

## CROSS-CATEGORIAL SYNCRETISM: EVIDENCE FROM DIMINUTIVES

Laura Grestenberger &amp; Dalina Kallulli

University of Vienna

laura.grestenberger@univie.ac.at &amp; dalina.kallulli@univie.ac.at

## The basic observation ...

- the existence of **identical** and **cross-categorical** ‘diminutive’ morphemes:

- (1) a. *Das Wasserkoch-t / köch-el-t.* (German)  
 the water boil-3S.PR boil-DIM-3S.PR  
 ‘The water boils / simmers.’
- b. *fischi-ett-are* (Italian, De Belder et al. 2014)  
 whistle-DIM-INF  
 ‘to whistle, to emit short whistles’
- c. *cixkek* (Hebrew, De Belder et al. 2014)  
 giggle.DIM.V  
 ‘to giggle’
- d. *lul-ëz-øj* (Albanian)  
 flower-DIM-1S  
 ‘I bloom’
- (2) a. *Busch Bäsch-el* (German)  
 bush (MASC.) bush-DIM (NEUT.)  
 ‘bush’ ‘small bush, bunch, tuft’
- b. *fischi-o fischi-ett-o* (Italian)  
 whistle-S.M whistle-DIM-S.M  
 ‘whistle’ (action) ‘whistle’ (object)
- c. ( $\sqrt{cxk}$ ) *cixkuk* (Hebrew)  
 laugh giggle.DIM.N  
 ‘a giggle’
- d. *lule lul-ëz* (Albanian)  
 flower flower-DIM  
 ‘flower’ ‘little flower’

## ... the core question ...

- are these diminutive morphemes categorizing (i.e., is the syncretism accidental)?

## ... and the basic proposal

- the identity of form is due to identical underlying syntactic structure, which crucially is underlyingly **nominal** (hence: categorizing) across the board

## Roadmap

- Background on (mostly nominal) diminutives
- Verbal diminutives across languages
  - Case study of German *-(e)l-* and *-erl-* verbs and their classification
  - Deliberations on Albanian and Italian
- Our analysis – the heart of the proposal:
  - “verbal” diminutives contain  $n_{DIM}$  in their structural makeup
  - $n_{DIM}$  can select  $\checkmark$  or  $n$
  - $n_{DIM}$  identifies the nominal core of unergatives, i.e. diminutive verbs are unergatives
- Theoretical ramifications: the structure of unergatives
- Summary and conclusions

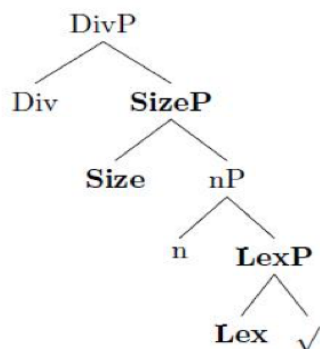
## 1. Diminutive background

- diminutive affixes turn mass into count nouns (Jurafsky 1996, Borer 2005, Wiltschko 2006):

(3)	<i>viel</i>	<i>Wein</i>	<i>viel-e</i>	<i>Weind-erl(-n)</i>	(Viennese)
	much	wine <sub>MASC</sub>	many-PL	wine-DIM(-PL)	
	<i>viel</i>	<i>Schlaf</i>	<i>viel-e</i>	<i>Schläf-chen</i>	(Standard German)
	much	sleep <sub>MASC</sub>	many-PL	sleep-DIM	

- semantic universals include “small”, “approximation”, “intensity”, “individuation”, “attenuation” (Jurafsky 1993, 1996)
- diminutives change noun gender or class (e.g. Dutch, German, Hebrew, Hindi)
- **De Belder et al. (2014)**: two different functional heads responsible for diminutive formation cross-linguistically; these are not category-forming and can co-occur (depending on the language, see also **Cinque 2015** for Italian):

(4) De Belder et al. (2014): structure of diminutives:



### LexP:

- selects roots

- attaches below category-forming heads (v, n, a)
- *may* have non-compositional meaning
- **Ex.:** It. *cas-a* ‘house’: *cas-in-o* ‘brothel’ (\*‘small house’); Hebr. *xatul* ‘cat’: *xataltul* ‘kitten’, SG *Busch* ‘bush’: *Büsch-el* ‘tuft, bunch’ → **non-compositional**

**SizeP:**

- selects nPs; sits between DivP ( $\cong$  NumP; the projection that hosts number marking/classifier morphology, cf. Borer 2005) and nP
- adds boundedness, unit-reading (cf. Ott 2011: UnitP)
- *always* fully compositional
- **Ex.:** It. *cas-a* ‘house’: *cas-in-a* ‘small house’; Hebr. *xatul* ‘cat’: *xatul-on* ‘small cat’, Austro-Bav. *Sockn* ‘sock’: *Sock-erl* ‘small sock’ → **compositional**

German *-(e)l-* seems to spell out Lex: it is non-compositional, not productive, and can be selected by higher, productive DIM morphology, (5a), and, arguably, by verbal morphology, (5b):

- (5) a. *Bund*      *Bünd-el*      *Bünd-el-chen*  
 bunch      bunch-DIM      bunch-DIM-DIM  
 ‘bunch’      ‘bundle’      ‘small bundle’  
 b. *bünd-el-n*  
 bunch-DIM-INF

