A Non-endoclitic in Estonian*

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Among the examples of endoclitics cited in the literature on clitics is the emphatic clitic -gi -ki of Estonian. Upon closer scrutiny it turns out that this is not an instance of endoclis, but a situation in which two morphemes exist, each having different positioning in the word and different meaning. I begin by looking at Zwicky's (1977) original citation of -gi as an endoclitic. Next, I summarize a proposed account of the surface phenomenon of endoclis as the result of external clitic attachment followed by a rule of morph metathesis. I reject this analysis for Estonian -gi and argue instead that the "endoclitic" -gi is really a separate morpheme from the emphatic enclitic -gi. It occurs only in certain adverbials and indicates indefiniteness rather than emphasis. I further argue that the five adverbials in question constitute lexicalized word-forms and suggest the possibility that the "endoclitic" -gi appearing in these adverbials is a derivational affix and not a clitic at all. Finally, I explore the historical origin of the apparent "infixation" of indefinite -gi, arguing that the source for this is analogy rather than infixation, endoclis, or metathesis.

Zwicky (1977), receiving his information from Ilse Lehiste, is the first person in the literature to describe Estonian -gi as an endoclitic bound word. He says that it

"has the syntactic freedom of the typical bound word, and in addition ... fails to condition at least one rule of internal sandhi ([n] fails to assimilate to [ŋ] before -ki, though [n] regularly assimilates to velars word internally, see Lehiste (1960:39). The morpheme is normally enclitic. However, when added to interrogative words (making them indefinite), -ki may either follow or precede a number of case suffixes" (Zwicky 1977:8)

He goes on to note the alternative orderings of the morpheme -gi and the case endings in keegi 'somebody, someone' and miski 'something, anything'. The paradigms for these two are given below. (The hyphens separate the morpheme boundaries.)

<table>
<thead>
<tr>
<th>Case</th>
<th>Genitive</th>
<th>Allative</th>
<th>Elative</th>
<th>Ablative</th>
<th>Prepositive</th>
<th>Interrogative</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOMINATIVE</td>
<td>kee-gi</td>
<td>---</td>
<td>mis-ki</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>GENITIVE</td>
<td>kelle-gi</td>
<td>---</td>
<td>mille-gi</td>
<td>---</td>
<td>mida-gi</td>
<td>---</td>
</tr>
<tr>
<td>PARTITIVE</td>
<td>keda-gi</td>
<td>---</td>
<td>mille-gi</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>INATIVE</td>
<td>kelle-s-ki</td>
<td>kelle-gi-s</td>
<td>mille-s-ki</td>
<td>mille-gi-s</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>ELLATIVE</td>
<td>kelle-le-ki</td>
<td>kelle-gi-le</td>
<td>mille-le-ki</td>
<td>mille-gi-le</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>ADESSIVE</td>
<td>kelle-l-gi</td>
<td>kelle-gi-l</td>
<td>mille-l-gi</td>
<td>mille-gi-l</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>ABLATIVE</td>
<td>kelle-1-gi</td>
<td>kelle-gi-1</td>
<td>mille-1-gi</td>
<td>mille-gi-1</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>TRANSLATIVE</td>
<td>kelle-ks-ki</td>
<td>kelle-gi-ks</td>
<td>mille-ks-ki</td>
<td>mille-gi-ks</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>
In the other indefinite adverbials, however, the order of case ending is fixed. For example, millalgi 'at some time, at any time, ever' has -gi outside the adessive -l, and the opposite ordering (*milla-gi-l) is ungrammatical. In kusagil ~ kuskiil 'somewhere, anywhere' the opposite prevails: -gi lies inside the adessive -l, with the other ordering ungrammatical (*kusa-l-gi, *ku-l-gi). See the kuski paradigm below.

Mingi 'some, a certain, a kind of' appears to have the -gi morpheme inside the case endings in its paradigm.

