

Decliticization in Old Estonian*

Joel A. Nevis

1. Introductory Remarks

Agglutination is a universal diachronic process among the languages of the world. As one of the oldest and best-known theories of the genesis of affixes, it has been used widely as a method of reconstructing word order -- as in Givon's (1971) well-known slogan "Today's morphology is yesterday's syntax." Givon's methodology has been constrained by some (e.g. Anderson 1980, Comrie 1980, and others) and has been refuted by yet others. In general, though, linguists have accepted the agglutinative cycle of words, whereby affixes are historically former words which have lost their independence and cliticized onto a neighbor, inevitably later fusing into the host as an affix.

According to Givon's principle, an affix continues the positioning within the word that its word source had within the phrase. Comrie points out by way of criticism that some clitics exhibit a special attraction to the position after the first constituent of a clause -- a positioning not shared by full words. However, I have argued that these clitics are phonologically dependent syntactic words (Nevis 1985a); in addition, examples of full words occupying this "second position" slot are not uncommon (Nevis 1985a, Wackernagel 1982). The clitics in question are generally sentential in scope (Kaisse 1985), and are called 'second position' or 'Wackernagel-type' clitics. Second position clitics have a peculiar resistance to completing the agglutination cycle, so that Comrie's remarks are not to be rejected out of hand after all.

In Baltic Finnic one finds several Wackernagel-type clitics that have been diachronically stable. Interrogative *ko, informal *s, and emphatic *pa exist in most BF languages today as clitics, and continue that status from the parent language, Late proto-BF. In Estonian these morphemes have been lost as clitics, but instead of becoming affixes, they have either decliticized into separate words or disappeared altogether.

1.1. On the Agglutination Hypothesis

I adopt here the terminology of Jeffers and Zwicky (1980). By cliticization I mean the reanalysis of a word as a clitic. Decliticization is the reverse metanalytic reinterpretation of a clitic as a word. Affixation is intended here to be a diachronic process: the reanalysis of a clitic as an affix. Conversely, deaffixation is the change from a former affix to a clitic.

- | | | | | | | |
|-----|----|------|-----------------|--------|--------------|-------|
| (1) | a. | WORD | > | CLITIC | > | AFFIX |
| | | | cliticization | | affixation | |
| (2) | a. | WORD | < | CLITIC | < | AFFIX |
| | | | decliticization | | deaffixation | |

Examples of the agglutination cycle (i.e. (1) above) are numerous. Examples of loosening (i.e. (2) above) are rare. One such example can be found in Janda (1981), who examines the history of the English genitive marker 's, arguing that it is a clitic in Modern English with a source in Old English as an affix.

Janda argues that deaffixation in this instance came about in Middle English through the homophony of genitive -es and unstressed pronoun (h)ys 'his', e.g. my moder ys sake (see Janda 1981 for more examples and details of the analysis). Janda also suggests that, had it not been for this homophony and deaffixation, Middle English would have lost genitive -es along with all the other case endings (as has happened in the Northern British dialects — Janda 1981:fn.4). Janda's analysis is not uncontroversial;¹ Carstairs (1985), for example, has an alternative account of deaffixation in Middle English.

Jeffers and Zwicky (1980) likewise offer an analysis from reconstructed particles in Proto-Indo-European that putatively falsifies the "tacit assumption that that clisis is invariably one stage in an inexorable development toward the status of an affix or toward ultimate oblivion". Actually there is no evidence to prove the clitic status of the particles in their example — Second Position cannot be used as an indication of clitichood here (Nevis 1985a). Even Wackernagel (1892) acknowledged the availability of this slot for unstressed words in general (what he called quasi-enclitics).

Nevis (1985b) offers an instance of both deaffixation and decliticization of an inflectional morpheme in Northern Lappish.

There are other examples of deaffixation and decliticization in the literature, but these usually involve changes in the lexicon (i.e. they are derivational morphemes). Several these examples are discussed by Vesikansa (1977) for Finnish. A common example in many parts of Europe is the decliticization of -ism (see Ariste 1968-69). In English, Finnish, and Estonian, one can speak of all kinds of "isms", with ism itself having the meaning 'doctrine, theory'.

As a reaction to the Agglutination theory of the origin of affixes, Tauli (1953) tells us, Alfred Ludwig² postulated the Adaption theory, and later Jespersen (1922) the Secretion theory. Both theories entail metanalytical reanalysis. Underlying Ludwig's Adaptation theory is a reanalysis of derivational or emphatic elements as inflectional. Jespersen's Secretion theory involves a reanalysis of "one portion of an originally indivisible word as coming to acquire a grammatical significance" (1922: 77). The possibility of metanalytical reinterpretation in morpho-syntactic change also permits the change from bound morpheme (i.e. affix or clitic) to full word.

Old Estonian offers a further example of decliticization. In Old Estonian two Second Position Clitics, namely interrogative es and emphatic ep, are free words showing no phonological interaction with a preceding word. Following Ariste (1973) and Alvre (1976, 1981), I argue that these two words have their source in Proto-Baltic Finnic Second Position clitics *s and *pe.

1.2. On Clitics

A clitic is a morpheme (possibly morphologically complex) having a mixed word/affix status. This is to say that it has some properties of words and some properties of affixes. Both diachronically and synchronically the clitic appears to be intermediate between the word and the affix.

