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# 32 Introduction to Baltic languages

The Baltic branch of Indo-European survives in two languages, Latvian and Lithuanian. Both of them productively derive nouns, verbs, adjectives, and adverbs through prefixation and suffixation, but prefixation is notably more developed in the verbal domain. Interfixes are sometimes recognized in the Latvian linguistic tradition and refer to segments occurring before the suffixes that arguably play no independent derivational role (Kalnača 2014: 106–107; cf. Roché 2015 for the same interpretation of interfixes in Romance). The reflexive (middle) verbs are productively derived by the addition of affixal reflexive markers (RMs) and are discussed in more detail below. Both languages also allow the simultaneous addition of two affixes, such as prefix-suffix, prefix-RM, or suffix-RM.

The main questions to be answered while building the derivational networks of the Baltic languages in this project relate to the following: (1) the treatment of reflexive (middle) constructions, (2) the interpretation of some aspectual forms, (3) ambiguous orders of derivation, and (4) negative forms with respect to their inclusion in derivational networks and their order of derivation.

The interpretation of reflexive (middle) constructions[1] as inflectional or derivational is a well-known problem, and both the Latvian and Lithuanian linguistic traditions show certain variations (for an overview and for the arguments in favour of treating these constructions as inflectional rather than derivational, see Holvoet 2001: 183–189, 2015: 455–459). REFLEXIVE was included in the list of derivational categories of the present project, and without trying to claim anything new in the inflection versus derivation debate, these formations are also included in the Baltic derivational networks to enable cross-linguistic comparison, especially with genetically and areally related Slavic languages, which constitute a large part of the sample. Baltic reflexive formations typically function as anticausatives in Latvian, and as anticausatives and indirect reflexives (benefactives) in Lithuanian. To get an idea of how the inclusion of reflexive verbs influences the size of Baltic derivational networks, consider the following numbers: Latvian verbal derivational networks have 35 (7%) REFLEXIVES out of a total of 497 formations, while Lithuanian derivational networks have 80 (12.6%) out of a total of 635.

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**1** These constructions have a broad range of functions and are termed 'reflexive' due to the original function of the reflexive pronominal clitic, which gradually became an affix. Alternatively, these constructions can also be called 'middle' to reflect their function, following the interpretation of Kemmer (1993). Adopting the terminological conventions of the present project, the term 'reflexive' is used henceforth.

Baltic reflexive verbs have affixal RMs, which appear as the last morpheme in all forms in Latvian, but only as the last morpheme in non-prefixed forms in Lithuanian, e.g. Latvian *vilkt* 'pull, drag' > *vilktie-**s*** 'drag oneself', Lithuanian *traukti* 'pull' > *traukti-**s*** 'shrink (intr.)'. In prefixed forms in Lithuanian, the RM is placed before the root, e.g. *ati-traukti* 'pull back (tr.)' > *at-**si**-traukti* 'pull back (intr.)'; an example of a Latvian form with a prefix where the RM is placed at the end is *at-vilkt* 'drag up' > *at-vilktie-**s*** 'drag oneself up'. In rare cases, the RM in Lithuanian appears before the first lexical prefix of the last derivational order if the verb contains two prefixes, e.g. *pri-pa-žinti* 'acknowledge' > *pri-**si**-pa-žinti* 'confess' (although such formations are not attested in the given sample of derivational networks). The appearance of the Lithuanian RM in two different positions reflects its former mobility as a clitic and can be interpreted as an instance of a Wackernagel affix (Nevis and Joseph 1993) or as an ambifix (Mugdan 2015: 268; see also Holvoet 2015: 457–460).

