

In this talk, I will discuss verbal affixes that encode manner information (e.g. *slowly, carefully*). An investigation into this typological rare and underexplored phenomenon can test our understanding of affix ordering, the relationship between morphology and syntax, and the distinction between functional and lexical items. I present novel data from West Greenlandic (*Unangan-Yupik-Inuit*), and compare the findings in a smaller typological sample of 31 languages. I propose implicational universals regarding the semantic content of such modifiers and their linear position inside verb complexes. I propose how to restrict their linear position, while still permitting the variation in scope and linear order found in West Greenlandic.

In West Greenlandic, manner affixes must be positioned closer to the verbal stem than Mood (*indicative, evaluative, etc.*), Modality (*iirealis, deontic, etc.*) and View-point aspect (*continuative, perfective, habitual, etc.*), and the reverse ordering would be ungrammatical, illustrated with deontic modality in (1). However, lower aspect markers (*repetitive, inchoative, etc.*) and valency changing morphology allow for variable ordering, with corresponding differences in scope interpretation, illustrated with repetitive aspect in (2) and causative (3).

(1) West Greenlandic Manner & Modality

- a. atuar-**rusaar**-tariaqar-pu-q
read-**slowly**-must-IND-3s.Abs
'S/he must read slowly' (Manner < Modality)
- b. *atuar-tariaqar-**rusaar**-pu-q
read-must-**slowly**-IND-3s.ABS (*Modality < Manner)

(2) West Greenlandic Manner & Aspect

- a. allag-qqig-**lluar**-pu-q
write-REP-**well**-IND-3s.Abs
'She wrote again well (having not written well previously)' (Asp < Manner)
- b. allag-**lluar**-qqig-pu-q
write-**well**-REP-IND-3s.Abs
'She wrote well again (having written well previously also)' (Manner < Asp)

(3) West Greenlandic Manner & Causative

- a. ani-**pallag**-tig-pa-i
Exit-**quickly**-CAU-IND-3s.Erg.3p.Abs
'S/he made they go out quickly' (Manner < CAU)
- b. ani-tig-**pallag**-pa-i
exit-CAU-**quickly**-IND-3s.Erg.3p.Abs Abstract Affixes
'S/he, in a quick manner, made them go out' (CAU < Manner)

The findings were reproduced in the typological survey, with verb-internal manner modifiers consistently appearing closer to the verbal root than TAM-markers (for both prefixes and suffixes), and with cross-linguistic variation with linear order for valency-changing morphology and manner (illustrated in (4)). The survey also shows that it is necessary to make a distinction between incorporated manner modifiers and manner affixes, although both exhibit the same constraints on linear order inside verb complexes. Adopting the 4 basic semantic categories for manner adverbs (SPEED, VALUE, CARE & NOISE) from Hallonsten Halling (2018), with the

addition of a fifth category STRENGTH, implicational universals regarding semantic content can also be formulated (given in 5).

(4) Possible linear order of Manner and TAM-markers

Mood/Tense/Aspect–Manner–Root–Manner–Aspect\Tense\Mood

(5) If a language encodes either [STRENGTH] and/or [NOISE] inside verbal complexes, it will also encode [CARE] and/or [VALUE], in which case it will also encode [SPEED]. ([SPEED] ← [CARE] v [VALUE] ← [STRENGTH] v [NOISE])

I propose that manner affixes are the overt realizations manner functional syntactic heads merged in the clausal spine, along with other functional projections. Morphology and syntax are taken to belong to the same grammatical domain (cf. Distributed Morphology, Halle & Marantz 1992, Halle 1997). Following Ramchand & Svenonius (2014), I assume that the clause is divided into three domains ([PROPOSITION [SITUATION [EVENT]]]). Since manner affixes modify the event denoted by the verb, they must be situated in a low position in the clause spine (EVENT-domain, roughly corresponding to the expanded VP), before existential closure takes place (in the transition between SITUATION and EVENT (Ramchand & Svenonius 2014). However, there are no inherent constraints regarding the ordering within the EVENT-domain, allowing for limited variation in scope (reflected in linear order) for categories in this domain (including manner, low aspect markers and valency changing morphology), contrary to cartographic claims (cf. Cinque 1999). The assumption that morphological structures reflect syntactic structure (and vice-versa, cf. Baker 1985) allows us to account for their distribution in a straight-forward manner without any additional assumptions.

These findings shed light on the semantic and morphosyntactic properties of a poorly researched linguistic phenomenon, and raise important theoretical issues, including the relationship between morphology and syntax and the ordering of grammatical morphemes.

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