- DIMINUTIVE *-(e)l-* triggers **umlaut** on the base vowel:
  - *a* > *ä* (/ɛ/, /e:/)
  - *o* > *ö* (/œ/, /ø:/)
  - *u* > *ü* (/ʏ/, /y:/)
  - *au* > *äu* (/ɔʏ/)
- NON-DIMINUTIVE *-(e)l-* does not trigger umlaut (mostly found on instrument nouns, e.g., *Sattel* ‘saddle’, *Nagel* ‘nail’, *Hobel* ‘plane’, etc.)
- DIMINUTIVE *-(e)l-* nouns are always *neuter*, NON-DIMINUTIVE *-(e)l-* is m. or f., rarely n

Austro-Bavarian/Viennese *-erl-* /al/ does not trigger umlaut, *-l-* usually does, as in Standard German (SG):

- (6) Viennese *-erl-* vs. *-l-*:

a. <i>-erl-</i>		b. <i>-l-</i>	
<i>Sack</i>	<i>Sack-erl</i>	<i>Haus</i>	<i>Heis-l</i>
sack (MASC)	sack (NEUT)	house (NEUT)	house-DIM (N.)
‘sack, bag’	‘small bag’	‘house’	‘toilet’
<i>Suppe</i>	<i>Supp-erl</i>	<i>Buasch</i>	<i>Biasch-l</i>
soup (FEM)	soup-DIM (NEUT)	boy (MASC)	boy-DIM (N.)
‘soup’	‘small amount of soup’	‘boy’	‘little boy’

- Can the verbal *-(e)l-/erl-* suffixes be equated with the nominal ones?

## 2. Verbal diminutives across languages

### 2.1. (Varieties of) German

We assembled a corpus of 300 verbs containing the SG affix-(e)l- and its Austro-Bavarian variant -erl- /al/ based on the data discussed in Weidhaas and Schmid (2015), Dressler and Merlini Barbaresi (1994), Hornung and Grüner (2001) and cross-checked with the *Digitales Wörterbuch der deutschen Sprache* (= DWDS), *Deutsches Wörterbuch* (= DWB) and Kluge's *Etymologisches Wörterbuch der deutschen Sprache* (Kluge 1999). These were divided into four basic classes:

- **Class I:** base = adjective
  - a. base without (e)l-suffix (11 verbs)
  - b. base with (e)l-suffix (2 verbs)
- **Class II:** base = verb (97 verbs)
- **Class III:** base = noun
  - a. base without (e)l-suffix (43 verbs)
  - b. base with (e)l-suffix (144 verbs)
- **Class IV** "other":
  - a. base = inflected verb form (2)
  - b. base = adverb (1)

We excluded 64 verbs of (i) onomatopoeic and/or synchronically and diachronically unclear bases (for details, see Grestenberger & Kallulli, forthcoming)

#### Examples:

(7) Class I: base = adjective

- |    |                |                            |
|----|----------------|----------------------------|
| a. | <i>schwach</i> | <i>schwäch-el-n</i>        |
|    | weak           | weak-DIM-INF               |
|    | 'weak'         | 'to be a little/act weak'  |
| b. | <i>blöd</i>    | <i>blöd-el-n</i>           |
|    | silly          | silly-DIM-INF              |
|    | 'silly'        | 'to be a little/act silly' |
| c. | <i>fromm</i>   | <i>frömm-el-n</i>          |
|    | pious          | pious-DIM-INF              |
|    | 'pious'        | 'to act piously'           |

- DIM seems to act as a verbalizer
- DIM *always* triggers umlaut (on umlaut-capable vowels, cf. *fremd* 'strange': *fremd el-n* 'be afraid of strangers, act shy around strangers (of kids)')

(8) Class II: base = verb

- |    |                             |   |
|----|-----------------------------|---|
| a. | <i>koch-en</i>              | <i>köch-el-n</i>  |
|    | boil-INF                    | boil-DIM-INF  |
|    | 'to boil' (anticaus./caus.) | 'to almost boil/simmer'                                 |
| b. | <i>dräng-en</i>             | <i>dräng-el-n</i>                                       |
|    | urge-INF                    | urge-DIM-INF  |
|    | 'to urge/push'              | 'to jostle, to push less intensely/a little/repeatedly' |

c.	<i>schütt-en</i> pour-INF 'to pour'	<i>schütt-el-n</i> pour-DIM-INF 'to shake, pour out small units'	
d.	<i>schreib-en</i> write-INF 'to write'	<i>schreib-erl-n</i> write-DIM-INF 'to write badly, inexpertly'	(Viennese)
e.	<i>funk-en</i> spark-INF 'to spark/emit sparks'	<i>funk-el-n</i> spark-DIM-INF 'to sparkle'	

- DIM adds iterative, intensive/attenuative or pejorative semantics
- DIM does not consistently trigger umlaut on the base vowel, cf. (8e); some verbs have/had umlauting *and* non-umlauting variants (e.g. MHG *lacheln* besides *lächeln* 'smile', *muffeln* vs. *müffeln* 'to smell musty', etc.)