Continuing along the lines of previous work (Nevis 1985a), I adopt the position that clitics are not primitive units of languages. Rather they fall into two classes of derived phenomena: (phonologically) bound words and phrasal affixes. The former is a special kind of word, the latter a type of affix. The bound word, in particular, has the syntax of words, but the phonological properties of affixes.

The Finnish clitics -pa/-pä, -ko/kö, and -han/-hän are bound words, as argued by Nevis (1985a). Although positioned with respect to the sentence as a whole, these morphemes cannot stand alone as independent words. Their phonological subordination to a preceding word is demonstrated by the application of vowel harmony. Vowel harmony operates over the phonological word, never beyond. Thus it can be used as a test for clitic-hood in Finnish:

tuuli-han 'the wind, you know' --- *tuuli-hän
tyyli-hän 'style, you know' --- *tyyli-han

The Baltic Finnic clitic, as represented by Finnish, are Wackernagel-type, or Second Position (2p), clitics. These clitics are bound words that, in an otherwise free constituent order language, occur strictly positioned after the first constituent of the clause and enclitic on it. See section 2.1. for examples.

Second Position clitics (or actually Second Position bound words) have a particular resistance to affixation -- both to phrasal affixation and to regular affixation. I demonstrate this point with data from Old Estonian. The Proto-Baltic Finnic Second Position clitics inherited by Estonian show some instability, namely decliticization. On the basis of the Baltic Finnic data, I offer a general account of possible and probable developments for Wackernagel-type clitics.

2. Ep and Es in Estonian

There are no Second Position clitics in Modern Estonian. From the point of view of her sister languages, a gap exists in Estonian. To account for this gap, one assumes that decliticization has taken place only in Estonian. This analysis is supported by two kinds of evidence. There is first an argument based on complementarity -- where the other Baltic Finnic languages have 2p clitics, Old Estonian has full words. The second argument relies on shared relic forms in all the Baltic Finnic languages. Some support comes from a third source -- relic forms in Estonian alone.

2.1. Wackernagel's Law

Cognate morphemes in sister languages are Second Position, or Wackernagel-type, clitics. That is, they are phonologically bound words which are attached to the first constituent of a clause (no matter what that constituent may be). Corresponding to Estonian emphatic ep are emphatic clitics in the various sister languages:

(3) Finnish	-pa/-pä	Tule-pa kotiin come-EMP home
Karelian	-bo	midä-bo what-EMP (Ahtia 1936:9)
Lyydi	-bo	midä-bo what-EMP (Larjavaara 1979:109)

Similarly, the BF cognates to Estonian interrogative es include Finnish, Karelian, Lyydi, Vepsä -s, which indicates not interrogativity, but informality (i.e. -s is a register marker). I account for the semantic discrepancy below in section 3.4.

- | | | |
|-------------|-----|--|
| (4) Finnish | -s: | tule-s tänne
come IF here |
| Karelian | -s: | ottakkoa-s 'take (2PL IMP)
take(2PL)-IF (Ahtia 1936: 132) |

These are a subset of the various BF sentential clitics that obey Wackernagel's law. Other such clitics include BF -ko, northern BF -han/hän, Lyydi-Vepsä se, and a few more clitics (Penttilä 1957, Ahtia 1936).

- | | | |
|-------------|-----------|--|
| (5) Finnish | -han/-hän | anna-han mennä 'let her/him/it go'
give-HAN go |
| Votic | -ko | evät-ko s ^o 'don't they eat?'
not-Q eat (Ahlqvist 1858:5) |
| Lyydi | se | kod'ii se ruoh'tinu tulda en
home EMP dared come not
'Home I didn't dare (to) come'
(Larjavaara 1979: 116-17) |

On the basis of comparative evidence, we want to reconstruct for Proto-Baltic Finnic at least three Second Position clitics: emphatic *pa, informal *s, and interrogative *ko. The other clitics are more recent innovations. There are few traces of these clitics in Modern Estonian. For this reason one looks to ep and es, which correspond roughly in meaning and positioning, as continuers of the clitics.

Beyond the evidence presented in the following section, it is not entirely clear that *pa and *ko were true clitics and not just quasi-enclitics (i.e. stressless words) in the parent language. It turns out that their clitic-hood has no bearing on the decliticization analysis I present below, since clitic-hood can be established for Old Estonian on the basis of internal reconstruction.

2. Estonian ep

Ariste (1973) contends that Estonian affirmative emphasis marker ep is a direct continuation of Proto-Baltic Finnic clitic *pa. It appears in roughly the same sentential slot as -pa in other BF languages, and it has the same meaning. Ariste cites a number of examples from turn-of-the-century Estonian and from the modern dialects. I repeat select ones below; for a more complete listing I refer the reader to Ariste (1973).

