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Small events.
Verbal diminutives in the languages of the world

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Abstract

Diminutives are typically nouns. However, verbs can also be diminutivised, i.e. marked for reduced intensity, duration, seriousness or success of the action or event. This paper is a first attempt at a typology of verbal diminutives, based on a balanced sample of 248 languages. We discuss the analytical and terminological challenges that arise from the study of a category that is not widely recognised and does not have an established place in grammatical descriptions. Our sample shows that verbal diminutives occur across the world, with a slightly higher predominance in the Americas and somewhat fewer cases in Africa. Among the language families, Austronesian has the highest percentage of verbal diminutives in our sample. We present our results for the various formal exponents of verbal diminution on the one hand and the array of semantic effects on the other. Meanings are separated into three categories: attenuation in quantity, attenuation in quality and affective meanings. In many cases, markers of verbal diminution encode additional meanings, some of which contradict the core meaning of attenuation by expressing intensity, durativity or iteration. Such apparent paradoxes have parallels in nominal diminutives. The paper closes with recommendations for further research.

Keywords: verbal diminutive; diminutive; evaluative morphology; attenuation; reduplication; morphology.

1. Introduction

Verbal diminutives are grammatical constructions indicating that an action or event is ‘smaller’ than usual. A truly classic example is (1), a line from Horatius’ *Ars Poetica*:

(1) Latin (Horatius, Ars Poetica, line 359)

indignor	*quandoque*	*bonus*	*dormi-**ta**-t*	*Homerus*
indignant	whenever	good	sleep-DIM-3SG.PRS	Homer

'I am indignant when worthy Homer nods.'

The verb *dormitare* 'to nod, to snooze' is the diminutive of the verb *dormire* 'to sleep': Homer sleeps lightly and for a brief time.

Like all diminutives, verbal diminutives belong to the domain of evaluative morphology. As such, they can be considered an implicit form of comparison, expressing reduction or attenuation with respect to some standard (Jurafsky 1996: 551, Dressler & Merlini Barbaresi 1994: 153, Körtvélyessy 2015: 4, 32, 41-42). This view is explicitly emphasised by Körtvélyessy, who defines evaluative morphology as "a continuum in which prototypical cases express the meaning of quantity under or above the default value" (2015: 4). In her model, the standard or default for verbal diminutives is anchored in the cognitive category "quantity of action".

Conceptually speaking, the quantity of actions can be reduced in a variety of dimensions.[1] The most obvious are intensity, time and space (but see Dressler & Merlini Barbaresi 1994: 132, for whom intensity is the only gradable dimension for verbs). As we will see (§2.3 and §3.3.2), not all of these are used for diminution in equal measure: attenuation in the spatial dimension is found more rarely than attenuation in time or intensity. Furthermore, actions could potentially be graded according to their frequency, but the lowest end for this parameter, a single event, is the norm rather than the exception for most verbs.[2] As we will see later, frequency does make an appearance in our data, but not in the sense of low frequency. Instead,

[1] A similar variety of dimensions is also found with nominal diminutives. While concrete nouns are usually diminutivised in the spatial domain, abstract nouns can be reduced in non-spatial domains such as time, strength or scale, as in Italian *sinfonia* > *sinfonietta* 'small-scale symphony', *cena* > *cenetta* 'small supper', *pioggia* > *pioggerella* 'light rain, drizzle' (Taylor 2003: 173). In a similar spirit, Jurafsky (1996: 559) points out that different semantic shades of the diminutive involve different "scales", such as amount, time, space or illocutionary force.

[2] In cases where languages employ singulative, punctual or semelfactive markers to mark the single occurrence of a normally repeated action, it is questionable whether these should be analysed as diminutives. This type of marking resembles nominal singulatives, which are not normally considered diminutives, just the way plurals are not seen as augmentatives. Therefore, such cases were not included in this study.

diminution of the verbal action may go hand in hand with iterativity; this is shown and discussed in §3.3.2.

We extend Körtvélyessy's definition of verbal diminution by also including attenuation in qualitative dimensions, such as seriousness and/or effort (diminution implies nonchalant, pretended or playful execution of the action) and completeness and/or success (diminutive marks incomplete or unsuccessful actions). In addition, verbal diminutives, like nominal diminutives, can have a variety of affective meanings such as endearment or contempt. The three functional domains – reduction in quantity, reduction in quality and affective functions – will be discussed further in §2.3 and §3.3.

Verbal diminutives such as example (1) are common and frequent in some language families, e.g. in Slavic and Romance, but in general do not constitute a well-known category and are cross-linguistically understudied (though see the explorations in Olsson 2012 and Makarchuk 2020). While accounts exist for individual languages, e.g. Finnish (Armoskaite & Koskinen 2008), Italian (Grandi 2009, Tovena 2011), Hebrew (Greenberg 2010), French (Amiot & Stosic 2014), German (Weidhaas & Schmid 2015), Russian (Makarova 2014) and Czech (Káňa 2017), the typologically oriented literature on evaluative morphology such as Jurafsky (1996), Bauer (1997), Grandi & Körtvélyessy (2015) and Körtvélyessy (2015) clearly shows that the primary domain of the diminutive, both in cross-linguistic attestation and in linguists' awareness, is the noun.[3]

The present study is the first attempt at a substantial typology of verbal diminution, covering 248 languages. In our sample, we found 112 verbal diminutives, with some languages displaying more than one marker or strategy. We begin by providing our methodology of sampling in §2.1. In §2.2 we situate the category among other grammatical properties and address terminological concerns. Our reasons to include or exclude individual cases are motivated in §2.3. Section §3 constitutes the heart of the paper: §3.1 summarizes the results of our cross-linguistic study, §3.2 focusses on the formal exponents of verbal diminution, and §3.3 discusses the semantics and

[3] Various sources show that nominal diminutives are more common than verbal or adjectival diminutives (see e.g. Dressler & Merlini Barbaresi 1994: 131, Bauer 1997 and the sources cited there, as well as Körtvélyessy 2015: 102). Occasionally, verbal or adjectival diminutives are thought to be metaphorical or metonymical extensions of nominal diminutives (e.g. Makarova 2015: 16). We do not pursue this hypothesis, since, as just shown, verbs possess diminishable semantics of their own.

pragmatics of the constructions in question. §4 outlines some issues of further interest, and §5 concludes the paper.