(9) Class IIIa: base = noun without (e)l-suffix

a.	<i>Frost</i> frost 'frost'	<i>fröst-el-n</i> frost-DIM-INF 'to shiver, be cold'
b.	<i>Schlange</i> snake 'snake'	<i>schläng-el-n</i> snake-DIM-INF 'to move like a snake'
c.	<i>Stück</i> piece 'piece'	<i>stück-el-n</i> piece-DIM-INF 'to divide into pieces'
d.	<i>Maus</i> mouse 'mouse'	<i>maus-el-n</i> mouse-DIM-INF 'to smell of mice'

- DIM mostly triggers umlaut (fewer exceptions than in class II)
- DIM seems to act as a verbalizer (cf. class I)

(10) Class IIIb: base = noun with (e)l-suffix

<u>No Umlaut</u>		<u>Umlaut</u>			
a.	<i>Sattel</i> daddle 'Saddle'	<i>sattel-n</i> saddle-INF 'to saddle'	d.	<i>Brösel</i> crumb 'crumb'	<i>brösel-n</i> crumb-INF 'to flake, crumb'
b.	<i>Hagel</i> hail 'hail'	<i>hagel-n</i> hail-INF 'to hail'	e.	<i>Bündel</i> bundle 'bundle'	<i>bündel-n</i> bundle-INF 'to bundle'
c.	<i>Wurzel</i> root 'root'	<i>wurzel-n</i> root-INF 'be rooted in'	f.	<i>Zügel</i> rein 'rein'	<i>zügel-n</i> rein-INF 'to put reins on, rein in'

- the root vowel of the derived verb only umlauts if the base does too; cf. (10d-f)  
- only four apparent exceptions to this generalization out of 144 verbs (see Grestenberger & Kallulli forthcoming)
- diminutive semantics less pronounced than in class II, or absent (when present,

clearly part of the base: *bröseln* ‘to crumble into small crumbs’, *Brösel* ‘small crumb’ vs. *wurzeln*, *satteln*)

## 2.2. Albanian

Albanian verbal diminutives seem to be 100% denominal; cf. (1d), (2d) and (11) – (13):

(11) a. *Gjithçka po syth-ëz-onte.*  
 everythingPROG bud-DIM-3PL.P  
 ‘Everything was budding.’

b. *Syth-at / syth-ëz-at dukeshin edhe nga larg.*  
 bud-PL / bud-DIM-PL appeared also from afar  
 ‘The (little) buds were visible even from afar.’

(12) *vall-ëz-oj* from:(*një*) *valle* → *vall-ëz*  
 dance-DIM-1S.PR a dance dance-DIM (i.e., ‘little dance’)  
 ‘I dance’

(13) a. *cop-ëz-oj* from:(*një*) *copë* → *cop-ëz*  
 piece-DIM-1S.PR a piece piece-DIM (i.e., ‘little piece’)  
 ‘I partition/separate/break (something) into small pieces’

b. *copë-t-oj* from:(*një*) *copë*  
 piece-EPENTH.-1S.PR a piece (i.e. no DIM!)  
 ‘I destroy/decimate (something)’

## 2.3. Italian

(Verbal) diminutive suffixes in Italian: *-ett-*, *-ell-*, *-ott-*, *-onzol-*, *-a/e/ucchi-*, *-in-* (Dressler & Merlini Barbaresi 1994: 98, Tovenà 2010, De Belder et al. 2014):

(14)	Noun	Diminutive noun	Diminutive verb
a.	<i>fischi-o</i> whistle-M ‘whistle’ (action)	<i>fischi-ett-o</i> whistle-DIM-M ‘whistle’ (object)	<i>fischi-ett-are</i> whistle-DIM-INF ‘to whistle’
b.	<i>fest-a</i> party-F ‘party’ Verb	<i>fest-icci(-)ol-a</i> party-DIM-DIM-F ‘small party’ Diminutive verb	<i>fest-icci(-)ol-are</i> party-DIM-DIM-INF ‘to throw a (small) party’
c.	<i>mangi-are</i> eat-INF ‘to eat’	<i>mangiu-cchi-are</i> eat-DIM-INF ‘to nibble’	
d.	<i>toss-ire</i> cough-INF ‘to cough’	<i>tossi-cchi-are</i> cough-DIM-INF ‘to cough repeatedly/	less intensely’

- base = mostly nouns and verbs
  - but adjectives and other bases too: *parecchi-o* a. ‘several’ → *parecch-in-o* a. ‘less than some; just a few’ → ?*parecch-in-are* ‘be/exist (as) several/a few’; *caspi-ta* ‘good heavens!’ (vel sim.), excl. → *caspit-er-in-a* diminutive of excl. → *caspit-er-in-are* v. ‘(cause somebody) to gasp/exclaim’<sup>1</sup>

## 2.4. Spanish

Several diminutive (and other evaluative) suffixes that variably attach to adjectives, nouns, verbs ... pronouns, and adverbs (Steriopolo 2015, Fabregas 2017, Oltra-Massuet 2019)

- Semantics (verbs): iterative, intensive, pejorative/attenuative/“appreciative”

(15) Evaluative verbs, nouns & adjectives in Spanish (Oltra-Massuet 2019)

