5 Reduplication as expressive morphology in German

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5.1 Introduction

The term 'expressive' refers to a varied class of semiotic phenomena with which interlocutors convey (in often depictive rather than descriptive terms) their sensory or aesthetic experience, and with it evaluative, emotive, and attitudinal content. The exponents of the expressive meaning might be entirely non-linguistic (e.g., facial expressions of joy, awe, or disgust), para-verbal (e.g., high-pitched tone of voice signaling endearment), or they might be genuinely linguistic items (e.g., an ideophonic interjection like German *schwups*, which roughly corresponds to Eng. 'hey presto!', or the diminutive/ evaluative morphology in German *Hans.i.lein* – Hans.DIM.DIM, Eng. 'dear little Hans').

It is perhaps because expressive phenomena are so multifaceted and transgress the boundaries of language that even the expressive exemplars that make use of genuinely linguistic means are often deemed outside the realm of grammar proper, or at least distinct from 'plainer', more mundane linguistic constructions. This conception is most evident in the (by now traditional) contradistinction of *plain* versus *expressive* morphology as expounded by Zwicky and Pullum (1987).

In this chapter, I address this contradistinction by taking recourse to investigations of reduplication in German. Reduplication is commonly understood as a morphological process in which a stem (or base) is extended by a copy of (a part of) its segmental material; the copied portion, also known as the reduplicant (Rubino 2005), is often prosodically circumscribed, that is, it has a more or less pre-determined shape corresponding to, for example, a syllable, a phonological foot, or a phonological word. Reduplication thus differs from word formation processes in which segmentally specified morphs are concatenated. German has various types of reduplication, chief among them rhyme reduplication (*Schickimicki* 'posh person' < *schick* 'posh'), ablaut reduplication (*Mischmasch* 'jumble' < *misch* 'to mix'), and full or total

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reduplication (Kaffeekaffee 'coffee coffee' = real coffee/standard variety coffee). However, like the elusive role of expressives in the linguistic system in general, the status of reduplication as a regular (and productive) morphological process in German is contested. There are various reasons for this: first, in German, reduplication is mostly a phenomenon of colloquial and familiar language use and thus evades the norms that characterize the written standard. Hence, reduplication lies outside the focus of scholars who, for convenience or other reasons, use written sources as their object of study. Second, as noted above, there are various kinds of reduplicative constructions in the German language which cannot be captured with a single grammatical analysis. Third, there are patterns that may look like reduplication but, on closer inspection, turn out to be the product of quite different morphological or syntactic processes. The effect of this state of affairs seems to be utter confusion, culminating in the curt and dismissive statement that, as far as German is concerned, reduplication 'can hardly be dealt with systematically' (Barz 2015: 2407).

In the following, I survey recent research into the various reduplicative constructions in German, and, with the aim of systematizing them, describe their morphophonology and their use conditions. In the course of this endeavour, I also discuss the expressive functions that (various kinds of) reduplication may have. In order to set the stage, I first revisit the iconic meaning potential ascribed to reduplication in general and across languages (§5.2). Two expressive phenomena in which reduplication features prominently, namely diminutives and ideophones, will be discussed in this context as well. In §5.3, the morpho-phonology and the use conditions of the various types of reduplication in German are discussed. I suggest that the specific use conditions and the poetic form together give rise to the expressive function of reduplication in German (§5.4). Against this background, the contradistinction between plain and expressive morphology is taken up and critically discussed in §5.5.

5.2 Iconic meaning potential of reduplication

In cross-linguistic studies on reduplication, researchers have often remarked on the potentially iconic relationship between reduplicative form and meaning ('more of the same form stands for more of the same meaning', Kouwenberg & LaCharité 2005: 534). An iconic form-meaning relationship is illustrated by cases in which reduplication encodes concepts such as plurality (*gula* 'sugar' – *gula-gula* 'sweets', Indonesian), iteration (*lat*' 'to lie' – *la-lat*' 'to lie a lot', Trumai), intensification (*mavi* 'blue' – *masmavi* 'azure', Turkish), or augmentation (*ngaru* 'wave' – *ngaru-ngaru*, 'large wave', Maori). However, a simple iconic relationship is difficult to maintain, as reduplication appears to

