



Germanic diminutives: a case study of a gap in Norwegian

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Abstract It is well known that German and Dutch have productive diminutive morphology. What is much less discussed is the fact that several other Germanic languages do not have such productive morphology, notably the Scandinavian languages. Instead, these languages form compounds to express a diminutive meaning. This paper addresses the puzzle of why the Scandinavian languages do not have productive diminutive morphology. The paper argues that the culprit is the particular definite suffix that the Scandinavian languages have. This is a postnominal definite suffix that occupies a low position in the nominal functional spine. It is argued that the presence of this suffixed article accounts for the lack of productive synthetic diminutive formation in these languages.

Keywords Definiteness · Diminutive · Gender · German · Scandinavian

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1 Introduction: the puzzle

As is well-known, several Germanic languages have productive diminutive morphology. For example, German has two productive diminutive affixes, *-chen* and *-lein*. When these attach to nouns, the resulting formation carries neuter gender and not the original gender, viz. masculine and feminine respectively for the words in (1).

- (1) a. das Tisch-chen/-lein b. das Fläsch-chen/-lein
 the.NEUT table-DIM/DIM *the.NEUT bottle-DIM/DIM*
 ‘the little table’ ‘the little bottle’

However, there is a puzzle that hardly has been addressed in the literature (except Postma 2016, which we summarize in Sect. 4): While German has productive diminutive morphology, Mainland Scandinavian languages lack such morphology. Instead, these languages generally make use of nominal compounds to express diminutive meanings. English seems to be employing both processes, which we can see in cases like *baby tree* and *piglet*. In this paper, we will discuss this puzzle and possible ways of accounting for it, primarily focusing on Norwegian. We will offer an account whereby the definite suffix is essential to understand the lack of diminutive morphology in Norwegian. Specifically, we claim that definiteness and diminutives belong to the same semantic function of classification, and that syntactically they compete for the same structural position. Our argument is mainly a diachronic one: Norwegian could have developed productive synthetic diminutives, but due to the properties of the definite suffix, analytic ways of expressing diminutive meanings were preferred (viz. compounding).

From a theoretical perspective, our contribution addresses two broader issues: (a) the question of whether compounding and derivation can and should be demarcated (see Booij (1995); cf. Ott (2011)), and (b) the relationship between form, meaning and realization. In general, derivational affixes and compound constituents are building blocks in the morphological structure of words. This suggests that investigating these building blocks and how they contribute to form diminutives will illuminate the sub-part of nominal structure that is required to yield diminutive interpretations. In turn, this means that there is one underlying structure for diminutive formation, which has two distinct realizations to express the same meaning. As the realization of this structure is subject to cross-linguistic variation, it is important to explore the reasons why this may be the case.

The paper is organized as follows. In Sect. 2, we provide a description of diminutives in Germanic. Then in Sect. 3, we examine the main properties of diminutives in Norwegian. After that, in Sect. 4, we present the internal structure of diminutives, adopting a decompositional approach to morphology. Before we present our analysis, we briefly dismiss an alternative that has been proposed in the literature: Postma (2016) argued that the lack of diminutives is correlated with the lack of V-to-T movement. We then argue that the culprit is the suffixal definite article. In Sect. 5, we conclude and address some open questions.

2 Diminutives in Germanic

Diminutives are a sub-case of evaluative morphology, an interesting domain of investigation for theories of the syntax-morphology and syntax-semantics interface. According to Dressler and Merlini Barbaresi (1994, 51), diminutives constitute an example of morpho-pragmatics, as morphological rules seem to yield pragmatic effects, challenging our standard models of the architecture of grammar, as it is not clear how such an additional level of interpretation can be modeled.

The main interest of this paper is the fact that Germanic languages show a great deal of variation when it comes to the expression of evaluative meaning. Either they use affixation or they use some kind of compounding to create diminutives. Although compounding may be used in other Germanic languages as well, the crucial point is that Mainland Scandinavian has only this diminutive formation process at its disposal. We discuss these patterns below, but first we will elaborate on the background provided in the introduction.

Beginning with German, diminutives change the gender of the noun they attach to. As discussed in Wiltschko (2006), Wiltschko and Steriopolo (2007), and Ott (2011), among others, German has two productive diminutive affixes, *-chen* and *-lein*, which form neuter nouns uniformly, irrespective of the gender of the noun they attach to, (2)–(3).