<u>Verb</u>	<u>“base”</u>	<u>adj.</u>	<u>verb</u>	<u>“base”</u>	<u>noun</u>
a. <i>(res)quebr-aj-ar</i> break-EV-INF ‘crack’	<i>quebr-ar</i>	<i>pequeñ-aj-o</i> small-EV-M ‘tiny’	c. <i>dorm-it-ar</i> sleep-EV-INF ‘doze’	<i>dorm-ir</i>	<i>perr-it-o</i> dog-EV-M ‘puppy’
b. <i>bail-ot-ear</i> dance-EV-INF ‘dance around’	<i>bail-ar</i>	<i>grand-ot-e</i> big-EV-INF ‘huge’	d. <i>bes-uqu-ear</i> kiss-EV-INF ‘kiss repeatedly’	<i>bes-ar</i>	<i>tierr-uc-a</i> land-EV-F ‘native land’

- Steriopolo (2015, 2016): (at least some) diminutives are modifiers rather than heads (cf. Wiltschko & Steriopolo 2007) and attach *outside* categorizing morphology → difficult for ex. In (15); Fábregas: evaluative “infixes” are root modifiers → problematic for “deverbal” examples with varying stem vowel like (15b-d).
- Oltra-Massuet & Castroviejo (2014), Oltra-Massuet (2019): *v* selects a relational-predicative  $P_{\text{manner}}$  in evaluative verbs like (15) which modifies the root and incorporates into *v*. Iterative/intensive, etc., semantics = epiphenomenal.
  - → “cross-categorial” nature of evaluatives/diminutives?
  - iterative/intensive semantics/pluractionality (and unergative syntax?) are a cross-linguistic property of verbal diminutives.

## 2.5. Hebrew

Two diminutive strategies:

- suffix *-on* (“high diminutive”), not found in verbal diminutives;

<sup>1</sup> “Sei tu l’autore. Arrangiati. Basta che non mi fai caspiterinare, woware, miagolare o altre cretinate del genere.” (<https://finepercorsovita.wordpress.com/2012/12/29/fuori-di-testo/>, accessed 14.12.2019)

ii. reduplication of final root consonant(s) + nominal or verbal vowel pattern  
(examples from de Belder et al. 2014, Faust 2015)

(16)	<u>Root/verb</u>	<u>Diminutive noun</u>	<u>Diminutive verb</u>
a.	√ <i>cxk</i> laugh	<b><i>cixkuk</i></b> giggle.DIM.N 'a giggle'	<b><i>cixkek</i></b> giggle.DIM.V 'to giggle'
b.	√ <i>kfc</i> jump	<b><i>kifcuc</i></b> jump.DIM.N 'a jump'	<b><i>Kifcec</i></b> jump.DIM.V 'to jump around'
c.	<b><i>kiven</i></b> 'to aim/to direct'	<b><i>kivnun</i></b> aim.DIM.N 'fine-tuning'	<b><i>kivnen</i></b> aim.DIM.V 'to fine-tune'

- De Belder et al. (2014) argue that this is evidence that DIM ≠ n, but head of uncategorized LexP (v = *i-e*-pattern, n = *i-u*-pattern)
  - NB the reduplicating diminutive is also denominal, e.g., *xatul* 'cat': *xataltul* 'kitten'

## 2.6. Halkomelem (Salishan)

... allows diminutives from nouns, verbs, and adjectives (DIM = reduplication, examples from Wiltschko & Steriopolo 2007):

(17) a.	<i>q'a:mi</i> (n)	'girl'	<b><i>q'á-q'emi</i></b>	'small girl'
	girl		DIM-girl	
b.	<i>lhi:m</i> (v)	'picking'	<b><i>lhi-lhi:m</i></b>	'picking a little bit'
	picking		DIM-picking	
c.	<i>p'eq'</i> (a)	'white'	<b><i>p'í-p'eq'</i></b>	'a little white, whitish'
	white		DIM-white	

- Wiltschko & Steriopolo (2007): DIM differs cross-linguistically in whether it attaches as a head or an adjoined modifier, and in where it attaches/adjoins (√ vs. n)
- Halkomelem DIM is analysed as modifier which adjoins to an uncategorized root → compatible with a higher a/v/n head
- ... but apparent compatibility of DIM with a/v/n is also found elsewhere (German, Hebrew, Italian...) where there is no independent evidence that DIM is an adjunct

## 2.7. Northern East Cree (Algonquian)

In verbal diminutives, the diminutive suffix *-(i)shi-* can modify the event, (18a-d), the subject of an intransitive verb, (18b-c), or the subject or object of a transitive verb, (18d-e) (examples and glosses from Cunningham 2008; non-SAP = Non-Speech Act Participant, AI = animate intransitive, II = inanimate intransitive, TS = theme sign, SFV = stem final vowels)





Cross-categorical syncretism

(21) *Die Cora hat zehn Minuten lang / \*in zehn Minuten ge-blöd-el-t.*  
 the Cora has ten minuteslong in ten minutes PTCP-silly-DIM-PTCP  
 ‘Cora acted silly for ten minutes / \*in ten minutes.’

(22) *Die Cora hat eine Stunde lang / \*in einer Stunde ge-schreib-erl-t.*  
 the Cora has an hour long in an hour PTCP-write-DIM-PTCP  
 ‘Cora attempted to write / wrote inexpertly for an hour.’

- Class II verbs may differ in their argument structure, aspectual behaviour, and selection of preverbs w.r.t. their (apparent) verbal base:

(23) a. *Das Wasserkoch-t.* vs.: a'. *Das Wasserköch-el-t.*  
 the water boil-3S.PR the water boil-DIM-3S.PR  
 ‘The water is boiling.’ ‘The water is simmering.’

b. *Hans koch-t das Wasser.* vs.: b'. *\*Hans köch-el-t das Wasser.*  
 Hans boil-3S.PR the water Hans boil-DIM-3S.PR the water  
 ‘Hans is boiling the water.’ \*‘Hans is simmering the water.’

