<p style="text-align:center">**Complementation in Finno-Ugric**
István Kenesei
(1994; accepted for publication in: N. Vincent, ed., *Complementation in the Languages of Europe*, Kluwer, Dordrecht; volume not published due to the editor's failure)</p>

0. Introduction*

In this chapter questions of complementation in some of the Finno-Ugric languages in Europe are discussed. The languages in this group are genetically related: Finnish (FIN), Estonian (EST) and Hungarian (HUN) are of the Finno-Ugric family within the Uralic stock. Hungarian represents the Ugric subgroup, while Finnish and Estonian, which are in the Balto-Finnic branch, are particularly close to each other. Although both have dialects that differ to a significant degree, the standard languages are mutually intelligible -- at least after some practice. Moreover, with respect to Standard Finnish, Colloquial Finnish shows interesting grammatical variation, some of which is to be reviewed below. Hungarian is more uniform as regards both its dialects and registers, though some variation is evidenced in its grammar. For reference grammars in Estonian, see Harms (1965) and Tauli (1973, 1983); in Finnish, Karlsson (1983) and Sulkala and Karjalainen (1992), in Hungarian, Tompa (1968) and Kiefer and É. Kiss (1994).

1. General properties

All three languages are fundamentally head-final, though Finnish and Estonian (and arguably Hungarian, too) have SVO basic orders, and in addition to postpositions characteristic to this language family, prepositions are also found in the Finnic branch. The basic syntactic orders are relatively free, since all three languages have focussing and topicalization strategies based on changing the neutral order of constituents, but they differ in the actual implementation of these devices.[1]

(1) a.   Mati luges selle   raamatu läbi   EST
           Mati read this.GEN book.GEN through
           'Mati read this book.'

     b.   <u>Selle raamatu</u> luges Mati läbi
           'It is this book that Mati read.'

(2) a.   Matti luki sen kirjan   FIN
           Matti read that book.GEN
           'Matti read that book.'

     b.   <u>Sen kirjan</u> Matti luki   FIN
           'It's that book that Matti read.'

(3) a.   Anna olvasta a könyvet.   HUN
            Anna read   the book.ACC
           'Anna read the book.'

b.   Anna <u>a könyvet</u> olvasta.   HUN
          'It's the book that Anna read.'

Languages in this group make no gender distinctions, and, with the exception of Hungarian, have no definite articles, but many of them differentiate definite/specific objects from indefinite/ nonspecific ones in some way, i.e., by case-marking or inflection. Hungarian is of the nominative--accusative type, but Finnish and Estonian mark objects by the nominative, partitive, or genitive case.

     All Finno-Ugric languages are highly agglutinative and they have a fairly large number of oblique cases. In most of them suffixation shows vowel harmony, and possession (i.e., the person and number of the possessor) must or can be marked on the possessed noun. Verbs are inflected for number and person in all tenses, expressed by means of auxiliaries in Finnish and Estonian in (some of) the past tense(s), and in Hungarian in the future tense. Estonian and Finnish also have a negative auxiliary, inflected (for persons) only in Finnish. Unlike Finnish and Estonian, Hungarian has no passive syntactic constructions.

     Pro-drop is comprehensive in Hungarian, where both subject and object pronouns, as well as pronominal possessors can be omitted, cf. (4), but less extensive in Finnish, where it is typical in first and second persons in subjects and possessor NPs only in the standard language, cf. (5). Note that Colloquial Finnish has a different paradigm.

(4) a.   (Te) látod   (őt/azt)   HUN
             you see.2SG he/she/it.ACC

    b.   (Mi) látunk (tégedet)   HUN
             we see.1PL you.ACC

(5) a.   (Me) lähdi-mme kotiin   Std F
             we went-1PL home

    b.   *(He) lähte-vät kotiin   Std F
            they go-3PL home

    c.   *?(Me) lähde-ttiin kotiin   Coll F
              we go-PASS.1PL home   'We went home'

    d.   *?(Ne) lähte-e   kotiin   Coll F
             they   go-3PL/SG   home

This distribution and the differences in persons occur also in the possessive paradigm, in which the same set of shortened or altered pronominal forms are accompanied by the omission of person marking on the possessed noun in the colloquial language.

2. Types of complementation

By far the most widespread devices of complement clause formation are indicative tensed embedding and nonfinite clauses. Although nominalizations are frequent, they are not, as a

rule, employed as canonical structures of complementation. Note, however, that the use of person marking in nonfinite clauses in some languages in this group evokes an analogy with possessive NPs.

2.1. Tensed complement clauses

Complement clauses formed with finite verbs are postverbally placed in the unmarked case.

(6) a.   Ta oli kuulnud [et siin on soe]   EST
          he had heard   that here is warm
          'He had heard that it was warm here.'

    b.   Jussi sanoi [että Matti luki sen kirjan]   FIN
          Jussi said   that Matti read that book.GEN
          'Jussi said that Matti had read that book.'

    c.   Péter el-mondta [hogy Anna olvasta a könyvet]   HUN
          Péter PFV-said   that Anna read   the book.ACC
          'Peter said that Anna had read the book.'

Finnish and Estonian do not have subjunctive mood in embedded clauses, but they have a wider range of infinitive constructions. (Note that Finnish can make use of conditional in this respect, see (10) below.) While Hungarian displays a more limited use of infinitivals, the verb forms in complement clauses of, for example, verbs of volition are in the subjunctive. For some verbs, obviative effects are achieved by changing the complement clause from infinitival to tensed, cf. (8).

(7) a.   Matti käski [meitä   poistu-ma-an]   FIN
          Matti ordered we.PRTV   leave-INF-ILL
          'Matti ordered us to leave.'

    b.   Anna meg-parancsolta [hogy távoz-z-unk]   HUN
          Anna PFV-ordered   that leave-SUBJ-1PL
          'Anna ordered us to leave.'

(8) a.   Anna [távoz-ni] akart   HUN
          Anna leave-INF wanted
          'Anna wanted to leave.'

    b.   Anna az-t   akarta [hogy Péter távoz-z-on]   HUN
       Anna it-ACC wanted that Peter leave-SUBJ-3SG
       'Anna wanted Peter to leave.'

The mood of the embedded verb depends on the properties of the verb or in general the predicate in the matrix clause, but in some cases the choice of mood is free, with predictable semantic consequences.

3

(9) a.   Fontos volt [hogy távoz-t-unk]   HUN
            important was that leave-PST-1PL
            'It was important that we had left.'

     b.   Fontos volt [hogy távoz-z-unk]   HUN
            important was that leave-SUBJ-1PL
            'It was important for us to leave.'

(10) a.   Oli tärkeää   [että lähd-i-mme]   FIN
            was important.PRTV that leave-PAST-1PL
            'It was important that we had left.'

     b.   Oli tärkeää   [että läht-isi-mme]   FIN
            was important-PRTV that leave-COND-1PL
            'It was important for us to leave.'

These languages also show obviation effects: when the subjects of the matrix and embedded clauses are identical, infinitives are possible, when they are not, tensed clauses are in order.

(11) a.   Anna olvasni kívánt   HUN
            Anna read.INF wished
            'Anna wished to read.'

     b.   Anna azt   kívánta [hogy Péter olvasson]   HUN
            Anna it.ACC wished   that Peter read.SUBJ.3SG
            'Anna wished for Peter to read.'

    In Estonian a narrative or quotative mood is distinguished, which can be applied in both matrix and complement clauses conveying the suspension of the speaker's and or subject's commitment as to the truth of the proposition, cf. Tauli (1983:31) and Help (1991:40).

(12) a.   Tädi ütleb [et onu ujub]   EST
            aunt says   that uncle swims
            'The aunt says that the uncle swims.'

     b.   Tädi ütlevat   [et onu ujub]   EST
                says.QUOT
            'According to somebody, the aunt says that the uncle swims.'

     c.   Tädi ütleb [et onu räägitakse ujuvat]   EST
                            is.said   swims.QUOT
            'The aunt says that according to somebody the uncle swims.'

2.2. Nonfinite complements

The variety of Finnish and Estonian nonfinite constructions has been a problem for

descriptive grammars. Recent analyses have called into question traditional classifications, cf. Karlsson (1983), Vainikka (1991), Tauli (1983), Help (1991), Laitinen and Vilkuna (1993). The difficulty lies in determining whether the various forms are infinitives, participles, or gerunds, and are to be differentiated along a present/past or an active/passive axis, which also figures in discussions on Hungarian, cf. Komlósy (1994).

3. Internal structure

3.1. Tensed complement clauses

At first blush the structure of complement clauses does not differ from that of matrix sentences. From a closer perspective, however, significant differences can be observed, mainly due to the interaction of complementizers with other categories in their domain. We restrict our attention to two languages in this section, Finnish and Hungarian, which apply similar, though not identical, devices to order constituents in their clauses.
     It will be seen that both languages make use of movement to focus and topicalize constituents, but the terminals are not in the same syntactic positions. In neither language are wh-phrases placed in the Spec of CP; they must occupy the same landing sites as foci, i.e. to the right of the complementizer.

3.1.1. Finnish

Finnish shows an interesting distribution of items that can be classified as functional categories, such as C (Complementizer) and I (Inflection), and its subtypes of Agr (Agreement), Neg (Negation) and T (Tense). In addition to the simple complementizer että (see (6b) and (10)), on the left periphery of clauses a number of various complex 'conjunctions' are found which can arise through the effects of head movement. Some of these conjunctions, or more exactly, complementizers, are given in (13) and (14).

(13)a.   [Ell-ei   sää   parane] jäämme kotiin.   FIN
           if- not.3SG weather improves stay.1PL home
           'Unless the weather improves, we shall stay home.'

    b.   En   tiedä jos-ko hän tulee.   FIN
          not.1SG know if-Q   she comes
          'I don't know whether she comes.'

(14)a.   Väität - kö [että kello ei   ole neljä]   FIN
          claim.2SG-Q   that clock not.3SG be four

    b.   Väität-kö [ett-ei$_i$ kello e$_i$ ole neljä]   FIN
          claim.2SG-Q that-not.3SG   clock   be four
          'Are you claiming that it is not four o'clock?'

