from Ueyama 1998). As a result of scrambling, however, ambiguity arises (133b,c). As it is well-known, the English equivalent of the sentence is always ambiguous in the neutral order, since it has no access to scrambling.

(133) a. Daremo-ga dareka-o aisiteiru.
 everyone-NOM someone-ACC love
 ‘Everyone loves someone.’
 $\forall x [\exists y [x \text{ loves } y]]$
 $*\exists y [\forall x [x \text{ loves } y]]$

b. Dareka-o_i daremo-ga t_i aisiteiru
 someone-ACC everyone-NOM love
 ‘Everyone loves someone.’
 $\exists y [\forall x [x \text{ loves } y]]$
 $\forall x [\exists y [x \text{ loves } y]]$

c. Daremo-o_i dareka-ga t_i aisiteiru
 everyone-ACC someone-NOM love
 ‘Someone loves everyone.’
 $\forall x [\exists y [x \text{ loves } y]]$
 $\exists y [\forall x [x \text{ loves } y]]$

[Gelderen 2003: 106-107, her ex. (10), (11)]

Some other properties of Japanese scrambling are the following: long-distance scrambling reconstructs completely; binding reconstructs completely in long-distance, partially in clause-internal, and not at all in VP-internal scrambling. As claimed by

Gelderen, all these properties can be explained under two assumptions, one of them being that objective case in Japanese can be checked either in v or in T (following Saito 1992), this way ruling out Hungarian, the other that the binding conditions apply at different stages in the derivation (Tada 1993, Epstein et al. 1998). As she claims it is movement to the T-domain that is motivated by information structure reasons, and, as a kind of side-effect, the object will also (or will also have the potential to) scope over and bind into the subject, at the same time having its case-features deleted. Gelderen herself acknowledges that evoking a Case-licensing property to explain scrambling phenomena is rather circular, moreover, it does not account for the very similar scrambling pattern found in German. For this reason she sets out to look for other factors and settles with the word-order parameter that connects German and Japanese: both of them are OV languages, and, as we have seen there are a number of proposals that describe scrambling as depending on an OV base order. However, we have also pointed out problems this approach faces. In spite of all the brilliant insights she presents concerning scrambling, Gelderen's approach becomes even more problematic if we have a look at how exactly her scrambling analysis cuts up the "language pie":

(134)

Early Spell-Out [+Case]	Non Early Spell-Out [-Case]	
Russian	<i>T-head object</i>	<i>No T-head object</i>
	Japanese	English/Hungarian/Dutch

[Gelderen 2003: 156, Table 1]

As

(134) shows the only attested example for an Early Spell-Out language with the expected Case-feature is Russian, though of course it is possible that more languages will join in the long run. Considering Non Early Spell-Out languages lacking the Case feature concerned there are two groups identified: a T-head object group (that is supposed to correspond to OV order³⁵) and a No T-head object group. The T-head

³⁵ Actually Gelderen presents arguments for connecting these two in terms of Case licensing following Neeleman and Reinhart (1998) and Neeleman and Weerman (1999). In this approach OV languages have a case licensing procedure to the left, which means it must happen in the syntactic domain, since Case assigner and Case assignee are never in the same prosodic domain. Gelderen views the deletion of the Case feature by the T-head in Japanese as an extension of Case licensing in OV languages in a broader syntactic domain.

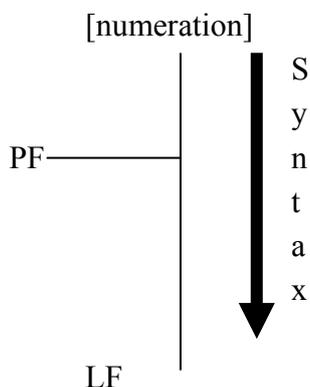
object group contains Japanese (and probably German, too), the No T-head group contains, among others, English and Hungarian. Thus, the most well-known scrambling languages end up in different groups³⁶, moreover, Hungarian, a free word-order language with word order options very similar to that of Russian, at least in finite clauses, ends up with English, a language with strictly defined word order, a highly problematic result.

As we have seen, some parts of the proposed analysis seem rather arbitrary, and Hungarian does not fit into either of the scrambling patterns argued for. However, the study presents a multitude of factors that should be taken into consideration when making an attempt to account for free word order phenomena, which is obviously a challenging endeavour. Also, a number of remarks Gelderen makes raise questions not discussed in her work that could put scrambling in a completely different perspective. This is what we turn to now.

4.3 A novel proposal: LF first?

Pointing out the asymmetric nature of the T-model of the Minimalist Program, illustrated in (135) Gelderen (2003) emphasises the following:

(135)



³⁶ This would not be a problem in itself, since it is possible that different mechanisms are responsible for different word order patterns in different languages. However, the distinctions the groupings are based on seem rather arbitrary, especially the one based on a particular property of the T-head, which, as we have seen in footnote 16, can be connected to OV word order, another approach that is not without serious problems.

different from it on the market. Since we would like to adopt Vallduvi's (1992) FF proposal only as a last resort, let us consider what we can expect if we try to account for information structure as a component of LF. Gelderen (2003) has good arguments against this approach, among others the following:

- (137) –focussed elements are assumed to be quantificational in nature, but there are no attested double-reading effects for focus
 –no real Weak Cross-Over effects with focus
 –in all-focus sentences an entire clause should move at LF

However, there is another alternative analysis that could in principle be considered, namely deriving PF *from* LF, another asymmetrical approach, but within this approach PF has access to information coming from LF, and Spell-Out contains information coming from both LF and PF. LF has no access to PF, but this modified LF can contain information about information structure. As a matter of fact, this approach, if taken seriously, could account for the “two-LFs problem” that keeps recurring ever since thematic relations ceased to be encoded in a DS component. The proposal along these lines that I am adopting in this dissertation is Bobaljik–Wurmbrand (to appear), but see also Brody (1995a) for arguments for the primacy of LF.

In this approach, as it turns out, one has to be careful to avoid using safe old practices, as they can be misleading at times. Since in this approach PF is defined by LF considerations, we start out with data coming from LF itself. What used to be minimal pairs earlier, for example, cease to do so, and this is something one has to be especially careful about, as we will see presently. The next section discusses this novel proposal.

4.3.1 Bobaljik–Wurmbrand (to appear)

As the authors themselves point out, the LF-to-PF approach can be summarised in three interrelated conclusions:

- i. There exist ‘soft’ constraints (economy conditions) that value a particular type of correspondence between LF and PF representations (for example, scope at LF matched by precedence at PF).
- ii. These constraints are uni-directional: LF (broadly construed) is calculated first, and determines PF.

- iii. Scope rigidity (the apparent absence of QR) is not a property of languages, but of specific configurations, and the distribution of rigidity effects is (largely) predictable from independent variation in the syntactic resources of various languages (e.g. possibilities for scrambling). There is no QR-parameter.

[Bobaljik and Wurmbrand, to appear]

Point i) is of course clearly discernible in Hungarian, in this approach Hungarian is a very economical language, almost a perfect one, alongside with other languages that have come to be known as languages “wearing their LFs on their sleeves” (e.g. Japanese, German). With the help of point ii) accounting for the sentences seemingly containing infinitives with nominative subject would be almost straightforward. The nominative subject can be identified as the subject of the finite clause that LF considerations place after the finite verb, in a position preceding the infinitive (for more details see Chapter 6) And in the light of iii) the difference between Hungarian finite and infinitival constructions is natural, therefore costless in this approach. The differences between the freedom of word order in the preverbal field of finite and infinitival clauses reduce to differences between the properties of these constructions (embedded vs. matrix clause on the one hand, tense properties on the other).

The proposal is based on a pattern that arises in natural languages too frequently to be purely accidental in nature, which Bobaljik–Wurmbrand call the $\frac{3}{4}$ (three of four) signature as defined below.

The $\frac{3}{4}$ signature: taking one LF property (A scopes over or under B) and one PF property (A precedes or follows B), what we frequently find is that three of the four logical combinations are grammatical.

This pattern already emerges as early as Greenberg’s (1963) typological studies as a descriptive generalization about potential word order patterns, and, at the same time, we find it when we make an attempt to account for different interpretations of particular constructions, like those in (138). What we attest here is that the English sentence with neutral word order is ambiguous, and there is only a single word order allowed. Japanese, as we have seen in 4.2.3, allows different word orders, where the neutral SOV sentence is not ambiguous with respect to scope interpretation, and can have only the interpretation connected to the surface order of the constituents. The scrambled word

order becomes ambiguous in terms of scope. It is the latter pattern that shows what is meant by the $\frac{3}{4}$ signature: there are two pairs of sentences with four potential interpretations out of which only three are actual interpretations of these sentences. Thus, it is predicted that there is always an interpretation that is not available, in the Japanese case the neutral, SOV word order with inverse scope reading.

(138) a. Some toddler read every book.

□»∇

∇»□

b. dareka-ga subete-no hon-o yonda [Kuroda 1970]

someone-NOM all-GEN book-ACC read

‘Someone read all the books.’

□»∇

*∇»□

c. subete-no hon-o dareka-ga yonda

all-GEN book-ACC someone-NOM read

‘Someone read all the books.’

∇»□ possible

□»∇

There is a straightforward explanation for why English does not show this pattern. One of the central claims of Bobaljik–Wurmbrand is that there is a correlation between free word order (scrambling) and scope rigidity. Since scrambling is not available in English, one member of the pair, the one that could be compared with the neutral sentence, is not grammatical, so the comparison cannot be made. It is exactly for this reason that the neutral sentence is ambiguous: the other meaning cannot be expressed with other means (apart from more marked constructions like topicalisation and passivisation, but, as argued by the authors, scrambling is a more economical process).

The question arises why this pattern can be an argument for an LF first analysis. Why could we not derive scope relations in German/Japanese-type languages (and it seems Hungarian can be added to the list) directly from the surface structure? The authors claim that there are different types of evidence, methodological, conceptual and

empirical in nature, for pursuing an economy account over a surface structure scope account:

– in some languages scope is determined at surface structure, in others at LF, which gives no unified account of scope. From an economy perspective it is a “retreat”, as the authors call it. If a unified account is possible, that should be pursued.

– it is simply incorrect that there are languages that are strictly rigid in their scope, i.e. in which scope always corresponds to surface structure. It is pointed out that Japanese and German allow scope reconstruction, and Hungarian can be added as well, since constituents appear in their scopal order only in the pre-verbal part of a Hungarian sentence, there is no scope rigidity in the post-verbal field.

The central notion of the analysis is the so called Scope Transparency Principle, which is claimed to be an economy condition UG includes. It favours isomorphism between LF (scope) and PF (linear order) representations. The principle is asymmetric, regulating the choice among PFs relative to a given LF.

Scope Transparency Principle

If the order of two elements at LF is $A > B$, the order at PF is $A > B$.

ScoT is assumed to be universal, language variation arises due to the violable/soft nature of economy conditions – ScoT must be satisfied whenever possible, but may be overridden by other constraints. “The appearance of scope rigidity is the “most economical” state of affairs, but scope rigidity effects will or will not emerge in specific configurations in particular languages as a function of the general syntactic resources of each language.”

The tables below illustrate what predictions this approach makes in term of word order in languages that allow/disallow scrambling. Table 1 presents expected properties of scrambling languages like German and Japanese, Table 2 expected properties of languages where scrambling is not allowed, like English.

(139) Table 1

German/Japanese	LF	PF	ScoT
✓	$A \gg B$	$A \gg B$	✓
* (QR)	$B \gg A$	$A \gg B$	*

✓	B»A	B»A	✓
!overt movement with reconstruction	A»B	B»A	*

Syntactic (LF) reconstruction is unavailable in German/Japanese A-scrambling, but semantic reconstruction (the interpretation of the trace as a higher-type) is allowed. Reconstruction in A'-scrambling interacts with information structure, which can balance out a ScoT violation.

(140) Table 2

English	LF	PF	ScoT
✓	A»B	A»B	✓
✓	B»A	A»B	*
not possible	B»A	B»A	✓
not possible	A»B	B»A	*

What Table 2 shows is that since English lacks scrambling, it has no neutral way for PF to provide the B>A order overtly. Lines three and four show exactly this: in PF only the A>B order is allowed. In line 2 the QR derivation violates ScoT, but this derivation is the only means (all else being equal) of representing the B>A scope, and for this reason the violation of ScoT is tolerated, actually forced.

As we have seen, the predictions we can make based on ScoT are not fully met even in languages where scrambling is allowed. However, as Bobaljik and Wurmbrand point out we get exactly what we can attest empirically if we assume that ScoT can interact with other components of the grammar, such as information structure. Non-scrambling languages provide evidence for the soft nature of ScoT, so the violation of this constraint is not unexpected any more in scrambling languages either.

Now let us compare the predictions of the $\frac{3}{4}$ signature when there are two interacting constraints with the pattern when there is only ScoT involved.

In terms of the $\frac{3}{4}$ signature, given two LF choices and two PF choices, three of the four logical combinations are judged acceptable – this is precisely what is expected if ScoT is a soft constraint and interacts with other economy conditions. The resulting pattern gives key support for asymmetry and the privileged status of LF, since if the

direction were defined from PF to LF another set of three would be judged grammatical which is not what we attest.

Translating the $\frac{3}{4}$ signature into the LF-first approach we have to deal with the following: one LF can be expressed by either of two PF representations, but the other can only find phonological expression only in one way. The question that arises at once is why one mismatched representation is allowed, but not the other. All this is explained under the assumption that ScoT interacts with some other economy constraint. If we compare tables three and four, we can see that in Table 3, where the only constraint present is ScoT, there is no explanation for why the pattern in line four is attested. However, if ScoT interacts with another constraint, the resulting pattern is exactly what we attest. Let us introduce a very simple constraint that introduces a ban on movement and call it *MOVE. The constraint is not a hard constraint, it can be violated. Based on Table 4 in (142), where the two constraints are shown to interact it is relatively straightforward to come up with an explanation for the $\frac{3}{4}$ signature: there are two pairwise competitions, taking a particular LF as input (in Table 4 the competing pairs are a-b, and c-d, since these are the pairs that start out from the same LF), and regulating the choice among competing PFs, relative to two economy conditions. Where the conditions align, there is a winner and a loser, but where the conditions conflict, optionality emerges.³⁷

(141) Table3

		LF	PF	ScoT
a.	✓	A»B	A»B	✓
b.	*	A»B	B»A	*
c.	✓	B»A	B»A	✓

³⁷ As admitted by even the authors themselves, this sounds very much like an OT analysis, but the authors emphasise that both the underlying assumptions and the predictions of the analysis are different. It becomes clear if we compare tables 3 and 4 with an OT analysis. In OT constraints are ranked with respect to each other. If there are two structures competing with each other and the only difference between them is that in one of them a constraint ranked higher is violated, and the other violates a constraint ranked lower, the winner is the one that violates the lower-ranked constraint. It is not the case in the present analysis, that is why three patterns out of the four logical options are grammatical (the ones that obey at least one of the constraints). In OT only one pattern would be predicted to be grammatical, that in line a), since it does not violate either of the constraints.

d.	✓	B»A	A»B	*
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(142) Table 4

		LF	PF	ScoT	*MOVE
a.	✓	A»B	A»B	✓	✓
b.	*	A»B	B»A	*	*
c.	✓	B»A	B»A	✓	*
d.	✓	B»A	A»B	*	✓

What is important to emphasise is that in this approach competing derivations are defined differently from the PF-first approach. In the PF-first approach the two English sentences in (143) are minimal pairs, which is not the case in the LF-first approach. These two sentences will be as different from each other as the sentences *A dog chased the cat* vs. *A cat chased the dog*, since both theta-relations and information structure considerations are encoded in this broadened conception of LF (Wurmbrand, p.c.). The relevant derivations, the ones that can compete with each other, should come from the same numeration, one of them containing e.g. a moved quantifier with respect to the other. So the sentence that could compete with (143a) would be a structure where ‘someone’ (in the function of constituent B as defined by ScoT) precedes ‘everyone’ (constituent A). This is exactly what we get as the result of QR, covert syntactic movement, but never in surface word order. In English it is ungrammatical to say *Someone everyone saw*. As we have seen before, in English this word order simply does not arise due to the lack of scrambling. To put it differently, we can say that the competing derivations are the ones that have the same LF, derivations with different LFs cannot be compared.

(143) a. Everyone saw someone.

b. Someone saw everyone.

The overall conclusion of the authors is that “free word order correlates with scope rigidity, but scope rigidity (the absence of QR) hinges crucially on the syntactic possibilities (competing derivations) given a particular input (numeration), and thus

scope rigidity is expected to characterize particular syntactic configurations, not (necessarily) languages as a whole.” The question that has to be addressed now is what particular property of languages can have a blocking effect on scope rigidity and result in ambiguous readings.

To answer this question we need to consider another central claim of Bobaljik and Wurmbrand: in their proposal the relevant notion of LF encompasses not only scope relations, but also information structure relations such as Topic and Focus. Arguments for this claim are based on the fact that information structure also exhibits the same type of $\frac{3}{4}$ signature that arises when ScoT interacts with another constraint, e.g. *MOVE in a scrambling language. This may indicate that the same rule is at work, rather than two separate rules with the same effect.

Moreover, when there are constituents in a construction specified for both scope and information structure, the same $\frac{3}{4}$ signature presents itself, thus, scope interacts with information structure. The data in (144) and (145) illustrate this.

The two sentences in (144) contain a focussed subject (A) and a topic object (B).³⁸ The subject is an existential nominal expression, the object a universal one. The relevant reading is the one where the existential is in the scope of the universal. Information structure constraints favour the canonical [TOP] » [FOC] order, Scope Transparency the order mirroring scope. As the table in (146) shows, (144a) is a perfect match: the topic constituent precedes the focussed one and it happens to coincide with the constituent having wide scope preceding the constituent with narrow scope. In (144b) the relevant interpretation is not available since in order to obtain the reading we are looking for, there should be a match for at least one of the two isomorphism constraints, but PF matches the requirements of neither Scope Transparency, nor information structure.

(144) Jetzt zu den Gedichten? Wer hat jedes Gedicht gelesen? Das weiß ich nicht, aber...
(Let's talk about the poems? Who read every poem? I don't know, but...)

A [FOC]; B [TOP]

Intended scope: B»A

a. jeden Roman hat mindestens ein Schüler gelesen

³⁸ For the purposes of the present discussion it is immaterial that what is the Topic of the German sentence would occupy the QP position in the Hungarian equivalent.

- every novel (B) has at least one pupil (A) read $\forall \gg \exists$
 ‘at least one pupil read every novel’
- b. mindestens ein Schüler hat jeden Roman gelesen
 at least one pupil (A) has every novel (B) read $*\forall \gg \exists$
 ‘at least one pupil read every novel’

In (145) the constraints coming from scope and information structure conflict: the subject (A) is the topic of the sentence, and at the same time the constituent with narrow scope. The object (B) is the focussed constituent and the universally quantified one. You either have the order A [TOP] \gg B [FOC], in which case the information structure constraints are met, but scope cannot be read off from linear order, or, alternatively, the construction can be realised in the B [FOC] \gg A [TOP] order, which violates information structure requirements, but reflects the scope properties of the structure. You cannot do both at the same time, and, as a result, both orders are attested, one of them ambiguous (the one not reflecting the scope properties of the construction, as predicted by ScoT).

- (145) Jetzt zu den Studenten Was hat mindestens ein Student gelesen? Das weiß ich nicht, aber...
 (Let’s talk about the students. What did at least one student read? I don’t know, but...)
 A [TOP]; B[FOC]
 Intended scope: B \gg A

- a. jeden Roman hat mindestens ein Schüler gelesen
 every novel (B) has at least one pupil (A) read $\forall \gg \exists$
 ‘at least one pupil read every novel’
- b. mindestens ein Schüler hat jeden Roman gelesen
 at least one pupil (A) has every novel read $\forall \gg \exists, \exists \gg \forall$
 ‘at least one pupil read every novel’

The interaction of LF in the traditional sense and information structure is summarised in (146). The give and take between the two components may be a strong argument for the claim that they may after all not be two different components, but rather two sides of the same coin. For further arguments for ScoT being a single constraint that looks simultaneously at LF and IS see Wurmbrand (2008).

(146)

	T4	LF	IS	PF	ScoT
(144)b.	* (QR)	B»A	B [TOP] » A [FOC]	A [FOC] » B [TOP]	*[LF, IS]
(144)a.	✓	B»A	B [TOP] » A [FOC]	B [TOP] » A [FOC]	✓
(145)b.	✓ (QR)	B»A	A [TOP] » B [FOC]	A [TOP] » B [FOC]	*[LF]
(145)a.	✓	B»A	A [TOP] » B [FOC]	B [FOC] » A [TOP]	*[IS]

Finally, in light of the above, it has to be clarified what is in the scope of ScoT and what is not. Bobaljik and Wurmbrand give the following list:

– we do not expect ScoT to distinguish QR and reconstruction, it is a property of a particular language and/or a particular construction whether QR/reconstruction is available or not and depends on what other constraints are assumed to interact with ScoT (see the discussion on the difference between Japanese and Hungarian in the next section);

– the authors do not intend it as a replacement for the various other conditions restricting QR (which still have to be subject to hard constraints like islands, clause-boundedness etc.): e.g. if overt movement of B across A is impossible, it does not mean that inverse scope is possible;

– ScoT is described to be an economy condition regulating choices among convergent derivations, determining whether a certain scope relation in a particular configuration is possible in principle, it does not regulate language specific restrictions. Two constraints often happen to have contradictory requirements in terms of PF realisation. The underlying idea is that once you cannot satisfy both of them, satisfying at least one should result in a potential interpretation. Again, according to the authors, that is why it is crucial to start from the LF side of the derivation: one of the pairs you compare is line a) and b) and there is a clear winner and a loser. In lines c) and d) it cannot be decided if the constraints are not assumed to be ranked, so both structures win. Starting from PF the $\frac{3}{4}$ signature would simply not arise, since in that case lines a)-d) and b)-c) should be compared, in which case there would be a clear winner.³⁹

³⁹ It has to be pointed out, however, that this is true only in terms of an OT-type analysis. If we apply the authors' proposal (that the satisfaction of one of the constraints is enough for an interpretation to be possible) not in relational but absolute terms, the same $\frac{3}{4}$ signature arises.

