

Cross-categorical syncretism: evidence from diminutives

1. Background and goals: A widespread phenomenon across languages is the existence of **identical** and **cross-categorical** morphemes associated with what can be roughly characterized as diminutive semantics (in the sense of Jurafsky’s 1996 notion of “attenuation”), as illustrated in (1) and (2) for German, Italian, Hebrew, Halkomelem, and Albanian, respectively, where the same “diminutive” affixes (notice that these may also involve umlaut, reduplication, etc.) attach to both nouns and verbs, a situation descriptively reminiscent of syncretism (same morphological form in different contexts).

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| <p>(1) a. <i>Das Wasser koch-t</i> / <i>köch-el-t</i>. the water boil-3SG.PR / boil-DIM-3SG.PR ‘The water boils / simmers.’</p> <p>b. <i>fischi-ett-are</i> whistle-DIM-INF ‘to whistle, to emit short whistles’</p> <p>c. <i>cixkek</i> giggle.DIM.V ‘to giggle’</p> <p>d. <i>lhi:m (v)/ lhi-lhi:m</i> picking DIM-picking ‘picking’ ‘picking a little bit’</p> <p>e. <i>lul-ëz-øj</i> flower- DIM-1SG.PR ‘I bloom’</p> | <p>(2) a. <i>Bund Bünd-el</i> (German) bunch(MASC.) bunch-DIM(NEUT.) ‘bunch’ ‘bundle’</p> <p>b. <i>fischi-o fischi-ett-o</i> (Italian) whistle-S.M whistle-DIM-S.M ‘whistle’(action) ‘whistle’ (object)</p> <p>c. (<i>cxk</i>) <i>cixkuk</i> (Hebrew) laugh giggle.DIM.N ‘a giggle’</p> <p>d. <i>q’a:mi q’á-q’emi</i> (Halkom.) girl DIM-girl girl’ ‘small girl’</p> <p>e. <i>lule lul-ëz</i> (Albanian) flower (N) flower-DIM ‘flower’ ‘small flower’</p> |
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Given the cross-categorical combinability of the formally identical diminutive morphemes, a core question is whether or not these morphemes are themselves categorizing, and thus whether this syncretism is accidental or not. While this phenomenon has received some scholarly attention in modern morphosyntactic theorizing (e.g., Wiltschko & Steriopo 2007, De Belder et al. 2014, Audring et al. 2017, Grestenberger & Kallulli forthcoming), these questions have thus far not received satisfactory answers. In this paper, we present additional data from a typologically diverse range of languages and show that the identity of form is due to the same underlying syntactic structure, which we argue is crucially underlyingly **nominal** (hence: categorizing) across the board. This in turn accounts for the fundamental properties of such derivations, and especially of verbal diminutives, which have received little attention in the theoretical literature until now.

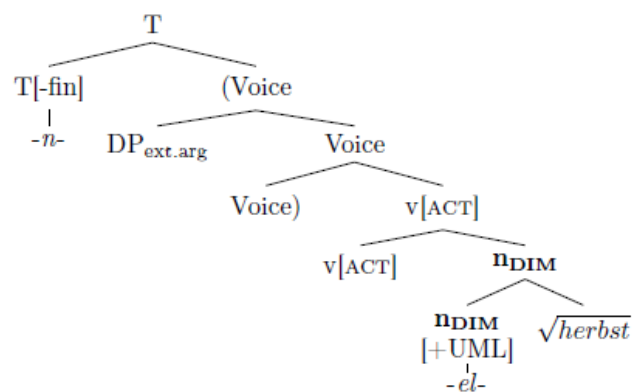
2. Further detail: Diminutive verbs across languages tend to be unergative activities, including (optionally) expletive verbs of emission – cf. (3a) and (3b) from Austro-Bavarian. They may differ from their non-diminutive counterparts with respect to valency – cf. the (Standard) German causative alternation verb in (4a,b) vs. its non-alternating diminutive counterpart (4a’,b’).

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| <p>(3) a. <i>So schön herbst-el-t</i> <i>unser Bezirk</i> so beautifully Fall-DIM-3SG.PR our.NOM district.NOM ‘This is how beautifully Fall-like our district is.’</p> <p>b. <i>Es herbst-el-t</i> It Fall-DIM-3SG.PR ‘It’s a bit Fall-like’.</p> | |
| <p>(4) a. <i>Das Wasser koch-t</i>. the water boil-s ‘The water is boiling.’</p> <p>b. <i>Der Hans koch-tdas Wasser</i>. the Hans boil-s thewater ‘Hans is boiling the water.’</p> | <p>a’. <i>Das Wasser köch-el-t</i>. the water boil-DIM-3SG.PR ‘The water is simmering.’</p> <p>b’. *<i>Der Hans köch-el-t</i> <i>das Wasser</i>. the Hans boil-DIM-3SG.PR the water *‘Hans is simmering the water.’</p> |