Descriptively speaking, in (13a) the conjunction ellei is compounded of the root ell- 'if' and the negative auxiliary ei, which is inflected for number and person, but not for tense or

mood.[2] The root <u>ell-</u> is itself historically derived from a stem <u>e-</u> 'proximate pronominal' (cf. obsolete <u>es</u> 'if') and an adessive case suffix <u>-llA</u>. A similar process is observed in <u>jo-ll-ei</u> 'if not', where the stem is <u>jos</u> 'if' (from a nonproximate pronominal <u>jo-</u> plus a lative suffix). In (13b) <u>jos</u> precedes the question particle <u>-kO</u>, while in (14), where the same particle is added to the main verb, thus forming a yes/no question, the subordinating conjunction <u>että</u>, which also goes back to the stem <u>e-</u>, is conjoined with the negative auxiliary <u>ei</u> to form a complex complementizer.

   Another set of phenomena that plays a role in the order of initial phrases in clauses is related to focus. The question particle <u>-kO</u> and the (optional) particles <u>-hAn</u> and <u>-pA(s)</u> are cliticized onto phrases moved into initial position to the right of the complementizer.

(15)a.   Matti kysyi [että <u>Jussi-ko</u> luki sen kirjan]   FIN
          Matti asked that Jussi-Q read that book
          'Matti asked if it was Jussi that read that book.'

    b.   Matti sanoi [että <u>sen kirjan(-han</u>) Jussi luki]   FIN
          Matti said   that that book-FOC Jussi read
          'Matti said that it was that book that Jussi read.'

Verbs can also move into this syntactic focus position, but then no other phrase can be focussed. (For more on this, see below.)

(16)a.   Matti kysyi [että <u>luki-ko</u> Jussi sen kirjan]   FIN
          Matti asked that read-Q Jussi that book
          'Matti asked if Jussi had (indeed) read that book'

    b.   *Matti kysyi [että <u>Jussi luki-ko</u> sen kirjan]   FIN

Focus in Finnish is not always marked by an overt morpheme; often it is sufficient (or even better) to move the focussed item in initial position and place emphatic stress on it, cf. (17a). We note here that, similarly to other languages where focus movement is optional, focussing a constituent is possible by assigning it primary stress in its original position, as in (17b).

(17)a.   Matti sanoi [että <u>sen kirjan</u>$_i$ Jussi luki <u>e</u>$_i$]   FIN

    b.   Matti sanoi [että Jussi luki <u>sen kirjan</u>]   FIN
          'Matti said that it was that book that Jussi read.'

While focus movement is optional, wh-phrases undergo obligatory movement into the same position to the right of the complementizer, where they can be followed by the question/focus clitic <u>-kO</u>, see (15a). The structure that emerges from this distribution of data must accommodate the linear order shown in (18).[3]

(18)COMP FOCUS   SUBJ/TOP   NEG-V   VERB ...

    a.   että mitä$_i$(-kö)   Pekka   ei   lukenut <u>e</u>$_i$ FIN
          that what-Q   Pekka   not-3(SG read

6

'... what Pekka didn't read.' (= embedded question)

b.   <u>minun tauluni</u>   tässä   on varastettu   FIN
        my   picture   here   is stolen
        'it was my picture that was stolen'

c. että   <u>Helena</u>   ei   kutonut villatakkia   FIN
  that   Helena   not.3SG knit sweater.PRTV
       'that it was Helena that didn't knit a sweater'

Since in every Finnish sentence there can be a single focussed constituent to the left of the subject or a single preverbal wh-phrase (both positioned to the right of the conjunction <u>että</u>), it seems reasonable to suggest that Finnish has another functional category between the projection of Comp and that of (the constituents of) Infl.[4] Following Brody's (1990) suggestion for Hungarian, we will label this item F (for 'focus'). Placed to the right of Comp, the Spec of FP will then be available for any maximal category marked for the arbitrary feature [+focus], and for wh-phrases in particular. The head of FP can be filled in by the various question and focussing clitics <u>kO</u>, <u>hAn</u>, <u>pA(s)</u>. Note that heads cannot be moved into the Spec of FP, but will be adjoined to the head of F, as required by general principles.

    The actual interpretation of the focus+clitic construction is a function of the clitic itself, which (as in the case of -<u>hAn</u>) does not necessarily carry contrastive focus meaning. 'Contrastive focus' is understood here as the default interpretation for the feature [+focus]. Taking into account Holmberg (1989), Vainikka (1989), Vilkuna (1989), Mitchell (1991), Holmberg et al. (1993), as well as Korhonen (1993) and Vilkuna (to appear), we suggest the following configuration.

(19) [$_{CP}$ että [$_{FP}$ F [$_{AgrP}$ Agr [$_{NegP}$ Neg [$_{TP}$ Tense [$_{VP}$ ...]]]]]]

Adverbs could occur adjoined either to TP or to VP. What is more important, by assigning to it the status of a head, movement of the negative verb (onto Agr, and then through F -- if any -- to Comp) is consistent with the principles of grammar. If, however, NegP is missing, either the (optional) tense auxiliary <u>olla</u>, or (if that is absent) the verb is moved onto Agr. Note that 'doubly filled FPs', e.g. (16b), are ruled out by Procrastination (Chomsky 1993): only one [+focus] marked item has to move to FP to have its feature checked at PF; all the other [+focus] marked constituents are not forced to move, thus their overt movement is disallowed.

    The movement of <u>ei</u> is of particular interest. First of all, as was noted in connection with (14a-b) repeated below, complex conjunctions arise through this operation.

(20)a. [$_{C'}$ että [$_{AgrP}$ kello ei [$_{NegP}$ $\underline{e}_i$ [$_{TP}$ ole neljä]]]]   FIN
       that   clock not-3sg   be four

b. [$_{C'}$ ett-ei$_i$ [$_{AgrP}$ kello $\underline{e}_i$ [$_{NegP}$ $\underline{e}_i$ [$_{TP}$ ole neljä]]]]   FIN
      '... that it is not four o'clock'

Although the two sentences (20a-b) are synonymous, this observation is not to be generalized; if the negative verb moves around a quantifier, it may affect scope relations, and

thus semantic interpretation. In other words, the scope of negation is determined in S-structure. In the examples below, (21b) is blocked or at least has questionable status because the existential quantifier <u>joku</u> 'someone' cannot be in the scope of negation, which arises through the cliticization of the negative verb onto the conjunction.

(21)a. [$_{C'}$ että [$_{AgrP}$ joku   ei [$_{TP}$ tullut]]]   FIN
        that   someone not-Px came
          'that someone didn't come'

    b. *?[$_{C'}$ ett-ei$_i$ [$_{AgrP}$ joku e$_i$ [$_{TP}$ tullut]]]   FIN

There are also other quantifier expressions that prevent the negation verb from moving into Comp. Below sentences containing focussed constituents are illustrated in the (a) examples, none of which can undergo Neg movement, as shown in the (b) lines.

(22)a.   Jussi sanoi [että sitä kirjaa -pa Matti ei   lue]   FIN
          Jussi said   that that book.PRTV-FOC Matti not.3SG read
          'Jussi said that it was that book that Matti didn't
          read.'

    b.   *Jussi sanoi [ett-ei$_i$ sitä kirjaa-pa Matti e$_i$ lue]   FIN

(23)a.   Leena kysyi [että Jukka-ko sitä kirjaa ei   lue]   FIN
          Leena asked that Jukka-Q that book   not.3SG read
          'Lena asked if it was Jukka that didn't read that book.'

    b.   *Leena kysyi [ett-ei$_i$ Jukka-ko sitä kirjaa e$_i$ lue]   FIN

(24)a.   Jukka kysyi [että mitä(-kö) Pekka ei   lue]   FIN
          Jukka   asked that what - Q   Pekka not-3SG read
          'Jukka asked what Pekka didn't read.'

    b.   *Jukka kysyi [ett-ei$_i$ mitä(-kö) Pekka e$_i$ lue]   FIN

The movement of the negative verb <u>ei</u> is forbidden in (21)-(24), because relativized minimality requires that it stop at the head of the FP, which is filled in by a clitic in each example, therefore the negative verb would have to bypass the head of FP, constituting an illegitimate instance of head-movement, cf. Rizzi (1990).

(25)a.   *Jussi kysyi [ett-ei$_i$ Matti-ko [e$_i$ lue sitä kirjaa]]   FIN
           Jussi   asked that-not.1SG Matti-Q   read that book

    b.   Jussi kysyi [$_{CP}$ ett-[ei$_i$-kö]$_j$ [$_{FP}$ e$_j$ [$_{AgrP}$ e$_i$ FIN
          [$_{NegP}$ e$_i$ [$_{VP}$ Matti lue sitä kirjaa]]]]]
          'Jussi asked if Matti didn't read that book.'

    c.   Jussi sanoi [ett-ei$_i$ [$_{FP}$ <u>Pekka</u> e$_i$ [e$_i$ lukenut sitä]   FIN

Jussi said   that not.3SG Pekka   read that.PRTV
'Jussi said that it wasn't Pekka that read that.'

In (25a) the movement of the negative auxiliary is forbidden since it does not stop at the head of the FP, whereas in (25b-c) it is licit, because it moves across the head of the FP, as is shown in (25b) by -ko being cliticized onto it, and the compound complementizer, which is the result of the movement of Neg+F onto Comp. In (25c) the head of FP is void of lexical material, thus the negative auxiliary can move across it into Comp.

3.1.2. Hungarian

Conjunctions are generated in the head of Comp, whose Spec is, in general, left unfilled in complement clauses. This is shown, among others, by the fact that wh-relative phrases have never occupied a position to the left of Comp in the history of Hungarian. On the contrary, there is a good deal of evidence to the opposite effect, i.e. that wh-relatives were always placed to the right of Comp, cf. (26) from the Margit Legend, dated 1510:

(26)   sok lesz [hogy kik egymásra kezdenek mutatni]   HUN
            many will-be that who-PL at-each-other begin to-point
            'there will be many who will begin to point at each other'

By far the most frequent single conjunction in complement clauses is hogy 'that'. The other complementizer, which is selected by a limited number of matrix predicates, ha 'if', is much less often used. Both items fairly freely combine with other complementizers and heads to provide a large array of complex conjunctions introducing subordinate as well as coordinate clauses, e.g., hogy + ha 'if'; nem 'not' + hogy = 'rather than'; ha + nem = 'but'; még 'even' + ha = 'even if'; még + is 'also' = 'even so'; mint 'as' + is + nem + hogy --> mintsemhogy 'rather than'; etc. Even though the movement of heads is less wide-spread than in Finnish, at least in some cases it is clearly attested.[5]

(27)a. [CP hogy [NegP Eszter [NegP ne [IP értse ...]]]]   HUN
           that   E.   not   understand

     b. [CP ne_i-hogy [NegP Eszter [NegP e_i [IP értse]]]]   HUN
           '... so that Esther wouldn't understand.'