Emphatic ep is generally located after the first constituent of the sentence, as in the following examples:

- | | |
|-----|---|
| (6) | selle kivi peal ep kolgitigi neid riideid |
| | this rock on EMP pounded these clothes |
| | 'on this stone one pounded the clothes' |
| | (Ariste 1973:33; originally from Saareste 1958) |

- (7) Mis ep saame näha
what EMP get see
'What do we get to see'
- (8) Need ep vist sinu omad ongi?
these EMP probably your own is-EMP
'These are probably your own?'
- (9) Siis ep ilmub Isakene, Tuleb taevast taadikene.
then EMP appears daddy comes sky-EL granddaddy
'Then Daddy appears, granddaddy comes from the sky.'
- (10) See ep siis tuli, et temal veel tihli sõbradele oli anda
there EMP then came that him still often friends-AL was give
'There then it came that he still often had a gift for friends'
- (11) See ep see on, mis suurem rahvahulk,
that EMP that is what larger crowd

et vanal viisil mõtleb, ära mõista ei või
that old-AD way-AD thinks understand not can

'That is that, what a larger crowd that thinks in the
old way cannot understand'

Most examples involve a one-word constituent at the beginning of the clause, but examples like (6) above show that multiword constituents can occur before ep as well. The location of ep in second position is not strict, however, as demonstrated by (12).

- (12) Täna näeb ta kirikus Hildat ja temale ta ep lilled
today sees he church-IN H. and her-AL he EMP flowers
viibki
brings-EMP
'Today he sees Hilda in church and to her he brings
flowers'

Thus, ep appears in the "third" slot in this example. Ariste further suggests that it can occur in sentence-initial position: see ep > ep see.

Not only has ep acquired phonological independence in its development from Proto-Baltic Finnic, but it seems to have acquired a certain amount of syntactic freedom as well. Numerous relic forms remain in the modern language, so that we know that ep was a bound morpheme. These are discussed below in section 4.2.

2.1. Negative ep

Ariste points out that Wiedemann (1857) considered (e)p a clitic in his dictionary, but confused it with the negative verb ep. The old third person singular of the negative verb was ep; it has been replaced in modern Estonian by ei, which has now spread to all persons and numbers. Nonetheless one still finds in the modern language ep ole (= ei ole) 'is not' and ep olnud (= ei olnud) 'was not' alongside their proclitic forms pole and polnud.

The continuation of Proto-Baltic Finnic *pa is affirmative emphatic ep, not negative verb ep.

3. Estonian es

Modern Estonian exhibits several es words, only one of which is a direct continuation of Proto-Baltic Finnic *s. The various homophonous morphemes are discussed below.

3.1. Interrogative es

Old Estonian interrogative es has been discussed by Ojansuu (1922) and Alvre (1976, 1981). It is a Second Position word, as seen in the 1686 New Testament examples that follow (from Ojansuu 1922: 93-94).

- (13) Nüüd es tee uSute (Joh. 16: 31)
now Q you believe
'Now do you believe?'
- (14) Kelt es Se Proweet Seddä ütlep (ApT. 8: 34)
whom-ABL Q the prophet that says
'About whom does the prophet say that?'
- (15) Kumb es Se Suurem KäSk om SäduSSen (Matt. 22: 36)
Which Q the larger order is law-ILL
'Which is the greater command under/according to the law?'
- (16) MiSt es minna Seddä peä tundma (Luk. 1: 18)
What-EL Q I that must know
'How should I know that?'
- (17) Mink ka es Sis Soolata (Matt. 5: 13)
What also Q then salt
'What kind then should you be?'
- (18) märätse es teije Sis peäte ollema (Joh. 6: 30)
what-kind Q you then must be
'What kind then should you be?'
- (19) Märäst Tähte es Sinna teet ...? (Joh. 6: 30)
What-kind letter Q you make
'What kind of letter/mark are you making ...?'
- (20) märätsel Nimmel es teije Sedda ollete tennu? (ApT. 4: 7)
what-kind name Q you that are done
'In whose name have you done that?'
- (21) Kes om minno Emmä, ninck kumma es omma minno Welle
who is my mother and which Q is my brother
'Who is my mother, and which is my brother?' (Matt. 12: 48)

Examples (17-19) demonstrate that location in the sentence is determined by constituents, not words, since interrogative es appears not after the first word of the clause in these examples, but after the first constituent. One example shows that, like emphatic ep, es can occur elsewhere in the sentence than in Second Position.

- (22) Kellega teie es sin tahate kõnelda
whom-COM you Q here want speak
'With whom here do you want to speak?'
(from Wiedemann's Grammar, cited by Alvre 1976: 346)

Several of early examples still show es as a clitic. The word cannot maintain any phonological independence since there is no vowel present. All s examples are written together with the preceding word (23-24), so that we have orthographic evidence that es was once a Second Position Clitic.

- (23) -- Kustas meije Lanen ni palju Leiba Same (Matt. 15: 33)
whence-Q our kind get so much bread get
'-- from where does our kind get so much bread?'
(24) Sinnas ütsinda wõras ollet... (Luk. 24: 18)
you-Q alone stranger are
'Are you alone the/a stranger...?'
(25) South Estonian:
Es meie juhren olles Sedda pattu ni palju
if our place being that sin so much
jumala juhren om wehl ennamb armu.
god's place is still more favored
'If in our place was so much of that sin, God's place is
even more favored.'

In both of these examples, the final s of the first word (Kustas and Sinnas) is the interrogative clitic.

There is a semantic discrepancy in the correlation between Estonian interrogative es and BF informal -s. I deal with this problem below in section 3.4.

3.2. Conjunction es

Interrogative es is homophonous with, and according to some, etymologically identical to conjunction es. The latter is found in a seventeenth century Southern Estonian verse, as well as in Old Finnish (that is, the southwest dialect used by Agricola, Finno, and Hemminki). In both Southern Estonian and Old Finnish, Ojansuu (1922) tells us, es had the meaning 'if, although'. Ojansuu's contention that 2P interrogative es originated in initially positioned conjunction es is a viable alternative account to Alvre's, so it must be examined in detail.

