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**Diminutives derived from terms for children:
Comparative evidence from Southeastern Mande**

The study addresses the relationship between diachronic change and synchronic polysemy based on the use of diminutives in four closely related Southeastern Mande languages. It explores the synchronic patterns of use of cognate diminutive markers deriving from the word ‘child’, and accounts for differences between the languages in terms of a Radial Category network, which is designed to capture in one representation both mechanisms of diachronic change and mechanisms of regular meaning extension. The study argues that the same approach can be used to account for the ways diminutive markers acquire new meanings and for the ways an old diminutive category disintegrates, when new markers start replacing the old one in some of the core diminutive functions. The invasion and expansion of new markers may result in discontinuous semantic structures that can only be understood when the diachrony is taken into account (in this particular case study, the evidence for historical change comes from a synchronic comparison with closely related languages).

Keywords: diminutivity, radial categories, Mande languages, semantic change, structured polysemy, semantic networks

1 Introduction: diminutivity in Southeastern Mande

Disentangling synchronic and diachronic trends in the functioning of semantic categories is a major challenge any study of polyfunctional markers has to address.¹ A particular marker can be used in a variety of senses that are perceived by speakers as related through regular semantic operations (inference, specific metaphors, etc.), but it can also be used in a set of seemingly disparate senses that cannot be directly related to each other at the synchronic level. The two situations are not always easy to distinguish, just as the line between synchrony and diachrony is not always easy to draw.

One way of capturing within the same model the synchronic and the diachronic semantics of a category is proposed by Jurafsky in a cross-linguistic study of diminutivity (1996), where relations between the various senses of the diminutive are explicitly modeled in terms of a Radial Category approach (Lakoff 1987). The specific semantic relations – represented as links in a structured polysemy network – describe the varied and sometimes contradictory uses of the diminutive attested at a given time. At the same time, the semantic relations model the diachronic mechanisms of extending the category to new contexts.

This paper sets out to apply the Radial Category approach to diminutive markers attested in four closely related Mande languages spoken in Côte d'Ivoire (Ivory Coast): Tura, Dan (the Eastern dialect), Mwan, and Wan. The languages belong to the Southeastern group of Mande (Gordon (ed.) 2005; according to the alternative classification proposed in Vydrin 2009, they belong to the South Mande group). The

¹ I am grateful to the editors and the anonymous reviewers, as well as to Clement Appah, Nana Aba Amfo, and to colleagues who have generously shared with me their knowledge and expertise: Dmitry Idiatov, Daria Mishchenko, Elena Perekhvalskaya, Valentin Vydrin. I am alone responsible for all remaining errors.

data – fragmentary at this point – is drawn from recent dictionaries and grammar sketches (Idiatov 2008 for Tura; Vydrine and Kességbeu 2008 for Dan; Perekhval'skaya and Yegbé 2008 for Mwan), as well as from my own field notes (for Wan).

As is typical of West African languages and possibly more generally (Greenberg 1959; Matisoff 1991; Heine et al. 1991; Heine and Kuteva 2002; Heine and Leyew 2008), the diminutive markers of Southeastern Mande are derived from nouns meaning 'child'. The language-specific nouns are cognate, i.e. apparently go back to the same common form in a proto-language. It is quite likely that the diminutive markers also go back to a common proto-form, and the range of the uses they display in the individual languages is to some extent inherited from the proto-language, rather than developed independently.²

The primary focus of this case study is on the ways the Radial Category approach can be used to account for similarities and differences in the functioning of the diminutive category in closely related languages. Three of the four languages use diminutives in largely the same way, but in one language – Wan – the marker shows exceptionally restricted distribution. Unlike in the other languages, the individual senses associated with the diminutive marker in Wan do not seem to be directly related to each other, and do not yield easily to a unified description. Comparative evidence from the related languages, however, suggests a diachronic explanation for the seemingly puzzling distribution of the diminutive marker in a way compatible with the structured polysemy approach.

² Remarkably, the form of the cognate but not identical nouns in the individual languages corresponds exactly to the form of the diminutive markers. This could be due to the fact that the same phonological processes affected the nouns and the corresponding diminutive markers in the individual languages, resulting in forms that continue to be identical. Alternatively, the process could be driven by considerations of analogy, if the diminutive markers were still perceived by the speakers of the individual languages as closely related – at the synchronic level – to the noun meaning 'child'.

The paper is organized as follows. Section 2 describes the various senses associated with diminutive markers in three of the four languages (Tura, Dan, and Mwan), and the range of lexical items that the markers combine with. Section 3 discusses the use of the diminutive marker in Wan, which differs considerably from the other three languages, and suggests a diachronic scenario accounting for that difference. Section 4 discusses the applicability of the Radial Category model to comparative evidence and touches upon some further issues relevant to the study of diminutivity.

2 Typical uses of diminutive markers: Tura, Dan, and Mwan

2.1 Individual senses of the diminutive

Cross-linguistically, the category of diminutive is associated with a wide range of senses that can hardly be treated together in any meaningful way. Attempts to subsume the various and sometimes contradictory meanings under a single description have resulted in definitions that are not specific enough to adequately capture cross-linguistic differences in the availability of individual senses (Dressler and Merlini Barbaresi 1994, *inter alia*). An alternative approach proposed by Jurafsky aims at describing the attested combinations by means of a structured polysemy network (a “Radial Category”) with explicitly defined relations between the individual senses (1996): all pairs of senses that are adjacent in the model are related by a specific mechanism (inference, metaphorical transfer, etc.), but there is no assumption that a single characterization must apply to all senses at once. My description of the diminutive markers of Southeastern Mande rests on the principles of the Radial Category approach: I describe individual senses separately and try to relate them to each other by means of universal semantic mechanisms.

In three out of the four languages – Tura, Dan, and Mwan – the category of diminutive is productive, and there seem to be virtually no restrictions on the range of nouns with which the diminutive marker can combine (cf. Bearth 1971: 221-223 on Tura). At the same time, even a cursory survey of the available sources makes it clear that the interpretation of the diminutive marker depends primarily on the noun's semantic type. Distinctions that seem most relevant are those related to ontological kind (objects of organic vs. non-organic nature), animacy (human vs. non-human), countability (count vs. mass), and referential type (concrete object vs. abstract quality vs. social activity). My description aims at uncovering regular associations between the specific diminutive senses and semantic types of the lexical item from which the diminutive is derived. Such associations prove to be useful in capturing some seemingly universal tendencies in the interpretation of diminutives. They also shed light on the development of the individual senses, as the most common associations between a diminutive sense and the original lexical item's type help identify specific contexts in which the diminutive could develop that particular use.