     The complementizer and/or the relative wh-phrase are then followed by one or more topicalized phrases, various optional quantified expressions, and a single focussed constituent (including a wh-phrase) all to the left of the inflected verb.

(28)COMP TOPIC   NEG QUANTIFIERFOCUS   VERB

     a.   hogy a csoportban   minden könyvet   Anna   olvasott HUN
           that   the group.INE every book.ACC   Anna   read
           'that it was Anna that read every book in the group'

| b. | hogy Pétert tegnap | | mikor | láttad | HUN |
| | that Peter.ACC yesterday | | when | saw-2SG | |

'... when you saw Peter yesterday'

| c. | hogy Pétert | nem | Anna | látta | HUN |
| | Peter.ACC | not | Anna | saw.3SG | |

'it wasn't Anna that saw Peter'

Various proposals have been made to account for the relative freedom of Hungarian constituent order, see, e.g., É. Kiss (1981, 1987, 1994), Horvath (1986), Marácz (1989), Brody (1990), and Kenesei (1992). É. Kiss (1994) considers a Topic Phrase as the 'notional subject' of the sentence over VP, with the Spec of VP as the landing site for focussed items. Rather than following Brody's (1990) proposal for a Focus Phrase (=FP), since Hungarian, unlike Finnish and a number of other languages, has no overt focussing particles, we suggest that in this language focussing is a function of the feature [+/- focus] in the head of the Tense Phrase (= TP). A constituent bearing the feature [+focus] moves to the Spec of TP. As the principles of substitution require, the verb moves into the head of TP, i.e., it adjoins Tense.

(29) $[_{CP}$ hogy $[_{TopP}$ ... $[_{NegP}$ nem ... $[_{TP}$ ... T $[_{VP}$ ...]]]]

$\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad$ [+/-focus]

Phrases marked for focus obligatorily move into the Spec of TP, otherwise their focus features could not be licensed. Verbs move to the head of TP either because they are marked for focus (and then no other constituent may move into TP on account of Procrastination, see above), or, if another constituent is focussed, for independent morphological reasons: their tense features have to be checked at PF. It is, incidentally, this phenomenon that serves as evidence against positing a FocusP in Hungarian, unlike the case in Finnish.

 Items marked for specificity can be topics, which, under É. Kiss's interpretation, have an 'aboutness' relation to the rest of the clause, while the TP and the quantifier phrases optionally adjoined to it represent the 'notional predicate'. If there are several topicalized expressions, only one sits in the Spec of TopP, the rest are adjoined to it.

3.2. Interrogative complements

As was shown above, one of the focussing clitics in Finnish is the interrogative particle -kO, whose occurrence is obligatory in alternative questions, whether matrix or embedded. If no maximal category is focussed in a yes/no question, the (highest) inflected verb has to move into the FP.[6]

(30)a.　　Matti kysyi [että Jussi$_i$-ko e$_i$ luki sen kirjan]　　　　　　　　FIN
　　　　　Matti asked that Jussi-Q　　read that book
　　　　　'Matti asked if it was Jussi that read that book.'

　　b.　　Matti kysyi [että luki$_i$-ko Jussi e$_i$ sen kirjan]　　　　　　　　FIN
　　　　　Matti asked that read-Q　Jussi　that book

'Matti asked if Jussi had (indeed) read that book'

c.   Matti kysyi [ett-ei$_i$-kö   Jussi $\underline{e}_i$ lue sitä kirjaa]   FIN
      Matti asked that-not.3SG-Q Jussi   read that book
      'Matti asked if Jussi didn't read that book.'

d. Matti kysyi [että on$_i$-ko Jussi $\underline{e}_i$ lukenut sen kirjan]   FIN
      Matti asked that is-Q   Jussi   read   that book
      'Matti asked if Jussi had read that book.'

In wh-questions -kO is optional, and when it is present, it shows up on the question word, see (24a). In both embedded alternative and wh-questions the complementizer että occurs as follows from the structural properties outlined in (19).[7]
    The Hungarian equivalent of the Finnish interrogative clitic is apparently far less complex in its syntactic behavior. The particle -e is obligatory only in embedded alternative questions, and, at least in standard Hungarian, is always attached to finite verbs, and is thus related to Infl.

(31)a.   Anna nem tudja [hogy [Eszter [látta-e [Pétert ...]]]]   HUN
      Anna not knows that Esther saw - Q Peter.ACC
      'Anna doesn't know whether Esther saw Peter.'

b.   *Anna nem tudja [hogy <u>Pétert</u>-e látta Eszter]   HUN

c.   Anna nem tudja [hogy <u>Pétert</u> látta-e Eszter]   HUN
      Anna not knows that Peter.ACC saw-Q Esther
      'Anna doesn't know if it was Peter that Anna saw.'

If some item other than the verb, like <u>Pétert</u> in (31b-c), is focussed, it has to be placed preverbally into the Spec of TP, but the clitic -e has to stay on the verb. Thus, in contrast to Finnish -<u>kO</u>, which sits in the head of FP, Hungarian -<u>e</u> cannot be adjoined to maximal projections.
    A further difference consists in its obligatory absence in wh-questions, see (32a), and in its nonobligatory occurrence in main clause alternative questions, see (32b).

(32)a.   hogy Eszter mikor látta (* -e) Pétert   HUN
      that Esther when saw   Q Peter.ACC
      'when Esther saw Peter'

b.   Anna olvasta(-e) a könyvet?   HUN
      Anna read   -Q the book.ACC
      'Has Anna read the book?'

    Finally, unlike wh-phrases, the question clitic cannot appear in nonfinite clauses, which indicates that it is related to a [+Tense] Infl.

(33)a.   Anna nem tud [hová men-ni]   HUN

Anna not knows where go-INF
'Anna has nowhere to go.'

b.   *Anna nem tud [men-ni-e (vagy ne)]   HUN
                    go-INF-Q or   not

c.   Anna nem tudja [hogy menjen-e (vagy ne)]   HUN
          Anna not knows that she-go-Q or   not
          'Anna doesn't know whether or not she should go.'

Estonian resembles the other two Finno-Ugric languages in that it allows the general complementizer to cooccur with the question marker or wh-phrases. In this language, however, the formative in question is not a clitic but a full-blown complementizer, cf. Help (1991:41).

(34)a.   Tädi küsis [(et) *(kas) onu   ujub]   EST
          aunt asked   that whether uncle swims
          'The aunt asked whether the uncle was swimming.'

b.   Tädi küsis [(et) kus   onu   ujub]   EST
          aunt asked that where uncle swims
          'Aunt asked where uncle was swimming.'

Kas is also possible in matrix questions if its initial position is not occupied by the inflected verb moved there, or the question is not expressed solely by intonation, and in infinitival clauses.

(35)a.   Kas   onu   ujub?   EST
          whether uncle swims
          'Is the uncle swimming?'

b.   Onu   ei   teadnud [kas/kus   ujuda]   EST
          uncle not knew   whether/where swim.INF
          'The uncle didn't know whether/where to swim.'

3.3. Infinitival complements

In this section I will give a survey of various infinitival complement constructions in Finnish and Hungarian, and will speculate on their syntax. I will proceed by first presenting their properties from the viewpoint of a descriptive classification, then I will suggest syntactic analyses.

3.3.1. Finnish

In most grammars, Finnish is shown to have several non-finite verb-forms: five infinitives are traditionally distinguished in addition to present/past as well as active/passive participles.

12

3.3.1.1. <u>1st infinitive</u>
The 1st infinitive is found in verb, adjective and noun complement clauses.
Forms:<u>-(t)a/(t)ä</u> (with <u>t</u> assimilating to the stem-final obstruent, liquid and nasal according to
        voice and sonority)
Examples:[8]

(36)a.   Yritä-mme juos-ta.   FIN
         try-1PL run-1INF
         'We try to run.'

   b.   Oli   mukava luke-a   kirjoja.   FIN
         be.PAST.3SG nice read-INF1 book.PL.PRTV
         'It was nice to read books.'

   c.   Minulla on ajatus lähte-ä   Unkariin ensi kesänä.   FIN
         I.ADESS is thought travel-1INF Hungary.ILL next summer.ESS
'I have the thought to travel (=I'm thinking of travelling) to Hungary next year.'

Note the following properties:
a. Usually the subject of the complement clause cannot be expressed, except with the three
verbs <u>antaa</u>, <u>allia</u>, <u>suoda</u> all meaning 'let' and <u>käskeä</u> 'order', cf.:

(37)   Anta-kaa   Kalle-n levät-ä.   FIN
         let-IMP.2SG Kalle-GEN rest-1INF
         'Let Kalle rest.'

b. Embedded subjects and (nominative) objects can occur in the matrix clause in construction
with adjectival and necessive predicates, cf.:

(38)a.   Jussin   oli   vaikea luke-a.   FIN
         Jussi.GEN be.PAST.3SG difficult read-INF1
         'It was difficult for Jussi to read.'

   b.   Jussin   täytyi   luke-a se kirja   FIN
         Jussi.GEN must.PAST.3SG read-INF1 that book
         'Jussi had to read that book.'

c. The infinitive is not in general case-marked in complement position. But it is possible for
the infinitive to have (inherent) translative case resulting in a purposive meaning, e.g.:

(39)   Lähd-i-n   Hollanti-in levät -ä -kse-ni.   FIN
         traveled-1SG Holland-ILL rest-1INF-TRA-POSS.1SG
     'I traveled to the Netherland in order to rest (= 'for my resting')

Observe that the infinitive is marked for person in (39).
    Verbs taking 1st infinitival complements: <u>haluta</u> 'wish', <u>tahtoa</u> 'want', <u>luvata</u> 'promise',

jaksaa 'be able', uskaltaa 'dare'; tietää 'can', arvata 'dare', etc.