In all of Ojansuu's examples, conjunction es begins the clause, as conjunctions generally do in Finnish and Estonian.

- (25) South Estonian:
Es meie juhren olles Sedda pattu ni palju
if our place being that sin so much
jumala juhren om wehl ennamb armu.
god's place is still more favored
'If in our place was so much of that sin, God's place is
even more favored.'
- (26) Agricola:
Eipe heiden pidhe woittaman ..., Es quinka corkiaSti
not-and they must win although how highly
he lendeuet; -- esquiga he ennen cucciStit
they fly although-how they before flourished

'And they must not win ..., No matter how high they fly;
 ... no matter how they flourished before.'

(27) Finno:

es cuSa Inhiminen olis
 if where person would-be
 'if a person would be somewhere'

(28) Hemminki:

Es cuca vihans päähän nacka
 if who anger head-ILL flings
 'If someone flings his anger into his head'

Conjunction es is derived from a former demonstrative pronoun/relative/indefinite pronoun stem *e-. The e-stem also occurs in the Finnish conjunctions että 'that', ellei 'if not', and dialectal ellä 'if', and in Estonian emb-kumb 'either (one or the other)', cf. Hakulinen (1979: 74). Paasonen (1906) finds cognates of the Baltic Finnic e-system in Mordvin, Zyrian, Votyak, Ostyak, and Hungarian, and suggests that the e-stem is a variant of the jo-stem (cf. Finnish jo-s 'if' just like conjunction e-s).

The s in conjunction es is a lative ending, which is also found in the Finnish conjunctions jos 'if' and koska 'because, when' (the -ka here is a former clitic -- see Nevis 1984), and in the adverbs alas 'down', ylös 'up' and pois 'away'.

Ojansuu proposes that conjunction es is the source for interrogative es. His proposal would require that there was a change in positioning in the sentence, a semantic change 'if, although' > 'whether', and a shift from dependent clause to main clause. It would leave open the question of why there is an absence of 2P clitics in Estonian and it would leave unexplained all the relic forms in Estonian (cf. section 4 below). Ojansuu's account would have to posit not only the two syntactic changes and the semantic change, but also a phonological change (enclisis-- examples (23) and (24) above have clitic -s).

Since some dialects have both interrogative and conjunction es words, Ojansuu would also have to assume a syntactic and semantic split.

3.3. Past Tense Negative es

Interrogative es is also homophonous with another unrelated form in the language, namely negative past tense es. Some of the Estonian dialects have innovated a past tense for negative verb (stem in e-). In general in Baltic Finnic, the negative verb e- has a defective paradigm. It may be inflected for person and number, but not for mood and tense. The Estonian dialects have allowed the negative paradigm to include tense, so that e-p is present tense and e-s is past tense, just like laula-b 'sings' and laula-s 'sang'.

- (29) es näe' timä miDaGi' (Savijärvi 1981: 111)
 not-past see s/he something
 'She/he did not see anything'

3.4. Interrogative Negative es

A third homophonous es comes from the negative verb e- plus clitic -s or from clitic combination -ko-s. As in Finnish, the negative verb ei combined with clitics *ko and *s to form a single lexicalized unit: es < *ei-ko-s. (Finnish has eikös, eiks.) The difference between the affirmative and negative interrogatives can be seen in the morphology of the following verb and in the positioning of the particle es. If the main verb is marked for person and number, then the cooccurring es is affirmative; if the main verb is not marked for person and number, then the cooccurring es is negative. The reason for this is that the negative in Baltic Finnic is an auxiliary verb and takes the person and number marks while the main verb has a special complement form. Also, if affirmative es is used, then the particle is located in Second Position. But if negative es is used, the particle is always sentence-initial. This is because the negative verb counted as the sentence-initial constituent to which 2P *-ko-s attached. Relevant examples are (30) and (31). Example (30) has finite main verb om 'is' (predecessor to modern Estonian on) rather than negative complement ole (as in (31)). It further exhibits 2P es instead of initial es.

(30) Old Estonian: (= (15))

Kumb es Se Suuremb KõSk om Sädussen (Matt. 22: 36)

Which Q the larger order is law-ILL

'Which is the greater command under/according to the law?'

By contrast, the dialect example in (31) has the negative complement ole 'be' rather than main verb on 'is'. And in this example es is initial rather than second.

(31) Põltsamaa dialect (SW Estonian) from Alvre (1976: 346):

eš ta alvem ole

not-Q it cheaper be

'Isn't it cheaper'

4. Relic Forms

Evidence for the declitic analysis of Estonian ep comes from the existence of relic forms in all the Baltic Finnic daughter languages. Shared relic forms indicate that the parent language had bound words rather than free words. Further evidence lies in the large number of relic forms in Estonian itself (not shared with sister languages) showing that the sources for Old Estonian ep and es were clitic before the Old Estonian period — pre-Estonian at the latest, most likely Proto-Baltic Finnic.

4.1. Relic Forms in Baltic Finnic

All of the BF daughter languages exhibit relic forms which indicate that Second Position enclisis is inherited from the parent language. These include emphasis word juba/jopa 'even', negative plus interrogative eks/eiks/eikos, and negative plus connective egas/eikas.