At this point of the discussion another remark is in order. Of course there are ways to resolve a scope ambiguity in English as well. Bobaljik and Wurmbrand discuss topicalisation and passive constructions, illustrated in (147), and conclude that these sentences do not qualify as competing alternatives in the way that scrambling does, since economy conditions only evaluate competing derivations from the same numeration (where passive is obviously different, and topicalisation structures are considered to be different because under the present proposal, where information structure is part of LF, topicalisation structures do have a different LF). Once scrambling is an available option in a language it is assumed to be free in a way topicalisation is not. Topicalisation constructions at the same time give further support to the claim that information structure considerations and scope interpretation should be handled by the same component of the grammar (which should then definitely be LF), since it is another type of construction where topic-focus structure interacts with scope.

- (147) a. Every detective interviewed exactly two suspects. $\exists > \forall, \forall > \exists$
 b. Exactly two suspects, every detective interviewed. PF: B > A!
 c. Exactly two suspects were interviewed by every detective. PF: B > A!
 [Bobaljik and Wurmbrand, ex. (4)]

4.3.1.1 Why not PF first?

One of the most influential works explicitly arguing for a PF-first approach is Reinhart (2005), where semantic focus is derived from the PF representation, with prosody having a central role in the process. With the help of the Nuclear Stress Rule algorithm and the Main Stress Shift rule it can be calculated which node in a tree can bear primary (secondary etc.) stress. Determining the focus set follows the calculation of main stress and the next step is judging whether the appropriate focus set, the one matching the context, is part of the focus set. If this evaluation procedure fails, parts of the original stress contour can be overwritten with the help of the Main Stress Shift rule, until the appropriate focus set is identified.

Bobaljik and Wurmbrand (to appear) point out that there is a problem with this approach: “the ‘reference set’ [...] consists of a set of possible semantic focuses, which are evaluated against a single given PF, and if the intended focus is not in the focus set, further operations are warranted. [...] [F]or the system to work the intended (i.e., actual) focus must be known *in advance* of the application of the focus shift rule.” (p. 26) The

authors argue that this actually is a strong argument *against* the PF-first and *for* the LF-first approach. In an LF-first approach the problem completely disappears resulting in a much simpler and more natural analysis: instead of the Main Stress Shift they introduce the Focus-Stress Rule that takes LF first and precedes the Nuclear Stress Rule, which has the status of a default sentential stress rule in this system. The outcome is a structure-filling and structure-preserving analysis instead of a structure-changing one. Bobaljik and Wurmbrand argue that the resulting analysis is superior as follows:

In our view there is no focus set, no focus projection, no stress shift, no evaluation of competitors, no backtracking in the derivation and no overwriting of previously assigned structure/labels. The effect of focus set/projection arises because distinct derivations may converge on identical PF representations. [...] There is no meaningful notion of ambiguity or competition internal to the grammar of focus, from our perspective. The derivation from LF (focus) to PF is deterministic; it just happens that the semantics has more distinctions available to it than the phonology does. [...] Apparent ambiguity thus arises, but as a matter of empirical observation, where the system is run backwards, as it were: the hearer/observer starts from the PF, but the grammar starts from the LF.

Actually, in Hinterhölzl's (2006) scrambling analysis discussed in (4.2.2) and in my own proposal detailed in Chapter 3 we can identify a problem very similar in nature to the problem of Reinhart's analysis: in order to be able to define the PF order of constituents we need information related to LF which under traditional approaches is available only later, or to a great extent independently of PF. The main problem of how to relate scope and linear order is not the relational nature of scope-bearing elements but the look-ahead problem that appears if we stick to deriving LF from PF representations. This can be very naturally handled under the assumption that it is actually the PF representations that are derived from LF. To solve this problem Hinterhölzl (2006) has to propose that it is the intention of the speakers that defines the scope properties of the sentence, but the exact properties of LF within such an approach are not discussed. Actually, if speaker intentions are included in the grammar, a substantial part of LF as generally understood becomes vacuous. Again, if we assume that LF precedes and defines PF, this problem finds a natural explanation. For this reason the next section discusses whether the Hungarian data support such an approach.

4.3.2 Scope and word order in Hungarian: do the data support Bobaljik-Wurmbrand (to appear)?

This section presents data from Hungarian where a) the $\frac{3}{4}$ signature arises as predicted by Bobaljik and Wurmbrand (to appear) and b) the expected pattern fails to turn up. In the latter case we discuss whether we can find other constraints that account for the lack of potential interpretations or word orders as argued by the authors.

Starting with finite clauses, it is a well-known property of Hungarian that in a simple sentence inverse scope readings are possible in the post-verbal field as opposed to the pre-verbal field (148).

- (148) a. Többször is meghívtam mindenki-t.
 several times invited-SG1 everyone-ACC
 ‘I invited everyone several times.’
 ✓several times > everyone
 ✓everyone > several times
- b. Többször is mindenki-t meghívtam.
 several times everyone-ACC invited-SG1
 ‘I invited everyone several times.’
 ✓several times > everyone
 *everyone > several times
- c. Mindenki-t többször is meghívtam.
 everyone-ACC several times invited-SG1
 ‘I invited everyone several times.’
 ✓everyone > several times
 *several times > everyone

As (148) shows, in the preverbal field quantifiers appear in the order defined by the scope properties of the sentence. In light of the discussion above it is relatively easy to identify the interacting constraints as ScoT and *Move:

(149) Table 5

	Hungarian	LF	PF	ScoT	*MOVE
a.	✓	A»B	A»B	✓	✓
b.	*	A»B	B»A	*	*
c.	✓	B»A	B»A	✓	*
d.	✓	B»A	A»B	*	✓

Actually, the data in (148) define two sets of pairs that the table can refer to, namely the two sentences a) and b) together with the three potential interpretations (out of the four logical possibilities) or the two sentences in a) and c), again, together with the three potential interpretations (out of the four logical possibilities). Once more, it has to be emphasised that the competing sentence pairs are the ones with the same LF. To demonstrate this, I present a detailed discussion of the Hungarian data in (148), where the sentence-pair a) and c) is discussed:

i) line a) competes with line b) and the obvious winner is a) where

– a) is one of the interpretations of the ambiguous sentence *Többször is meghívtam mindenkit* ‘several times invited-1SG everyone-ACC’, namely the interpretation without QR, since this is the interpretation that reflects surface order: LF scope hierarchy translates into PF order, which is the most welcome state of affairs.

– b) is *Mindenkit többször is meghívtam* ‘everyone-ACC several times invited-1SG’, where constituent B is *mindenkit* ‘everyone’, as this is the constituent that has undergone movement with respect to what we find in a). Since in b) both quantifiers appear in the preverbal position, scope is rigid, it cannot have an interpretation different from PF. The situation described in line b) expresses exactly this, a moved constituent with scope properties different from the surface order, which is ruled out. That such a construction should be ruled out indeed is justifiable even on theoretical grounds: if movement is assumed to be motivated by purposes of scope disambiguation, the interpretation corresponding to the order prior to movement should not arise (that is, reconstruction should not be possible), which is exactly what we find.⁴⁰

⁴⁰ Again, the sentences are minimal pairs if we start from the direction of LF. It is true that the constituent *többször is* ‘several times’ has already undergone movement (it also comes from a position within the vP), but this movement takes place in both of the sentences, so does not have to be compared from an LF point of view. The situation in (148b) with respect to (148a) is a bit more complex, but again, we have to assume that certain movements that take place in sentence (b) have no effects on the LF-comparison of the two sentences. At this point we can identify a problem for the Bobaljik and Wurmbrand approach: if the extra movement that takes place in (148b) has no effect on LF, we should be able to identify a motivation different from LF-type motivations. But since information structure considerations are part of LF in this approach they are excluded. What we are left with is PF considerations, but these should follow the LF part of the derivation. Either PF does not follow LF, or we have to assume that PF-movements can be counter-cyclic. Or, somewhat similarly to Gelderen (2003), we could assume that movement for phonological reasons can take place before reaching the PF component itself (similarly to her phonologically-driven rules), which actually makes sense, since in this approach the difference between to be continued

ii) line c) competes with line d), both satisfying one of the constraints and violating the other, but since the constraints are not ranked with respect to each other, both states of affairs lead to grammatical constructions. In this pattern

– line c) is *Mindenkit többször is meghívtam* ‘everyone several times invited’, with LF scope matching PF order, however, to achieve this, constituent B had to undergo movement, so the constraint that favours lack of movement is violated. ScoT, however, is respected, so the word order with the given interpretation survives.

– line d) corresponds to *Többször is meghívtam mindenkit* ‘several times invited everyone’ with QR.⁴¹ This pattern illustrates a case where a given word order corresponds to an inverse scope reading. In this case movement does not take place (*MOVE is respected), and for this reason scope interpretation does not correspond to surface order (ScoT is violated).

We can conclude that in Hungarian simple sentences properties of preverbal and post-verbal quantification fit into the pattern described and discussed by Bobaljik and Wurmbrand.

Turning to infinitival clauses, the LF-first approach together with the $\frac{3}{4}$ signature and ScoT offers an account for the observed problems repeated here as (150) for the sake of convenience:

(150) a. *Jobb lenne CSAK KEDDEN minden előadásra bemen-ni.* FP>∀
 better would-be only on-yesterday every talk attend-INF
 ‘It would be better to attend every talk only on Tuesday.’

b. *Jobb lenne minden előadásra CSAK KEDDEN bemen-ni.* FP>∀, ∀>FP
 better would-be every talk only Tuesday attend-INF

The two interacting constraints to be taken into consideration are different this time: one of them is LF (scope), the other the constraint on the order of Left Periphery (the QP>FP order). Sentence a) violates the left peripheral word order, but obeys ScoT,

LF and PF is that the LF part of the derivation stops earlier, and it can be assumed that up till that point structure-building goes hand-in-hand. However, this calls for confirmation, as Bobaljik and Wurmbrand do not discuss properties of the structure-building component in the LF-first approach.

⁴¹ By now it should be clear that in Bobaljik and Wurmbrand’s LF-first approach the mechanism of QR is not necessary (and together with it the need for assuming e.g. expletive replacement also disappears). However, we go on using the term as a cover term to describe structures that in different earlier approaches were accounted for assuming QR taking place.

and, as predictable under the present approach, can only be interpreted in one way. Sentence b), on the other hand, keeps the left peripheral word order at the cost of resulting in an ambiguous interpretation. Since in neither of the sentences are both violated at the same time, both structures are grammatical.

Accounting for clauses containing nominative subjects *seemingly* functioning as subjects of infinitives appears to be relatively straightforward as well. Actually, the LF-first approach is the only one discussed so far that can explain the observed asymmetry without raising serious theoretical problems. Let us consider the relevant examples again, illustrated in (151)

- (151) a. Nem akar csak ő menni busszal. (Szabolcsi 2005)
 not want only he go-INF by-bus
 ‘He doesn’t want to be the only one to go by bus.’
 neg > FP
- b. Csak ő nem akar busszal menni.
 only he not want by-bus go-INF
 ‘He’s the only one who does not want to go by bus.’
 FP > neg

The two interacting constraints can be assumed to be *Move and ScoT again: the subject belongs to the finite verb, however, to get the transparent scope interpretation, where ‘*only he*’ is in the scope of ‘*want*’ movement takes place based on the partial ordering rules proposed in Szécsényi (2009) and also discussed in Chapter 3.

At this point of the analysis an apparent problem arises: (151b) should be ambiguous, but is not, we cannot find the $\frac{3}{4}$ signature we are looking for to indicate that we are on the right track. Related to this, it could be claimed that there is another, similar problem in finite clauses. As we pointed out earlier, the pattern under discussion, FP preceding QP is allowed only in infinitival clauses, and leads to ungrammaticality in finite ones:

- (152) *CSAK KEDD-EN minden előadásra ment-ünk be/be-ment-ünk.
 only Tuesday-on every talk went-1SG in/in-went-1SG
 ‘We attended every talk only on Tuesday.’

The question that should be answered is why this order is impossible in finite clauses as opposed to infinitival clauses. It should in principle be allowed, since the QP>FP order in principle could be overridden to get the correct scope interpretation, which means that ScoT would not be violated.

Of course, under the present assumptions the way to try to account for the problem is evident: there must be other interacting constraints and we should make an attempt to identify them. What exactly can they be? Based on Szabolcsi (1997) we could conclude that it is something to do with properties of negation, seeming to delimit scope. In (152), on the other hand, there is not negation and a very similar problem arises. What it indicates is that the left periphery word order restriction is not enough, it must be a soft constraint, since it is violable in infinitival clauses. What is the common factor?

The lack of the missing interpretations can be connected to the fact that in both cases constituents under discussion appear in the domain of the finite verb, and not in the infinitival clause. At this point a familiar pattern arises, the one already discussed in (148). There it was pointed out that we find ambiguous structures in the post-verbal domain of Hungarian sentences, not in the pre-verbal one. This means that the $\frac{3}{4}$ signature is not absent in these cases, we are simply looking for it in the wrong place, having identified the wrong constraints interacting with ScoT. In finite clauses ScoT has been shown to interact with the preference for the lack of movement, *MOVE. The relevant LF-pairs that compete are thus the following:

- (153) a. Minden előadásra CSAK KEDDEN mentünk be.
 every talk only on-Tuesday attended PV
 ‘We attended every talk only on Tuesday.’
 $\forall > \text{FP}$
- b. CSAK KEDDEN mentünk be minden előadásra.
 only on-Tuesday attended PV every talk
 ‘We attended every talk only on Tuesday.’
 $\text{FP} > \forall$
 $\forall > \text{FP}$

In (153a) both the quantified constituent and the focussed expression are in the pre-verbal domain, therefore no ambiguity arises. In (153b) the quantified constituent is

in the post-verbal domain, the sentence is ambiguous, as expected. The ungrammatical sentence in (152) would be exactly the sentence that is ruled out in the $\frac{3}{4}$ signature account.

Actually, there is a way for scope-disambiguation in (153b) as well. A quantified constituent (at least apparently) in the post-verbal field ceases to be ambiguous if it receives focus stress, compare (154) a) and b). If the quantifier following the verb receives focus stress, it obligatorily receives wide scope interpretation. This pair of sentences illustrates the English pattern, where focus stress is more readily available for information structure considerations than movement (which is never a result of scrambling, but a more costly operation like clefting or pseudo-clefting).

- (154) a. Csak JÁNOS látogatott meg mindenkit.
 only John visited PV everyone-ACC.
 ‘Only John visited everyone.’
 FP > \forall
 \forall > FP
- b. Csak JÁNOS látogatott meg MINDENKIT.
 only John visited PV everyone-ACC
 ‘Only John visited EVERYONE.’
 \forall > FP

To make sure that the quantified expression has narrow scope we can resort to the contrastive topic construction characterised by a marked rising intonation pattern.

- (155) Mindenkit, csak JÁNOS látogatott meg.
 everyone-ACC only John visited PV
 ‘Only John visited everyone.’
 FP > \forall

However, both of these constructions include an additional mechanism besides scrambling, similarly to (147b,c). From the perspectives of the LF-first approach accounting for them would mean identifying the relevant constraints that interact resulting in the given order with the expected intonation. I leave this for future research.

Accounting for infinitival clauses that seem to appear with a nominative subject we can proceed on a similar train of thought, but the interacting constraints identified will be slightly different from the constraints we identified in the finite clauses in (153),

which is due to the fact that this time we are concerned with an embedded infinitival clause that is assumed to have an internal structure of its own. The $\frac{3}{4}$ signature does not arise in this case, but I argue that it is with a reason. In (151b) *csak ő* ‘only he’ appears in a position preceding the finite verb. As we have seen already, this is a position where we do not expect ambiguity to arise, this can be taken care of in the post-verbal domain of the finite verb. But what is in the post-verbal domain of the finite verb in this sentence is an infinitival clause having its own internal structure and this will be the factor that accounts for the lack of the $\frac{3}{4}$ signature. In this respect, the focussed constituent can be argued to appear in a preverbal domain again in (151a), the preverbal domain of the infinitival clause, and for this reason this sentence is not going to be ambiguous either. The LF-first analysis together with the partial ordering rules actually forces this structure to arise, because this is the only way to have the interpretation under discussion. Hungarian in general is assumed to be able to handle scope ambiguities on its surface form, and this is attested here as well, actually in an even more perfect form this time: since the focussed constituent can relate to the preverbal domain of a specific verb (irrespective of whether it is finite or infinitival), in both of the sentences in (153), the PF perfectly matches LF in these constructions, the lack of the $\frac{3}{4}$ signature is accounted for. Moreover, it is perfectly in line with Bobaljik’s and Wurmbrand’s (to appear) claim that different constructions are expected to have different properties in terms of obeying ScoT depending on the syntactic resources available in a given construction. In Hungarian pre-verbal and post-verbal word order can be accounted for by different constraints interacting with ScoT in the LF-first analysis. In the case of the preverbal field of finite clauses the relevant interacting constraint is *MOVE, as we have seen in (148) and the table in (149). In the case of infinitival clauses ScoT can interact with restrictions on left peripheral order, meaning that this restriction can be violated if the scope properties of the sentence call for it. This difference may be something to do with my proposal in Chapter 3, where I claim that scope relations read off the infinitival clause must be preserved in the derivation. Since scope relations have been shown to interact with information structure the assumption that in infinitival clauses the two interact with each other has exactly the desirable consequences.

All in all, it can be stated that the LF-first approach can account for both the general patterns of Hungarian other approaches also handle well, and the problematic cases discussed in the present study, which there were no obvious solutions for within the framework I started out working with. Similarly to previous accounts, this analysis also necessitates that infinitival clauses are also CPs: we need this assumption to claim that in infinitival clauses there is also a separate pre-verbal domain, which accounts for the lack of certain interpretations predicted to be available otherwise. However, previous generalisations are not lost either, mono-clausal and bi-clausal properties of infinitival embedded clauses can be derived within this framework as well, moreover, probably in a more straightforward manner than in previous approaches. The question that arises is which part of the derivation takes care of them, which I am going to discuss in the following chapter.

Chapter 5 Putting pieces of the puzzle together

5.1 Introduction

As we have seen in Chapter 3 and Chapter 1 the following set of assumptions can account for the observed word order in terms of scope and information structure in sentences where a finite verb takes an infinitival complement:

(156)

- a scrambling field is available somewhere in the derivation;
- this scrambling field operates with the help of partial ordering restrictions;
- these partial ordering restrictions are sensitive to LF features;
- these LF features include features related to both scope and information structure;
- for this reason a derivation that proceeds from LF to PF gives a more satisfactory account of the data.

What we have not considered so far are other properties of restructuring listed in (10) in 1.1.2 and some further issues that arose later, to do with auxiliaries and the verb *látszik* ‘seem’ (see section). It means that the following phenomena are still left for us to account for:

(157)

- the formation of verbal complexes;
- agreement between the finite verb and the object of the infinitive;
- properties of infinitival clauses with nominative subjects;
- properties of constructions containing auxiliaries;
- properties of constructions containing the verb *látszik* ‘seem’.

The following subsections discuss the so far unresolved problems listed above. In 5.2 I compare Hungarian auxiliaries and the raising verb *látszik* ‘seem’ and account for their similarities and differences. Section 5.3 discusses verbal complex formation, and in section 5.4 I propose an account of verb-object agreement. Section Chapter 6 presents the resulting derivations of different types of restructuring constructions.

5.2 The analysis of Hungarian auxiliaries and *látszik* ‘seem’

Since we claim that restructuring takes place in every single embedded infinitival construction, properties of the constructions of the four verbs assumed to undergo restructuring in the literature on Hungarian restructuring should be explained evoking independent properties of the verbs in question.

As we have seen, the verbs claimed to be restructuring verbs in Hungarian by Tóth (2000) include the set of verbs Kenesei (2001) analyses as the true auxiliaries of the Hungarian language. This part of my study raises the question whether a correlation can be established between auxiliaries and restructuring verbs in general, and in particular, what distinguishes the fourth member of Tóth’s (2000) list, *látszik* ‘seem’ from the three auxiliaries of Kenesei (2001), namely *fog* ‘will do’, *szokott* ‘usually does’, and *talál* ‘happen to’. The discussion also points out some problems Wurmbrand’s analysis of German restructuring faces.

There are three verbs identified as the auxiliary verbs of the Hungarian language in Kenesei (2001), based on criteria completely different from Tóth, Kálmán et al. or actually any other previous account of auxiliaries in Hungarian. These three verbs are *fog* ‘will’, *szokott* ‘usually does’ and *talál* ‘happen to’. Only these verbs classify as auxiliaries in Hungarian, being verbs without a thematic structure of their own.

One of the main questions is whether the four restructuring predicates fit into any of the four restructuring types proposed by Wurmbrand (2001), and whether the verb *látszik* ‘seem’ the only verb that is claimed to be a restructuring verb, but not to be an auxiliary at the same time behaves differently from the auxiliaries in terms of restructuring.

