Edited by
Joseph Emonds and Markéta Janebová

Language Use and Linguistic Structure

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Abstract: We discuss the Romance nominal inflection -*a*, which surfaces both as a singular feminine exponent and as a lexicalization of "cohesive" plurals. The empirical focus is on Central Calabrian varieties, where -*a* plurals occur in the contexts of inflectional systems that do not differentiate masculine and feminine in the plural, as well as on Sursilvan Romansh varieties, where -*a* productively forms feminine singulars with an interpretation akin to that of -*a* plurals in Italian. On the basis of our case studies, we characterize the inflectional morphology in nouns as (sometimes) endowed with semantic content, specifically with the Class properties [aggregate] for mass and [⊆] for plural.

1. Introduction

In Italian, -*a* serves as a singular inflection, normally feminine, as in (1a); its plural is normally -*e*, as in (1b). The singular inflection -*o* is normally masculine, as in (1c), and its plural presents the plural inflection -*i*, as in (1d). However -*a* (apart from occurrences as masculine singular, not immediately relevant here) also introduces the plural of a set of nouns characterized by a distinctive semantics, denoting "a plurality of weakly differentiated parts" (Acquaviva 2008), as in (1e). The singular of these nouns is masculine and it sometimes displays a regular masculine plural with a pure count interpretation such as (1d). Romance languages have only two target genders, namely masculine and feminine—and the -*a* plural agrees in the feminine with determiners and adjectives in (1d). A comparison

can usefully be made with other language families that have genders, for instance the Semitic languages (Fassi Fehri 2016, Kramer 2015), which display the same syncretism between feminine singular and plural (non-gender specific), despite the fact that unrelated morphology is involved.

(1) (a) l-a   cas-a   bianc-a
          the-F.SG   house-F.SG   white-F.SG
          "the white house"

     (b) l-e   cas-e   bianch-e
          the-F.PL   house-F.PL   white-F.PL
          "the white houses"

     (c) il   mur-o   solid-o
          the.M.SG   wall-M.SG   solid-M.SG
          "the solid wall"

     (d) i   mur-i   solid-i
          the.M.PL   wall-M.PL   solid-M.PL
          "the solid walls (e.g., of the house)"

     (e) l-e   mur-a   solid-e
          the-F.PL   wall-PL(A)   solid-F.PL
          "the solid walls (e.g., of Rome)"

The potential theoretical interest of taking up the classical topic of the feminine/plural syncretism is that recent formal syntax and semantics studies revise the traditional distinctions between singular and plural, and between gender and number—yielding potential insights into their syncretism. First, underlying the standard number opposition singular/plural, there is an interpretive tripartition between mass nouns, count singulars and count plurals. More to the point mass singulars overlap in many respects quite closely with count plurals (Chierchia 2010); while in other respects the opposition is between count nouns, irrespective of number, and mass nouns (Borer [2005] for a syntactic model). So, it is expected that singular (at least mass singular) and plural may share a lexicalization.

   Another stream of generative literature calls into question the traditional distinction between gender and number. The similarity between the genders of, say, Romance languages and the nominal classes of Bantu has been remarked more than once by the literature (Kihm 2005; Carstens 2008); genders and nominal classes are understood by this literature to be classification systems for nominal roots. Recall now that for Borer

(2005) number (*qua* countability), as formally represented by her category Div, is also a classifier. In this perspective, gender and number (countability) are simply different facets of nominal classification (Déchaine et al. 2014). So, it is to be expected that the same exponent may lexicalize the apparently disjoint traditional categories of gender and number—conceived as superficial manifestations of nominal class. Indeed a well-known fact about Bantu nominal classes is that there are no specialized number morphemes; the same morphology forms the singular of one class, and the plural of another. The same holds for Italian -*a* and -*e*, which inflectional/gender markers of the singular and also form the plural (in different inflectional classes).

The empirical focus in this article will be on -*a* plurals in Central Calabrian varieties which lack gender distinctions in the plural—as well as on -*a* feminine singulars in Sursilvan Romansh varieties, with an interpretation similar to that of -*a* plurals in Italian.

