

Assignment 4

DUE OCTOBER 29

Estonian nominals

This assignment concerns the nominal system of Estonian, a Finnic language spoken with just over 1 million speakers. It is the national language of Estonia.

One very important piece of information about Estonian is that traditionally, vowels and most consonants are said to contrast *three* degrees of length: short, long, and “overlong.” The distinction between short and long/overlong is always indicated by orthography, but the distinction between long and overlong is not always represented— it is only indicated in the orthography for stops. For other letters, segments that are “overlong” will be preceded by ` , so orthographic “long” [s] is *ss*, and orthographic “overlong” [s] is `*ss*.

The orthography used here is the standard Estonian orthography. Some important notes about how it differs from IPA:

1. Estonian has no voiced stops. Orthographic *b, d, g* are actually (phonemically) voiceless [p, t, k]. Orthographic *p, t, k* are long versions of the same sounds (i.e., geminates [pp, tt, kk]), and orthographic *pp, tt, kk* are traditionally described as overlong segments.
2. Vowels: *ü* = high, front, rounded, tense [y], *ö* = mid, front, rounded, tense [ø], *ä* = low, front, unrounded, lax [æ], *õ* = mid, back, unrounded, tense [ɤ]

Part One

Estonian is traditionally described as having 14 cases: three “grammatical” and 11 “semantic.” Here are some basic examples illustrating the grammatical cases:

- (1) Poiss magab.
‘A/the boy is sleeping.’
- (2) Lipp lehvis tuules.
‘The flag waved in the wind.’
- (3) Poiss nägi tüdrukut.
‘A/the boy saw a girl.’
- (4) Tüdruk nägi mehe ka`ssi.
‘A/the girl saw the man’s cat.’
- (5) Võileib maitseb hästi.
‘The sandwich tastes good.’
- (6) Mees riputas lippu.
‘A/the man hung up a flag.’

- (7) Lipu värvid on ilusad.
‘The flag’s colors are beautiful.’
- (8) Tüdruk kallistas meest.
‘The girl hugged a man.’
- (9) Tüdruk sõi poisi võileiba.
‘A/the girl ate (some of) the boy’s sandwich.’

The three cases exhibited here are the NOM(INATIVE), GEN(ITIVE), and PAR(TITIVE). Unsurprisingly, subjects are (generally) NOM, possessors are GEN, and the most common case for objects is PAR—Estonian has no (morphological) ACCUSATIVE case.¹ Fill out the table for the forms of the following nouns:

	gloss	NOM	GEN	PAR
(10)	‘boy’			poissi
	‘girl’		tüdruku	
	‘flag’			
	‘man’			
	‘sandwich’		võileiva	
	‘cat’	ka`ss	kassi	

- (i) Posit underlying forms for ‘girl’, ‘flag’, and ‘sandwich’. State clearly how you made this choice, and note any difficulties that arise. State informally how the underlying form is changed to make the other forms. (Note: do not try to provide a formal analysis of the forms yet. You will have time to get to that in a moment.)

Part Two

Here are some more nouns and some plural forms:

	gloss	NOM.SG	GEN.SG	PAR.SG	NOM.PL	GEN.PL
(11)	‘shoulder’	õlg	õla	õlga	õlad	õlgade
	‘book’	raamat	raamatu	raamatut	raamatud	raamatute
	‘caterpillar’	tõuk	tõugu	tõuku	tõugud	tõukude
	‘wheel’	ratas	ratta	ratast	rattad	rataste
	‘spring’	kevad	kevade	kevadet	kevaded	kevadete
	‘tooth’	hammas	hamba	hammast	hambad	hammaste
	‘bag’	kott	koti	kotti	kotid	kottide
	‘exception’	erand	erandi	erandit	erandid	erandite
	‘custom’	komme	kombe	kommet	kombed	kommete
	‘mitten’	kinnas	kinda	kinnast	kindad	kinnaste
	‘time’	aeg	aja	aega	ajad	aegade
	‘idea’	mõte	mõtte	mõtet	mõtted	mõtete
	‘bundle’	kimp	kimbu	kimpu	kimbud	kimpude
	‘pumpkin’	kõrvits	kõrvitsa	kõrvitsat	kõrvitsad	kõrvitsate

¹Objects can also be marked GEN or NOM under certain conditions, which are quite complicated and still somewhat a mystery to me. Since this problem is primarily about morphology, we’re going to ignore this complicated syntactic issue.

Your task for this part is to build a formal account of the forms in (11).² You are not responsible for the partitive plural, which has been left out of the assignment because it is very complicated. Your account should also be able to extend to the forms in (10). Make sure your account helps us understand the answers to the questions (or results of the imperatives) below:

- (i) Note any generalizations you see about the various forms. Make sure you look for generalizations for all words in one column as well as generalizations for individual words across columns.
- (ii) How is the NOM.PL constructed? What is the morpheme indicating NOM.PL? Does it exhibit any allomorphy? If so, what is its underlying representation, and what conditions the choice of allomorph (i.e., is it something phonological, or does it just appear with certain words)?
- (iii) How is the GEN.PL constructed? What is the morpheme indicating GEN.PL? Does it exhibit any allomorphy? If so, what is its underlying representation, and what conditions the choice of allomorph (i.e., is it something phonological, or does it just appear with certain words)?
- (iv) How do the data in Part Two bear on the choice of underlying form from Part One? Note any difficulties that the data in Part Two pose for choosing an underlying form. For example, can you derive all the forms in (11) with just one underlying form for each word? What about two underlying forms? Three? Four?
- (v) Some more nouns are given in the table below. Your formal account of the singular forms in (11) probably doesn't extend to the singular forms in the (12). Do not spend your time trying to change it so that it does. However, your formal account of the plural forms in (11) should extend to the plural forms below. Make sure that it does.