According to Kalima (1936), all the BF languages have words that correspond to Estonian juba and Finnish jopa, both of which have an idiosyncratic, unpredictable meaning. The etymological source for juba/jopa 'even' is an old Germanic loanword ju, (Finnish jo) 'already' (Raun 1982: 21, cf. Gothic ju) plus emphatic *pa. The result is not semantically

compositional 'even already' but a special emphasis word. Juba/jopa has a typical syntax for a phonological word containing a Second Position Clitic; it can appear in other than initial position.

(32) from Kalima (1936: 144):

Finnish	jo	jopa
Estonian	juu	juba
Livonian	ju	juba, jub, j va

All BF languages likewise show relics of combinations informal clitic *s. Standard Finnish, for example, has en-kö-s 'don't I?', et-kö-s 'don't you?', ei-kö-s 'doesn't?', etc. Colloquial Finnish has eiks 'doesn't?'. Estonian has eks 'doesn't?'. All of these come from the negative verb (stem in e-) and interrogative clitic *ko with optional informal clitic *s. The appearance of this form in Estonian is particularly surprising since it does not have the two clitics in question elsewhere.

- (33) a. Finnish
- | | | |
|-----|--------------|------------|
| 1SG | en-k(ö)-s | } NEG-Q-IF |
| 2SG | et-k(ö)-s | |
| 3SG | ei-k(ö)-s | |
| 1PL | emme-k(ö)-s | |
| 2PL | ette-k(ö)-s | |
| 3PL | eivät-k(ö)-s | |

- b. Estonian eks < ei/ep + ko + s
NEG + Q + IF

Finally, the negative verb can combine with a former clitic conjunction *ka (see Nevis 1984) and informality marker *s. Finnish has en-kä-s 'and you don't', ei-kä-s 'and he/she/it doesn't'. Estonian has egas 'and doesn't'. Again the presence of Estonian egas is unexpected here, since it displays (a relic of) clitic *s.

- (34) a. Finnish
- | | | |
|-----|------------|---------------|
| 1SG | en-kä-s | } NEG-CONJ-IF |
| 2SG | et-kä-s | |
| 3SG | ei-kä-s | |
| 1PL | emme-kä-s | |
| 2PL | ette-kä-s | |
| 3PL | eivät-kä-s | |

- b. Estonian egas < *ei/ep + ka + s
NEG + CONJ + IF

In summary, the complementarity of Estonian es and ep with the other BF languages' Wackernagel-type clitics suggests a common origin. The relic forms juba/jopa, eks, and egas indicate that the forms were once bound in BF. More evidence for the bound nature of these morphemes comes from strictly language-internal facts.

4.2. Estonian relics

Alvre (1981) cites a number of Estonian relic forms in which bound s continues former clitic *s or clitic combination *ko-s. Bound s has an interrogative function here, even if only redundantly in conjunction with some of the interrogative hosts -- e.g. kuna 'when' -- kuna-s 'when'.

- (35) From Alvre (1981):
 kuna-s 'when'
 kuida-s 'how'
 palgu-s, palju-ks 'how much'
 ammu-s, ammu-ks 'early?'
 ilma-ks 'free?'
 juba-ks, jook 'already?'
 kaus-ks, kaŕva-s 'far?'
 kaugele-ks 'far?'
 kuni-s 'up to what? as far as what?'
 mina-ks 'me?'
 sina-ks 'you?'
 mitu-ks 'how many?'
 muidu-ks 'otherwise?'
 nõnda-ks 'like this?' thus?
 on-ks, on-s 'is?'
 oli-ks 'was?'
 pea-ks 'has to?'
 veela-ks 'still?'
 vähe-ks, vähä-s 'few?'

Dialectal forms include tuli-ks 'came?', räkkisi-ks-ma 'did I speak?', vgtsi-ks-me 'did we take?', antsi-ks 'took?', miga-s 'what?', kumb-s 'which (of two)?', and ken-s 'who?' (Alvre 1981).

There are also a number of -p-relics in Estonian. The list in (36) is taken from Ariste (1973: 36):

- (36) see'p see on 'that's that' (lit. that-EMP that is)
 küllap 'certainly'
 siisap 'then'
 siiap 'hither'
 temap 'he/she'
 nondap 'thus'
 samap 'same'
 sinap 'you (SG)'
 minap 'I'
 kustap 'whence'
 sealap 'there'
 annap 'give!'
 tulep 'come!'

The -p-relics show greater variety in "host selection". -p attaches primarily to pronouns and adverbs, but can also be found connected to imperative verbs.

Former clitics *pa and *s cooccurred in some instances, as revealed in relics eps 'doesn't?' < e- negative verb plus *-pa plus *-s, nõndaps 'dann so' < nonda 'thus' plus *-pa-s, teps 'hinfort, von nun an' < te 'do!' plus *-pa-s, vastaps 'erst, soeben' < vasta 'just' plus *-pa-s (Alvre 1983).

In some instances relics -(k)-s and -p have acted prophylactically to retain an apocopated vowel. For example, interrogative veela-ks 'still?' retains older final a, but veel 'still' does not; it shows the effects of apocope. And kustap 'whence (EMP)' likewise retains older final a, while kust 'whence' does not. In fact, a good number of Proto-Baltic Finnic case

suffixes ended in a or ä (according to vowel harmony). These final vowels were generally apocopated, unless a clitic such as -s or -p prevented apocope.