Though out of the four restructuring verbs of Tóth only *látszik* ‘seem’ is lexical, analysing constructions involving this verb as examples for lexical restructuring is excluded as a potential difference between auxiliaries and *látszik* ‘seem’, since in Hungarian there are no constructions where verbs fail to assign accusative case to their objects. As the examples from (158) to (161) show, the infinitival complements of all the four verbs can assign accusative case to their objects.

- (158) Mari meg fog-ja olda-ni a feladat-ot.
 Mary PV will-DEF solve-INF the task-ACC
 ‘Mary will solve the task.’

- (159) Mari meg szokta csinálni a lecké-t.
 Mary PV usually.does do-INF the homework-ACC
 Mary usually does the homework.’
- (160) Mari meg találta fejteni a kódot.
 Mary PV happened.to decipher-INF the code-ACC
 ‘Mary happened to decipher the code.’
- (161) Mari bicikli-t szerelni látszik.
 Mary bicycle-ACC mend-INF seems
 ‘Mary seems to be mending a bicycle.’

The constituent *Mari* is in nominative case, which can only come from the finite verb. As we have seen before, the infinitive can only assign dative case to its subject (162):

- (162) Mari-nak meg kell oldani a feladatot.
 Mary-DAT PV has-to solve-INF the task
 ‘Mary has to solve the task.’

The behaviour of the four verbs is uniform with respect to case assignment, but we find differences in the word order patterns the verbs can appear in. This is particularly conspicuous in the case of the verb *látszik* ‘seem’: it can appear together with a verb that also has a preverb if the whole preverb-verb sequence precedes it (163).

- (163) a. Mari megérkezni látszik
 Mary arrive-INF seems
 ‘Mary seems to be arriving.’
- b. *Mari látszik megérkezni. (without focus!)
 Mary seems arrive-INF
- c. *Mari meg látszik érkezni.
 Mary PV seems arrive-INF

Contrasting this, in the case of auxiliaries it is the subject-preverb-auxiliary-infinitive order that is grammatical (164).

- (164) a. *Mari megérkezni fog/szokott/talált.
 Mary PV.arrive-INF will/does/happened to

- b. *Mari fog/szokott/talált megérkezni (without focus)
Mary will/does/happened to PV.arrive-INF
- c. Mari meg fog/szokott/talált érkezni.
Mary PV will/does/happened to arrive-INF
'Mary will arrive/usually arrives/happened to arrive.'

If the infinitival complement of the verb *látszik* 'seem' is transitive and contains a preverb at the same time, the object (and only the object) can appear in a position following the finite verb in neutral sentences as well, moreover, as the examples in (165) show, this seems to be the only natural position for the object to take.

- (165) a. Mari lekés-ni látszik a busz-t.
Mary PV.miss-INF seems the bus-ACC
'Mary seems to be missing the bus.'
- b. *Mari a busz-t lekés-ni látszik.
Mary the bus-ACC PV.miss-INF seems
- c. *Mari lekés-ni a busz-t látszik
Mary PV.miss-INF the bus-ACC seems
- d. *Mari le látszik kés-ni a busz-t.
Mary PV seems miss-INF the bus-ACC
- e. *Mari a busz-t látszik lekés-ni. (without focus!)
Mary the bus-ACC seems PV.miss-INF

In a sentence containing an auxiliary that takes a transitive infinitive as a complement, the grammatical order is the familiar subject-preverb-auxiliary-infinitive order, the object of the infinitive follows the infinitive itself in a neutral sentence (166).

- (166) a. *Mari lekés-ni fogja/szokta/találta a busz-t.
Mary PV.miss-INF will/does/happened to the bus-ACC
- b. *Mari a busz-t lekés-ni fogja/szokta/találta.
Mary the bus-ACC PV.miss-INF will/does/happened to
- c. *Mari lekés-ni a busz-t fogja/szokta/találta.
Mary PV.miss-INF the bus-ACC will/does/happened to

- d. Mari le fogja/szokta/találta kés-ni a busz-t.
 Mary PV will/does/happened to miss-INF the bus-ACC
 Mary will miss/usually misses/happened to miss the bus.
- e. *Mari a buszt fogja/szokta/találta lekésni. (without focus!)
 Mary the bus-ACC will/does/happened to PV.miss-INF

When the infinitival complement of the verb *látszik* ‘seem’ is a transitive construction not containing a preverb related to the infinitive, the object of the infinitive usually precedes the infinitive preceding the verb *látszik* ‘seem’ (167a), and it can also precede the finite verb (167b). This latter order is of course the natural one when *krokodil-t* ‘crocodile-ACC’ is understood as focussed. As (167c) shows, the infinitival complement cannot occupy post-verbal position in a neutral sentence.

This is another point where the behaviour of *látszik* ‘seem’ clearly deviates from the behaviour of the three auxiliaries, where the only word order acceptable in a neutral sentence is the one where the object (with no determiner) of the infinitive surfaces in the position directly preceding the auxiliary itself (168). The verb *látszik* ‘seem’ can also be preceded by the whole infinitival construction resulting in the object-infinitive-main verb order.

Látszik:

- (167) a. Andris krokodil-t rajzol-ni látszik.
 Andy crocodile-ACC draw-INF seems
 ‘Andy seems to be drawing a crocodile.’
- b. Andris krokodil-t látszik rajzol-ni.
 Andy crocodile-ACC seems draw-INF
 same
- c. *Andris látszik krokodil-t rajzol-ni (without Andris in focus!)
 Andy seems crocodile-ACC draw-INF
- d. *Andris látszik rajzol-ni krokodil-t.
 Andy seems draw-INF crocodile-ACC

Fog/szokott/talál:

(168) a. *Andris krokodil-t rajzol-ni fog/szokott/talált.

Andy crocodile-ACC draw-INF will/does/happened to

b. Andris krokodil-t fog/szokott/talált rajzol-ni.

Andy crocodile-ACC will/does/happened to draw-INF

‘Andy will draw/usually draws/happened to draw a crocodile.’

c. *Andris fog/szokott/talált krokodil-t rajzol-ni. (without focus!)

Andy will/does/happened to crocodile-ACC draw-INF

d. *Andris fog/szokott/talált rajzolni krokodilt. (without focus!)

Andy will/does/happened to draw-INF crocodile-ACC

Related to this, an interesting difference can be observed between *látszik* ‘seem’ and the auxiliaries. The constituent *krokodil-t* ‘crocodile-ACC’ is a nominal expression with no determiner, thus functions as a verb modifier. As (167b) and (168b) illustrate, this type of verbal modifier can appear in the position preceding the finite verb in both constructions. However, as we have seen, if the verbal modifier is a preverb, *látszik* ‘seem’ does not tolerate the preverb-finite verb order.⁴²

5.2.1 Kenesei’s (2001) account of auxiliaries in Hungarian

As pointed out in 1.2.2, Kálmán et al. (1989) define the set of Hungarian auxiliaries (that we called helping verbs in this work) based on exclusively distributional criteria. This raises the question what is the particular factor that makes *szeretne* ‘would like’ and *akar* ‘want’ qualify as auxiliaries and at the same time excludes e.g. *szeret* ‘like’ or *imád* ‘love, adore’. In general it can be stated that a classification that relies exclusively on distributional criteria does not give a satisfactory account of what makes an auxiliary an auxiliary. This is exactly what Kenesei (2001) points out also and makes an attempt to identify more general properties of auxiliaries, looking for criteria that lend themselves more easily to a cross-linguistic comparison as well. Following Heine (1993), Kenesei (2001) separates auxiliaries from stress-avoiding light verbs as a first step. The main criterion for auxiliaryhood is defined to be the lack of thematic structure

⁴² For further details on different types of verb modifiers see Komlósy (1992).

that can be tested with the help of the so-called agent-test. The resulting list of properties defining Hungarian auxiliaries is the following:

(169) Properties of auxiliaries based on Kenesei (2001):

- a. They have no subjects of their own, either with or without a theta-role.
- b. They have no non-finite forms.
- c. They cannot be nominalised.
- e. They do not define argument structure.

Considering what kind of verbal inflections the verbs under discussion can take, the three auxiliaries do not exhibit uniform behaviour. None of these verbs can appear with all the potential inflectional endings of a finite lexical verb, but even in the behaviour of these three verbs differences can be observed: *talál* ‘happen to’ can appear together with the conditional ending *-na* (the English equivalent would be ‘would’), as opposed to *fog* and *szokott* – the **szok+na* and *fog+na* forms are ungrammatical.⁴³ Based on these facts Kenesei (2001) attributes the structure depicted in (170) to the auxiliaries, where a given verb form can only appear with the inflections above it. Thus, none of them, including *talál* can take the inflectional ending expressing potential (*hat/het*, ‘be allowed to, be permitted to’): **talál+hat* is just as ungrammatical as **szok+hat* and **fog+hat*.⁴⁴

(170) AgrSu > Finit > AgrOb > *fog/szokott* > Mod > *talál* > Pot > Finit/VP

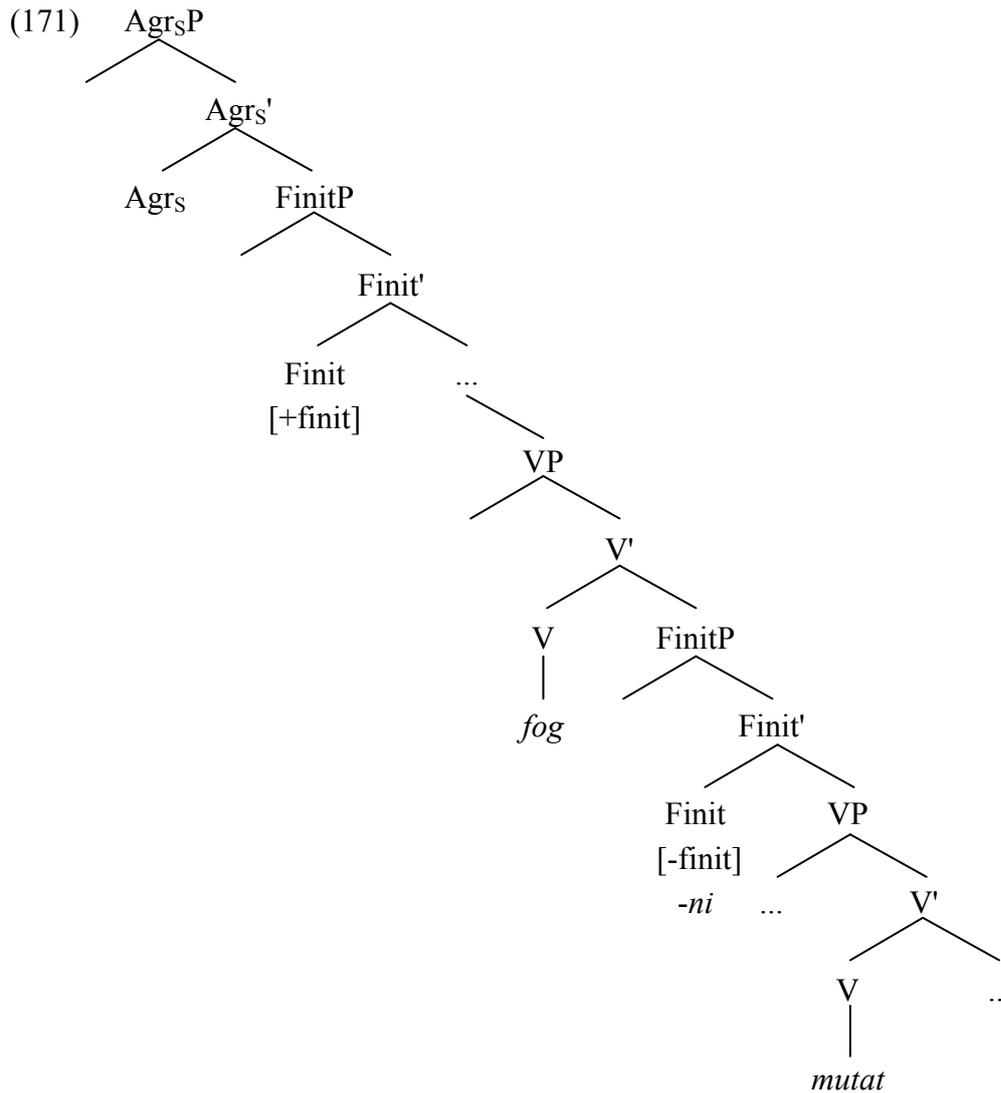
⁴³ The disappearance of *-ott* from *szokott* is unexpected. However, the form of this verb is a past form which has developed a present meaning in the history of the language. It could be related to the verbs expressing ‘be used to something/ have got used to something’ in Hungarian.

⁴⁴ In the relevant sense, in their auxiliary meaning. All the three of these verbs have a matching lexical verb form, where, as expected, all of the inflectional ending are possible:

- i.) Ha Péter alaposan el-olvas-ná a cikk-et, könnyen talál-hat-na benne problémák-at.
if Peter thoroughly PV-read-COND the article-ACC easily find-POT-COND in.it problems-ACC
‘If Peter read the article thoroughly, he could easily find problems in it.’
- ii.) Megfoghatod a kezem.
PV-hold-POT-2SG the hand-POSS
‘You can hold my hand.’
- iii.) Péter könnyen megszokna egy új autót.
Peter easily PV-get.used.to-POT a new car
‘Peter would easily get used to a new car.’

Another important question is whether auxiliaries in Hungarian should be analysed as occupying separate functional projections similarly to Cinque's (2004) analysis of Italian restructuring, or they should be treated as irregular verbs. Kenesei (2001) argues that it is more advisable to describe them as irregular verbs for the following reason: they can take verbal types of inflections, which is a property we should account for anyway, and a functional approach would face difficulties in doing so. For this reason the most straightforward option is describing auxiliaries as irregular verbs acting like functional heads, meaning that they lack a thematic structure, and they can only take infinitival complements. Kenesei (2001) words this as follows: “[they are] functional elements without projecting a functional category of their own” (Kenesei 2001).

Kenesei (2001) claims that auxiliaries can best be described with the structure in (171), which shows the complement of auxiliaries to be a FiniteP/TP, where finiteness is defined with the negative value, selecting an infinitival complement where the head position is the position of the infinitival ending *-ni*. Returning to the question of restructuring, we can say that in this account restructuring is not going to be parallel with either lexical or functional restructuring in the sense of Wurmbrand. The complement has a TenseP(=FiniteP) projection, so the construction can be described as belonging to the “reduced non-restructuring”-type of restructuring.



5.2.2 *Látszik* ‘seem’: previous observations

5.2.2.1 Kálmán et al. (1989)

According to Kálmán et al. (1989) the infinitival modifier of *látszik* ‘seem’ is not a verbal modifier but a real complement, as opposed to helping verbs, where the infinitive functions as a verbal modifier.

Based on the distributional criteria mentioned earlier (1.2.2), Kálmán et al. (1989) distinguish three groups of verbs taking infinitival complements. The first group is the group of stress-avoiding helping verbs that use either their infinitival verbal modifier or the verbal modifier of their infinitive to avoid a position where they would bear stress. The second group is formed by verbs that have to be stressed, like e.g. *imád* ‘love, adore’. The verb *látszik* ‘seem’ belongs to the third group, the group of stress-avoiding

non-helping verbs containing verbs that exhibit a clitic-like behaviour together with verbs like e.g. *van* ‘be’, *kényszerül* ‘be forced to’, *vágyik* ‘desire to’. To explain the difference between helping verbs and verbs with clitic-like behaviour Kálmán et al. (1989) point out that verbs belonging to the third group are by no means helping verbs, under neutral circumstances they avoid being stressed, but they cannot use the strategy of helping verbs, namely appearing after a verbal modifier. Their clitic-like behaviour is not motivated by a need to occupy a position directly after the constituent bearing main stress. All they strive for is a position with no stress and this is what makes the difference.

Within the third group of verbs *látszik* ‘seem’ belongs to the group of verbs that cannot bear stress at all together with *kényszerül* ‘be forced to’ and *van* ‘be’. Their belonging to this group is proposed to be an arbitrary lexical feature, based on their meanings they could as well be helping verbs. Their behaviour is similar to verbs expressing motion like *jön* ‘come’ and *megy* ‘go’, where the infinitival construction functions as an adverbial modifier and does not form a complex with the finite verb.

5.2.2.2 Kenesei (2001)

Kenesei (2001) makes the following observations concerning the verb *látszik* ‘seem’:

- a. it is a one-argument verb: its argument is a proposition (as opposed to auxiliaries, which do not tolerate a clausal complement);
- b. it has a nominative subject as opposed to the dative subject of deontic helping verbs;
- c. has a full finite and non-finite paradigm;
- d. it cannot take a subjectless complement (like clitic-like verbs in general), this property is shared with epistemic helping verbs.

(172) *A szobában kitakarítva látszik/kell lenni.

The infinitival complement of *látszik* ‘seem’ must be as big as a FiniteP, since the infinitival *-ni* ending can only appear in the head position of FiniteP (see (171)), so *látszik* ‘seem’ cannot belong to the class of lexical restructuring verbs, either.

5.2.2.3 A problem for Wurmbrand (2001)

Having a closer look at the analyses in Wurmbrand (2001), we find that the ending that matches the Hungarian infinitival *-ni* ending, the constituent *zu*, occupies a position within the VP. This can among others be motivated by assumptions in Haider (1993),

according to which *zu* can be analysed as a verbal affix. Actually, this analysis could work for Hungarian, but cannot account for a number of constructions available in several Germanic languages, such as West Flemish (173) or Afrikaans (174)

(173) West Flemish:

mee Valere **te** [willen [dienen boek kuopen]] **een**
 -val Valere INF akar hogy könyvet megvesz PERF
 ‘since Valerie wanted to buy the book’

(174) Afrikaans:

Die banke moes oop ewees het, om dit gister **te** [kan betaal] **het**
a bank kellene nyitva lenni PERF azt tegnap INF tud megvesz PERF
 ‘The bank should have been open in order for us to be able to buy it yesterday.’
 [Hinterhölzl (1999)]

Hinterhölzl (1999, 2006) argues that in the two sentences above the infinitive marker can by no means be a verbal affix, since there can appear constituents between the infinitive marker and the verb, in (173) a whole phrase. This is one of the main reasons why he calls into question previous accounts of restructuring and argues for a bi-clausal analysis, contrary to Wurmbrand (2001).

5.2.3 Accounting for the differences between the auxiliaries and *látszik* ‘seem’

In Hungarian, as we have seen in 5.2, there are differences in the behaviour of the verbs *fog* ‘will’, *szokott* ‘usually does’, *talál* ‘happen to’ *látszik* ‘seem’ and the rest of the verbs taking infinitives on the one hand, and there are differences in the behaviour of the four verbs themselves as well. These differences may not be related to restructuring directly, but a theory of restructuring has to be able to account for them.

In accounting for the word order differences in the behaviour of Hungarian auxiliaries and *látszik* ‘seem’ I propose an analysis along the lines of É. Kiss’s (2004a) theory of verb modifiers. According to this approach only verbs with a complex event structure can have a PredP projection in the specifier position of which preverbs can appear, where the PredP is assumed to be a licensing position for adverbs. My proposal is the following: the reason why there cannot be a preverb in the position preceding the verb *látszik* ‘seem’ is that this verb does not have a complex event structure, therefore it lacks the PredP projection. Its meaning is even more transparent than the meanings of the three auxiliaries.

The event structure of auxiliaries can be complex because it is formed together with the event structure of the lexical verb(s) they take. Lexical verbs themselves can have a complex event structure, but even if lexical verbs have no complex event structure of their own, they will certainly do so once a construction with an auxiliary is formed (and the future, habitual or accidental aspect of meaning is added to the meaning of the lexical verb). This results in the licensing of the PredP projection.

In this respect the Hungarian verb *látszik* ‘seem’ is independent. It selects and theta-marks a propositional argument, but the event structure of *látszik* ‘seem’ and the event structure of the infinitival verb that appears in its complement clause are independent of each other. The event structure of ‘seem’ is by no means complex, which translates into not projecting a PredP in terms of É. Kiss (2004a). I claim that it is the lack of the PredP projection that accounts for the lack of preverb movement to the position preceding the finite verb. This is exactly what accounts for the clitic-like behaviour of the verb as well: *látszik* ‘seem’ is one of the stress-avoiding verbs of Hungarian (actually, the “most stress-avoiding” one, as we could see in (182c): it cannot even bear focus-stress when the verb itself would be emphasised, which means it cannot be emphasised under any circumstances). Verbs like this usually get round this problem by moving a constituent into their PredP, but this is not an option for *látszik* ‘seem’. Since it does not have a PredP to move constituents to, its clitic-like behaviour can be claimed to be another strategy to avoid positions with stress.

In contrast with the behaviour of the verb *látszik* ‘seem’, properties of structures containing auxiliary verbs as defined by Kenesei depend on properties of the lexical verb they modify the meaning of. If the event structure of the lexical verb is simple, there will be only one PredP present in the sentence, above the auxiliary. If the event structure of the lexical verb is complex, the event structure of the resulting construction will be even more complex, there will be two PredP projections available, one above the auxiliary, one above the lexical verb, and the verbal modifier can appear in both positions. Based on the data we have to argue that when an auxiliary is present in a neutral sentence, the verbal modifier appears in the PredP projection on top of the whole auxiliary-lexical verb complex (175) and when there is a focussed constituent preceding the auxiliary, movement of the verbal modifier is not necessary, it appears in the PredP on top of the lexical verb (176).

