

Why should diminutives count?

Martina Wiltschko, UBC

Years ago, when I had the pleasure to be a student of Henk's in Vienna, he made us *squib*. We were terrified but Henk just commented with a smile: "Every linguist should always have at least 15 squibs in the back of their mind – so this should be easy." He was right about the *should* part – but it wasn't easy. I'm grateful to the editors of this volume for giving me the opportunity to squib for Henk once again.

1. German and Dutch diminutives turn mass nouns into count nouns

In Dutch, diminutive suffixes turn mass nouns into count nouns – an observation attributed to Henk van Riemsdijk in Borer 2004, (Ch. 4, Fn.6).

(1)	a.	<i>veel zout</i> much salt 'much salt'	<i>*veel zout-je</i> much salt-DIM	<i>veel zouten</i> many salts 'many kinds of salts'	<i>veel zoutjes</i> many salt-DIM-PL 'many salt crackers'
	b.	<i>veel brood</i> much bread 'much bread'	<i>*veel brood-je</i> much bread-DIM	<i>veel brood-en</i> many bread-PL 'many kinds of breads'	<i>veel brood-je-s</i> many bread-DIM-PL 'many rolls'

The same is true in German where diminutive marking on mass nouns is very productive: all diminutive suffixes found in German turn mass nouns into count nouns (some are lexicalized with a special meaning, but some are fully compositional). Here I will discuss *-chen*, and *-lein* from Standard German and *-erl/-l* from Austrian German:

(2)	a.	<i>viel Brot</i> much bread 'much bread'	b.	<i>viele Bröt-chen/Bröt-lein/Brot-erl</i> many.pl bread-DIM 'many little rolls/sandwiches'
	b.	<i>viel Wein</i> much wine 'much wine'	b.	<i>viele Wein-chen/Wein-lein/Weind-erl</i> many.pl wein-DIM 'many little (good) wines'

Interestingly, the *individuating* function of the diminutive is not an idiosyncratic property of Dutch and German but occurs in a number of typologically and geographically diverse languages (Jurafsky 1996):

(3)	YIDDISH	<i>der zamd</i>	'sand'	<i>dos zemdl</i>	'grain of sand'	
	OJIBWA	<i>goon</i>	'snow'	<i>goonens</i>	'snowflake'	
	EWE	<i>sukli</i>	'sugar'	<i>sukli-ví</i>	'piece of sugar'	
	BAULE	<i>ajwe</i>	'rice'	<i>ajweba</i>	'rice kernel'	
	CANTONESE	<i>tong</i> ²¹	'sugar'	<i>tong</i> ³⁵	'piece of candy'	Jurafsky 1996: 555

In light of this generalization, we are led to conclude that diminutives function as *classifiers*. However, as reported in the same footnote, van Riemsdijk points out that we would expect diminutives to be in complementary distribution with plural marking (on the assumption that classifiers and number marking occupy the same functional head; cf. Borer 2004, among others). However, this is not the case as indicated by the data in (1). The purpose of this squib is to defend the classifier analysis of diminutives.

2. Two approaches that do not work

I start by briefly considering two approaches towards the problem that don't work. Suppose that diminutive affixes are associated with a selectional restriction that requires them to combine with count

nouns. When combined with a mass noun, the diminutive will treat it as if it were a count noun (since it only combines with count nouns). In other words, the diminutive suffix coerces a mass noun into a count noun just like plural marking which triggers a *subkind* interpretation as in (1) (the universal sorter effect; Gillon 1992). There are two problems with such an approach. First, there are certain mass nouns which cannot be coerced by plural marking but nevertheless they allow for diminutive marking and the diminutivized noun still behaves like a count noun:

- | | | | | | | | |
|-----|----|-------------|-----------------|---------------|-------------------|--------------|----------------------|
| (4) | a. | <i>viel</i> | <i>Geschirr</i> | <i>*viele</i> | <i>Geschirr-e</i> | <i>viele</i> | <i>Geschirr-chen</i> |
| | | much | dishes | many | dishes-pl | many | dishes-DIM |
| | b. | <i>viel</i> | <i>Schlaf</i> | <i>*viele</i> | <i>Schläfe</i> | <i>viele</i> | <i>Schläf-chen</i> |
| | | much | sleep | many | sleeps | many.pl | sleeps ('naps') |
| | c. | <i>viel</i> | <i>Luft</i> | <i>*viele</i> | <i>Lüft-e</i> | <i>viele</i> | <i>Lüft-chen</i> |
| | | much | air | many | air-pl | many | air-DIM ('breezes') |