- (37) ELATIVE -st < -sta/-stä
 INSSIVE -s < -ssa/-ssä
 ABLATIVE -lt < -lta/-ltä
 ABESSIVE -l < -lla/-llä

Non-initial ä became e in Estonian.

The result of apocope in Estonian was that the final vowel came to be reanalysed not as part of the stem, but as part of the -s or -p morpheme. Thus, when *keltä lost its final vowel while *keltä-s retained the vowel, the result was a realignment of the vowel with respect to the morpheme boundary (see also Alvre 1981):

- (38) keltäs > keltes > kelt es
 keltä > kelt

One would expect also as as a remnant of back vowel harmonic -a (e.g. kusta-s > kust as), but I assume that leveling was responsible for the spread of es at the expense of as. A parallel reanalysis is necessary to explain the development of ep (section 5.1.).

It is impossible to account for these relic forms in the cliticization approach -- retention of a former morpheme-final vowel cannot be reconciled with language-specific agglutination of an es or ep word. Instead, these relic forms demonstrate that independent es and ep used to be bound morphemes, and thus decliticization is required to account for their development.

5. Clitic Development in Estonian and Finnish

That ep and es are independent words arising from phonologically dependent words is clear from the preceding discussion. What remains to be accounted for is the semantic shift from informal -s to interrogative es.

On the basis of the Finnish and Estonian data, I propose a general account of possible and probable developments for Wackernagel-type bound words. Old Estonian es and ep demonstrate that decliticization is one possible course of change. Old Estonian also shows loss of former interrogative clitic *ko. Finnish -ko/-kö and -pa/-pä reveal that clitics of this sort can be fairly stable as well. Affixation is also possible, though rare -- Finnish informal -s is one such example.

5.1. Decliticization in Old Estonian

Both es and ep were once phonologically bound words. The two decliticized at roughly the same time and in the same manner. When final vowels were apocopated circa 1250-1500 AD (Raun and Saareste 1966: 59, Kask 1972: 155), clitics *-pa and *-(ko)-s acted prophylactically in preventing apocope:

- (39) PROTO-BALTIC FINNIC OLD ESTONIAN after apocope
 a. *keltä > kelt
 *keltä-s > *keltä-s
 b. *päällä > *pääll
 *päällä-pä > *päällä-p

(Recall non-initial *ä > e; note also diphthongization *ää > ea and certain degeminations.)

Once the default instance is the apocopated stem and the less common instance is the vowel allomorph before a clitic, the situation is ripe for reinterpretation. The morpheme boundary is "moved", so to speak, such that the vowel is considered part of the clitic:

- (40) kelte-s > kelt-es
peale-p > peal-ep

And once vowel harmony is lost as a productive rule (circa 1650 AD -- Raun and Saareste 1966: 65), there is no longer any evidence that -es and -ep are phonologically dependent words rather than independent (though unstressed) words, i.e. quasi-enclitics. Since the rule that is responsible for phonological subordination consequently lacks motivation, it disappears from the language altogether, and the clitics are no longer "clitic" but independent. In other words, bound words are marked with respect to independent words, and I propose that decliticization here is an instance of the more general case in which marked become unmarked forms.

Although one would expect both es, ep and as, ap from the Proto-Baltic Finnic clitics, one finds only the e-vowel descendants. The two e/a alternates would be the continuations of former vowel harmonic alternates ä/a as explained in section 4.2. I have been assuming that the e-stem allomorphs spread at the expense of the a-allomorphs (except in instances of lexicalization -- section 4.2). Leveling of this type is confirmed by cases where neither e- nor a- sources occurred. Examples (7-9, 11, 13, 17) above, have not had an intervening vowel between the host and the clitic (or else had a different vowel).

- (7) Mis ep ...
what EMP
- (8) Need ep ...
these EMP
- (9) Siis ep
then EMP
- (11) See ep ...
that EMP
- (13) Nüüd es ...
now Q
- (17) Mink ka es ...
what also Q

Thus, for example, Mis (7) does not reconstruct with a vowel (i.e. not *misä-pä). These examples demonstrate the productivity and spread of es and ep at the expense of the a-variants.

When former *s and *pa failed to decliticize in Estonian, they were lexicalized to specific lexeme and morpheme combinations. Therefore the

productive forms ep and es did not spread to every item. One finds a similar lexicalization with Finnish informal -s.

5.2. Affixation in Finnish

In Nevis (1985a) I argue that Finnish -s is not a clitic but an affix. It is no longer productive insofar as it does not combine with just anything. It can be found in four situations: it attaches to clitics -ko/-kö and -pa/-pä (but not to clitics -han/-hän 'you know, I wonder, by golly' or -kin/-kaan/kään 'also, too, neither'), it attaches to interrogative pronouns kuka 'who' and mikä 'what' and relative pronoun joka 'who' (but not to other pronouns, e.g. se 'it, that' or minä 'I'), and it attaches to imperatives like otta-kaa-s 'please take' but not other verbal moods (e.g. *otta-a-s 'takes').