3.3.1.2. 2nd infinitive
The 2nd infinitive construction is used with an inessive case suffix as temporal adjunct. The subject is expressed by a genitive NP if it is different from the matrix subject, or by a possessive suffix on the infinitive (with an optional pronoun in genitive) if it is identical with the matrix subject. This construction is regarded as highly 'nominal'.

Forms: same as those of the 1st infinitive but with a final -e in place of -a/ä.

Examples:

(40)   [Peka-n   herät-e - ssä] Liisa   lähtee töihin.   FIN
             Pekka-GEN wake-2INF-INE Liisa-NOM goes   work.ILL
            'When Pekka wakes up, Liisa goes to work.'

(41)   Vaimo-ni   heräsi [(minun) tul - le -ssa-ni   kotiin]   FIN
            wife-POSS.1SG woke   my   come-2INF-INE-POSS.1SG home.ILL
            'My wife woke up when I came home (lit.: at my coming home).'

(42)   [Herät-e - ssä-än]   Pekka   oli sairas.   FIN
            wake-2INF-INE-POSS.3SG Pekka-NOM was ill
            'When Pekka woke up, he was ill.'

3.3.1.3. 3rd infinitive
The 3rd infinitive has the forms -ma/mä, and occurs in two different constructions, of which only the first is generally considered to be infinitival.

A) Forms case-marked under government, i.e. (a) through (c), or inherently, as (d)-(e), which cannot occur as complements, are classified as infinitives and they (can) have the following uses:
    a) with inessive case: ongoing process/action
    b) with elative case: 'from' some action
    c) with illative case: purposive
    d) with adessive case: means/manner
    e) with abessive case: 'without' some action
The infinitive can have no possessive suffix, except in (e).

Examples:

(43)a.   Istumme juuri syö -mä -ssä.   FIN
            sit.1PL now   eat-3INF-INE
            'We are now sitting eating.'

   b.   Hän   pelasti minut hukku-ma-sta.   FIN
            (s)he saved   me   drown-3INF-ELA
            '(S)he saved me from drowning.'

14

c.   Jätin   Kallen   kotiin luke-ma-an.   FIN
        left.1SG Kalle.GEN home   read-3INF-ILL
        'I left Kalle at home to read.'

d.   Hän elää kirjoitta-ma-lla kirjoja.   FIN
        (s)he lives write-3INF-ADESS book.PRTV
        '(S)he lives by writing books.'

e. Kalle   teki sen   (meidän) tietä-mä-ttä-mme.   FIN
   Kalle.NOM did it.PRTV our   know-3INF-ABE-POSS.1PL
   'Kalle did it without our knowing.'

Verbs taking 3rd infinitive complements:
      a) Subject control: <u>mennä</u>+ILL 'go', <u>olla</u>+INE 'be', <u>tulla</u>+ ELA/ILL 'come from/to',
<u>kävellä</u>+ILL 'go, walk', <u>kyetä</u>/<u>pystyä</u>+ILL 'be able', <u>ryhtyä</u>+ILL 'begin', <u>suostua</u>+ILL 'agree',
<u>kieltäytyä</u>+ ELA 'refuse', <u>lakata</u>+ELA 'quit', etc.
      b) Object control (all with ILL except where marked): <u>pakottaa</u> 'force', <u>taivuttaa</u>
'persuade', <u>panna</u> 'compel', <u>käskeä</u> 'order', <u>pyytää</u> 'ask', <u>vaatia</u> 'demand', <u>autta</u> 'help', <u>opettaa</u>
'teach', <u>estää</u>+ELA 'prevent', <u>kieltää</u>+ELA 'deny', etc.

Examples:

(44)a.   Jukka   kävi osta-ma-ssa kirja-n.   FIN
            Jukka.NOM went buy-3INF-INE book-GEN
            'Jukka went to buy a book.'

b.   Liisa   pyysi Peka-n   luke-ma-an   kirja-n.   FIN
        Liisa.NOM asked Pekka-GEN read-3INF-ILL book-GEN
        'Liisa asked Pekka to read the book.'

B) The other construction in which a form identical with the 3rd infinitive appears is a
prenominal relative clause, where the non-finite verb can of course have no independent
case-marking: its case agrees with that of the head noun. Its traditional name is 'agent
construction' and corresponds to non-finite relative clauses common in other Finno-Ugric
languages, cf. the discussion at the beginning of 3.3.1.5. Subjects can be expressed by a NP
in genitive and/or a possessive suffix on the infinitive. In Colloquial Finnish, possessive
suffixes, as in (45b), can be ommitted, but then the genitive pronominal must be overt. This is
in accordance with similar variation of pro-drop versus omission of agreement suffixes in the
verbal paradigm.
Examples:

(45)a.   Hän ajaa [Tuula-n   hankki-ma-lla] venee-llä.   FIN
            (s)he go.3SG Tuula-GEN get -3INF-ALL boat-ALL
            '(S)he is going in the boat Tuula got.'

b.   Istun [hankki-ma-ssa-ni   ] venee-ssä.   FIN

sit.1SG get -3INF-INE-POSS.1SG boat -INE
'I am sitting in the boat I got.'

3.3.1.4. <u>Other infinitives</u>

Grammars sometimes list two more forms as infinitives, though there is disagreement as to whether they are indeed infinitives or nominal derivatives in construction with the copula <u>olla</u> 'to be', which is also used with the other three infinitives.

a. <u>4th infinitive</u>
Form: -<u>minen</u> (rare, or, as (46), even obsolete)
Examples:

(46)a.   Minun on mene-minen sinne.   FIN
            I-GEN is go-4INF.NOM there
            'I must go there.'

    b.   Sinne ei   ole mene-mis-tä.   FIN
            there not.3SG be go-4INF-PRTV
            'One must not go there.'

b. <u>5th infinitive</u>
Forms: <u>-mainen/mäinen</u>, <u>-mais/mäis</u>, etc.
Meaning: 'almost' (written use only)
Example:

(47)   Olin   kaatu-mais-i-lla-ni.   FIN
            be-PAST.PERF fall-5INF-PL-ADE-POSS.1SG
            'I almost fell.'

3.3.1.5. Participles

Only complement participial clauses will be discussed here, although, as is expected, participles can occur in adjunct clauses in prenominal relative constructions. Present versus past participles differentiate between the time of the action or event of the embedded clause in relation to that of the matrix clause, cf. (48)-(49).
    The participle is formally marked genitive, one of the cases for object complements, although speakers tend to view the suffix as an unanalyzed infinitive marker.[9] The subject of the participial clause is also in the genitive, since nominative is not available in the absence of +Tense. The participial clause exhibits the same agreement properties as the possessive noun phrase: if its subject is the same as that of the matrix clause, it can be pro-dropped, cf. (49c). Then the participle is marked by a possessive agreement suffix and its genitive case marking must be covert. If the two subjects are not coreferent, either an R-expression (cf. (49a)) or an overt pronominal (cf. (49b)) is used.[10]

(48)a.   Pekka   uskoi [Jukan   luke-va-n   kirja-a]   FIN
            Pekka.NOM believed Jukka.GEN read-PART-GEN book-PRTV

'Pekka believed that Jukka was reading a book.'

b.   Pekka uskoi   [pro$_{i/*j}$ luke-va-nsa   kirja-a]   FIN
        Pekka believed   read-PRT.PRES-POSS.3SG book-PRTV
        'Pekka$_i$ believed that he$_i$ was reading a book.'

(49)a.   Pekka uskoi   [Jukan luke-nee-n   kirjaa]   FIN
        Pekka believed Jukka read-PART.PAST-GEN book-PRTV
        'Pekka believed that Jukka had read a book.'

b.   Pekka$_i$ uskoi [hänen$_{*i/j}$ luke-nee-n   kirjaa]   FIN
        Pekka believed he-GEN   read-PRT.PAST-GEN book-PRTV
        'Pekka$_i$ believed that he$_j$ had been reading a book.'

c.   Pekka$_i$ uskoi [pro$_{i/*j}$ luke-nee   -nsa   kirjaa]   FIN
        Pekka believed   read-PRT.PAST-POSS.3SG book-PRTV
        'Pekka$_i$ believed that he$_i$ had been reading a book.'

Verbs in this class: nähdä 'see', kuulla 'hear' (and other perception verbs); sanoa 'say', väittää 'claim', myöntää 'admit', arvata 'guess', tietää 'know', haluta 'wish', etc.

3.3.1.6. Analysis

Complement infinitival clauses have no projection of Agr, thus they must have PRO subjects controlled by the matrix subject/ object. Adjunct infinitival clauses, such as 2nd infinitives and the 'agent construction' in section 3.3.1.3, can have Agr and overt subjects (in genitive), therefore they can also have pro subjects with person marking on the infinitive.

    Complement infinitival clauses can contain 1st or 3rd infinitives. Since the 1st infinitive can be case-marked, as was seen above in section 3.3.1.1, whenever it is an adjectival complement, it will be assumed to have a (morphologically unmarked) nominative case. We have chosen the option of regarding the infinitive in effect as the subject instead of an expletive-clause construction because in these sentences Finnish has no overt expletive of the sort It is difficult to VP. When it is a verbal complement, it will be claimed to have (a phonetically similarly invisible) accusative. Observe that a number of verbs taking 1st infinitival complements are also regular transitive verbs that take direct objects and assign them the appropriate cases. 3rd infinitives are marked for locative cases as selected by the main verb.

    Prenominal relative constructions, as in (45) are adjunct clauses like the 2nd infinitival clauses in 3.3.1.2. They can have their own subjects, whether overt or covert, and the case assigned to the non-finite verb agrees with that of the head noun. Although the non-finite is formally identical with the 3rd infinitive, we agree with the traditional intuition that classifies it under a different heading ('agent construction') among participles, since its properties of allowing agreement markers on the head as well as overt subjects characterize participles rather than the (3rd) infinitive.[11]

    We will suppose that the functional category in which the non-finite affix is generated is Tense marked for [-Tense]. The fact that non-finite clauses may carry a simultaneous/antecedent event distinction relative to the time of the event expressed in matrix

clause can be represented by a [+/-perfect] choice in Tense, where the nonfinite verb is to move. The only tense auxiliary <u>olla</u> 'be' does not occur in non-finite clauses, and note also that there can be no focus there, therefore, unlike tensed clauses, there is no projection of the functional category Focus here. Some matrix predicates select for TenseP complements, i.e. for clauses that have no AgrP constituents. Since nominative (in tensed clauses) or genitive (in possessive NPs or non-finite clauses) is assigned by Agr, the subject in non-finite clauses without AgrP is an ungoverned PRO, as in (50a). Clauses with pro-dropped or overt subjects have an AgrP projection, whose Spec is the locus of nominative assignment in tensed clauses and genitive assignment in infinitivals (similarly to possessive NPs), as shown in (50b).