<table>
<thead>
<tr>
<th>Nom</th>
<th>Gen</th>
<th>Par</th>
<th>Ill</th>
<th>Ine</th>
<th>Ela</th>
<th>All</th>
<th>Ade</th>
<th>Abl</th>
<th>Tran</th>
<th>Ess</th>
<th>Term</th>
<th>Abes</th>
<th>Com</th>
</tr>
</thead>
<tbody>
<tr>
<td>mingi</td>
<td>mingi</td>
<td>mingi-t</td>
<td>mingi-sse</td>
<td>mingi-s</td>
<td>mingi-st</td>
<td>mingi-le</td>
<td>mingi-l</td>
<td>mingi-lt</td>
<td>mingi-ks</td>
<td>mingi-na</td>
<td>mingi-ni</td>
<td>mingi-ta</td>
<td>mingi-ga</td>
</tr>
</tbody>
</table>

Note that the kuski paradigm actually has both orderings. For the 'internal local cases' (i.e. the illative, inessive, and elative) the case endings lie inside the -gi morpheme. For the 'external local cases' (i.e. the allative, adessive, and ablative) the case ending lies outside it. There is, in addition, a difference in the root: the internal local cases take ku-; the external local cases take kus- or kusa-.

The morpheme -gi in Estonian has the following placements with respect to the case endings in indefinite adverbials:

**Inside**
- external local cases of kuski
- nonomorphemic mingi

**Both Inside and Outside**
- oblique cases of keegi and miski

**Outside**
- internal local cases of kuski
- millalgi
- non-oblique (or direct) cases of keegi and miski

[Note, by way of comparison, that the clitic -gi normally attaches outside the case endings, e.g. maja-s-ki 'even in the house' ~ *maja-gi-s.]
In an early draft of a book in progress, Zwicky and Pullum attempt to restrict the notion 'cliticization', arguing that clitics are attached externally to their hosts and that endoclitics are the result of morph metathesis rules. This approach works fine for miski and keegi above. The clitic -gi, under this view, is attached externally to inflected kee- or mis-, as in (a), and optionally metathesizes with the case ending, as in (b).

(a) CLITICIZATION
[[[ kelle- ] -le ALLATIVE ] -gi CLITIC]

(b) MORPH METATHESIS kelle-gi-le

This rule, however, would have to apply obligatorily for the external cases of kuski.

In the following I argue against any synchronic analysis in which the morpheme -gi is seen as an endoclitic. First, I point out that the morpheme in question is one that indicates indefiniteness and does not signal emphasis, as does the enclitic -gi. Second, I argue that these five adverbials in which "endoclitic" -gi appears are lexicalized word-forms, semi-frozen polysyllabic adverbs. There is no morph metathesis rule, merely memorized paradigms having variants with different orderings. Finally, I will explicate an account of the historical origin of the apparent "infixation" of -gi.

The -gi found in keegi, miski, millalgi, kuski, and perhaps mingi does not have the emphatic meaning of the clitic -gi, but has a meaning of indefiniteness ('some, any'). There is a formal difference between the emphatic clitic -gi and the indefinite morpheme -gi. The former is productive, and like a typical clitic, exhibits a low degree of selection with respect to its host (Zwicky and Pullum 1983:503). It can attach to any word class, e.g.

NOUN naine-gi 'even the woman'
VERB rIlilgib-ki 'even speaks'
ADJECTIVE suur-gi 'even large'

This clitic never appears inside case endings and is never found as an endoclitic in compounds.

The latter, however, is not a clitic, but appears to be a derivational affix. It appears with only a few pronominal stems (denoting person, place, time, or type).

keegi 'somebody, someone', cf. kes 'who'
kuski 'someplace, anywhere', cf. kus 'where'
miski 'something, anything', cf. mis 'what'
millalgi 'at some time, at any time, ever', cf. millal
'when, at what time'

(mingi 'some, a certain, a kind of' from older genitive of mis 'what')
This behavior is typical of affixes, which exhibit a high degree of selection with respect to their stems (Zwicky and Pullum 1983:503).

My claim, then, is that it is only the indefinite -gi, not the clitic -gi, that appears on the surface "endoclitic", "infixed", or metathesized with the case endings. There is no motivation to posit a rule of morph metathesis, since the generalization that underlies such a rule is restricted to parts of just three paradigms (the optional miski and keegi forms and the three obligatory kuski forms). It is more likely the case that all the forms in question are memorized as wholes—a common situation for pronouns and adverbs.

One may worry about the independent status of this indefinite -gi—is it truly a derivational morpheme? There is some evidence to support a polymorphemic analysis of keegi, miski, kuski, and perhaps millalgi (but not mingi -- see footnote 5). Numerous formal similarities exist between the interrogative pronouns that serve as the etymological sources for these adverbs and the stems which serve as the synchronic stems for the adverbs.