This restricted distribution is uncliticlike. Affixes typically impose restrictions on host selection, but clitics do not -- they are generally promiscuous in attachment (Zwicky 1977, 1984). All occurrences of Finnish informal -s can be accounted for by assuming that the s-forms are allomorphs of the non-s-forms. That is, tule-pa-s (come-EMP-IF) is not trimorphemic, but bimorphemic tule-pas, where -pas is simply the "informal" allomorph of -pa.

Note that the two classes of phenomena in Finnish that allow informal -s are interrogative morphemes (interrogative pronouns plus their near cousins the relative pronouns, as well as the interrogative bound word -ko/-kö) and emphatic morphemes (imperatives and emphatic clitic -pa/-pä). The connection to the former is revealing. It shows the crucial link between Finnish informal -s and Old Estonian interrogative es.

I propose that the primary source for Estonian es was precisely this lexicalized clitic *-ko-s > -ks (> -s > es). Interrogativity originates in the former Second Position clitic *ko, but through successive stages involving lexicalization of -ko-s and upgrading colloquial k(o)s, the meaning is now continued in es.

5.3. Clitic Loss

Proto-Baltic Finnic interrogative clitic *ko is now lost in Estonian. It played a role in the development of es, as described above, and it is found in relic forms eks, veelaks, and a few other relics (see (35) above). The loss of *ko probably came about through regular sound changes in the language. Apócope (circa 13th century -- Raun and Saareste 1966: 63) would have dropped the final vowel, hence *ei-ko > *ei-k, and loss of final *n, k, h would have dropped the now-final consonant (Kask 1972: 155-156), hence *ei-k > ei. The result is the awkward situation in which all interrogatives with former *ko become homophonous with declaratives.

Interrogative *-ko and es (now archaic and dialectal) have been replaced by kas. Kas is positioned clause-initially and is of uncertain origin. Alvre (1983: 82) attributes to L. Kettunen the suggestion that kas came from the imperative verb katso! 'look!'. But bimorphemic ka-s with relic of former interrogative clitics *-ko-s is just as likely (see Alvre 1983).

5.4. Wackernagel's Law

Bound words that occur in Sentence Second Position are oftentimes stable. They rarely complete the agglutination cycle by becoming affixes. This is

because they are frequently incompatible semantically with the host. There is often no semantic or syntactic connection between the Wackernagel-type bound word and the initially positioned constituent. Affixation cannot be ruled out completely, as evidenced by Finnish informal *-s* (section 5.3), but it seems to be one of the least likely developments of a Second Position clitic.

If the Wackernagel-type clitic is not stable, then it is either lost from the language (as with Proto-Baltic Finnic **-ko* in Estonian) or it becomes independent (as with Proto-Baltic Finnic **-s* and **-pa*). Steele (1976) offers yet a different possible course of development -- the Second Position clitic can turn into another kind of clitic. In several Uto-Aztecan languages, the Wackernagel-type clitic inherited from the parent attachment to the initially positioned constituent preceding it to the verb which followed it. Yaqui is an example:

- (41) ?inepo ne-?a-me?ak (Steele 1976: 554)
 I I -it-threw
 'I threw it'

The former Second Position clitic pronoun *ne* no longer attaches to the first constituent in the sentence but to the following constituent, namely the verb. The former Second Position enclitic is now a verbal proclitic.

Ard (1977, 1978) presents similar data from the developments in the Slavic languages, although cliticness of the morphemes in question is not established for sure (i.e. they are likely to be leaners, i.e. quasi-clitics, rather than bound words). Wackernagel-type words are found in Czech, Slovak, Slovenian, Serbo-Croatian, Transcarpathian Ukrainian, and in dialectally in Polish. Attraction to the verb has taken place in the other Slavic languages. In Russian, Belo-Russian, Ukrainian (except for transcarpathian), and dialectally in Polish the cognate morphemes have turned into suffixes on the verb; in Macedonian and Bulgarian they are located adjacent to the verb -- after an imperative or participle, before a finite verb. Thus the alternative to Wackernagel's Law has been attraction to the head of the clause, namely the verb.

6. Concluding Remarks

Old Estonian *es* and *ep* evince the rare phenomenon of decliticization or loss, but also shows the possibility of a change in the direction of attachment. In an SVO language, the sandwiching of the Second Position clitics between the initial constituent and the verb permits the verb to exert a syntactic and semantic pull on the clitic group, so that they attach phonologically to the verb. Verbal clitics are more compatible with the host, and consequently are more likely to complete the agglutination cycle and less likely to decliticize.

Notes

*This paper was composed at the Ohio State University, but completed at the University of Michigan. A general absence of available materials forces me to leave out some potentially relevant Karelian, Vepsä, Votic and Livonian data.

Irrelevant grammatical information is left out from glosses.
Abbreviations used in this article include:

ABL	ablative
AD	adessive
AL	allative
CONJ	conjunction
COM	comitative
EL	elative
EMP	emphatic
HAN	an epistemic clitic marking reintroduced information of current discourse relevance.
IF	informal
ILL	illative
IN	inessive
PL	plural
Q	interrogative

1. Janda (personal communication) now informs me that he has given up one piece of his synchronic analysis, namely the claim that the 's' morpheme is synchronically a determiner to the following NP. His diachronic analysis remains as before.

2. Tauli cites Alfred Ludwig's (1873) article "Agglutination oder adaptation?", but I have not been able to locate that reference.

