6. On a low and a high diminutive:

Evidence from Italian and Hebrew

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Abstract

In this paper we argue for two different positions for diminutives. The first one is in the functional domain of the noun. The second one directly merges with the root. Therefore, it can occur below categorial heads. The two positions differ with respect to i) productivity; ii) compositionality of meaning; and iii) strategy of word-formation. These effects are defined in terms of syntactic structure.

6.1 Introduction

Cross-linguistically, diminutives display mixed behavior with respect to meaning. To illustrate, take the Italian examples below. Example (1) shows a diminutive with a compositional meaning; examples (2)-(4), on the other hand, have non-compositional meanings.[1]

1) nas-ino   [Italian]

    nose.DIM

'small nose'

2) pan-ino

    bread.DIM

    'sandwich'

3) cas-ino[2]

    house.DIM

    'brothel'

4) telefon-ino

    telephone.DIM

    'cell phone'

Whereas the combination n+DIM in (1) simply refers to a smaller version of what the noun denotes, in (2)-(4) the diminutive morpheme derives a new denotation. As a result, (1) cannot be combined with an augmentative morpheme, because a concept cannot be small and big at the same time, as can be seen in (5). The diminutives in (2)-(4), in contrast, freely combine with an augmentative. This is illustrated in (6).

5) *nas-in-one   [Italian]

    nose-DIM-AUG

6) pan-in-one

    bread- DIM-AUG

'big sandwich'

The data above argue for two types of diminutivization: compositional and non-compositional diminutives.

   This paper argues that the distinction between the two diminutives can be captured in terms of syntactic structure. More specifically, we propose two different positions for diminutives. The first position we refer to as SizeP. It is situated in the functional domain of the noun, between the categorial head n° and the projection which hosts number marking (see De Belder 2011 for a detailed discussion of this head). Because it realizes functional material it is characterized by full productivity and compositionality. The second one directly merges with the root and realizes a lexical position below the category head, henceforth LexP.[3] Because of its low position, a diminutive in Lex° is oblivious to the nature of the category head above it. As such, it is not restricted to nouns: a verbal head may select the same configuration of LexP+√. In addition, because it does not realize a functional head, it may show lexical gaps and non-compositional meaning.

Summing up, we propose that diminutives can realize both functional and derivational heads cross-linguistically. Both positions are shown in (7).[4]

7)

DivP
Div'
Div°   SizeP
Size'
Size°   nP
n'
n°   LexP
Lex'
Lex°   √
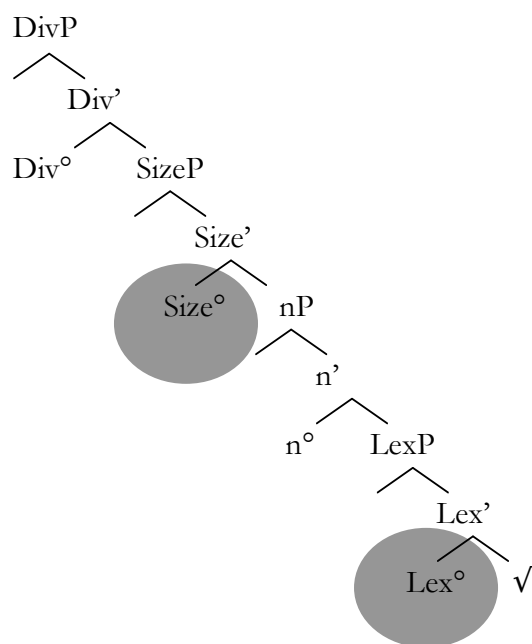
Data from Romance, Semitic, Germanic and Slavic languages will provide support for our proposal.

Our analysis is consistent with the syntactic approach to word-formation proposed by Embick & Noyer (2007), Harley & Noyer (1999) and Marantz (1997, 2001) among the most relevant ones. More precisely, we assume that the first category-assigning head demarcate a frontier between two different structural domains. The domain below that head is reserved to lexical meaning and thus non-compositionality, whereas the one above hosts functional projections, whose meanings cannot be idiosyncratic (see Borer this volume).