Keegi 'somebody, someone' is formally identical to the interrogative pronoun kes 'who' plus the emphatic clitic -gi. The first morpheme in kee-gi is declined exactly like kes (except in the nominative), sharing all the idiosyncrasies of that paradigm. For example, kes has an irregular genitive kelle and irregular partitive keda, and so does keegi—genitive kelle-gi and partitive keda-gi. For this reason kee-gi is to be analyzed as polymorphemic. It is not the case, however, that keegi is the same as the interrogative pronoun plus the emphatic clitic (i.e. kes-ki), since it has a specialized meaning—'somebody, someone', not kes-ki 'even who'. Just as kes is lexicalized, with its morphophonological idiosyncrasies, so is keegi, which shares many of these properties (but not all).

Parallel to keegi is miski 'something, anything'. This likewise is composed of two morphemes mis and -gi. The former is to be identified with (but not as) the interrogative pronoun mis 'what' because the two are phonologically and morphologically identical. They both have the same morphophonological idiosyncrasies—nominatives ending in -s, genitives in -lle, partitives in -da, short and long forms (both of which are represented in the lexicon—e.g. millelt ~ milt). That miski is not the same as the pronoun plus the emphatic clitic is obvious from the semantics of miski: the pronoun-clitic mis-ki means 'even what', but the lexicalized miski has the specialized meaning 'something, anything'.

That miski is a semi-frozen form in the lexicon is further demonstrated by its appearance as the first member of a compound: miskipkraast ~ millegipkraast 'for some reason or other'. The emphatic clitic -gi even, in combination with mis 'what', would never appear endoclitic in compounds or any other word form.

The morpheme kus in kuski has internal local cases kuhugi, kuski, and kustki, just like the kus paradigm. Kuski also lacks forms in the nominative, genitive, partitive, transitive, essive (see footnote 6), terminative, abessive, and comitative. What the kuski paradigm has that is absent in the kus paradigm are external local cases. These, however,
are attached not to the ku-stem, but to a kus-~ kusa- stem, with the indefinite -gi intervening. This irregularity is apparently memorized, as is the whole defective paradigm. Note, in addition, that kus has an emphatic form kus-ki 'even where', but this has only superficial similarity to the semantically specialized kuski 'somewhere, anywhere'.

None of these paradigms can be generated syntactically from interrogative pronouns and clitic -gi. Their meanings are specialized and they have certain morphophonological idiosyncracies that force a special treatment of them in the lexicon. That they are not completely rule governed is seen from the formal irregularities in their respective paradigms (e.g. absence of plural forms and presence of short forms). There is no motivation for a rule of morph metathesis which would apply optionally to parts of two paradigms (keegi and miski), obligatorily to parts of one paradigm (kuski), and would fail to apply at all in parts of the kuski paradigm and in millalgi. Thus we are dealing with lexicalized word-forms which are semi-frozen polymorphemic adverbials.

I have argued above that Estonian does not have a synchronic endoclitic -gi in the five adverbials at hand, but I have not yet proven that the "malordering" of -gi in at least some of these forms is not due to endoclis (or metathesis) at an earlier stage of the language. At this point I shall attempt to outline a diachronic account of the indefinite -gi in which endoclis (or metathesis or infixation) is not a necessary step in in the history of Estonian. Instead, I claim that analogy is the crucial factor.

Originally the interrogative pronouns combined with the emphatic clitic -gi and took on a specialized meaning. The -gi apparently changed semantically to indefiniteness and the whole adverbial became lexicalized. All five of these adverbials were frozen. Millalgi did not inflect further, thus stranding -gi outside the case ending. The kuski paradigm is based on the defective kus paradigm, which has only internal local cases (inessive, illative, elative). In order to form the external local cases for the kuski paradigm, the case endings were attached to the kuski ~ kusagi stem, stranding the -gi morpheme inside the allative, adessive, and ablative case endings.

In miski and keegi, the nominative, genitive, and partitive are morphemes fused into the stem (not isolable) and could not be separated to be placed on the other side of -gi. The rest of the paradigm follows this ordering of case and -gi, but also allows the reverse order, due to analogy with the kuski external local cases. In other words, millelgi ~ millegii et al. were subject to analogical pressure from two sources: one is the direct (or non-oblique) set of inflections of the same paradigm; the other is the external local case set from the kuski paradigm.

Mingi is frozen and lexicalized to the point that it is no longer analysable as two morphemes. All inflections lie outside the former morpheme -gi.