As we will see below, the two methodological decisions – the focus on the individual senses of the diminutive marker, rather than on an abstract generalization, and special attention to the semantic type of the original lexical item as a determinant in the diminutive's interpretation – are crucial to an effective description of diminutivity in the languages I am concerned with.

2.2 Senses regularly attested with count nouns

2.2.1 “*Small size*”

It is often assumed that the prototypical use of diminutive markers is represented by combinations with regular count nouns. Such combinations are commonly used to

describe objects that are smaller in size than some contextually relevant standard, as in the following examples from Mwan (Perekhval'skaya and Yegbé 2008; Perekhval'skaya p.c.) and Dan (Vydrine and Kességbé 2008).(1) [Mwan]³

- a. *wèè -nè* mortar + diminutive ‘little mortar’
- b. *mlè -né* horn + diminutive ‘little horn’
- c. *pē -nè* thing + diminutive ‘little thing’
- d. *gǔǔ -nè* mountain + diminutive ‘little mountain’

(2) [Dan]⁴

- a. *kɔ dǔdǔdǔ nɔ* hut + round + diminutive ‘small round huts’
- b. *blúù dǔdǔdǔ nɔ* bread + round + diminutive ‘small round bread’

Dictionaries of languages with a productive diminutive category rarely list diminutives with “smaller than standard” meanings. In such spontaneous uses, the physical size of an individual object is compared to a standard size that is relevant in the given context. The “small size” diminutives are rarely lexicalized in this specific sense: they are used

³ In Dan and Tura, the tone of the diminutive marker is consistently high. For Mwan, the diminutive marker is listed in Perekhval'skaya and Yegbé (2008) as *nè* (low tone), but the same marker appears after some low-tone nouns as a high-tone *né*; I have no explanation for why only some low-tone nouns have this effect (it may have to do with the degree of lexicalization of the noun + diminutive combination).

In Wan (discussed in Section 3), the diminutive normally has a high tone, but appears with low tone in highly lexicalized combinations with high-tone nouns (due to a restriction on sequences of two high tones within compounds, see Nikitina forthcoming for details).

⁴ Note the placement of the diminutive marker after the adjective, rather than after the nominal head. This placement suggests that, despite the tendency to describe the diminutive marker as a suffix, it can actually function as a phrase-level free-standing marker, which points to its productivity.

to characterize an object exclusively in terms of physical size, and physical size alone is rarely associated with a functional difference that would be prominent enough for a diminutive combination to become conventionalized as a special lexical item (cf., however, the term in 2b that describes a specific kind of bread, weighing 50-100 grams, with reference to the standard “round” bread with the typical weight of 300-400 grams). When a functional difference does exist, the diminutive can be lexicalized as a label for a specific type of object, independently of its actual size (see next section).

2.2.2 “*Small type*”

In diminutives characterizing exclusively physical size, the standard is set as the size of a prototypical object of the same kind: (1a) describes a mortar that is smaller than an average mortar, etc. A different type of use involves conventionalization of diminutives as labels for entire ontological kinds of objects, not merely individuals with deviating physical size. The “small type” diminutives (which correspond to classificatory diminutives in the terminology of Rhodes 1990) describe a separate concept, such as a special type of mortar that differs in size as well as in function. As argued by Jurafsky (1996: 552-553), such diminutives develop historically from the productive, size-based uses described in the previous section, through lexicalization, and the distinction between the two kinds of diminutive is not always easy to draw (cf. again what appears to be a lexicalized “small size” term in 2b).

In typical examples of a “small type” diminutive, the actual size of the individual object is irrelevant; the presence of the diminutive marker is determined instead by the object’s ontological kind. The diminutive in (3) from Mwan, for example, is reported to have two meanings: the “small size” meaning ‘small bag’, and the “small type” meaning ‘wallet’. In the latter case, there is no indication that the object in question differs in size

from a standard wallet (the same term may refer, presumably, to a larger-than-normal wallet); rather, wallets as such tend to be smaller than general-purpose bags (with which they belong in the same superordinate category).⁵

(3) [Mwan]

bòtò -né bag + diminutive ‘small bag; wallet’

Lexicalization of diminutives on the “small type” reading is due to functional differences that go along with size: general-purpose bags are not suitable for carrying money, and special bags of smaller size are used for that purpose instead. Differences in function are a typical motivation for lexicalization of “small type” diminutives with artifacts.

A similar type of lexicalization is commonly attested with terms for animal and plant species, with one important difference: synchronic oppositions between diminutive terms (referring to a smaller species) and terms without a diminutive marker (referring to a larger species) – i.e. oppositions in which both terms are in active use at the same time period – are relatively hard to find. Instead, terms for certain kinds of species – normally those characterized by relatively small size – feature a diminutive marker that is in some cases obligatory and in others, optional; the corresponding non-diminutive term, accordingly, either does not exist or does not differ in meaning from the diminutive. The examples in (4) illustrate the obligatory use of such diminutive markers in Mwan and Tura.

⁵ In spite of being superficially similar, the term in (i), from Dan, differs in that it specifies explicitly the small bag’s function (money-keeping). In this case, lexicalization did not involve merely a size-based description:

(i) [Dan]

wál glēē nál money + (travel) bag + diminutive ‘wallet’

(4) a. [Mwan]

bīēlē-nē ‘little mouse’

b. [Tura]

ḡààkîà-né ‘(smaller) pangolin’ (*Phataginus tricuspis* and *Uromanis tetradactyla*)

Although these terms are no longer analyzable at the synchronic level (i.e. the corresponding terms without a diminutive marker are not attested), the “small type” component is still present in the terms’ interpretation: (4a) describes a special kind of mouse that is characterized by small size, and (4b) describes two smaller species of pangolin (*Phataginus tricuspis* is defined as a ‘small arboreal pangolin, mostly nocturnal...’, and *Uromanis tetradactyla*, as a ‘small arboreal diurnal pangolin with a very long tail...’).⁶

In all probability, at the origin of such synchronically non-decomposable terms were optional uses of the diminutive marker that described a particular species as “small” relative to a closely related species. Optional uses of this kind are particularly widely attested in Tura with certain kinds of species – primarily those that have “bigger” close relatives in the folk animal and plant classification. Omission of the diminutive marker does not, according to the most recent dictionary (Idiatov 2008), produce a difference in meaning (but may be associated with a stylistic difference).