References

- Ahlqvist, August. 1858. Wotisk Grammatik jemte språkprof och ordförteckning. Acta Societatis Scientiarum Fennicae V.
- Ahtia, E. V. 1936. Karjalan Kielioppi. Karjalan Kansalaisseura, Suojärvi.
- Alvre, Paul. 1976. Vana Kirjakeele küsisõnu. Keel ja Kirjandus 1976.6: 343-350.
- Alvre, Paul. 1981. Veelaks-tüüp Kirjakeeles ja murdeis. Keel ja Kirjandus 1981.1: 24-30.
- Alvre, Paul. 1983. Zur Herkunft der Wörter Kas und teps in der estonischen Sprache. Soviet Finno-Ugric Studies 1983.2: 81-89.
- Anderson, Stephen. 1980. On the Development of Morphology from Syntax. Historical Morphology. Edited by Jacek Fisiak, Mouton.
- Ard, Josh. 1977. Raisings and Word Order in Diachronic Syntax. Ph.D. dissertation, UCLA (1975). Distributed by IULC.
- Ard, Josh. 1978. The process of reanalysis and its implications. Paper read at the Conference on Syntactic Change, University of Michigan.
- Ariste, Paul. 1968-69. Kas ism võib olla sõna? Emakeele Seltsi Aastaraamat 14-15.

- Ariste, Paul. 1973. Eesti rõhumaarsona ep. Suomalais-Ugrilaisen Seuran Aikakauskirja 72:33-37.
- Carstairs, Andrew. 1985. Constraints on Allomorphy in Inflexion. Distributed by the Indiana University Linguistics Club.
- Comrie, Bernard. 1980. Morphology and Word Order Reconstruction: Problems and Prospects. Historical Morphology, pp. 83-96. Edited by Jacek Fisiak. Mouton.
- Givón, Talmy. 1971. Historical Syntax and Synchronic Morphology: An Archeologist's Field Trip. CLS 7: 394-415.
- Hakulinen, Lauri. 1979. Suomen kielen rakenne ja kehitys. WSOY, Porvoo.
- Janda, Richard. 1981. A Case of Liberation from Morphology into Syntax: The Fate of the English Genitive-Marker -(e)s. Syntactic Change. Natural Language Studies 25: 59-114.
- Jeffers, Robert, and Arnold Zwicky. 1980. The Evolution of Clitics. Papers from the Fourth International Conference on Historical Linguistics. Also in OSU WPI 24: 55-64.
- Jespersen, Otto. 1922. Language, Its Nature, Development and Origin. Holt and Co., New York.
- Kalima, Jalo. 1936. Itämerensuomalaisten kielten balttilaiset lainasanat. Suomalais-Ugrilainen Seura 202, Helsinki.
- Kask, Arnold. 1972. Eesti keele ajalooline grammatika. Häälikulugu. Tartu Riiklik Ülikool, Tartu.
- Larjavaara, Matti. 1979. Lyydin se-partikkeli. Sivulaudatur-työ, University of Helsinki.
- Ludwig, Alfred. 1873. Agglutination oder adaptation? Prag.
- Nevis, Joel. 1984. On Finnish Disyllables, Cliticization, and Typology to appear in the Proceedings of the Third Uralic Phonology Conference (Eisenstadt, Austria).
- Nevis, Joel. 1985a. Finnish Particle Clitics and General Clitic Theory. Ph.D. Dissertation, The Ohio State University (to appear in Ohio State University Working Papers in Linguistics).
- Nevis, Joel. 1985b. Deaffixation and decliticization in Saame: Abessive -taga. Paper presented to the Linguistic Society of America Winter Meeting, Seattle. (In this volume of Ohio State University Working Papers in Linguistics).
- Ojansuu, Heikki. 1922. Itämerensuomalaisten kielten pronominioppia. Turun Suom. Yliopiston Julkaisuja B.1.3, Turku.
- Paasonen, Heikki. 1906-08. Die finnischen pronominalstämme jo- und e-. Finnisch-Ugrische Forschungen 6:114-17.

- Raun, Alo. 1982. Eesti keele etümoloogiline teatmik. Maarjamaa, Rome-Toronto.
- Raun, Alo, and Andrus Saareste. 1966. An Introduction to Estonian Linguistics. Ural-Altäische Bibliothek, Wiesbaden.
- Savijärvi, Ilkka. 1981. Sanajärjestystyyppi pääverbi--kieltoverbi viron kielessä. Virittäjä 85.2: 109-117.
- Steele, Susan. 1976. Clisis and Dichrony. Mechanisms of Syntactic Change, pp. 539-579. Edited by Charles N. Li. University of Texas, Austin.
- Tauli, Valter. 1953. The Origin of Afixes. FUF 32.1-2: 170-225.
- Vesikansa, Jouko. 1977. Johdokset. Nykysuomen oppaita 2. WSOY, Porvoo.
- Wackernagel, Jakob. 1892. Über ein Gesetz der indo-germanischen Wortstellung. IF I: 333-436.
- Wiedemann, Ferdinand J. 1875. Grammatik der Ehstnischen Sprache. L'Académie Impériale des sciences, St.-Péterbourg.
- Zwicky, Arnold. 1977. On Clitics. Distributed by the Indiana University Linguistics Club.
- Zwicky, Arnold. 1984. Particles and Clitics. OSU WPL 29: 105-116. (also appeared (1985) in Language 61.2: 283-305.