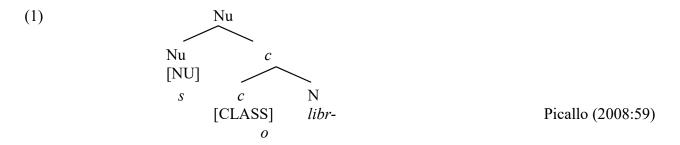
#### Evaluative suffixes in Italian.

### 1. A framework for the internal structure of N.

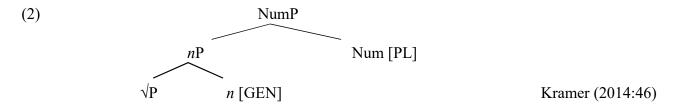
This article, placed within the minimalist framework of Chomsky (1995, 2000, 2001, 2013), adopts a morpheme-based approach and assumes that the same basic computational mechanisms underlie syntax and morphology. In this introductory section we provide an overview of recent works concerned with the internal syntax of N, specifically with its inflectional structure. Though our empirical focus is on evaluative suffixes, hence on what would be traditionally called derivational morphology, one of our leading conclusions will be that the nominal classification system (for notions such as size, individual vs. aggregate, gender, etc.) straddles the traditional derivation/inflection distinction. Evaluatives externalize this classification system as does gender/number inflectional morphology. The background assumptions on inflections introduced here will allow us to proceed with our structural analyses in later sections. The literature on evaluatives will be introduced in the body of the paper.

In our analysis, morphological structure is the result of combining lexical components by a syntactic Merge operation. This is a well recognizable postulate of Distributed Morphology (Halle & Marantz 1993). We differ from DM in assuming that there is no separate Morphological Structure component capable of rearranging the syntax prior to vocabulary insertion. In other words, the syntax projects from actual lexical items. This stance is generally deemed to be too strong - but see Kayne 2010, Manzini & Savoia (2007, 2011a, in press) for arguments that it is quite sufficient to account for (considerable portions of) the morphosyntax of Romance languages. The morphemic analysis of Romance implies a first component which is a root; following Marantz (1997), we may think of the root  $\sqrt{}$  as category-less. Next to the root we find different kinds of morphemes, including derivational and inflectional ones. Inflectional morphemes generally follow derivational suffixes. The model of reference for much discussion is represented by the tree in (1), where N (the root) and the functional heads for Class (i.e. gender) and Number are built on top of it. This tree is conceived as syntactic - nevertheless the internal morphological build-up of, say, Spanish *libr-o-s* ('book-masc-pl') reflects (in a mirror image) the syntactic organization in (1).



In a number of works more or less contemporary to Picallo (2008) (see Kihm 2005, Ferrari Bridgers 2008), the move is made to identify Marantz's (1997) n, specifically in the Romance languages, with the vocalic inflectional class/gender vowel immediately following the stem. The

most recent accounts of nominal gender and number inflections do not modify this overall picture. For Déchaine et al. (2014), whose empirical basis is the Bantu language Shona, both notions of countability (the traditional number, Borer 2005) and sortal properties (including the traditional gender) are part of the broadly understood Classifier system of natural languages. Déchaine et al. (2014) assume that the Marantzian n nominalizes the root prior to the merger of Class categories. By contrast, the idea that n and the Class categories are effectively one and the same thing is accepted by Kramer (2014), who argues for trees of the type in (2). These hardly differ from the older proposal by Picallo, except in that gender features are associated with the nominalizing n category.



Summarizing, there is considerable consensus on the idea that the inner core of an N(P) is represented by a non-categorized root. This is immediately dominated by functional layers which embed the root into a nominal classification system. The properties that are directly relevant for Romance or generally Indo-European languages, are gender and countability (the latter often rendered as a Num category). The literature splits as to whether the nominalization of the category-less root is prior to its classification (as seems to be assumed by Déchaine et al.) or if it is the classification system that realizes n (most recently Kramer 2014, 2015).

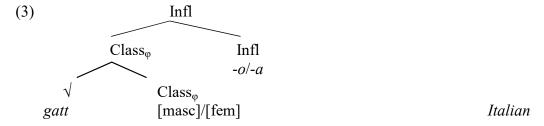
Several issues remain open – dealt with in various forms in the literature quoted. One problem has to do with the correct coupling of roots with their gender – another with the coupling of root-gender pairs with their appropriate inflection. For Kramer (2015), the declension class diacritics [I], [II], [III] in Spanish are first matched with large sets of roots and then interpreted as vocalic endings, namely -a for [II], etc. The rule that inserts the class diacritics is sensitive to the context determined by sets of roots: insert -e in the context  $\sqrt{padr}$ ,  $\sqrt{madr}$ , etc; in other words, we are in the presence of a selectional restriction. A similar approach is suggested by Acquaviva (2009: 5), namely that 'morphological and semantic information can be dependent on the choice of a root without being encoded on the root itself'. To say 'a noun has gender X', for instance, means in this perspective 'a root Vocabulary item is licensed in the context of [n] with gender X'. In other words, the standard syntactic notion of selectional restriction is powerful enough to encode the fact that a certain Class content is associated with a certain lexical base and not with others.

Next, the gender with respect to which N agrees is not predictable from the root – occasionally even when sexed referents are involved. Thus Italian *la guida* 'the guide' is feminine even when referring to a male guide – and Italian *il contralto* is masculine even when referring to a female singer (as it normally does). On the other hand, at least some Class contents are determined directly by the root (see Italian *donna* 'woman', feminine, or *marito* 'husband', masculine). What is more some (root, Class) combinations are interpreted compositionally, as for instance *gatto*, *gatta* 

'cat(m), cat(f)'. There is also the matter of gender contributing singulative or plurative properties in Semitic (Fassi Fehri 2016) - which in fact may have parallels in Indo-European (see Ferrari Bridgers 2008, Crisma et al. 2011 for suggestions of gender denoting 'size'). Theorists generally do not question the fact that Class/n may sometimes be interpreted and sometimes not, but simply seek to model this fact. For Kramer (2015), the difference is to be expressed via the [interpretable] feature. For Steriopolo and Wiltschko (2010), Fathi and Lowenstamm (2015) it is a matter of where gender is embedded in the structure. Yet given general ideas of simplicity, we are surprised to find that a certain category is sometimes interpreted and sometime not in the same structure – which is quite different from the interpretable/uninterpretable alternations of standard minimalist theory.

In what follows, we will make certain decision as to potentially controversial issues. We reject the idea that Class identifies with Marantz's (1997) nominalizing category n (Kihm 2005, Ferrari Bridgers 2008, Kramer 2014, 2015) – though otherwise a constructionist view of the category NP as ClassP/NumP is implicit in (2). Following Higginbotham (1985), we interpret the root as a predicate. The predicate represented by the root in turn has one open argument place (the R-role, Williams 1994), which is ultimately bound by a D/Q operator (Higginbotham 1985). Gender and number specifications apply to the argument x open at the predicate. In other words, they operate as a predicates in turn, restricting the content of the argumental variable ultimately bound by a Determiner or Quantifier. Similarly, Percus (2011) entertains the possibility of a conjunctive semantics for the (root, gender) pair.

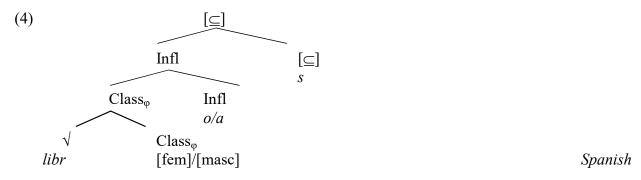
As a first illustration of the structures that we will be using throughout, we exemplify Italian gatt-o 'he-cat' and gatt-a 'she-cat' in (3). In (3) the property 'cat' is compatible with both a feminine and a masculine Class, depending on the sex denoted. We tentatively assign the inflectional vowel of Italian to an Infl Position which embeds the root and the Class nodes. More precisely, we will indicate the gender specification like [fem] and [masc] as  $Class_{\phi}$ , where  $\phi$  recalls the traditional label  $\phi$ -features.



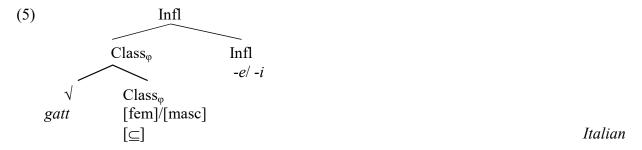
We assume that the best mechanism to insure the correct coupling of nominal roots with gender is via selection. Hence, we agree with Kayne (2010) that the most economical means to express inflectional classes is via selection of the root by the class vowel, more precisely by the inflectional class vowels. In the framework that we are suggesting, the three inflectional class vowels in Italian, namely -a, -o-, -e cover both masculine and feminine and partition the roots among them. Thus -e selects for  $\sqrt{madr}$ , among many other roots, while -a selects for  $\sqrt{mamm}$ -, again among many other roots, in spite of having the same gender and essentially the same meaning. A different problem is the sexed interpretation of gatt-o/gatt-a. A possible answer is to

assume that the sex interpretation of [fem] and [masc] is derived at the Conceptual-Intentional interface level, that is, it is a pragmatic effect due to knowledge of the world. This can explain the variable and uncertain nature of this interpretation, not only in the case of [masc], but also of [fem], as for example *tigr-e* 'tiger', *formic-a* 'ant', *balen-a* 'whale', etc.

Given (3), if we identify the vocalic inflection of Spanish with the Infl position, it is evident that the specialized -s segment for plurality in Spanish must occur on top of Infl itself, as schematized for *libros/libras* 'books/pounds' in (4). Following Manzini & Savoia (2011a, 2011b) we formalize the content of the plural node as ⊆; this says that the denotatum of the predicate can be partitioned into subsets.