(5) [Tura]

a. *ḡûbêlê -né* = *ḡûbêlê*(common) ‘sweet banana’ (a smaller and sweeter kind, up to 10 cm)

b. *kpâin -né* = *kpâin* ‘centipede; millipede’

⁶ The larger species is described in Tura by the term *zô* ‘giant pangolin (the biggest and heaviest of the pangolin species)’.

- c. *wéé -né = wéé* (common) ‘fly’
- d. *zeŋ -né = zeŋ* ‘sparrow’
- e. *bié -né = bié* ‘grasshopper’
- f. *bóò -né = bóò* ‘ground squirrel (esp.); marmot; jerboa’

With artifacts, the same pattern only occurs exceptionally, cf. (6), where the presence of a diminutive marker is most likely due to the fact that the general-purpose knife is perceived as a small “relative” of another instrument (e.g., the machete used in the bush):

(6) [Tura]

- làà -né = (rare) làà* ‘knife’

Lexicalization of the optional use of the diminutive in the “small type” sense may result in terms that are no longer decomposable at the synchronic level, as in the following examples from Tura (for which no corresponding non-diminutive terms are reported):

(7) [Tura]

- a. *zèè -né* ‘a species of small ant’
- b. *wóó -né, wáá -né* ‘worm (a species found in the stomach)’

Terms of this kind show remarkable consistency across the languages: it is quite common to find the same species labeled by a diminutive term in two of the three (sometimes even in all three) languages in question, cf. (7a) from Tura, corresponding to (8) from Mwan and (9) from Dan:

(8) [Mwan]

- kpēcīē -nè* ‘little black ant inhabiting dwellings’

(9) [Dan]

$z\bar{l}\bar{\lambda}\bar{\lambda}-n\bar{\lambda}$ 'small black ant' (inhabits dwellings)

As predicted by the proposed scenario, terms involving a diminutive marker are most commonly used to describe animal species that are perceived as minuscule compared to their closest relatives (according to folk classification): the species of black ants inhabiting dwellings is smaller than most species of forest ants, and the intestinal worm (7b) is smaller than a prototypical non-parasitic worm. In other words, the typical size of a representative of a particular species is compared to the size typical of a representative of its superordinate category (worms and ants in 7-9).

The three languages indeed show striking similarities in the way the diminutive marker is distributed across various terms for animal species. Certain kinds of insects and “small creatures” are commonly described by terms derived – at least diachronically – by the diminutive marker. Among the three languages in question, Tura shows the greatest prominence of animal terms featuring an optional diminutive marker that does not alter the term’s interpretation. Species described by such terms in Tura commonly correspond to synchronically non-decomposable diminutives in Dan and Mwan, suggesting once again a common semantic basis for diminutivity marking with these particular species. Besides certain kinds of insect, such species include, characteristically, domestic cat and hare (the former was most likely originally described as “small” compared to its wild feline relatives; the latter could be compared to the domestic rabbit⁷).

(10)a. [Tura]

$y\acute{u}\acute{u} -n\acute{e} = y\acute{u}\acute{u}$ 'palm worm'

⁷ Sometimes referred to as *lièvre du village* in the local variety of French.

b. [Mwan]

wlĕ-nĕ ‘caterpillar’

(11) a. [Tura]

lùù-ṅĕ = lù-ṅĕ = lù-nĕ ‘hare (esp.)’

b. [Dan]

sĀ-nĀ ‘hare’

c. [Mwan]

lóo-nĕ = lōō-nĕ ‘hare’

(12) a. [Tura]

yāmà = yāmà -nĕ ‘domestic cat’

b. [Dan]

yùmǎǎ-nĀ (arch.) ‘cat’

gwǎ-nĀ ‘cat’

c. [Mwan]

sĕĕ-nĕ ‘cat’

The similarities in the choice of species to be described by “small type” diminutives suggest once again that the use of diminutive markers – both optional and obligatory – with animal terms depends on the categorization of particular species within the hierarchy of ontological types and general observations of systematic differences in size being associated with differences between related species.⁸

⁸ Diminutive markers are also commonly attested with “smaller” animal species – including domestic cats – in Mande languages outside the Southeastern branch; e.g., in Bamana (Vydrin 2008: 105) and in Looma (Mishchenko p. c.).

2.2.3 “Young age”

This type of interpretation is generally restricted to objects of organic nature, i.e. objects that are inherently capable of natural growth. For such objects, size is systematically associated with age, and younger individuals can be expected to be physically smaller than older ones. The “young age” interpretation is illustrated in (13).

(13) [Tura]

svvfâi -né donkey + diminutive ‘little donkey; young donkey’

While “young age” diminutives of this type could be, in principle, interpreted as based on a regular noun ‘child, offspring’ (‘donkey’s child’ = ‘young donkey’), the corresponding noun in Tura would require the use of an inalienable possessor construction.⁹ Furthermore, the terms in (14), describing early stages of human life, show that the “young age” meaning is attested in cases that cannot be derived directly from the “offspring” interpretation.

(14) [Tura]

a. *né -né* child + diminutive ‘young child’

b. *lôð -né = lôðé* woman + diminutive ‘young girl’

c. *mîç -né* man + diminutive ‘boy; adolescent; young man’

⁹ Mande languages distinguish between so-called “inalienable” and “alienable” possession; the former corresponds to combinations of argument-taking nouns with their arguments, the latter, to combinations of nouns with possessive modifiers (for details, see Nikitina 2008: Ch. 3).

2.2.4 *The pejorative sense*

Cross-linguistically, diminutive markers are commonly associated with a pejorative meaning, through the “small is insignificant” inference. In Southeastern Mande, this interpretation is attested primarily with terms for humans. Such uses, however, seem to be relatively infrequent, and are not reported as part of the regular meaning of the diminutive marker in my sources (possibly due to the restricted scope of the available data). Both (15a) and (15b) are just one possible reading of the diminutive term, cf. (14c) and (17) for alternative – and apparently more common – interpretations.