2. Methodology

2.1 Sampling

This paper is based on a combination of two variety samples of 102 and 223 languages, respectively. The samples were composed by applying the Diversity Value technique to the language classification of Ethnologue 2015 (Lewis et al. 2015). This technique, developed by Rijkhoff & Bakker (see Rijkhoff et al. 1993, Rijkhoff & Bakker 1998, Bakker 2011) and validated by Miestamo and colleagues (Miestamo et al. 2016), involves computing diversity values for the nodes in a language family tree. These values reflect the degree of internal complexity of the subgroups under the nodes and thereby determine the number of languages that should be sampled from each subgroup, given the desired sample size.

For a pilot study on verbal diminutives (henceforth: VDims), we used the minimal sample (one language per family) of 102 languages (see Audring et al. 2019). In order to include more variation and to consolidate our preliminary results, we extended the coverage by adding Mattiola's (2020) sample, constructed according to the same technique applied to the same classification.[4] Elimination of overlap yielded a final sample of 248 languages.

Merging Mattiola's sample with our pilot sample led to a number of cases where different representatives had been chosen within a particular genetic grouping. When this happened, we used the following criteria to decide between the languages: (i) general quality of the available description; (ii) if relevant, status of the (description of the) VDim construction. VDim constructions were occasionally harder to classify in one language than in the other, in which case we favoured the language with the

[4] As Mattiola (2020) explains, his 223-language sample is in fact a reduced version of a larger 424-language sample constructed by adding all isolates, as well as a number of pidgin/creole languages and sign languages, to an initial 350-language sample. While Miestamo et al. (2016) suggest selecting just one isolate and one unclassified language, Mattiola views such languages as essentially representing a family of their own. Moreover, pidgins, creoles, and sign languages tend to be underrepresented in linguistic typology. Hence, including them also adds to overall diversity. Eventually, however, a number of languages in these categories were dropped for practical reasons, resulting in a 223-language sample.

clearest case. If none of this was decisive, we chose, if available, a language with a VDim rather than one without a VDim, in order to maximize the diversity of our coverage.

In a number of cases, we were not able to find usable descriptions for the representative of a particular group. If we could not replace the language with another from the same group (either because it was an isolate or because no - suitable - descriptions were available for any other languages in the group), this meant that the group had to be omitted. This was the case for 13 groups.

The sample languages, together with their genealogical classifications and the source(s) we used can be found in the online Appendix (Audring et al. 2021).

2.2 Verbal diminutives and their place in the grammar

Since verbal diminutives are not a standard category in descriptive grammars, they are described – if at all – as part of various grammatical subsystems. The most obvious, as mentioned in §1, is the domain of evaluative morphology. However, diminution is usually discussed in the context of nominal morphology; the extension of the category to verbs and other parts of speech may be mentioned in passing. More often, grammars report attenuative markers in a chapter or section on verbal aspect (or TAM morphology in general), alongside habituals, iteratives and intensives (which, with Körtvélyessy 2015, might be considered cases of verbal augmentatives). In other cases, instances of verbal diminution were found in the context of pluractionality, as meanings of attenuation and repetition appear in tandem in various languages. The apparent paradox between reduction (attenuation) and increase (iteration), which we might describe as 'less is more', will be addressed briefly in §3.3.2. Finally, we sometimes found relevant descriptions in sections about the semantic effects of verbal reduplication. Since this is a formal rather than a functional criterion, it sidesteps the question of where in the grammar verbal diminutives belong.

The practical challenge of identifying relevant cases in descriptive sources reflects theoretical difficulties in situating the phenomenon in a particular grammatical subsystem. These issues are exacerbated by a great variation in terminology. The term "verbal diminutive" does not commonly appear in grammars, especially for languages outside Europe. A telling example is the grammar of Chukchi (Dunn 1999), where one of the suffixes in (2), *-qeet,* is glossed as DIM (diminutive), while the prefix *mec-* in the same example is glossed as APPR (approximative), although its description

suggests a highly similar function: "The prefix *mec-* indicates that the action/event of the verb occurs slightly or incompletely" (Dunn 1999: 266).[5]

(2) Chukchi (Chukotko-Kamchatkan; Dunn 1999: 268)
*e-**mec**-pintəqet-**qeet**-lin*
PRF-APPR-show.self-DIM-3SG
'It showed itself slightly.'

Other candidate cases are referred to as "delimitatives" (Mandarin Chinese; Li and Thompson 1981: 232), "incompletives" (Alto Perené; Mihas 2015: 250), "de-intensification" (Epena Pedee; Harms 1994: 40), or "attenuatives" (Toqabaqita; Lichtenberk 2008: 186).

This variation in terminology has repercussions for a cross-linguistic investigation of VDims. In addition, we will see that the category is heterogeneous, especially in its semantics. Our considerations and criteria for including or excluding potential cases will be explained next.

2.3 Selection and coding

As outlined in §1, we recognize three sets of functions of VDims: a) reduction in quantity of the action, b) reduction in quality of the action and c) affective meanings. Functions a) and b) can be considered semantic, while functions of type c) are pragmatic in nature.

Quantitative reduction can be seen in example (3) from Jarawara, where the reduplication of the first syllable of the verb (here: *joko* 'push') changes the meaning to 'V a bit'.

(3) Jarawara (Arauan/Jamamadi; Dixon 2004: 275)
*Okomobi awa **jo.**joko na-ka*
name stick RDP.push AUX-DECL
'Okomobi is giving the stick a little push.'

Reduction in the qualitative sense can be seen, for example, in the Austronesian language Ibatan (Maree 2007), which has a "pretense mode" indicating that "the

[5] The similarity of the meanings is pointed out explicitly by the author (Dunn 1999: 266).

action is pretended or is performed playfully or hypocritically" (Maree 2007: 209). An example is (4); the markers are a prefix glossed as PRT 'pretense', plus the reduplication of the first stem syllable and vowel lengthening.

(4) Ibatan (Austronesian, Malayo-Polynesian; Maree 2007: 209, example shortened and glosses modified)

Naysin-ta:*-tanyis*	*saw*	*adedekey*
PRT-RDP-cry	3PL.NOM	children

'The children pretended to cry.'

A second example was found in the Australian (Bunaban) language Gooniyandi (McGregor 1990), which has so-called affixal iteratives. For some of the examples, the description says "It may be that the process was attempted, unsuccessfully, a number of times" (McGregor 1990: 243). More examples are given in §3.3.2 below.