be used in a seemingly anti-iconic fashion in many languages, for example, for approximation and attenuation (yala 'yellow' - yala-yala 'yellowish', Jamaican Creole; maji 'wet' - majimaji 'somewhat wet', Swahili) or diminution $(b \ge k^w \text{ 'man'} - ba:bag^w \text{ 'boy'}, \text{ Kwak' wala})$. Still other morphological uses of reduplication lack any obvious relationship between form and meaning, for example, when reduplication encodes perfect tense (currere 'run. INF' - cucurri 'run. ISG. PERF', Latin). Regier (1998) and Fischer (2011) suggest that both the apparently iconic reduplications as well as the putatively anti-iconic ones can be traced back to a common source in which the iconic maxim more of the same form stands for more of the same meaning holds. Specifically, Fischer works out a common iconic grounding of reduplication that she ascribes to i. the concept of quantity increase and ii. to the resemblance of reduplication with iterative babbling in baby talk. As for the concept of quantity increase, Fischer distinguishes an increase in the vertical dimension (augmentation, intensification) from an increase in the horizontal dimension (plurality, iteration, distribution). An increase in the horizontal dimension entails conceptualizations like spread, scatter, and dispersion. Observing a multitude of similar items spread out on a horizontal plane makes each individual item appear relatively small and blurry. Consequently, reduplicative constructions that make use of the 'horizontal' meaning increase may promote secondary meaning components that involve diminution, attenuation, lack of control and, via semantic shifts, pejoration and contempt. An increase in the vertical dimension, on the other hand, promotes concepts such as prototypicality and intensification: rather than blurring the view, the vertical quantity increase brought about by reduplication implies sharpening the focus on the individual referent, thereby making it appear more vivid.

Apart from encoding, however abstractly, the concept of quantity increase, reduplication, or more generally, phonological iteration, is reminiscent of child language or stuttering. The iconic relationship to baby talk affords both positive and negative connotations: syllable iterations typical of baby talk evoke concepts like smallness and cuteness, which may promote caring affection; the similarity to playful reduplicative babbling fosters ludic semantic flavours (funniness) that, as we shall see, figure prominently in German reduplication. On the other hand, baby talk is also related to naiveté, and stuttering may provoke pejoration and contempt. In sum, Fischer's proposal ascribes a common grounding to the pluripotential expressiveness of reduplication and the multitude of sometimes antithetic meanings associated with reduplication.

Across languages, reduplicative words are represented excessively in the realm of diminutives (Jurafsky 1996) and expressive ideophones (the present volume vividly attests to this observation). Diminutive markers (be they reduplicative or not) denote relative smallness of the referent of the base word

(e.g., the German diminutive suffix *-chen* in *Wäldchen* forest. DIM 'grove' < Wald 'forest, woodland', German). In addition, diminutives can be interpreted as evaluative expressives, that is, words that convey disdain (Eng. *commie* as pejorative term for *communist*) or affection (*Lizzy* as hypocoristic name for *Elisabeth*) towards the referent. Notably, kinship terms in many languages, which sometimes entail diminutive semantics, can be considered reduplicative in that they involve consonant repetitions (*mommy, daddy, sister;* Ital. *nonno* 'uncle'; hung. *neny* 'aunt', Bulg. *baba* 'grandmother').

Dingemanse (2015) remarks on the prevalence of reduplicative forms in the ideophone inventory across languages. Ideophones are expressive words that signify sensory imagery through phonological markedness. While ideophones may well have conventionalized meanings, the descriptive content of these vocabulary items takes a back seat to the benefit of the iconically foregrounded expressive content. Like speech-accompanying gestures, ideophones do not directly take part in the propositional content of an utterance but provide additional non-at-issue meaning (see, e.g., Barnes et al. 2022). They can be thought of as rhetorical devices that, when used appropriately, render the message more affectively engaging or stimulating by making the listener imagine the sensory experience or emotional involvement of the speaker.

Reduplication, or repetition in general, is a conspicuous and therefore potent phonological marker for evaluatives and ideophones, and for expressives in general. Like all lexical items, expressives make use of the phoneme inventory of their language, but in contrast to ordinary words, they sometimes have variable shapes. This holds especially for some reduplicative expressives that may, in actual use, be extended by not only one but two or more copies, sometimes with no strict upper bound (Dingemanse 2015). Speakers and listeners tolerate or even purposefully use the variability to express gradient perceptions. However, not all reduplicative ideophones are variable in this sense. In fact, many are restricted to phonological doubling. The grammarian has to distinguish different kinds of iteration and carefully delineate morphological reduplication (commonly restricted to doubling) from lexical sequencing (potentially unrestricted). This holds also for reduplicative forms in German, which will be considered in detail in the following sections.