(24) a. *Die Livia nerv-t (herum).* vs.: a'. *Die Livia nerv-el-t (herum).*  
 the Livia nerve-3S.PR around the Livia nerve-DIM-3S.PR around  
 ‘Livia is/acts annoying.’ ‘Livia is/keeps acting somewhat annoying.’

b. *Die Livia nerv-t mich.* vs.: b'. *\*Die Livia nerv-el-t mich.*  
 the Livia nerve-3S,PR me the Livia nerve-DIM-3S,PR me  
 ‘Livia annoys me.’ ‘Livia continually annoys me.’

- Intransitive class I and II verbs pattern as unergatives w.r.t. attributive participles:

(25) a. *das ge-koch-te / \*ge-köch-el-te Wasser*  
 the PTCP-boil-PTCP PTCP -boil-DIM-PTCP water  
 ‘the boiled / \*simmered water’

b. *\*die ge-blöd-el-te Cora*  
 the PTCP-silly-DIM-PTCP Cora

c. *\*der ge-funk-el-te Stern*  
 the PTCP-spark-DIM-PTCP star

- Austro-Bavarian/Viennese non-umlauting *-(e)l-/(er)l-* is moreover productive in deriving (optionally expletive) verbs of emission from nouns:

(26) Austro-Bavarian *-(er)l-*verbs of emission:

a. <i>Schweiß</i>	<i>schweiß-l-n</i>	c. <i>Brand</i>	<i>brand-l-n</i>
sweat	to smell of sweat	fire	smell burned
b. <i>Maus</i>	<i>maus-l-n</i>	d. <i>Speibe</i>	<i>speib-erl-n</i>
mouse	to smell of mice	vomit	to smell of vomit

- (27) a. *Der Hans schweiß-I-t.*  
 the Hans sweat-DIM-3S.PR  
 'Hans smells of sweat.'
- b. *Es schweiß-I-t hier.*  
 it sweat-DIM-3S.PR here  
 'It smells of sweat here.'

- (28) a. *Es herbst-el-t.*  
 it Fall-DIM-3S.PR  
 'It's a bit Fall-like'.
- b. *So schön herbst-el-t unser Bezirk.*  
 so beautifully Fall-DIM-3S.PR our.NOM district.NOM  
 'This is how beautifully Fall-like our district is.'

These facts suggest that our class I and II verbs are unergative activities and verbs of emission (states/activities).

### 3.2 Italian

Tovena (2010) argues that verbal diminutives/pluractional verbs are ambiguous w.r.t. telicity/lexical aspect tests, but some of her examples suggest activity verbs; cf. (29) with the same achievement/activity distinction as in (20), and (30) incompatible with an adverbial that marks a point in time (inchoative reading ok in (30b) though):

- (29) a. *Luisa ha mangiucchiato la mela per un'ora / ?in un'ora.*  
 Luisa has nibbled the apple for an hour / in an hour
- b. *Luisa ha mangiato la mela \*per un'ora / in un'ora.*  
 Luisa has eaten the apple for an hour / in an hour

- (30) a. *Daniele ha tossito alle due in punto.*  
 Daniele has coughed at two o'clock (sharp)
- b. *#Daniele ha tossicchiato alle due in punto.*  
 Daniele has coughed slightly & repeatedly at two o'clock (sharp)

### 3.3 Albanian

- Albanian verbal diminutives seem to be 100% denominal
- (Especially) productive with (denominal) verbs of emission (i.e. semelfactives); cf. (1d), (11a), (31):

- (31) a. *Vjesht-ëz-on (qyteti).*  
 Autumn-DIM-3S.PR (city)  
 'It's starting to look/feel like Fall.' / 'The town is starting to look/feel Fall-like.'
- b. *Djersa po i bul-ëz-onte në ballë.*  
 sweat PROG CL.3S drop-DIM-3PL.P in forehead  
 'Droplets of sweat were forming on his/her forehead.'

- (Semi-)productive with activities and accomplishments, cf. (12), (13) and (31):

- (32) a. *gërm-ëz-oi*  
 spell-DIM-1S.PR  
 'I spell'

- b. *frym-ëz-øj* (dikë)  
 inspire-DIM-1S.PR someone<sub>ACC</sub>  
 ‘I inspire (someone)’

### 3.4 Interim summary

- Selected case studies suggest a connection between verbal diminutives and lexical aspect: unergative **activity** verbs
- Argument structure changes w.r.t. the apparent “verbal base”
- More comparative work needed

## 4. Analysis: verbal diminutives are derived unergatives

### 4.1. Unergatives

Unergatives are built on a nominal core:

- Hale & Keyser (1993, 2002): unergatives contain an incorporated nominal
- Harley (1999, 2005): certain roots are “nominal” (i.e. denote “things”)
- Marantz (2013): the nominal part of unergatives is not a complement of the verb but rather a ‘manner’ Root that modifies *v*.

**Our take** based on the cross-linguistic behaviour of verbal diminutives:

- 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.
- The “diminutive” semantics follow from the presence of an incorporated  $n_{DIM}$  head.