Affective meanings have a slightly different status, as not every expression of affection or deprecation on the verb qualifies as a verbal diminutive. Rather, such functions were included only when they occurred alongside semantic functions of reduced quantity and/or quality. A relevant example is shown in (5), from the isolate language Karok. Verbal diminution is marked by the suffix *-ač* as well as by changes in the stem consonants, here a shift from *r* to *n*. The semantic effect is 'to V a little', but this type of marking can also "[indicate] a speaker's familiar or affectionate attitude towards a situation".

(5) Karok (isolate, North America; Bright 1957: 114)[6]

*ik**r**émyahtih*	*ik**n**émyahtih**ač***
'(wind) to be blowing'	'(wind) to be blowing a little'

Several grammars described constructions that resembled verbal diminutives, but were not included in our study. The clearest case was diminutive markers appearing on the verb, but not actually pertaining to the verb but rather to one of its arguments. This situation can be seen in the Algonquian language Passamaquoddy, where diminutive verb forms typically indicate that one of the arguments of the verb is "small, cute, or an object of affection or pity" (LeSourd 1995: 133). For example, the form *mehci-né-hs-o*, from *mehci-né* 'he/she dies, is dead', does not mean 'he/she dies a

[6] Where examples lack glossing, the source did not provide them.

little' (if such a meaning makes sense at all) but 'the little one is dead' (LeSourd 1995: 108). A similar situation is discussed for the four Northern American languages Lakhota, Creek, Chicasaw, and Maricopa in Munro (1988), and for the Arawak language Mojeño in Rose (2018). However, participant diminution can sometimes be observed in true verbal diminutives, for example in the language Iquito, which has a "cumulative diminutive" (CUM) with a variety of meanings; see example (6).

(6) Iquito (Zaparoan; Lai 2009: 533)
*Nu = capi-**juu**-yaa-Ø.*
3S = cook-CUM-IPFV-EC
a. 'She is cooking slowly.'
b. 'She is cooking in small portions (i.e. in a small pot) many times in order to make enough food for a meal.'
c. 'A little child is cooking a small portion.'

Among these meanings, (6a) is a case of attenuated action, i.e. verbal diminution, while (6b) and (6c) indicate small participants (the object in b., subject and object in c.). If participant diminution was the only reported meaning (unlike in Iquito), we did not include the construction as a case of a VDim.

A second type of excluded cases can be seen in the Torricelli language Walman (Dryer 2016). In this language, verbs show diminutive agreement with diminutive nouns. This has no consequences for the semantics of the verb, which is why it is not a verbal diminutive according to our typology.

Another case excluded on semantic grounds was the category sometimes glossed as "frustrative" or "avertive", which encodes events intended to happen or on the verge of happening, but not actually occurring. For an action to be attenuated, it is necessary that it has at least been initialised; hence, we distinguish actions that are incomplete or unsuccessful from events that have failed to take place altogether.

In addition, we chose not to consider instances of imperfective or so-called incompletive aspect. Incompletive marking usually does not mean that the action or event is literally incomplete, but that the perspective is on the progress of the event, with the end point out of view. Moreover, including such cases would bloat the category of VDims in an unhelpful and uninsightful way. This is not to say that there is no relation between (im)perfectivity and verbal diminution. For example, Grandi (2009) points out that evaluative suffixes in Italian are more frequently combined

with imperfective verbs. We will briefly discuss the relation between verbal diminution and aspect in §4.

Last but not least, we were careful about cases where we could not be sure that the diminution is truly verbal rather than adjectival. This is the case whenever languages express property meanings by verbal lexemes. For example, in the Nilo-Saharan language Lango (Noonan 1992) initial CV reduplication (including tone) has a diminutive function, but is restricted to property-denoting lexemes, which can be used either attributively or predicatively, e.g. *ràc* '(be) bad' → *ràràc* '(be) sort of bad' (Noonan 1992: 174). Such cases, where a diminutive strategy is limited to stative verbs, were excluded from our data.

All potential instances in the grammars were recorded and coded for the type of formal exponent(s) (§3.2) and their functional effect(s) (§3.3). Among the functional effects, we did not only include those that were directly indicative of verbal diminution, but also any other effect described for the markers in question. This resulted in a penumbra of associated meanings, which will be discussed in §3.3. We made special note of cases where attenuation coincided with iterativity (the 'less is more' diminutives, see §3.3.2).

We also included cases that were mentioned in the text but for which no examples were provided. If there was a discrepancy between the gloss and the idiomatic translation, we followed the gloss. Glosses and idiomatic translation in grammars were generally left unchanged. When a source failed to provide glosses, as in example (5) above, we did not construe them ourselves.

3. Results

3.1 General distribution of VDims

Our sample yielded 112 VDims in 85 languages. The number of VDims exceeds the number of languages, because some languages have more than one VDim construction. In order to find out whether VDims are especially common in particular language families and/or linguistic areas, we investigated the geographical and genealogical spread by computing the percentage of languages with VDims in the six macro-areas and in the ten language families in our sample from which we included more than one language. The results for the areal distribution are shown in Table 1, ordered by proportion of VDims. Comparing the proportion of VDims per macro-area

to the proportion of VDims in the total sample, it is clear that VDims are relatively frequent in South-America and relatively uncommon in the languages of Africa (the line in the table separates the areas above average from the areas on/below average).

Macro-area	**Number of languages in sample**	**Number of languages with VDim(s)**
South-America	54	22 (41%)
North-America	42	16 (38%)
Eurasia	36	13 (36%)
Papunesia	68	23 (34%)
Australia	6	2 (33%)
Africa	42	9 (21%)
Total	248	85 (34%)

Table 1: Areal distribution of VDim languages.

Table 2 provides an overview of the genealogical distribution of VDims in our sample. The table only includes language families represented by two or more languages in the sample (note that some of the figures are more informative than others due to the higher or lower number of languages in the sample). The percentages show that the number of VDims is relatively high in Austronesian languages, while they are relatively uncommon in the Trans-New Guinean family, in Sino-Tibetan, Nilo-Saharan as well as in Indo-European.

Family	**Number of languages in sample**	**Number of languages with VDim(s)**
Austronesian	28	18 (64%)
Creole	2	1 (50%)
Australian	6	2 (33%)
Afro-Asiatic	7	2 (29%)
Niger Congo	21	5 (24%)
Nilo-Saharan	6	1 (17%)
Sino-Tibetan	6	1 (17%)
Indo-European	7	1 (14%)
Trans-New Guinea	12	1 (8%)
Total	99	32 (32%)

Table 2: Genealogical distribution of VDim languages.