- | | | | |
|-----|-----------------|-------------------------------|--------------------------------|
| (2) | MASCULINE | | NEUTER |
| a. | der | klein-e Tisch | b. das Tisch-chen/-lein |
| | <i>the.MASC</i> | <i>little-MASC table.MASC</i> | <i>the.NEUT table-DIM/DIM</i> |
| | | ‘the little table’ | ‘the little table’ |
| (3) | FEMININE | | NEUTER |
| a. | die | klein-e Flasche | b. das Fläsch-chen/-lein |
| | <i>the.FEM</i> | <i>little-FEM bottle</i> | <i>the NEUT bottle-DIM/DIM</i> |
| | | ‘the little bottle’ | ‘the little bottle’ |

These affixes can attach to mass nouns, yielding a count interpretation:

- | | | | | |
|-----|----|-------------------------|----|--|
| (4) | a. | viel Wein | b. | viel-e Wein-chen |
| | | <i>much wine</i> | | <i>many-PL wine-DIM</i> (Wiltschko 2006) |
| | | ‘much wine’ (mass noun) | | ‘many portions of wine’ (count noun) |

There is a further affix, discussed in Plank (2012), namely *-ling*, which derives diminutive nouns from all word classes. This is illustrated in (5)–(8) (Plank 2012, 278–280).

- | | | |
|-----|-----------|---------------|
| (5) | Adjective | |
| a. | neu | b. Neu-ling |
| | ‘new’ | ‘novice-MASC’ |

- | | | | |
|-------------|-------------------------|----|---|
| (6) Numeral | | | |
| a. | zwei
'two' | b. | Zwil-ling
'twin-MASC' |
| (7) Noun | | | |
| a. | Spross
'shoot.MASC' | b. | Spröss-ling
'offspring-MASC' |
| (8) Verb | | | |
| a. | finden 'find'
'find' | b. | Find-ling
'foundling; erratic boulder-MASC' |
| c. | ankommen
'arrive' | d. | Ankömm-ling
'arrival (person)/newcomer-MASC' |

All *-ling* nouns are masculine. As Plank (2012) details, nouns derived via *-ling* denote persons and typically have a diminutive and/or a pejorative sense. Historically, *chen/lein* developed via a combination of two diminutives, a neuter *-in* + the Gothic forms *-ka* and *-la* (Paul 1920) and various phonological changes. As for *-ling*, according to Plank (2012, 281), the original affix **-inga* was extended via the segment /l/, which originally served as the coda of stems.

Like German, Dutch also has a productive diminutive affix *-tje* carrying neuter gender, which has several allomorphs; cf. de Haas and Trommelen (1993) and De Belder (2008). Unlike the German three-gender system, Standard Dutch distinguishes between neuter nouns, preceded by *het*, and non-neuter (common) nouns, preceded by the determiner *de*. Irrespective of the gender of the noun the affix attaches to, the result is a noun with neuter gender; i.e., the noun is preceded by *het*. Unlike German *-chen/lein*, *-tje* can also attach to other categories, for example a preposition in (11), and the result is again a noun with neuter gender:

- | | | | |
|---------|--|----|---|
| (9) a. | de kikker
<i>the.COM frog</i> | b. | het kikker-tje
<i>the frog-DIM</i> |
| (10) a. | het monster
<i>the.NEUT monster</i> | b. | het monster-tje
<i>the monster-DIM</i> |
| (11) | het omme-tje
<i>the about-DIM</i>
'a short walk' | | (Moskal and Smith 2019) |

Turning to English, it has been argued that the language lacks diminutive morphology. However, it has been also claimed that this is not an accurate characterization. Schneider (2003) points out that English forms diminutives via compounding by employing *baby* and *dwarf* as the first member of the compound, e.g., *baby tree* and *dwarf tree*. Diminutive formation further includes *mini-* and *macro-*, which according to Bauer (2003, 38) have lost their prefix status and behave like 'lexemes'. Bauer (op. cit.) states that this is due to the general significance of compounding in English and other Germanic languages. Several authors have pointed out that English uses in addition the adjective *little*; see also footnote 2. For

instance, according to Charleston (1960, 126), “in accord with the general analytic tendency in modern English, the English speaker tends to make a rather sparing use of endearing diminutives formed with suffixes, preferring the adjective *little*”. With respect to *little*, Strang (1968, 136ff.) points out that unstressed *little* is used to form English diminutives, and it differs from purely quantifying *little* structurally; i.e., it occupies a distinct position in the noun phrase. Dressler and Merlini Barbaresi (1994, 114ff.) distinguish between a strong and a weak *little*, and they point out that the latter is losing its phrasal status. Specifically, Dressler and Merlini Barbaresi (1994, 115) attribute the following properties to weak *little*.