(175) Péter el fog menni
 Peter PV will go-INF
 ‘Peter is going to leave.’

(176) PÉTER fog elmenni.
 Peter will PV-go-INF
 ‘It is Peter who is going to leave.’

Since *látszik* ‘seem’ has no PredP of its own, a verbal modifier cannot precede it (177). However, it does not affect whether there can be a verbal modifier present within the infinitival complement of the verb. It can contain a PredP of its own, but due to the lack of the PredP projection on top of *látszik* ‘seem’, it cannot move there.

(177) *Péter el látszik menni.
 Peter PV/away seems go-INF
 ‘Peter seems to be leaving.’

(178) PÉTER látszik elmenni.
 Peter seems PV/away-go-INF
 ‘It is Peter who seems to be leaving.’

To sum it up, we can conclude that the differences between the auxiliaries and *látszik* ‘seem’ reduce to the differences between the availability of the PredP projection. The FP projection, however, is available for both verb-types, so we expect no difference in grammaticality in being able to focus the lexical verb in auxiliary constructions and the verb following *látszik*, which is borne out by the data.

(179) Péter (MEG-)ÉRKEZNI fog kettő óra-kor (nem elindulni).
 Peter PV-arrive-INF will two o’clock-at (not PV-leave-INF).
 ‘Peter will arrive at two o’clock, not leave.’

(180) Péter (MEG-)ÉRKEZNI látszott (nem elindulni).
 Peter PV-arrive-INF seemed (not PV-leave-INF)
 ‘Peter seemed to be arriving, not leaving.’

If we consider which of the four verbs can be focussed we find that two of the auxiliaries can bear focus stress⁴⁵ as opposed to *látszik* ‘seem’. (181) and (182) show that auxiliaries themselves can be focussed. The a) sentences present ungrammatical constructions where the ungrammaticality is caused by the fact that there is nothing to prevent stress-assignment to a stress-avoiding verb. As we have seen this is a property auxiliaries and *látszik* ‘seem’ share. If the constituent preceding the stress-avoiding verb is understood as focussed, the sentence becomes grammatical as illustrated in the b) examples. Auxiliaries and *látszik* ‘seem’, however, behave differently with respect to the focussing of the verbs themselves.

(181) a. *Andris fog/ szokott/ talált krokodilt rajzol-ni. (without Focus!)
 Andrew will usually- does happened-to crocodile draw-INF
 ‘Andrew will/is probable to/happened to/ draw crocodiles.’

b. ANDRIS fog/szokott/ talált krokodilt rajzol-ni.
 Andrew will usually- does happened-to crocodile draw-INF
 ‘It is Andrew who will/is probable to/ happened to draw crocodiles.’

c. Andris FOG/SZOKOTT krokodilt rajzol-ni.
 Andrew will usually-does crocodile draw-INF
 ‘Andrew WILL/DOES draw crocodiles.’

(182) a. *Andris látszik krokodilt rajzol-ni (without Focus!)
 Andrew seems crocodile draw-INF
 intended meaning: ‘Andrew seems to be drawing a crocodile.’

b. ANDRIS látszik krokodilt rajzol-ni.
 Andrew seems crocodile draw-INF
 ‘It is Andrew who seems to be drawing a crocodile.’

⁴⁵ The exception is *talál* ‘happen to’. The lack of a well-definable comparison set cannot be the reason for this, since it is easy to contrast the accidental event with a deliberate one. It might be the case that a more obvious way presents itself to focus the accidental nature of an event, that of focussing the adverb *véletlenül* ‘accidentally, as shown in (i).

(i) Én VÉLETLENŰL ejtettem le a vázát.
 I-NOM accidentally dropped PV the vase.
 ‘I dropped the vase ACCIDENTALLY.’

- c. *Andris LÁTSZIK krokodilt rajzol-ni.
 Andris seems crocodile draw-INF
 Andris SEEMS to be drawing a crocodile.

Although auxiliaries and *látszik* differ in their potential for being focussed, both verb-types can appear in *only*-focus constructions.

- (183) Péter csak FOG angolul tanul-ni (még nem kezdte el).
 Peter only will English learn-INF (yet not started)
 ‘Peter is only going to learn English (he hasn’t started yet).’
- (184) Péter csak LÁTSZIK tanulni (valójában csak ábrándoz-ik).
 Peter only seems study-INF (actually only daydream-3SG)
 ‘Peter only seems to be studying (actually, he is daydreaming).’

I propose that the difference between ordinary focus and *only*-focus is semantic in nature: the presence of *only* enriches the verb *látszik*, and, as a result it can be focussed, whereas without *only* present the meaning of *látszik* is too neutral, too transparent. That the meaning of the focussed constituent is relevant and can be modified by the presence or absence of *only* is further supported by the ungrammaticality of *szokott* ‘usually does’ with *only*-focus. While *szokott* ‘usually does’ can quite naturally be focussed in itself, together with *only* the result is rather degraded, very probably due to the lack of a well-definable comparison set.⁴⁶

- (185) Péter SZOKOTT színház-ba járni.
 Peter does theatre-to go-INF
 ‘Peter does go to the theatre.’ (there’s an underlying assumption that he does not)
- (186) *Péter csak SZOKOTT színház-ba jár-ni.
 Peter only *szokott* theatre-to go-INF
 Intended meaning: ???

However, certain contexts can make it possible to use *szokott* ‘usually does’ with *only*-focus as well, exactly by providing the (relatively) well-definable comparison set missing in (186). As pointed out by Tibor Szécsényi (p.c.) this is what we find in (187).

⁴⁶ It has to be noted though that there is considerable native speaker variation in the grammaticality judgements of focussed auxiliaries.

- (187) December-ben csak SZOKOTT havaz-ni, de nem mindig esik.
 december-in only *szokott* snow-INF but not always fall-3SG
 ‘It is only sometimes that it snows in December, it doesn’t always snow.’

The other problem is related to the mono-clausal–bi-clausal dichotomy. Based on data in 1.2 these four verbs are assumed to have only a vP-sized complement. Other data, however, suggest that one should not draw this conclusion too hastily. Sentences containing these verbs that appear to have a negated constituent within the infinitival clause would call for a bi-clausal analysis, and this is what we find when there is a focussed constituent present in the finite clause (188).

- (188) MARI szokott/fog nem megérkezni az előadás elejére.
 Mary usually.does/will not PV-arrive-INF the lecture beginning
 ‘It is Mary who regularly doesn’t arrive/will not arrive by the time the lecture begins.’

Actually, the focus may not even be necessary, in sentence (188) it appears because all the verbs under discussion share the property of being stress-avoiding verbs. If we have a heavy verb like *imád* ‘love, adore’, you do not even need a focussed constituent in preverbal position.

- (189) Mari imád nem megérkezni az előadás elejére.
 Mary loves not PV-arrive-INF the lecture beginning
 ‘Mary loves not arriving by the time the lecture begins.’

If there is negation in the finite clause, another negation can easily appear in the infinitival clause as well.

- (190) a. Andris nem szokott nem válaszolni a tanár kérdéseire.
 Andy not usually.does not answer-INF the teacher questions
 ‘Andy never fails to answer the teacher’s questions.’
- b. Andris nem fogja nem szeretni a leendő tanárát.
 Andy not will-DEF not like-INF the would.be teacher
 ‘Andy won’t dislike his would-be teacher.’

Moreover, left-peripheral constituents can very easily appear within the infinitival clause even when the finite verbs is an auxiliary.⁴⁷

(191) A JÖVŐ HÉTEN fog Mari minden étteremben csak két fogást megkóstolni.
the next week will Mary every restaurant-in only two dishes PV-taste-INF
'Mary will taste only two dishes in every restaurant NEXT WEEK.'

(192) PÉTER szokott minden konferencián csak egy napig maradni.
Peter usually does every conference only one day stay-INF
'It is Peter who stays at every conference only for a day.'

(193) EBBEN AZ ÉTTEREMBEN talált Péter
this-in the restaurant-in happened.to Peter

minden pincért többször is megsérteni.
every waiter several.times even PV-hurt-INF
'It was in this restaurant that Peter happened to upset every waiter several times.'

5.2.4 Interim summary

The aim of this part of the dissertation has been to compare Tóth's (2000) four restructuring verbs with Kenesei's (2001) three auxiliary verbs from the perspective of restructuring. The analysis of the differences and similarities shows that differences in the behaviour of *látszik* 'seem' on the one hand and *fog* 'will' *szokott* 'usually does' and *talál* 'happen to' on the other are not related to restructuring in the strict sense but to the complexity of the event structure of the verbs concerned, which results in the presence/absence of the PredP projection on top of the verbs in question in the light of É. Kiss (2004a).

The data presented at the end of this section also give further support to the claim that restructuring can affect full CPs.

⁴⁷ The focussed constituents preceding the auxiliaries end up in this position due to the stress-avoiding property of the auxiliaries. The examples cannot be analysed as true multiple focus-constructions. Actually, these data could support a mono-clausal analysis as well whereby the auxiliaries would be analysed as light verbs, following e.g. Ramchand (2004). However, it would be difficult to account for the verbal inflections potentially present and the fact that these auxiliaries themselves can be focussed (e.g. (183)).

5.3 Verbal complex formation

As we saw in 2.1.2, the formation of verbal complexes is one of the reflexes of restructuring. In a comprehensive account of restructuring we would like to propose an analysis that is compatible with general assumptions on restructuring including É. Kiss's (1999) reanalysis data. The primary aim of the present study is to account for the word order phenomena discussed in the previous chapters, however, it still has to be proven that the analysis proposed above is reconcilable with the reanalysis data as well, especially so as some of the processes related to verbal complex formation clearly have an effect on word order facts in terms of scope as well, an observation not surprising at all once we regard restructuring as the interaction of a set of independent factors. The presence or absence of a focussed constituent, for example is crucial in defining the resulting word order.

First, let us consider É. Kiss's (1999) reanalysis data again:

Reanalysis in the neutral sentence:

(194) a. János szét fogja akarni kezdeni szedni a rádiót.

John apart will want-INF begin-INF take-INF the radio-ACC

'John will want to begin to take apart the radio.'

b. *János fogja akarni kezdeni szét-szedni a rádiót.

John will want-INF begin-INF apart-take-INF the radio-ACC

No reanalysis triggered due to the presence of a focussed constituent:⁴⁸

⁴⁸ To complete the picture another potential order should also be mentioned: the inverted order, or roll-up construction first observed by Kenesei (1989) and extensively discussed in É. Kiss and van Riemsdijk (2004):

i. a. Most fogok [akarni [kezdeni [énekelni]]]. straight order
now will-1SG want-INF begin-INF sing-INF
'Now will i want to begin to sing.'

b. Most fogok [énekelni kezdeni akarni] inverted order
now will-1SG sing-INF begin-INF want-INF
[Bartos 2004, ex. (1)]

If there is a verbal particle present in the construction, it stays together with its selecting verb:

ii. JÁNOS fogja szétszedni kezdeni akarni a rádiót.

to be continued

- (195) JÁNOS fogja akarni kezdeni szét-szedni a rádiót.
 John will want-INF begin-INF apart-take-INF the radio
 ‘It is John who will want to begin to take the radio apart.’

There is extensive literature on how to account for the formation of verbal complexes, both on West-Germanic and Hungarian. Most of the approaches try to account for the similarities between the two languages verb clusters by deriving them from a common root, claiming that “[i]f identical constructions displaying identical syntactic properties are derived from different underlying structures by means of different operations, a generalization is likely to be missed” (É. Kiss 2004b:354). For this reason we can find attempts to bring the two languages on a common base in terms of word order, similarly to our discussion of OV vs. VO based accounts of scrambling in 4.2.1. Bobaljik (2004) however, gives a word of warning suggesting that these approaches may not be on the right track referring to, among others, major differences in particle placement.

We have already seen that verbal complex formation can be assumed to be triggered by the stress-avoiding property of certain verbs (a broader class of stress avoiding verbs for Csirmaz 2004, auxiliaries/helping verbs for É. Kiss 2004b, Olsvay 2004, Szendrői 2004). In the presence of a focussed constituent reanalysis does not take place, in the absence of it the verbal modifier moves to the position directly preceding the stress-avoiding verb. There are different views on how the observed word orders come about. Tóth (2004), for example argues that particle movement should not be regarded as a symptom of restructuring, in her work movement of the particle to a position directly preceding the matrix verb is an instance of A'-movement to Spec,FP. However, the focus-interpretation is not necessarily present in all of the cases, which can be an argument against this proposal.

The present study does not aim to account for how this order comes about. Following Bartos (2004), Brody 1995a, 2004) and É. Kiss (1999, 2004b) and contra Koopman and Szabolcsi (2000) and Tóth (2004) I assume that roll-up constructions are the result of mechanisms different from those discussed here. Namely, while I assume the straight order structure to be the result of phrase movement, there are strong arguments for treating roll-up constructions as the outcome of cyclic head movement, e.g. only the reverse order verbal complex can be input to derivation, and only the reverse order section of a verbal complex is impenetrable. The most natural account of this phrase- vs. head movement dichotomy in verb clusters is offered in Brody (2004) within his framework of Mirror Theory. He claims that the input is the same in both straight and inverted constructions, the difference is related to headedness. Depending on whether the construction is left- or right-headed, it has phrasal or word-like properties respectively.

Other approaches account for verbal complex formation in terms of aspect (Alberti 2004, Olsvay 2004) presenting how the positioning of the particle can affect the aspectual interpretation of a sentence. For den Dikken (2004) the structural location of the AspP (whether it is present in the finite or infinitival clause) is only one factor that accounts for the formation of verb clusters. The present work is similar in spirit to den Dikken's in claiming that clause union is not a unitary phenomenon but the interaction of independent properties of the finite and infinitival clauses participating in the construction. The details of the analysis, however, are largely different: one of the main differences is that whereas definiteness agreement is the result of the DP moving to vP projections in den Dikken's analysis, in the present dissertation it is the infinitival CP that is assumed to undergo movement to a checking position.

Another group of analyses (Csirmaz 2004, É. Kiss 2003) accounts for particle placement in terms of a PredP projection directly on top of the vP. This predicative projection seems to have functions very similar to the Spec,VP position in Alberti (2004, 1997), which serves as kind of an escape hatch for non-referential arguments. The need for this is argued for based on the assumption that "complement positions [...] are predetermined to accommodate subcategorized arguments, and that arguments should typically "refer" whilst predicating is a genuine task of the head" (Alberti 2004:259) This argument actually motivates the introduction of a PredP projection as well.

More recent approaches (Csirmaz 2008a, É. Kiss 2008a) combine the merits of the AspP and PredP approaches and claim that both projections are present in the extended projection of the verb to capture both the predicative and aspect-related properties of the construction. Some of these approaches (Csirmaz 2008a) work with a more refined notion of aspect as well, making a difference between viewpoint aspect, which expresses properties external to the event described and is thus related to a separate aspectual projection, AspP and situation aspect related to the Vendlerian classes and compositionally determined within the vP. This, for us more relevant composition of AspP accounts better for the word order facts: the aspectual head is assumed to be merged in Asp, and the trigger for moving constituents there is argued to be the EPP feature present in Spec, AspP.

É. Kiss (2008c) even argues against the complementary distribution of identificational focus and the verbal particle showing that whereas PredP, the position particles can occupy when they are not understood as focussed, is dominated by AspP, FocP must necessarily be outside it. Sentences where both a focussed constituent and an aspectually marked constituent are present support this claim. In (196) an AsP projection is convincingly argued to separate the focussed constituent and the V position.

- (196) JÁNOS takarított ki két óra alatt.
 John cleaned PV two hour in
 ‘It was John who cleaned [the apartment] in two hours.’
 [É. Kiss 2008c:219, ex. (46)]

The existence of such constructions can also be evidence against Tóth (2004).

This way movement of the particle to the position preceding a stress-avoiding verb can easily be separated from the aspectual interpretation of the clause and arguing for its independent motivation is more straightforward as well.

In the previous section we have independently argued for the introduction of PredP above the vP referring to the event structure of the predicate concerned. We have shown that the behaviour of the verb *látszik* ‘seem’ can be accounted for under the assumption that it has no PredP projection available for it, due to its lack of complex event structure. A question that arises now is whether the particle should be base generated in PredP or move to it. The fact that the particle does not always have to immediately follow the verb (197) may call for the movement analysis along lines of É. Kiss’s (2008c, 2003) arguments contra Brody’s (1990, 1995b) analysis of Focus.

- (197) JÁNOS vezett Évával össze.
 John fell Eve-with out
 ‘It was John who fell out with Eve.’

However, it has to be pointed out that in the present analysis there are a number of projections assumed to be present between the FocP and the base position of the verb, namely AspP and PredP, where the preverb can appear. What still calls for the movement analysis, however, is the position of *Éva*, ‘Eve’, which shows that we are indeed in the postverbal domain (É. Kiss 2007). For this reason I also assume that

particles are base generated in the VP and move to PredP for predicate licensing purposes. It is this licensing step that cannot be carried out in a clause containing *látszik* ‘seem’, however, this does not lead to ungrammaticality, since the verb in the infinitival complement of *látszik* can license its own particle, and *látszik* never has a particle of its own. Therefore, if *látszik* has an embedded clause with a particle verb, the particle alone cannot move.

The most spectacular symptom of verbal complex formation in Hungarian is the movement of the particle. Some of the most influential works that argue that the trigger for this movement is phonological in nature are Szendrői’s works (2001, 2003, 2004). In her treatment of Focus, following the proposal in Reinhart’s (1995) interface economy approach, Szendrői claims that Focus movement is stress-driven based on the following hypothesis:

(198) *Stress-driven movement*

In Hungarian, movement of the focussed constituent to the left periphery is triggered by the requirement that a focussed constituent be stressed.

Horváth (2005), however, points out serious conceptual (as well as empirical) problems this approach faces, among others the following two:

(199) the problem of look-ahead

“Prosodic phrases are mapped from syntactic structure but are not isomorphic with it. The question then arises how a syntactic movement operation taking place in the CS can be driven by a property [...] that is defined on prosodic, rather than syntactic structure. Such a syntactic movement account would need to assume “look-ahead” into what properties prosodic phrasing will have. Specifically, some look-ahead into the prosodic structure of the sentence would be necessary in order to know where the alleged stress-driven syntactic operation moves to, and, in particular whether an adjoined position will suffice [...] or movement will have to substitution into the Spec position of a new Pre-VP functional head. *The latter functional category in turn needs to be constructed within the CS prior to the actual stress-driven Focus movement*⁴⁹ by an additional movement, namely V-raising.” (p. 141.)

⁴⁹ My italics.

- (200) the problem of losing important cross-linguistic generalizations
 “[T]he stress-driven movement proposal for Focus in Hungarian ... leaves a prominent generalization about A-bar movements in Hungarian looking completely accidental. Namely, Hungarian has a variety of uncontroversially LF-driven A-bar movements. These latter LF-motivated movements, such as the raising of various types of quantifier phrases, are all overt in Hungarian, while the same are covert in the English-type languages [...]. So a parameter involving overt versus covert movement of quantified expressions distinguishing Hungarian and English is called for independently of Focus. [...] [T]he stress-driven movement account suggests that overt Focus movement has nothing to do with the existence of a set of overt LF-induced QP movements in Hungarian, and would take the absence of both overt Focus movement and of overt quantifier movements in the English-type languages to be a mere coincidence.” (p.142)

The problem of look-ahead in (199) is the same problem Bobaljik and Wurmbrand (to appear) point out in connection with the analysis of Reinhart (1995), as discussed in section 4.3.1.1 and they take it as an argument for an LF-first approach. Actually, the analysis of the movement of the particle runs into a very similar problem: irrespective of what kind of a projection it targets (whether it is assumed to undergo movement to an FP, or an adjoined position) information is presupposed about whether there is already a focussed constituent present in the structure that will move to the position directly preceding the verb and movement of the particle is required only in case a focussed constituent fails to turn up in the respective position. While the stress-driven account of Focus faces serious other problems as well, movement of the particle can be argued to be clearly phonological in nature. Under an LF-first approach the look-ahead problem disappears, so this type of movement, movement of the particle to a position that saves a stress-avoiding verb from being assigned main stress within the intonational phrase as a last resort, can actually be a strong argument for an LF-first approach.

The second problem discussed by Horváth, that of losing cross-linguistic generalisations about focus as in (200) can (but not necessarily has to) be interpreted as an argument for the LF treatment of information structure phenomena. Focussed constituents and quantified expressions have a number of properties common in Hungarian (e.g. both undergo overt movement), moreover, in English both quantification and focussing differ from Hungarian constructions involving a quantified

expression or focus in at least one relevant factor, the lack of movement. If we want to find uniform ways to account for the parallel behaviour of Focus and quantification, we can argue, as Bobaljik and Wurmbrand do, that the two are handled by the same level of representation, which, due to the uncontroversial nature of quantification, and the highly dubious approaches to information structure must be argued to be LF.⁵⁰

In the present study I present a proposal that captures the last resort-nature of moving the verb modifier into a position preceding the stress-avoiding verb. The proposal is along the lines of the analysis of Bobaljik–Wurmbrand (to appear), making use of that part of their proposal that argues for the priority of LF and that information structure considerations should be part of LF. My suggestion is very similar to their treatment of the existential *there* construction already discussed in Bobaljik (2002).

Sentences (201), (202), taken from Haegeman and Gueron (1999, p. 578) illustrate a problem related to expletive replacement and quantifier scope. If the associate of the expletive *there* replaces the expletive in LF, we would expect there to be no difference in the meaning of the two sentences, contrary to fact.