The paper is structured as follows. Section 2 discusses predictions which follow from the proposal. We first show that a language can formally distinguish between the two diminutives (§ 2.1). In section 2.2, it emerges that both positions can be filled simultaneously. Section 2.3 shows that the lower diminutive combines with

uncategorized material and that it does not determine the category of this combination, which can therefore be the base of either a noun or a verb. Finally, we discuss the prediction that some languages may have a derivational diminutive without having an inflectional one *or vice versa* (§ 2.4). After having discussed these predictions, we address some theoretical consequences of the proposal in section 3. The final section concludes and sums up.

6.2 Predictions on the behavior of Lex° and Size°

As mentioned above, this paper explores the hypothesis that diminutives may spell out two different syntactic positions, which we refer to as Lex° and Size°. If our hypothesis is correct, then the following four situations must be attested in some, if not all languages:

8) Predictions

   a. Different morphological strategies of diminutivization may correspond to the two different positions;

   b. Both positions may be filled simultaneously;

   c. The derivational diminutive is oblivious as to the category-head that selects it; and

   d. The two types of diminutives may exist independently of each other.

In what follows, Modern Hebrew (henceforth MH) will be shown to exemplify (8a). (8b) will be confirmed by data from various other languages. (8c) states the prediction that one and the same low diminutive formation is not necessarily restricted to a

single category: the same diminutive may yield nouns, verbs, adjectives and adverbs. Hebrew will again provide the relevant data. Finally, the prediction in (8d) will be confirmed by languages which lack one of the two positions.

6.2.1 Prediction #1: Different morphological strategies of diminutivization may correspond to the two different positions

The first logical consequence of our hypothesis concerns how Lex° and Size° are realized cross-linguistically. As we saw in the introduction for Italian *-in*, the same morpheme can be used to realize both positions. Still, by assuming two positions or domains, it is predicted that the form of the diminutive may reflect its position, i.e. that different behavior may be detected in the different domains with respect to form, too.

   This is indeed the case in Modern Hebrew (henceforth MH), which shows two different paths to diminutivization. MH uses either a concatenated morpheme *-on* or a reduplicated and discontinuous morpheme QTaLTVL, wherein the V is sometimes (though not always) the vowel of the corresponding noun.[5]

9)   Diminutivization in MH

	Noun		Temp.Dim		Concat.Dim	
a.	*xazir*	'pig'	*xazarzir*	'piglet'	*xazir-on*	'small pig'
b.	*bacal*	'onion'	*bcalcal*	'shallot'	*bcal-on*	'small onion'
c.	*xatul*	'cat'	*xataltul*	'kitten'	*xatul-on*	'small cat'

d. *kélev*	'dog'	*klavlav*	'puppy'	*kalb-on*	'small dog'
e. *géver*	'man'	*gvarvar*	'macho'	*gavr-on*	'small man'
f. *xamor*	'donkey'	**xamarmor*		*xamor-on*	'small donkey'

The interpretation of concatenative diminutives is strictly compositional. In addition, it is a fully productive morphological process. In the terms of the present study, this means that it is spelled out at the Size° position.

Conversely, templatic diminutives must be the product of Lex°, because of the following two properties. Firstly, their interpretation is not semantically predictable. They do not denote a smaller counterpart of the basic noun. For example, *xazarzir* is not simply a "small pig". Secondly, they are not morphologically productive.[6] The non-concatenative diminutive applies only to a closed group of roots, as is shown by the illicitness of **xamarmor*.[7]

If so, in MH we find a case for two positions for diminutives on both semantic and morphological grounds: two different morphological strategies exist that correspond to two distinct semantic effects. The first strategy, the templatic one, involves a low diminutive and may result in non-compositionality; the second strategy - concatenation - points to a high diminutive, and is always compositional.[8]

6.2.2 Prediction #2: Both positions may be filled simultaneously

If two positions exist for diminutives, one predicts that both positions could be filled simultaneously. In other words, one expects to find a compositional diminutive on top of a non-compositional one. This is indeed borne out in many languages. In the

introduction it was already pointed out that the lower diminutive may co-occur with an augmentative in Italian. The example is repeated in (10). In the same vein, the lower diminutive can co-occur with a higher, compositional diminutive in this language:

10) pan-in-one   [Italian]

bread- DIM_{LEX}-AUG_{SIZE}

'big sandwich'

11) pan-in-etto

bread- DIM_{LEX}-DIM_{SIZE}

'small sandwich'

Similar data are found in other languages:

12) stół   [Polish]

'table'

13) stoł-ek

table- DIM_{LEX}

'chair'

14) stół-ecz-ek

chair- DIM_{LEX}-DIM_{SIZE}

'small chair'

8

15) bolso   [Spanish]

    'bag'

16) bols-illo

    bag- DIM$_{LEX}$

    'pocket'

17) bols-ill-ito

    bag- DIM$_{LEX}$ -DIM$_{SIZE}$

    'small pocket'

18) kalb   [Tunisian Ar.]