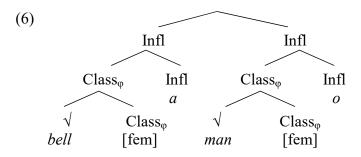
Differently from languages like Spanish, endowed with an independent lexicalization for the plural, namely -s, Italian plurals are obtained by a change of the inflection. In these terms, we may suppose that the plural of gatto/gatta in (3), namely gatt-i 'cats', gatt-e 'she-cats' has the structure in (5).



Since we have rejected inflectional class diacritics, it is important to note that plurals cannot be predicted from singulars. Thus feminines inflected by -a can have an -e plural, as in (6), but also an -i plural (e.g. al-i 'wings') - vice versa -i plurals correspond to -e, -a, -o singulars. D'Achille & Thornton (2003) argue that taking into account singular and plurals, Italian should not be characterized in terms of the traditional [I]-[III] classes, but by VII different classes (or VI, considering that class VII is obsolete). Thus class diacritics could be reintroduced, but much enriched. Alternatively, one could take the same approach to plurals as to singular and simply list which  $[\subseteq]$  morpheme selects which root.

Finally, in disentangling gender (and number) from inflectional class, the diagnostics that plays the most important role is Agree - since agreement between the noun, its modifiers, and it determiners is sensitive to gender and number (as well as case), but not to inflectional class. The

matching (agreement) of genders between the adjective *bella* 'that.fem' and the noun *mano* 'hand.fem' in (6) means that the inflections -a, -o can individuate the same argument, introduced by the root and restricted by Class specifications.



In the minimalist framework (Chomsky 2000, 2001), agreement processes are standardly associated with the rule of Agree - which however is conceived so as to account for one-to-one agreement in the sentential domain. In what follows, we will keep the assumption that Agree also applies within DPs. However we will avoid attributing interpretable/uninterpretable, valued/unvalued status to any of the categories inside DP. We will simply assume that given two elements in a c-command configuration, the higher is the Probe and the lower the Goal. Everything else proceeds as in the standard definition of Agree, by Minimal Search and Match of the relevant features. We will assume that what impels Agree to apply is the necessity of creating equivalence classes of phifeature bundles denoting a single referent (the equivalent of uninterpretable feature deletion).

#### 2. Inflection and derivation.

As to the relation between inflectional and derivational morphology, essentially two solutions emerge, namely approaches that assign a different status to derivation and inflection or approaches that unify them in a single morphological component. The literature supporting the Split Morphology Hypothesis (Anderson 1982, Scalise 1986) is based on a number of formal and distributional criteria that could confirm a different status for inflection, associated to or incorporated into syntactic operations, and for derivation, internal to the lexicon. Borer (2005: 53) concludes that 'Morpho-phonologically speaking, inflection is every bit as erratic as derivation, involving listed relations between stems and marking, accidental gaps, and stem changes which do not yield easily to a characterization in terms of compositional morphology'. This justifies her idea that inflection is more adequately treated by a Word and Paradigm model. On the contrary derivation seems to be interpretable in terms of a compositional hierarchical process.

However, as Stump (2001) notes, these criteria are too weak and uncertain to bear out this differentiation. In general, in Romance languages, inflectional morphemes can introduce properties more standardly introduced by derivational tools, for example category change, size properties. Conversely, derivational morphemes can introduce types of content generally associated with inflection, e.g. plural, mass specification, etc. In fact, models unifying derivation and inflection

have been proposed by Williams 1981, Lieber 1980, but as models operating inside the morphology, without interaction with syntax. As we have already mentioned, our approach takes some fundamental tenets of DM, assuming that morphological composition of the word is essentially a process operating on syntactic objects. More precisely, in keeping with Berwick & Chomsky (2011), morphology can be understood as the linguistic process that converts 'internal syntactic objects to the entities accessible to the sensorimotor system'. In this perspective, inflection and derivation do not seem to meaningfully differentiate.

Both inflection and derivation introduce comparable semantic specifications, i.e. feminine/masculine/sexed (gender), count/mass, aggregate/collective/plurative/singulative¹ (number), size/affective (evaluative), animacy/inanimacy, imageability, etc. Different linguistic families can lexicalize these properties in different ways; specifically, in Indo-European languages, inflectional morphology that closes the noun on the right, cuts out a sub-set of meanings, i.e. gender, number, mass, collective, singulative, while other meanings are left in charge of the morphemes which occur between the root and the inflectional ending.

Our approach, as we have seen in section 1, assumes that morphemes merge with the root, constructing a compositional content of the word. Besides, a corollary of our hypothesis is that all and only the content lexicalized by formal elements present in the word, i.e. root and other morphemes, is interpreted at Conceptual-Intentional level. Pursuing a minimalist line of analysis, Chomsky (2013) proposes a revision of Phrase Structure Grammar assuming that the order of constituents depends on a third factor principle operating in the process of externalization at the sensorimotor interface (Chomsky 2013). More precisely, the computational operation that forms the syntactic objects, namely Merge, yields non-ordered couples (sets) of the type  $\{x, y\}$ . According to Chomsky (1995), the operation Merge projects either x or y; the projected element is the head and the label of the syntactic object, as in  $\{x\{x, y\}\}$ . As regards inflectional/derivational morphology we find both possible orders, namely {Aff{Aff,root}}, with morphological exponents in initial position, as in Bantu Languages, or {{Aff,root} Aff}, with inflection in final position, as in Romance and generally in Indo-European languages. A crucial aspect, apparently independent of order, is that inflection is in a position where it closes the predicative stem (including its Class gender and other restrictors) - a well-known typological generalization (Bybee 1985). Thus in Indo-European, evaluative morphemes are inserted between the root and the inflectional endings in the noun.

Before entering into the question of evaluative morphology, consider the data in (7), concerning the derivational suffix *-ess-* that in Italian converts a masculine to a feminine (Thornton 2005). We are interested in the fact that a derivational morpheme has the same effect as the inflection in cases such as *gatt-o/gatt-a* in (3).<sup>2</sup>

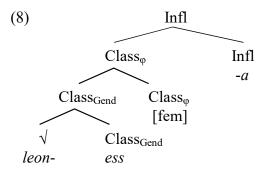
(7) a. leon-e vs. leon-ess-a

<sup>&</sup>lt;sup>1</sup> On the notion of singulative and its implementation in different languages see Acquaviva (2015). A clear characterization of this category is provided in Fassi Fehri (2016).

<sup>&</sup>lt;sup>2</sup> In the glosses, f = feminine, m = masculine, pl = plural, sg = singular, A = plural -a inflection.

	lion-m	lion-fem-f
b.	avvocat-o	avvocat-ess-a
	lawyer-m	lawyer-fem-f

The data in (7) show that the predicates 'lion' or 'lawyer' are compatible with both a feminine and a masculine Class, depending on the sex denoted. Besides, in (7), -ess- is followed by the inflectional ending -a exactly as a feminine root, like gatt-a in (3). In (3) the inflectional vowel of Italian is assigned to an Infl position which embeds both the root and the Class node. If we extend this analysis to feminines in (7), we must admit that the Gender Class can have a specialized lexicalization as in (8), i.e. the morpheme -ess-, that we assign to the Class<sub>Gend.</sub> node. We may think that the selection of [fem] in Class<sub> $\varphi$ </sub> is imposed by this element.



As shown in (8), gender can be expressed by means of a derivational-like suffix which introduces the content [fem]. It is worth noting that not only gender but also number can receive a non-inflectional lexicalization. A case study is provided by the Guardiaregia (Molise) dialect in (9a,b), where, as in a number Central and Southern Italian dialects, a specialized plural -a occurs for the aggregate interpretation. Furthermore, in this dialect the plural suffix  $-\partial r^{-3}$  is inserted inbetween the root and the plural inflection -a, at least in a sub-set of lexical bases as in (9a). Hence, the suffix  $-\partial r^{-}$  is a plural, in turn restricted to aggregate meanings.

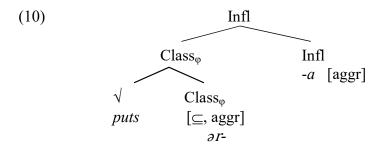
(9)	a.	pu:ts-ə	'wrist' /	'pots-ər-a	'wrists'
		ort-ə	'garden' /	'ɔrt-ər-a	'gardens'
		kur'teλλ-e	'knife' /	kur'tɛll-ər-a	'knives'
	b.	vratts-ə	'arm' /	vratts-a	'arms'
		di:t-ə	'finger' /	det-a	'fingers'
		o:v-ə	'egg' /	ov-a	'eggs'

Guardiaregia

In treating the plural -a in Romance, Manzini and Savoia (submitted), assume that -a plurals correspond to a set whose members are rather more like parts of whole than like individuated atoms (cf. Acquaviva's (2008) notion of "weakly differentiat parts"), for instance the body part Ns in (9b). Therefore, the -a plural can be differentiated from the -i plural by associating with the former the

<sup>&</sup>lt;sup>3</sup> This plural suffix is documented in Old Italian documents, including Tuscan scripts (see Rohlfs 1968 [1949]: § 370).

property [aggregate], and with the latter the property [ $\subseteq$ ], which specifies the normal plural, identifiable with the relation of inclusion (part-whole), as assumed in the discussion concerning (4)-(5). In the case of the plural  $-\partial r - a$  in (9a) the number content has a twofold lexicalization, one by the inflection -a and one by the suffix  $-\partial r$ - associated to Class<sub> $\varphi$ </sub>, as in the representation in (10).



In short, the same content can be expressed by derivational suffixes and by inflection. In (9), a gender specification is involved. In (10), number is involved. In both instances it is the inflection that normally lexicalizes these contents, but nothing prevents what is called 'derivation' from lexicalizing the same properties. This conclusion agrees with what we will see for the evaluative suffixes, that share crucial semantic and structural properties with inflection, although they may be considered under the heading of derivational morphology.