In the next two sections, we discuss the formal strategies used in VDim marking and elaborate on their semantic and pragmatic functions.

3.2 Form

Languages make use of a wide variety of strategies to express verbal diminution. These strategies are:

- Affixation (mostly suffixation, occasionally pre- or infixation)
- Reduplication
- Cliticisation
- Freestanding element/particle
- Verbal element (auxiliary, post-verb, serialised verb)[7]
- Base modification (segmental or suprasegmental change)

While Körtvélyessy mentions compounding as a diminution strategy for nouns (the diminutiviser usually being the word for 'child' or 'young', Körtvélyessy 2015: 20), we did not encounter any cases of verbal diminution by compounding.

Before discussing the frequency of the various strategies, we illustrate each with examples.

Affixation is by far the most frequent strategy. Example (7) from Central Alaskan Yup'ik shows suffixation, the examples in (8) from Georgian illustrate prefixation.

(7) Central Alaskan Yup'ik (Eskimo-Aleut; Miyaoka 2012: 653)
*tang-**cuar**-tuq*
see-DIM-3SG
'He sees a little bit.'

Georgian has three prefixes (called "preverbs") with diminutive-like semantics, plus a fourth translated roughly as 'to V (aimlessly) around', a meaning commonly found with VDims, but analysed as intensification in Hewitt (1995: 164). Example (8a)

[7] Verbal diminutives expressed by serial verb constructions may be more common than our data indicates, as grammars are often unable to exhaustively cover the varied semantic effects of verb serialisation.

shows the prefixes *mo-* and *šer-*, (8b) illustrates the use of *c'a*, and (8c) demonstrates that *c'a-* and *mo-* can occur in combination.

(8) Georgian (Kartvelian; Hewitt 1995: 162-167)

a.	*darbilda*	***mo**-rbilda/ **šer**-bilda*
	'X softened.'	'X softened a bit.'
b.	*isauzmeb*	***c'a**-isauzmeb*
	'You will have breakfast.'	'You will snatch a bit of breakfast.'
c.	*ic'vimebs*	***c'a**-**mo**-c'vims*
	'It will rain.'	'There will be a short rainfall.'

Reduplication is also highly common. We already saw a case in §2.3 (Jarawara, example (3)), illustrating partial reduplication. Full reduplication is shown in example (9) from Waray.

(9) Waray (Austronesian; Oyzon & Payne in prep., Thomas Payne p.c.)

a.	*káon*	*káon-kaon*
	'eat'	'eat a little/ playfully'
b.	*lakat*	*lákat-lakat*
	'walk'	'walk a little/ playfully/randomly'

Other languages mark VDims by means of cliticisation; one of them is Tariana (example (10)).

(10) Tariana (Arawakan; Aikhenvald 2003: 366, 193)
nha kida = ***tuki*** = *sina*
they ready = DIM = REM.PST.INF
'They must be a little bit ready.'

The Malayo-Polynesian language Toqabaquita marks verbal diminution by means of a particle, a freestanding non-verbal element.[8] There are three such particles; example (11) shows two of them, glossed as ATTN, i.e. attenuative.

(11) Toqabaquita (Austronesian, Malayo-Polynesian; Lichtenberk 2008: 169)
Nia kai ***{thafa/thafeqe}*** *qono naqa*
3SG 3SG.IPFV ATTN/ATTN sit PRF
'He/she is feeling better now.' (lit.: 'He/she is sitting a little now.')
(Said about a person recovering from an illness.)

The same language also has a verbal marker, *sukani*, with a similar meaning, shown in (12).

(12) Toqabaquita (Austronesian, Malayo-Polynesian; Lichtenberk 2008: 168)
Nau ku ***sukani*** *mataqi*
1SG 1SG.NFUT be.of.little.degree be.sick
'I am a little sick.'

Free-standing verbal markers of verbal diminution are also found in other languages, where they are described as auxiliaries, postverbs or serial verb constructions. Example (13) shows the attenuative auxiliary *gi* in Bauzi, which has a connotation of 'just, only' and therefore fits the qualitative dimension we will call NON-SERIOUS in §3.3. This language encodes other aspectual distinctions with free words, so *gi* is part of a set, which prompts us to treat it as a grammaticalised, not just a lexical element.

(13) Bauzi (Geelvink Bay; Briley 1976: 8)
em ***gi*** *la lo*
I ATTN go doing
'I'm just going.' (nothing special in mind)

The Turkic language Uyghur has post-verb constructions, i.e. verbs following another verb and bearing a generalised meaning (some sources, e.g. Hahn 1998: 390, describe

[8] A reviewer pointed out that "evaluative morphology" should imply morphological, i.e. bound markers. In this paper, we use the term only to situate our research amongst other relevant work, without committing ourselves to such limitations.

them as auxiliaries). VDim meanings can be found with posture verbs such as *oltu(r)-* (lit. 'sit') (Lopnor dialect; Abdurehim 2014: 160) or *tur-* (lit. 'stand') (Hahn 1998: 392).

Last but not least, we find verbal diminution expressed by base modification. Two striking examples come from Beja (North Cushitic) and Huave (Huavean), shown in (14) and (15). In Beja, the alveolar trill /r/ shifts to an alveolar lateral approximant /l/ to form diminutives of nouns, adjectives and verbs. (14) is a verbal example in which the 'smallness' of the action is beautifully evident.[9]

(14) Beja (North Cushitic; Vanhove & Ahmed 2018: 67)

birʔik	*bilʔik*
'fly' (of birds)	'flutter about' (of butterflies)

In Huave, "[d]iminutivization essentially involves raising of all non-high root vowels to high, plus palatalization of any eligible (i.e. coronal) root-final consonants" (Kim 2008: 320). An example is (15).

(15) Huave (Huavean; Kim 2008: 322)

jajybij	*jujyʉij*
'shake'	'shake gently'

The sound symbolism in diminutives expressed by high vowels has long been recognised as typical (see Jurafsky 1996: 534 for early references).

In rare cases we found combined strategies of suffixation plus reduplication and/or base modification. For example, the Hmong Mien language Western Mien, also known as Xong, shows a combination of full reduplication of the verb, interspersed with two morphemes, *lib* and *daod*, which are not glossed, but characterised as some kind of sound-symbolic units. The process is productive with stative verbs, but also applies to some dynamic verbs and is described as "always having an attenuating effect" (Sposato 2015: 504). (16) shows an example with a stative (a) and a dynamic verb (b).