### 4.2. Proposal

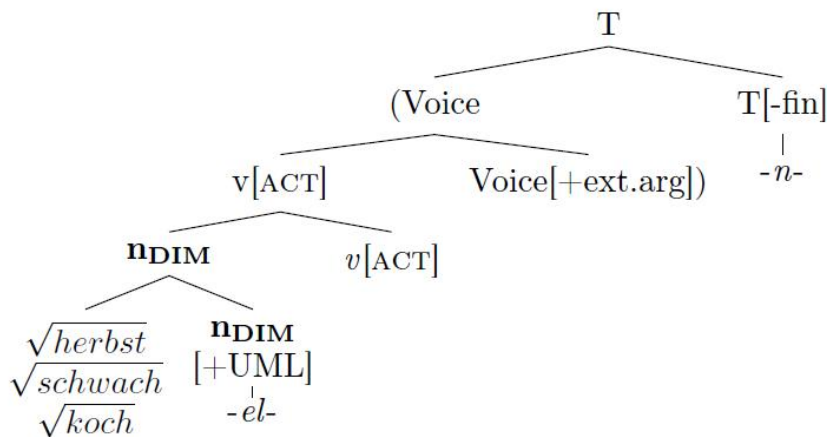
- all German *-(e)l/-erl-*verbs (and their analogues in other languages) contain a diminutive head  $n_{DIM}$ , even the “deverbal” ones of class II
- function of  $n_{DIM}$ : individuation; creation of (countable) **units** (Borer 2005, Wiltschko 2006, De Belder 2011, Ott 2011, De Belder et al. 2014)
- $n_{DIM}$  can select roots or nouns (Wiltscho 2006, Wiltschko & Steriopolo 2007, De Belder et al. 2014)
- “bleached”/grammaticalized  $n_{DIM}$  loses diminutive semantics > **n** (i.e., no LexP/nP distinction)
- “high”  $n_{DIM}$  ( $\cong$  SizeP of De Belder et al. 2014) can become the input to verbalization, pace Wiltschko & Steriopolo (2007), De Belder et al. (2014):

- (33) a. [*optim*]<sub>v</sub>-[*ist*]<sub>n</sub>-[*e*] <sub>$n_{DIM}$ -n</sub>]<sub>v</sub> ‘to be optimistic, act like an optimist’  
 optim- ist -DIM -INF
- b. [*brauch*]<sub>v</sub>-[*tüm*]<sub>n</sub>-[*e*] <sub>$n_{DIM}$ -n</sub>]<sub>v</sub> ‘to be overly concerned with preserving  
 use -dom -DIM -INF customs and traditions’

- $n_{DIM}$  is verbalized by (a particular type of) *v*
  - *v* verbalizes, but does not introduce an (external) argument, cf. Harley (2005), (2013), (2017), Alexiadou et al. (2015), Alexiadou & Lohndal (2017), Panagiotidis et al. (2017), Wood & Marantz (2017), etc.

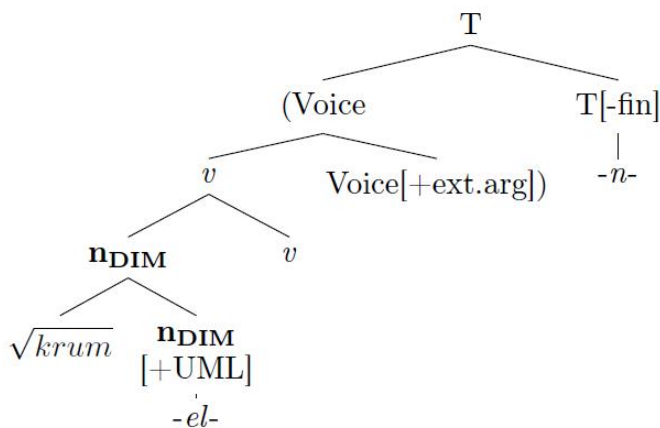
- we formalize this as **v[ACT]**: *v* classifies the event as **action**; the argument merged in SpecVoiceP is an actor rather than an agent
  - Cf. Doron 2003 on the Hebrew intensive template as introducing an actor theta-role; Harley 2005 on unergative activity verbs
  - Unlike agents, actors can be animate or inanimate → *unergative* “verbs of internal causation” & “verbs of emission” (Levin & Rappaport Hovav 1995, Rothmayr 2009), which covers almost all of our class II (e)/-verbs, as well as the productive Albanian and Austro-Bavarian verbs of emission

(34) Structure of unergative/iterative (emission) verbs: German *herbst-el-n* ‘be Fall-like’, *schwäch-el-n* ‘be/act a little weak’, *köch-el-n* ‘simmer’



- Uniform structure for German class I, II & IIIa verbs
- Corresponds to “transparent” diminutive verbs of class IIIb with a synchronic nominal diminutive, e.g., *krüm-el-n* ‘crumble, spread crumbs’: *Krüm-el* ‘crumb’, etc., cf. (35).