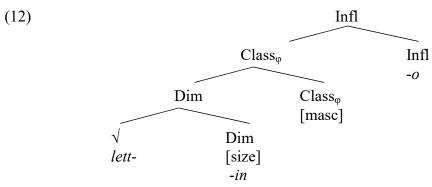
### 3. Evaluative morphology in Italian.

In Italian the evaluative morphology includes a large set of suffixes. We will concentrate on the diminutives (Dim) -in-, -uzz-, the endearing (End) -ett-, -ell-, the augmentative (Aug) -on- and the pejoratives (Pej) -acci-, -ucci-. The morphological and distributional properties of these elements have been investigated in the descriptive literature (Rainer 1990, Merlini Barbaresi 2004). Scalise (1988) points out some of the restrictions that characterize the occurrence of evaluatives, such as the possibility of recursive embedding (e.g. -ett-in- -End-Dim-), the external position with respect to the other suffixes, the internal position with respect to the inflection, some macro-semantic effects, etc.

Before going into the different questions posed by evaluative forms, the semantic and morpho-syntactic nature of these morphemes must be defined. Evaluatives express size properties or grade of individuals with reference to physical or culturally-determined properties, as in (11).

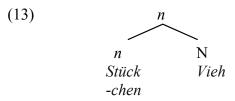
Evaluatives can be understood as predicates that contribute to restricting the argumental variable of the noun root, as proposed by Percus (2011) for gender (section 1). In other words, we extend the analysis of adjectives in Parsons (1979) to the evaluatives. For Parsons (1979:157), adjectives in the

attributive position are 'operators on the predicate contributed by the noun ... these operators can be further analysed in terms of conjunction with a predicate', whereby 'red box' can be translated as 'x is red and a box'. In this perspective, a strict relation between evaluatives and adjectives is predicted to show up – as we will see it does. In what follows, we will associate the evaluative morphemes with different Class nodes, as illustrated in (12) for the diminutive -in-, exemplified in (11). In (12) Dim is to be construed as DimClass, and so on in the case of the other evaluative class nodes.

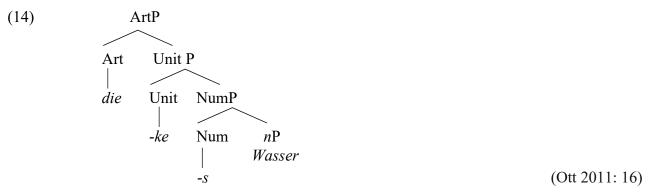


### 3.1. Singulative properties

Recent proposals in the generative framework aim to relate the morphemic status of evaluatives to the discussion on the internal structure of the noun, also in a cross-linguistic perspective, as in Wiltschko (2006), Wiltschko & Steriopolo (2007), Ott (2011), de Belder et al. (2014), Cinque (2007, 2015). Wiltschko (2006) assumes that diminutive suffixes are 'light nouns', and specifically that they correspond to numeral classifiers. Wiltschko's idea is that they are equivalent to German words like *Stück* 'piece', *Blatt* 'sheet', etc. which change mass nouns into count nouns and with which diminutives are in complementary distribution - e.g. *12 Stück Vieh* '12 pieces of cattle' analysed in (13).



Ott (2011), based on Wiltschko (2006), proposes a more detailed structure whereby the dimunitives are analysed as 'numeral classifiers', as illustrated in (14) for *Wässer-ke-s* 'the-water-Dim-PL' in Low Rhenish German dialect.



Both authors converge in identifying the diminutive suffix with a lexicalization of a nominal head independent of the root, *n* in Wiltschko and *Unit* in Ott. We adopt this insight, assuming that the diminutive suffix -*in*- corresponds to something as 'a small/ little individual' to which the properties introduced by the root apply. As we just saw (Wiltschko 2006, Ott 2011 for German; see also Déchaine et al. 2014 on Bantu) evaluatives, precisely diminutives, are able to change mass nouns into count nouns.

The singulative effect of diminutives is at work in Italian, as exemplified in (15), where diminutives, in (15b-b"), turn mass nouns or adjectives in (15a-a") into count nouns. The data in (15) show that: (i) the mass-count alternation is triggered by the evaluative, actually generally by diminutives -in- and possibly -uzz-; (ii) diminutives can combine in suffix sequences like sonn-ell-in-o 'nap'; (iii) the diminutive -in- suffix gives rise to masculine derived forms independently of the class gender of the root, as in (15a'-b') (see also Acquaviva 2015). It is noteworthy that the derived forms in (15a',b') are lexicalized, in the sense that the count interpretation is not immediately predictable from its mass counterpart. In (15c-c') we exemplify some cases only apparently similar to the ones in (15a-a',b-b'). In fact, the simple forms in (15c) admit both the mass interpretation and the count one, as illustrated in (15c"). The only restriction in effect is that combining with diminutives implies the count reading alone.

a.	zuccher-o	'sugar	,	a'.	zuccher-in-o	'sugary'
	piomb-o	'lead'			piomb-in-o	'sinker'
	sonn-o	'sleep'	•		sonn-ell-in-o	'nap'
b.	crem-a	'cream	ı'	b'.	crem-in-o	'cream chocolate count'
	cer-a	'wax'			cer-in-o	'wax match'
	cioccolat-a	'choco	late'		cioccolat-in-o	'chocolate count'
	frutt-a	'fruit'			frutt-in-o	'jam stick'
	paglia	'straw	,		pagli-uzz-a	'blade of straw'
c.	legn-o	ʻwood	,	c'.	legn-ett-o	'stick of wood'
	spag-o	'twine	,		spagh-ett-o	'a single spaghetti strand'
	gess-o	'chalk	,		gess-ett-o	'piece of chalk'
	bronz-o	'bronz	e'		bronz-ett-o	'statuette in bronze'
	gran-o	'grain'	,		gran-ell-o	'grain count'
c".	un legno	/	molto	legno		
	'a piece of wo	ood'/	'much	wood'		
	un grano (di s	ale)/	molto	grano		
	'a grain of sal	t'/	'much	wheat'		
	b. с.	piomb-o sonn-o  b. crem-a cer-a cioccolat-a frutt-a paglia c. legn-o spag-o gess-o bronz-o gran-o c". un legno 'a piece of wo un grano (di s	piomb-o 'lead' sonn-o 'sleep' b. crem-a 'cream cer-a 'wax' cioccolat-a 'chocco frutt-a 'fruit' paglia 'straw c. legn-o 'wood spag-o 'twine gess-o 'chalk bronz-o 'bronz gran-o 'grain'	piomb-o 'lead' sonn-o 'sleep'  b. crem-a 'cream' cer-a 'wax' cioccolat-a 'chocolate' frutt-a 'fruit' paglia 'straw'  c. legn-o 'wood' spag-o 'twine' gess-o 'chalk' bronz-o 'bronze' gran-o 'grain'  c". un legno / molto 'a piece of wood' / 'much un grano (di sale) / molto	piomb-o 'lead' sonn-o 'sleep' b. crem-a 'cream' b'. cer-a 'wax' cioccolat-a 'chocolate' frutt-a 'fruit' paglia 'straw' c. legn-o 'wood' c'. spag-o 'twine' gess-o 'chalk' bronz-o 'bronze' gran-o 'grain' c". un legno / molto legno 'a piece of wood' / 'much wood' un grano (di sale) / molto grano	piomb-o 'lead' piomb-in-o sonn-o 'sleep' sonn-ell-in-o  b. crem-a 'cream' b'. crem-in-o cer-a 'wax' cer-in-o cioccolat-a 'chocolate' cioccolat-in-o frutt-a 'fruit' frutt-in-o paglia 'straw' pagli-uzz-a  c. legn-o 'wood' c'. legn-ett-o spag-o 'twine' spagh-ett-o gess-o 'chalk' gess-ett-o bronz-o 'bronze' bronz-ett-o gran-o 'grain' gran-ell-o  c". un legno / molto legno 'a piece of wood' / 'much wood' un grano (di sale) / molto grano

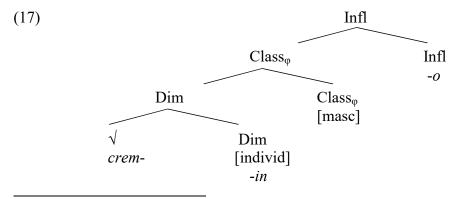
Evaluatives, including diminutives, can also freely combine with all mass nouns, giving rise to a predictable (compositional) 'light type/ kind' interpretation, as exemplified in (16a-a') with

both lexicalised and not lexicalised forms<sup>4</sup>. As to *rossetto* in (16b'), note that the form *rossetto* itself allows two interpretations, mass and count, as we can expect from applying an evaluative to an adjectival predicate, *per se* not associated to an individual argument.

(16)	a.	vin-o	'wine'	a'.	vin-ell-o	'light type of wine'
		lan-a	'wool'		lan-in/ucci-a	'light/cheap wool'
		crem-a	'cream'		crem-in-a	'light cream'
		acqu-a	'water'		acqu-er-ugi-ol-a	'drizzle'
		oli-o	'oil'		oli-ucci-o	'low quality oil'
		pioggi-a	'rain'		piogg-er-ell-a	'drizzle'
	b.	ross-o	'red'	b'.	ross-ett-o	'lipstick mass/count'

We first focus on the cases in (15), which show that the diminutive -*in*- is endowed with the interpretive specification of 'individual'. More precisely, we can think that diminutives include a more general content introducing a 'size' specification that, under the right pragmatic conditions, may individuate pieces of a continuum or of a mass, i.e. singletons.