[9] The process shown here is reminiscent of, or even analysable as, a phonaesthemic alternation. Such processes are also associated with evaluative notions like diminutivity and augmentativity; see Willemsen & Miltersen (2020).

(16) Western Mien (Hmong Mien; Sposato 2015: 504-505)

a. *Zheit-zhauf* *giand-**lib**-giand-**daod***
outside-door icy-LIB-RDP-DAOD
'It's a little bit icy outside.'

b. *wel* *sheit-**lib**-sheit-**daod***
1SG write-LIB-RDP-DAOD
'I've written a little bit.'

The Niger-Congo language Wawa has four suffixes described as pluractionals, iteratives or distributives. They attach to a tonally modified stem, sometimes with reduplication. The example in (17) shows the suffix *-kə́kā*, which "stresses that the actions are done a little bit each time, it can also refer to actions being done jokingly, like pretending to hit someone or doing so only lightly" (Martin 2012: 305) and was therefore identified as a verbal diminutive in the qualitative as well as quantitative domain. The stem vowel *u* is the locus of the tone modification.

(17) Wawa (Niger-Congo; Martin 2012: 305)

gŭ-	*gù-**kəàkā***
'fall'	'fall a little bit many times'

Table 3 indicates the frequencies of the strategies used in the languages of our sample. Note that the sum of the numbers is, again, higher than the number of VDim-languages in the sample because some languages employ more than one strategy, either combined or as individual constructions.

Strategy	**Number of constructions in the sample**	**Number of languages using strategy for one or more VDim constructions**
Affixation	54	42
Reduplication	28	27
Cliticisation	14	10
Freestanding element	7	6
Verbal element	8	7
Base modification	4	4

Table 3: Exponence of verbal diminution.

The overview shows that affixation and reduplication are by far the most common strategies of verbal diminution across the languages of the world. Diminution by reduplication is particularly interesting, since, as noted in the literature (e.g. Moravcsik 1978: 317), it may appear counterintuitive: principles of iconicity decree that increase in form indicates increase in meaning. We will return to this issue in §4. First, however, we take a look at the various functions of verbal diminutive markers, which show more interesting complexities.

3.3 Functions

3.3.1 Earlier observations

The examples above show that the functions of verbal diminutives vary. This does not come as a surprise: since Jurafsky (1996), it has been noted that diminutives form a "radial category" of related meanings (though see Dressler & Merlini Barbaresi 2001, Fortin 2011, and Mutz 2015 for criticism and alternative proposals). Therefore, it is interesting to explore the semantic effects of verbal diminutives in greater detail.

According to Jurafsky (1996), diminution encompasses a variety of notions, with 'small' and 'child' at the center and meanings such as 'imitation' 'related-to', 'partitive' and 'approximation' at the periphery. In addition, diminutives tend to come with affective meanings, both positive and negative. Figure 1 from Jurafsky shows the proposed universal structure of the diminutive in a semantic map, which also illustrates how the more peripheral meanings relate to the more central ones.

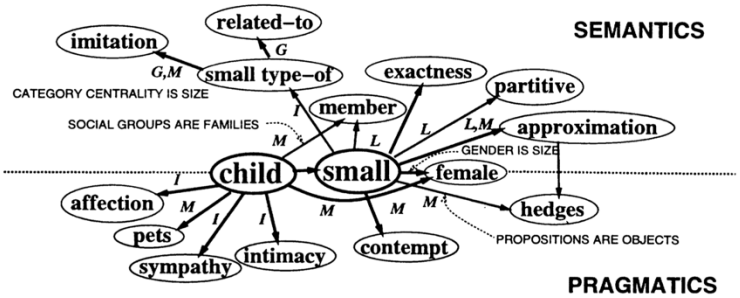

Figure 1: Proposed universal structure for the semantics of the diminutive (Jurafsky 1996: 542).

Whereas Jurafsky's examples are almost exclusively nominal or adjectival, Weidhaas & Schmid (2015) find that German verbal diminutives in *-el* can be arranged in a similar configuration, with the following list of meanings (Weidhaas & Schmid 2015: 203):

- Semantic attenuation:
  - low intensity
  - iterative
  - small pieces
  - playful-tentative and playful-pretentive
- Pragmatic attenuation:
  - language of proximity
  - contempt
  - affection and sympathy
  - trivialisation
  - euphemism

As we will show in the following, these observations for German are largely corroborated by our sample of languages and other languages discussed in the literature.

3.3.2 Cross-linguistic functions of verbal diminutives[10]

In our sample, we observe eleven semantic and pragmatic categories, listed below, that occur with a certain regularity, as well as a few more idiosyncratic meanings. Assuming the gradable dimensions of verbal meaning introduced in §1, quantity and quality, plus affective meanings,[11] we can identify six categories directly related to attenuation. These are LOW INTENSITY, SHORT TIME, NON-SERIOUS, INCOMPLETE, EMOTION (AFFECTION/CONTEMPT) and POLITENESS.

[10] In this section we will ignore more grammatical functionalities of VDims, such as transitivisation or perfectivisation (see Katunar 2013: 3), effects on telicity, etc.

[11] Affective meanings can be called pragmatic, as we did in §2.3, but it should be noted that semantics and pragmatics cannot always be distinguished with certainty. For example, in the category NON-SERIOUS we find both objective meanings such as 'pretend' and affective meanings such as 'careless', as well as in-between cases such as 'playful'.

The categories referred to as "associated meanings", i.e. SMALL ARGUMENT, ITERATIVE, DISTRIBUTIVE, DURATIVE and INTENSIVE, are not themselves indicative of verbal diminution, but occur as additional effects of the VDim markers. Some of these meanings are surprising, as they are downright contradictory to attenuation.

- LOW INTENSITY
- SHORT TIME

quantitative domain

- NON-SERIOUS
- INCOMPLETE

qualitative domain

- EMOTION (AFFECTION/CONTEMPT)
- POLITENESS

affective meanings

- SMALL ARGUMENT
- ITERATIVE
- DISTRIBUTIVE
- DURATIVE
- INTENSIVE

associated meanings

We briefly discuss each group in turn.

The meanings LOW INTENSITY and SHORT TIME represent reduction in the quantitative domain. Example (18) illustrates LOW INTENSITY in the Niger-Congo language Noni.