Syntactically, this article is placed within the minimalist framework. Morphologically, we adopt a morpheme-based approach and we assume that the same basic computational mechanisms underlie syntax and morphology. The morphemic analysis of Indo-European nouns is fairly straightforward. The first component is a root; in consonance with Marantz (1997), we think of the root √ as category-less. Next to the root, a vocalic morpheme encodes properties that may include gender and/or number and/or declension class, depending on the language. A third slot is specialized for number and case (e.g., Latin) or just for number (e.g., Spanish). The consensus in the literature is that at least two functional projections are needed—corresponding roughly to gender and number. In homage to the cross-linguistic comparison with Bantu languages, the lower category is often labelled Class, the higher category is Num (Picallo 2008), i.e., [[√ Class] Num].

Extra complexity arises in Indo-European languages from the fact that there is no one-to-one mapping between the content of Class—which enters agreement with determiners and modifiers of N, and the inflections immediately following the root. The latter are instead sensitive to inflectional class, which we will henceforth call declension in order to avoid confusion with Class. 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 (2). In (2) 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 both the root and the Class node.

(2)

```
                      Infl
              ┌────────┴────────┐
           Class               Infl
        ┌────┴────┐            -o/-a
       √        Class
     gatt-   [masc]/[fem]                    Italian
```
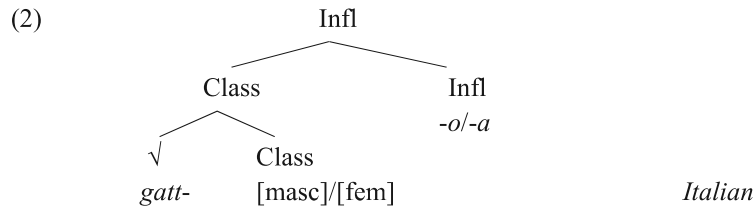
Languages like Spanish have an independent lexicalization for the plural, namely -*s*. Following Manzini and Savoia (2011) we formalize the content of the plural node as the category ⊆, which says that the denotatum of the predicate can be partitioned into subsets, as schematized for *libros*/*libras* "books/pounds" in (3).

(3)

$$
\begin{array}{c}
[\subseteq] \\
\diagup \quad \diagdown \\
\text{Infl} \qquad [\subseteq] \\
\qquad \qquad \textit{-s}
\end{array}
$$

Infl
　Class　　Infl
　　　　　-*o*/-*a*
√　　Class
libr-　[fem]/[masc]　　　　　　　　　*Spanish*
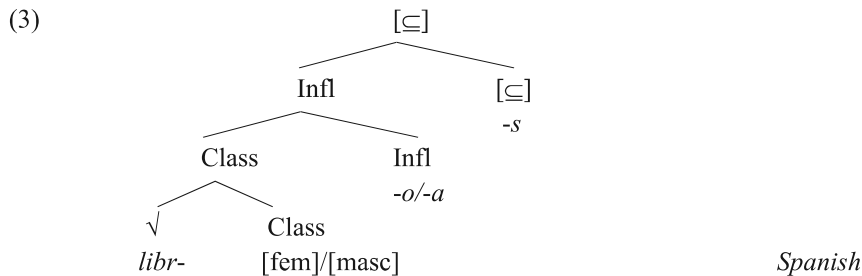
In Italian however pluralization is obtained by a change of the inflectional vowel. In these terms we may suppose that the plural of *gatto*/*gatta* in (2), namely *gatti* "cats," *gatt-e* "she-cats" has the structure in (4), where the [⊆] property ("divisibility") is associated with the Class node.[1]

(4)　　　　　　　Infl
　　　　　　　　　　／　＼
　　　　　　Class　　　　Infl
　　　　　　　　　　　　-*e*/-*i*
　　　　√　　　Class
　　　gatt-　[fem]/[masc], [⊆]　　　　　　*Italian*
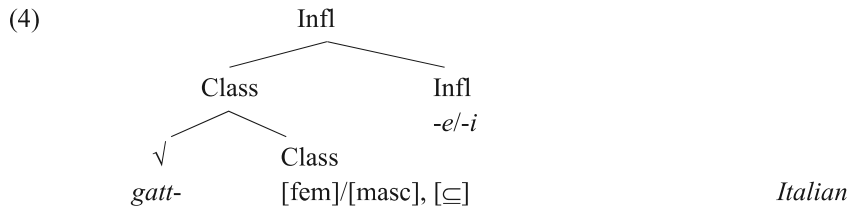
For reasons of space we cannot provide much further detail on the theoretical choices embodied by the structures in (2), (4), which we need in order to structure the data in later sections. We chose the category Class over the Distributed Morphology (DM) account of Class in terms of the nominalizing category *n* (Kihm 2005, Kramer 2015 a.o.)—essentially because it is less theory bound (Déchaine et al. 2014 use Asp). We also avoided the DM category Th, i.e., "thematic vowel" (Oltra-Massuet and Arregi