5.3 Reduplication in German

In German, the main habitat of reduplicative words like *Mama* 'mum', *larifari* 'slipshod', *Mischmasch* 'mishmash', or *schickimicki* 'fancy-shmancy' are colloquial registers of the language. These reduplicative words are used predominantly in oral and socially close communication (or in genres that pretend social closeness, e.g., advertisements), and express a variety of expressive, affective or evaluative meanings that correspond with their colloquial registers

of use, namely jocular or affectionate diminution and/or depreciation or slight disdain. Quite often, reduplicative words are associated with jocularity, play-fulness, and a lack of seriousness (think of brand names for sweets like *Hubbabubba*, or nicknames like *Jojo*, a hypocoristic of the given name *Johannes*). Full or total reduplication (a.k.a. contrastive focus reduplication or identical constituent compounding), while also used in nonstandard registers, encodes emphasis, prototypicality, or normality (Finkbeiner 2014, Frankowsky 2022, Freywald 2015).

The variety of meanings ascribed to reduplicative words is mirrored in the promiscuity regarding the phonological or morphological targets of reduplication: Word-internal repetition may target syllables and phonological feet, word stems, and even whole words. Moreover, words may be repeated to form iterative lexical sequences that resemble reduplication.

Because of the variable nature and their nonstandard registers of use, repetition and reduplication have been claimed to emanate from a ludic drive rather than from orderly linguistic competence. Correspondingly, grammarians have considered reduplication in German to be not only marginal, but also irregular and non-productive (e.g., Barz 2015, Schindler 1991, Wiese 1990), 'pre-grammatical' (Bzdega 1965: 22), or 'extra-grammatical' (Dressler 2000). When viewed as a family of related morphological types, reduplication clearly appears to be morphologically 'extravagant' (Eitelmann & Haumann 2022), a prime example of expressive morphology in the sense of Zwicky & Pullum (1987). However, disregarding the superficial resemblance among the various patterns and instead focusing on each individual morphological type, it is possible to give explicit formal accounts that capture their essential grammatical features (e.g., Finkbeiner 2014, Frankowsky 2022, Freywald 2015, Kentner 2017, 2022, Wiese 1990). Viewed from this perspective, the diverse reduplicative structures are perfectly regular and by no means extragrammatical.

5.3.1 A morphological taxonomy of reduplicative constructions in German

In the most comprehensive collection of German reduplicative words, Bzdęga (1965) amassed approximately 1,880 lemmas gleaned from a broad range of dialectal and historical strata of German. This collection attests to the diversity of reduplicative structures in German. The two biggest classes of reduplicatives in Bzdęga's collection are rhyming reduplication (e.g., *Ilsebilse < Ilse* [proper name]) and ablaut reduplication (e.g., *Wirrwarr* 'jumble' < *wirr* 'chaotic'). However, their morphological status is often ambiguous, as many apparently reduplicative forms either lack a synchronically transparent morphological base (e.g., *Techtelmechtel* 'fling', neither **techtel* nor **mechtel* are identifiable morphemes), or involve two stems (e.g., *Schnippschnapp* [name of

a card game] < *schnippen* 'to snip', *schnappen* 'to snatch') and may thus be more properly treated as a special kind of compound. Other tokens are morphologically simplex despite their reduplicative form (e.g., *Mama* 'mum', *Kuckuck* 'cuckoo'). Given the great diversity of reduplicative structures and their marginal status in morphological descriptions of German, it is necessary to identify those patterns from the diverse set that are unambiguous instances of reduplication, and to assign the dubious cases a proper place in the lexicon and/or grammar of German.

In order to systematize the various morpho-phonological types, I have proposed (Kentner 2017) a taxonomy of reduplicative constructions that is determined by the degree of lexicality of the reduplicated form and by the correspondence with an identifiable morphological base, if present. The proposed taxonomy distinguishes i. (phonotactically illegal) interjections and ii. iterative syntagmas from iii. reduplicative lexical items.

Iterative interjections formally resemble reduplications but they may be phonotactically illegal; their status as normal lexical items is therefore doubtful. Items in this category are the iterative syllables characterizing laughter (*hihi, haha*, etc.) or onomatopoeic imitations, for example, of machine gun fire (*ratatata*), in which there is no strict upper bound to the iteration.

Iterative syntagmas transgress the boundary of a single word. They are best analysed as word repetitions, as they do not abide by the requirement for lexical integrity, that is, they can be split up (*dalli dalli / dalli, los, dalli –* 'quick!'). Also, as in the case of the interjections, there is often no strict upper bound regarding the number of repetitions (*hopp (hopp hopp ...) –* 'quick!').