- (201) a. Many students will never be interested in syntax.
 b. There will never be many students interested in syntax.
- (202) a. Many students will not be present at the talk.
 b. There will not be many students present at the talk.

⁵⁰ Actually, Horvath (2005) proposes that movement to what is assumed to be FP should be separated from focus itself, arguing that not every constituent that is focussed undergoes movement to this FP preceding the verb. She identifies the trigger for movement to the position formerly assumed to be FP as exhaustive identification and replaces FP with an E(xhaustive) I(dentification) Phrase headed by an operator (which can be invisible or visible as *csak* ‘only’, this way also accounting for differences between only-focus and even-focus in Hungarian). Pointing out some theoretical and empirical problems with Horvath (2005), É. Kiss proposes that the operator-feature responsible for movement to FP is specificational predication based on Higgins (1973) and Huber (2000). If this proves to be the right approach to what formerly was assumed to be focus-movement, a very interesting and promising line of research emerges: there is no difference whatsoever between English and Hungarian-type focus, both are indicated by phonological prominence. Movement to the left periphery of the sentence can only be triggered by some kind of an operator-feature (be it an exhaustive identification or specificity feature), that is, it is only LF that can trigger such a movement. Regarding topicalisation, following Szendrői (2001) it could be claimed that TopP and therefore topics are extrametrical in nature, and a different, lesser-known mechanism is responsible for it.

The conclusions we can draw based on the data are that expletive replacement interacts with scope, so the insertion of *there* is not merely a PF requirement completely independent of LF considerations. Actually, the insertion of the expletive can be motivated by the need for scope disambiguation, a motive far too familiar for us by this time. Again, the explanation in a scope driven approach can account for these facts without introducing ad hoc mechanisms. In Bobaljik and Wurmbrand's analysis the two interacting constraints this time are ScoT and an economy condition DEP (Don't insert Expletive Pronoun) that defines expletive insertion as a costly operation, used only as a matter of last resort. In the case of English, the insertion of the expletive may be required to satisfy a hard constraint, namely the EPP constraint English is a classic example of. As is well-known, there are two possibilities for satisfying this constraint in English, either moving a DP to the subject position or inserting an expletive. Expletive insertion is more costly, but the question arises what makes movement impossible in those cases where an expletive does appear. One, very easily identifiable factor is scope as illustrated in (202), (203), but of course the expletive *there* appears in sentences without scope-bearing elements as well, in which case information structure considerations enter the picture: since in such constructions the whole information is new (Quirk and Greenbaum), including the subject, it cannot occupy the canonical subject position, which will be occupied by the expletive. Again, we have found a construction where scope and IS phenomena trigger the same repair mechanism.

The construction Bobaljik and Wurmbrand discuss is existential *there* appearing in raising constructions, but naturally, as illustrated in (202) the conclusions are valid for any scope-bearing element appearing in an existential *there* construction. The crucial part of their analysis is the claim that *there* is not part of the syntactic numeration but inserted at PF exactly in those cases when the construction requires it. LF is formed prior to PF, so it is clear where the insertion of the expletive is required and expletive replacement is not necessary at all.

The ambiguity of structures without expletives present is also predicted: since these structures meet either ScoT or the DEP constraint, both interpretations are allowed, as opposed to structures containing the expletive, which already violate the DEP constraint, so only the interpretation that meets ScoT is allowed.

- (203) a. There seems to be someone from NYC at John's parties * \exists >seem
 b. Someone from NYC seems to be at John's parties. ambiguous

Table 6 presents the pairwise competitions describing how this $\frac{3}{4}$ signature emerges.

A: the indefinite subject

B: any potential scope-bearing element (*seem, never, not, always, etc.*)

(204) Table 6

	expletive constructions with scope-bearing elements	LF	PF	Scot	DEP
a.	✓	A»B	A»B	✓	✓
b.	*	A»B	B»A	*	*
c.	✓	B»A	B»A	✓	*
d.		B»A	A»B	*	✓

My proposal for accounting for preverb-climbing is the following: if information structure is part of LF and LF precedes and defines PF, the information whether there is a focussed constituent present in a construction including a stress-avoiding verb is freely available. As we have seen already, in previous analyses of particle climbing it is problematic how to account for the movement of the preverb or the lack of it. This would presuppose information about whether there is already a focussed constituent present in the structure that will move to the position directly preceding the verb. Under the present approach movement of the verb modifier follows in the PF part of the derivation by which point it is already clear if the stress-avoiding verb would receive stress otherwise. We can conclude that a derivation that starts from LF can account more straightforwardly for this set of data as well.

The difference between preverb-climbing in Hungarian and *there*-insertion in English is that in English existential constructions the expletive *there* is inserted, while in my analysis the stress-avoiding verb's needs are satisfied by movement (external vs. internal Merge). The motivation for movement or insertion taking place is the same in both cases: to avoid a fatal violation related to the PF part of the derivation, which in the case of English is EPP, in the case of Hungarian the lexically defined stress-avoiding property of the verbs in question.

5.4 Verb-object agreement

As discussed in 1.4.3, Hungarian verbs, besides agreeing with the person and number properties of their subjects, also show definiteness agreement with their object, or, more importantly for the purposes of the present work, with the of the object of their infinitival complement, which has been taken as one of the indicators of either a base-generated mono-clausal structure or clause union taking place in the construction.

Based on different patterns of verb-object agreement in sentences containing an infinitival embedded clause, den Dikken (2004) claims that clause union is not a unitary phenomenon, but a sliding scale defined by the following three separate parameters: (i) preverb climbing, (ii) definiteness agreement and (iii) person agreement (den Dikken, 2004:477).⁵¹

With the help of these parameters den Dikken distinguishes four clause union constructions as presented in Table 7 (his table 1:449).

(205) Table 7

	(i) preverb climbing	(ii) definiteness agr.	(iii) person agr
I (<i>fog</i>)	obligatory	obligatory	obligatory
II (<i>jön</i>)	impossible	impossible	optional/variable
III (<i>-tat/-tet</i>)	cannot tell	obligatory	obligatory
IV (<i>hagy</i>)	impossible	obligatory	obligatory blocked by DAT

⁵¹Person agreement refers to whether the matrix verb agrees in person with the embedded object, with special attention to first and second person object pronouns. If the subject is first person singular and the object (of the infinitive) second person singular /plural, the *-lak/lek* agreement form has to be used, which is ‘the only inflectional ending of Hungarian which crossreferences both the subject and the object’ (den Dikken, 2004:449).

- (i) (Én) szeretlek (téged)
I-NOM love-1SG(SUB)2SG(OBJ) you-ACC
'I love you.'

It is not the aim of the present paper to account for the properties of these constructions. Also, I do not attempt to explain differences in third person pronoun forms as opposed to first and second person ones and how these differences affect the resulting construction. Though it would be necessary for a complete account of restructuring to offer an analysis of these facts as well, I do not undertake this task here, since I consider this aspect of my approach compatible with den Dikken (2004). Whether the object of the infinitive is a lexical DP or a pronoun is one of the micro-parameters where variation can be expected, moreover, the person of the pronoun also plays a role here. For a clitic account of Hungarian first and second person pronouns (as opposed to the ordinary pronoun treatment of third person pronouns) in Hungarian, and how this difference is expected to affect verb-object agreement patterns, see den Dikken (2004).

I am not going to discuss person agreement (see footnote 45), and in section 5.3 I have adopted an account of preverb climbing different from what is proposed by den Dikken.⁵² What this section aims to account for is the differences in the definiteness agreement patterns. However, before we go on with the discussion, I would like to emphasize that, though den Dikken's approach to restructuring is similar in spirit to the approach of the present dissertation in claiming that clause union is not a unitary phenomenon, in the present work verb-object agreement and preverb climbing is only a subset of the different factors where variation is expected and restructuring is understood in broader terms, covering free word order phenomena as well, whereby constituents of the infinitival clause and those of the finite clause can freely occur in each other's environment.

To account for clause union effects den Dikken (2004) proposes the following: "clause union effects are a function of the variable placement of *v/AgrO* and *Asp* projections and the presence/absence of an embedded IP on the movement path; several 'levels' of 'clause union' manifest themselves depending on whether both, one or neither of the set {*v/AgrO*, *Asp*} is generated upstairs in multi-verb constructions" (den Dikken, 2004:445). If the preverb appears in a position preceding the matrix verbs, an *Asp* projection is claimed to appear in the matrix domain. Similarly to this, definiteness agreement between the matrix verb and the object of the infinitive is the indicator of an *AgrO* or *v* projection on top of the matrix verb. Even if we disregard the third parameter, that of person agreement, the four classes of verbs identified by den Dikken show different patterns of behaviour.

(i) auxiliary verb constructions: *fog* 'will', *akar* 'want'

(206) a. Meg fogsz látogat-ni valaki-t.
 PV will-2SG.INDEF visit-INF someone-ACC
 'You will visit someone.'

⁵² Den Dikken, following Piñon (1995), places preverbs in *AspP* projections. Depending on whether the preverb appears in a position preceding the matrix verb or the infinitive, he argues for an *AspP* projection base-generated either in the matrix or the infinitival clause, respectively (as opposed to the option of base-generating preverbs on verbs in the lexicon).

- b. Meg fogod látogat-ni Péter-t.
 PV will-2SG.DEF visit-INF Péter-ACC
 ‘You will visit Peter.’

(ii) *come/go* verb aspectual constructions + some subject-control constructions, e.g.
igyekeznek ‘strive’, *vágyik* ‘long for’, *kényszerül* ‘be forced’

- (207) a. Jöttél meg-látogat-ni valaki-t.
 come-PAST-2SG.INDEF PV-visit-INF someone-ACC
 ‘You came to visit someone.’

- b. Jöttél meglátogatni Pétert.
 come-PAST-2SG.INDEF PV-visit-INF Peter-ACC
 ‘You came to visit Peter.’

(iii) *-tat/-tet* ‘make’ causatives

- (208) a. Meglátogat-tat-tál (János-sal) valaki-t.
 PV-visit-CAUS-PAST-2SG.INDEF János-with someone-ACC
 ‘You had someone visited (by János).’

- b. Meg-látogat-tat-tad (János-sal) Péter-t.
 PV-visit-CAUS-PAST-2SG.DEF János-with Peter-ACC
 ‘You had Peter visited (by János).’

(iv) *hagy/enged* ‘let’ permissive causatives

- (209) a. Hagysz Jánosnak meglátogatni valakit.
 let-2SG.INDEF János-DAT PV-visit-INF someone-ACC
 ‘You allow someone to be visited (by János).’
 b. Hagyod Jánosnak meglátogatni Pétert.
 let-2SG.DEF János-DAT PV-visit-INF Peter-ACC
 ‘You allow Peter to be visited (by János).’

Den Dikken proposes that in order to account for the presence or lack of definiteness agreement between the finite verb and the object of the infinitive one has to assume different placements of AgrOP, where variation can be expected in whether it appears in the finite or the infinitival clause. In the former case we expect a clause union effect, visible agreement with the finite verb. If we assume that AgrOP is in the infinitival clause itself, where the infinitival verb form does not show definiteness agreement due to morphosyntactic reasons, we expect no visible agreement.

object of an infinitival complement but that of the infinitival complement itself as a whole. In this account every verb has a definiteness feature irrespective of whether it shows morphologically or not. In the case of finite forms this feature can be (but is not always) morphologically expressed, while in the case of infinitival forms it never is. Simple transitive verbs possess a definiteness feature that is defined by the definiteness feature of their object. The definiteness feature of verbs with no infinitival or nominal complements is supposed to be the same as that of verbs with an indefinite object.

In this approach the ungrammaticality of (210) can best be described with restrictions to do with locality. An intervening indefinite/”definiteless” feature on the verb blocks the transfer of the definiteness feature on a definite object.⁵⁴

Interestingly enough something very similar can be observed in Swedish, which Wiklund (2005) labels Inverse Agree due to the top-down nature of the process. Wiklund claims that copying, one of the reflexes of restructuring as discussed in 2.2.1, goes hand in hand with the Tense property, based on which we can make predictions about multiple embedded constructions. If a verb selects an infinitival complement, copying can spread. If the complement is tensed, spreading will be blocked. In (212) there are three verbs involved: *sluta* ‘stop’, selecting a tenseless complement, *råda* ‘advise’, selecting a tensed complement and *gå* ‘go’. The predictions are borne out by the data, copying cannot reach the third verb.

⁵⁴ There are data coming from the pronominalisation of the infinitive that at first sight seem to undermine this proposal. Irrespective of the definiteness of the infinitive we have the same pronominal form, which, moreover, coincides with the definite pronoun (i)-(iii).

- (i) Futni? Azt nem akar-ok.
run-INF that not want-1SG.INDEF
(What about) running? I don’t want to.
- (ii) Könyvet olvasni? Azt nem akar-ok.
book-ACC read that not want-1SG.INDEF
Read a book? I don’t want to.
- (iii) Ezt a könyvet olvasni? Azt nem akar-om.
this-ACC the book-ACC that not want-1SG.DEF
Read this book? I don’t want to.

The way I interpret these data is the following: the pronominal constituent is an expletive that is not specified for the definiteness feature. The definite/indefinite agreement morpheme appears on the finite verb as expected: an intransitive infinitive goes together with the default indefinite agreement (i), an indefinite object results in indefinite agreement again (ii), while a definite object of the infinitive triggers definite agreement on the finite verb (iii).

- (212) a. Han slutade [att råda henne [att gå till kyrkan]].
 he stop.PAST [to advise.INF her [to go.INF to church]]
- b. *Han slutade [o rådde henne [o gick till kyrkan]].
 he stop.PAST [o advise.PAST her [o go.PAST to church]]
- c. Han slutade [o rådde henne [att gå till kyrkan]].
 he stop.PAST [o advise.PAST her [to go.INF to church]]
- d. *Han slutade [att råda henne [o gick till kyrkan]].
 he stop.PAST [to advise.INF her [o go.PAST to church]]

If the verb *råda* ‘advise’ is replaced by a verb selecting a tenseless complement, such as *hjälpa* ‘help’, copying can go all the way down. This is completely in line with the proposal in the present dissertation, which claims that restructuring can have a number of effects and is defined by requirements coming from both the finite verb and the infinitival embedded clause. Information flow can be bi-directional (in a local domain) once clause-union has taken place, and languages can select from a multitude of phenomena to express this. The data also support the claim that restructuring can be triggered by the Tense deficiency of the complement.

Chapter 6 The resulting derivations

Having discussed a number of phenomena that can be claimed to be a part of the restructuring process, now we are in the position to offer complete derivations for different types of sentences containing infinitival complements. This section provides the discussion of only some of the constructions discussed in the dissertation, but references will be made on how alternative structures can be formed, giving a full account of the questions raised in the study.

6.1 How does the infinitive end up with a nominative subject?

The first structure is the one where a focussed constituent belonging to the infinitive appears in nominative Case leading to the by now familiar problem of Case assignment.

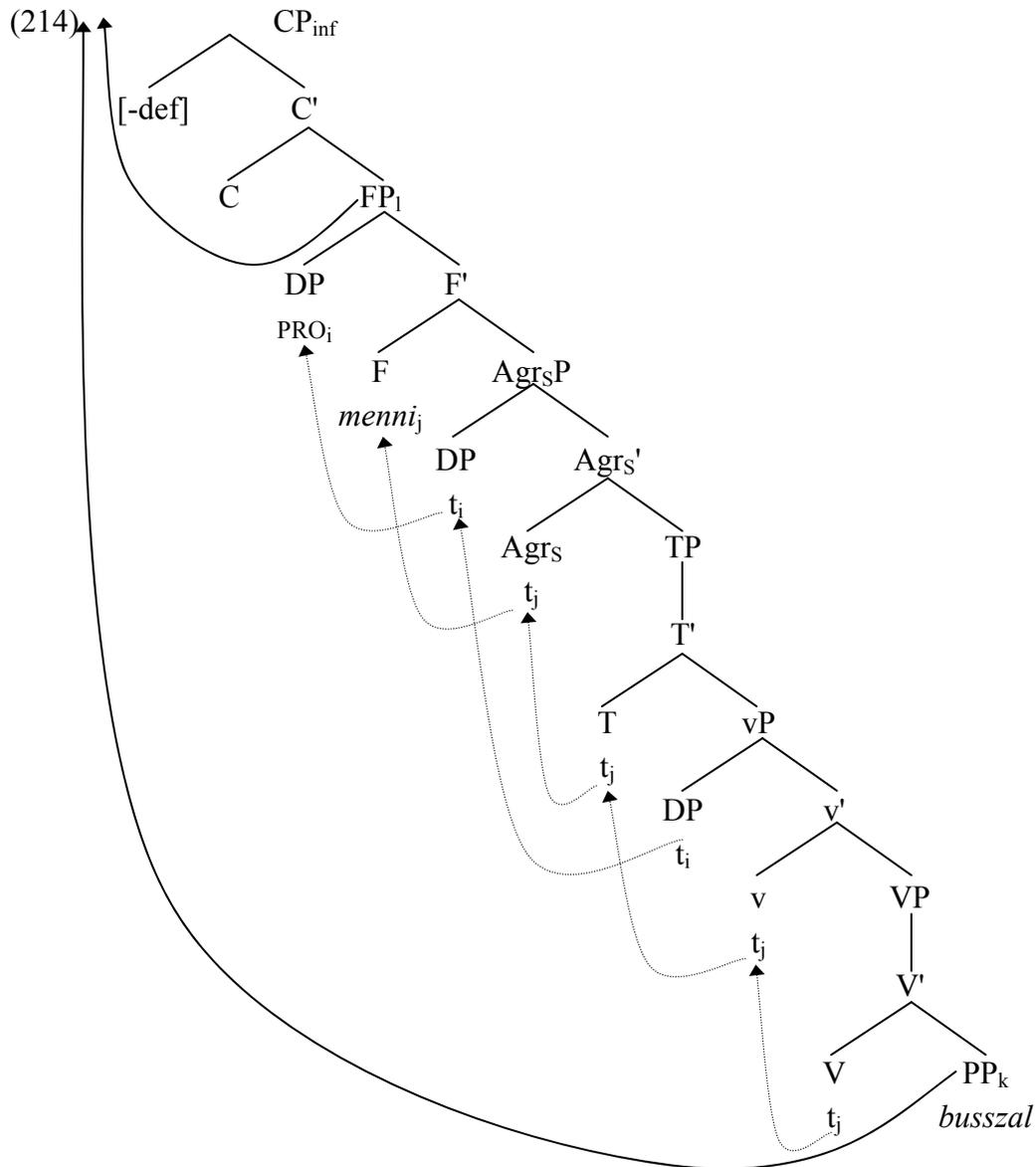
- (213) a. Nem akar-ok csak én menni busszal.
not want-1SG only I-NOM go-INF bus-with
'I don't want to be the only one to take the bus.'

The tree structure in (214) shows the first part of the derivation containing only the infinitival clause.

In my proposal the subject of the infinitive is a PRO bearing Null Case as expected, which moves to the [Spec, FP] position of the infinitival CP. This is what makes such constructions problematic: there are different ways to express Focus in Hungarian (movement to a designated Focus position or stress assignment), but neither of them is applicable to an unpronounced constituent. Due to PRO moving to FP, there is the usual verbal movement taking place in the clause, to the head position of FP (this is claimed to be optional in the case of infinitival clauses to account for the alternative verb modifier-verb order).

As indicated in the tree, according to the proposal, the CP, as the projection of the V, is specified for the definiteness feature. Infinitival clauses are defined for this feature negatively by default (as opposed to finite clauses which are always definite), but if the verb heading the infinitival clause has a definite object the VP projects a definite VP that defines the infinitival CP as definite (see (217)).