    'dog'

19) klayb

    'puppy'

20) klayb-un

    puppy- DIM$_{SIZE}$

    'small/cute puppy'

21) xazir   [MH]

    'pig'

22) xazarzir

   pig- DIM_{LEX}

   'piglet'

23) xazarzir-on

   piglet- DIM_{SIZE}

   'small piglet'

The Polish and Spanish examples display a sequence of diminutive suffixes, of which the inner one gives rise to non-compositional meaning. In Tunisian Arabic and MH, non-concatenative morphology is used to derive a possibly non-compositional diminutive, and a strictly compositional diminutive is realized as a suffix. In conclusion, two diminutives may co-occur. If one assumes two different positions for diminutives, this is unsurprising.

   We conclude the discussion of this prediction by giving the structure for the MH double-diminutive *xazarziron* 'small piglet':

24) Structure of MH double diminutive

DivP
Div'
Div°   SizeP

xazarzir-on
'small piglet'

Size'
Size°
-on   nP
n'
n°   LexP
Lex'
Lex°   √
$CVCaCCV_{lex}C$ *xʒr*
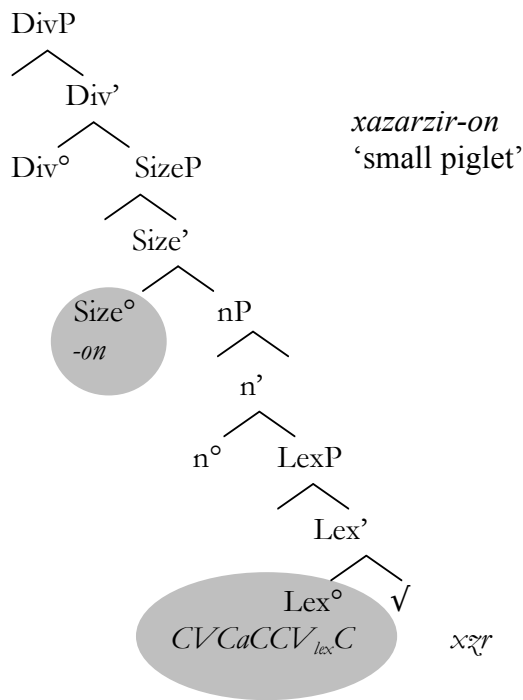
6.2.3 Prediction #3: The derivational diminutive is oblivious as to the category-head that selects it

LexP, as we have been using it here, is an elaboration on the root, in that it both precedes the category-assigning head and has no category of its own. Therefore, in order to prove the existence of such a position, we have to show that the combination of a root and a diminutive morpheme may serve as the base of more than one category. This section suggests that this is the case of reduplicated diminutives of the type Q-TL-L and Q-TQ-T in MH.

Before we can approach these diminutives, we must examine the general case of QiTeL verbs and nouns. MH has several verb types. The most productive type is called QiTeL (wherein by convention {Q,T,L} represent root consonants and {i,e} the vocalization of the unaffixed verb-stem). The majority of the verbs in this group have related nominal forms (also called action nouns) of the shape QiTuL:

25) QiTeL, QiTuL in MH

	Verb	Action noun	
a.	*xipes*	*xipus*	'search'
b.	*šitef*	*šituf*	'sharing'
c.	*nipec*	*nipuc*	'shattering'
d.	*kilef*	*kiluf*	'peeling'

We would like to propose that although QiTeL and QiTuL are certainly related, it is wrong to posit a relation of derivation in either direction. We make this claim for three empirical reasons. First, QiTuL nouns may have an idiosyncratic meaning, only vaguely related to that of the verb (26a,b). In fact, there may even be no existing verbal base (26c,d). Finally, a sub-group of QiTeL verbs has {o,e} vocalization (26e,f). Their corresponding nominal melody is still {i,u}, not *{o,u}. Thus, even the form of the QiTuL noun is not influenced by that of the verb.