This approach to the origin of the different orderings of indefinite -gi and the case endings in the indefinite adverbials makes the claim that there was never a period in the history of Estonian that the clitic -gi
metathesized with the case ending. The different orderings were a result of analogy. Speakers of the language today have both orders as alternatives as a result of this analogy, and neither ordering can be proven basic in synchronic Estonian.

In this paper I have argued against an endoclitic analysis of Estonian -gi on several grounds. First, keegi, miski, etc. are not semantically relatable to forms having the emphatic clitic coupled with an interrogative pronoun; they are lexicalized adverbs. Second, they must be seen as semi-frozen forms because of certain formal irregularities (absence of plural forms and presence of short forms, among others). Third, the -gi that appears in these paradigms has an indefinite meaning, not an emphatic one. Finally, the alternative orderings found in the keegi and miski paradigms are restricted to just parts of these two paradigms. The generalization that underlies a morph metathesis rule (or any other endoclitic) is very limited indeed. I have proposed instead that all the forms in question are memorized as wholes.

The historical source for this ordering predicament comes from the lexicalization of indefinite -gi and the defective kus paradigm, followed by the reinflection of kuski ~ kusagi, which leaves indefinite -gi stranded inside the case ending. This defective paradigm has influenced the miski and keegi paradigms, through analogy, to reverse (optionally) the order of case and -gi. The original ordering is still possible due to pressure from the direct, or non-oblique, cases (nominative, genitive, and partitive) which could not "metathesize" because they lack discrete morphemes (i.e. they are fused into the stem).

The tendency, then, is for indefinite -gi to migrate closer to the root because it is a derivational affix. As Zwicky (1977:8) says, "we have, transparently, a morphological change in progress, with -ki coming to be treated more and more as a suffix attached to the base." The change is nearly complete; the indefinite morpheme -gi is a suffix, and is in most instances attached to the base. (In the case of mingi, the change is complete—the former morpheme lies inside all inflections and is synchronically unanalyzable as a separate morpheme.) This means that Estonian does not have an endoclitic -gi, but a derivational affix -gi.

Footnotes

*Special thanks go to Ilse Lehiste for acting as an informant and providing additional information, and to Brian Joseph and Arnold Zwicky for reading previous versions and offering helpful suggestions.

1 -gi and -ki are orthographic variants: -ki is found after voiceless consonants and -gi after voiced consonants and vowels. Phonemically there is no difference between the two—both -gi and -ki have a short /k/ (which is to say quantity one; phonetically voiceless lenis [g] or [G]). Since the letter ə is normally used to represent this phoneme, I shall refer to this morpheme by the -gi variant.

2 The class of indefinite adverbials includes not only the five examined in the text but also mingiugune 'a kind of' (a compound, cf.
mingi 'some, a certain, a kind of'), Ukski 'even one', and muu 'other' (Kask and Palmeos 1965:70). In addition, there is kumbki 'either'. Although kumbki and Ukski contain the indefinite -gi, neither are discussed in this paper since they are both well formed. Only kumbki has a specialized meaning -- compare the interrogative pronoun kumb 'which (of two)' in combination with the emphatic clitic -gi: kumbki 'even which (of two)'. Otherwise these two adverbs are formally equivalent to the pronouns kumb and Uks ('one') plus the emphatic clitic, having case endings between the stem and -gi, and allowing all case forms and plurals.

Finally, there are kuidagi 'somehow', etymologically related to kuidas 'how, in what way' (and possibly also kuid 'but, yet'), and kuigi 'though, although', etymologically related to kui 'when, if'. Neither of these two are synchronically derivable from their respective etymological stems.

The term 'case ending' here refers to the direct (or syntactic) cases -- nominative, genitive, partitive; the oblique suffixes -- illative, inessive, elative, allative, adessive, ablative, and translative; and the bound postpositions--essive, terminative, abessive, and comitative (see Nevis 1982 for a discussion of these last four case endings). In this paper the bound postpositions are not distinguished from the other oblique suffixes, since the distinction is not relevant here.

I have selected kuski as the citation form for this paradigm. There is no nominative case, but the form kuski can serve as the stem for the attachment of the external case endings, e.g. allative kuskile alongside kusagile (with the alternative stem kusagi-).

Mingi is to be parsed into two morphemes only on etymological grounds. It consists of an older genitive min (cf. Finnish min-kM) plus the -gi morpheme. But the n-genitive has long disappeared in Estonian, and where it does appear (e.g. in maantee 'highway, road', etymologically maa-n-tee lit. land-GEN-path), it is no longer recognized as a genitive. The synchronic genitive of mis is *min, but mille. Mingi is inflected as if it were a single morpheme. It still has the indefinite meaning found in the other indefinite adverbials examined here.