- (12) a. The weak form is sometimes contracted in writing, e.g., as *lil*, *til'*, or *li'l*.
 b. It is always unstressed.
 c. It has never a purely quantifying meaning.
 d. It can, therefore, only rarely, if at all, be replaced by *small*.
 e. It can only be used attributively.
 f. It cannot be used in postmodification.
 g. It always appears to the right of its (marked) synonyms
 (e.g., *tiny*, *wee*, etc.).
 h. Its typical, unmarked position is immediately to the left of the noun.

We note here that Schneider (2003) argues that English uses fourteen diminutive suffixes: {A}, {EEN}, {ER}, {ETTE}, {IE}, {KIN}, {LE}, {LET}, {LING}, {0}, {PEG}, {POO}, {POP}, and {S}. However, it is not clear how productive these are. For instance, Plank (2012) notes that *-ling* is actually one of the least productive affixes in English. Others, e.g., {LET} seem to be more productive. We take this as evidence that English does differ from Norwegian, which we will describe momentarily.

Turning to the Scandinavian languages, these also do not have productive diminutive morphology. The suffix **lingaz* was available in earlier stages of all the Germanic languages, and it can still be identified in many existing words. This is also documented for Old Norse (Torp 1909, LII), although *-ling* does not seem to have been productive at the time. Its cognate in Icelandic, *-lingur*, is hardly used in Modern Icelandic (Whelpton et al. 2015, 71), and it is absent from Mainland Scandinavian (Olofsson 2015).

Specifically, in Icelandic, Kvaran (2005, 138) observes that the suffix *-lingur* is used to derive diminutives; e.g., *grís* ‘pig’ + *lingur* ‘DIM’ gives *gríslingur* ‘piglet’, and *strák* ‘boy’ + *lingur* ‘DIM’ gives *strákingur* ‘(young) lad’. However, although it is available, it is no longer productive.

Finally, in contemporary Norwegian as a representative of the Mainland Scandinavian languages (see Møller 1943 and Farø and Schoonderbeek Hansen 2009, 2010 for Danish, and Åkerblom 2013 for Swedish), there is no productive diminutive morphology. Rather, compounding is used to express diminution. In general, compounding is highly productive in Norwegian, and it is also productive when it comes to expressing diminution. A set of examples involving adjectives

one is used for plural forms and compounds (16d), and another form is used for definites and compounds (16e).

- (16) a. lit-en SG.MASC d. små PL, COMPOUND
 b. lit-a SG.FEM e. lille WEAK.DEF, COMPOUND
 c. lit-e SG.NEU

Focusing on compounds, (17) illustrates plural compounds whereas (18) illustrates singular compounds.

- (17) a. små-barn b. små-tær c. små-jente
little-children *little-toes* *little-girl*
 ‘little children’ ‘little toes’ ‘little girl’
- (18) a. lille-bror b. lille-tå c. lille-gutt
little-brother *little-toe* *little-boy*
 ‘little brother’ ‘little toe’ ‘little boy’

Note that even though (17a, b) have a plural interpretation, this is not the case for (17c). This means that *små* cannot be a plural form but rather must be used when the speaker wants to create a compound with *liten* as its left-hand member (Leira 1992, 66). As expected, in such cases the inflected form of *liten* cannot be used, as illustrated in (19).

- (19) *lit-a-jente
small-FEM-girl.FEM

This demonstrates that *små* is a dedicated compound form of *liten*. As such, it is also much more productive compared to *lille* (cf. Skommer 2016). A few examples of *lille* are provided in (18). These compounds are almost name-like in that they typically refer to particular individuals or a particular toe. However, there is nothing prefix-like about *liten* and its forms. Notably, *liten* occurs in both its singular and definite forms, as shown in (20).

- (20) a. en liten bror b. den lille broren
a.MASC small brother *DEF small brother.DEF*
 ‘a small brother’ ‘the tiny brother.’