3. Analysis: We argue that **both** in nouns and in verbs, the diminutive affix spells out the head of a diminutive *nP* that selects nouns or roots (cf. Wiltschko & Steriopo 2007). Evidence for this comes

from the umlaut of diminutive (*e*)-verbs in (1a), which, we claim, is triggered by the presence of the nominal diminutive affix (notice the umlaut on the “nominal” diminutive in (2a)). This analysis explains the argument and event structure differences vis-à-vis their corresponding non-denominal verbs such as (4a’,b’) vs. (4a,b), respectively: the function of n_{DIM} is individuation; the creation of (countable) units (Wiltschko 2006, De Belder 2011, De Belder et al. 2014). Embedded under *v*, this “unit-of” (or in Wiltschko’s 2006 terms: “classifier”) interpretation becomes reanalyzed as belonging to *v* and results in an activity verb. The verbalizing head v_{ACT} ($\approx v_{DO}$) classifies the event as action and may introduce an **actor** theta-role (cf. Doron 2003 on the Hebrew intensive template), which is then saturated by a DP introduced by a higher Voice head (Alexiadou et al. 2015, Wood & Marantz 2017). Since actors (unlike agents) can be animate or inanimate, we thus derive the properties of the expletive/unergative “verbs of emission” (cf. Rothmayr 2009) such as *herbst-el-n* ‘be Fall-like’ and seemingly “deverbal” diminutives such as *köch-el-n* ‘to simmer’ (for which we posit the same structure), namely (5):

(5) unergative/iterative emission verbs (cf. 3)



Our analysis explains why verbal diminutives pattern as unergative activity verbs, independent of the valency and Aktionsart of corresponding non-diminutive verbs from the same root: their derivational basis is always a nominal, n_{DIM} , which prevents the projection of potential arguments of the root. Moreover, the n_{DIM} head in (5) can be identified with the ‘natural atomic function’ of Rothstein (2004), who argues that semelfactives and activity predicates contain a set P_{min} that picks out the minimal events in their denotation. Since all semelfactives can be shifted to activity verbs,

we argue that n_{DIM} marks the minimal event of ‘being Fall-like’ in (5), while $v[ACT]$ denotes the set of events P containing P_{min} . We suggest that a similar analysis also holds for other languages in which verbal diminutives behave as (pluractional) activity verbs (e.g. Italian, Tovena 2010), thus connecting diminutive verbs to the debate on deriving unergative verbs.

4. Conclusion: Our analysis corroborates the idea that the structure of denominal verbs (such as “diminutive verbs”) directly reflects the structure of their nominal basis. In the verbal domain, iterativity and/or pluractionality is the equivalent of diminutive semantics (unit, individuation, classification) in the nominal domain: the individuating semantics of n_{DIM} lead to its selection by $v[ACT]$, i.e. $v[ACT]$ can have an uninterpretable individuation feature which is saturated by n_{DIM} . A further implication is that the external argument of diminutive verbs is not selected by the root (cf. Hale & Keyser 1993 for unergatives in general). Our analysis thus implies that a “cross-categorial syncretism” like that between diminutive nouns and verbs in (1)-(2) is never accidental, but reflects an identical underlying structure. This explains the uniformity of diminutive morphology across categories and morphological devices (affixation, reduplication) in these formations. Moreover, we have on the basis of a specific phenomenon provided an answer to the general question of what prevents roots from projecting.

5. Selected references: De Belder, M. (2011) A morphosyntactic decomposition of countability in Germanic. *JCGL* 14. De Belder, M. et al. (2014) On a low and a high diminutive. *The syntax of roots and the roots of syntax*, OUP. Doron, E. (2003) Agency and voice: the semantics of the Semitic templates. *NLS* 11. Harley, H. (2005) How do verbs get their names? *The Syntax of Aspect*, OUP. Jurafsky, D. (1996). Universal Tendencies in the Semantics of the Diminutive. *Language* 72: 533-578. Marantz, A. (2013) Verbal argument structure: Events and participants. *Lingua* 130. Rothmayr, A. (2009) *The Structure of Stative Verbs*, Benjamins. Rothstein, S. (2004) *Structuring Events*, Blackwell. Tovena, L. M. (2010) Pluractional verbs that grammaticise number through the part-of relation. *Romance Languages and Linguistic Theory 2008*, Benjamins. Wiltschko, M. (2006) Why should diminutives count? *Organizing grammar*, De Gruyter. Wiltschko, M. & O. Steriopolo. (2007) Parameters of variation in the syntax of diminutives. *Proceedings of the 2007 CLAAC*.