

Degree preverbs in Kazym Khanty and Ingush

Intro This paper presents novel data and analysis of a previously un(der)described type of preverbs, as found in two genetically and areally unrelated languages (Ingush and Kazym Khanty). In these two languages, verbal preverbs are found with remarkably similar properties. Such preverbs (a) may possess compositional or idiomatic meanings; (b) are banned with stative predicates, (c) demonstrably do not form a complex head with the verb. We analyze preverbs in the two languages as verbal adjuncts, which are degree modifiers applying either to a lexical scale or to an interval scale of change during the event. **Data Ingush** In Ingush (Nakh-Dagestanian; Ergative; SOV), a class of preverbs (referred to as *deictic*) exists: *wa* ‘down’, *hwal* ‘up’, *dwa* ‘away’, *hwa* ‘here’, (Nichols 2011), which (a) may have, depending on the verb, either *compositional* (i.e. deictic) (1a) or *idiomatic* (1b) semantics, (b) are banned with stative predicates (2) and in atelic environments (3) and can be optionally used in telic environments (4). (4) also shows that preverbs cannot move. Two or more deictic preverbs cannot co-occur with one verb (no stacking) (5). In the case the verb head moves, the deictic preverb cannot move together with the verb and must stay *in situ* (6). (Same picture for idiomatic cases).

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| <p>(1) a. doda ‘go’ – dwa doda ‘go away’
 b. daqqa ‘take’ – dwa daqqa ‘wipe’</p> <p>(2) Angliski mott (*dwa) xov
 English language DEIC knows
 Ahmad-an
 Ahmad-DAT
 ‘Ahmad knows the English language.’</p> <p>(3) Ahmada-s itt minut xodar (*dwa) diir
 Ahmad-ERG 10 min porridge DEIC ate
 ‘Ahmad was eating the porridge for 10 minutes’</p> | <p>(4) (*dwa) Ahmada-s (*dwa) gali (dwa)
 DEIC Ahmad-ERG DEIC bag DEIC
 hwo
 bring.PRS
 ‘Ahmad is taking the bag out’</p> <p>(5) a. *hwa dwa hwo (<i>away+here+bring</i>);
 b. *wa dwa hwo (<i>up+away+bring</i>);
 c. *dwa wa hwo (<i>away+up+bring</i>) etc.</p> <p>(6) Hana dedad_i cisk dwa t_i?
 Why ran cat DEIC
 ‘Why has the cat run away?’</p> |
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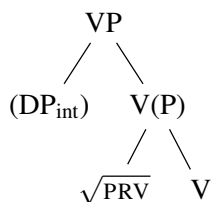
Kazym Khanty In Kazym Khanty (Ob-Ugric, Uralic; Accusative; SOV) there is a class of preverbs that, similarly to Ingush, may have compositional or idiomatic meaning, depending on the verb (Kaksin 2010, Solovar 2023, inter alia), see (7). These include *nuχ* ‘up’, *iλ* ‘down’, *läp* ‘tight’ and others. These preverbs are not compatible with statives (8). Statives may be reinterpreted as eventive predicates, as (8) shows. Moreover, these preverbs are incompatible with atelic readings with some verbs and may appear with telic ones (9). Moreover, preverbs cannot be stacked (10). While the preverbs cannot be moved (11), preverbs can be separated from the verb by manner adverbs (12) only when the verb head-moves to C (Belkind 2021), suggesting that the preverb can be stranded by head movement of the verb. (Same picture for idiomatic cases).