(35) Structure of class IIIb verbs (with synchronic nominal diminutive)



- This analysis explains why Albanian and German *-(er)/-*verbs are uniformly unergative activities, independent of their derivational basis: their derivational basis is always a nominal,  $n_{DIM}$  (=> nouns don’t have external arguments)
- The  $n_{DIM}$  head in (34) 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

- Evidence: diminutives denote the “lower boundary” of the event (basic intuition: the meaning of “small”, i.e. DIM, in the verbal domain = start to / start turning into)

- (36) a. *Das Wasser köch-el-t seit einer halben Stunde, aber es koch-t einfach nicht.*  
 the water boil-DIM-3S since one half hour but it boil-3S just not  
 “The water has been simmering for half an hour, but it just won’t boil.”  
 b. *Es hat monatelang ge-herbst-el-t aber es war nie richtig Herbst.*  
 it has for.months PTCP-Fall-DIM-PTCP but it was never really Fall  
 “It’s been Fall-like for months, but it was never really Fall.”

- Since all semelfactives can be shifted to activity verbs, we argue that  $n_{\text{DIM}}$  marks the minimal event of ‘being Fall-like’ in (34), while  $v[\text{ACT}]$  denotes the set of events  $P$  containing  $P_{\min}$
- A similar analysis should also hold for other languages in which verbal diminutives behave as (pluractional) activity verbs (e.g. Italian, Tovená 2010)
- Decrease event internal pluractional verbs denote composite single events resulting from distributing the predicate on the fragments of a participant (Tovená 2007, Tovená & Kihm 2008)

→ Contra Weidhaas & Schmid (2015) and Audring et al. (2017), a “derivational” account *can* handle the apparent structural ambiguity of these verbs (i.e. root vs. verbal vs. nominal basis)

### 4.3. Diminutive and other unergative verbs

- Our analysis of “cross-categorial syncretism” in diminutive verbs fits into a broader picture: denominal verbs reflect their nominal basis compositionally
  - Ex. “act like/ behave like”-verbs in Ancient Greek & Spanish: base = agent(ive) noun


(37)

a. Ancient Greek

<i>basil-eún-ō</i> <sub>1SG.ACT</sub>	‘am/act as king’	<i>basil-eún-s</i>	‘king’
<i>khalk-eún-ō</i> <sub>1SG.ACT</sub>	‘am a coppersmith’	<i>khalk-eún-s</i>	‘coppersmith’
<i>hipp-eún-ō</i> <sub>1SG.ACT</sub>	‘am a horserider’	<i>hipp-eún-s</i>	‘horserider’

→ developed into Modern Greek verbalizer *-ev-* without specifically agentive semantics (cf. Panagiotidis et al. 2017). Cf. unergative ‘behave like’ verbs in *-ear* in Spanish:

(38) Spanish ‘act/ behave like’ verbs (ex. from Oltra-Massuet & Castroviejo 2014)

<u>verb</u>		<u>‘base’</u>	
<i>fanfarron-ear</i>	‘act like a boaster’	<i>fanfarrón</i>	‘boaster’
<i>serpent-ear</i>	‘act/move like a snake’	<i>serpiente</i>	‘snake’
<i>merkel-ear</i>	‘act like A. Merkel’	<i>Merkel</i>	

- Suggests a diachronic pathway from denominal, “de-diminutive” verbs to unergative (iterative/frequentative/“diminutive”) verbs and/or verbalizers (cf. Grestenberger & Kallulli forthcoming for more ex.).

## 5. Summary and conclusion

- Verbal diminutives are a cross-linguistically well-attested way of deriving unergatives.
- We have argued that they always contain a nominal core -  $n_{DIM}$  – that determines their syntactic and semantic properties.
- ... allowing us too keep the view that roots are acategorical and are interpreted via categorizers  $v, a, n$ .
- ... and suggesting that unergatives in general are denominal in the traditional sense,
- i.e. they contain nominal functional structure.

## References

- Alexiadou, A., E. Anagnostopoulou, and F. Schäfer.** 2015. *External arguments in transitivity alternations: a layering approach*. OUP.
- Alexiadou, A. and T. Lohndal.** 2017. On the division of labor between roots and functional structure. In: R. D’Alessandro, I. Franco and Á. Gallego (eds.), *The verbal domain*, 85–102. OUP.
- Audring, J., G. Booij, and R. Jackendoff.** 2017. *Menscheln, kibbelen, sparkle: Verbal diminutives between grammar and lexicon*. In: S. Lestrade and B. Le Bruyn (eds.), *Linguistics in the Netherlands 2017*, 1-15. Amsterdam: John Benjamins.
- Borer, H.** 2005. *Structuring sense, vol. I: in name only*. OUP.
- Cinque, G.** 2015. Augmentative, pejorative, diminutive and endearing heads in the extended nominal projection. In E. di Domenico, C. Hamann and S. Matteini (eds.) *Structures, Strategies and Beyond: Studies in honour of Adriana Belletti* 67-82. Benjamins.
- Cunningham, A.** 2008. “Small” talk: the form and function of the diminutive suffix in Northern East Cree. Master’s thesis, Memorial University of Newfoundland.
- De Belder, M.** 2011. A morphosyntactic decomposition of countability in Germanic. *Journal of Comparative Germanic Linguistics* 14: 173-202.
- , N. Faust, and N. Lampitelli. 2014. On a low and a high diminutive: evidence from Italian and Hebrew. In: A. Alexiadou, H. Borer, and F. Schäfer (eds.), *The syntax of roots and the roots of syntax*, 149–63. OUP.
- Doron, E.** 2003. Agency and voice: the semantics of the Semitic templates. *Natural Language Semantics* 11/1:1-67
- Dressler, W. U. and L. Merlini Barbaresi.** 1994. *Morphopragmatics: diminutives and intensifiers in Italian, German, and other languages*. Mouton de Gruyter.
- . 2001. Morphopragmatics of diminutives and augmentatives: On the priority of pragmatics over semantics. In: I. Kenesei & R. M. Harnish (Eds.), *Perspectives on semantics, pragmatics and discourse*, 43-58. Amsterdam: Benjamins.
- DWB** = *Deutsches Wörterbuch von Jacob und Wilhelm Grimm*, I-XVI, Leipzig 1854–1960. <http://dwb.uni-trier.de/de/>.
- DWDS** = Digitales Wörterbuch der deutschen Sprache. <https://www.dwds.de/>.
- Fábregas, A.** 2017. ¿Son algunos interfijos morfemas apreciativos? *ELUA* 31: 135–150.
- Faust, N.** 2015. Israeli Hebrew. In Grandi, N. and L. Körtvélyessy (eds.), *Edinburgh Handbook of Evaluative Morphology*, 238-45. Edinburgh University Press.
- Grestenberger, L., and D. Kallulli.** Forthcoming. The largesse of diminutives: suppressing the