In other words, the fundamental structural distinction is not between infinitival and participial, since either can be selected as a complement or serve as an adjunct, but between clauses with overt subjects including pro-dropped ones, and those without. Matrix verbs can then select clauses with or without an AgrP, and if they select for one with an AgrP, the clause can be either of [+/-Tense]. The Comp head of the clause is spelled out as <u>että</u> in tensed clauses or is marked for case in non-finite ones. The CP in (50a) is then the general structure for 'subjectless' clauses, while the one in (50b) illustrates clauses with overt or pronominal subjects.

(50)a. Complement clause without an overt subject

$$... V [_{CP} C [_{TP} T [_{VP} PRO [_{V'} V ...]]]]$$
$$[-Tense]$$

b. Complement clause with an overt or pronominal subject

$$V [_{CP} [_{AgrP} DP_i [Agr [_{TP} T [_{VP} \underline{e}_i [_{V'} V...]]]]]]$$
$$[-Poss] \quad [-Tense]$$

3.3.2. Hungarian

Hungarian has two types of infinitive clause: one with and another without a dative subject (and a possible agreement marker on the infinitive), see Dalmi (1981), É. Kiss (1987), Szabolcsi (1983). The infinitive has an invariable affix -<u>ni</u>, to which the variable agreement marker can be affixed, but no tense/aspect distinctions can be shown, except for the presence or absence of the perfective preverbal prefix. The action designated by the infinitive is always simultaneous with or subsequent to the action expressed by the matrix predicate.

3.3.2.1. Forms

Below we will differentiate infinitival clauses according to how their subjects are expressed and what control structures they are part of.

A. <u>Infinitive with an overt subject</u>
By 'infinitive with overt subject' we understand the infinitive with either an overt subject and an optional agreement marker or one without an overt subject but with an agreement marker.

(51)a.   Fontos volt [Péter-nek úsz-ni (-a)]   HUN

important was Peter-DAT swim-INF-3SG
'It was important for Peter to swim.'

  b.   Fontos   volt [pro úsz-ni-a]   HUN
             important was   swim-INF-3SG
             'It was important for him/her to swim.'

Verbs or predicates of this class: illik 'behoves', sikerül 'succeed', etc., szükséges 'necessary', kár (volt) '(it was/is a) pity', etc.

B. 'Subjectless' infinitive: three subtypes
First of all, an infinitive with an 'arbitrary' PRO subject is illustrated in (52).

(52)   Fontos volt [PRO úsz-ni]   HUN
           important was   swim-INF
           'It was important to swim.'

Then there are two kinds of structures in which infinitival clauses without overt subjects can occur: in one the subject of the infinitive is controlled by the subject of the matrix clause, that is, they are complements to 'subject-control' verbs. Here the matrix predicate is classified as a full or 'notional' verb, as in (53), where in the neutral, unfocussed order the infinitive appears behind the matrix verb.

(53)a.   Péter szeret [PRO úsz-ni]   HUN
           Peter likes   swim-INF
           'Peter likes to swim.'

  b.   *Péter szeret [egy bíró-t/-nak úsz-ni]   HUN
             Peter likes   a referee-ACC/DAT swim-INF
            'Peter likes a referee to swim.'

In the second group the infinitival is in construction with auxiliary-like verbs, which always follow the infinitive in the neutral sentence.[12]

(54)   Péter úsz-ni   fog.   HUN
           Peter swim-INF will-3SG
           'Peter will swim.'

    Finally, 'object-control' structures are illustrated, in which the object of the matrix clause determines the reference of the embedded infinitival subject.

(55)a.   Péter küldött valaki-t   [PRO úsz-ni]   HUN
            Peter sent   someone-ACC   swim-INF
           'Peter sent someone to swim.'

  b.   *Péter küldött [PRO úsz-ni]'   HUN
            'Peter sent to swim.'

3.3.2.2. Agreement in the infinitival clause

Infinitival clauses resemble possessive noun phrases in having an optional dative subject, since the possessor can also be assigned dative as was shown by Szabolcsi (1981, 1994). According to her analysis as modified by Kayne (1993), a nominative possessor in the Spec of AgrP moves into the Spec of DP, where it is assigned dative case. This position also serves as an 'escape hatch', from which the possessor can move into the matrix clause.

(56)a.　　　Lát-om [$_{DP}$ az [$_{AgrP}$ Anna　asztal-á-t]]　　　　　　　　HUN
　　　　　　see-1SG　the　　　Anna.NOM table-3SG-ACC
　　　　　　'I see Anna's table.'

　　b.　　　Látom [$_{DP}$ Anná$_i$-nak　az [$_{AgrP}$ e̲$_i$ asztal-á-t]]　　　　　　HUN
　　　　　　see-1SG　Anna-DAT　the　　table-3SG-ACC
　　　　　　'I see Anna's table.'

　　c.　　　Annának$_i$ látom [$_{DP}$ e̲$_i$ az [$_{AgrP}$ e̲$_i$ asztalát]]　　　　　　HUN

　　d.　　　[$_{DP}$ e̲$_i$ Az [$_{AgrP}$ e̲$_i$ asztalát]$_j$ látom Annának$_i$ e̲$_j$　　　　HUN

We will also follow Szabolcsi's (1992, 1994) and Kayne's (1993) analysis in assuming that the head of the DP has the same function as the head of the CP, and will assume that, analogously to dative assignment to the Spec of DP by D within the DP, C can assign dative to the Spec of CP in infinitival clauses.

(57)a.　　　Lehetett [$_{CP}$Péter$_i$-nek [$_{AgrP}$ e̲$_i$ úsz$_j$-ni-a [$_{VP}$e̲$_i$ e̲$_j$]]]　　　　HUN
　　　　　　was-possible Peter-DAT　　　swim-INF-3SG
　　　　　　'It was possible for Peter to swim.'

　　b.　　　Lehetett [$_{CP}$ Péter-nek$_i$ [$_{TP}$ e̲$_i$ úsz$_j$-ni [$_{VP}$ e̲$_i$ e̲$_j$]]]　　　　HUN
　　　　　　'It was possible for Peter to swim.'

　　c.　　　Péter-nek$_i$ lehetett [$_{CP}$ e̲$_i$ úsz-ni(-a)]　　　　　　　　HUN
　　　　　　'For Peter, it was possible to swim.'

　　d.　　　Lehetett [$_{CP}$ PRO úsz-ni]　　　　　　　　　　　　HUN
　　　　　　was-possible　swim-INF
　　　　　　'It was possible to swim.'

　　e. Lehetett [$_{CP}$ pro̲ úsz-ni-a]　　　　　　　　　　　HUN
　　　　　'It was possible for him/her to swim.'

In Hungarian, nominative can be assigned to a possessor in a noun phrase or to a subject in a tensed clause; the Spec of AgrP in an infinitival is, however, not a possible locus for nominative assignment, so the embedded subject has to move into the Spec of CP to receive dative, as in (57a). Then the subject can move on into the matrix clause, similarly to dative

possessors, cf. (57c). Note that, unlike possessive NPs, the presence of agreement is not even necessary for there to be dative assignment in the infinitival clause, cf. (57b). Thus a matrix predicate is free to select either an AgrP or a TP (within or without the CP) as its complement. If the complement clause is a TP, which is a possible option for some verbs, and the only one for others as will be seen below, the subject can have no case assigned in the Spec of TP on the one hand, and has no Spec of CP to move into for case assignment, on the other. Since the Spec of VP is not governed by V, it can only be filled by the ungoverned empty category PRO, as in (57d).

Note finally that there is an interesting correlation between the behavior of pronouns in Finnish and Hungarian nonfinites, among others. In Finnish, only pronominal subjects require that the verb carry possessive suffixation, and then the pronouns can be dropped, cf. (41), (45), (48a), (49a). In Hungarian, pro-drop is in general possible across all persons and numbers only if the pronoun is in the nominative. It follows then that the covert pronouns in structures like (57e) must be in the Spec of AgrP.

3.3.2.3. Subject control construction

Object control verbs behave as expected, see (55), but subject control structures have peculiar properties.

Type A: matrix verb + infinitival clause
In this type of complementation the matrix predicate takes a Tense Phrase with a PRO subject controlled by the matrix subject, and the infinitive follows the matrix verb in the neutral order of constituents.

(58)   Péter szeret [$_{TP}$ úsz-ni$_i$ PRO e_i a Dunában]   HUN
            Peter likes   swim-INF   the Danube.INE
            'Peter doesn't like to swim in the Danube.'

Verbs like szeret 'like' select a complement clause without a C-projection, consequently no overt (dative) subject is possible. Verbs of this type are imád 'love', fél 'fear', siet 'hurry', igyekszik 'strive', etc., and almost all predicative adjectives (e.g., hajlandó 'willing', köteles 'obliged').

Type B: infinitive + matrix verb
This subgroup contains verbs that follow the infinitive in the neutral order of constituents, as in (59), where the embedded infinitive is claimed to raise onto the matrix verb.

(59)   Péter [$_{VP}$ úsz-ni$_j$ akar [$_{TP}$ [$_T e_j$ [$_{VP}$ PRO e_j a Dunában]]]   HUN
            Peter   swim-INF wants   the Danube-ILL
            'Peter wants to swim in the Danube.'

Verbs of this class are tud, bír 'can, be able to', mer 'dare', óhajt, kíván 'wish', etc., as well as more 'auxiliary-like' verbs like fog 'will', szokott 'used to', or talál 'happen to'.[13]

In contrast to Type A, see (60a-b), verbs of Type B can split an infinitive with prefixal preverb if in the neutral order, cf. (60c). Note that Type B verbs cannot be preceded by a preverb+infinitive sequence in the neutral sentence, cf. (60d).