The etymological root ku- plus essive -na plus "emphatic" is not truly a part of this paradigm for two reasons. First, it has temporal meaning, 'once, at one time, ever', not spatial as the rest of the members of the kuski paradigm have. And second, kunagi is lexicalized, and as a separate lexicalized item, participates in derivational morphology, e.g. kunagine 'former, one time, some time' with the derivational affix -ne. Such derivation with other members of this paradigm is ungrammatical, e.g. *kuskine.

Klavans (1979) is a response to Zwicky and Pullum's (former) analysis of endoclitics as morph metathesis. She argues that clitics which are members of some major word class can themselves be inflected, and after cliticization, can come to look like endoclitics (i.e. resulting in [HOST[CLITIC-SUFFIX]] or [[PREFIX-CLITIC]HOST]). In her footnote 10, she promises to analyse Estonian -gi in her 1980 dissertation. I have not yet been able to locate this information in her dissertation. Nonetheless, -gi
is not problematic for her "clitics as words" analysis since it is not a
member of an inflectable word class and therefore does not behave like the
other examples of endoclitics that Klavans examines. And, as I argue in
this paper, the "endoclitic" -gi is not even a clitic.

8 It is doubtful that clitic -gi ever appears lexicalized, even in
siiski 'nevertheless, all the same, still, even then' from sis 'then' plus
emphatic -gi. Note that the meaning 'even then' of siiski is not simply
'even at that time, even in that case'.

9 Kes has "short" forms in the adessive and ablative; that is to say,
kel occurs as an alternative to kellel, and kelt to kellelt. This is only
partly true for keegi--kelegi appears alongside kellelgi, but *keltki is not
possible as an alternative for kelleltki. Some of the kes case endings
accept plural -de-: genitive plural kelle-de ~ kelle, illative plural
kelle-de-sse ~ kelle-sse, etc. Keegi, however, lacks separate plural
forms. See Kask and Palmeos (1965) for a description of the long and short
forms and see my (1982) CLS paper for arguments that neither is derived
from the other--both long and short forms are lexicalized and idiosyncratic
(pp. 403-5).

10 Miski has only two short forms, adessive milgi (~ millelgi ~
millegi) and translative mikski (~ millekski ~ millegiks) according to
Kask and Palmeos (1965:75). The pronoun mis 'what' also has (optional)
plural forms for most case endings (e.g. genitive plural millede ~ mille,
illative plural milledesse ~ millesse) which are lacking in miski (Kask and
Palmeos 1965:63, 75).

11 Arnold Zwicky has suggested that the kus paradigm need not be
entirely lexicalized. The gaps that appear are for the most part semantic
--kus 'where', kust 'whence', and kuhu 'whither' are locative (or
directional) in meaning (the stem ku- refers to location). Absence of
nominative, genitive, partitive, translative, essive, abessive, and
comitative cases in this paradigm is then to be expected on semantic
grounds. They do not express location or direction. The absence of
external local cases is not necessarily expected, however, nor is the gap
in the terminative. For the latter, one would expect kuni, a form that
exists, but only in temporal meaning (and not locative). That kuni 'until,
up to' is lexicalized and separate from the kus paradigm is clear from its
further inflection: kuni-ks 'up to when, up to what time' is the
translative of kuni. Estonian never productively strings sequences of case
endings together, so an analysis of kuniks as ku-ni-ks (ku-TERM-TRANSL)
is ruled out and kuni is to be viewed as a single morpheme. The same holds
for the terminative of kuni, kunini 'until, up to'.

In the kus paradigm, however, the gap in the locative *kuni (in the
sense of 'up to where') is unexpected. For two reasons, then, I claim that
the kus paradigm is lexicalized and defective: the absence of the external
local cases and the absence of the terminative (i.e. locative kuni). These
two gaps are apparently arbitrary and not ruled out on semantic grounds as
are the other gaps in the paradigm.
12. The absence of external local cases in this defective paradigm results in partial agreement in phrases like kus kohal 'in what place, where' (in which kus is inessive and kohal is the adessive of koht 'place') and kust kohalt 'from what place, from where' (in which kust is elative and kohalt ablative). These two phrases agree in directionality. Similarly one finds kuspool 'on which side, where, in what direction' with inessive kus and adessive pool, and also kuhupoole having illative kuhu and allative poole.

References