(18) Noni (Niger-Congo; Hyman 1981: 35)

kám	*kám-**cɛ́***
'squeeze'	'squeeze a little'

SHORT TIME is also frequent, often with descriptions such as 'limited duration' or 'for a while'. Interestingly, we find temporal attenuation both manifested as 'rapidly' (Urarina; Olawsky 2006: 472) and 'slowly' (Toqabaquita; Lichtenberk 2008: 169, see example (30) in §4). Another special case is the Muskogean language Creek, which uses the diminutive suffix to express closeness in time, i.e. 'just now' (Martin 2011: 234). The basic temporal meaning is nicely illustrated in example (19) from Kolyma Yukaghir.

(19) Kolyma Yukaghir (Yukaghir; Maslova 2003: 276)

morie-	*morie-**s'i:-***
'wear'	'wear for a short time'

As anticipated in §1, our catalogue of meanings does not list SMALL SPACE, as reduction in a spatial sense is rare; our sole example is from Yurakaré, as shown in (20). Note that this example could also be interpreted as reduction in intensity.

(20) Yurakaré (Yurakaré; van Gijn 2006: 120, cited in Körtvélyessy 2015: 78)
ana-ja-lë *baja-**nñu**-ø*
DEM-MEA-AMP subside-DIM-3
'The water has subsided a little.'

Within the qualitative domain, we see reduction in the dimension of seriousness and/or effort, which we labeled NON-SERIOUS, and in the dimension of completeness and/or success, for which we use the term INCOMPLETE.

The former category encompasses a variety of meanings, the most common being 'playful' and 'pretend to' (this includes the meanings described by Weidhaas & Schmid 2015: 203 as playful-tentative and playful-pretentive). Other variants are described as 'relaxed attitude', 'less purposeful', 'careless' or 'aimless'. We also included meanings translated as 'just', 'simply' or 'merely', which fit the general impression of low dedication and effort. An example of the 'aimless' meaning is given in (21). The diminutive is formed by partial reduplication (plus, in this particular verb, the addition of the vowel *o*).

(21) Palauan (Austronesian, Malayo-Polynesian; Josephs 1975: 236)

mẹrael	*mẹr**ero**ael*
'walk'	'walk aimlessly'

The category INCOMPLETE subsumes meanings of the type 'partially done' or 'accomplished to a lesser extent than expected'. In addition, we included cases where the action is attempted but not completed. For example, the Papuan language Imonda shows verb complexes with an extra root following the stem. There are several such roots; the forms and their semantics are illustrated in (22).

(22) Imonda (Papunesia; Seiler 1985: 103-104)

a. *nagtõ* 'incomplete' (as in 'I have chopped the tree halfway through')
b. *sabeha* 'pretend', "indicates that the event depicted by the lexical verb is in some

sense not ‘the real thing’, that it was only begun but not finished.” (Seiler 1985: 104)[12]

c. *sëlõh* ‘in vain’ (without success)

d. *nòg* ‘incomplete’ (like *sabeha*) or ‘in vain’ (like *sëlõh*)

All of these fit the wider category we are describing here.

Affective meanings manifested themselves in two basic ways, one we refer to as EMOTION (AFFECTION/CONTEMPT) the other as POLITENESS. As to the former group, grammars sometimes mention ‘speakers’ feelings’ or qualify the action or event as ‘close to the speaker’, without specifying a positive or negative thrust of the emotions in question. In most cases, however, affective meanings were explicitly identified as positive (fondness, approval or compassion) or negative (disparagement, trivialisation). It is worth noting that emotions could be linked either to the action or to a participant. The former situation can be seen in German, which has a number of verbs for touching events, such as *kuscheln* ‘to cuddle’, *streicheln* ‘to stroke’, *hätscheln* ‘to pet’ or *tätscheln* ‘to pat’. All of these contain the diminutive suffix *-el*, which here transports positive connotations of intimacy.[13] The latter situation, which appears to be more common, can be seen in Chukchi, where the diminutive can express “both fondness and disparagement” towards a participant (Dunn 1999: 268; examples in (23) are shortened).

(23) Chukchi (Chukotko-Kamchatkan; Dunn 1999: 268)

a. *ilu-ke* *q-ə-twa-**qaat**-ə-rkən*
move-NEG INT-E-be-DIM-E-PROG
‘Stop it you little [idiot]!’

b. *jəlqet-**qeet**-ɣʔi*
sleep-DIM-TH
‘He fell asleep, the poor little thing.’

Such cases were only included if they occurred alongside meanings of reduced quantity and/or quality, as outlined in §2.3. This is true for Chukchi; witness example

[12] The verb root *sabeha* also shows the attenuative meaning NON-SERIOUS.

[13] Jurafsky (1996) lists “intimate” as a separate category. As this meaning only occurred once in our dataset, we included it under EMOTION.

(2), repeated here for convenience, which contains the marker *-qeet-* used as a true verbal diminutive.

(2) Chukchi (Chukotko-Kamchatkan; Dunn 1999: 268)
*e-mec-pintəqet-**qeet**-lin*
PRF-APPR-show.self-DIM-3SG
'It showed itself slightly.'

In addition, verbal diminutives can be used as POLITENESS markers, e.g. to soften imperatives or requests or to express self-deprecation. The first can be seen in Mandarin Chinese (24),[14] the second in Zulu (25), both expressed by reduplication.

(24) Mandarin Chinese (Sino-Tibetan; Li & Thompson 1981: 235)
*qǐng nǐ bǎ mén **kaǐ-kaǐ***
please 2SG BA door open-open
'Please open the door.'

(25) Zulu (Niger-Congo, Atlantic Congo; Van der Spuy & Mjiyako 2015: 520)
*ngi-ya-**cul-a-cul-a***
'I'm just singing a bit.'

Among the associated meanings, which are not themselves indicative of verbal diminution but were described as meanings for the same markers, we see semantic effects related to the participant, in other words, to a verbal argument. This situation is mentioned in §2.3 above and illustrated with example (6) from Iquito; example (23) from Chukchi is another case in point. This category, which we call SMALL ARGUMENT here, comes in various shades of meaning, from 'small participant', especially 'child', to 'toy' and 'small pieces' (a category also identified by Weidhaas & Schmid 2015). An example for the latter is found in the Austronesian language Nias Selatan, where "initial-syllable-reduplication indicates that the action is done many times, often with the sense that the actions are small ones, or result in many small pieces" (Brown 2001: 529). The 'small pieces', though not the 'small action' meaning can be seen in (26). This case was included by virtue of the verbal 'small action' meaning mentioned in the source.

[14] We owe this example to Olsson (2012).