For completeness, it is also the case that *små* can appear as a separate form, as shown in (21).

be a father. Rather, as mentioned above, we are dealing with pet names that have a clearly affectionate meaning.¹

In order to gauge the productivity of these particular forms, we looked into various corpora of Norwegian. It is impossible to search for diminution in general, so the best way seems to search for forms that one may expect to exist. Needless to say, this may not, then, provide an accurate picture of what is in the corpora. In the Nordic Dialect Corpus (Johannessen et al. 2009), (23e) occurs once, but the other examples in (23) are not attested. The Linguistic Infrastructure made Accessible (LIA) corpus, which contains a spoken dialect corpus of older recordings, does not have any occurrences. As for written corpora, we looked at the HaBiT Norwegian Web Corpus 2015 (Bokmål) and there are a few occurrences of (23a–c) and (23e), mostly taken from blogs, and where several of the occurrences of these forms are the usernames of the people posting on the blogs. It may be that none of these corpora represent the required register for these forms to occur, but these findings align with our intuition that the phenomenon in (23) is non-productive.

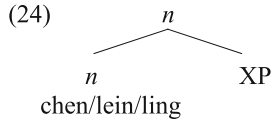
In summary, Norwegian does not have any clear productive diminutive morphology compared to languages like German. Instead, diminution is most easily and productively expressed as compounds, typically using the compound form of the adjective *liten* ‘small’. In addition, it differs from English which does have certain affixes that enter diminutive formation as well as compounding.

4 Towards an analysis

4.1 The structure of diminutives

In agreement with Kramer (2015), we take *n* to be the locus of gender as well as declension class. The question is where diminutive morphology can be located in this structure. As we saw in Sect. 2, in German and Dutch diminutives affect gender. A straightforward analysis of this pattern is to assume that diminutive affixes that affect gender are placed on the functional head *n*. Specifically, following Kramer, we assume that diminutives where the gender of the diminutive is altered compared to the base noun also realize *n*, (cf. Ralli 1988; Booij 1995; Wiltschko and Steriopolo 2007). In other words, we adopt the view that German diminutives are nominalizations formed via a diminutive *n*; see Wiltschko (2006), Wiltschko and Steriopolo (2007), Steriopolo (2008), and Kramer (2015), but see de Belder (2008), Ott (2011) and de Belder et al. (2014) for alternatives. As illustrated in (24), on our view *-chen* and *-lein* as well as *-ling* realize *n*.

¹ There are also differences in how easily *mor* ‘mother’ and *far* ‘father’ combine with proper names: Some sound much better to native speakers than others. In particular, names ending in a schwa seem to work much better, arguably because it provides a better rhyme.



These types of nominalizations are gendered; i.e., they come with their own gender information, neuter for *-chen/-lein*, and masculine for *-ling*. A similar analysis can be assumed for English diminutive affixes, which are clearly derivational, e.g., *pig-let*. We follow Kramer (2015) and Comrie and Thompson (2007) in viewing these instances as cases of denominal nominalizations.

We are aware that the structure in (24) is subject to some controversy, which we briefly discuss here, but for our purposes it provides the right tools to analyze the Norwegian case. For instance, De Belder (2011) and Ott (2011) view diminutives as realizing a projection relating to countability, SizeP and UnitP respectively, as in German (and Dutch) they turn mass nouns into count nouns. In a similar vein, Mathieu (2012) argues that diminutives are used in the language to singulativize collective and mass nouns. Franco et al. (2020) claim that diminutives are instances of collectivizers and that they are syntactically represented as Class heads in the extended nominal spine. We think that all these alternatives are largely compatible with the structure in (24), if, following Acquaviva (2008), we view collectivizers, size and units as instances/flavors of *n*. In particular, we capitalize on Ott's (2011) proposal that diminutives, nominal classifiers and measure nouns have an identical structure: Following Alexiadou et al. (2007), we view these elements as realizations of a semi-lexical head *n*, which encodes a unit.

4.2 V-to-T movement?

Postma (2016) is the only paper we are aware of that addresses the puzzle of why Mainland Scandinavian lacks diminutive morphology. He suggests that there is a correlation between the lack of diminutive morphology and V-to-T movement. All languages that have a productive affixal diminutive have V-to-T movement. Indeed, English and Mainland Scandinavian lack V-to-T movement. However, it has been argued that certain Mainland Scandinavian varieties allow verb movement in embedded clauses (Bentzen 2007 and references therein). (25a) illustrates that verb movement in certain dialects can occur in embedded clauses, whereas ordinary V2 is not licit (25b).