This effect is in keeping with the semantic characterization of the 'size' adjectives, that is the adjectives that specify size properties and that can be identified with the semantic import of the diminutives. Bunt (1979: 270) refers to the *homogeneous combination principle* to explain the fact that 'count adjectives like "large", "small", "heavy" that indicate size properties of individual physical objects, when combined with a mass noun, induce the count interpretation. Essentially, size adjectives have the same interpretive effect as diminutives, behaving as singulatives. The analysis in Bunt (1979) bears out our proposal, that size specifications elements, namely diminutives as well as size adjectives, impose on their argument the properties of 'individual physical object'. (17) illustrates an example in which -in- lexicalizes these individual properties. Note that the diminutive selects [masc], suggesting that suffixes really behave like noun roots insofar as they can autonomously introduce gender and other classifying properties (cf. also Acquaviva 2015). We may expect this in view of the fact that evaluative, gender and other suffixes can combine in recursive sequences.



<sup>&</sup>lt;sup>4</sup> An example as *acquerugiola* 'drizzle' is by now fixed in the lexicon, differently from *lanuccia* 'wool of low quality', that is a free combination.

## 3.2 The interaction of singulative and gender/class properties

(10)

The singulative, individuating content of -in- emerges also in deverbal evaluatives, as the examples in (18a) illustrate. Inserting a diminutive on the verbal root generates an individual interpretation, more precisely specifies properties associated to an individual referent. The verbal root in turn contributes (a part of) its semantic content; the resulting noun is never an event nominal, more like an instrument -er formation in English (e.g. strainer 'instrument with which one strains'), or an agent, like in (18a'). (18b) suggests that all evaluatives, for instance -ell-, when merged with a verbal base, imply reference to an individual.

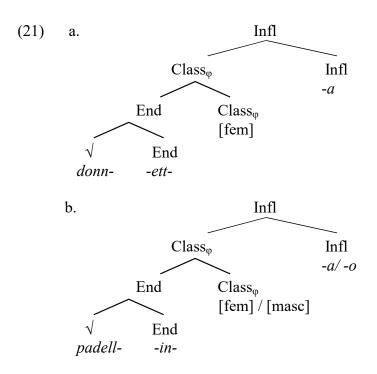
(18)	a.	asciugh-in-o	'wiping cloth'	a'.	asciug-are	'to dry'
		col-in-o	'colander, strainer'		col-are	'to strain'
		passegg-in-o	'push-chair'		passeggi-are	'to walk'
	a'.	imbianch-in-c	'painter'		imbianc-are	'to paint'
	b.	gir-ell-o	'baby walker'	b'.	gir-are	'to turn, to go around'

Italian shows alternations which exploit the contrast between evaluatives which maintain the gender of the root and evaluatives, like -in-/-on-, which can select a specialized gender of the suffix, as in (19b, c). That the masculine gender is selected by the suffix is shown by the fact that only the change [fem] to [masc] is possible while the reverse change is not admitted, \*marit-in-a 'husband-Dim-f'; besides, only a sub-set of the evaluative suffixes admit this possibility. Endearing suffixes such as -ett-, -ell- do not have any gender instruction of their own. It is of note that other evaluatives admit this type of alternation as well; this is the case of Diminutive/ Endearing -uzz- in (20) and, marginally, of the Pejorative -a/ucci- in (19). The same holds for Augmentatives like -on- in (19) (cf. Grandi 2001). The mechanism illustrated in (19) concerns also inanimates, where the masculine -in-o introduces an individual with reduced size interpretation, as in (20c) and the masculine -on-e introduces a big size interpretation, as in (20c').

(19)	a.	donn-a [fem]	b.	donn-in-a [fem]	c.	donn-in-o [masc]
		'woman'		'small woman'		'little entity which is woman'
				donn-on-a [fem]		donn-on-e [masc]
				'big woman'		'big entity which is woman'
				donn-ucci-a		?donn-ucci-o
				'woman of little acc	count'	'woman of very little account'
		mogli-e [fem] b.		mogli-ett-in-a [fem]	]	mogli-ett-in-o [masc]
		'wife'		'small pretty wife'		'small pretty entity which is wife'
						mogliett-on-e [masc]
						'big entity which is wife'
(20)	a.	padell-a	b.	padell-in-a	c.	padell-in-o

	'frying-pan'	'small frying-pan'	'small entity which is frying-pan'
	macchin-a	macchin-in-a	macchin-in-o
	'car'	'small car'	'small entity which is car'
	vi-a	vi-uzz-a	vi-uzz-o
	'street'	'little street'	'little entity which is street'
a'.	padell-a b'.	padell-on-a c'.	padell-on-e [masc]
	'frying-pan'	'big frying-pan'	'big entity which is frying-pan'
	macchin-a	macchin-on-a	macchin-on-e
	'car'	'big car'	'big entity which is car'

Summarizing, among evaluatives some do not select a gender, so that the only gender allowed is that determined by the root. For instance, *-ett-* excludes a mechanism like the one seen in (19) for *-in-*; so, forms like \*donn-ett-o 'woman-End-m' are impossible. This evaluative lets the gender of the root emerge, as in (21a). In this case, more precisely, the suffix *-ett-* does not introduce a specific Class $_{\phi}$  specification, so that the only available Class $_{\phi}$  properties, projected under the inflection, are those selected by the root. As to the diminutive *-in-*, which is able to select its own gender, two possibilities are available. If the masculine gender of the diminutive is selected, the inflection matches this, as in (21b). Otherwise, the same mechanism as in (21a) is at work, yielding the gender associated with the root.



At least two issues immediately arise. First, we may wonder why masculinization is possible while femininization is excluded, so that we have *donn-a* 'woman-f'/ *donn-in-o* 'woman-Dim-m' / *donn-on-e* 'woman-Aug-m', *macchin-a* 'car-f'/ *macchin-in-o* 'car-Dim-m'/ *macchin-on-e* 'car-Aug-m', but not *uom-o* 'man-m' / \*om-in-a 'man-Dim-f' / \*om-on-a 'man-Aug-fem', *libr-o* 'book.m' / \*libr-in-a 'book-Dim-m' /\*libr-on-a 'book-Aug-m'. A second issue concerns the difference

between suffixes like -in-/-on-, available for gender alternations, and other evaluative suffixes which do not admit it. In particular, the question is whether this differentiation has something to do with the order of suffix in complex sequences of evaluatives.

Let us begin by considering the first question. In Italian, or at least in some regional varieties, the alternation between feminine and masculine encodes a size contrast in a lexical subclass including artefacts or spatial denotata like *cest-o/cest-a* 'basket-m/big basket-f', *buc-o/buc-a* 'hole-m/pothole-f' *foss-o/foss-a* 'ditch-m/pit-f'; moreover -o denotes trees, e.g. *mel-o* 'apple-tree-m', as opposed to fruits, e.g. *mel-a* 'apple-f'<sup>5</sup>. We note that -a is associated with big size, extended objects or, in the case of fruit nouns, to the parts of a conceivable aggregate, while -o is associated with an individuated (small) object. Some insights can be gained from these alternations. Semantic effects are associated with the gender properties of lexical items. If we are on the right track, we can think that [masc] implies [individual] while [fem] implies [aggregate] or [aggregate part] (cf. Manzini & Savoia submitted).

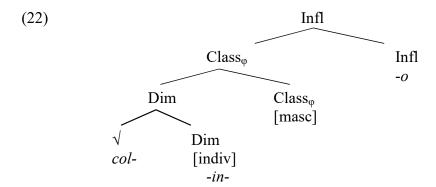
If we apply this analysis to -in-o/-in-a alternations, we conclude that in (19) and (20) -o selects for the property [individual] introduced by -in-. As for why this mechanism triggers only the change from a feminine root to a masculine complex noun, and not the opposite, we surmise that the change to feminine of masculine roots could not give an interpretable reading insofar as the -a inflection seems to deactivate or void the individuating interpretation. This effect can be deduced from the hypothesis that -a in Italian and in general in Romance is able to imply the aggregate interpretation. This interpretation is present in particular in so-called collective plurals like dit-a 'fingers', oss-a 'bones'.

Returning to the data in (18), concerning deverbal evaluatives, we note that the individuating result is triggered not only by -in- but also by the other evaluative suffixes, as in (18b). We should conclude that the merger of the evaluative with the nominal inflection is sufficient to impose an individual interpretation to a predicate (see below, section 4). Actually, and quite interestingly, the inflection alone is also generally able to obtain a single event interpretation from verbal roots (Scalise 1988), as in the case of *rincar-o* 'price rise' from *rincar-are* 'to rise in price', *stamp-o* 'mould' from *stamp-are* 'to imprint'. Hence, the contribution of the evaluative mainly concerns the introduction of an individual meaning (whereas event nouns are known to behave essentially like mass nouns). In (22) the verbal root is of course devoid of gender, which on the contrary is introduced by the diminutive.

Franco et al. 2015, a.o.).

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<sup>&</sup>lt;sup>5</sup> Other Romance examples include Portuguese *ram-o* m.sg 'branch (count)', *ram-a* f.sg 'branch (mass)'. Mascaró (1985: 101) provides a set of Catalan and Spanish cases where gender distinguishes the size of artefacts, as in the pairs *cistell/ cistella* 'basket.m/big basket.f' (Catalan), or *saco/ saca* 'sack.m/big sack.f (Spanish) (see also Crisma et al. 2011,



This characterization of the suffix -in- as endowed with the [individual] property agrees with the further occurrences of -in- in nouns referring to town inhabitants, as in *fiorent-in-o* 'of Florence, Florentine', regg-in-o 'of Reggio', and in small sub-classes of individuals, like *gall-in-a* 'hen', regin-a 'queen'.