Not all the verbs in (26) are vocalized alike. The fact that they nevertheless express the same verbal pattern can be established by the [e] vocalization of the prefix *m-* of the participle, which uniquely characterizes the pattern under discussion.
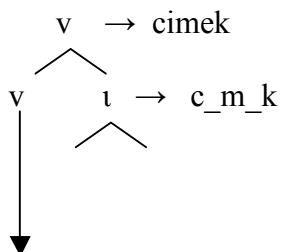
26) QiTuL is not derived from QiTeL

	Verb	*Participle*		*Action noun*	
a.	*miten*	*me-maten*	'moderate'	*mitun*	'moderation/**(economic) depression**'
b.	*cimek*	*me-camek*	'shrink'	*cimuk*	'shrinking/**raisin**'
c.	-	-		*sikuy*	'chance'[9]
d.	-	-		*biyuv*	'gutter'
e.	*roken*	*me-roken*	'empty'	*rikun*	'emptying' (**rokun*)
f.	*pocec*	*me-focec*	'explode'	*picuc*	'explosion' (**pocuc*)

We take the facts in (26) as sufficient evidence against a derivation of QiTuL directly from QiTeL (or vice versa). That said, it is clear that both forms are related through a common base. The relation is thus best described as follows: first the template is specified; the category is assigned only subsequently.
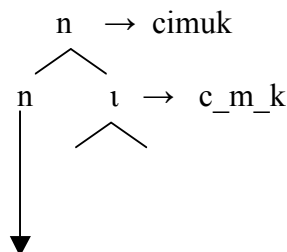
   This derivation is modeled in (27). First, the root is combined with an action head ɩ (Doron 2003) that inserts a template Q_T_L. The formal effect of ɩ is to syllabify the root by creating vocalic positions within it. However, this syllabified root is not yet vocalized; its vocalization will be determined only by the category head subsequently merged with it.

27) QiTeL and QiTuL are both derived from Q_T_L

a. *cimek* 'to shrink'

v → cimek
v   ɩ → c_m_k

b. *cimuk* 'shrinking/ raisin'

n → cimuk
n   ɩ → c_m_k

13

$$\begin{array}{ccc} \iota & \sqrt{\text{CMK}} & \\ \downarrow & & \\ \{i,e\} & \text{Q-T-L} & \end{array} \qquad\qquad \begin{array}{ccc} \iota & \sqrt{\text{CMK}} & \\ \downarrow & & \\ \{i,u\} & \text{Q-T-L} & \end{array}$$

In (27) we use Doron's diacritic ι as the morpheme that the Q_T_L template realizes. Notice, however, that the position is the same position that we have labeled LexP, namely between the root and the category-assigning head.

Having established that QiTeL and QiTuL are *not* derived from one another, we may return to diminutives. Another sub-group of QiTeL verbs is QiTLeL, i.e. verbs with a third reduplicated radical. Such verbs, which often carry a pluractional diminutive meaning (diminutives and pluractionals often coincide in verbal morphology[10]), are shown in (28). They may be related to a basic QaTaL-type verb (28a,c), or exist alongside an equi-radical QiTeL verb (28d,e). Other QiTLeL verbs may have no equivalent (28f,g). Regardless of origin, all the forms in (28) have both the verbal and the nominal versions.

28) QiTLeL verbs

related item		QiTLeL "diminutive"		
		verb	action noun	
a. *caxak*	'to laugh'	*cixkek*	*cixkuk*	'giggle'
b. *laxaš*	'to whisper'	*lixšeš*	*lixšuš*	'whisper quietly'
c. *kafac*	'to jump'	*kifcec*	*kifcuc*	'jump around'
d. *kiven*	'to aim/to direct'	*kivnen*	*kivnun*	'fine-tune'
e. *išer*	'permit (auth.)'	*išrer*	*išrur*	'allow bureaucratically'
f. -		*fikšeš*	*fikšuš*	'commit a small error'

g. - *širbev širbuv* 'carelessly insert, stick out'

