## Building unergatives: insights from diminutive verbs Laura Grestenberger & Dalina Kallulli University of Vienna

<u>1. Background and goals</u>: While various analyses of unergatives posit that they are built on a nominal core, a contentious issue has been whether this nominal should be seen as the selected argument of the transitive verbalizer  $v_{DO}$  or as a predicate (or modifier of v) supplying lexical content to this light verb. For instance, while Hale & Keyser (1993, 2002) claim that unergatives contain incorporated nominals and Harley (1999, 2005) argues for "nominal roots" (i.e. roots that denote "things"), Marantz (2013) contends that the nominal part of unergatives does not function as a complement of the verb but rather as a 'manner' Root that modifies v. Taking our clue from the cross-linguistic behavior of "diminutive verbs", we show that parallel to the way nominalizations contain different levels of verbal structure, unergatives may contain different levels of nominal structure, which directly affect their event and argument structure properties. We illustrate this first and foremost for (varieties of) German, and adduce corroborating evidence from a diverse set of languages, including Albanian, Halkomelem, Hebrew, Italian, Northern East Cree, and Passamaqoddy.

<u>2. Data:</u> (Bavarian) German has productive "diminutive" verbs formed with the suffix -(e)l / -(er)l with iterative, frequentative, attenuative or intensive semantics, attaching to adjectival, verbal and nominal bases, (1). Crucially, the same suffix is also productive with nouns, (2).

| (1) | a. deadjectival                                      | b. deverbal                                      | c. denominal                        |  |  |
|-----|------------------------------------------------------|--------------------------------------------------|-------------------------------------|--|--|
|     | schwach – schw <mark>ä</mark> ch- <mark>el-</mark> n | kochen – k <mark>ö</mark> ch- <mark>el-</mark> n | Herbst – herbst- <mark>el-</mark> n |  |  |
|     | weak weak-DIM-INF                                    | boil boil-DIM-INF                                | Fall Fall-DIM-INF                   |  |  |
|     | 'weak' – 'to be/act a little weak'                   | 'to boil' – 'to simmer'                          | 'Fall' – 'to be Fall-like'          |  |  |
| (2) | Busch – B <b>ü</b> sch-el                            | Sack — Sack-(er)l                                | Buasch – B <b>ia</b> sch-l          |  |  |
|     | 'bush' – 'bunch, tuft'                               | bag — small bag                                  | 'boy' – 'small boy'                 |  |  |

Similar patterns exist in Italian and Hebrew, as in (3) and (4) (from De Belder et al. 2014), in Halkomelem, as in (5) (from Wiltschko & Steriopolo 2007), in Albanian, as in (6), as well as in Northern East Cree and Passamaqoddy (cf. Cunningham 2008).

| (3) | Dim. Noun                   | Dim. Verb                     | (4) | Dim. Noun                    | Dim. verb                |
|-----|-----------------------------|-------------------------------|-----|------------------------------|--------------------------|
|     | fischi- <mark>ett</mark> -o | fischi- <mark>ett</mark> -are |     | <i>cixkuk</i> (√cxk 'laugh') | ci <b>xk</b> ek          |
|     | whistle-DIM-M.SG            | whistle-DIM-INF               |     | giggle.DIM.N                 | giggle.DIM.V             |
|     |                             | 'to whistle'                  |     | 'a giggle'                   | 'to giggle'              |
| (5) | <b>q 'á</b> -q 'emi         | <mark>lhi</mark> -lhi:m       | (6) | lul- <mark>ëz</mark>         | lul- <mark>ëz</mark> -oj |
|     | DIM-girl                    | DIM-picking                   |     | flower-DIM                   | flower-DIM-1s            |
|     | 'small girl'                | 'picking a little bit'        |     | 'small flower'               | 'I bloom'                |
| D'  | • ,• • •                    | • 1 1 .•                      |     |                              |                          |

Diminutive verbs are invariably unergative activities. In German, they contrast with their non-diminutive counterparts in class (1b) a.o.t. in terms of argument structure properties, cf. the causative alternation verb in (7a,b) vs. its non-alternating diminutive counterpart (7a',b').

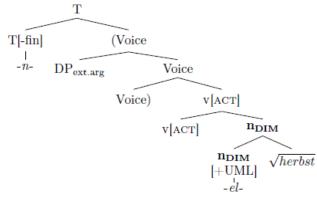
| (7) a. Das Wasser koch-t.      | a´.                             | Das Wasser k <mark>ö</mark> ch- <mark>el</mark> -t. |  |  |
|--------------------------------|---------------------------------|-----------------------------------------------------|--|--|
| the water boil-s               |                                 | the water boil-DIM-3SGPRES                          |  |  |
| 'The water is boiling.'        | 'The water is simmering.'       |                                                     |  |  |
| b. Der Hans koch-t das Wasser. | b′.*                            | Der Hans köch-el-t das Wasser.                      |  |  |
| the Hans boil-s the water      |                                 | the Hans boil-DIM-3SGPRES the water                 |  |  |
| 'Hans is boiling the water.'   | *'Hans is simmering the water.' |                                                     |  |  |

Diminutive affixes often derive unergative or expletive verbs of emission, cf (8) for Bavarian:

| (8) | a.                                                   | So sch | ön       | herbst- <mark>el</mark> -t | unser   | Bezirk       | b.                  | Es | herbst- <mark>el</mark> -t |
|-----|------------------------------------------------------|--------|----------|----------------------------|---------|--------------|---------------------|----|----------------------------|
|     |                                                      | so bea | utifully | Fall-DIM-3SG.PRES          | our.NOM | district.NOM |                     | it | Fall-DIM-3SG.PRES          |
|     | 'This is how beautifully Fall-like our district is.' |        |          |                            |         | 'It's        | s a bit Fall-like'. |    |                            |

3. Analysis: We argue that the "verbal" diminutive affixes spell out the head of a diminutive *n*P that selects nouns or roots (cf. Wiltschko & Steriopolo 2007), **both** in nouns and in verbs. Evidence for this comes from the umlaut of diminutive (e)l-verbs in (1a,b), which, we claim, is triggered by the presence of the nominal diminutive suffix (cf. the umlaut on nominal diminutives in (2)). This analysis explains the argument and event structure differences vis-àvis their corresponding non-denominal verbs: 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 (corroborating data from the diachrony of the German -(e)l will be discussed) 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 "deverbal" diminutives such as köch-el-n 'to simmer' (for which we posit the same structure):

(9) unergative/iterative emission verbs (cf. 1c)



Our analysis explains why -(er)l-verbs are uniformly unergative activities, independent of their derivational basis: the derivational basis of -(er)l- is always a nominal. n<sub>DIM</sub>, which prevents the projection of potential arguments of the root. Moreover, the n<sub>DIM</sub> head in (9) can be identified with the 'natural atomic function' of Rothstein (2004), who argues that and activity semelfactives predicates contain a set P<sub>min</sub> 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 (9), 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). <u>4. Conclusion:</u> 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).

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. 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.