Among the **reduplicative lexical items** are those that do not have a transparent relation to any current and synchronically available morphological base. Therefore, these items do not represent morphologically productive patterns of reduplication. This holds for word-like interjections like *dingdong* (onomatopoetic for the sound of a doorbell), ideophonic adverbs like *ratzfatz* 'in a jiffy', nouns like *Techtelmechtel* 'fling', and loans like *Bonbon* 'candy' (French, derived from *bon* 'good') or *Dumdum* 'dumdum'. Similarly, a few predicative adjectives like *plemplem* 'crazy' show reduplicative structure. Cases like these are indeed difficult to classify as their provenance is varied and often unclear.

Reduplicative paronomasias employ either blending or compounding of two near-homophonic stems (e.g., *schlampampen* 'to be untidy/sloppy' < *schlampen* 'to skimp' + *pampe* 'mush'; *Klimperwimper* 'person blinking one's eyelashes' < *klimpern* 'to tinkle', *Wimper* 'eyelash'). Since the reduplicative surface is not due to segmental copying, these words have to be distinguished from proper reduplication (see §5.3.2). As suggested by Benczes (2019), it is most likely the conspicuous quasi-reduplicative surface structure which supports the lexicalisation of these special compounds and promotes their continuous use.

The word-like reduplicative structures just mentioned either lack any relation to an identifiable morphological base, or they are related to more than a single base. In that, they differ from four kinds of word formation that have been analysed as proper reduplication, because those can be derived from a single morpho-phonological base via copying. These cases will be presented in the following sections.

5.3.2 Proper reduplication in German

5.3.2.1 Phonological doubling A familiar pattern for nickname formation (1) can be analysed as a two-step process, involving i. truncation of a full name to a light CV syllable and ii. subsequent doubling or copying of that syllable. Doubling serves to establish wordhood (Saba Kirchner 2010) because, in German, a light syllable cannot serve as a word on its own. The pattern is productive for name formation yet heavily constrained by segmental context: generally, names with complex (2a) laryngeal (2b) and (2c), or rhotic onsets (2d) do not undergo this truncation plus doubling process. In some cases, however, source forms with complex onsets can be used, but they then require reduction to singleton onsets (*Britta* > *Bibi*).

(1)

a. Jojo < Johannes \rightarrow [jo] \rightarrow [jo:jo] b. Lulu < Luise \rightarrow [lu] \rightarrow [lu:lu, lolu] c. Vivi < Viola \rightarrow [vi] \rightarrow [vi:vi, vIvi]

(2)

- a. $*Floflo < Florian \rightarrow [flo] \rightarrow *[flo:flo]$
- b. $*Ii < Ina \rightarrow [?i] \rightarrow *[?i:?i]$
- c. *Haha < Hartmut \rightarrow [ha] \rightarrow *[ha:ha]
- d. $^{?}Roro < Robert \rightarrow [ro] \rightarrow ^{?}[ro:ro]$

Furthermore, only names with cardinal vowels allow this truncation-plusdoubling process. Apparently, syllables with diphthongs (3a) front rounded vowels (3b) and (3c), or non-low lax vowels (3d) cannot be doubled in this way because the resulting structure would feature such a vowel in a final open unstressed syllable, which is ungrammatical in German.

(3)	a. *Meimei < Meike \rightarrow [maɪ] \rightarrow *[maɪmaɪ]
· /	b. $*Lyly < Lydia \rightarrow [ly] \rightarrow *[ly:ly]$
	c. *Hoehoe < Hoeness \rightarrow [hø] \rightarrow *[hø:hø]
	d. *Käkä < Käthe \rightarrow [k ϵ] \rightarrow *[k ϵ :k ϵ]

Because of the loss of segmental content due to the truncation, different source forms can yield the same hypocoristic form, which, moreover, and in contrast to the full name, is underspecified with respect to gender (*Jolanda* (f.), *Josefa* (f.), *Josefa* (f.), *Johannes* (m.) > *Jojo; Lorena* (f.), *Lorenz* (m.) >

Lolo). Therefore, these names are felicitously used only in familiar contexts, among close friends or family, that is, when the gender of the name is known to the interlocutors and therefore redundant and irrelevant for the identification of the person referred to, that is, when the risk of confusion is minimal. Thus, the opaque form establishes strict conditions that restrict their use to those familiar contexts in which hypocoristic forms are appropriate. In addition, the reduplicative yet short and simple disyllabic form of the name potentially conveys its hypocoristic or affectionate meaning iconically via the association to reduplicative baby talk.