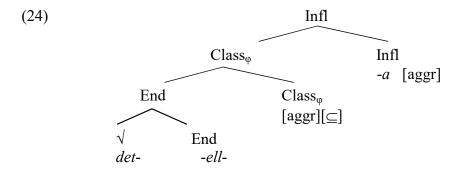
It is worth noting that the interaction between evaluatives and gender/ number classes provides some suggestions as to the nature of these latter nominal components. In fact, not only the gender class can be established by the evaluative, at least in the case of -in-, as in (22), but also number specifications can depend on the evaluative. Consider some data concerning the aggregate plural in -a-. In dialectal and standard varieties endowed with this plural, inserting an evaluative brings about two possibilities, i.e. either the combination root-Ev-a, as in (23b) for the dialect of Guardiaregia in (10), or root-Ev-i, where -i is the normal plural, as in Italian (23b') (where the diminutive -in- occurs).

(23)	a.	e-λλi-tib	b.	det-ell-a
		finger-End-Infl.sg		finger-End-Infl.A

Guardiaregia

a'.	bracc-in-o	b'.	i bracc-in-i	b".	?le bracc-in-a
	arm-Dim-Infl.sg		the arm-Dim-Infl.pl		the.f arm-Dim-Infl.A
	dit-in-o		dit-in-i		?dit-in-a
	finger-Dim-Infl.sg		finger-Dim-Infl.pl		finger-Dim-Infl.A
	ginocch-in-o		ginocch-in-i		?ginocch-in-a
	knee-Dim-Infl.sg.		knee-Dim-Infl.pl		knee-Dim-Infl.A
					Standard (Tuscan) Italian

In (23b), in the presence of an endearing suffix the plural inflectional morpheme -a and its aggregate interpretation is retained, as illustrated in (24). More precisely, we must assume that the endearing suffix does not interfere with the aggregate interpretation required by the root and selected for by the inflectional -a, so that this interpretation is inherited by the complex form. Thus an endearing suffix imposes no specialized type of numeral classifier on the root argument, but simply introduces an affective evaluative content.



In different varieties, the possibility of -i plural is attested, as in (23b') for standard Italian. In other words, an evaluative creates a new word, so that the number classifier properties associated with a root can be left out, triggering the plural inflection -i. The result is a reading not involved with the difference between part-whole vs. aggregate interpretation

Actually, the Italian examples in (23b') show that the diminutive forms like *bracc-in-i* 'arm-Dim-Infl.pl' are more usual than the corresponding -a forms in (23b"). We may expect that both plurals are accepted. In the singular, -in- is able to create and individual referent; the plural can be interpreted as a sum of individuals (-i) or an aggregate of similar individuals (-a), exactly like count singular roots of the type of *bracci-o* 'arm', *dit-o* 'finger', etc. We could explain the fact that the -i plural is more normally used, considering that the [aggregate] property is pragmatically implied by the roots (e.g. body parts), but the -in- forms do not entail this content, as detailed above.

# 3.3. Pragmatic occurrences of evaluatives

We must also observe that in Italian (as in other languages) there is a pragmatically characterized use of evaluatives, mostly the diminutive -in-, that we left out so far. It is connected to the expression of affection and/ or the asymmetry between the speaker and the listener/ addressee. In these discourse contexts, evaluatives can combine indifferently with any kind of nouns, count or mass ones (cf. Acquaviva 2015), as in (25a-a', b-b').

(25)	a.	bagn-o	'bath'	a'.	bagn-ett-in-o	'loving form - bath'
		man-o	'hand'		man-in-a	'loving form - hand'
		cas-a	'house'		cas-in-a	'loving form - house'
	b.	latt-e	'milk'	b'.	latt-in-o	'loving form - milk'
		crem-a	'creme'		crem-in-a	'loving form - creme'
		acqu-a	'water'		acqu-in-a	'loving form - water'
		carn-e	'meat'		carn-in-a	'loving form - meat'

This affective import typically emerges in talking with little children and the interpretation does not (necessarily) involve a size interpretation like 'little' nor an endearing interpretation like 'nice'. When a form like *latt-in-o* 'milk-Dim-Infl' is addressed to a young child in a sentence like *vuoi il* 

*lattino?* 'do you want the milk?', this means something like 'the milk for/ of the dear child'. This use of the evaluatives has the status of an illocutionary means, characterizing baby-talk or motherese (Ferguson 1978), i.e. the linguistic modality used by the adults in the asymmetric interaction with a child, denoting the universe of discourse in which a parent or and adult expresses his/ her affection to the child and, at the same time, his dominant position (Savoia 1984).

The pragmatic loving interpretation of diminutives can be related to their semantic individuating and size import. In other words, the individuating meaning seems to trigger an imageability level associated to the child universe of discourse. In this perspective the diminutive forms in (25b') introduce a [small size/ extension degree] content, differently from the change to count or type nouns discussed in connection with (15) and (16a').

# 4. Constraints on the sequences of evaluative suffixes

In a recent experimental study with an Italian agrammatic speaker, Franco et al. (2013) did not detect any impairment in either evaluative or gender morphemes. Both categories were spared<sup>6</sup> despite the fact that other grammatical categories were deeply impaired in their patient. In fact, his spontaneous speech revealed reduced phrase length, many omissions of free standing functional morphemes, a high percentage of substitutions of tense and agreement morphology, mainly consisting in the substitution of the requested tense/agreement inflection by an infinitival form (e.g. *io studiare arte* 'I study(inf.) arts'), violations in number agreement/inflection.

These results point to the idea that evaluative morphology and gender may be similar grammatical strategies for the classification of nominal roots. Indeed, as shown in the present work, their respective semantics may overlap (cf. the gender alternation *buc-o* 'small hole-m' vs. *buc-a* 'big hole-f' and the augmentative alternation *bors-a* 'bag' vs. *bors-on-e* 'bag-Aug-m, big bag'). Thus, a unified approach, assuming that these grammatical phenomena are part of a single grammatical domain (i.e. classification) seems empirically well-motivated. Diachronically, nouns are the most common source for (at least) diminutives and augmentatives. As shown in Jurafsky (1996), the word for 'child' is the most common base for the grammaticalization of diminutives in the languages of the world. This process begins when such words are employed as a type of classificatory element to refer to young animate individuals and then are extended to inanimate entities, targeting small sizes with countable items and small quantities with uncountable items, and being employed also to turn mass items into count nouns (Heine & Kuteva 2002: 65-66, Di Garbo 2014). In Jurafsky's view (1996: 553), the 'connected to X' meaning of diminutives (cf. e.g.

<sup>&</sup>lt;sup>6</sup> Data from different languages indicate that aphasic patients do not have problems in accessing the gender category or, at least have fewer problems with gender, when it compared with other grammatical categories. Indeed, it has been reported that they are able to access grammatical gender in single-word naming, independently of whether they are able to actually process the target word or not. For instance, in a study using a picture-naming task in which German and Dutch agrammatic Broca's aphasics had to generate nouns, it was demonstrated that they produced determiners correctly inflected for gender (Bastiaanse et al. 2003).

Marocco > marocchino 'Morocco>Moroccan', imbiancare > imbianchino 'paint (a wall)> painter (of walls)') may represent a late stage of grammaticalization, when an item expressing size is reanalysed in order to convey a more abstract meaning, roughly according to the scale: small size > small type/ kind of > connected to. An opposite pattern (the inverse scale) may also be conceivable. So affixes expressing relational content or resemblance can be turned into diminutives. This is the case for Italian -in-o/a, derived from Latin -in-us/a, which originally meant roughly 'connected to X' and then developed as diminutives morphemes (Grandi 2001, Di Garbo 2014). In short, the range of facts explored in relation to the competence of Italian native speakers can be seen displayed in the historical development process as well.

The preceding discussion leads us to reconsider the question of the order of evaluative suffixes and the relation between them and inflection endings. As noted in Cinque (2007, 2015), embedding of the evaluative suffixes presents constraints that prevent some combinations. Specifically, the endearing suffixes *-ett-* and *-ell-* can only precede diminutive *-in-*, inserting between the root and *-in-*. The sequences where pejorative *-acci-/-ucci-* precedes *-in-/-ett-* and *-on-* are excluded. In (26a), (27a) the admissible forms including one suffix are listed. In (27b) the grammatical combinations such as *-ett-in-* are presented, while (26c) shows the banned sequences such as \*-in-ett-. A similar distribution characterizes clusters formed by *-uzz-*, (*-ic*)-ell- and *in-*, which can close sequences but not occur in the intermediate position.

The banned sequences where intermediate or final -in- is incompatible with augmentative - on- and pejorative -acc(i)-/-ucc(i)- are presented in (27b) and (27c). Sequences where the pejorative precedes the augmentative are acceptable, like om-acci-on-e.<sup>8</sup>

(26)

a. libr-in-o/libr-ett-o
book-Dim-/End-Infl
voc-in-a/voc-ett-a
voice-Dim-/End-Infl
om-in-o/om-ett-o
man-Dim-/End-Infl
donn-in-a/donn-ett-a

woman-Dim-/End-Infl

b. libr-ett-in-o
book-End-Dim-Infl
voc-ett-in-a
voice-End-Dim-Infl
om-ett-in-o
man-End-Dim-Infl
donn-ett-in-a/-o

woman-End-Dim-Infl

\* libr-in-ett-o
book-Dim-End-Infl
\* voc-in-ett-a
voice-Dim-End-Infl
\* om-in-ett-o
man-Dim-End-Infl
\* donn-in-ett-a/-o
woman-Dim-End-Infl

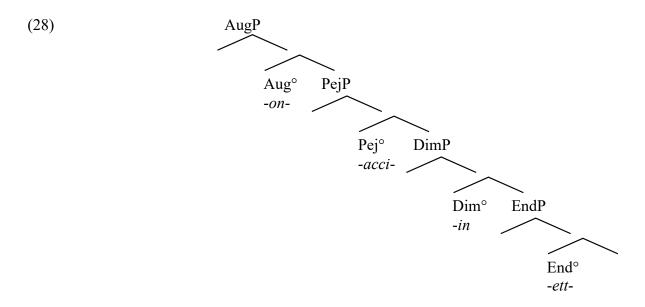
<sup>&</sup>lt;sup>7</sup> In several types of combinations we discuss in this work there is marginal uncertainty partially due to regional, but also individual, differences. Specifically, our judgements on Italian reflect Tuscan or Florentine native competence.