We have chosen verbs of the type QiTLeL because some of such verbs have non-diminutive equivalents in QaTaL, and are thus contrastable to those. But, as discussed at length in Greenberg (2010), QiTeL contains many other diminutive (/pluractional) verbs of the fully reduplicated sub-group QiTQeT:
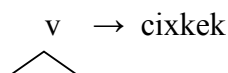
29) Diminutives in QiTQeT

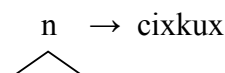| *QiTQeT*		*Related item*	
a. milmel	'mutter'	mila	'word'
b. nimnem	'doze'	nam	'sleep'
c. rixreax	'sniff'	reax	'odor'
d. pitpet	'babble'		

Now consider the tree representation for a QiTLeL diminutive. There is now one other morpheme to realize before we apply the category-head: the diminutive morpheme. This morpheme is called [dim$_1$] in (30); together with ι, it assigns the root with the special sub pattern of QiTeL, namely QiTLeL (we name it [dim$_1$] in order to distinguish it from the diminutive realized as QiTQeT). In this example, we regroup both ι and [dim$_1$] under the same label, LexP.
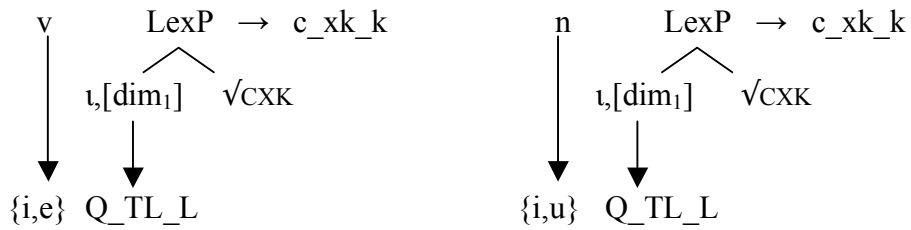
30) *cixkek* and *cixkuk* 'giggle'

a. *cixkek* 'to giggle'   b. *cixkuk* 'a giggle'

       v → cixkek   n → cixkux
      ⁀   ⁀

```
     v          LexP   →   c_xk_k              n          LexP   →   c_xk_k
     |          /\                             |          /\
     |     ɩ,[dim₁]   √CXK                     |     ɩ,[dim₁]   √CXK
     |          |                              |          |
     ↓          ↓                              ↓          ↓
   {i,e}     Q_TL_L                          {i,u}     Q_TL_L
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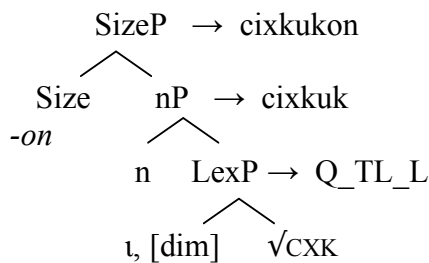
In (30) we have what our proposal predicted: a diminutive devoid of category, which can serve as the basis for items of more than one category (the same structures, with a different diminutive morpheme [dim_2], will yield the QiTQeT - QiTQuT pairs in 29).

Recall that MH also had a concatenative diminutive -*on*, which we suggested was exclusively SizeP material. The noun *cixkuk*, but not the verb *cixkek*, should be able to appear before *on*. This is indeed the case: *cixkukon* is presented in (31); the suffix -*on* is never found on any verbal form.

31) *cixkukon* 'a small giggle'