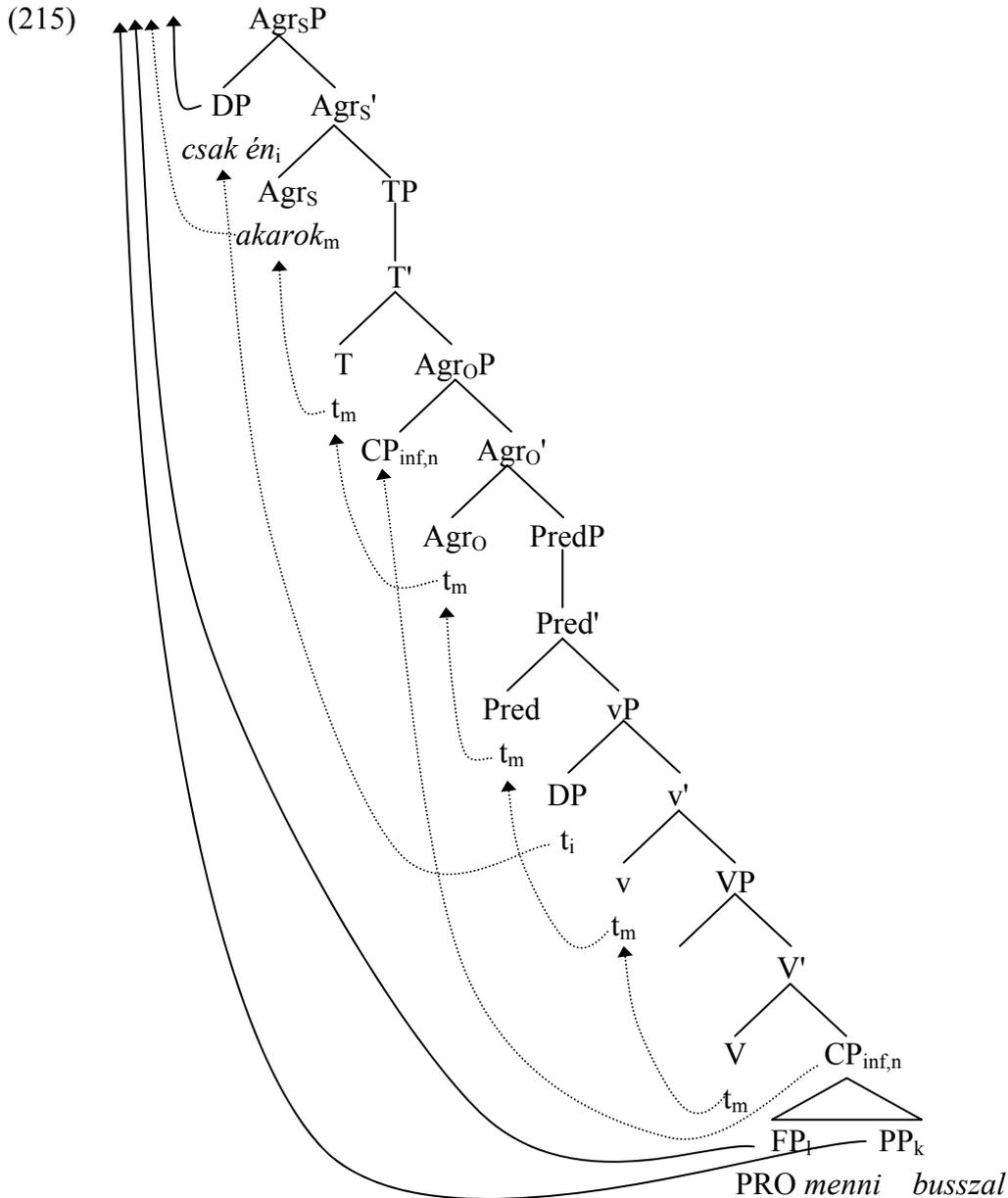
Potential scope-bearing constituents leave the infinitival clause, as indicated by the arrows. The PP moves alone, the FP involves movement of both PRO and the infinitive. That leaves the infinitival CP empty.



The second part of the derivation, (215), presents the finite clause up to the Agr_SP projection. FP and PP coming from the infinitival clause move to a projection above the visible part of the tree. The emptied infinitival CP moves to the [Spec, VP] position. This accounts for the appearance of indefinite agreement marking on the finite verb, which is lexically specified as transitive. This way the complementiser role of the infinitival CP becomes really meaningful: since the finite verb has access to information

coming from the CP only, the definiteness feature must be present on the infinitival CP, too.

The constituent *csak én* ‘only I’, functioning as the subject of the finite clause, is base-generated in the specifier position of a thematic vP, but moves from it for reasons of Case. *Csak*-phrases are obligatorily focussed, so the DP moves on targeting a left peripheral position. The presence of a focussed constituent triggers the movement of the finite verb as well. The constituent *busszal* ‘bus-with’ moves to the scrambling field for reasons of licensing. This way the infinitival CP is emptied, ready to move to the Specifier position of VP to check its definiteness feature.



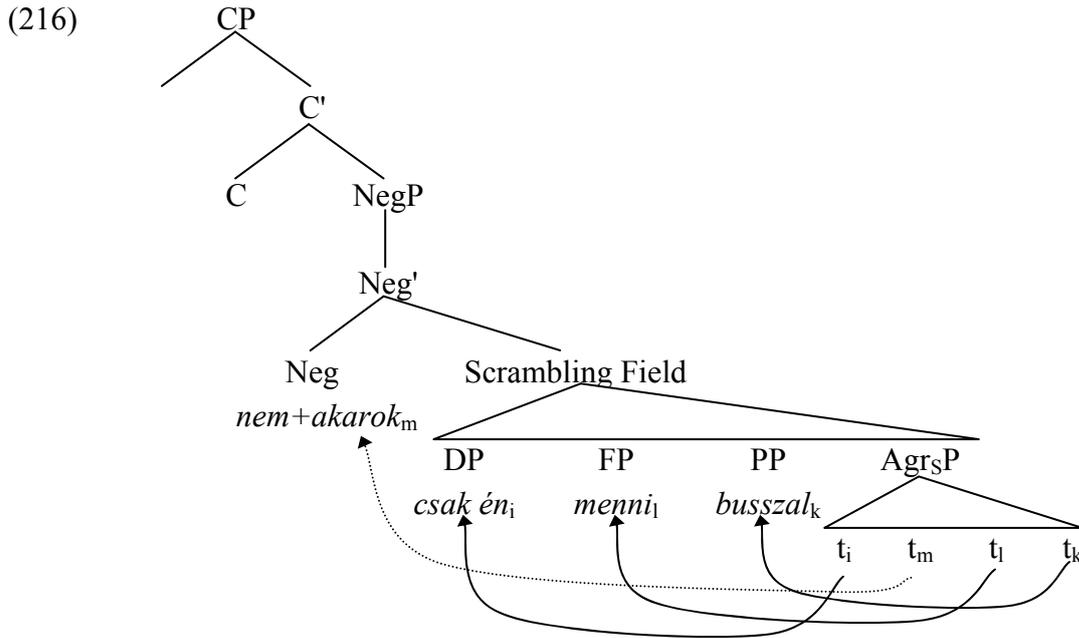
The tree in (216) completes the derivation. It includes the left periphery of the clause the scrambling field is also supposed to be a part of in the present proposal. This is the position where constituents of the infinitival clause end up after restructuring taking place (motivated by the Tense deficiency of the infinitival clause on the one hand, and the transitive property of the finite verb on the other). As argued in Chapter 3, in the scrambling field the scope properties defined earlier in the infinitival clause have to be preserved. In this particular construction it means that the focussed PRO constituent has to have wide scope with respect to the predicate expressed by the infinitive. In Hungarian constituents can appear in the order defined by their scope

properties, but again, we run into the problem of how to express the scope of a covert constituent overtly.⁵⁵ This is where the constituent *csak én* ‘only I-NOM’ plays an important role. As indicated in the previous paragraph, *csak én* ‘only I-NOM’ targets the FP of the finite clause. However, the scope properties of the sentence require that *csak én* ‘only I-NOM’ have narrow scope with respect to negation.⁵⁶ Of course it is not a problem for the finite verb, which can target the Neg head position in either case. The DP *csak én* ‘only I-NOM’ has to resort to the scrambling field of the sentence, which, nevertheless, is an operator field sensitive to the scope features of a given constituent.

This way the overt DP *csak én* ‘only I-NOM’ ends up in the same domain as the infinitival PRO it is coindexed with, and we have two DPs in the scrambling field with the same reference. We have already pointed out the problems we face when wanting to focus a covert constituent. Now an obvious solution presents itself: we substitute PRO with the DP it is bound by. The covert nature of PRO is not a problem for LF, this substitution takes place at the PF part of the derivation motivated by requirements of the PF interface. The result is a proposal that accounts for why the construction seemingly containing a nominative infinitival subject goes together with that infinitival subject being focussed.

⁵⁵ The inverse control proposal of Bartos (2006) also identifies this as one of the problematic aspects of the construction.

⁵⁶ In the present work we assume a theory of negation following Puskás (1998), where the negation element is a head filling Neg⁰. When the clause contains a focus as well, the negative particle moves to F⁰ together with the verb. Surányi (2002b) points out that this approach suffers from a number of problems, both empirical and conceptual in nature. The alternative analysis he proposes is a multiple specifier configuration resulting from the co-projection of focus and negation. Within this approach the scope differences can be accounted for as well: the outer specifier position is reserved for the constituent with wide scope. Actually, this proposal gains special importance within the present work as well. If the scrambling field sensitive to LF features is in the left periphery of the clause and is preceded by a co-projection of negation and focus within which the respective constituents appear in an order defined by their scope properties, an obvious extension of my proposal suggests itself: that of proposing that the whole left periphery is actually a scrambling field in the Bobaljik and Wurmbrand (to appear) sense, where constituents are ordered based on considerations of LF (more refined in the present work by Bouma (2003)). However, I am not going to pursue this in the present paper as it raises important questions related to structure building, such as how to account for immediate precedence between the focussed constituent and the finite verb. This would call for an analysis where there is a scrambling field both below and above FP.



6.2 Standard QP > FP order with definiteness agreement

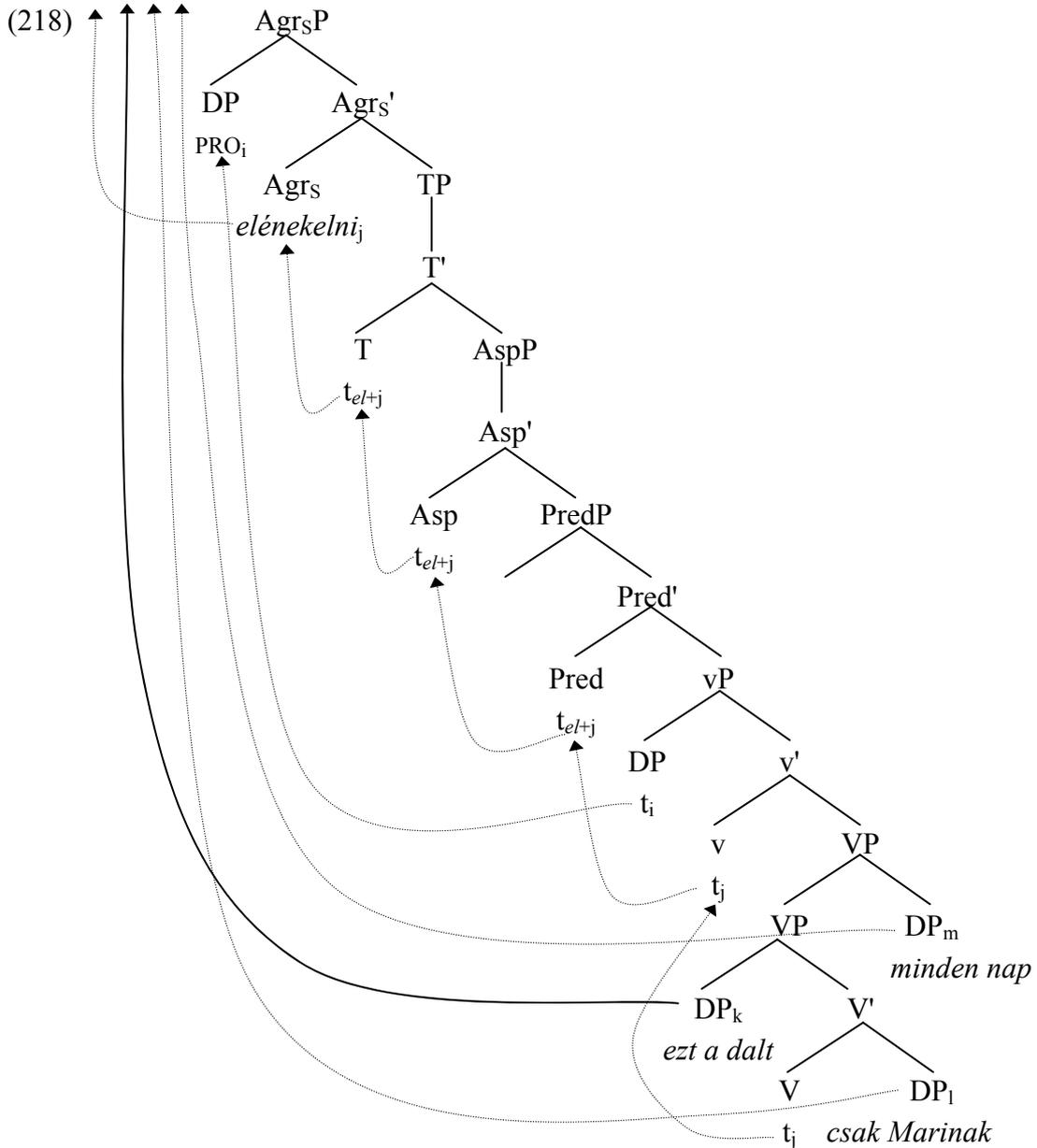
The second derivation is for a more ‘ordinary’ sentence, where the finite clause contains a focus of its own, the infinitival clause appears with left peripheral constituents belonging to the infinitival clause, but the definiteness agreement between the finite verb and the object of the infinitive suggesting there being some kind of transparency between the two clauses, which I claim is the result of restructuring.

(217) PÉTER akar-ja
Peter want-3SG-DEF

[minden nap CSAK MARINAK el-énekelni ezt a dalt].
every day only Mary-DAT PV-sing-INF this-ACC song-ACC
‘Peter would like to sing this song every day only to Mary.’

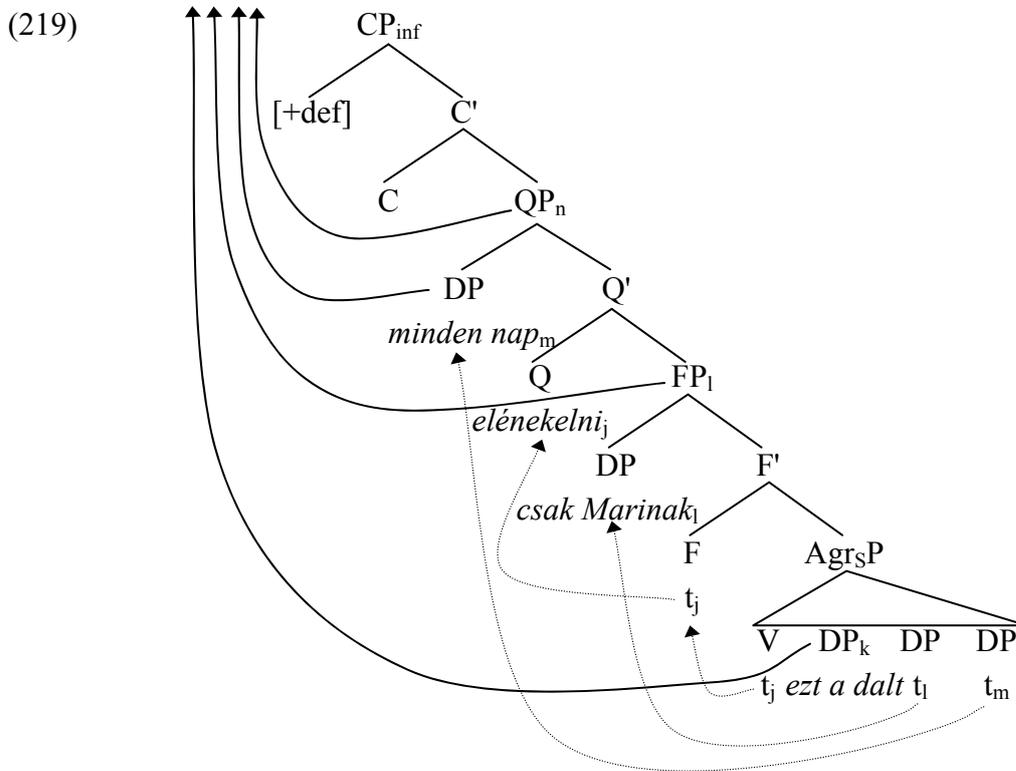
The tree in (218) presents the infinitival clause without its left periphery. The structure contains a preverb, *el-*, which appears together with the selecting verb *énekelni* ‘sing’. The preverb does not have to climb to a position preceding the finite verb, since the stress-avoiding finite verb is preceded by a focussed constituent. The verb and the preverb move together for this reason up till AgrsP, incorporation takes place within the PredP (though I allow for the option that the preverb comes from somewhere behind the verb). In this part of the tree, variation can be observed in the behaviour of *látszik*

‘seem’ and the rest of the verbs. To account for the lack of preverb climbing in constructions containing *látszik* ‘seem’, I have proposed that *látszik* ‘seem’ has no PredP projection on top of it due to its simple event structure. The controller of PRO is Peter, but since the covert constituent carries no operator features (as is usually the case), it does not call for the type of specific treatment we have seen in the previous derivation.



In (219) we can find the infinitival clause together with its left periphery. The quantified and the focussed expressions undergo movement to their respective positions,

and the object DP, not having any operator feature, moves to the scrambling field of the higher clause. Since the object DP itself is definite, the infinitival CP is also specified positively for the definiteness feature.



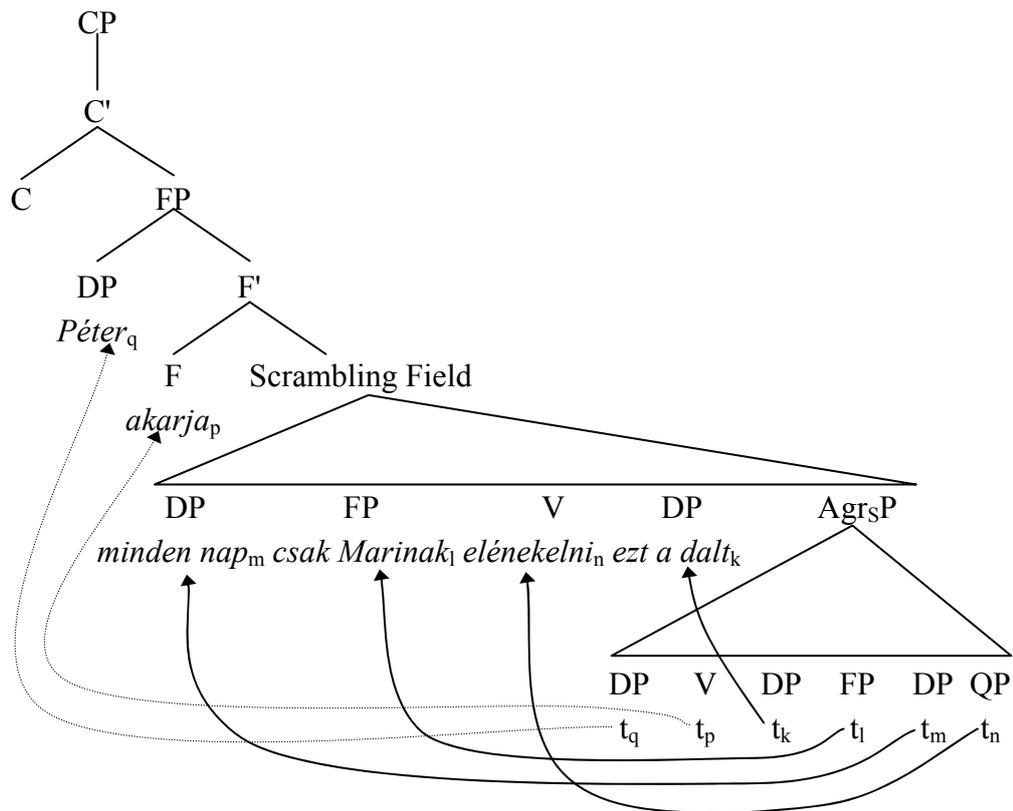
The tree in (220) presents the finite clause without its left periphery. The finite verb agrees with the definiteness feature of its infinitival complement. The finite verb has a focus feature to check, for this reason it does not need a preverb to save it from getting stress.

partial ordering restrictions specify: the scope of the operators is easily read off from the structure, but they also contain information about the verb with the zero scope value. This is what defines the order of the constituents in the scrambling field. To explain why the final position of the scrambling field is most natural position for the definite DP *ez-t a dal-t* ‘this-ACC the song-ACC’ we can evoke Behaghel’s Law of Growing Constituents following É. Kiss (2007). Though it can appear in other positions as well, it sounds the most natural in the final position since it is the constituents that has the most phonological weight.

(221) Partial ordering restrictions for (219):

- QP > FP
- QP > V
- FP > V

(222)



6.3 The FP > QP order with definiteness agreement

Now let us see how the FP > QP order of (223) can be derived, putting aside questions related to the placement of the preverb. In the first part of the derivation in (224) the infinitival clause is shown up to AgrSP. The constituents with an operator feature move to the left periphery, the verb moves to check the relevant features in this part of the projection and ends up in AgrS.