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| <p>(7) a. potti ‘freeze’ (about berries) - läp potti TIGHT
 FREEZE ‘freeze’ (about a lake)
 b. pitt_i ‘become’ - nuχ pitt_i UP BECOME ‘win’</p> <p>(8) pet’a-jen nuχ λoλ-s
 pet’a-POSS.2SG up stand-PST[3SG]
 # ‘Petya stood’; Ok: ‘Petya stood up’</p> <p>(9) a. jernas-εm (nuχ) sor-s
 dress-POSS.1SG up dry-PST[3SG]
 ‘The dress dried’ [very quickly]</p> <p>b. jernas-εm χoλen sos mar (*nuχ)
 dress-POSS.1SG 3 hour within up
 sor-s
 dry-PST[3SG]
 ‘The dress dried for 3 h.’ [and is still wet]</p> | <p>(10) a. *nuχ iλ sewerti UP DOWN CUT exp. ‘cut down’, *iλ nuχ sewerti DOWN UP CUT exp. ‘cut down’
 b. nuχ sewerti UP CUT ‘cut down’, iλ sewerti DOWN CUT ‘cut down’</p> <p>(11) (*nuχ) was’aj-en amp-eλ
 (up) Was’a-POSS.2SG dog-POSS.3SG
 (nuχ) jir-λ
 up tie-NPST[3SG]
 ‘Wasya is tying the dog’</p> <p>(12) a. purmäs-λ-an nuχ jäma
 cloth-PL-POSS.2SG up well
 sor-s-ət ?
 dry-PST-3PL
 ‘Have the clothes dried well?’</p> <p>b. [[nuχ t_i]_{VP} jäma]_{VP} sor-s-ət_i]_{CP}</p> |
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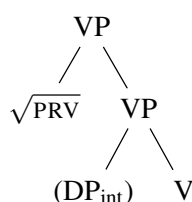
Analysis We propose that in both languages the preverbs (Khanty preverbs and Ingush deictic preverbs) are acategorical roots (hence inability to move) which are adjoined to a verbal structure (see Wiltschko (2008) on adjoined morphemes and Surányi (2009) on preverbs as adjuncts). As adjuncts, the preverbs are unable to participate in head movement. We take a relatively agnostic position on whether the preverb attaches to the verb below (Wurmbrand 2000), (as in 12), or above the Direct Object (as in 13); nothing in our analysis crucially hinges on this choice. However, we have certain evidence that the latter option might be correct at least for Ingush. In this language, the preverb can linearly precede indefinite pronouns but not a definite DPs in the DO position (14 vs. 4). Assuming that (a) all Absolutive (definite) DPs must move out of the base generated positions (Polinsky 2017) and (b) indefinite noun phrases are less likely to scramble (Diesing and Jelinek 1993; Diesing 1997, Does and Hoop 1998, a.o.), the observed pattern can be accounted for easily if

suggested that in Ingush the indefinite pronouns (but not other noun phrases), remain in situ and the preverb left- or right- adjoins to the VP, yielding the two attested orders in (14), (the verb is assumed to raise at least to v).

(12)



(13)



- (14) Ahmada-s (dwa) ham (dwa) hwo
 Ahmad-ERG DEIC something DEIC bring.PRS
 ‘Ahmad is taking something out’

Following Svenonius (2012), a.o., we take the separability of the preverbs (6, 12) as evidence that they are unincorporated into the verb. We follow (Wurmbrand 2000), (Zeller 2001), (Tan 2024), among others, in assuming that the availability of idiomatic readings in preverbs is only obtained in sufficiently local environments. To allow adjuncts to participate in idiomatic readings, we modify the structural condition on idiomatic preverbs given in Tan (2024) slightly as follows (15). To that effect, the Ingush and Kazym Khanty preverbs in question *may* but *are not forced to* develop idiomatic readings.

(15) **Idiomatic Particle Licensing**

- a. Idiomatic interpretations are licensed in a local relation at LF
 b. A preverb may develop an idiomatic reading iff (a) it is contained inside the vP and (b) it is not separated from the verb by a phase boundary (such as P)

Semantics The common core of the semantic denotation of degree preverbs is given below (16), as well as a sample derivation of a VP containing a preverb (inspired by (Kagan 2013, Martínez Vera 2021)) in (14).