```
          SizeP   →   cixkukon
          /\
      Size      nP   →   cixkuk
      -on       /\
             n     LexP →  Q_TL_L
                   /\
             ɩ, [dim]   √CXK
```

Modern Hebrew, if so, exemplifies the lack of category in LexP. This, of course, should be demonstrable in other languages too.

Consider the examples from Italian in (32). The root √*fischi* in Italian has the approximate denotation of 'whistle'. Two nouns may be derived from it: one with a simple class marker *o* (32a) and the other with the same class marker preceded by an exponent *ett*, already familiar for its diminutive meaning (32b). Both nouns have

parallel verbs (32c,d). In the case of *fischio-fischiare*, it is hard to tell whether there is a derivational relation or not between the two. Nothing, in truth, indicates that there is one, and the relation might very well be one of a shared base, as we saw above for MH. The case of *fischietto-fischiettare* is clearer: the verb cannot be derived from the noun, because the semantic relation between the two is non-compositional.

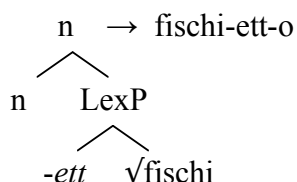32) LexP in Italian is category-less in Italian

a. fischi-o

whistle.sg.m

'whistle (the action)'

c. fischi-are

whistle-infinitive

'to whistle'

b. fischi-ett-o

whistle-DIM-sg.m

'whistle (the object)'

d. fischi-ett-are

whistle-DIM-infinitive

'to emit short whistles repeatedly

(not necessarily with a *fischietto*)'

Just like in the MH case, there is no relation of derivation between the noun *fischietto* and the verb *fischiettare*; rather, both are derived from a common base. We propose that this common base is a complex structure root+LexP.
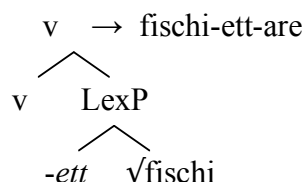
The relevant tree diagrams are in (33). In both *fischi-ett-o* and *fischi-ett-are*, the exponent *-ett-* occupies the low position. It merges with the root. As we saw for MH, this position has no category and is oblivious to the category head that will be assigned to it. If it is *n* we derive *fischi-ett-o*, but if it is *v* we derive *fischi-ett-are*. Neither is derived from the other.

33) *fischi-ett-o* vs. *fischi-ett-are*

a. *fischi-ett-o* 'whistle (object)' b. *fischi-ett-are* 'whistle (pluract.)'