	gloss	NOM.SG	GEN.SG	PAR.SG	NOM.PL	GEN.PL
	'(bed)room'	tuba	toa	tuba	toad	tubade
	'month'	kuu	kuu	kuud	kuud	kuude
	'fish'	kala	kala	kala	kalad	kalade
(12)	'butterfly'	liblikas	liblika	liblikat	liblikad	liblikate
	'student'	õpilane	õpilase	õpilast	õpilased	õpilaste
	'party'	pidu	peo	pidu	peod	pidude
	'mouth'	suu	suu	suud	suud	suude
	'table'	laud	laua	lauda	lauad	laudade

²A **formal** account must include rules that generate these words. You may use either vocabulary insertion or form rules, but you must provide explicit rules. If you need phonological rules (and you might), provide them as explicitly as you can. Note that a formal description involving phonological and morphological rules is not complete without discussion of the ordering the two sets of rules have with respect to one another.

Part Three

Here are some more sentences exhibiting some of the semantic cases. You can assume that these examples are representative of the behavior of the semantic cases in general.

- (13) ILL(ATIVE)³
- a. Poiss astus toasse. ‘The boy stepped into the room.’
 b. Liblikad lendasid tüdrukute suudesse. ‘The butterflies flew into the girls’ mouths.’
- (14) INE(SSIVE)
- a. Raamatutes on palju sõnu. ‘There are many words in the books.’
 b. Mari istus toas. ‘Mari sat in the room.’
- (15) ELA(TIVE)
- a. Õpilane lahkus toast. ‘The student left the room.’ (*Lit:* out of the room)
 b. Poiss on tüdrukutest pikem. ‘The boy is taller than the girls.’
- (16) ALL(ATIVE)
- a. Poisid läksid pidudele. ‘The boys went to the parties’
 b. Raamat kukkus lauale. ‘The book fell to the table.’
- (17) ADE(SSIVE)
- a. Meestel on kõrvits. ‘The men have a pumpkin’ (*Lit:* On the men is a pumpkin.)
 b. Tüdruk on peol. ‘The girl is at the party.’
- (18) ABL(ATIVE)
- a. Liblikas saabus peolt. ‘The butterfly arrived from the party.’
 b. Poiss laenas tüdrukult raamatu. ‘The boy borrowed a book from the girl.’
- (19) TRANSLATIVE (TRL)
- a. Poiss sai meheks. ‘The boy became a man.’
 b. Tõugud saavad liblikateks. ‘The caterpillars are becoming butterflies.’

Extend your formal account from Part Two so that it can generate these seven semantic cases. Make sure your account and discussion of it provide answers to the following questions.

- (i) All of the semantic cases are built in the same way. How? State this as clearly and precisely as you can.
- (ii) What are the underlying representations for the seven cases listed above? How can you tell?
- (iii) How do the data in Part Three bear on the issue of choosing an underlying form for the nouns in Parts One and Two?

³Some lexical items also have a so-called ‘short form’ of the ILL.SG. For example, the ILL.SG short form of *tuba* is *tuppa*. The long forms given here are part of the standard language, but in colloquial speech, the short form is more often (or always) used with certain lexical items.

Part Four

What do the data in these examples show?

- (20) Need väikesed tõugud saavad ühel päeval väga ilusadeks liblikateks.
'These little caterpillars will one day become very beautiful butterflies.'
- (21) Need kurvad õpilased lahkusid sellest mustast toast.
'These sad students left this dirty room.'
- (22) Poiss astus nende tüdrukute ilusasse toasse.
'The boy stepped into these girls' beautiful room.'
- (23) Pikad tüdrukud sõid selle pika mehe väga maitsevat võileiba.
'The tall girls ate this tall man's very delicious sandwich.'
- (24) See ilus tüdruk kallistas seda pikka meest.
'This beautiful girl hugged this tall man.'
- (25) Nendel pikkadel õpilastel on väga suured raamatud.
'Those tall students have very big books.'

Your task in this part of the assignment is to take your formal account from Parts Two and Three and incorporate it into an analysis of Estonian DPs. This set contains some words besides nouns and verbs (i.e., adjectives, demonstratives, degree words [adverbs]). You can assume their behavior is representative of their respective class as a whole.⁴ Make sure your analysis accounts for them as well. What do you notice about them (i.e., their forms)? Do they all behave the same way? Here are some assumptions you can make about Estonian DPs:

- Demonstratives are Ds.
- Genitive possessors are generated in specifier of a functional projection– call it PossP.⁵
- APs are adjoined to NPs, and degree words are adjoined to APs.

Make sure your discussion shows how your analysis works by going through some examples.

⁴Which means that you should posit either Phrase Structure Rules generating the correct word order, or else specify *exactly* what is possible in an Estonian DP in terms of word order.

⁵This isn't totally crazy– Finnish and Hungarian, both related languages, have a possessor agreement morpheme (as in Turkish), but it seems clear based on word order that possessors are NOT in Spec,DP in these languages.