- (16) $\|prv\| = \lambda P \lambda d \lambda x \lambda e \exists d'. [P(d)(x)(e) \& \max(d) \leq d' \& \mu]$
 where $\max(d) = \max_S^I$ if S is top-closed, $\max(d) = \max_S^C$ otherwise,
 μ is lexical component of meaning of the preverb

- (17) $\|prv + dry/run\| = \lambda d \lambda x \lambda e \exists d'. [dry/run(d)(x)(e) \& \max(d) \leq d' \& \mu]$

An degree preverb is assumed to denote a maximum on the scale, $\max(d)$ (Martínez Vera 2021). With degree verbs, that are associated with a lexically specified top-closed scale, preverb denotes a maximum on this scale. For the verbs that are not associated with a scale (such as *run*), we assume an interval scale of change in time is coerced. Since interval scales contain no maximum (Sassoon 2010) in this case, the maximum is defined contextually. Therefore, the event may be interpreted both as telic and as atelic (11). This leads to compatability with predicates that denote some change over time such as activities, achievements and accomplishments. Such preverbs are banned from merging another preverb (in Ingush – from merging another deictic preverb) because of a type-clash (verb is of type $\langle d, e, d, vt \rangle$ and VP is of type $\langle d, e, vt \rangle$ (DP is interpreted higher in the structure)). The constraint on surfacing in atelic (non-maximal) contexts arises because only maximal descriptions satisfy $\max(d)$. Furthermore, such preverbs are banned from appearing in stative structures because stative structures do not feature a degree-of-change argument (Hay et al. 1999) as these predicates exhibit no change over time. **Discussion** We suggest that the described type of preverbs constitutes a novel type of preverbs and cannot be accounted for by any major theory of preverbs. We reject ResP approach proposed by Svenonius (2004) for Slavic as this approach would predict that the preverbs obligatory head move. Furthermore, the preverbs in Ingush and Khanty cannot be accounted by P-doubling (Tan 2024) since P-doubling preverbs may not develop idiomatic readings. Ingush and Khanty preverbs cannot be argued to be Appl heads (Tan 2024) as they do not introduce arguments. Wurmbrand’s (2000) original account of (semi)-idiomatic preverbs must also be rejected since it incorrectly predicts the possibility to move for Ingush and K.Khanty preverbs. **Selected bibliography** Belkind, A. (2021) Verb movement in Khanty. Fieldwork handout, Kazym. Hay, J., Kennedy, C., & Levin, B. (1999, November). Scalar structure underlies telicity in “degree achievements”. In *Semantics and linguistic theory* (pp. 127-144). Kagan, O. (2013). Scalarity in the domain of verbal prefixes. *Natural Language & Linguistic Theory*, 31, 483-516. Kaksin, A. D. (2010). Kazymskij dialekt chantyjskogo jazyka. IIC JUGO. Sassoon, G. W. (2010). Measurement theory in linguistics. *Synthese*, 174(1), 151-180. Solovar, V. N. (2023). Obsko-ugorskie glagoly s preverbami destruktivnoj semantiki. *Vestnik ugrovedeniya*, 13(1), 143-149. Surányi, B. (2009). Verbal particles inside and outside v P. *Acta Linguistica Hungarica* (Since 2017 *Acta Linguistica Academica*), 56(2-3), 201-249. Svenonius, P. (2004). Slavic prefixes inside and outside VP. *Nordlyd*, 32(2). Svenonius, P. (2012). Structural and featural distinctions between Germanic and Slavic prefixes. In *Stuttgart P-Workshop*. Tan, T. L. (2024). The morphosyntax of Gothic preverb compounds: incorporation and applicativisation. *The Journal of Comparative Germanic Linguistics*, 27(1), 5. Vera, G. M. (2021). Degree achievements and maximalization: a cross-linguistic perspective. *Glossa: a journal of general linguistics*, 6(1). Wiltschko, M. (2008). The syntax of non-inflectional plural marking. *Natural language & linguistic theory*, 26(3), 639-694. Wurmbrand, S. (2000). The structure (s) of particle verbs. Ms., McGill University. Zeller, J. (2001). Particle verbs and local domains.