(15)a. [Tura]

mîŋ -nɛ́ man + diminutive

(pejor.) ‘boy’ (an adult man who is still not married)

b. [Dan]

gɔ̃dā -nɔ́ mister (term of address) + diminutive (pejor.) ‘boy’

2.2.5 “*Old age*”

In addition, diminutive markers can be used to derive terms for elderly humans. This use seems to be uncommon cross-linguistically and cannot be explained in a straightforward way by direct inference from any other attested sense of the diminutive marker. The “old age” terms are generally not considered pejorative (and are, on the

contrary, sometimes described as respectful). The terms in (16), from Dan, feature a diminutive marker and describe advanced stages in human life.¹⁰

(16)[Dan]

- a. *dēbā̄ -nā̄* woman + diminutive ‘elderly woman’ (of about 50 years of age)
- b. *mī -nā̄* man + diminutive ‘man’ (from about 30 years up)
- c. *nēē -nā̄* ?? + diminutive ‘old woman’ (of very advanced age)
- d. *kwēē -nā̄* ?? + diminutive ‘old man’

The term in (17) can be used in the pejorative meaning (15b), but also as a neutral term for an elderly man. The pejorative use, however, seems to be the exception rather than the rule.

(17)[Dan]

- gōdā̄ -nā̄* mister (term of address) + diminutive
‘man (of around 50 years of age)’

The “old age” use is similarly reported for the diminutive marker in Mwan.¹¹

(18)[Mwan]

- lē -nē* woman + diminutive ‘old woman; madam’

¹⁰ Two of the terms are synchronically non-decomposable but most likely derive from terms for ‘woman’ and ‘man’; (16c) features a stem that may be cognate with terms for ‘woman’ or ‘mother’ in related languages, cf. *nē* ‘mother’ in Wan.

¹¹ In Tura, terms for older humans often include the extension *-ā̄*, which is derived from *kpāā* ‘big, old, elder’ + the diminutive *-nē* (e.g., *lō-ā̄* ‘old woman’). This suggests an association between the diminutive and the “old age” meaning for Tura as well. I am grateful to an anonymous reviewer for this important observation.

I would suggest that the “old age” sense is ultimately related to the use of diminutives for the expression of affection or politeness. While the affection and the politeness uses are not discussed explicitly in any of my language-specific sources, it is typically associated with diminutivity in other languages (cf. Vydrin 2008: 105 on Bamana). The highly lexicalized “old age” use could develop through a conventionalization of the affection/politeness use for the expression of respect toward the elderly.

2.3 Diminutives derived from abstract nouns

2.3.1 *Category membership and activity participation*

Diminutive markers combine with abstract terms to derive terms for category members or activity participants, without reference to their physical size or age. This use is illustrated in (19) with terms from Tura and Dan. The diminutive in (19a) describes a person characterized by a quality; it is synchronically non-decomposable, but apparently derives from an abstract noun. The diminutive in (19b) is derived from a term for a specific dance, and refers to those who are allowed to participate. The “membership/participation” sense is highly lexicalized, and most likely derives directly from the nominal sense ‘child’ (literally, ‘a child of good’ and ‘a child of *gwá*’ in 19a,b), based on metaphors that can be described as “categories are families” and “those involved in a social activity are families”.¹²

¹² Some other lexicalized combinations feature the noun ‘child’ in a very general meaning ‘someone associated with x in some conventionalized way’, cf. (ii) from Mwan:

(ii) [Mwan]

<i>gǔǔ -nè</i>	mountain + child	‘mountainous spirit’
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As an anonymous reviewer points out, similar “conventional association” uses are attested in various African languages outside the Mande family (e.g., in Swahili). Although they can hardly be described as

(19)a. [Tura]

wóô-né ??goodness + child/diminutive ‘person of good’

b. [Dan]

gwá -nÁ gwá (name of a dance) + child/diminutive

(arch.) ‘member of “gwa” (one who can participate in the dance)’

2.3.2 *Recently acquired membership*

If categories and activity participants can be construed as families, more recent members of a category can be described, on the same metaphor, as younger family members. In (20) from Tura, a diminutive is derived from a term for an initiation ceremony, and describes a person who has only recently gone through the ritual (rather than, for example, one who became initiated at a younger than usual age).

(20) [Tura]

a. *bà -né* circumcision + diminutive ‘newly initiated; newly circumcised’

b. *a wôô tó bà-né á*

s/he:PRF RETR become newly.initiated PPS

‘S/he has already been initiated.’ (lit., ‘s/he had been newly initiated’)¹³

Just like “category membership” diminutives, diminutives with the meaning of “recently acquired” category membership are typically derived from terms for social

diminutive *stricto sensu*, they illustrate further extension of the noun’s function that is parallel to the path followed by the diminutive marker.

¹³ The combination of the perfect with a retrospective shift marker suggests that the participant was previously in the state of having become newly initiated, but is no longer newly initiated at the present moment.

activities. In (21) from Dan, however, a similar kind of diminutive is derived from a kinship term: following the same logic, a more recent member of the category “wife” is represented as a younger family member (characteristically, the “order of precedence” is defined in this case exclusively in terms of time of marriage, not age, i.e. a “younger/second wife” might be older than the “first wife”).

(21) [Dan]

dē -nā ‘younger wife’ (one who became married later than her co-wife)

2.4 Individuation and scale-based readings

2.4.1 Quantification senses: “small amount” and “conventional unit”

Diminutives show a number of uses that cannot be directly related to any of the senses described above. Most prominent among them is the use of the diminutive marker for quantification, with terms that normally function as mass nouns.

With terms for substances, the diminutive marker can be used in two senses, which are both related to quantification but differ with respect to their degree of lexicalization. Most commonly, diminutives describe “smaller than expected” quantities of a substance, without specifying the form in which the substance appears, as in (22) from Dan.

(22) [Dan]

yī -nā liquid + diminutive ‘small quantity of a liquid’

The liquid in (22) can appear in any form, as the description is not specific about the exact quantity or the container in which the liquid is located. The quantity is described as small relative to a contextually determined standard. The use of the diminutive marker in this sense is productive, and is rarely reported in dictionaries. In (23), a

combination of a diminutive term with the quantifier *kê* ‘some’ is used in the meaning ‘some [smaller than expected] quantity’.

(23) [Tura]

e *mini -né* *kê* *lô'*
s/he rice -DIM some bought
‘He bought a little bit of rice.’