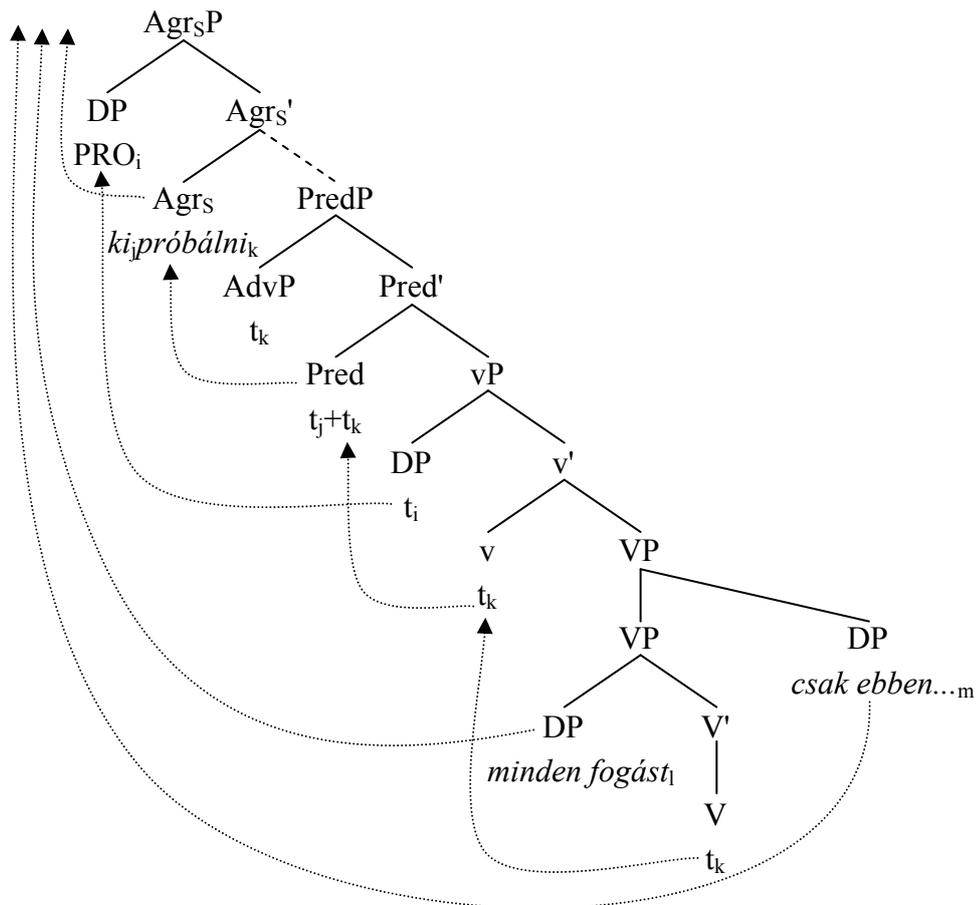
- (223) Péter szeretne CSAK EBBEN AZ ÉTTEREMBEN
 Peter would-like only this-in the restaurant-in

minden fogást ki-próbálni.

every dish PV-try-INF

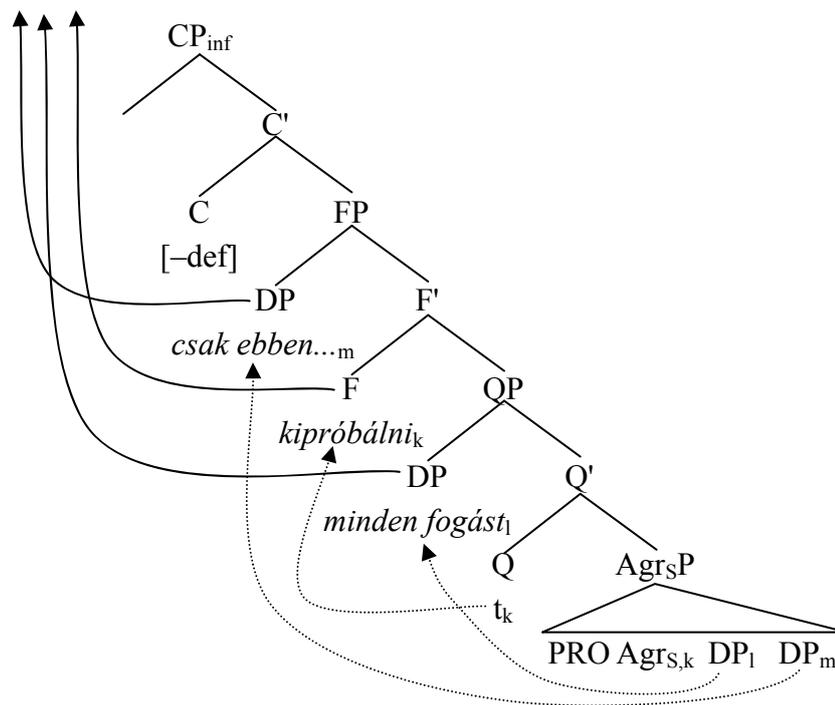
‘Peter would like to try every dish in this restaurant TOMORROW.’

- (224)



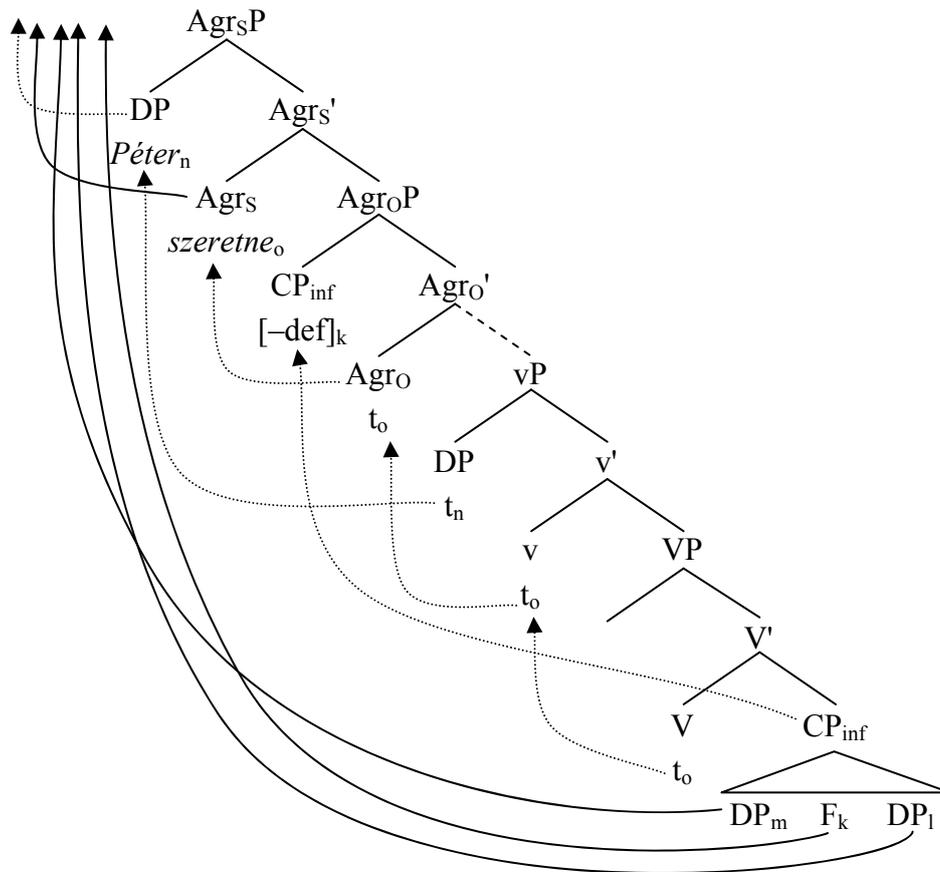
In (225) we can see the left periphery of the infinitival clause. The FP is the end of the first TopP – QP – FP sequence, but, as we have seen in Chapter 3, this sequence is iterative, the QP following the FP in the structure comes from the second sequence. In principle nothing blocks the appearance of the same structure in finite clauses, the reason why we never attest this surface order is to do with differences in the feature checking properties of finite and infinitival clauses. In the infinitival construction the verb (to be more precise, –T) can move to Q, and from this position further on to F for checking purposes, as opposed to +T. It is at this point that syntax and semantics depart from each other and the introduction of the partial ordering restrictions becomes necessary. As we have already seen above, the infinitive moves to check the relevant operator features, which is indicated in (225). But the partial ordering restrictions define again that, in order to reflect the semantic properties of the clause, the verb has to appear in a position following the scopal constituents.

(225)



In the third part of the derivation the structure of the finite verb is detailed up to the AgrSP. By now all of the processes taking place here are familiar: the verb checks the features it is expected to check, including the definiteness feature in AgrOP, which is made possible by moving the infinitival CP to the specifier position of AgrOP after it has been emptied as a result of moving its constituents to the scrambling field.

(226)



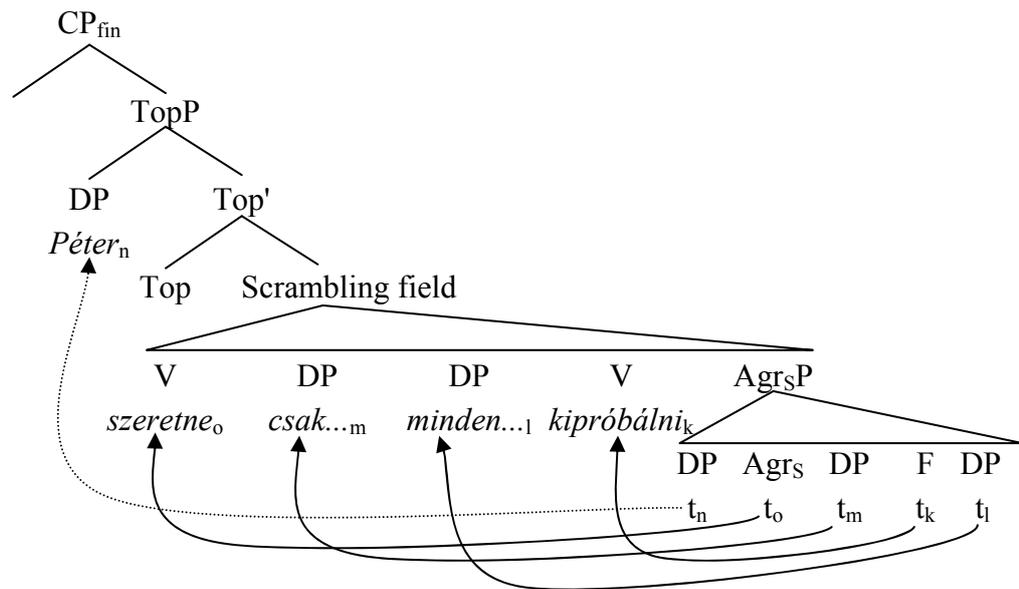
In the final part of the derivation constituents in the scrambling field are ordered as defined by the partial ordering restrictions.

(227) Partial ordering restrictions for (225)

- FP > QP
- FP > V
- QP > V

Section 6.4, more exactly the derivation for (230) will provide support for what is merely indicated in the present tree, namely that in a neutral sentence the finite verb also appears in the scrambling field. For now let it suffice to simply place it in the position preceding the constituents of the infinitival clause assuming that this this is the position the finite verb is supposed to take in the scrambling field unless (e.g. scope) requirements of the sentence define it otherwise.

(228)



6.4 The derivation of constructions with *látszik* ‘seem’ and auxiliaries

In 5.2.3, following É. Kiss (2004a) I assume that the verb *látszik* ‘seem’ behaves differently from the auxiliaries because of the lack of the PredP projection on the top of the V projection. The present section gives the derivation of sentence (229). The derivation is going to be contrasted with the auxiliary construction in (230), where the main emphasis will be to account for the differences in the behaviour of the particle.

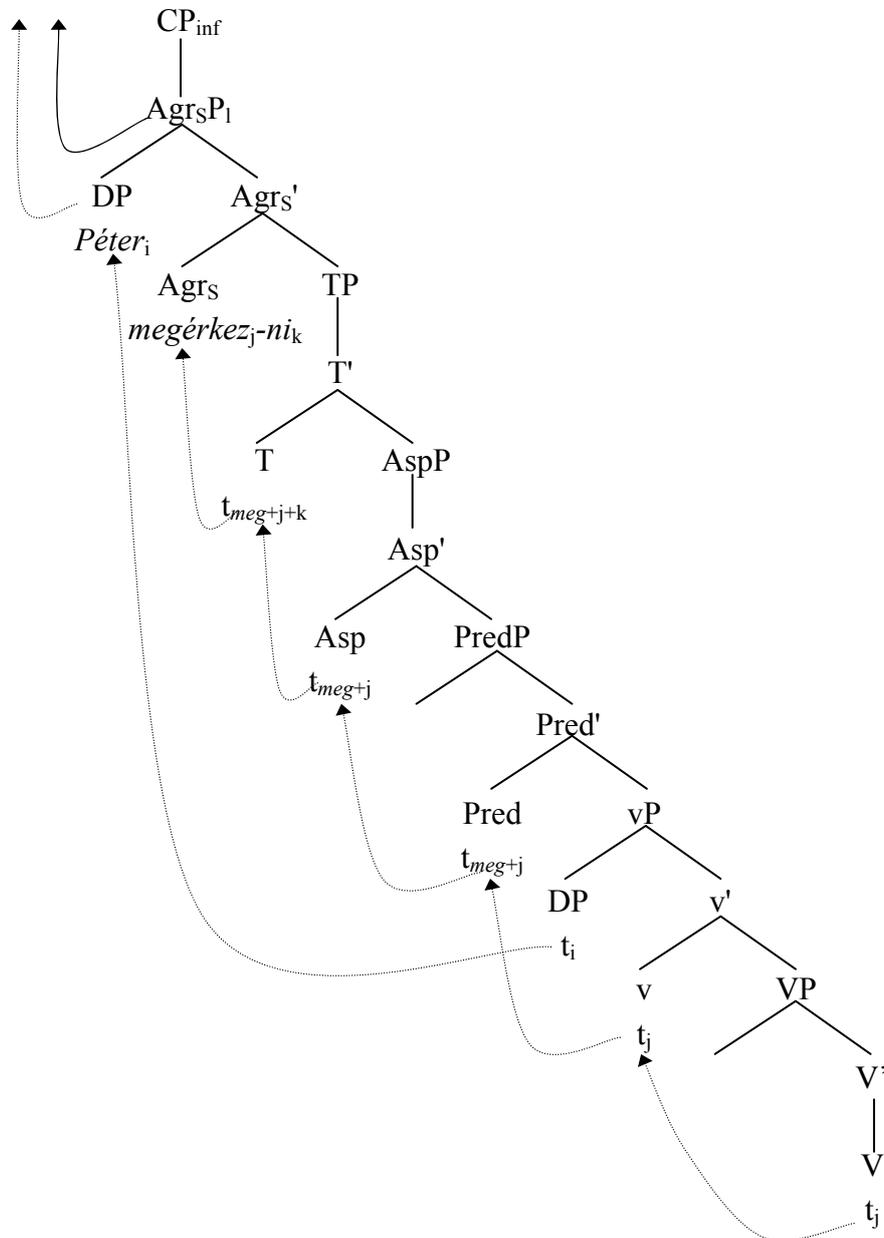
(229) Péter megérkezni látszott.
 Peter PV-arrive-INF seemed
 ‘Peter seemed to be arriving.’

(230) Péter meg fog érkezeni.
 Peter PV will arrive-INF
 ‘Peter will arrive.’

The structure of the embedded infinitive is the same in both constructions (231), but there is a difference in what happens to the preverb. In the examples that follow, like in previous cases, projections that play no role in the derivation are often not indicated.

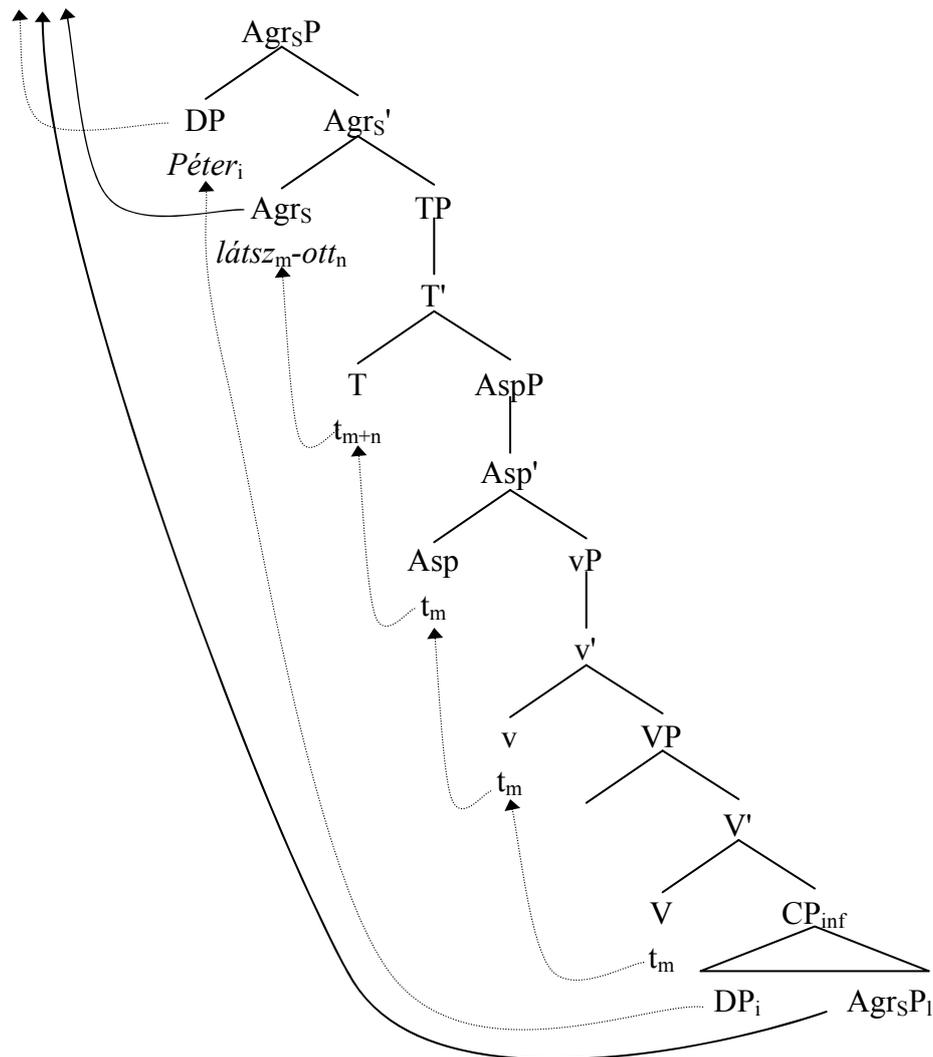
6.4.1 *Látszik* ‘seem’

(231)



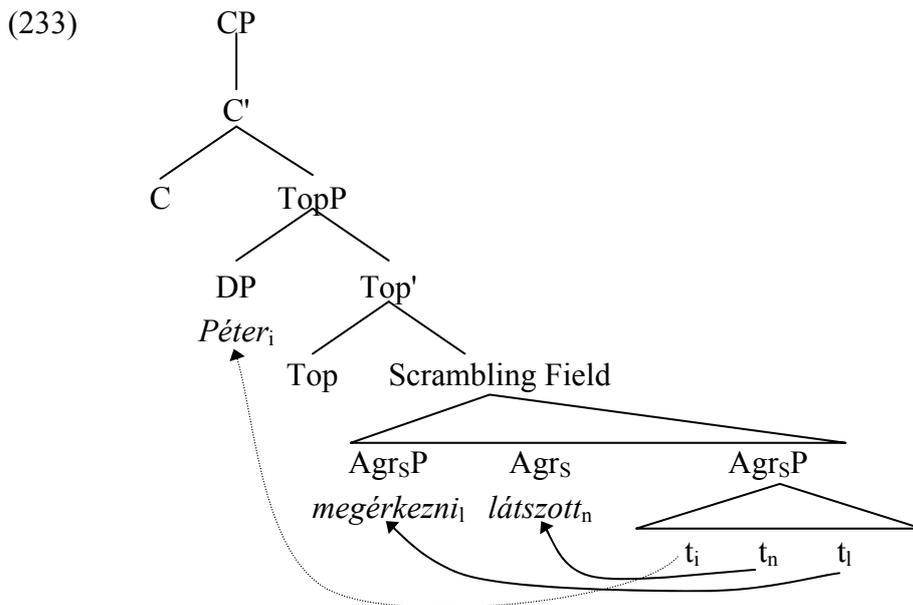
A PredP on top of VP licenses the preverb that I assume to come from a position behind the verb (not indicated in the tree). The PV-V infinitival complex together with the infinitival ending *-ni* is formed in TenseP, and moves to the finite AspP to satisfy the requirements of the finite verb. Since there is no PredP present in the projection of *látszik* ‘seem’, the preverb itself cannot move separately from its verb.