	PREV	MTRX V	INF	
(60)a. *Péter	át	szeret	úsz-ni a Duná-n	HUN
Peter	across	likes	swim-INF the Danube-SUPESS	

b. Péter   szeret   át-úszni a Dunán   HUN
'Peter likes to swim across the Danube.'

c. Péter   át   akar   úsz-ni a Duná-n   HUN
Peter   across   wants   swim-INF the Danube-SUPESS
'Peter wants to swim across the Danube.'

d. *Péter   át-úszni   akar   a Duná-n   HUN

No satisfactory account of the phenomenon of 'preverb climbing' has been given, but an interesting analysis in Autolexical Syntax has been suggested by Farkas and Sadock (1989), relying on a requirement that preverbs be adjoined to finite forms of auxiliary-like verbs.

4. External relations

4.1. Tensed complement clauses

4.1.1. Positions

Tensed clauses in Finnish are placed finally and cannot vary their positions. In Hungarian, topic positions are generally available for clauses, as seen in (61a-b), where both Péter and the clause are clearly in topic.

(61)a.   [Hogy Anna olvasta a könyv-et] Péter el-mondta nekünk   HUN
           that Anna read   the book-ACC Peter PRF-said to.us

b.   Péter [hogy Anna olvasta a könyv-et] el-mondta nekünk   HUN
            'That Anna read the book, Peter has told us.'

The question arises why no tensed clause can occur in the focus position if any maximal phrase can move there. Note that the intended meaning is quite possible and, as is shown below in (69a), is available in a different construction type.

(62)   *Péter [hogy Anna olvasta a könyv-et] mondta el nekünk   HUN
           'It is (the fact) that Anna had read the book that Peter told us.'

The answer that is suggested in Kenesei (1994) is based on a requirement of prosodic phonology, viz., that the strict hierarchy of prosodic constituents must be observed. A focussed phrase forms a lower level constituent, a Phonological Phrase, with the obligatorily unstressed inflected verb that immediately follows it. A tensed clause, however, must by definition be an Intonational Phrase, which, as a higher level constituent containing Phonological Phrases, cannot be contained by a Phonological Phrase.

4.1.2. Case-marking and expletives

Tensed clauses per se cannot be overtly case marked in any of the languages in this group.

(63) Jussi sanoi [että Matti luki sen kirjan]   FIN
      Jussi said   that Matti read that book.GEN
      'Jussi said that Matti had read that book.'

(64) Péter el-mond-t-a   [hogy Anna olvasta a könyvet]   HUN
      Peter PRF-said-PST-3SG.DEF that Anna read   the book.ACC
      'Peter said that Anna had read the book.'

But note inflection in Hungarian, which shows whether the object is definite or, if there is one, indefinite.

(65)a. Péter el-mond-t-a   a   mesé-t   HUN
        Peter PRF-say-PST-3SG.DEF the story-ACC
       'Peter told the story.'

   b.   Péter el-mond-ott   egy mesé-t   HUN
        Peter PRF-say-PST.3SG.INDEF a story-ACC
        'Peter told a story.'

   c.   Péter itt lak-ott   HUN
        Peter here live-PST.3SG.INDEF
        'Peter lived here.'

Since in (64) the definite conjugation has to be used, there must be object agreement between the verb and the clause or its surrogate, similarly to (65a). We return to this issue directly.
    Both Finnish and Hungarian apply optional pronominal expletives in construction with complement clauses.

(66)a. Jussi tarkoitti sitä   [että Matti luki sen kirjan]   FIN
        Jussi meant   it-PRTV that Matti read that book-GEN
        'Jussi meant that Matti had read that book.'

   b.   Jussi puhui siita" [etta" Matti luki sen kirjan]   FIN
        Jussi talked it-ELA that   Matti read that book-GEN
        'Jussi talked about it that Matti had read that book.'

   c.   Péter el-mondta az-t [hogy Anna olvasta a könyv-et]   HUN
        Peter PRF-said it-ACC that Anna read   the book-ACC
        'Peter said that Anna had read the book.'

   d.   Péter beszélt *(ar-ról)[hogy Anna olvasta a könyv-et]   HUN
        Peter spoke   it-ELA that Anna read   the book-ACC

'Peter spoke about it that Anna had read the book.'

In analyzing Hungarian expletive-clause construction, it is worth noticing that even though the matrix verb may be transitive, the pronominal in the accusative and the clause cannot be substituted for by an NP, which shows that the matrix verb is subcategorized for a clause rather than an NP.

(67)a.   Anna az-t   hisz-i   [hogy Eszter okos]   HUN
           Anna it-ACC think-3SG.DEF that Esther intelligent
           'Anna thinks that Esther is intelligent'

     b.   *Anna [Eszter okosság-á-t]   hiszi   HUN
            Anna   Esther intelligence-3SG-ACC thinks
            '*Anna thinks Esther's intelligence.'

We assume here that every tensed complement clause is accompanied by an expletive, which by definition has to be case marked. The expletive is thus in a CHAIN with the clause, which is made visible by case marking the expletive so it could be assigned a thematic role. The expletive disregarded in the semantic interpretation, which takes the clause to be in the surface position of the expletive, cf. Chomsky (1986, 1993). Subject and object expletives, like all pronominals in nominative and all singular ones in accusative, can be dropped, though not preverbally, when they are in focus positions in Finnish, as in (68), or in focus, like in (69a), and in topic, as in (69b), in Hungarian.

(68)a.   <u>Sitä</u>-(hän) Jussi tarkoitti [että Matti luki sen kirjan]   FIN
           it.PRTV-FOC Jussi meant   that Matti read that book-GEN
           'What Jussi said was that Matti had read that book.'

     b.   <u>Sitä</u>-kö Jussi tarkoitti [että Matti luki sen kirjan]?   FIN
           it.PRTV-Q/F
           'Did Jussi say that Matti had read that book (or was it something different)?'

(69)a.   Péter <u>azt</u>   mondta el [hogy Anna olvasta a könyv-et]   HUN
           Peter it.ACC said PRF that Anna read   the book-ACC
           'What Peter said was that Anna had read the book.'

     b.   Azt <u>Péter</u> mondta el [hogy Anna olvasta a könyv-et]   HUN
           'It was Peter that said that Anna had read the book.'

4.2. Verb classes

Below a more or less semantically based classification is attempted in Finnish and Hungarian, but note that in the discussion of infinitival clauses representative verbs of the classes discussed here were listed alongside the construction types introduced there.

4.2.1. Auxiliaries

Finnish has two unquestionable auxiliaries, the negation verb <u>ei</u> and the tense/aspect auxiliary <u>olla</u> 'be'. The negative verb <u>ei</u> is a defective verb: it is inflected for number and person, but not for tense or mood, which are shown by either the other auxiliary <u>olla</u> or the main verb, and has no nonfinite forms.[14] Their order is fixed, which is indicative of the hierarchy of the functional categories Agr and Tense.

 Hungarian has a tense auxiliary expressing future in construction with nonperfective verbs, though it often occurs in the colloquial language with perfective verbs as well. <u>Fog</u> 'shall, will' is defective, it is inflected only in the present tense and has no nonfinite forms. The only other verb that qualifies as a tense auxiliary is <u>szokott</u> 'used to (do), usually (does)', inflected only in the past tense, but with reference to regular actions in both past and present time. For more on their structure, see section 3.3.2.3. Since both verbs behave as Type B verbs in 3.3.2.3, i.e., they split infinitives, they are best treated like the rest of this class.

 Both languages have auxiliary-like verbs expressing necessity and possibility, which have also uses as main verbs, cf. Vilkuna (1989) for Finnish, and Kálmán et al. (1986) for Hungarian. As Vilkuna (1989:211) observed, whichever is placed first has an epistemic reading, while the one in its scope retains its non-auxiliary sense.

(70)a. On täytynyt voida pelata.   FIN
      be.3SG must.PRT can.INF play.INF
      '(S)he must have been able to play.'

  b. On   voinut täytyä pelata.   FIN
      be.3SG can.PRT must.INF play.INF
      '(S)he may have been forced to play.'

Subjects of the embedded infinitivals can surface as genitive NPs placed in the neutral sentence in the matrix topic/subject position.

(71)   Jussin täytyi   lukea   se kirja.   FIN
      Jussi.GEN must.PAST.3SG read.INF1 that book
      'Jussi had to read that book'

The corresponding Hungarian auxiliaries have dative subjects, which is due to the structure of the infinitival clause, see 3.3, but only the verb of 'necessity' can be used in both the epistemic and deontic senses in such constructions.

(72)a. Annának úsznia kell.   HUN
      Anna.DAT swim.INF.3SG must
      'Anna must swim/be swimming.'

  b. Annának lehet úsznia.   HUN
      Anna.DAT may swim.INF.3SG
      'Anna may (= is allowed to) swim.'

Epistemic possibility is expressed either by the same verb governing a tensed complement clause or by a derivational affix on the main verb.

(73)a.   Lehet [hogy Anna úszik]   HUN
             may.be that Anna swims

    b.   Anna úsz-hat   HUN
                swim-POSS.3SG
              'Anna may be swimming.'

4.2.2. Volitional verbs

In both languages volitional verbs govern infinitives if the subjects of the matrix and the
embedded clauses are identical. If, however, they are different, Finnish can apply the
participial construction discussed in section 3.3.1.5, in addition to a tensed clause, while
Hungarian can only make use of a tensed complement clause with the verb in subjunctive.

(74)a.   Mikko haluaa pelata tennistä.   FIN
              Mikko wants play.INF tennis.PRTV

    b.   Mikko haluaa [minun pelaavaan   tennistä]   FIN
                             I.GEN play.PRT.GEN tennis.PRTV
              'Mikko wants me to play tennis.'

(75)a.   Miki teniszez-ni akar   HUN
              Mike tennis.play-INF wants
              'Mike wants to play tennis.'

    b.   Miki azt akarja [hogy tenisz-ezz-ek]   HUN
              Mike it.ACC wants that tennis.play-SUBJ-1SG
              'Mike wants me to play tennis.'

Neither language has a structure similar to accusative-with-the-infinitive or exceptional case
marking. Note that Finnish uses the 1st infinitive in this complement type, cf. 3.3.1, while
Hungarian verbs of this class are of Type B in 3.3.2.3, i.e., they split the infinitive.