Combinations of diminutive markers with mass nouns can become lexicalized as descriptions of conventional units representing a substance or forms in which the particular substance/material is typically encountered (such as products typically made of it). This sense is illustrated by the alternative interpretation of (22), presented in (24). Here, the diminutive describes a typical, culturally prominent form in which a prototypical liquid – water – is attested in nature:

(24) [Dan]

yí-ná liquid + diminutive ‘stream’

The “conventional unit” sense is in some ways analogous to the “small type” sense described in Section 2.2.2. Just as the “small type” sense is a lexicalization of the productive “small size” use, the “conventional unit” sense is a lexicalization of the productive “small amount” use: like the “small type” diminutives, “conventional units” describe special concepts, rather than individual instances characterized in terms of size/quantity.

The examples in (25) provide further illustration of the “conventional unit” use. The term in (25a), from Tura, refers to a standard measure of potash used to produce bricks of soap (i.e. a typical individuated form in which the substance can be encountered, cf. Rhodes 1990: 153). The term in (25b), from Mwan, refers to a product made of metal, or one of the usual forms in which small pieces of metal are attested, and

the term in (25c), to a typical form in which stone as a material is encountered. Finally, in (25d), from Dan, the diminutive term – derived from the term for ‘wood; tree’ – is reported to have two interpretations: on the regular “small size” reading, it can be used to describe small trees; on the “conventional unit” reading, it can refer to a stick as a form in which wood is commonly encountered in daily life.¹⁴

(25) a. [Tura]

bàjɔ́lá -nɛ́ potash + diminutive ‘potash used for the crafting of soap’

b. [Mwan]

pīībē -nè metal + diminutive ‘ring’

c. [Mwan]

vlē -nè tɛ́ stone + diminutive + red ‘flint’

d. [Dan]

dūú -nɔ́ tree/wood + diminutive ‘small tree; stick’

2.4.2 Low intensity: weak adjectival force

Gradable adjectives and intensifying adverbs combine with the diminutive marker to describe properties that are not fully realized as compared to some standard measure. This use is only discussed explicitly for Tura, but since it is relatively infrequent, one

¹⁴ In Mwan, the same quantification function seems to subsume the diminutives in (iii):

(iii) [Mwan; Perekhval'skaya p.c.]

a. *wléwlé nè* pistachio + diminutive ‘a pistachio’

b. *pìgìnì nè* traditional money + diminutive ‘traditional coin’

should not exclude the possibility of its being acceptable – albeit as yet unrecorded – in some of the other languages.

(26) [Tura]

dʒʒ -né (redupl. *dʒʒdʒʒ -né*, *dʒdʒʒ -né*) long + diminutive ‘a little elongated’

2.4.3 Short duration or little progress: weak verbal force

Similarly, diminutive markers are used to qualify dynamic processes. In Southeastern Mande, such uses are attested with semantically general verbs (“light verbs”), such as ‘do a walk’, ‘strike a run’, etc. Diminutives express in this context the meaning of short duration or insignificant progress. In (27a,b), for example, the constructions with light verbs describe directed motion, and the diminutive markers encode, correspondingly, insignificant advancement along a path (cf. a similar construction with a mass noun in 23).¹⁵

(27) [Tura]

a. *é ló-né kê wô' líélé dʒʒ-á ...* (Bearth 1986: 222)

s/he go-DIM some did in.front far-PPS

‘when he walked a little further...’

b. *e tɔŋ-né kê wô'*

s/he ascend-DIM some did

‘he ascended a little bit’

Although the “low intensity” and the “insignificant progress” senses of the diminutive are only reported for Tura, Tura is also, at the moment, the most well-studied of the

¹⁵ In Mande languages, objects precede the verb, but all oblique arguments follow it; for details on the rigid SOVX word order, see Nikitina (2009).

three languages, and it seems likely that the same use is possible to some extent in the other languages (Dan and Mwan); for example, the same use is reported for languages outside the Southeastern group (e.g., for Looma; Mishchenko p. c.).

2.4.4 A mechanism for deriving scale-based readings

In his study of the semantics of diminutivity, Jurafsky (1996) suggests, based on a cross-linguistic survey, that the seemingly unrelated quantification senses, on the one hand, and the “low intensity” and “short duration or little progress” senses, on the other, are derived from the “small size” sense by a special kind of semantic shift: *lambda-abstraction-specification*. This mechanism derives second-order predicates by taking the original concept “small(x)” and replacing one of its predicates with a variable. Thus, lambda-abstracting of the diminutive meaning “smaller than the prototypical exemplar x on the scale of size” results in the meaning “lambda(y)(smaller than the prototypical exemplar x on the scale y)”. For gradable adjectives, the operation results in the “low intensity” sense.

The same mechanism produces the quantification senses described in Section 2.4.1, which select an individuated, bounded unit from a mass, and the “short duration” or “insignificant progress” sense described in Section 2.4.3, which selects a bounded part from a larger event by restricting the subevent in temporal extent (“short duration”) or in the degree of advancement toward a result (“insignificant progress”). As predicted by Jurafsky’s model, the different senses are distributed across predicate types: the quantification (“partitive”) sense is attested with mass nouns, the “low intensity” sense is attested with gradable adjectives, and the “short duration” and “insignificant progress” senses are reserved for verbs that can be characterized, in aspectual terms, as

processes (unbounded activities lasting in time) and accomplishments (bounded activities that last in time and have a natural endpoint).

2.5 Summary

The goal of the overview presented in this section was to illustrate the variety of uses of diminutive markers in three different Southeastern Mande languages. The senses are summarized in the table below. Some of the senses are only reported for some of the languages; such differences may reflect minor discrepancies in the use of diminutives across the three languages, but they may also be due to the limited scope of available data. It is possible that some of the “missing” uses will be attested once a larger set of data has been taken into account.