- (25) a. *Æ vet [koffer ho Hedda {kjøpe} ofte {kjøpe} sko].*
I know why she Hedda buys often buys shoes
 'I know why Hedda often buys shoes'
- b. **Jeg vet [hvorfor sko kjøper Hedda ofte]*
I know why shoes buys Hedda often

Postma further assumes that diminutive formation is productive in Icelandic, which he relates to the V-to-T parameter. However, Icelandic does not seem to have

productive diminutive morphology either but is argued to have V-to-I (Holmberg and Platzack 1995; see also Wiklund et al. 2007 on Icelandic verb movement always being to the CP domain of the clause). Thus, we conclude that the lack of diminutive morphology cannot be related to the V-to-I parameter.

4.3 The role of the suffixal definite article

In this section, we will propose our account of why Scandinavian languages do not have productive diminutive morphology of the *-chen/-lein* sort. We will suggest that the answer is to be found in the properties of the suffixal definite article.²

In Scandinavian, the definite suffixal article emerged from a free-standing clitic in D (see Lohndal 2007 and Faarlund 2009 on Norwegian; see Sigurðsson 1993, 2006 on Icelandic). (26) provides an example where (26a) and (26b) are the Old Norse forms and (26c) the contemporary Norwegian form.

- (26) a. *sá inn gamli hestr* b. *hestr-inn*
that DEF.SG.MASC old horse horse-DEF.SG.MASC
 ‘the old horse’ ‘the horse’
- c. *hest-en*
horse-DEF.SG.MASC
 ‘the horse’

The clitic *inn* in (26a) developed into a suffix in (26b), which is similar to its Modern Norwegian counterpart (26c). The definite article encodes the features number and gender/declension class.³ The majority of dialects has different exponents for the three genders and for singular vs. plural, as illustrated in Table 2 using the written variety Nynorsk.

With this as a background, let us consider the structure of nominal phrases in Norwegian and Scandinavian more broadly. We adopt Julien’s (2005) analysis of the Scandinavian DP as this is the most up to date and explicit analysis. She offers a

² Another possibility would be to correlate the absence of diminutive morphology with gender. It is generally acknowledged that size-related meanings are among the possible semantic values of a gender system (Allan 1977; Corbett 1991; Croft 1994; Aikhenvald 2003; Di Garbo 2014). Feminine and neuter are prototypically used as diminutives. A correlation between diminutive morphology and gender could account for why English lacks productive diminutive morphology: The language lacks grammatical gender, and diminutive morphology. However, there are two reasons to doubt this. First, as discussed in Sect. 2, diminutives are not entirely absent from English. Second, Scandinavian languages, unlike English, have gender, and they still lack productive diminutive morphology. We cannot appeal to the merger of masculine and feminine gender in Germanic to explain this behavior either: The masculine and feminine genders have merged in Swedish, Danish, and in many varieties of Norwegian (see Kürschner and Nübling 2011; Busterud, Lohndal, Rodina and Westergaard 2019 for a recent overview). Nevertheless, dialects of Norwegian as well as Swedish and Danish lack productive diminutive morphology. Furthermore, even though different dialects have different number of genders, there are no differences between these dialects when it comes to diminutive morphology. Taken together, pinning the explanation on gender appears to be a non-starter, especially in the case of the Scandinavian languages.

³ The literature is divided on whether the suffix encodes a gender feature. See Busterud et al. (2019) for some discussion and references.

Table 2 Inflectional paradigm for three Norwegian nouns.

Noun/feature	INDEF.SG	DEF.SG	INDEF.PL	DEF.PL
hest	hest	hest-en	hest-ar	hest-ane
horse.MASC				
tralle	tralle	trall-a	trall-er	trall-ene
trolley.FEM				
tre	tre	tre-et	tre	tre-a
tree.NEUT				

decompositional approach, whereby each feature is hosted in an independent functional projection. The general structure looks as in (27).

$$(27) \left[{}_{\text{DP}} \text{D} \left[{}_{\alpha\text{P}} \alpha \left[{}_{\text{DefP}} \text{Def} \left[{}_{\text{NumP}} \text{Num} \left[{}_{\text{nP}} \text{n} \sqrt{\text{ROOT}} \right] \right] \right] \right] \right]$$