4.2.3. Verbs of knowledge, thinking, and saying

In Hungarian they can take an infinitival exceptionally. In Finnish, however, that seems to be
the rule, in addition to the choice available in both languages, i.e., tensed clauses, and the
option of participial clauses in the case of some verbs.

(76)a.   Mikko luulee [minun pelaavaan   tennistä]   FIN
              Mikko thinks I.GEN play.PRT.GEN tennis.PRTV
              'Mikko thinks that I am playing tennis.'

    b.   Anna elfelejtett a   boltba   men-ni   HUN
              Anna forgot   the shop.ILL go-INF
              'Anna forgot to go to the shop.'

26

4.2.4. Verbs of perception

Besides tensed clauses, the participial construction can be applied in Finnish, and in Hungarian a construction similar to the infinitive-with-the-accusative, though it is doubtful whether it is not rather an object control infinitive.

(77)	Anna látta Pétert a boltba menni	HUN
	Anna saw Peter.ACC the shop.ILL go.INF	
	'Anna saw Peter go to the shop.'	

4.2.5. Raising verbs

Verbs of the class of näyttää, näkyä 'seem', tuntua 'feel, seem', kuulua 'sound, seem', and vaikuttaa 'appear' all take a participial clause -- without the genitive subject, of course. Their Hungarian counterparts látszik 'seem', tűnik 'appear', etc., take infinitivals, but the surface order of the infinitive and the main verb resembles that of neither subject control subgroup in 3.3.2.3, since the preverb+verb units can precede the main verb. In both languages subjects are raised and assigned nominative in the matrix clause.

(78)a.	Mikko näyttää pelaavaan tennistä	FIN
	Mikko seems play.PRT.GEN tennis.PRTV	
	'Mikko seems to play tennis.'	

b.	Miki meg-érteni látszott a feladatot	HUN
	Mike PREV-understand seemed the task.ACC	
	'Mike seemed to understand the task.'	

4.2.6. Verbs of asking

Verbs of asking in Finnish and some verbs of causation in both languages govern objects and infinitival clauses, which in Finnish are invariably formed with the 3rd infinitive case marked for illative. The others have tensed complements.

(79)a.	Mikko pyysi minua pelamaan tennistä	FIN
	Mikko asked I.PRTV play.3INF.ILL tennis.PRTV	
	'Mikko asked me to play tennis.'	

b.	Anna úszni küldte Pétert	HUN
	Anna swim.INF sent Peter.ACC	
	'Anna sent Peter to swim.'	

For more verbs in this class in Finnish, see the object control verbs in section 3.3.1.3.

4.2.7. Causative constructions

The languages in this family use morphological means to express causation: in Hungarian

that is the sole option; in Finnish analytic causative constructions are also widespread. Causative verbs are formed by affixing verbs and changing their argument structures.

(80)a.   Anna maksoi   laskun   FIN
              Anna pay.PAST.3SG bill-GEN/ACC
              'Anna paid the bill.'

    b.   Jussi maksa-tt-i   Anna-lla laskun
              Jussi pay-CAUS-PAST.3SG Anna-ADE bill-GEN/ACC
              'Jussi made Anna pay the bill.'

(81)a.   Jussi puhu-tt-i   kielenopastaan   kauan   FIN
              Jussi talk-CAUS-PAST.3SG language-guide.3SG long
              'Jussi made his informant talk a long time.'

    b.   Jussi pani kielenoppaansa   puhumaan kauan.   FIN
              Jussi put language-guide.GEN/ACC.3SG talk.INF3 long
              'Jussi made his informant talk a long time.'

(82)a.   Anna kifizette a számlát   HUN
              Anna paid   the bill.ACC
              'Anna paid the bill.'

    b.   Anna kifizet-tet-te   Péter-rel a számlát   HUN
               Anna pay-CAUS-PAST.3SG Peter-INST the bill.ACC
              'Anna had Peter pay the bill.'

    c.   Anna beszél-tet-te   Péter-t   HUN
               Anna talk-CAUS-PAST.3SG Peter-ACC
              'Anna made Peter talk.'

5. Constituents of embedded clauses in matrix sentences

5.1. Infinitivals

In both Finnish and Hungarian there is indication that constituents in embedded clauses must be accessible to matrix verbs or moved into the main clause. According to Vainikka (1989:164ff), the case of an embedded object in Finnish can be determined by the case and mood potential of matrix verb. In non-imperative moods, objects of completed actions receive the genitive, while in imperative they are marked nominative.

(83)a.   Maija luki kirja-n/*kirja   FIN
              Maija read book-GEN/*NOM
              'Maija read a/the book.'

    b.   Lue kirja/*kirja-n!   FIN
              read book-NOM/*GEN

'Read a/the book!'

If the object is within an infinitival clause, it has genitive. However, if the main verb is imperative, the object of the infinitival is marked nominative. The examples in (84) contain 1st infinitives, those in (85) 3rd infinitives.

(84)a.   Matti antoi Juka-n   syö-dä suklaa-n   FIN
           Matti let   Jukka-GEN eat-1INF chocolate-GEN
           'Matti let Jukka eat the chocolate.'

     b.   Anna   Juka-n   syö-dä suklaa   FIN
           Let.IMP Jukka-GEN eat-1INF chocolate.NOM
           'Let Jukka eat the chocolate!'

(85)a.   Pekka kävi osta-ma-ssa solmio-n/*solmio   FIN
           Pekka went buy-3INF-INE tie-GEN/*NOM
           'Pekka went to buy a tie.'

     b.   Käy   osta-ma-ssa solmio/*solmio-n!   FIN
           go.IMP buy-3INF-INE tie-NOM/*GEN
           'Go (to) buy a tie!'

It looks as if the imperative on the matrix verb makes it possible for the embedded verb to assign nominative case to its object. But note here on the one hand that the range of nominative marked (or, for that matter, morphologically unmarked) NPs is far from being confined to objects of imperatives; the same case surfaces in the subjects impersonal passives and necessive verbs. On the other hand, nonfinite complement clauses do not in general seem to have the case-marking potential of tensed complements; their objects are marked according to the case-marking properties of the (tensed) matrix verb. Further research of this and related problems are outside the scope of this discussion.

    A similar problem is encountered in Hungarian, where constituents of infinitival clauses can determine agreement features of the matrix verb. In (86) the properties of definite conjugation within the VP are illustrated. (87a) shows that infinitival clauses do not trigger definite conjugation. However, if the embedded clause has an object, it agrees with the matrix verb in terms of definiteness as seen in (87a-b).

(86)a.   Szeret-ünk   egy mesé-t   HUN
          like-1PL.INDEF   a story-ACC
          'We like a story.'

     b.   Szeret-jük   a mesé-t   HUN
          like-1PL.DEF the story-ACC
          'We like the story.'

(87)a.   Szeret-ünk   úsz-ni   (*szeret-jük)   HUN
          like-1PL.INDEF swim-INF
          'We like to swim.'

b.   Szeret-ünk   monda-ni egy mesé-t   (*szeret-jük)   HUN
         like-1PL.INDEF tell-INF a story-ACC
         'We like to tell a story.'

c.   Szeret-jük monda-ni a mesé-t   (*szeret-ünk)   HUN
         can-1PL.DEF tell-INF the story-ACC
         'We like to tell the story.'

In the absence of satisfactory proposals in the literature on the subject, we may speculate that object agreement is dependent on the functional category Agr_O, which is missing in nonfinite clauses as is shown by the absence of definite conjugation there. It can, however, be a constituent of the (tensed) matrix clause, which in turn has no object of its own to fill in the Spec of Agr_O position. Therefore, the embedded object, which receives its case from the embedded verb, raises into the matrix Spec of Agr_O, triggering definite agreement there, or, alternatively, its features percolate there, a proposal that might be considered also in the case of Finnish embedded objects in imperative matrix clauses.

5.2. Extraction

Both Vilkuna (1989) and Vainikka (1989) observe that the 3rd infinitive allows raising the VP into focus position, but the 1st infinitive does not. In (88a), taken over from Vainikka (1989:257), the infinitival clause is in preposed focus position, with the focusing clitic placed on the first (phonological) word, while (88b) illustrates the clitic in its structurally less unusual phrase-final position. (88c) shows a 1st infinitive in the same focus position.

(88)a.   (?)[Solmion-ko osta-ma-ssa]$_i$ Pekka kävi $\underline{e}_i$?   FIN
         tie.GEN-Q buy-3INF-INE Pekka went
         'Was it to buy a tie that Pekka went?'

    b.   [Solmion osta-ma-ssa-ko]$_i$ Pekka kävi $\underline{e}_i$?   FIN
         tie.GEN buy-3INF-INE-Q   Pekka went
         'Was it to buy a tie that Pekka went?'

    c.   ?*[Suklaata(-ko) varasta-a(-ko)]$_i$ Jukka yritti $\underline{e}_i$?   FIN
         chocolate.PRTV-Q steal-1INF-Q   Jukka tried
         'Was it to steal the chocolate that Jukka tried?'

Focus or wh-raising out of an embedded infinitival is generally possible.

(89)a.   Jussi sanoi [Peka-n luke-nee-n   sen kirjan]   FIN
         Jussi said   P-GEN read-PRT.PST-GEN that book.ACC
         'Jussi said that Pekka had read that book.'

    b.   Kenen$_i$ Jussi sanoi [$\underline{e}_i$ lukeneen sen kirjan]?   FIN

who-GEN
'Who did Jussi say had read the book?'

    c.   Mitä$_i$ Jussi sanoi [Pekan lukeneen e$_i$] ?   FIN
              what-PRTV
              'What did Jussi say Pekka had read?'

Extraction from tensed clauses is also possible in both languages, though it is much freer in Hungarian.

(90)a.   Mitä$_i$ [Jussi sanoi [että Pekka luki e$_i$] ?   FIN
              what.PRTV Jussi said   that Pekka read
              'What did Jussi say Matti had read?'

    b.   Sen kirjan$_i$(-pa) [Jussi sanoi [että Matti luki e$_i$]]   FIN
              that book.GEN-FOC Jussi said   that Matti read
              'It's that book that Jussi said Matti had read.'