```
        n  → fischi-ett-o              v  → fischi-ett-are
       / \                            / \
      n   LexP                       v   LexP
         /  \                           /  \
      -ett   √fischi                 -ett   √fischi
```

To conclude this section, we have seen that low diminutives (templatic in MH) occupy a position close to the root, which we call LexP.[11] This position is lower than the category-assigning head, and thus not marked for category. However, as we saw above (e.g. MH *-on*), the possibility of yielding more than one category is not shared by all diminutive markers. The existence of both types of diminutive markers is expected if diminutives can indeed occupy two positions: a pre-categorial, derivational one and a post-categorial, functional one.

6.2.4 Prediction #4: The two types of diminutives may exist independently of each other

Under the assumption that languages only select a subset of the features of Universal Grammar (Iatridou 1990), a Size° head (i.e. a head that hosts a productive diminutive) may not exist in some languages. That said, if the positions SizeP and LexP exist independently of one another, such languages may still allow for low diminutives.

This situation is found in English, for example. It is well known that English only contains some sporadic diminutives, such as *piglet*, *gosling* and *catkin* (Marchand 1960). Similar examples can be found in French and Egyptian Arabic. Both are languages without a productive diminutive, but some diminutive markers can be found in derivations. This is illustrated in (34)-(35) for French and in (36)-(37) for Egyptian Arabic, in which the diminutive is realized by means of non-concatenative mophology.

34) fill-ette   [French]

   girl.DIM$_{LEX}$

   'young girl'

35) livr-et

   book- DIM$_{LEX}$

   'small notebook'

36) bint   [Egyptian Ar.]

   'girl'

37) bannuuta

   girl-DIM$_{SIZE}$

   'young girl' (template: QaTTuuL)

We can conclude that the structurally low diminutive can exist in a given language, independently from the structurally high one. The question immediately arises

whether the opposite holds as well. Do some languages have only high diminutives, without having a low one? It is hard to provide this question with an answer from a methodological point of view: it is (nearly) impossible to prove that a given lexicon contains not a single example of a non-compositional diminutive. However, if such a case may exist, it might be found in a Creole language, in which a diminutive morphology has developed only recently. In Mauritian Creole, for example, there is a strategy for the formation of diminutives which originates in the adjective 'small'. The adjective is illustrated in (38), the newly formed diminutive in (39).

38) tipti   sez

    small   chair

    'small chair'

39) ti-sez

    chair.DIM

    'small chair'

It may well be the case that such languages with limited, recent morphology show the first reflexes of a high diminutive, while no derivational diminutive exists as of yet.[12]

    Summing up, the low and high diminutives may exist independently of one another. It is clear that the low diminutive occurs in languages in which no productive high diminutive exists. The other side of the coin is harder to prove. We suggested that the first occurrences of the high diminutive in Creole languages may not have a low counterpart.

6.3 Further issues

Most attempts at the formalization of diminutives have assumed a single locus for all diminutive morphology, which corresponds to what we have been calling the high diminutive (See e.g. Bachrach & Wagner 2007, Ott 2011, Stump 1993). Wiltschko & Steriopolo (2007) is an exception to that trend. In this paper, diminutives are also classified according to the level they attach to, which is either the root or a category head. As in the present study, the fact that a diminutive marker is shared by more than one category serves as proof for a low level of attachment. The authors further show that this state-of-affairs has an effect on the order of affixes, with some diminutives appearing below derivational morphology. The proposal and analysis of the present paper should be viewed as further confirmation for this two-level distinction.

   In addition to this distinction, Wiltchko & Steriopolo submit that a diminutive can be either a head or a modifier. If a diminutive marker imposes gender or conjugation class features on its base, it is a head; if these features of the base remain unaltered, the diminutive is an adjunct. This distinction is incompatible with our findings, because it does not coincide with the compositionality condition. Dutch high diminutives, for example, are completely compositional *and* change the gender of the noun they attach to, as shown below. The noun *ster* 'star' in (40) has common gender. This can be concluded from the fact that it selects the common definite article *de*. However, when it is diminutivized, it selects the neuter article *het*, as illustrated in (41).

40) de   ster

    the   star

    'the star'

41) het   ster-etje

    the   star-DIM$_{SIZE}$
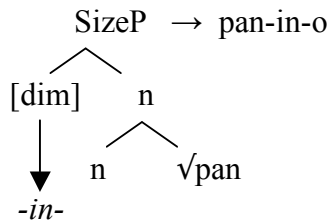
    'the small star'

Italian compositional diminutives completely overwrite the inflectional class information (i.e. theme vowel) of the base. For example, the diminutive of *nav-e* 'boat' is *nav-in-a*, not **nav-in-e*.[13] Pending further evidence, we do not see a justification for the head-modifier distinction.

We would like to point out a specific aspect of our proposal regarding the relation between syntactic information and exponence. As we have seen for Italian, *-in-* may be the realization of either SizeP (*nasino* 'small nose') or LexP (*panino* 'sandwich (lit. small bread)'). We would like to use this last example to clarify the status of LexP and show two different advantages it may have.
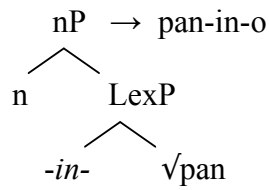
The first advantage is in modeling grammatical change. Consider how the non-compositional *panino* noun comes into being. First, we have a compositional diminutive noun (40a), with *-in-* realizing Size°. When this combination becomes grammaticalized, *-in-* loses its diminutive meaning. It is no longer interpreted as realizing the head Size°, and comes to occupy Lex°, below nP (40b):

42) Compositional vs. non-compositional *pan-in-o*

a. Pre-grammaticalized	b. Grammaticalized
pan-in-o 'small bread'	*pan-in-o* 'sandwich'

