Appendix A: On the independence of the thematic allomorph

This appendix lays out that thematic allomorphy is determined *only* be the factors discussion in Section 4, namely the root or the number allomorph (depending on what spells out number). That is, I lay out that the thematic allomorph is never immediately determined by other factors (however relevant they may be in a mediated fashion, insofar as they are relevant to the determination of the spellout of number). These other factors include number, a root's number class, and the root/affix distinction. I both demonstrate these facts, and show how the kind of lexical entries I have proposed allow for this independence. As I discuss in Appendix B, this is crucial vis-a-vis simpler nanosyntactic lexical entries and an account of singulatives in terms of *gapping*, which would fail to provide the necessary degrees of freedom.

In essence, this section will discuss three contrasts: First, two elements from the same number class and in the same number showing different thematic allomorphs. This contrast shows that the former two do not predict the latter. Second, two elements from different number classes, and in different number showing the same thematic allomorph, showing that the latter does not predict either of the former. Together, these contrasts show that the thematic allomorph is independent of both number and number class. Finally, we will consider the case of a root and a number affix determining the same thematic allomorph, showing that the thematic allomorph cross-cuts the root/affix distinction.

Consider first the independence of the thematic allomorph from number marking class. We have already seen *peet* 'day' and *oosn* 'forest', both of which mark only the plural. In section 3, I laid out how the two roots "select" different plural allomorphs, due to their difference in branching. As is highlighted in (63-64), they also trigger different thematic allomorphs in the unmarked singular: While *peet* combines with *-u*, *oosn* combines with *-a*.

(63) a. peet-**u**-it → pêetúut
day-**TH**-SEC
'day (SG)'

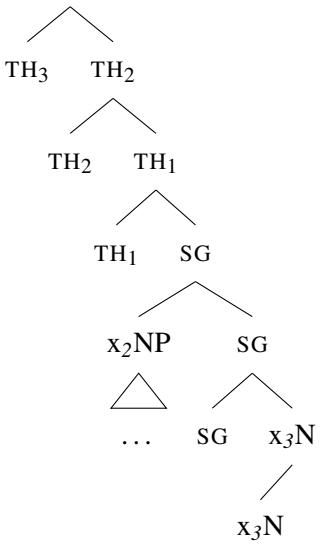
b. peet-uus-**ya**-ik → pêetùusyék
day-PL-**TH**-SEC
'days (PL)'

(64) a. oosn-**a**-it → òosnêet
forest-**TH**-SEC
'forest (SG)'

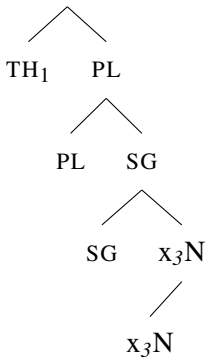
b. oosn-oos-**ya**-ik → òosnòosyék
forest-PL-**TH**-SEC
'forests (PL)'

We can immediately derive the behavior of *oosn* by revising the previous analysis of *oosn* and its associated plural allomorph *-oos* to the structures in (65). In the singular, *oosn* will spell out the whole structure until TH_3, with TH_4 being spelled out by *-a* (58b). In contrast, in the plural, it will fail to determine the thematic allomorph just as we saw with *peet* above. The plural allomorph *-oos* will determine the thematic allomorph in the plural – incidentally (unless one might be driven towards further decomposition), both *-uus* and *-oos* trigger the same thematic allomorph *-ya* (55b), i.e., they both spell out TH_1, but no other material in the thematic domain. Crucially, the fact that *peet* and *oosn* are of the same number-marking class is determined simply by them not lexicalizing PL, and their behavior with respect to thematic allomorph selection (by varying the size in the thematic domain), and their behavior with respect to the plural allomorph (by varying the breaking point of the f-seq below number) are independent of this fact.

(65) a. *oosn* ⇔ TH$_3$



b. TH$_1$ ⇔ *-oos*



We have seen two roots from the same number class triggering different thematic allomorphs, and we now turn to the fact that the opposite is also a possibility, i.e., two roots from different number marking classes may trigger the same thematic allomorph in the unmarked case.[1] We have, in fact, already introduced both the data and the analysis; compare the unmarked singular form *oosn-a-it* 'forest' from (66a) with the unmarked plural form *ngeend-a-ik* 'beans' in (66b):

(66) a. oosn-**a**-it → òosnêet
forest-**TH**-SEC
'forest (SG)'

b. ngeend-**a**-ik → ngéendéek
bean-**TH**-SEC
'beans (PL)'