(91)a.   Mi-t$_i$ hitt   Péter [hogy Anna olvasott e$_i$] ?   HUN
              what-ACC believed Peter that Anna read
              'What did Petert believe that Anna had read?'

    b.   Péter ezt a könyvet$_i$ hitte [hogy Anna olvasta e$_i$]   HUN
              Peter this the book.ACC believed that Anna read
              'It's this book that Peter believed that Anna had read.'

In Finnish the moved wh-phrase preserves the case it is assigned in the embedded clause, cf. (89b-c). In Hungarian case change is possible: the extracted subject below is marked accusative in the higher clause. Without such a case change the sentence would be unintelligible, although not all dialects or registers find all raising constructions acceptable.

(92)a.   Ki-t$_i$ hitt Péter [hogy e$_i$ olvasta a könyvet] ?   HUN
              who-ACC believed Peter that read the book.ACC
              'Who did Peter believe had read the book?'

    b.   *Ki$_i$ hitt Péter (azt) [hogy e$_i$ olvasta a könyvet] ?   HUN
               who-NOM   it.ACC

Similarly to Finnish, the raised wh-phrase must move across the Spec of AGRoP in the matrix clause, since it triggers indefinite conjugation on the matrix verb, cf. the verb form in (91b).
    Morphologically marked cases remain unchanged in both languages.

(93)a.   Kenestä$_i$ Jussi sanoi [että Matti kirjoitti e$_i$] ?   FIN
              who.ELA Jussi said   that Matti wrote
              'Who did Jussi say Matti wrote about?'

b.   Ki-vel$_i$ akarja Péter [hogy Anna találkozzon e$_i$] ?   HUN
            who-INS wants Peter that Anna meet.SUBJ.3SG
            'Who does Peter want Anna to meet?'

Since the raised constituent occupies the position of the expletive in the matrix clause, no expletive can occur along with the raised subject.

(94)a.   *Ketä$_i$ Jussi sanoi sitä [että e$_i$ luki sen kirjan]   FIN
             who.PRTV Jussi believed it.PRTV that read that book

b.   *Ki-t$_i$ hitt Péter azt [hogy e$_i$ olvasta a könyvet] ?   HUN
            who.ACC believed Peter it.ACC that read the book

References

Brody, M. (1990). "Remarks on the order of elements in the Hungarian Focus Field," in: I. Kenesei (ed.), Approaches to Hungarian: Vol. 3., Szeged: JATE, 95-121.

Chomsky, N. (1986). Knowledge of language, New York: Praeger.

Chomsky, N. (1993). "A minimalist program for linguistic theory," in K. Hale & S.J. Keyser (eds.), The view from Building 20, Cambridge: The MIT Press, 1-52.

Dalmi, G. (1981). "A case of reanalysis in a 'topic-prominent' language," Acta Linguistica Hungarica 31:57-85.

Farkas, D.F., and J.M. Sadock. (1989). "Preverb climbing in Hungarian, Language 65., 318-338.

Harms, R.T. (1965). Estonian Grammar. Bloomington, Ind.: Indiana University Press,

Help, T. (1991). "Complementation in Estonian," in: N. Vincent and K. Börjars (eds.), Complement structures in the languages of Europe: More preliminary surveys, EUROTYP WP III:2, Strasbourg: ESF.

Holmberg, A. (1989). "Verb movement in Finnish," in J. Niemi (ed.), Papers from the 11th Scandinavian Conference of Linguistics, Joensuu: University of Joensuu.

Holmberg, A., and U. Nikanne (eds.) (1993). Case and other functional categories in Finnish syntax, Berlin: Mouton de Gruyter.

Horvath, J. (1986). Focus in the theory of grammar and the syntax of Hungarian, Dordrecht: Foris.

Kálmán, L., G. Prószéky, A. Nádasdy, and C.G. Kálmán (1986). "Hocus, Focus and verb types in Hungarian infinitive constructions," in: W. Abrham and S. de Meij (eds.), Topic, Focus and configurationality, Amsterdam: John Benjamins, 129-142.

Karlsson, F. (1983). Finnish grammar, Werner Söderström, Porvoo.

Kayne, R. (1993) "Toward a modular theory of auxiliary selection," Studia Linguistica 47.

Kenesei, I. (1992.) "Functional categories in Finno-Ugric," in K. Borjars and N. Vincent (eds.) Functional categories in complementation, EUROTYP WP III:2, Strasbourg: ESF

Kenesei, I. (1994). "Subordinate clauses," in: Kiefer and É. Kiss.

Kiefer, F., and K.É. Kiss (eds.) (1994). The syntactic structure of Hungarian (Syntax and Semantics, Vol. 27), San Diego: Academic Press.

Kiss. K.É. (1981). "Structural relations in Hungarian, a 'free' word order language," Linguistic Inquiry 12, 187-218.

Kiss, K.É. 1987. <u>Configurationality in Hungarian</u>, Dordrecht: Reidel.

Kiss. K.É. (1994). "Sentence structure and word order," in: Kiefer and É. Kiss.

Komlósy, A. (1994). "Complements and adjuncts," in: Kiefer and É. Kiss.

Korhonen, R. (1993). <u>Buts about Conjunctions</u>, Helsinki: Suomalaisen Kirjallisuuden Seura.

Laitinen, L., and M. Vilkuna (1993). "Case marking in necessive constructions and split intransivity," in: Holmberg and Nikanne (1993).

Marácz, L.K. (1989). <u>Asymmetries in Hungarian</u>, unpublished PhD dissertation, Groningen: University of Groningen.

Mitchell, E. (1991). "Evidence from Finnish for Pollock's theory of IP," <u>Linguistic Inquiry</u> 22:373-379.

Rizzi, L. (1990). <u>Relativized minimality</u>, Cambridge: The MIT Press.

Sulkala, H., and M. Karjalainen. 1992. <u>Finnish</u>, Routledge, London.

Szabolcsi, A. (1983). "PRO and cons: A double dealer's account," Unpublished manuscript, Institute of Linguistics, Budapest.

Szabolcsi, A. (1992). "Subordination: Articles and Complementizers," in: I. Kenesei and Cs. Pléh (eds), <u>Approaches to Hungarian, Vol. 4</u>, Szeged: JATE, 123-138.

Szabolcsi, A. (1994). "The Noun Phrase," in: Kiefer and Kiss.

Tauli, V. 1973. <u>Standard Estonian Grammar, Vol I</u>, Uppsala: University of Uppsala.

Tauli, V. 1983. <u>Standard Estonian Grammar, Vol II</u>, Uppsala: University of Uppsala.

Tompa, J. (ed.) (1968). <u>Ungarische Grammatik</u>. The Hague: Mouton.

Vainikka, A. M. 1989. <u>Deriving syntactic representations in Finnish</u>, unpublished PhD dissertation, Amherst: University of Massachusetts.

van Steenbergen, M. (1991). "Long-distance binding in Finnish," in J. Koster and E. Reuland (eds.), <u>Long-Distance Anaphora</u>, Cambridge: Cambridge University Press, 231-244.

Vilkuna, M. 1989. <u>Free word order in Finnish</u>, Helsinki: Suomalaisen Kirjallisuuden Seura.

Vilkuna, M. (to appear). "Discourse configurationality in Finnish," in: K.É. Kiss (ed.), <u>Discourse Configurationality Languages</u>, London: Oxford University Press.

1. Words in italics mark focussed constituents.

2. For more on the negative auxiliary, see section 4.2.
    Harmonizing vowels in affixes are marked by capital letters.

3. (18b) is from Vilkuna (1989:110).

4. The observation that embedded foci cannot occur in factive clauses (cf. Vilkuna 1989) is probably due to focus being a wide scope quantifier in Finnish with scope over the matrix clause. Such a reading is available in complements of verb of saying, but for those of factive predicates, cf.:

(i)   *On outoa [että <u>sen kirjan</u>   Jussi luki]   FIN
         is odd   that this book.GEN Jussi read
         'It is odd that it is this book that Jussi read.'

5. This movement of Neg is restricted to purposive clauses. The moved negative has a scope wider than its counterpart left in place, cf. (i)-(ii), which are not synonymous.

(i)   ... hogy Eszter se (=is+ne) értse   HUN
         that Esther also.not understand
   'so that Esther would also be one that does not understand'

(ii) ... ne-hogy Eszter is értse   HUN
         'so that it wouldn't be the case that Esther also understands.'

6. The occurrence of <u>että</u> is optional in Colloquial Finnish, but ruled out by prescriptive grammarians.

7. In matrix clauses a wh-phrase followed by -<u>kO</u> signals an echo-question. Note that -<u>kO</u> can be accompanied by the (other) focussing clitic -<u>hAn</u>.

8. The source of most of the examples below is Karlsson (1983), but I have also taken several from Vainikka (1989) and Vilkuna (1989), which have provided most of the verb classes.

9. Maria Vilkuna (personal communication).

10. For more data and analysis, see van Steenbergen (1991).

11. Cf. Karlsson (1983), Sulkala and Karjalainen (1992).

12. This classification and the lists are from Kálmán et al. (1986). For more on subject control verbs, see below.

13. Unlike Finnish, complement clauses of neither verb class resemble NP objects: some verbs do not even allow the question verb mit 'what-ACC' under any interpretation, cf. *Mit igyekszik? 'What is he striving?', and others do so only under a different interpretation, cf. Mit szeret? 'What does he like?' ('What does he like to do?')

14. The paradigm is as follows (cf. Karlsson 1983:135ff):

kerro-n   e-n kerro
tell-1SG   NEG-1SG tell
'I tell'   'I don't tell'
kerro-i-n   e-n   kerto-nut
tell-PST-1SG   NEG-1SG tell-PST.PART
'I told'   'I didn't tell'
ole-n osta-nut   e-n   ole osta-nut
be-1SG buy-PST.PART   NEG-1SG be buy-PST.PART
'I have bought'   'I haven't bought'
ol-i-n   osta-nut   e-n   ol-lut   osta-nut
be-PST-1SG buy-PST.PART   NEG-1SG be-PST.PART buy-PST.PART
'I had bought'   'I hadn't bought'
osta-isi-n   e-n   osta-isi
buy-COND-1SG   NEG-1SG buy-COND
'I would buy'   'I wouldn't buy'
ol-isi-n osta-nut   e-n   ol-isi osta-nut
be-COND-1SG buy-PST   NEG-1SG be-COND buy-PST.PRT
'I would have bought'   'I wouldn't have bought '