Appendix: The order of adjective and genitive in corpora

I claimed in Section 2 that adnominal genitives typically precede adjectives in Estonian nominal phrases. It has been observed that the order of elements within DPs is freer in some languages without articles than it is in, for example, English. Thus, to clarify the claim that genitives "typically" precede adjectives in Estonian, I conducted a corpus study (with the assistance of Travis McGeehan and Coree Clinton) to investigate the relative frequencies of the two orders. In brief, the study supports the claim that it is more common for genitives to precede adjectives (Gen-Adj), accounting for roughly 83% of all examples collected. In this section, I explain the design and discuss briefly questions that this study raises.

We used the balanced literary corpus and the corpus of parliamentary records available online (http://www.keeleveeb.ee/). The corpora are tagged for grammatical information. We collected examples of nominal phrases bearing one of three cases that are used fairly frequently: nominative, partitive, and adessive. Genitive could not be used, because the genitive itself bears genitive case. In order to ensure that the adjective was actually modifying the noun, both adjective and noun were tagged with the same case information.

In order to ensure a variety of adjectives, we searched the corpora for examples containing specific adjectives according to the classification given by Laenzlinger (2005); Scott (2002). Given that some analyses maintain that some adjectives are merged with the nominal spine later/higher than other adjectives, a reasonable hypothesis to entertain is that structurally higher adjectives are more readily found on the left of genitives and structurally lower adjectives more readily found between genitives and the head noun. The results are presented in Table 1.

The table is organized as follows. The BROAD column corresponds to Laenzlinger's (2005) adjective classes, and the NARROW column corresponds to Scott's (2002) adjective classes. The table is organized with the adjective classes that are closest to the noun at the top, moving further away as the table moves down. The chart ignores nationality/origin adjectives (e.g., French) and material adjectives (e.g., wooden) as these are not typically expressed with adjectives in Estonian. In the columns showing the specific token percentages, the figure on the left (#) corresponds to the total number of tokens collected, and the percentage given corresponds percentage of tokens with that particular order for that particular adjective. To verify whether the proportions are distinct, we ran a test of independent proportions, and the χ^2 values are reported in the final column. Shaded rows are the classes where the difference between the number of Adj-Gen orders and Gen-Adj orders was significant at $\alpha=0.05$.

The results do not support the hypothesis that adjective class affects availability of adjective-genitive word order. Even with ordinals, the highest adjective class in the hierarchies of Laenzlinger (2005) and Scott (2002), it is more common to have the genitive precede the ordinal. Only one adjective (*paks* 'thick') has more tokens of the order adjective-genitive than the order genitive-adjective, although the difference is not significant due to the small number of tokens. Thus, the overall picture indicates that the order wherein the genitive precedes the adjective is more common, thus supporting my claim that this is the typical order in Estonian.

SEMANTIC CLASS		WORD		Adj-Gen		GEN-ADJ		
BROAD	NARROW	ESTONIAN	ENGLISH	#	%	#	%	χ^2
non-scalar	color	punane	'red'	2	4.8%	40	95.2%	65.2
non-scalar	color	valge	'white'	7	10.9%	57	89.1%	75
non-scalar	shape	kolmnurkne	'triangular'	0	_	0	_	_
non-scalar	shape	ümmargune	'round'	1	14.3%	6	85.7%	4.6
measure	age	kaasaegne	'modern'	9	36.0%	16	64.0%	2.9
measure	age	noor	'young'	18	34.0%	35	66.0%	9.7
measure	temperature	külm	'cold'	3	10.0%	27	90.0%	35.3
measure	temperature	kuum	'hot'	1	4.8%	20	95.2%	30.9
measure	weight	kerge	ʻlight'	16	33.3%	32	66.7%	9.4
measure	weight	raske	'heavy'	22	22.4%	76	77.6%	57.3
scalar	height	kõrge	'tall/high'	18	8.4%	197	91.6%	294.7
scalar	height	madal	'low'	32	28.8%	79	71.2%	38.1
scalar	length	lühike	'short'	15	28.8%	37	71.2%	17
scalar	length	pikk	'long/tall'	36	31.9%	77	68.1%	28.3
scalar	size	suur	'big'	294	35.5%	534	64.5%	138
scalar	size	väike	'little'	73	43.2%	96	56.8%	5.7
scalar	speed	aeglane	'slow'	6	20.0%	24	80.0%	19.3
scalar	speed	kiire	'fast'	19	6.4%	277	93.6%	446.3
scalar	width	paks	'thick'	4	80.0%	1	20.0%	1.6
scalar	width	peenike	'thin'	1	16.7%	5	83.3%	3
speaker	subj. comm.	suurepärane	'excellent'	6	25.0%	18	75.0%	10.1
speaker	subj. comm.	vastik	'nasty'	1	33.3%	2	66.7%	0
quant	ordinal	esimene	'first'	180	9.8%	1650	90.2%	2358.4
quant	ordinal	viimane	'last'	100	11.2%	792	88.8%	1070.6
			TOTAL	864	17.4%	4098	82.6%	4212.9

Table 1: Order of adjective and genitive across adjective types in nominative, partitive, and adessive nominal phrases

References

Laenzlinger, Christopher. 2005. French adjective ordering: perspectives on dp-internal movement types. *Lingua* 115(5). 645–689.

Scott, Gary-John. 2002. Stacked adjectival modification and the structure of nominal phrases. In Guglielmo Cinque (ed.), *Functional structure in DP and IP: The cartography of syntactic structures*, vol. 1, 91–120. Oxford: Oxford University Press.