<sup>&</sup>lt;sup>8</sup> We note that our native judgements on the sequences *om-in-on-e* and *om-in-acci-o* are different from Cinque (2015: 72) in that we assign them an unacceptable/ ungrammatical status. In accordance with Cinque (2015), we exclude from our discussion the sequences where the internal suffix is lexicalized as a part of the lexical base, like *bambin-o/a* 'child', *tavolin-o* 'coffee table', *motorin-o* 'moped', *lampadin-a* 'light bulb', *fornell-o* 'stove fire', *porton-e* 'street door' etc. In some instances a corresponding simple base is missing, as \*bamb-, etc. More in general these forms have non compositional semantic contents. Thus, *fornello* is not a 'little hoven', *lampadina* is not a 'little lamp', *motorino* is not a 'little motor', and so on.

	ven-uzz-/-ett-a		ven-uzz-in-a		*ven-in-uzz-a
	vein-Dim-/End-Infl		vein-End-Dim-Infl		vein-Dim-End-Infl
	pied-uzz-o/ pied-in-o		pied-uzz-in-o		*pied-in-uzz-o
	foot-Dim-/End-Infl		foot-End-Dim-Infl		foot-Dim-End-Infl
	salt-er-ell-o/salt-in-o		salt-er-ell-ino		*salt-(er)-in-ell-o
	jump-End-/Dim-Infl		jump-End-Dim-Infl		jump-Dim-End-Infl
	stupid-ello/stupid-in-o		stupid-ell-in-o		*stupid-in-ell-o
	silly-End-/-Dim-Infl		silly-End-Dim-Infl		silly-Dim-End-Infl
	pont-ic-ello/pont-ic-in-o		pont-ic-ell-in-o		*pont-ic-in-ell-o
	bridge-End-/-Dim-Infl		bridge-End-Dim-Infl		bridge-Dim-End-Infl
(27)					
a.	om-acci-o/ om-on-e	b.	om-acci-on-e	c.	*om-on-acci-o
	man-Pej-/Aug-Infl		man-Pej-Augn-Infl		man-Aug-Pej-Infl
			*om-on-in-o		*om-in-on-e
			man-Aug-Dim-Infl		man-Dim-Aug-Infl
	om-ucci-o		om-ett-ucci-o		*om-ucc-ett-o
	man-Pej-Infl		man-End-Pej-Infl		man-Pej-End-Infl
			*om-ucc-in-o		
			man-Pej-Dim-Infl		
			*om-acc-in-o		*om-in-acci/ucci-o
			man-Pej-Dim-Infl		man-Dim-Pej-Infl
			*om-ucci-on-e		*om-on-ucci-o
			man-Pej-Aug-Infl		man-Aug-Pej-Infl
	donn-ucci-a		donn-ett-ucci-a		*donn-ucc-ett-a
	woman-Pej-Infl		woman-End-Pej-a		woman-Pej-End-Infl
			*donn-ucc-in-a		*donn-in-ucci-a
			woman-Pej-Dim-Infl		woman-Dim-Pej-Infl
	libr-acci-o		libr-ett-acci-o		*libr-acc/ucc-ett-o
	book-Pej-Infl		book-End-Pej-Infl		book-Pej-End-Infl
			libr-ett-acci-o		
			book-End-Pej-Infl		

Cinque (2015) accounts for the order and mutual exclusions between evaluative suffixes in the spirit of the cartographic model. A structural spine is proposed in which the order *root-endearing-diminutive-pejorative-augmentative* is obtained in accordance with the Mirror Principle

(Baker 1985). The lowest suffix is the endearing one -ett-,<sup>9</sup> immediately dominated by the diminutive -in-, that in turn is embedded under the pejorative -acc(i)- and the augmentative -on-, as in (28) (Cinque 2015: 71). Noun movement creates the correct sequences, -in-ett- Dim-End and -acci-on- Pej-Aug, and possibly, according to Cinque, (-ett)-in-on- (End)-Dim-Aug.



An insight implied by the cartographic distribution in (28) is that the order reflects the semantic content of suffixes. Thus, the endearing suffix, which occurs in a position adjacent to the root, can be understood as an aspectual suffix related to the way of presenting the root. In turn, -in-and -on- introduce a size evaluation associated, as we saw in the case of -in-, to a singulative content [individual]. We have seen that pejorative and other types of evaluatives behave like -ett-. In fact, if we take the data in (26)-(27) into account, we obtain the possible combinations in (29i-v). Actually, (29) is a little coarse to the extent that the pejorative suffixes we consider have different distributions. Indeed -acci-, but not -ucci-, can precede -on-, whereas -ucci-, but not -acci-, can follow -ett-. This suggests that the suffixal paradigm is more fine-grained. More precisely, we must conclude that subtle differences of meaning are implied that determine the possible combinations and types of order.

It should be recalled that evaluative suffixes can be repeated, as in the examples in (30). These sequences are associated with strongly expressive and affective effects, where the repetition has therefore a pragmatic value. Alternatively, it is possible that doubling acts as an intensifying device, with respect to the size referred to by the evaluative.

<sup>&</sup>lt;sup>9</sup> We note that the endearing interpretation of suffixes like *-ett-*, *-ucc-*, *-uzz-*, admits different nuances, that can include evaluation of the type 'modest', 'scarce', etc.

(30) a. om-in-in-o man.Dim.Dim.m 'very little man' b. gatt-in-in-ocat.Dim.Dim.m'very small/cute cat'

Besides, several evaluative suffixes may or must contextually combine with morphemic expansions. In many cases these pre-suffixal elements do not occur as autonomous evaluative morphemes (Rohlfs 1969 [1954], Merlini Barbaresi 2004), such as -er-, or -(i)c-, in the examples in (31a-c).

(31) a. salt-er-ell-o
little jump
scem-er-ell-o
little fool
b. corn-ic-in-a
little frame
fium-ic-ino/att-ol-o
little river
pont-ic-in-o
little bridge'

c. leon-c-in-o little lion

Some morpho-phonological restrictions seem to be at work that avoid alliterations (Rainer 1990) or favour some prosodic structures. For example, the roots containing the final sequence ... on require the insertion of -c- before -in-, as in melon-c-in-o 'little mellon', possibly avoiding the n alliteration; nevertheless -in- can combine with roots ending in a coronal nasal, as can-in-o 'little dog'. Analogously, the sequence [' $\sigma$   $\sigma$ '] seems favoured in comparison with the sequence [ $\sigma$  ' $\sigma$ ], in turn admissible, as in pont-ic-in-o vs. pont-in-o 'little bridge'.

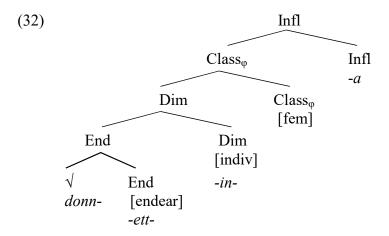
If the evaluative suffixes introduce predicates/ properties that restrict the argument of the root, we expect the order of morphemes to reflect semantic composition. Hence, the fact that -in-closes the sequence of the evaluative suffixes can be understood as a consequence of its content. In particular, its quantification-related singulative property restricts the other evaluatives, notably the endearing -ett- lacking [individual]. This explains why -in- embeds all endearing suffixes such as -ell-, -uzz-, and therefore follows them. Interestingly, the aphasiological data discussed above independently suggest that -in- is semantically similar or in any event close to inflectional morphology. In short, insofar as it functions as a singulative/individual exponent, -in- externalizes quantification-related properties otherwise specified by inflection, such as plural, aggregate, individual, etc. (cf. section 3). As regards forms such as gess-etto 'piece of chalk', legn-etto 'piece of wood', in (15c',c"), the singulative result is only apparently due to the suffix, given that already

the corresponding simple roots allow an individual/count reading, on a par with examples like *libretto* 'little book'.

The incompatibility between -in- and -on- can be imputed mainly to the fact that they imply opposed size values. Other restrictions must be at work, given that, for example, -acci-on- Pej-Aug is admitted, while -acc-in- Pej-Dim is strange. On the other hand, we know that both endearing and pejorative suffixes, while directly encoding ethic or affective judgements, also have size connotations. This is true for the pejorative -acci- that implies large size, thus excluding the combination \*-acc-in- Pej-Dim. Conversely, the pejorative -ucci- implies small size, in some way reduplicating the one introduced by the diminutive -in. These properties could also explain why pejorative -acci- and -ucci- can combine with strictly endearing/ affective elements such as -ett-giving rise to acceptable forms like libr-ett-acci-o 'book-End-Pej-m'/ libr-ett-ucci-o 'book-End-Pej-m' in (27b).

The clearest conclusion we reach is that suffixes with a singulative import apply to the entire set of properties associated to the root, fixing the individual defined by such a set of properties. Therefore, they cannot be embedded by, hence restricted by, a size suffix, be it endearing *-ett-/-ell-*, pejorative *-ucci-* etc. The latter in turn can be understood as an aspectual classifier expressing the way the speaker thinks of/ evaluates the nominal argument.

An individuating/ singulative suffix is therefore predicated of the entire complex *root-evaluative classifier* cluster, as in (32), modifying its interpretation.