5.3.2.2 *Rhyme and ablaut reduplication* The two biggest classes of reduplicative words in German that were identified by Bzdęga (1965) are rhyme reduplication (4a) and ablaut reduplication (4b).

- (4) a. Hinkepinke (hinken 'hobble'), Ilsebilse (Ilse [proper name]), Schickimicki (< schick 'posh')
 - b. Quitschquatsch (<Quatsch 'nonsense'), Wirrwarr (< wirr 'crazy'), Kippelkappel (< kippel 'wobble')

These reduplicative patterns are especially productive in the realm of proper names; they may regularly be found as usernames in online platforms. As argued in Kentner (2017), the obligation to create a unique username in internet forums leads to various kinds of formal augmentation (e.g., *Vera123, Vera1982 < Vera* [proper name]), and reduplication may serve the same purpose (*Veramera*), while adding a hypocoristic or facetious connotation. Consequently, when used as username or hypocoristic formation, reduplication results in nouns or, more specifically, proper names.

Apart from proper names, bare verb stems may reduplicate, too. The reduplicative products may likewise be used as proper names (*Schwippschwapp < schwappen*, 'to slosh', brand name for a lemonade), but also as ideophonic interjections (*plitschplatsch < platschen*, 'splish-splash' < 'to splash'), or modifiers within compounds where bare stems are commonplace (*Flitterflatter-Seidenband < flattern*, 'flittering silk ribbon').

Regarding the morpho-phonological behaviour of rhyme and ablaut reduplication, several generalisations can be formulated which hold for both types. First, rhyme and ablaut reduplication result in words containing exactly two phonological feet. Second, the phonological feet are either both monosyllabic or both trochaic; that is, base and reduplicant display the same number of syllables and stress pattern. Third, the segmental makeup of base and reduplicant must not be fully identical; rhyme and ablaut serve to fulfil the nonidentity requirement.

These generalizations are in line with the fact that trisyllabic or quadrisyllabic bases ([?]*Nataliepatalie < Natalie; *Kunigundepunigunde < Kunigunde*, proper name) or iambic bases (**Ivonnepivonne* < *Ivonne*) do not undergo reduplication without previous truncation to a trochaic foot via i-formation (*Ivipivi* < *Ivi* < *Ivonne*) (see Féry 1997, Grüter 2003, Wiese 2001 on the grammar of i-truncations). Likewise, disyllabic words that superficially display a trochaic strong–weak syllabic pattern, yet already consist of two morphological stems, cannot become reduplicated. This ban holds for compounds (**Bahnhofpahnhof* < *Bahn+hof*, 'train station') and for morphologically unanalysable yet prosodically complex words (**Schokoladepokolade* < *Schokolade* 'chocolate'; **Gerhardperhard* < (*Ger*)(*hard*) [proper name], **Manfredpanfred* < (*Man*)(*fred*) [proper name]).

As for **rhyme reduplications** (4a), the reduplicant invariably follows the base. The initial segment of the reduplicant is generally a labial, mostly [p], sometimes [m]. Koronal [d] is attested in loans from English (*okidoki, super-duper*). The ban of segmental identity of base and reduplicant is attested by the fact that bases with an initial labial invariably harness a different labial for the reduplicant (*Matzepatze < Matze, *Matzematze; Pepemepe < Pepe, *Pepepepe*). Rhyme reduplications exhibit a strong bias towards disyllabic trochees as the constituting feet. Monosyllabic bases are possible but only rarely attested (e.g., *Ralfpalf/Ralfmalf < Ralf* [proper name], *Heinzpeinz < Heinz* [proper name]). These names are more readily used in rhyme reduplication when augmented with the hypochoristic -i-suffix, resulting in disyllabic trochees (*Ralfpalfi, Heinzipeinzi*).

The curious fact about **ablaut reduplication** (4b) is the variable ordering of base and reduplicant. Both prefixing (*Quitschquatsch < Quatsch*) and suffixing reduplicants (*Wirrwarr < wirr*) are well attested. That is, any (morphological) constraint responsible for the ordering of base and reduplicant must be distinctly weaker than the phonological constraint regulating the ablaut order of the vowels [i] > [a]. In this respect, ablaut reduplication differs from other means of word formation in which the morph order is regulated independently of the phonology (see Kentner 2017 for a grammatical analysis that captures the variable ordering of base and reduplicant).