TABLE 1 Senses associated with the diminutive marker in Tura, Dan, and Mwan

Interpretation of the diminutive	Explanation	Lexical item from which the diminutive is derived
Small individual size	picks out individuals that are smaller than the average for their ontological kind or smaller than some contextually defined standard	count nouns
Small type	picks out types of object that are characterized by small size compared to related categories (i.e. the type is small compared to its superordinate category); especially common with terms for animal and plant species	
Young age	picks out young individuals, i.e.	terms for objects of

	individuals that have not achieved full size/strength/development	organic nature (plants, animals, humans), for which size is reliably associated with age
Pejorative	characterizes an individual as “insignificant” (based on the “small is insignificant” metaphor)	primarily terms for humans
Old age	characterizes an individual as elderly (possibly based historically on an affection/politeness sense)	restricted set of terms for humans; highly lexicalized
Category membership; activity participation	Characterizes an individual as a bearer of an abstract quality or a (potential) participant in an activity (based on a “categories are families” and an “activity participants are families” metaphors)	nouns describing abstract qualities; terms for social activities (including rituals)
Recently acquired category membership	Characterizes an individual as a category member belonging to the category for a shorter than standard period of time (based on a “recent members are younger family members” metaphor)	terms for social activities; kinship terms
Small amount	picks out a small bounded unit from an unbounded mass	mass nouns
Conventional unit	picks out a unit of conventional size or form	

Low intensity	describes a quality as only partially realized (based on the “smaller than standard on the scale of a quality” meaning)	gradable adjectives
Short duration or insignificant progress	restricts processes in temporal extent and accomplishments, in progress toward an endpoint	nominal parts of constructions with light verbs

The table presents different senses of the diminutive marker as neatly distributed across distinct types of lexical item to which the diminutive marker is attached. In practice, however, classifying some of the lexicalized uses is not a straightforward task, and some of the uses may not fit well into the classification presented above. For example, the interpretation of (28) from Tura seems to deviate from the “low intensity” sense commonly attested with adjectives; on the contrary, the diminutive marker seems to intensify the adjective’s meaning

(28) [Tura]

déê -né new + diminutive ‘all new, brand new’

The “intensifying” interpretation is apparently based on the “recently acquired membership” sense. Unlike gradable adjectives, the adjective ‘new’ is not interpreted in terms of a scale (cf. the English gradable adjective *new* vs. non-gradable ones, such as *brand new*), and does not combine with the diminutive on the “low intensity” reading. Instead, the diminutive marker is attached to the adjective to foreground the quality’s short temporal duration.

Lexicalized deviations like this one complicate the classification presented in Table 1, which otherwise captures rather precisely the way different senses are associated with different classes of lexical item. The same senses are represented in

Figure 1 as a structured polysemy network, with indications of types of semantic change that are most likely responsible for the development of a particular sense.

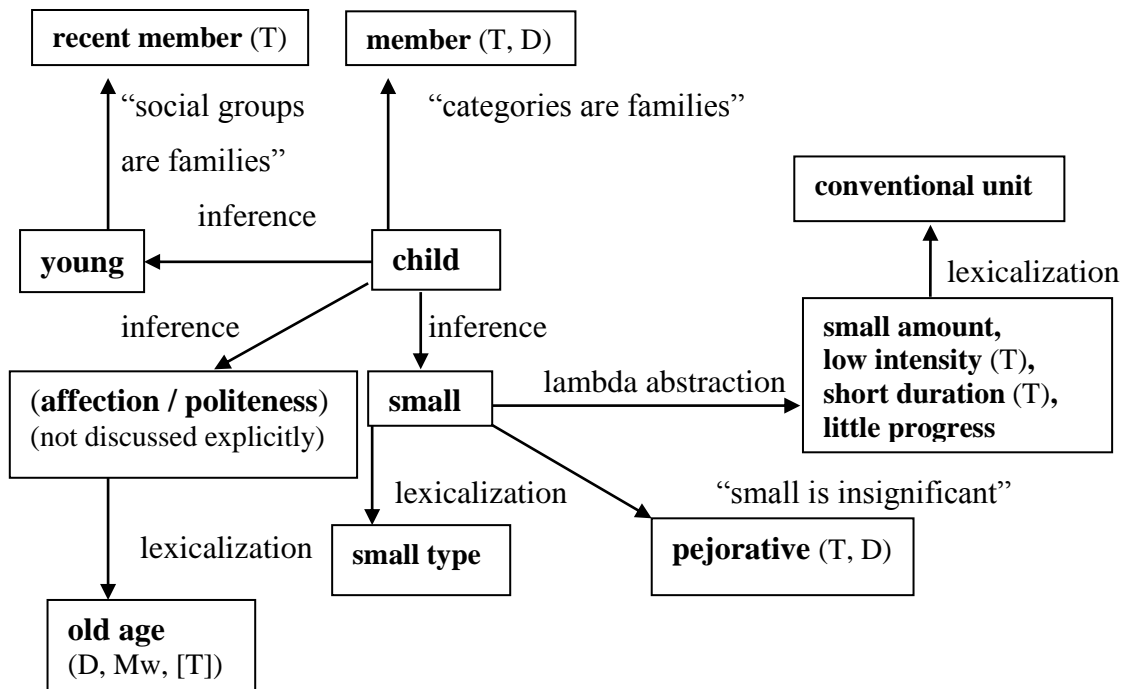


Figure 1. A structured polysemy network for diminutive markers in Tura (T), Dan (D), and Mwan (Mw); for senses that are attested in all three languages, no specific language is indicated

In the next section, I review the range of meanings in which diminutives are attested in another Southeastern Mande language, Wan, and discuss how the use of the diminutive marker in that language differs from the structure presented in Figure 1.

3 Diminutivity in Wan

3.1 The denominal diminutive marker

In the three languages described above, the diminutive marker is derived from a noun meaning ‘child; fruit’. The diminutive marker and the noun are still perceived as closely related, and they are not always easy to distinguish in context. For example, diminutives

based on category membership are likely to be derived from combinations with the noun ‘child’ (‘x’s child’ = ‘member of x’), independently of other diminutive meanings. Similarly, terms describing typical forms in which a particular material is attested in daily life could be derived from the noun’s meaning ‘fruit’, if such forms are viewed as a “product” typically associated with the material (e.g., a ring as a “product of metal”). Still, the range of the marker’s use is more or less uniform across the three languages, suggesting that the same marker is extended to new contexts based on the same underlying principle.

In Wan, a marker derived from a term for children – *nɛ̃* ‘child; fruit’¹⁶ – is used in some of the same functions. Its use is, however, severely restricted compared to the other Southeastern Mande languages. First of all, the marker is not attested in texts outside lexicalized uses; in particular, it is not used to describe objects of smaller than average individual size. It is attested, on the other hand, on a “small type” reading, with a limited number of terms that describe objects of small average size as compared to related objects. Characteristically, such nouns are no longer synchronically decomposable, and the denominal diminutive marker represents in such terms no more than a historical relic of a once-productive strategy. As in the languages discussed above, such terms refer primarily to animal and plant species; more rarely, to types of artifact.