This illustrates that thematic selection is a root-property that is independent of number-marking class: Above, we saw that two roots from the same number-marking class may determine different thematic affixes in the unmarked case. The same data also illustrates that both a singular-marking and a plural-marking root may determine the same thematic affix. As is evident from comparing the lexical entry for *ngeend* (58) with the one for *oosn* (65a), this is due to the fact that the size of a lexical item with respect to the thematic domain is independent of whether or not a noun lexicalizes the kind of structure that results in marked singulars, or the kind that results in marked plurals: In either case, they can determine the thematic allomorph only in case they spell out the number structure, and nothing blocks them from determining the same thematic allomorph by lexicalizing identical parts of the thematic domain. Hence, thematic allomorphy selection is independent of number-marking class.

The comparison in (66) is also immediately relevant for showing that thematic allomorph selection is not dependent on number itself: Different numbers may co-occur with the same thematic allomorph. We have already seen that the flipside is also true: The same number may occur with different thematic affixes, e.g., *peet-**u**-it* 'day' (63a) vs *oosn-**a**-it* 'forest'(64a).

Finally, let me illustrate that both a root and an affix may in fact select the same thematic allomorph. Consider the comparison in (67) – both the plural suffix *-uus* and the plural-marking root *tariit* 'bird' select for the thematic suffix *-ya*.

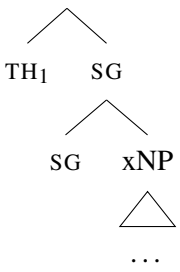
[1] That being said, Kouneli (2021: 8) points out that the set of thematic suffixes that occur with singular-marking nouns is a subset of those that occur with plural-marking nouns. I do not currently have a principled explanation for this; it appears simply as a lexical gap.

(67) a. peet-uus-**ya**-ik → pêetùusyék
day-PL-**TH**-SEC
'days (PL)'

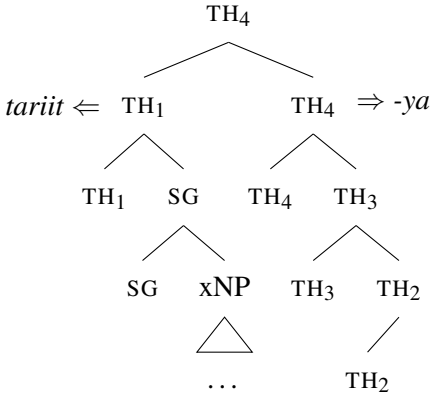
b. tariit-**ya**-it → tàrìityét
bird-**TH**-SEC.SG
'bird (SG)'

We have already seen how the plural suffix *-uus* determines the thematic suffix *-ya*: By not lexicalizing the relevant part of the thematic region that *-ya* spells out (in this case, all of it). The fact that a root triggers the same thematic suffix when it spells out number, can be modeled in the same way: When a root and an affix lexicalize the same parts of the thematic domain, and they actually get to spell them out, they will trigger the same thematic suffix. In this case, the root *tariit* 'bird' (68) and the plural suffix *-uus* trigger the same thematic suffix *-ya* because neither lexicalizes any part of the thematic region above TH_1 (68a), (55a). Hence in both cases, TH_2, TH_3 and TH_4 are spelled out in a constituent, by *-ya* (68b), (56).

(68) a. *tariit* ⇔ TH_1



b.



The results of this subsection are summarized in Table 1, with trivial cases, such as same class, same thematic affix, or different class, different thematic affix omitted.[2]

DOMAIN	S/D	THEM.	DATA	ANALYSIS
NUMBER CLASS	same	diff.	(63), (64)	(53-54), (65)
	diff.	same	(66)	(65), (58-59)
NUMBER	same	diff.	(63a), (64a)	(53-54), (65)
	diff.	same	(66)	(65), (58-59)
ROOT/AFFIX	diff	same	(67)	(55-56), (68)

Table 1: Independence of the Thematic Allomorph: Summary.

[2] One thing I have not investigated here, is the relation between the thematic suffix in the unmarked number case, and the number suffix in the marked number case. According to Kouneli's (2021) Tables 3 and A.1 there exists a nontrivial degree of correlation between these in plural-marking roots, but neither predicts the other perfectly: For instance, there are pairs of plural-marking roots that take the same thematic suffix in the singular, but different plural suffixes, and there are pairs of roots that take the same plural suffix, but different thematic suffixes in the unmarked singular.