If diminutive suffixes would coerce mass nouns into count nouns we would expect the diminutivized nouns in (4) to be ruled out since their base nouns resist coercion otherwise. Furthermore, we observe that selection for a given feature does not usually allow for coercion. For example the verb *wonder* selects for a [+Q] complement:

- (5) I wonder if/*that that's what's going on

If selection would trigger coercion, then the embedded clause containing *that* should be interpreted as an embedded question (just like diminutivized mass nouns are interpreted as count nouns). I conclude that coercion via selection is not a successful approach towards our problem.

There is a second possible approach that comes to mind. Suppose that the semantics of diminutives (roughly *small*) is such that it requires individuation. Again there are a number of problems with this approach. First, we observe that several nouns which freely allow for diminutive marking resist modification by *klein* an adjective which refers to smallness in size:

- | | | | | | | | |
|-----|----|--------------|----------------|---------------|------------|----------------|--------------------|
| (6) | a. | <i>*ein</i> | <i>kleiner</i> | <i>Schlaf</i> | <i>ein</i> | <i>kleines</i> | <i>Schläf-chen</i> |
| | | indef. | small.masc.sg. | sleep | indef. | small.neut.sg | sleep-chen |
| | b. | <i>*eine</i> | <i>kleine</i> | <i>Luft</i> | <i>ein</i> | <i>kleines</i> | <i>Lüftchen</i> |
| | | indef. | small.fem.sg | air | indef. | small.neut.sg | air-dim |

Second, smallness does not necessarily refer to the *size* of an individuated object, it can also refer to the *amount* of an unindividuated substance as for example the modifier *biss-erl* (see section 4):

- | | | | | | | |
|-----|------------|-----------------|------------------------|------------|-----------------|-------------------------|
| (7) | <i>ein</i> | <i>biss-erl</i> | <i>Bier</i> | <i>ein</i> | <i>biss-erl</i> | <i>Wasser</i> |
| | indef. | bit-dim | beer | indef. | bit-dim | water |
| | | | 'a little bit of beer' | | | 'a little bit of water' |

Third, in Halkomelem Salish, diminutive marking (Ci-reduplication) never turns a mass noun into a count noun: combined with an individual-denoting noun the diminutive marker is translated as 'small'; combined with a substance-denoting noun it gets translated as 'little bit of':

- | | | | | |
|-----|-----------------|---------------|------------------|-----------------------------|
| (8) | <i>steqiw</i> | 'horse' | <i>lhémex</i> | 'rain' |
| | <i>stitiqiw</i> | 'small horse' | <i>lhilhémex</i> | 'little bit of rain' |
| | <i>spáth</i> | 'bear' | <i>speháls</i> | 'wind' |
| | <i>spipáth</i> | 'little bear' | <i>spipeháls</i> | 'little bit of wind/breeze' |

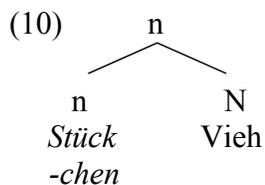
We conclude that there is nothing inherent about the semantics of ‘smallness’ and thus diminutives which would force an individuated interpretation of the noun it combines with. This means that we should look for a formal account which can be subject to language variation. Thus, it is time to go back to the initial analysis according to which these diminutives are classifiers.