While monosyllabic and disyllabic bases are equally attested, ablaut reduplication requires strict segmental restrictions with respect to the base in order to apply. Ablaut reduplication is impossible if the stem vowel of the base cannot undergo ablaut, that is, ablaut reduplication is restricted to bases with [i, i, 0, 0] or [a].

In general, rhyme and ablaut reduplications are commonly found in nonstandard registers of oral language, for example, in playful conversation, not only with children. If these words are used in written language at all, they mark the text as informal. Correspondingly, they may be found either in chat conversations, in which an immediate interaction of the interlocutors is normal, or in poetic texts. Reduplication serves to foreground or amplify (5)

expressive content. In the case of ideophonic or onomatopoetic stems (e.g., *schwappen* 'to swash, to slosh', *platschen* 'to splash'), expressive meaning may already be part of the stem. Additionally, speakers use reduplication to depict their perspective on the referent, event, or action encoded by the stem. This perspective is bound to the utterance situation ("non-displaceable" in the words of Potts 2007), and oscillates between the poles of diminution, affection, lack of seriousness, and jocular pejoration. In that these words highlight a speaker-specific and utterance-specific perspective, they are akin to other use-conditional expressions such as ideophones (Dingemanse 2018) or non-inflectional constructions (Bücking & Rau 2013).

5.3.2.3 Total reduplication or identical constituent compounding As with English and several other languages, modern German features total reduplication in the form of identical constituent compounding (ICC, see Hohenhaus 2004, Finkbeiner 2014, Frankowsky 2022, Freywald 2015), a.k.a. contrastive focus reduplication (Ghomeshi et al. 2004). In this morphological pattern, word stems are doubled/reduplicated to form new words.

- a. Nimmst Du Basmatireis oder einfach Reis-Reis?
 'Do you take basmati rice or just rice-rice' (i.e., prototypical rice, standard variety rice)
 b. Was meinst Du mit 'ietzt' ietzt-ietzt oder in zwei Minuten?
 - b. Was meinst Du mit 'jetzt' jetzt-jetzt oder in zwei Minuten? 'What do you mean by 'now' – now-now or in two minutes?'
 - c. Der Typ ist echt schlau nicht nur gewieft, sondern schlau-schlau.
 'This guy is really smart not just slick, but smart-smart.'

As the term suggests, contrastive focus reduplications are used exclusively in contrastive contexts to denote the stem's prototypical features vis-à-vis less prototypical but contextually available alternatives. Freywald (2015) adopts the term Real-X-reduplication by Stolz et al. (2011) to emphasize the prototypicality reading these items have in German. I follow Hohenhaus (2004) and argue that these words are best analysed as a special form of endocentric compound, hence the label *identical constituent compounding* (ICC): as in endocentric compounds, the first, accented, part restricts the meaning of the identical head – in this case by emphasizing the head's prototypical or ideal properties. This compound analysis may seem at odds with the traditional concept of reduplication; reduplication usually involves copying of *phonological* material whereas compounding involves the concatenation of *morphosyntactic* units, namely word stems. However, adopting a broader concept of morphological Doubling Theory), one may stick to the term *reduplication*.

Ghomeshi et al. (2004) discard the compound analysis as ICC may involve parts-of-speech not typically used in compounding. In fact, it may be that this type of word formation is more promiscuous than canonical compounds with respect to the stem that is used: ICC may target adverbs that are not typically used as stems in endocentric compounds. Also, in contrast to canonical compounds, linking elements are banned in ICC.

However, the promiscuity regarding the stems involved and the lack of linking elements are by no means compelling arguments against the compound analysis. Note that German makes productive use of phrasal compounds (Meibauer 2007), which generally lack linking elements. Furthermore, (phrasal) compounds may involve parts of speech in head or modifier position that are not typically found in canonical compounds (e.g., pronouns: *Über-Ich*; *Ich-AG*, *Wir-Gefühl*, 'superego', 'You Inc.', 'group identity' or adverbs *im Hier und Jetzt*, 'in the here and now'). Like most phrasal compounds, but in contrast to rhyme and ablaut reduplication, ICC do not become lexicalized – instead, they are created *ad hoc* as they are bound to a salient contrastive context in order to be used.