With regard to aspect, prefixed DIRECTIONAL formations in Latvian and Lithuanian express perfectivity and are at the same time FINITIVE, e.g. Latvian *griezt* 'cut (imperfective)' > ***iz**-griezt* 'cut out (perfective)', Lithuanian *pjauti* 'cut (imperfective)' > ***iš**-pjauti* 'cut out (perfective)'. As this is a regular relation, only DIRECTIONAL was marked in the Baltic derivational networks; FINITIVE was reserved for cases when a prefix added no spatial features to the derivative and only the endpoint was marked, e.g. Latvian *šūt* 'sew (imperfective)' > ***pa**-šūt* 'idem (perfective)', Lithuanian *siūti* 'sew (imperfective)' > ***pa**-siūti* 'idem (perfective)'. Lithuanian also has some imperfectivizing (DURATIVE) suffixations, which are absent in Latvian. In general, though, the Baltic languages do not possess a highly grammaticalized aspectual system of the Slavic, particularly Russian, type, despite a number of similarities. As a result, the Baltic formations related to aspectual distinctions are much more derivational than inflectional (for a discussion and further references, see Arkadiev et al. 2015: 31–35; Holvoet 2015: 463–464).

Baltic verbs with the structure prefix-root-suffix quite frequently allow two interpretations based on the order of their derivation: either the suffix is added first and then the prefix, or vice versa. For example, from the Lithuanian *deg-ti* 'burn (intr.)', one can derive a suffixal CAUSATIVE, *deg-**in**-ti* 'burn (tr.)', and then a FINITIVE can be formed by adding a prefix, ***su**-deg-in-ti* 'burn down (tr.)'; consider also the Latvian *deg-t* 'burn (intr.)' > *dedz-**inā**-t* 'burn (tr.)' (CAUSATIVE) > ***sa**-dedz-inā-t* 'burn down (tr.)' (FINITIVE). Alternatively, one can argue that a FINITIVE is derived first (*deg-ti* 'burn (intr.)' > ***su**-deg-ti* 'burn down (intr.)'), and a CAUSATIVE suffix is added later (> *su-deg-**in**-ti* 'burn down (tr.)'); consider also the Latvian *deg-t* 'burn (intr.)' > ***sa**-deg-t* 'burn down (intr.)' > *sa-dedz-**inā**-t* 'burn down (tr.)'. Some prefixed ITERATIVES also allow two interpretations, and the same

problem is relevant for derived verbs with the structure prefix-root(-suffix)-RM (Latvian) or prefix-RM-root(-suffix) (Lithuanian), e.g. Latvian *vilkt* 'pull, drag' > *vilktie-**s*** 'drag oneself' (REFLEXIVE) > ***at*-vilktie-s** 'drag oneself up' (DIRECTIONAL), Lithuanian *siūti* 'sew (imperfective)' > *siūti-**s*** 'sew, have sewn for oneself (imperfective)' (REFLEXIVE) > ***pa*-si-siūti** 'sew, have sewn for oneself (perfective)' (FINITIVE) versus the alternative order of derivation – Latvian *vilkt* 'pull, drag (imperfective)' > ***at*-vilkt** 'drag up' (DIRECTIONAL) > *at*-vilktie-***s*** 'drag oneself up' (REFLEXIVE), Lithuanian *siūti* 'sew (imperfective)' > ***pa*-siūti** 'sew (perfective)' (FINITIVE) > *pa-**si**-siūti* 'sew, have sewn for oneself (perfective)' (REFLEXIVE). The choice of the preferred order of derivation in such cases is left open to the authors of the individual chapters, and the interpretation chosen affects neither the number of orders nor the total number of derivatives. It should be mentioned, however, that the possibility of two alternative derivational histories shows that some verbal categories can occur in a reversed order (yet the order of morphemes in the final derivative remains the same), e.g. CAUSATIVE-FINITIVE vs. FINITIVE-CAUSATIVE or REFLEXIVE-DIRECTIONAL vs. DIRECTIONAL-REFLEXIVE, as illustrated above.

Prefixal negative (PRIVATIVE) derivatives in this survey are included for nouns, adjectives, and adverbs, but, following the traditional approach, verbs with negation are omitted (see e.g. Pavlovič 2015: 1367–1368 for an alternative view regarding Slavic). PRIVATIVE adverbs are interpreted as being derived from the corresponding positive ones, but a deadjectival interpretation would also be possible, e.g. Latvian *slikti* 'badly' > ***ne*-slikti** 'not badly', Lithuanian *blogai* 'badly' > ***ne*-blogai** 'not badly' versus Latvian *neslikt-s* 'not bad' > *neslikt-**i*** 'not badly', Lithuanian *neblog-as* 'not bad' > *neblog-**ai*** 'not badly'.

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