(29) [Wan]

- a. *gwɛ̃-nɛ̃* ‘small mattock’
- b. *vlɛ̃-nɛ̃* ‘bronze munia’ (bird species)
- c. *kɔ̃-nɛ̃* ‘insect’ (general term)

¹⁶ The word has a “neutral” tone, which is characterized by a complex realization that is dependent both on its surrounding tones and the syntactic environment (Nikitina forthc.).

In one case, the marker is attested in a relatively unusual lexicalized meaning ‘(smaller) companion; (smaller) partner’:

(30) *ōlí -nĕ* mortar + diminutive ‘pestle’

As predicted by the meaning ‘child’, the same marker can be used to describe young individuals of animal species (with plant species, the marker tends to describe the plant’s fruit, rather than young plants):

(31) *zrò -nĕ* ‘young antelope; antelope’s child’

The denominal diminutive marker is not attested in Wan with the pejorative meaning (cf. Section 2.2.4). It is, however, used to refer to elderly humans, as illustrated by the lexicalized terms in (32) (the terms are perceived as respectful, by no means pejorative):

(32) a. *lĕ -nĕ* woman + diminutive ‘old woman’

b. *kōlĕ -nĕ* man + diminutive ‘old man’

Turning to mass nouns, the denominal marker is not attested in descriptions of small quantities of substance (cf. Section 2.4.1). It can, however, be used to describe typical countable forms – “conventional units” – representing a particular material, as in (33):

(33) *klĕ -nĕ* stone (material) + diminutive ‘(individual) stone’

With abstract nouns, the marker is attested in the “membership” sense with terms for certain social activities:

(34) *zĕ -nĕ* cult + diminutive ‘initiate of a cult’

The meanings of newly acquired membership and low degree of affectedness are not attested. Similarly not attested are combinations of the denominal diminutive marker with adjectives or adverbs.

In sum, the distribution of the denominal diminutive marker in Wan is restricted to only a subset of the meanings attested in the other three languages: with count nouns,

the marker is attested in the “young age” sense, and appears in a few lexicalized terms for objects of small average size and terms for elderly humans; with mass and abstract nouns, it is attested with the “conventional unit” and with the “participation” meanings, respectively. The uses of the marker are summarized in Table 2.

TABLE 2 Attested uses of the diminutive marker in Wan

Interpretation of the diminutive	Explanation	Lexical item from which the diminutive is derived
Small type	a few lexicalized terms only	count nouns
Young age	highly lexicalized use	terms for objects of organic nature, capable of natural growth
Old age	highly lexicalized use	a restricted set of terms for humans
Conventional unit	describes standard forms in which a substance is encountered; lexicalized use	mass nouns
Participation	highly lexicalized use	terms for social activities

Figure 2 represents the senses of the diminutive marker attested in Wan using the structured polysemy approach. The empty nodes correspond to uses that are attested in the other languages (cf. Figure 1), and provide the “missing links” between certain pairs of attested senses.

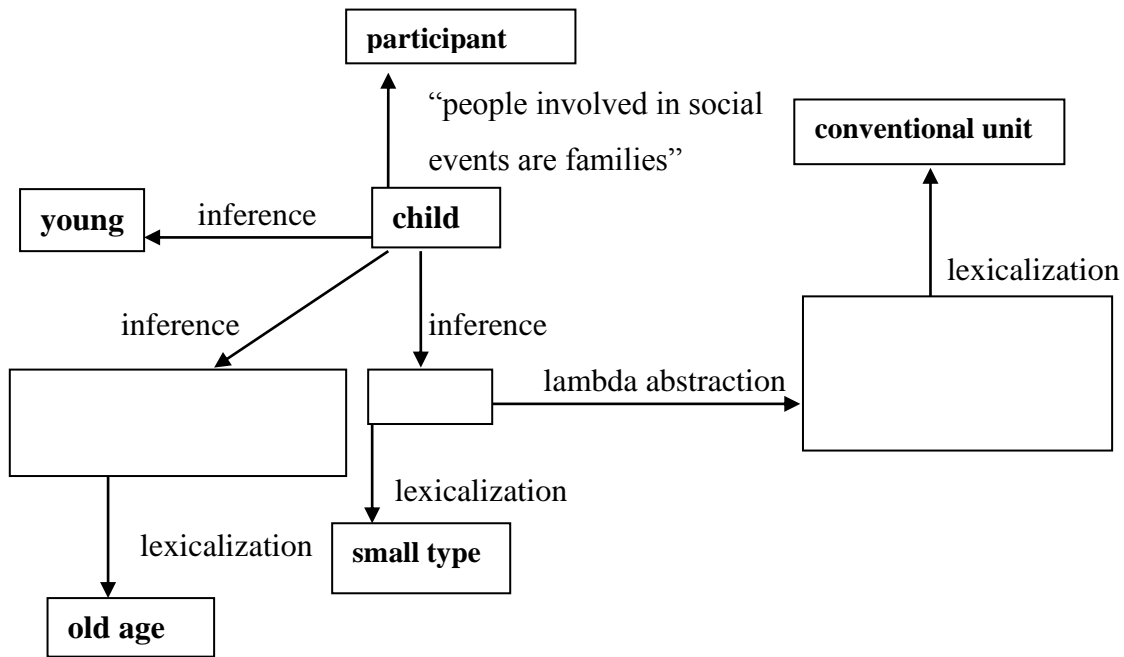


Figure 2. A structured polysemy network for the denominal diminutive marker in Wan

The most striking property of the polysemy network in Figure 2 is its discontinuous structure: the attested meanings cannot be derived directly from each other using the standard mechanisms of semantic change described in Jurafsky (1996), such as conventionalized inference, metaphorical extension or lambda abstraction. I return to the problem of category discontinuity after reviewing the strategies speakers of Wan use to convey the meanings missing from the polysemy network in Figure 2.

3.2 Alternative ways of encoding “diminutive” meanings

Alternative lexical means are used in Wan to encode some of the senses associated with denominal markers of diminutivity in the other three languages (described in Section 2).