The semantics and pragmatics of ICC has been discussed extensively by Finkbeiner (2014) and Horn (2018). Freywald (2015) specifically remarks on the ambiguity of words like Freundfreund (lit. friend-friend), which can be translated as 'buddy, not romantic partner' or 'boyfriend, not just buddy', depending on the context. These contradictory meanings prove that the prototypicality reading of these words is semantically underspecified and crucially depends on the context of use. It is specifically because of this semantic underspecification, which can only be resolved in the actual context, that these words cannot become lexicalised. Instead, these reduplicative compounds are nonce words created ad hoc. Importantly, in order to use this kind of total reduplication felicitously, the interlocutors need to (tacitly) agree on the relevant meaning dimension that the prototypicality reading targets. Therefore, and because of the ad hoc and spontaneous use, these words are confined to familiar registers of mostly oral language use, with sufficiently acquainted interlocutors that can trust each other to read the relevant context in the same way.

5.4 The expressive meaning of reduplication: Use conditions and poetic form

The four kinds of pattern identified as proper reduplication, namely phonological doubling, rhyme reduplication, ablaut reduplication, and total reduplication share important use conditions: all of them are found in familiar, colloquial, nonstandard, playful, spontaneous, and mostly oral language. They presuppose close acquaintance of the interlocutors and are, correspondingly, characteristic of a class of registers that Koch and Österreicher (1985) label as 'Sprache der Nähe' (language of the close environment), which affords a high degree of expressivity. Only in this type of register, reduplications can deploy their full potential as words that convey, apart from the descriptive content, the (sensory or emotional) involvement of the speaker and his or her perspective on (aspects of) the communicative situation. In more formal registers (as, e.g., in written communication), reduplication would be inappropriate and highly marked, as these registers do not afford the same degree of expressivity. Given that the four types of reduplication are amenable to grammatical formalization, I surmise that it is not so much the alleged morphological peculiarity that sets reduplication apart from *plain* or ordinary morphology, but the conditions that reduplication imposes on the users. That is, if reduplication is used in an otherwise formal or standard register, it may well 'raise chuckles' (one of the diagnostics that Zwicky & Pullum 1987 suggest to identify expressive as opposed to *plain* or ordinary morphology). But this does not imply that reduplication should be deemed 'extragrammatical' (as has been proposed by Dressler 2000). I think that, in the case of reduplication, the 'chuckle'-diagnostic points to a register clash rather than to grammatically deviant behaviour of these forms. This is because, once the different morpho-phonological types of reduplication are properly sorted, reduplication is not a strange or particularly unruly phenomenon from a grammatical point of view.

Apart from the use conditions, the highly marked phonological form of reduplication itself likely contributes to the expressive meaning. Since repetition in general is a hallmark of poetic language use (Fabb 2015, Görner 2015, Jakobson 1960, Menninghaus et al. 2017), reduplicative morphology may be considered a condensed form of poetic language confined to single words. It will therefore likely affect the evaluation of the respective words with regard to how euphonious or cacophonous they are perceived. In this regard, we tested affective meaning dimensions, cognitive effects and the aesthetic appeal associated with reduplicative morphology in a rating experiment (Kentner et al. 2022). Participants of the experiment were asked to rate various reduplicative and non-reduplicative non-words on six bi-polar rating scales. The scales covered the key emotional dimensions of valence (with the poles labelled *appreciative – depreciative*) and arousal (soothing – arousing), the perceived familiarity of the patterns (familiar - strange), euphony (euphonious - cacophonous), funniness (funny - serious), and perceived size (belit*tling – magnifying*). Stimuli were non-words with different reduplicative patterns that either conformed to the reduplicative patterns that are conventional and productive in German morphology (rhyme reduplication, e.g., 'jaffe-maffe', ablaut reduplication 'liff-laff', total reduplication 'miffe-miffe'), or differed from them (reverse ablaut with the vowel order [a]-[i]: 'laffe-liffe', post-vocalic consonant alternation 'laff-lass'). In addition, а non-reduplicative baseline condition, in which none of the segments were repeated ('liss-maff'), was presented. The results of this rating study suggest that, in the absence of descriptive content, reduplicative forms, are associated

with several meaning characteristics that are generally considered positive: they are perceived to be more appreciative, less arousing, more familiar, distinctly more euphonious and funnier, and they are perceived as more affectionately belittling when compared to the non-reduplicative baseline. Among the various reduplicative patterns, total reduplication and ablaut reduplication boost these effects to a particularly pronounced degree. This boost especially affects the scales concerning euphony, funniness, familiarity, and positive belittling (cuteness). These findings are perfectly in line with the close and familiar social environment in which reduplicative words are mostly used. Apart from the euphony, these effects are compatible with the iconic grounding that Fischer (2011) suggests for reduplication. The jocularity and lack of seriousness as well as the diminutive effect are likely a reflection of the association with child language and baby talk.