At the bottom, an *nP* hosts the root and the categorizing head. Above that, a *Num* head hosts number features. Further up the tree, there is a projection that Julien calls *nP* in her work, but to avoid confusion with the Distributed Morphology view discussed in Sect. 4.1, we are going to label it *DefP*. This is the locus of a low definiteness projection, which is realized as the suffixal definite article.⁴ Above *Def*, a projection αP hosts adjective phrases in its specifier (following Cinque’s 1994 influential analysis). Between αP and *DP* there may be additional projections, such as one hosting numerals and other weak quantifiers (*CardP*; Julien 2005, 10). Regarding the presence of these various projections, Julien (2005, 12) argues as follows: “Of the projections shown here, I take *NP*, *NumP*, [*DefP*] (and *DP*) to be present in every Scandinavian *DP*. These projections contain features that are essential to the interpretation of the *DP* as a whole. *CardP* and αP , on the other hand, are only generated when they contain lexical material.”

An important argument in favor of the articulated structure in (27), is the fact that Norwegian (and Swedish) allows for double definiteness in the presence of an adjectival modifier. An example from Norwegian is provided in (28), using Julien’s (2005, 1–2) decomposition.

$$(28) \text{ de} \quad \text{fin-e} \quad \text{tegn-ing-e-ne}$$

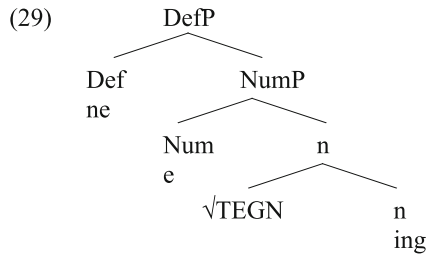
DEF.PL nice-WEAK draw-NMLZ-PL-DEF

‘the nice drawings’

The pronominal definite article is argued to be in *D*, a standard claim at least since Delsing (1993). The other morphemes are positioned in their relevant

⁴ Note that Icelandic also has a definite suffix which is postnominal; see Sigurðsson (1993, 2006), Pfaff (2015), Ingason (2016), and Harðarson (2017) for analyses.

projections, which is to say that the structure of (28) is as in (29), prior to any head movement (cf. Julien 2002).



Regarding gender, Julien argues that it is placed on *n*, a claim that is in agreement with the view presented in 4.1. One Norwegian specific piece of evidence for this involves nominalizing suffixes which carry gender, such as *-ing*, which traditionally is feminine and still is in dialects retaining the feminine. Note that gender cannot be on Number (cf. Ritter 1993) because feminine nouns with typically masculine plural suffixes (e.g., *myr-ar* ‘bogs’) still trigger feminine agreement suggesting that gender is fixed before number is added (Julien 2015, 3–4; see also Kramer 2015, chapter 8).

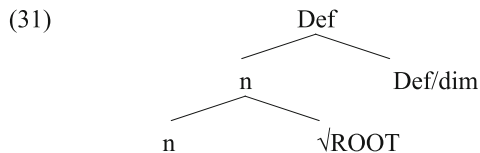
In terms of semantics, Julien (2005, 35–39) argues that there are differences between Def and D. D encodes the semantic feature of inclusiveness whereas Def encodes specificity (Kester 1996). An empirical argument in favor of the latter is the following. Consider the examples in (30) taken from Julien (2005, 36).

- (30) a. Dei oppfører seg som dei verst-e bøll-ar.
they behave 3REFL REL DEF.PL worst-w brute-PL
 ‘They behave like the worst brutes [whoever those are].’
- b. Dei oppfører seg som dei verst-e bøll-a-ne
they behave 3REFL REL DEF.PL worst-w brute-PL-DEF
 ‘They behave like the worst brutes [and we know who those are].’

Without a suffixed definite article, the reading in (30a) is that no specific set of brutes is referred to (Julien 2005, 35), unlike in (30b), where there is such a specific set. This contrast is not idiosyncratic; Julien provides several additional examples that make the same point. Syntactically, Julien argues (2005, 39) that the relevant feature is DEFINITE both in D and Def, and that the particular interpretation depends on which projection the feature belongs to.