Applying an evaluative/ affective endearing suffix to an individuating suffix gives rise to an ill-formed interpretation insofar as size morphemes must apply to the root predicate and not to the individual obtained by inserting -in-. In this, End, Pej, Aug evaluatives behave like -count adjectives (in the sense of Gabbay & Moravcsik 1979), which introduce modifications on the predicate expressed by the nominal root. They cannot modify -in- but must be restricted by it.

### 5. Evaluatives and adjectives

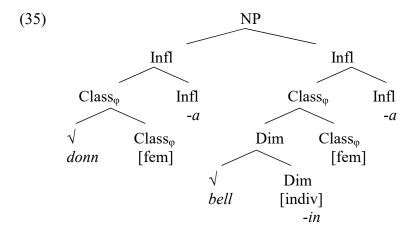
We have seen that diminutive suffixes either assume the gender of the root, as in (21a), or, in the case of evaluatives such as -in-/-on- and possibly others (cf. section 3), impose their gender, as in (17), (21b). On the other hand, the diminutive suffixes select for inflection endings, independently of what inflection exponents would be selected by the root. So, -on- has the inflection -e/-i for the masculine and -a/-e for the feminine regardless the inflection endings that the root selects, as illustrated in (33a,b). In this respect, a parallel emerges with the agreement of adjectives and determiners. Adjectives and determiners lexicalize the gender selected by the predicative root they modify or quantify over – but combine with the their own inflectional exponents, as in (33c).

(33)can-e/ can-i b. can-in-o / can-in-i il can-e piccol-o a. c. little dog/ little dogs the dog little dog/ dogs libr-o/ libr-i libr-on-e / libr-on-i il libr-o grand-e book/ books big book/ big books the book big voc-e/ voc-i voc-ett-a/voc-ett-e l-a voc-e alt-a voice/ voices little voice/ little voices the voice loud

A final fact to be considered is that evaluatives generally admit combining with adjectival roots, giving rise to complex adjectival forms endowed with size or other evaluative meanings, as illustrated in (34).

(34)bell-o/-a bell-in-o/-a nice.m/f rather nice.m/f brav-o/-a brav-in-o/-a good.m/f rather good.m/f grand-e grand-in-o/a rather big.m/f big.m/f scem-o/a scem-ett/in-o/a / scem-er-ell-o/a silly.m/f rather silly.m.f

As for the interpretation of these complex forms, the evaluatives in adjectives are not essentially different from those in nouns, since in both cases they assigns classificatory properties to the argument of the nominal root. According to Parsons (1979), adjectival modification of the noun creates a logical conjunction (intersection) between noun and adjective predicate. We have attributed the same basic semantics to modification of nouns by evaluative suffixes. In other words, evaluatives can be dealt with as predicates that restrict the content of the root. Combining evaluatives and adjectives, as illustrated in (35), is not different, and gives rise to a cumulative interpretation of the adjectival and evaluative meanings.

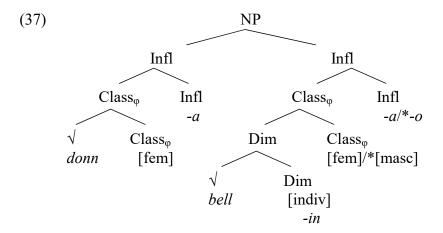


On the other hand, suffixes like -in-, that can impose a different gender to the noun root, as in (21b), cannot assign to the adjective a gender different from the one selected by the noun. So, examples like (36a) are ill-formed as opposed to (36b).

(36) a. \*un-a donn-a bell-in-o b. un donn-in-o magr-o
a.f woman.f nice-Dim-m a.m woman-Dim-m thin.m

\*un-a donn-a gross-on-e un donn-on-e alt-o e gross-o
a.f woman.f big-Aug-m a.m woman-Aug-m tall.m and big.m

The unacceptability of the examples in (36a) is explained on the basis of standard agreement mechanisms. Adjectives, modifiers and determiners agree with the gender class of the noun, as in the discussion surrounding (7). In (36b) this means that the adjective and the determiner must match the gender of the noun. If -in- could assign its masculine gender to the adjective, agreement simply would not be realized. The interpretation whereby the argument selected by the nominal root and the argument selected by adjectival root are interpreted as having a single referent would fail, since the class/gender of the noun and of the adjective do not coincide, as indicated in (37).



In conclusion, it is the gender and the number of the nominal head that are relevant to agreement, whereas the other possible specifications introduced by morphology seem to play no role, including inflectional class, as we have seen in (11).

The idea that evaluative morphology is essentially predicative is supported by the observation that diminutives can occur in post-nominal adjectives but not in pre-nominal ones. In languages admitting both positions, post-nominal adjectives have a predicative reading which is absent in pre-nominal contexts. According to Serianni (1989), Salvi and Vanelli (2004) and Cinque (2010, 2014) adjectives in pre-nominal position have a non-restrictive reading, i.e. they introduce an evaluation by the speaker, while post-nominal adjectives restrict the denotation of the noun by introducing further specifications on its referent (the argument of the root). 10 If this distinction is correct, we can connect the distribution in (38) to the fact that only post-nominal adjectives have a predicative reading, which is required for the application of evaluative affixes.

- (38)una grande casa/una casa grande a. a big house/ a house big
  - a'. \*una grand-in-a casa/una casa grand-in-a a big-Dim house/a house big-Dim
  - b. una bella ragazza /una ragazza bella a cute girl /a girl cute
  - b'. \*una bell-in-a ragazza/una ragazza bell-in-a a cute-Dim girl /a girl cute-Dim

In other words, the evaluative morphology introduces predicates that restrict the range of the possible arguments, as noticed in the section 3. All evaluative modifications of adjectives create the pre-nominal/post-nominal asymmetry.

### 5.1. The evaluatives and the intensifier –issim-

The superlative suffix -issim- can occur both in pre-nominal and post-nominal adjectives, as illustrated in (39). This suggests that the interpretive status of the superlative is different from the predicative nature of the evaluatives.

(39)una bell-issim-a ragazza / una ragazza bell-issim-a a very beautiful girl / a girl very beautiful

Let us consider this issue more in detail. In Italian, pre-nominal adjectives can be modified by quantifiers like più 'more', tanto/molto 'very/ much'. After Quine (1960) the semantic literature has tried to classify adjectives on the basis of their intrinsic predicative content. For example Quine

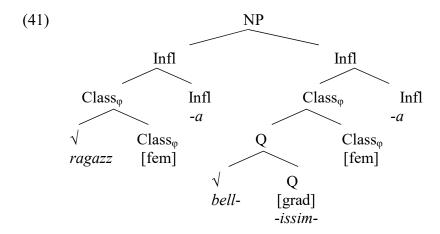
<sup>&</sup>lt;sup>10</sup> In the proposal of Cinque, Italian adjectives that occur pre-nominally have only a direct modification source, providing "a unique window on the type of interpretive properties that are associated with the direct modification source" (Cinque 2014: 2). Post-nominal adjectives may have a predicative content; thus the latter seems to be required for the application of evaluative affixes. These syntactic facts are in line with the distinction between predicative vs. non-predicative classes of adjectives at a semantic level (Partee 2007).

(1960: 63) defines as 'cumulative' the type of reference implied by mass nouns like 'water' and adjectives like 'red', since both meet to constraint whereby 'any sum of parts which are water/ red is water/ red' (see discussion in Bunt 1979, Lasersohn 2011). Gabbay and Moravcsik (1979) separate +count adjectives, like mortal, spherical, etc. and -count adjectives, like yellow. A clear-cut difference emerges in Italian, in that sferico 'spherical', mortale 'mortal' exclude occurring in pre-nominal position, that is reserved to -count adjectives, as defined by these authors. We may wonder what is the essence of this split.

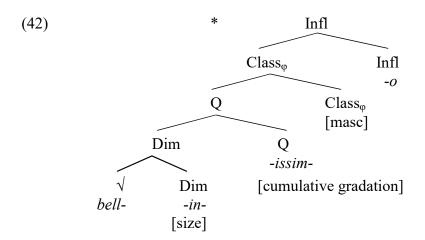
In any event, the properties introduced by attributive, i.e. prenominal, (-count) adjectives are mass-like. The cumulative (mass) content of most adjectives correlates with the fact they take intensifiers that do not inflect in number, i.e. in Italian *molto/tanto*, as in the context of mass nouns, as illustrated in (40). This of course means that the scope of the intensifier includes the adjectival predicate, leaving out the nominal root. In this sense the intensifiers are insensitive to the predicative/ non–predicative interpretation. Hence, the possibility for the superlative *-issim-* to occur in pre-nominal adjectives matches the possibility for pre-nominal adjectives to be quantified. This parallelism confirms that *-issim-* is a quantifier/ intensifier, interpretable as something similar of adjectival intensifiers such as *molto* 'very/ much'.

- (40) a. la più bella ragazza the most beautiful girl
  - b. delle tanto brave persone/ delle bravissime persone some very good persons
  - c. due molto apprezzati autori/ due apprezzatissimi autori two much appreciated author

Clearly, -issim- has a different nature from the evaluatives. Specifically it does not introduce another predicate, restricting the argument of the noun root, in the sense discussed in the section 1. Rather, it quantifies on the cumulative predicate lexicalized by the adjective, expressing a gradation. This explains its different behaviour, in the sense that, as illustrated in (41), the Class properties remain unchanged, for example [fem], and -issim- lexicalizes a Q content applying to the cumulative properties associated to  $\sqrt{bell}$ -. We could express this point by assigning to -issim- the property [cumulative gradation].