(26) Nias Selatan (Austronesian; Brown 2001: 529)
*I-**ta**-taba* *geu*
3S.RLS-RDP1-cut wood:MUT
'He cut up the wood (into many small pieces).'

In addition, we see argument-related affective meanings, such as in Chukchi. Taken broadly, this category also encompasses verbs used mostly or exclusively towards or in reference to children. An example can be found in German (27).

(27) German (Indo-European; personal knowledge)
fremd *fremd-**el**-n*
'strange' 'be shy with strangers'

While shyness with strangers can also be felt by adults, the verb *fremdeln* is specifically used for children, often referring to a typical developmental phase in early childhood.

Of the other associated meanings, three are aspectual in nature, i.e. ITERATIVE, DISTRIBUTIVE and DURATIVE. Iterativity is a common meaning accompanying verbal diminutives. Being a more conspicuous or simply better-known category, iterativity is sometimes taken to be the central meaning of the relevant forms, which are then glossed as "iteratives, "frequentatives" or even "pluractionals", while their semantic profile also contains evidence of attenuation. We saw an example in the language Wawa (example (17), repeated for convenience).

(17) Wawa (Niger-Congo; Martin 2012: 305)
gŭ- *gù-**kàkā***
'fall' 'fall a little bit many times'

The marker *-**kàkā*** is referred to as a "pluractional" in the grammar, while – repeating the quote from §3.2 – "it can also refer to actions being done jokingly, like pretending to hit someone or doing so only lightly" (Martin 2012: 305), which means that it doubles as a verbal diminutive.

The polysemy between verbal diminution and pluractionality suggests that there is a connection between the two (see Mattiola 2017, 2019 for a semantic map of pluractionality, which can be linked to the conceptual space we are discussing here). Similar relations, i.e. between verbal diminution and iterativity, are discussed in

various places in the literature, e.g. by Amiot & Stosic (2014) for French, Katunar (2013) for Croatian, Grandi (2009) and Tovena (2011) for Italian, and Weidhaas & Schmid (2015) for German. Such polysemy patterns are somewhat paradoxical, as they involve a contradiction which Tovena (2011) refers to as "small is many" and we like to call "less is more": diminution equals reduction, while iterativity equals increase. Explanations offered in the literature are mostly along the lines of Cusic (1981), who argues that event plurality comes in two kinds, a) repetition of the event and b) repetition *within* the event. The latter constitutes the link to verbal diminution, as introducing repetition within the boundaries of an event reduces the size of the subevents (see Tovena 2011, Amiot & Stosic 2014, François 2004 and Kouwenberg & LaCharité 2005 for similar arguments).

A category that is easier to reconcile with attenuation is DISTRIBUTIVE, i.e. 'little by little', 'here and there' or 'one by one'. For example, the language Nias Selatan we saw in (26) can use initial-syllable-reduplication not only to indicate small actions or small pieces, but also for distributive actions, as in (28).

(28) Nias Selatan (Austronesian; Brown 2001: 529, glosses slightly adjusted)
La-ta-taru *zinanö*
3PL.RLS-RDP-plant seedling:MUT
'One plants the seedlings one by one (in a wet rice field).'

The intuitive relation between attenuation and distributivity is nicely explained by Hyman (1981), who writes that in the Niger-Congo language Noni "30% [of the attenuative verb forms attested] have the meaning 'here and there' or 'little by little' [...]. This interpretation derives from the attenuative meaning: instead of performing an action all at once as a single event, one attenuates the action into a sequence of smaller events" (Hyman 1981: 36; Hyman analyses this as verbal plurality and reserves the term "distributive" for a different suffix, but translates both the same way, as 'several times').

Finally, the less-is-more paradox manifests itself in two further variants, i.e. the categories DURATIVE (or 'continuous') and INTENSIVE, which quite clearly contradict the core meanings of VDims, SHORT TIME and LOW INTENSITY, but nevertheless occur with a certain frequency in our dataset. A striking example can be found in the language Westcoast Bajau, where full reduplication can have contradictory meanings, even

with the same verb (example (29) shows reduplication of the verb *keet* 'to glow'; meaning a. corresponds to our INTENSIVE).

(29) Westcoast Bajau (Austronesian; Miller 2007: 81)
keet-keet
a. 'to burn brightly' (emphatic meaning)
b. 'to burn dimly' (diminutive meaning)
c. 'to burn over a period of time' (continued action meaning).

The fact that these patterns are found specifically with reduplication is probably motivated by iconicity. We refer again to Kouwenberg & LaCharité (2005), who address the less-is-more paradox in relation to reduplication in three Caribbean Creole languages.

In addition to the meanings discussed in this section, we found individual cases of meanings like 'incipient action', 'habitual', 'counterexpectation', and a particularly expressive function called "diminuendo" ('less and less', the language is Palauan, shown in example (21)).

Quantitative meanings	Qualitative meanings	Affective meanings	Associated meanings	N of VDim constructions per combination
+	-	-	-	31
-	+	-	-	12
-	-	+	-	(0)
-	-	-	+	(0)
+	+	-	-	14
+	-	+	-	5
+	-	-	+	13
-	+	+	-	0
-	+	-	+	10
-	-	+	+	(0)
+	+	+	-	4
+	+	-	+	12
+	-	+	+	7
-	+	+	+	0
+	+	+	+	4
Total				**112**

Table 4: Frequency of combinations of meanings.

The zeroes in brackets follow from our methodology: affective and associated meanings
were not considered unless they accompanied quantitative or qualitative meanings. To round off this section, Table 4 illustrates the frequency in which meanings occurred in combination in our sample.

The overview shows that purely quantitative meanings, i.e. LOW INTENSITY or SHORT TIME, were clearly the most common scenario. All combinations with ten or more instances are highlighted in grey. It should be noted that the meanings summarised under "associated meanings" are highly heterogeneous, which explains the fairly high number of signs + in this column.

4. Further issues of interest

Before concluding, we would like to offer a brief look at a number of issues we could not address, but which seem worthwhile avenues for further research.