Taken together, it seems that the use conditions and the poetic form of the reduplicative words conspire and jointly give rise to the expressive meaning components that may be summarized as jocularity/lack of seriousness and/or affective diminution. Reduplication is therefore well suited to produce (mocking) nicknames, as it does in the case of phonological doubling (*Jojo < Jolanda* [proper name]), rhyme reduplication (*Sillepille < Silke* [proper name]) and ablaut reduplication (*Frinzfranz < Franz* [proper name]). The effect of diminution and jocularity is also noticeable in the case of reduplicative ideophones like *plitschplatsch* 'splish-splash', in which the event so depicted is felt to be less severe than the corresponding non-reduplicative *platsch* 'splash'. In the case of total reduplication is the expression of prototypicality, but the reduplicative structure insinuates ludic semantic flavours as well, in line with the colloquial use conditions of these forms.

5.5 Discussion and conclusion

Zwicky and Pullum (1987) have proposed various criteria to define *expressive morphology* as a type of word formation that deviates from plain or normal morphology. The first criterion is the pragmatic effect. Expressive morphology, according to Zwicky and Pullum, has 'an expressive, playful, poetic, or simply ostentatious effect of some kind' (1987). As we have seen, reduplication in German, in all its forms, perfectly fits this description. However, as suggested above, it is not so much the peculiar morphological structure of these words, but, on the one hand, the use conditions, and on the other hand, the resulting phonological form which engender the poetic and expressive effects.

Zwicky and Pullum (1987) also comment on the fact that expressive morphology is less strict than plain morphology regarding the environment in which the rules apply that produce the derived words in question. Specifically, they note that expressive morphology is promiscuous regarding the morphosyntactic input category whereas plain morphology only applies to a specific, determinate input category. As demonstrated above (5), total reduplication may apply flexibly to nouns, adjectives, and adverbs; rhyme and ablaut reduplications (4a and 4b) can be derived from proper names, adjectives, or interjections alike. Correspondingly, this criterion is fulfilled as well.

Furthermore, Zwicky and Pullum suggest that, in contrast to plain morphology, which all competent speakers master, expressive morphology resembles an art form: not all speakers produce words with expressive morphology, and the outputs sometimes vary between those who do. Again, this is true for the various forms of reduplication in German. There are speakers who actively produce newly coined reduplications but others who neither produce nor accept them as proper words. Rejection, however, might not be an effect of the morphological structure but a corollary of the nonstandard register in which these words are predominantly used. Not all speakers are fluent in all registers of a language, and not all speakers accept nonstandard language as 'proper' language. That is, the rejection can be considered a prescriptivist value judgement rather than a grammaticality judgement. It has to be noted, though, that such value judgements are typical for many if not most linguistic phenomena that are subject to considerable inter-speaker variation, that is, not only for instances of expressive morphology.

Finally, Zwicky and Pullum (1987) suggest that phenomena of expressive morphology, while certainly within the 'sphere of human linguistic abilities', are not amenable to normal grammatical analysis but 'lie in a domain orthogonal to grammar'. Regarding the cases of expressive reduplication discussed above, I disagree. Granted, when lumped together into a composite class of 'reduplication', it is impossible to come up with a single comprehensive grammatical analysis that can derive the various forms in equal measure. It is probably for this reason that reduplication has previously been considered to be irregular, unsystematic, and non-productive. However, once the subtypes (phonological doubling, rhyme/ablaut reduplication, total reduplication) are identified, it is very well possible to formulate grammatical accounts for each of them. In these accounts, morpho-phonological constraints (e.g., the strict prosodic circumscription in the case of phonological doubling and in rhyme/ ablaut reduplication) might well override otherwise important morphosyntactic regularities (cf. the promiscuity regarding the input categories). This however, does not suffice to justify the exclusion of these words from the realm of grammar and their expulsion to an ill-defined 'extra-grammatical' domain (as proposed by Dressler 2000).

In sum, while the various subtypes of reduplication have to be kept apart as distinct morphological classes, each with its own grammatical characteristics,

they may still have comparable expressive effects in that they all give rise to a sense of playfulness or jocularity, or diminution. This effect is due to the special use conditions to which these words are subject, and to their poetic phonological form which iconically foregrounds their affective, ludic and unserious semantic flavours.

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