3. German diminutives as classifiers

I will now show that German diminutive markers do indeed behave like classifiers and that the possibility of plural marking diminutive nouns does not render this analysis untenable. In particular, I propose that the German diminutive marker is akin to *numeral classifiers* of the type found in (9):

- (9) 12 **Stück** Vieh 3 **Blatt** Papier 4 **Kopf** Salat 12 **Mann** Besatzung
 12 piece cattle 3 sheet paper 4 head lettuce 12 men crew

I tentatively propose that such classifiers (including the diminutive) are best analyzed as *light nouns* (semi-lexical nouns) which take full nouns as their complements:



The lightness of these nouns is consistent with their bleached meaning. The classifiers used in (9) convey: ‘piece’, ‘flat piece’, ‘round piece’, and ‘human’, respectively. Similarly, the diminutive marker simply conveys ‘small piece’.¹

In what follows, I show that diminutives pattern just like numeral classifiers in a number of crucial ways. First, we observe that all of the numeral classifiers in (9) turn mass nouns into *count phrases*. That is, these classified phrases contain numerals, which require countability. On their own these nouns do not allow for numerals (i.e., they can’t function as count nouns on their own).

- (11) *12 Vieh *3 Papier *4 Salat *12 Besatzung
 12 cattle 3 paper 4 lettuce 12 crew

Consequently, the generalization about the function of diminutives has to be slightly revised: it is not that diminutives turn mass nouns into count *nouns*. Rather, diminutives are light nouns, which take full nouns as their complements and thus create *count phrases*. We are not dealing with a coercion strategy. Another way in which diminutives and classifiers behave alike has to do with gender. Given that the light noun is the head of the phrase, we correctly predict it to determine gender. It is always the classifier (including the diminutive) and never the full noun which determines the gender of the entire phrase:

- (12) a. *die* *Gelatine* *ein* *klein-es* *Blatt Gelatin*
 det.fem gelatine det.neut small-neut sheet gelatin
 b. *der* *Kuchen* *ein* *gross-es* *Stück Kuchen*
 det.masccake det.neut big-neut piece cake
- (13) a. *der* *Schnaps* *das* *Schnaps-erl*
 det.masc schnaps det.neut schnaps-dim
 b. *die* *Luft* *das* *Lüft-chen*
 det.fem air det.neut air-dim

Next we turn to the interaction between classifiers (including diminutives) and plural marking. Recall from above that this seemed to create a problem for the analysis of diminutives as classifiers. Note first, that the possibility for plural marking on diminutives (as in (1)) only creates a problem if we assume that classifiers are generated in the same functional head as plural marking. But according to the present proposal numeral classifiers are analyzed as light nouns and as such they should be compatible with plural marking.² I will now show that the pattern of plural marking in the context of classifiers (including diminutives) is actually a little more complicated. Crucially however, the proposed parallelism between classifiers and diminutives holds.

First, we observe that the languages under consideration differ with respect to the possibility of plural marking diminutive nouns. As already mentioned, in Dutch diminutive nouns can be pluralized. In fact, as indicated in (1), plural marking is obligatory if a plural interpretation is intended. Next we turn to Austrian German, where plural marking of diminutive nouns is possible but it is not required even if a plural interpretation is intended:

- | | | | |
|---------|---------------------------|----------------------------|----------------------------|
| (14) a. | <i>viele Zuck-erl-(n)</i> | <i>viele Papier-l-(n)</i> | <i>viele Wasser-l-(n).</i> |
| | many sugar-dim-pl | many paper-dim-pl | many water-dim-pl |
| b. | <i>viele Blum-erl-(n)</i> | <i>viele Zahnd-erl-(n)</i> | <i>viele Häus-erl-(n)</i> |
| | many flower-dim-pl | many tooth-dim-pl | many house-dim-pl |

Moreover, in Standard German, diminutive nouns are never overtly marked for plural.³

- | | | |
|---------|--------------------------------------|--------------------------------------|
| (15) a. | <i>das Pferd-chen/Pferd-lein</i> | <i>die Pferd-chen/Pferd-lein</i> |
| | det.neut.sg horse-dim/horse-dim | det.pl horse-dim/horse-dim |
| b. | <i>das Schnäps-chen/Schnäps-lein</i> | <i>die Schnäps-chen/Schnäps-lein</i> |
| | det.neut.sg. schnaps-dim/schnaps-dim | det.pl schnaps-dim/schnaps-dim |

Interestingly, the different patterns associated with the diminutive markers across these languages is reminiscent of the behavior of different types of numeral classifiers supporting the present analysis. First, we observe that there are classifiers which obligatorily require plural marking in the context of a plural interpretation:

- | | | | |
|------|------------------------|-----------------------|----------------------|
| (16) | <i>eine Prise Salz</i> | <i>2 Prise-n Salz</i> | <i>*2 Prise Salz</i> |
| a | bit salt | 2 bit-pl salt | 2 bit salt |
| | ‘a bit of salt’ | ‘two bits of salt’ | |

Thus the behavior of the German classifier *Prise* (‘small amount of powdery substance’) is reminiscent of the behavior of Dutch diminutives in that plural marking is obligatory. We further note that there are classifiers which allow but do not require plural marking without any obvious difference in meaning:

- | | | | |
|------|---------------------------|---------------------------|--------------------------------|
| (17) | <i>2 Stück/Sücke Holz</i> | <i>2 Glas/Gläser Bier</i> | <i>2 Blatt/Blätt-er Papier</i> |
| | 2 piece/piece-pl wood | 2 glass/glass-pl beer | 2 sheet/sheet-pl paper |

The optionality of plural marking on these types of classifiers is reminiscent of the behavior of the diminutive marker in Austrian German (-*erl*) which shows the same pattern. Finally, there is also a numeral classifier which does not allow for plural marking just like the diminutive suffixes in Standard German are not compatible with overt plural marking:

- | | | |
|------|--------------------------|------------------------------|
| (18) | <i>12 Mann Besatzung</i> | <i>*12 Männ-er Besatzung</i> |
| | 12 man crew | 12 man-pl crew |

Whatever is responsible for determining the possibility of plural marking on numeral classifiers – the same type of restriction can be used to determine the possibility of pluralizing diminutivized nouns: it depends on the kind of diminutive suffix used. Note further that the parallel behavior of diminutive suffixes and numeral classifiers manifests itself in the type of plural marker used: classifiers just like diminutive suffixes each select a particular kind of plural marker which is independent of the plural marker the noun they take as a complement would select:

(19)	a. <i>Hölz-er</i>	2 <i>Stück-e</i>	<i>Holz</i>	<i>Holz-erl-n</i>
	wood-pl	2 piece-pl	wood	wood-dim-pl
	b. <i>Wein-e</i>	2 <i>Gläs-er</i>	<i>Wein</i>	<i>Weind-erl-n</i>
	wine-pl	2 glass-pl	wine	wine-dim-pl
	c. <i>Papier-e</i>	2 <i>Blätt-er</i>	<i>Papier</i>	<i>Papier-l-n</i>
	paper-pl	2 sheet-pl	paper	paper-dim-pl

As shown in (19) a diminutivized noun in Austrian German is always pluralized with *-n* independent of the plural marker the base noun would select.⁴ This is of course expected under an analysis according to which the diminutive marker is the head of the complex phrase.

4. Conclusion

We have seen empirical evidence to the effect that diminutive suffixes in German behave like numeral classifiers of the type *Blatt*, *Stück*, etc.. We have tentatively analyzed these classifiers (including the diminutive suffix) as light nouns. Since (some of) these classifiers can be pluralized it does not come as a surprise that (some) diminutive suffixes allow for pluralization as well. This suggests that the complementarity between classifiers and plural marking affects only certain types of classifiers (and as shown in Wiltschko 2005 certain types of plural markers). Consequently, we need to be careful not to jump to conclusions when we see certain morphemes glossed as diminutives or classifiers: such morphemes can have a different syntax despite their common gloss.

In a similar vein, we expect so-called diminutives to display different syntactic behavior cross-linguistically. This is indeed the case. We have already seen that in Halkomelem Salish, diminutives do not have an individuating function. I claim (without further discussion) that in this language diminutives are not heads but adjoined modifiers and as such they cannot determine the behavior of the entire phrase.¹

According to the present analysis, diminutives (in German) have the same syntax as numeral classifiers (in German), namely that of a light noun. Accordingly, we predict diminutives to be in complementary distribution with such classifiers (in German). This prediction is indeed borne out: a diminutivized noun cannot be classified by a numeral classifier:

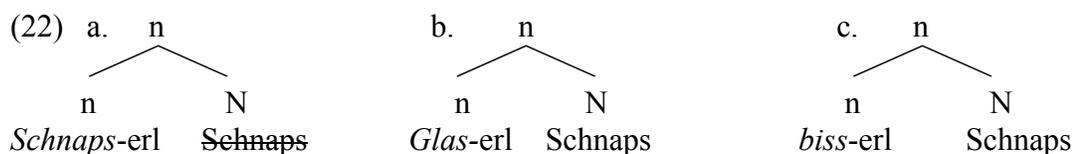
(20)	2 <i>Glas Schnaps</i>	*2 <i>Glas Schnaps-erl</i>
	2 glass schnaps	2 glass schnaps-dim

Crucially, the classifier itself can be diminutivized (and note that diminutivization of the full noun is still excluded in this context indicating that we are not dealing with some form of *diminutive agreement*):

(21)	2 <i>Glas-erl Schnaps</i>	*2 <i>Glas-erl Schnaps-erl</i>
	2 glass-dim schnaps	2 glass-dim schnaps-dim

¹ This is probably also the proper analysis of Spanish and Portuguese diminutives which do not change the gender of the noun (cf. Bachrach and Wagner 2005 for such a proposal).

I tentatively analyze this pattern as follows: suppose that the suffix requirement of the diminutive marker in *n* can be satisfied either by moving (copying) the main noun (N) to *n* (as in (22a)) or else by inserting another light noun into *n* (as in (22b)). Furthermore, if the suffixal requirement of the diminutive is neither satisfied by copying nor by inserting another classifier, we might expect (as a last resort strategy) that it can be filled by an expletive *n*. I suggest that German *biss-* can be analyzed along these lines (as in (22c)).



This analysis is consistent with the fact that *biss* is not independently attested (i.e., it is a bound root). If so, we predict that *bisserl* cannot precede a diminutivized noun. This is indeed the case as shown in (23). For a diminutivized noun to be grammatical in this context it must be embedded within another layer of functional structure, as indicated by the obligatoriness of the indefinite determiner *a* in this context – a phenomenon I leave for a different occasion.

- (23) *Trink a biss-erl {Schnops/ *Schnaps-erl/ a Schnaps-erl}. Prost Henk!*
 drink indef. bit-dim schnaps/ schnaps-dim/ indef. schnaps-dim Cheers Henk!
 'Have a little bit of Schnaps! Cheers Henk!'

References

- Aikhenvald, A.Y. 2003. *Classifiers. A typology of Noun Categorization Devices*. Oxford University Press.
- Bachrach, Asaf, and Michael Wagner. 2005. The Prosody of Adjunction vs. Complementation. The case of diminutives in Brazilian Portuguese. Paper presented at *MOT, McGill University*.
- Borer, Hagit. 2004. *Structuring Sense*. Oxford University Press.
- Doetjes, Jenny. 1997. Quantifiers and Selection: On the Distribution of Quantifying Expressions in French, Dutch and English. Doctoral dissertation, Leiden University.
- Gillon, Brendan. 1992. Towards a common semantics for English count and mass nouns. *Linguistics and Philosophy* 15:597-693.
- Jurafsky, Daniel. 1996. Universal Tendencies in the Semantics of the Diminutive. *Language* 72:533-578.
- Wiltschko, Martina. 2005. Many things are not [PLURAL]. Ms., UBC.

¹ According to the analysis in (10) the diminutive suffix is a light noun. This implies that diminutivization is a process akin to compounding. Evidence that this is indeed on the right track stems from the patterns of final devoicing. A noun shows final devoicing before a diminutive suffix, but not before a *plural* suffix or a derivational suffix like (*-isch*):

i) *pfɛəd-ə* *pfɛəd-ɪʃ* *pfɛət-çən*
 horse-pl hors-ish horse-dim

² See Aikhenvald 2003 for several exceptions to the generalizations that classifiers and plural marking are in complementary distribution. Obviously, we must allow for the possibility that some classifiers do not occupy the same functional head as plural markers (see also Wiltschko 2005).

³ In principle, this pattern could receive two different analyses: we are either dealing with the absence of plural marking or with a \emptyset plural allomorph (which is independently attested in Standard German).

⁴ Similarly, Dutch diminutive nouns are always pluralized with *-z* independent of the plural marker the noun would select.