We argue that specificity can be subsumed under the notion of classification in Bisang (2017, 217). Nominal classification is viewed as a way of dividing the nominal inventory into different sets of objects (Bisang 2017, 200), which for example can be done through counting, definiteness, or possession (Bisang 2017, 216). Concretely, Bisang (2017, 217) argues that a nominal classifier “increases the predictability of a nominal concept in ongoing speech production—it reduces the search domain and thus enhances the identifiability of a nominal concept”. This is true for both definiteness and diminution. As such, it can be argued that definiteness

and diminution share a semantic function, namely that of classification. In our analysis, Def is occupied by features that are realized as the definite article. These features provide classification of nouns in terms of identifiability, through specificity. If we were to add a diminutive morpheme to the noun, we would be faced with a kind of redundancy of specification within the noun itself. Formally, we can think of that as two morphemes competing for the same structural position, as depicted in (31).



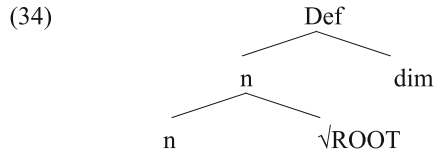
We hypothesize that avoiding this double specification of classification is what has caused Scandinavian languages to lose productive affixal diminutive morphology. That is, we are making a diachronic claim that the language did not sustain affixal diminutive morphology because of the low definiteness marking which covers the function of classification associated with diminutive morphology. Importantly, Norwegian can still express diminutive meanings, but that happens through compounding.⁵

Support for this idea comes from the facts involving *mor* ‘mother’ and *far* ‘father’ expressing a diminutive meaning when being combined with proper names. Some Norwegian dialects in and around Bergen allow proper names to take a definite suffix (32) (cf. Julien 2005, 174, fn. 22), but this suffix cannot appear together with *mor* and *far* (33).

- (32) a. Tore-n b. Kari-en
 Tore-DEF *Kari-DEF*
 ‘the Tore’ ‘the Kari’
- (33) a. *Tore-n-far b. *Kari-en-mor
 Tore-DEF-father *Kari-DEF-mother*

Julien (2005, 174) argues that the suffixed proprial articles in (32) are realizations of Def. Based on that and the data in (33), we claim that proper names combined with *mother* or *father* may be an instance of the structure in (34), where *mor* and *far* appear in the position of ‘dim’.

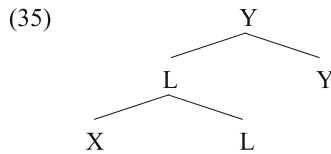
⁵ Julien (2015, 10, fn. 11) discusses diminutives in K^wak^w’ala and suggests that these may realize an α head, which is the head that hosts size adjectives in its specifier. The α P appears immediately above DefP in Julien’s analysis. She argues that there may be head movement of the noun into the adjectival domain, in which case any realization of α would be suffixed to the noun. Julien does not discuss diminutives in Scandinavian, but the question arises as to whether or not her remarks on K^wak^w’ala could generalize and predict why compounding is the preferred strategy in Scandinavian. In view of our remarks on English weak *little* in the main text later on, we are led to conclude that the size head Julien refers to cannot be the locus of diminutive affixes, which must be lower, thus making her intuition compatible with our analysis.



Put differently, if we view *mor* and *far* as some kind of suffix-like non-productive diminutive morphology, then on the analysis in (34), they would occupy the Def position in Julien’s analysis and thereby derive the incompatibility of overt suffixal definiteness and *mor* and *far*.

Our analysis raises another question, namely why Norwegian did not develop affixal diminutive morphology with indefinite nouns.⁶ This follows from the analysis since indefiniteness is also represented in Def. That is, Def is the locus for the relevant feature, i.e., DEFINITE on Julien’s (2005) analysis. The value of this particular feature matters less; it is the presence of the feature itself that creates the double specification that we have suggested above.

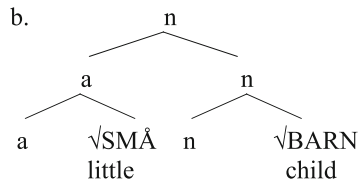
As shown in Sects. 2 and 3, in order to express diminution semantically, the productive way of doing this in the Scandinavian languages is to make use of adjective-noun compounds. Eik (2019) proposes a structure for endocentric compounds in Norwegian. The general structure looks like in (35).



Here, X is the left-hand member and Y is the right-hand member. Each of these consists of a categorizer and a root. L is a functional head that in Norwegian can be realized by a linking element, but when there is no overt linking element, this head is not present. Following this general analysis, the root compounds involving *små* ‘little’ are as in (36).

⁶ We are grateful to an anonymous reviewer for emphasizing the importance of this question.