At this point, the exclusion of the combination between evaluatives and -issim- should be noted. Thus -issim- cannot combine with evaluative forms of adjectives, like \*bell-in-issim-o 'beautiful-Dim-issim-Infl' in (42), \*stupid-ell-issimo 'stupid-End-issim-Infl', etc. In other words - issim- cannot quantify over evaluative properties, that in turn restrict the predicative adjectival base. On the contrary, -issim- must be applied to the predicate, i.e. to the cluster of properties that are the content of the adjectival predicate \*\shell-\text{ibell-} 'beautiful'. Thus the evaluatives introduce a size or individuating effect that is not able to restrict the 'mass/ cumulative' nature of the intensified adjectival predicate. Analogously, the evaluatives cannot be added to superlative adjectival forms, like \*bell-issim-in-o 'beautiful-issim-Dim-Infl'. In general, the size/ individual interpretation does not go well with the cumulative reading triggered by -issim-. As a consequence, in both instances, any available natural interpretation is blocked. 11



On the contrary, *molto* quantifies over an evaluative adjectival form in examples like *molto bell-in-* o 'very nice'. In other words, Q can takes in its scope the entire predicate that is the conjunction of the predicate *bell-* and the predicate *-in*, namely *bell-in-* 'a bit beautiful/ nice'.

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<sup>&</sup>lt;sup>11</sup> An apparent counterexample is *carinissimo* 'very pretty, nice'. Again, the form *carino* 'pretty, nice' is now completely lexicalized, and its derivation as *car-in-o* is not accessible.

### 6. Combining evaluative and other derivational suffixes

As is well-known, the Italian lexicon has many nominalizers, i.e. elements such as *-V-ment-*, *-V-zion-*, *-V-t-*, *-ai-*, etc. (Lo Duca 2004, Thornton 2004, Gaeta 2004). Some of these elements form event nominals, introducing aspectual properties that restrict the predicative base, like *fer-i-ment-o* 'injuring', *dorm-i-t-a* 'sleep', especially in deverbal formations, but also in other cases, like *man-a-t-a* 'slap', *dit-a-t-a* 'fingerprint/ jab with the finger'. Others form individual nouns such as *-ai*-indicating 'agent, instrument, location related to X', where X is the lexical base, as in *libr-ai-o/a* 'book-seller.m/f', *poll-ai-o* 'hen-house'. A clear contrast is found between nouns of individuals and eventive nouns. The first admit combining with evaluatives, like for example *libr-a(i)-in-o/ libr-ai-ett-o* 'bookseller-ai-Ev-Infl'. The eventive/aspectual forms show interesting restrictions, in that the diminutive *-in-* regularly combines with some of them, for example participial suffixes *-V-t-* in (43a), while it is marginal with others, for example *-V-ment-*, in (43c), and with others yet it gives mixed results, for example with *-V-zion-/-sion-* in (43 b-c).

(43) a. dorm-i-t-a (di dieci minuti) dorm-i-t-in-a (di dieci minuti)

'sleep (ten minutes long)' 'short sleep (ten minutes long)'

man-a-t-in-a

'slap'

'slap' 'light slap'
b. rev-i-sion-e rev-i-sion-c-in-a

revision/revising short/ little revision/ revising

corr-e-zion-e corr-e-zion-c-in-a

correction/ correcting short/ little correction/ correcting

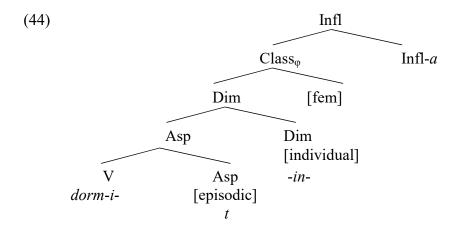
c. ucc-i-sion-e ??ucc-i-sion-c-in-a killing little/ short killing

cambi-a-ment-in-o ?cambi-a-ment-in-o

change little change

pent-i-ment-o ?pent-i-ment-in-o repentance little/ short repentance

The eventive content of the derived Ns in (43) is clearly involved. Event nominals like *dorm-i-t-a* in (43a), and in structure (44), entail an aspectual durative interpretation, as indicated by temporal specifications like 'ten minutes long'. The diminutive does not interfere with this aspectual/temporal interpretation. What it does is limiting the duration of the event, imposing an individual segment interpretation. In fact, the suffix *-V-t-* introduces per se such a temporal segmentation; for instance, in *man-a-t-a* it refers to an individual event, the singular action of hitting with a hand.



More interesting are the examples in (45b,c). These suffixes can in many cases introduce an ambiguity between the description of an event, with the possibility of expressing its arguments, and the description of an individual physical object, sensation, etc. Thus *rev-i-sion-e* can refer to a revised text, in (45a), or to the event of revising a text, in (45b); in this latter instance it may either be existentially quantified (episodic reading) or universally/generically quantified (generic reading). The diminutive as in (45c), blocks the universal/generic interpretation. In other words, the insertion of a diminutive forces an episodic interpretation that can coincide with a delimited eventive segment.

- (45) a. questa revisione è sbagliata this review is wrong
  - b. una/ la revisione di un testo è sempre impegnativa revising a text is always demanding
  - c. una / \*la revisioncina di un testo è sempre possibile a / the short review of a text is always possible

We can connect this effect with the individuating nature of -in-, that we have already discussed in relation to its combination with mass nouns and with other suffixes. On the contrary, the ungrammaticality of examples like *ucc-i-sion-c-in-a* in (43c) can be imputed to cognitive/pragmatic factors, like imageability, <sup>12</sup> that make 'a little killing' very difficult to be imagined.

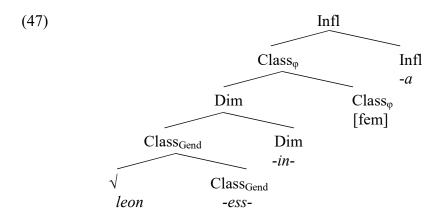
Finally, we note that diminutives must occur in an external position, adjacent to the inflectional ending and including not only other evaluatives (section 3) but also the other suffixes. This holds for examples such as (46a), where the individuating suffix takes in its scope the agentive suffix -ai-. This concerns also suffixes like the feminine suffix -ess- (see (9)), as in (46b,c), where (46b) is grammatical while (46c) is an ungrammatical order.

<sup>12</sup> The notion of imageability is discussed in Luzzatti and Chierchia (2002) as one among the cognitive distinctions fundamental in the organization of human conceptual space.

book-seller-Dim-Infl

- b. leon-ess-in-a lion-Fem-Dim-Infl
- c. \*leon-c-in-ess-a lion-Dim-Fem-Infl

In (46a) -in- normally merges with the enlarged base leon-ess-, exactly as it can combine with any gendered lexical base/root. In principle, we could equally expect that a feminine suffix could include a diminutive one; in fact in all of the examples that we have seen so far the Dim element is embedded under a Class specification [fem]/[masc]. But in (46c) the feminine suffix cannot include the individuating -in-. We analyse this fact as pointing to the conclusion that the – ess- suffix does not in fact introduce the nominal class property [fem], but selects [fem] in Class<sub> $\varphi$ </sub>, as indicated in (47), and above in (9). As for the relative order of Class<sub>Gend</sub> and Dim, it corresponds to the generalization that the evaluative series, carrying actual Class content (in particular singulative) are immediately embedded under Class<sub> $\varphi$ </sub>.



A general point that emerges from all data we have discussed so far is that a strict left to right merger sequence is lexicalized in word internal sequences. In other words, in Romance languages the Merge mechanism creates structures where classifiers/inflections, merged according to the schema  $\{\{\{\text{root}\}, \text{Class}_x\}, \text{Class}_y\}$  ... $\}$ , are linearized so that each applies to the immediate adjacent element on its left.

## 7. Final remarks.

The morphology of nouns in Italian involves a number of descriptive and theoretical questions, concerning both the internal structure of the noun and the status of the so-called derivational and inflectional morphemes. We have started from the proposal that inflectional morphology in nouns is endowed with semantic content, which provides evidence about its active involvement at the interpretive interface. There is evidence for concluding that evaluative as well as other derivational

suffixes can be equated to classifiers, as suggested by recent work comparing Bantu and Romance. In other words, these elements are associated with semantic content, interacting with one another and with inflectional morphemes. Essentially, we have posited no crucial difference between derivational and inflectional morphology, except for their semantic specialization and some distributional restrictions. This is all the more so as we propose an analysis of the internal structure of the noun where inflection is not directly associated with gender (which we identify with a specification of the root) but introduces other types of classification.

The present case study on evaluative suffixes has allowed us to gain some insight into crucial problems concerning the distribution and reciprocal order of derivational suffixes and of evaluatives in particular. The different status of the various types of evaluative suffixes, like -in-, -on-, -ett-, -acci-, -ucci-, etc. has been examined. Specifically we have distinguished -in-, as a singulative suffix, from the others. The particular nature of -in- is evidenced by many facts, for example by its occurrence in 'inhabitant of' formations and its capacity to change a mass noun into a count one. This latter property can account for certain constraints on the possible combinations between evaluatives, excluding, for instance, sequences like -in-ett- Dim-End but admitting sequences like -ett-in- End-Dim. We have proposed an explanation that avoids recourse to cartographic stipulation. The properties of evaluatives in adjectives have also been derived. We have discussed the impossibility to have diminutive adjectives in pre-nominal position, as due to the nature of the evaluative morphology as essentially predicative. Indeed in languages admitting both positions, post-nominal adjectives have a predicative reading which is absent in pre-nominal contexts. Therefore only the post-nominal adjectives have the predicative reading which is required for the application of evaluative affixes

In conclusion a theory of nouns based on the hypothesis that all internal morphemes are endowed with semantic import allows obtaining an interesting treatment of morphemes distribution, including order and mutual exclusion phenomena. This result is reached without having resort to an abstract underlying level, as in cartographic approaches (see functional hierarchies) or in DM approaches (see Late Insertion): on the contrary, the morpho-syntactic model we discuss assumes that words, here nouns, are the interpretable result of a compositional mechanism, essentially regulated by Chomsky's Merge procedure.

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