In particular, small individual size is encoded by adjectives describing size: *ní* ‘small’

and its reduplicated version *níní* ‘small’:

- (35) a. *bā ní* field + small ‘small field’
b. *mī níní* man + small ‘a small person’

A different adjective – or rather, an element that historically functioned as an adjective – is attested exclusively in terms for species characterized by small size:

- (36) a. *vli -wlēŋlō* crested porcupine + small
‘brush-tailed porcupine’ (a smaller species)
b. *klègè wlēŋlō* pimento + small ‘small chili’

Terms for other species include the standard “diminutive” adjective *ní* ‘small’:

- (37) a. *gàngè sé -ní* guinea-fowl + chicken + small
‘crested guinea-fowl’
b. *yí-tà sé -ní* water-surface + chicken + small ‘water-boatman’

The same adjectival marker is present in synchronically non-decomposable terms that correspond to either non-decomposable diminutives or terms with an optional denominal marker in the languages discussed in Section 2. Such are, for example, terms for certain insects and, characteristically, the domestic cat:

- (38) a. *ǵ-nì* kind of insect
b. *mléŋyē-ní* ‘small lizard’
c. *sésé-nì* ‘(domestic) cat’

Just like the denominal diminutive marker, the diminutive adjective is present in terms for young individuals:

(39) a. *gbàlò-ní* ‘young girl’

b. *zḡgḡ-ní* ‘young man’

With mass nouns, small quantity is typically described by the noun *sé-ní* ‘little bit’, featuring the same form of the “diminutive” adjective (the non-diminutive form *sé* is attested as an adverb meaning ‘a little’). In (40), the noun in a reduplicated form, with a distributive meaning, describes a small amount of unspecified substance:

(40) *kō á séni séni glà-ŋ*
1DU COP little little take-PROSP

‘Each of us is going to take a little.’

The same noun is used to describe low intensity of a quality or a low degree of affectedness with abstract nouns; (41) illustrates its use with an abstract noun to describe low intensity or possibly short duration of the process of working.

(41) *è yrē séni lō*
3SG work little did

‘He worked a little bit.’ (half-heartedly or for a short period of time)

Although the denominal diminutive can be used in Wan with terms for certain materials to describe typical forms in which the material is attested, with many mass nouns, a special noun *kpléŋ* ‘piece, bit’ is used for quantification instead:

(42) a. *gàŋ kpléŋ* yams + piece ‘tuber of yams’

b. *kālē kpléŋ* forest + piece ‘patch of forest’

Newly acquired category membership is normally encoded by the adjective *tālē* ‘new’:

(43) *lē tālē* wife + new ‘newly married wife’

Interestingly, the diminutive adjective *ní* ‘small’ can be used to reinforce the meaning of the adjective *tālē* ‘new’, just as in (28) from Tura above:

(44) *né tālē ní* child + new + small ‘newborn baby’

Table 3 summarizes the lexical means commonly used in Wan to encode the meanings that are normally associated with denominal diminutive markers in the related languages.

TABLE 3 Lexical means for the encoding of “diminutive” meanings in Wan

Interpretation	Lexical means by which the diminutive sense is derived	Lexical item from which the diminutive is derived
Small size	adjectival strategy	count nouns
Small type	adjectival strategy	
Young age	adjectival strategy or denominal diminutive marker	terms for objects of organic nature
Old age	denominal diminutive marker	terms for humans
Category membership; participation in social activity	denominal diminutive marker	terms for social activity
Recently acquired membership	adjectival strategy	kinship terms
Small quantity	specialized nominal	mass nouns
Conventionalized unit	specialized nominal or denominal diminutive marker	

Low intensity; short duration; little progress	specialized nominal	abstract nouns
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3.3 Explaining the reduced range of senses in Wan

The restricted range of functions in which the denominal diminutive marker appears in Wan is surprising in the context of data from the related languages: the senses attested in Wan are discontinuous and cannot be derived from each other without positing hypothetical intermediate stages. Explanation for the discontinuous structure should be sought in diachrony. As argued in Croft et al. (1987) and Pederson (1991), discontinuous (“doughnut-shaped”) structures with missing central senses may develop at a stage where new forms become conventionalized as standard means for encoding the original central sense of the old category. As such forms take over the encoding of some of the central senses, the structure of the old category becomes discontinuous.

The differences in the use of the diminutive marker between Wan and its related languages suggest that originally, the marker had a wider distribution in Wan. Subsequent shrinking of the diminutive category resulted in a replacement of the denominal diminutive by other lexical means in most of the original functions: the “small size” sense has been taken over by adjectives, the “small amount” sense has become associated with special nominals, etc. While it is often impossible to determine why certain semantic categories go out of use at a particular moment of time, this case study uncovers the general mechanisms involved in this type of change: as original categories lose their productivity, their associated functions may be taken up by a variety of lexical means, sometimes resulting in a loss of semantic coherence and the category’s radical reorganization. In Wan, this process has left us with relics of the

original category which no longer show evidence for synchronic semantic relations between the disparate senses. It is only based on comparative evidence that the missing diachronic links can be established.

4 Conclusion

This case study addressed the role of comparative evidence in the study of diminutivity. For three out of the four languages we have looked at, the radial category approach outlined by Jurafsky provides a satisfactory synchronic account of the senses in which the diminutive marker is attested. In Wan, however, the attested senses cannot be organized into a continuous structure, and a particular diachronic scenario must be referred to in order to make sense of the “anomalous” range of functions.

The original diminutive affix is no longer used productively in Wan, but appears in a number of lexicalized combinations corresponding to different – and sometimes unrelated – senses. Comparative evidence, on the other hand, suggests that originally, the senses were related in a more systematic way. The present discontinuous structure is due to the category’s subsequent shrinking: some of the original functions of the denominal diminutive have been taken over in Wan by other lexical means, such as adjectives and specialized nominals.

More generally, this case study demonstrates how the radial category approach can be used, in combination with comparative evidence, to capture within the same model synchronic and diachronic relations between various functions of the diminutive, and to make sense of its seemingly random and disparate functions in the individual languages. While accounts based on the radial network approach have been developed for various grammatical categories (see in particular Croft et al. 1987, Janda 1990, Lewandowska-Tomaszczyk 2007 for an overview), little work has been done on the

historical development of the same category in closely related languages. This study aimed at highlighting, based on a case study from Mande languages, the importance of the comparative approach to semantic change. How do new forms get introduced into existing categories? Do they always replace the old forms in central functions before becoming extended to other senses? How much discontinuity can a category support without breaking up into a set of unrelated functions? All these are important questions that future research has to address, and diminutive markers of African languages may provide fruitful ground for this line of inquiry.

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