First of all, we mentioned a number of contradictory meanings involving attenuation on the one hand and pluractionality, durativity or intensity on the other, subsumed under "less is more". This is not the only paradox in the realm of verbal diminution (and in diminutives in general). Another such paradox lies in the fact that diminutives can be associated both with positive and negative affective meanings. Jurafsky (1996) proposes a way out by assuming two core meanings, "child" and "small", and analysing "affection" as derived from "child" by means of inference (see Figure 1 in §3.3.1), while "contempt" is seen as metaphorically related to "small". It is not so evident how this solution might be transferred to the VDims. Instead, the contradictory effects may simply be a consequence of whether a reduced event or activity inspires fondness or annoyance, given the lexical semantics of the verb. A second paradox, also mentioned in Jurafsky (1996: 535), holds between 'approximation' and 'exactness', which both occur in the penumbra of nominal diminutives. In our data, we mostly see approximation (which we distributed over two categories, NON-SERIOUS and INCOMPLETE). In one case, however, the opposite semantics is found: the two VDim markers in Toqabaquita, *thafa* and *thafeqe* (shown in example (11) in §3.2), can also signal that "an event is (to be) performed or is taking place in a calm, slow, quiet, careful, measured manner" (Lichtenberk 2008: 169). Example (30) illustrates this use.

(30) Toqabaquita (Austronesian, Malayo-Polynesian; Lichtenberk 2008: 169)
Qoko ***thafa*** *ngata.*
2SG.SEQ ATTN speak
'Speak calmly/slowly/quietly.'

However, this semantic effect appears to be rare.

A second general issue we have not covered is the interplay between VDims and Aktionsart or lexical aspect. Various sources point out that VDims show preferences for particular verbal subclasses and/or produce different semantic effects from one class to another. For example, the Mandarin "delimitatives" described in Li & Thompson (1981) occur only with volitional activity verbs. The authors explain this as follows: "Since the delimitative aspect means that the subject does something a little bit, it follows that only volitional verbs, that is, those expressing events over which one has some control, can be reduplicated to show delimitative aspect" (Li & Thompson 1981: 235). Related observations are discussed for other languages, e.g. in Kouwenberg & LaCharité (2005), Armoskaite & Koskinen (2008), Grandi (2009), Németh & Sőrés (2018), and Makarchuk (2020). We have also not touched on issues such as transitivity or telicity, which appear to be relevant as well.

A third issue worth discussing is where VDims are situated between inflection and derivation. Various grammars list them as aspectual distinctions, i.e. as inflection, while other cases might be considered derivational or are expressed by syntactic strategies. Alternatively, as mentioned in the §1, VDims can be seen as instances of evaluative morphology, which is sometimes analysed as a third category between inflection and derivation (see Scalise 1984 and, for a different view, Stump 1993; Bauer 1997: 12 provides a summary). This has sparked a lively and controversial debate, to which the verbal cases could add new evidence.

Moreover, it would be interesting to take a closer look at the relation between verbal and nominal diminutives. In some languages, nouns and verbs take the same diminutive marker, for example in Tariana, which has a "floating enclitic" *tuki*, which can attach to "any focussed constituent", e.g. nouns, verbs and adjectives (Aikhenvald 2003: 366). Another relevant case is German verbal *-el*, mentioned in (27) above, which might have arisen by reanalysis of a homophonous nominal suffix (Schmuck 2018). In many cases, however, the verbal diminutive is distinct from the nominal diminutive. For those languages where the marker is the same, we face the interesting issue that a grammatical feature is grafted onto a different part of speech. This touches

on a more general issue, i.e. the extent to which grammatical functions can cross category boundaries.[15] A well-known case is, of course verbal number, i.e. pluractionality, another is nominal tense (Lecarme 2012, Bertinetto 2020). Velupillai (2012: 125) mentions Mwotlap (François 2005), "where nouns may take tense, mood and aspect markers". The Niger-Congo language Klao/Kru, described by Rickard (1970), marks completive/incompletive aspect in the pronominal paradigm. Various other instances can certainly be found. If diminution is considered a primarily nominal feature, the verbal diminutives provide interesting material in this field.

Last but not least, it can be observed that verbal diminutives are found in at least a number of creole languages (Kouwenberg & LaCharité 2005, Ponsonnet 2018), which shows that VDims are not necessarily a "mature" phenomenon in the sense of Dahl (2004), i.e. typical of later stages of linguistic life cycles.

5. Conclusions

This study offers the first substantial typology of verbal diminutives, based on a balanced sample of 248 languages. We have framed diminution as an instance of comparison, as it always involves attenuation with respect to some implicit standard. The dimensions along which verbal meanings can be reduced were identified as:

- Quantitative: LOW INTENSITY or SHORT TIME
- Qualitative: NON-SERIOUS or INCOMPLETE

In addition, verbal diminutives – like nominal diminutives – can have affective meanings like fondness or deprecation or can be used as politeness markers, e.g. to soften requests.

As additional meanings encoded by the same markers, we found 'iterative', 'distributive' and 'durative', plus meanings associated with a verbal argument (mostly 'child' or 'small pieces'). Some of these are particularly interesting, as they contradict the more central meanings by expressing higher rather than lower intensity or a longer instead of a shorter duration of the action. Such paradoxical semantic effects have also been noted for the semantics of nominal diminutives, as well as in the

[15] Note that these categories can be semantic in nature (i.e. concern the difference between events and objects or individuals) or they can be related to issues of word class flexibility (i.e. the ability to use different types of lexemes in multiple syntactic functions).

semantic effects of reduplication (see e.g. Moravcsik 1978, Regier 1994, Kiyomi 1995, Rubino 2005, Abraham 2005, Körtvélyessy 2016).

Regarding formal exponence, our study shows that verbal diminutives can be expressed by a wide variety of morpho-syntactic strategies, the most frequent being affixation. We have not systematically studied the relation between form and function(s) of verbal diminutives. However, this would be an interesting next step to take, especially since it may shed light on the diachronic development of this category, which as yet is largely uncharted territory.

Our study points out various other avenues of further research. Of special interest is the place of verbal diminutives amongst other categories applying across parts of speech or ontological categories prototypically associated with them, such as actions, properties, and individuals. We hope that the typology outlined in this paper contributes as a starting point for research in this area.

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Abbreviations

1 = 1st person
2 = 2nd person
3 = 3rd person
AMP = amplification
APPR = approximative
ATTN = attenuative
AUX = auxiliary
CUM = cumulative
DECL = declarative
DEM = demonstrative
DIM = diminutive
E = epenthetic schwa
EC = extended current tense
INF = infinitive
INT = intentional
IPFV = imperfective
MEA = measure
MUT = mutated nominal
NEG = negation
NFUT = nonfuture
NOM = nominative
PL = plural
PRF = perfect
PROG = progressive
PRS = present
PRT = pretense mode
PST = past
RDP = reduplication
REM = remote
RLS = realis
SEQ = sequential
SG = singular
TH = thematic suffix

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