- projection of roots. *Proceedings of NELS 49*.
- Hale, K.** and S. **Keyser**. 1993. On argument structure and the lexical expression of syntactic relations. In: Hale, K., Keyser, S.J. (eds.), *The View from Building 20*, 53-109. Cambridge, MA: MIT Press.
- Harley, H.** 1999. Denominal verbs and Aktionsart. In: L. Pykkänen and A. van den Hout (eds.), *Proceedings of the 2nd Penn/MIT roundtable on event structure*, 73-85. Cambridge, MA: MIT Press.
- . 2005. How do verbs get their names? Denominal verbs, Manner Incorporation and the ontology of verb roots in English. In: N. Erteschik-Shir and T. Rapoport (eds.), *The Syntax of Aspect*, 42-64. OUP.
- . 2013. External arguments and the Mirror Principle: On the distinctness of Voice and v. *Lingua* 125: 34-57.
- . 2014. On the identity of roots. *Theoretical Linguistics* 40/3: 225-76.
- . 2017. The “bundling” hypothesis and the disparate functions of little v. In: R. D’Alessandro, I. Franco and Á. Gallego (eds.), *The verbal domain*, 3–28. OUP
- Jurafsky, D.** 1993. Universals in the semantics of the diminutive. *BLS* 19: 423-36
- . 1996. Universal tendencies in the semantics of the diminutive. *Language* 72:533-578.
- Kluge, F.** 1999. *Etymologisches Wörterbuch der deutschen Sprache*. 23., erw. Aufl. Berlin: de Gruyter.
- Levin, B.**, and M. **Rappaport Hovav**. 1995. *Unaccusativity*. Cambridge MA: MIT Press.
- Marantz, A.** 2013. Verbal argument structure: events and participants. *Lingua* 130: 152-68.
- Oltra-Massuet, I.** 2019. On the morphosyntax of evaluative deverbal verbs in Catalan and Spanish. Handout, *Distributed Morphology from Latin to Romance*, University of Vienna, Oct. 30-31, 2019.
- , and E. **Castroviejo**. 2014. A syntactic approach to the morpho-semantic variation of *-ear*. *Lingua* 151: 120-41.
- Ott, D.** 2011. Diminutive-formation in German: spelling out the classifier analysis. *Journal of Comparative Germanic Linguistics* 14:1-46.
- Panagiotidis, Ph.**, V. **Spyropoulos**, and A. **Revithiadou**. 2017. Little v as a categorizing verbal head: evidence from Greek. In: D’Alessandro, I. Franco and Á. Gallego (eds.), *The verbal domain*, 29–48. OUP
- Rothmayr, A.** 2009. *The structure of stative verbs*. Amsterdam: John Benjamins.
- Rothstein, S.** 2004. *Structuring events*. Blackwell.
- Steriopolo, O.** 2015. Syntactic variation in expressive size suffixes: a comparison of Russian, German, and Spanish. *SKASE Journal of Theoretical Linguistics* 12:2–21.
- . 2016. Expressives across languages: form/function correlation. *Annual Review of Linguistics* 2016/2: 293–324.
- Tovena, L. M.** 2010. Pluractional verbs that grammaticise number through the part-of relation. In: *Romance Languages and Linguistic Theory 2008. Selected papers from 'Going Romance', Groningen 2008*, 233-48. Amsterdam: John Benjamins.
- , and A. **Kihm**. 2008. Event internal pluractional verbs in some Romance languages. *Recherches linguistiques de Vincennes* 37: 9-30.
- Weidhaas, Th.**, and H.-J. **Schmid**. 2015. Diminutive verbs in German. *Morphology* 25/2:183-227.
- Wiltschko, M.** 2006. Why should diminutives count? In: *Organizing grammar. Studies in honor of Henk van Riemsdijk*, 669–79. Berlin: Mouton de Gruyter.
- , and O. **Steriopolo**. 2007. Parameters of variation in the syntax of diminutives. Proceedings of the 2007 Canadian Linguistics Association Annual Conference.
- Wood, J.** and A. **Marantz**. 2017. The interpretation of external arguments. In: R. D’Alessandro, I. Franco and Á. Gallego (eds.), *The verbal domain*, 255–78. OUP.