- (36) a. småbarn
little.child
 ‘small child’



As we can see from (36), the structure is abstractly somewhat similar to the structure in (34), which won't be surprising because Eik (2019) argues that compounding involves adjunction. The similarity between the two cases provides an appealing consequence of the analysis, since both structures involve diminution structurally and semantically speaking.

We mentioned that English also makes use of compounding in addition to nominalization to create diminutives. As far as we can tell, the analysis proposed here can be extended to cases such as *baby tree*, the difference being that the first member of the compound would be a noun. The question to which we now turn is whether it can also capture the weak *little* form that English uses productively. Strang (1968) points out that diminutive *little* appears closer to the noun than size *little*, a position otherwise occupied by color adjectives:

- (37) a. a little white house size
 b. a little old man diminutive

Schneider (2003) also observes that diminutive *little* appears after all evaluative adjectives. In principle there are two ways to analyze diminutive *little*: One option would be to adopt the structure in (36b) presented above for Norwegian. An alternative would be to treat this adjective as occupying Spec, *nP*. Since it is the adjective immediately to the left of the noun, and cannot occur in predicative position, it seems to have properties in common with so-called classificatory adjectives, cf. Bosque and Picallo (1996).

We believe that the fact that English has both affixational as well as various forms of analytic compounds supports the analysis of the Norwegian data presented here, according to which it is the presence of the suffixed article that is the culprit for the lack of productive synthetic diminutive formation in the language. As English does not have a suffixal article, the fact that it behaves differently from Norwegian follows from our account. Finally, since we have been assuming, following Ott (2011), that diminutives and classifiers are elements that realize a semi-lexical head *n*, which encodes a unit interpretation, we cannot attribute the differences between Norwegian and other Germanic languages to differences in the structure of classifiers and measure nouns. Norwegian is very similar to German in

allowing juxtaposition, as seen in (38), while as the translation shows, English requires the preposition *of*.

- (38) a. *zwei Gläser Wasser* German
 two glasses water
 ‘two glasses of water’
- b. *to glass vann* Norwegian
 two glasses water
 ‘two glasses of water’

5 Conclusion and open questions

In this paper, we have discussed a major puzzle when it comes to the crosslinguistic distribution of productive diminutive morphology, namely why is it that the Scandinavian languages do not have such morphology when so many other closely related languages do. We have proposed that it is the presence of the suffixed article that can account for the lack of productive synthetic diminutive formation in these languages. Unfortunately, we do not have sufficient sources to be able to determine whether such formation was ever productive at a given historical stage for these languages, although comparative evidence from other Germanic languages would suggest that it may have been productive.

Our proposal would then predict that it should cease to be productive once the suffixal definite article started to emerge. If on the right track, this seems to suggest that the suffixal determiner is regarded as the most specific realization of the Def head, thus blocking the selection of other exponents and leading to the present-day gap, i.e., the lack of diminutive affixes. In frameworks such as Distributed Morphology, competition for the realization of specific functional heads happens at the level of vocabulary insertion. Moreover, we have seen that compounding is a productive source for diminutives, suggesting that compounding and derivation are not as clearly demarcated as often assumed. In Distributed Morphology, the distinction between words and phrases is actually irrelevant. Crucially, if two strings have the same meaning but distinct realizations, this entails a common structure underlying both. In the present case, analytic realization emerges due to some marked feature at the level of morphological structure. We think that the source of this marked feature is to be found in the diachrony of the suffixed article, thus our prediction is that there is a correlation between the emergence of the suffixed determiner and the lack of diminutives.

On a more general level, our proposal would predict that languages that have a suffixal definite article with the same properties as the Norwegian one also do not have productive synthetic diminutive formation. In other words, our proposal crucially does not imply that if a language has a suffixal article it will lack productive synthetic diminutive formation. There are several languages with suffixed articles, e.g., the languages of the *Balkan Sprachbund* and Amharic, but

that these suffixed articles do not have the same properties as the Scandinavian ones. For instance, in Bulgarian, the article appears as a suffix to the adjective modifying the head noun. In this case, it seems more accurate to assume that the suffixed article realizes D, see Giusti (2002). A similar analysis has been proposed for the Amharic definite article by Kramer (2010). For this type of languages, the article appears affixal via the mechanism of Local Dislocation. In Scandinavian, however, the suffixal article is not associated with D, but with Def. Future work will determine whether or not this prediction is borne out.

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