(232)



In (233) there is no clear indication of scrambling, but since the finite verb has to move to AgrP and ‘Peter’ moves to the TopP position, the position of the infinitive must be between the two, so the scrambling field is a potential candidate. This raises questions concerning the scrambling field, since so far we have been focusing on scope and information structure properties only, based on Bobaljik and Wurmbrand (to appear) and neglecting their claim that the $\frac{3}{4}$ signature is the result of two constraint where one of them is an LF (understood as scope AND information structure) the other a PF constraint. In the case under discussion it can be proposed that the LF constraint applies vacuously, but there is a PF requirement that should be met, namely the stress-avoiding property of the finite verb. It is for this reason that the PV-V sequence ends up in the scrambling field, the position where constituents of the infinitive move up to anyway. That the preverb and the infinitival verb are inseparable follows from the

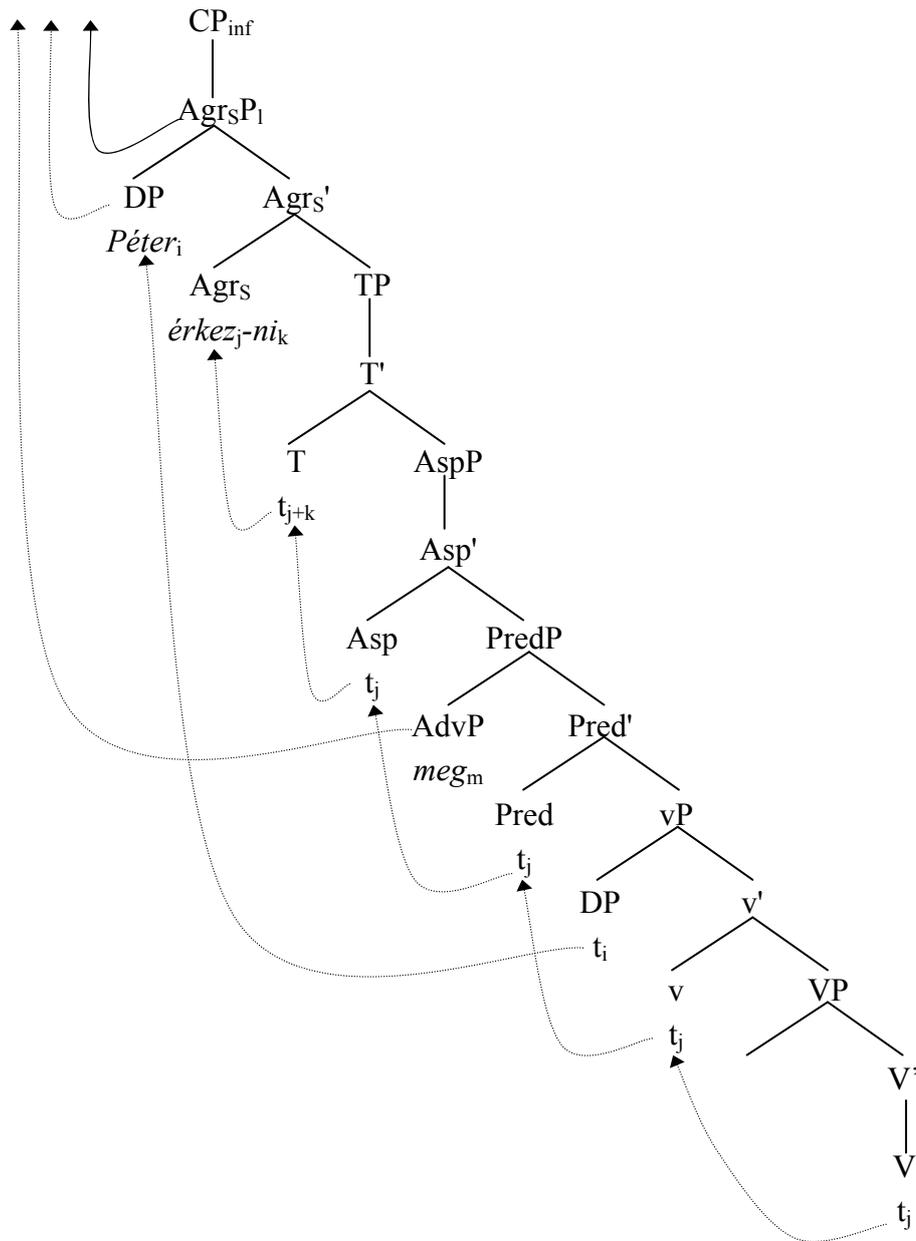
structure of the finite projection lacking PredP. The infinitival clause itself does not impose this restriction (see the derivation for the example with *fog* ‘will’, where the preverb and the verb are separable), it comes from the higher structure. The position of *látszott* ‘seemed’ can be either in the scrambling field or the AgrS position, but since we have evidence that the finite verb can also move up to the scrambling field (see the derivation for (230) in (237)), I assume that *látszott* ‘seemed’ also moves there. The order of the two constituents is fixed not by scope but by phonological considerations.



6.4.2 The auxiliary *fog* ‘will’

The difference in the behaviour of the preverb I alluded to in the previous section is the following: while in the sentence with the verb *látszik* ‘seem’ the preverb incorporates into the infinitive, incorporation is blocked in the sentence containing the auxiliary *fog* ‘will’. The first part of the derivation shows that the preverb is licensed in the PredP, but it does not move on with the verb. It is so due to the lexical stress-avoiding property of the finite verb taking the infinitival clause.

(234)



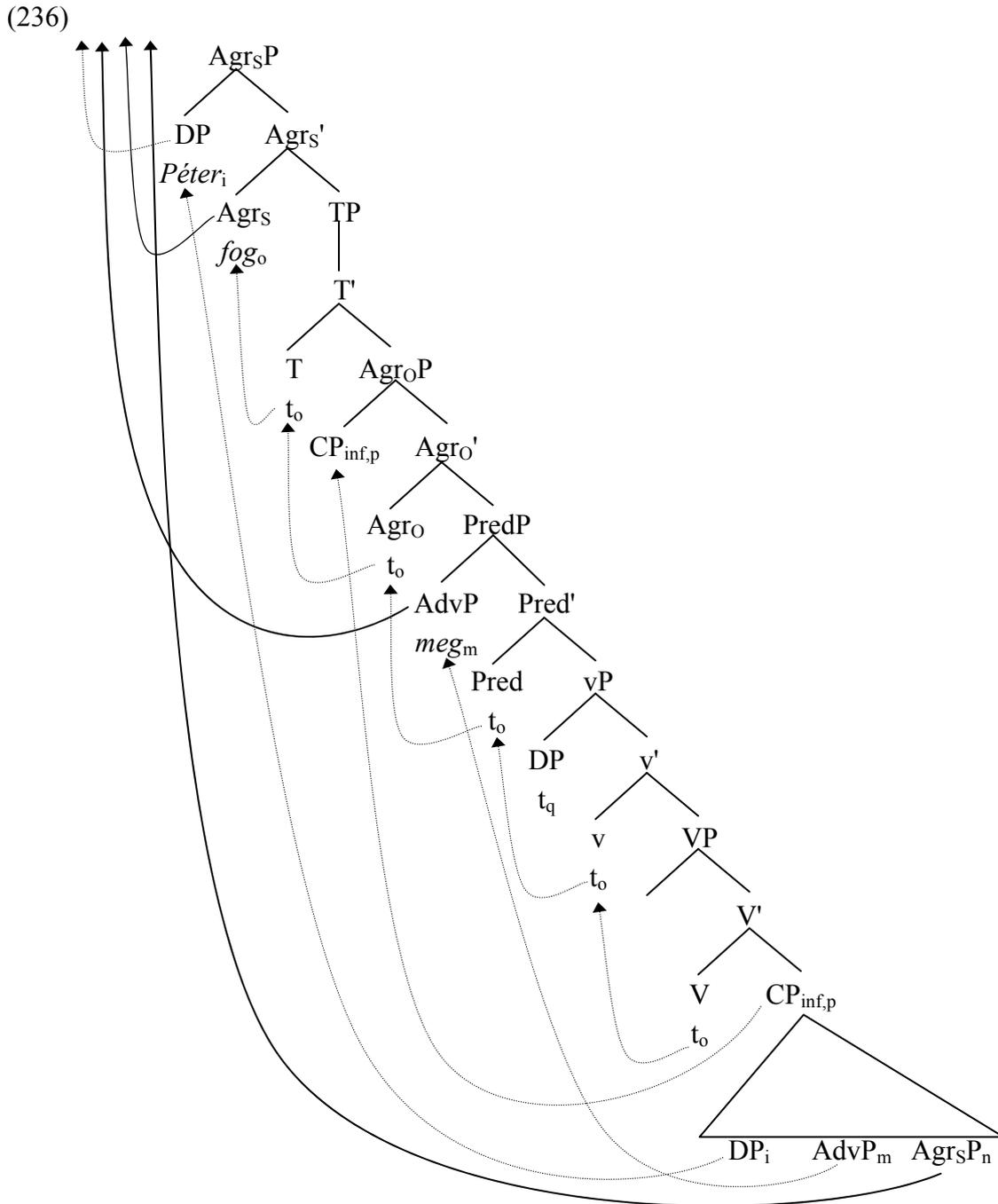
In (236) the auxiliary *fog* ‘will’ has a PredP projection of its own where the preverb of the infinitive can move to, so the preverb and the infinitival verb can move separately. They will do so as well, as evidenced by the data, but we cannot claim that it is because the auxiliary is a stress-avoiding verb, since reordering for phonological reasons is expected to take place in the scrambling field. However, we cannot claim that it is also in the scrambling field where the preverb and the verb are separated. Once the two constituents have been separated the rules operative in the scrambling field can place them in different positions, but there is no rule in the scrambling field proper that

can separate the preverb from the verb. If so, separating them must be the result of the preverb moving to the Specifier position of the PredP projection of the finite clause. What is it that necessitates the movement of the preverb from the infinitival clause to the Spec, PredP position of the finite verb? One possible answer we can come up with is to do with event structure. As we have claimed earlier, PredP is projected only if the event structure of the construction in question is complex. One of the functions of PredP then seems to be introduction of a subevent into the structure. To account for the movement of the preverb to this position we can adopt the Argument per subevent condition (235) introduced by Rappaport Hovav and Levin (2001) following Grimshaw and Vikner (1993), also adopted by Csirmaz (2008c) to account for the appearance of non-theta marked objects in certain constructions.

(235) Argument per subevent condition

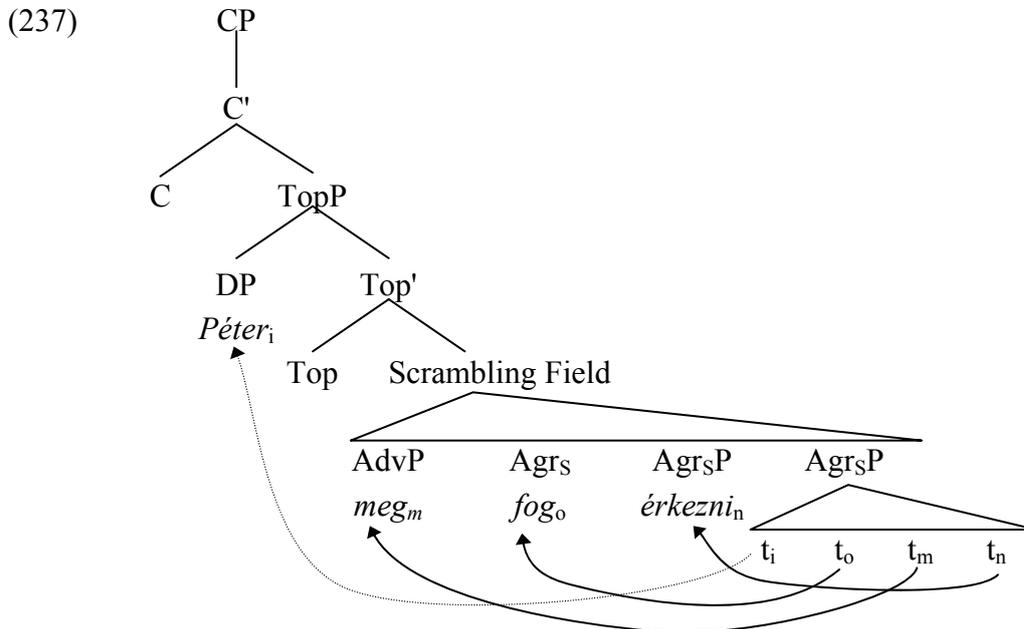
There must be at least one argument XP in the syntax per subevent in the event structure

I propose that the Argument per subevent condition is satisfied by the movement of the infinitival preverb to the finite PredP, which I assume to be obligatory. This could be added as a further alternative to the analysis proposed in Csirmaz (2008c). Since the infinitive alone does not have any special role to fulfil in the finite clause, it moves directly to the scrambling field to empty the infinitival CP, which then moves to AgrOP/vP for definiteness agreement.



The word order in (230) presents more evidence for the assumption that the finite verb moves to the scrambling field. The finite verb again has to move as high as the AgrSP, but since the PredP is in the position directly above VP, I have to assume this reordering takes place in the scrambling field, too, as the finite verb itself also has to be part of the scrambling field to get the $PV_{(inf)} - V_{fin} - V_{inf}$ order. This result is not surprising within the assumptions of the present dissertation since it is exactly in the scrambling field that constituents of the finite and the infinitival clause are expected to

co-occur. Of course the resulting order is the result of the PF requirement of the stress-avoiding verb, like in the previous preverb-climbing case.



6.5 Directions for further research: some remarks on the question of preverb placement

The following sections briefly discuss problems related to the placement of the preverb and consequences of the proposed analysis regarding it. Most of the proposals here are rather speculative in nature but it seems to me that it is possible to reconcile the preverb-data with the proposal in the dissertation.

6.5.1 Neutral VM – V order

In sentence (230) we have already seen a neutral sentence with the usual VM – V_{fin} – V_{inf} order and proposed that the finite verb itself is also in the scrambling field and in the case of stress-avoiding verbs it is the PF requirement of the finite verb that results in the VM – V_{fin} order. This is a rather unorthodox proposal, but this way the problem of where to place the scrambling field with respect to the finite verb can also be overcome. This is all the more important because there are data that show that the position of the scrambling field should be lower than the neutral position of the finite verb, but at the same time the data with *látszik* ‘seem’ argue for an analysis whereby the finite verb is below the scrambling field (6.4). If we assume that this verb is also in the scrambling

field, and this is the position where its phonological requirements are satisfied, similarly to the preverb-climbing cases, the problem disappears.

6.5.2 Optionality of V_{inf} – VM order and the focus – quantifier asymmetry

As it is often observed in studies on infinitival constructions, and as has already been pointed out in the present work as well, the Focus–Verb–Preverb order obligatory in finite clauses (238), (239) is only an option in the case of infinitives (240), (241).

(238) Csak kedd-en mentem haza.
 only tuesday-on went-1SG home
 ‘I went home only on Tuesday.’

(239) *Csak kedd-en haza mentem.
 only tuesday-on home went-1SG

(240)=(18)
 Jobb lenne CSAK KEDDEN haza menni.
 better would-be only Tuesday-on home go-INF
 ‘It would be better to go home only on TUESDAY.’

(241)=(19)
 Jobb lenne CSAK KEDDEN menni haza.
 better would-be only Tuesday-on go-INF home
 (same)

We can explain this asymmetry under the assumption that constituents of the infinitival clause occupy a position in the scrambling field, and, since the verb and the preverb are not ordered with respect to each other in terms of scope or information structure, their order is not fixed with respect to each other either.⁵⁷ The difference between focussed and quantified constructions may be due to the difference between the checking mechanisms. In the infinitival clause we have the same checking mechanism we attest in finite clauses, that is, in checking the Focus feature, the verb moves to the

⁵⁷ It is often pointed out that in infinitival constructions the order where the preverb precedes the infinitive is actually preferred. One explanation for this in the present framework may actually turn out to be Behaghel’s Law of Growing Constituents proposed in É. Kiss (2007). The preverb is usually shorter than the infinitive, and this may explain why the PV – V order is preferred in the scrambling field. Since other factors do not play a role, phonological considerations of weight are left to define the resulting order.

head position of FP leaving behind its preverb, thus, there are two constituents moving to the scrambling field individually and can be reordered due to the lack of the relevant features the partial ordering restrictions are sensitive to. Quantified expressions do not trigger verb modifier/preverb-verb inversion (242), (243), so we can assume that the preverb and the verb move to the scrambling field as a unit.

(242) Minden hét-en haza mentem.
 every week-on home went-1SG
 ‘I went home every week.’

(243) *Minden hét-en mentem haza.
 every week-on went-1SG home

Though there are some questions unresolved, such as why the preverb, being a constituent with no scope, cannot freely appear in other positions, such as a position preceding the focussed constituent, it seems a promising starting point.⁵⁸ The exact details of what happens when there are QP – FP (– QP) sequences in the infinitival clause are also to be worked out, but my expectation is that besides the proposal in the present section the different requirements of syntax and semantics discussed in 3.1 will also play a role.

6.6 Summary

As we have seen from these derivations, even complex, seemingly rather different constructions containing infinitival embedded clauses can be analysed in a relatively uniform and coherent way based on the assumptions of the present dissertation. Moreover, it can be maintained that the left peripheral structure of finite and infinitival constructions is the same (even in spite of the seeming optionality of the PV – V/V – PV order in infinitival constructions with Focus), apparent differences are the result of the embedded nature of the infinitival clause and specific properties of both the finite verb and the embedded infinitival construction. Whatever these properties are, the position of clause union proper is argued to be the scrambling field of the clause,

⁵⁸ But see the very tentative proposal in **Hiba! A hivatkozási forrás nem található.** according to which one potential solution might be to assume that the preverb inherits the zero scope specification of the infinitive.

operating based on the partial ordering restrictions of Bouma (2003) sensitive to scope and information structure à la Bobaljik and Wurmbrand (to appear) and natural phonological mechanisms argued for in É. Kiss (2007). If the proposal in the dissertation is on the right track, the scrambling field is the (only) part of the clause where constituents of the finite and infinitival clause can co-occur. The phenomena that have been argued to be accounted for by assuming the existence of a scrambling field (presumably) in the left periphery of the clause are the following:

- (244) – freer word order (FP – QP – V_{inf} also allowed) in the seemingly left periphery of the infinitival clause;
- preverb climbing;
 - the optionality of the Focus – Verb – Preverb order in focussed infinitival constructions.
 - embedded infinitival clauses apparently containing a nominative subject.

That includes some of the phenomena set out as objectives of the dissertation to account for at the beginning of the dissertation which included the following:

- (245) = (58)
- a. the formation of verbal complexes;
 - b. relatively “free” word order based on É. Kiss (2003);
 - c. agreement between the finite verb and the object of the infinitive;
 - d. embedded infinitival clauses apparently containing a nominative subject;
 - e. properties of constructions containing auxiliaries;
 - f. properties of constructions containing the verb *látszik* ‘seem’

The structures that are not (or not exclusively) accounted for with the help of the scrambling field proper include the agreement phenomenon between the finite verb and the object of the infinitive. This seems to be motivated by independent properties of the sentence, namely the transitivity of the finite verb contained in it, that I also assume to be the lexical property of the verbs in question. Agreement under the assumptions of the dissertation is made possible after restructuring defined as clause union resulting from the movement of the infinitival T head to the finite TP proposed also in Hinterhölzl (1999, 2006). The location of definiteness agreement is AgrOP/vP where the emptied infinitival CP (defined for the definiteness property of the infinitival clause) moves to check the definiteness feature of the projection.

There are two further, related areas left to sum up, the properties of auxiliaries and the verb *látszik* ‘seem’. To account for the differences between these, a structural account has been proposed in terms of the presence/absence of the PredP projection. Individual properties of the auxiliaries can be accounted for with the help of Kenesei’s (2001) account.

As we have seen, the scrambling analysis of preverb climbing and the optional preverb-infinitive order in focus constructions has fallen out of the analysis almost for free.

While restructuring of the infinitival clause opens the way for the individual scrambling of constituents, that scrambling itself is available in a certain construction indicates that restructuring has taken place. For this reason at times it may be rather difficult to differentiate between these two related notions. Under the assumptions of this dissertation the difference between the two is very subtle indeed, but the two should definitely be kept distinct: the availability of scrambling is a clear diagnostic for restructuring having taken place, but the lack of it does not suggest the opposite. It may occur that LF and PF requirements happen to coincide with what the structural requirements of the construction call for, but this does not result in the lack of restructuring, which is always assumed to take place whenever a verb takes an infinitival complement in Hungarian.

Chapter 7 Conclusions and evaluation

In this dissertation I have made an attempt to account for why certain infinitival structures fail to project typical left peripheral constituents in the expected order in spite of the widely accepted claim that infinitival structures are clauses, also supported by ample empirical evidence. I have pointed out an important difference between the structure of Hungarian finite and infinitival clauses hitherto unnoticed concerning the position of focussed constituents: while in finite clauses focussed constituents obligatorily target the specifier position of the FP directly above the VP, in infinitival clauses focussed constituents can be separated from the verb by quantifiers.

Based on Hinterhölzl (1999, 2006) I have argued that Hungarian infinitival clauses always start out as bi-clausal structures, but as a result of licensing movements they become mono-clausal. This analysis has the welcome consequence of (1) accounting for the similarity between free word-order phenomena of certain West Germanic languages and Hungarian and (2) giving the potential for providing a uniform bi-clausal analysis of infinitival structures in Hungarian. To explain the difference in the word order of finite and infinitival clauses I proposed that in infinitival clauses as opposed to finite clauses the verb can move to the head position of QP overtly, thus the claim that the structure of finite and infinitival clauses is the same can be maintained. The differences in word order are not related to differences in the ordering of constituents in the left periphery. They arise in the scrambling field of the finite verb imposed on constituents by scope considerations that come from the infinitival left periphery.

Once scope interpretations enter the picture, another question arises: how do the two interfaces, PF and LF, interact in defining word order? In what direction does the derivation proceed? Based on Bobaljik–Wurmbrand (to appear) I have argued that assuming an asymmetric scope transparency principle that regulates the choice among PFs relative to a given LF (including information structure) provides a more satisfactory account of the Hungarian data as well.

The results presented in the study show that the word order in restructuring constructions is not defined simply by the requirements of the finite verb selecting an infinitival complement. Rather, word order is the result of an intricate interaction

between properties of both the finite and the infinitival clause, where the positioning of the preverb is especially problematic and calls for further clarification. Refinement of which other properties may be involved and what their contribution to the resulting order is seems a promising research programme. The research could also be further completed by a broader cross-linguistic comparison.

The proposal in this dissertation indicates that those properties of infinitival clauses that apparently deviate from the structure proposed for finite clauses can be related to mechanisms operating within the scrambling field. If the assumptions presented in the dissertation are correct, the scrambling field turns out to have a much more important role in the syntax of Hungarian (and presumably other languages) than previously assumed.

From a broader theoretical perspective this approach to LF has further welcome consequences as well: the problem concerning the double-faced property of LF disappears, which has been with us since the advent of the Minimalist Program, which did away with D-structure and together with it the level of representation that handled thematic relations between predicates and arguments. In this account, where LF is argued to precede and define PF, semantic properties of lexical items do not have to be assumed to belong to different components of the grammar, contrary to classic MP where LF should be the sole representation encoding the semantic properties of lexical items, but that raises questions whether there is a component of the grammar that specialises in lexico-conceptual notions – such as those related to the determination of theta-roles – that are not expressible in terms of scope and related notions (Lasnik and Uriagereka 2005, Ch. 7). This problem does not arise in an LF-first framework, such as the one presented in this dissertation.

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