```
   SizeP  →  pan-in-o              nP  →  pan-in-o
    /\                              /\
[dim]   n                         n    LexP
  |    /\                              /\
  |   n   √pan                      -in-   √pan
-in-
```

Crucially, the item in (40b) is still morphologically decomposable: this is only possible if a low position such as Lex° is available for *-in-* to move into.

It may be concluded from the relative independence of exponent and position that the former is a sign similar to the root. Like a root, it does not have a category or a single fixed position. Lowenstamm (this volume) accords such morphemes the status of a bound *root* (see also De Belder 2011). Our analysis conforms to such a view.

The second advantage of LexP is that it is not exclusively reserved for diminutives. Indeed, as we have said above, LexP is more generally a position for root augmentation: other morphemes may also be represented as hosted by LexP. We have argued for this to be the case in MH, where an action head ι was also included under the label LexP. We conclude this section of the paper with a similar example from Italian:

43) Derivational LexP

a. bors-a   [Italian]

   handbag-f.sg.

   'handbag'

b. bors-eggi-o

   handbag-Lex°-m.sg.

   'the act of mugging'

c. bors-eggi-are

   handbag-Lex°-infinitive

   'to mug (not just a *borsa*)'

Both the noun *borseggio* and the verb *borseggiare* (41c) are attested. We propose that morphological material (in the example above: *-eggi-*) which is not the expression of any type of diminutivization, is best analyzed as the being in a position Lex°, merging directly with the root below the categorial head. We leave for future work the question of interplay between the different exponents that may occupy the Lex° position.

6.4 Conclusion

On the basis of Italian data, we proposed that two different projections (Lex° and Size°) should be postulated to host what has always been called "diminutive" morphology.

   We then showed that the four predictions which followed from our proposal are all correct, using data drawn mainly - but not only - from Modern Hebrew and Italian. We illustrated that the low and high positions may correspond to different morphological strategies, that both positions can be filled simultaneously, that the low diminutive is oblivious to the category with which it merges and that a language may have one position, but not the other.

After a short discussion of further implications of the proposal, we concluded that LexP is an independent projection which is merged with the root below the categorial node.

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[1] We take compositionality and non-compositionality to be the equivalent of "semantic predictability" and "semantic unpredictability", respectively. Cf. Bertinetto (1995) for a slightly different use of these terms in morphology.

[2] Cf. Pianigiani (1926).

[3] A reviewer raises an alternative, according to which the low DIM is not a head, but rather a modifier adjoined to the root, as in Wiltschko & Steriopolo (2007). However, note that *-in* imposes its formal features to the base: the item *pane* 'bread' has the theme vowel *-e*, whereas its diminutive *panino* 'sandwich' has *-o* (**pano, *panine*). In Italian, final vowels are the exponents of gender and number features. In addition, low *-in* can change the gender of the base (as German *-chen*): *donna* woman-F-sg 'woman' vs. *donnina* woman-DIM-F-sg and *donnino* woman-DIM-M-sg. These facts point to the head status of such an item. Therefore lexical material such as *-in-* in *panino* 'sandwich' can be treated as a head root which projects √P, as in Lowenstamm's (this volume) account of English suffixes. An alternative is to assume a low *position*, which we label Lex^o. The differences between the two approaches are beyond the scope of this paper.

[4] Our proposal relies on two previous studies: De Belder (2008) proposes the projection SizeP to introduce diminutive inflection on nouns, whereas Lampitelli (2010) proposes that Italian diminutives are introduced by a projection between nP and √.

[5] Surface mismatches between V in QTaLTVL and a corresponding noun concern only segholates (cf. 9d and 9e). It has been shown on independent grounds in Faust (2011) that these nouns involve an underlying /a/ between the two last consonants, which would explain the vowel in their respective templatic diminutive.

[6] By "not productive" we mean that no new words are formed with this strategy. In other words, it is impossible to predict whether an item will be eligible for this strategy. This situation stands in sharp contrast to the productive diminutive strategy of -on suffixation, which in principle is possible for any noun in the language. For a discussion of productivity with emphasis on MH, see Bolozki (1999).

[7] Unlike Hebrew, Italian -in does both jobs with the same root: *casino* 'brothel', *casina* 'small house' (cf. *casa* 'house').

[8] See Faust (2011) and Faust & Lampitelli (2012) for further discussion of the construction of templates by templatic morphemes situated low in the structure.

[9] We take it that form reflects structure: even though these nouns do not have corresponding verbs, we assume that they have to share a structure with QiTuL nouns that do.

[10] Literature on pluractionals is vast since Cusic (1981). Tovena (2010, 2011) addresses some related issues, namely on Italian verbal diminutivization from a semantic point of view.

[11] Other accounts place diacritics on roots (cf. Embick & Halle 2005) or let L-nodes select for types of roots (Acquaviva 2008).

[12] That said, since a low diminutive is only optionally non-compositional, it is hard to prove on the basis of semantics alone that a language like Mauritian Creole doesn't have such low diminutives.

[13] Italian diminutives can marginally change the gender of the basic noun, i.e. *donna* 'woman.F-sg' and *donnone* 'ugly woman.M-sg'.