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1　Lampitelli (2011) in a formal account of Italian, suggests that Italian has a structure similar to that of Spanish, though Gender and Number categories are lexicalized by elements, in the sense of Government Phonology. Specifically, the element -A lexicalizes the singular Number and -I the plural. Thus plural -*e* is the effect of the phonological combination of gender -A with number -I and so on. However the -*a* plurals of Italian (which are more productive than Lampitelli acknowledges) represent a problem for this approach—as are the -*e* plurals (of -*u* singulars) discussed by Loporcaro and Paciaroni (2011), Manzini and Savoia (forthcoming b).

2005), which is adjoined postsyntactically in order to externalize (via Late Insertion) the declension diacritics associated with the root. As we will see, our Infl, unlike Th, may be associated with interpreted content; in any event, in the present model we reject Late Insertion as unnecessarily costly (Manzini and Savoia 2005, 2011; Kayne 2010).

The main problem left open by the structures in (2), (4) has to do with the correct pairing of roots with their Class, when the latter is not semantically motivated, hence in practice with arbitrary gender—and with the correct pairing of [√, Class] substructures with their appropriate Infl.[2] Generative grammar has various mechanisms whereby the relevant matches could be implemented, including the standard syntactic mechanism of selection. Thus Kramer (2015, 54) explicitly endorses the view that gender she terms "arbitrary" is selected by the root; in present terminology this means that √ selects for Class when not determined by interpretive needs.

As for the Infl vowel, we just rejected the DM approach in terms of declension diacritics and Late Insertion of inflectional exponents. Rather, assuming that morphosyntax is projected from lexical terminals, as in the minimalist program, we adopt Kayne's (2010, 73–74) suggestion that inflectional vowels select (large sets of) roots. It is this selection that defines the descriptive notion of declension (not vice versa). In the same way nothing prevents us from assuming that it is really [fem] and [masc] Classes that select for (large sets of) root, when "arbitrary" (i.e., not corresponding to sexed interpretation). Our syntactic structures, with Class projecting, correspond in fact to this second option.

2. Central Calabrian *-a*

Our first case study concerns the Central Calabrian variety of Iacurso, which in the singular distinguishes the two genders [fem] and [masc] as well as the three inflectional classes *-a*, *-u*, *-ε*. At least *-ε* can combine with feminine or masculine bases. The plural has the gender-neutral realization *-i* on nouns, on adjectives and on functional categories of the noun, as illustrated in Fig. 1 just for definite determiners.

	-u, -i [masc]	-a, -i [fem]	-ε, -i [masc]	-ε, -i [fem]
sg	l-u fiɟɟuɐl-u "the son"	l-a rɔt-a "the wheel"	l-u mɛlun-ε "the melon"	l-a cav-ε "the key"
pl	l-i fiɟɟuɐl-i "the sons"	l-i ruɐt-i[3] "the wheels"	l-i mɛlun-i "the melons"	l-i cav-i "the keys"

Figure 1. Inflection classes of Iacurso (Central Calabria, Italy)

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2   For a correct reading of the text it is necessary to remember that Class here refers to gender/number, as represented under the node Class.

3   In this dialect metaphony changes the stressed mid vowels /ε ɔ/ into the diphthongs [iɐ uɐ] in the context of a [+high] post-tonic vowel.

Iacurso also has -*a* plurals, illustrated in Fig. 2, for -*u* masculine singular bases; but while in Italian (1) -*a* plurals can be seen to switch to the feminine, in Iacurso in the absence of gender distinctions on adjectives and on functional categories of the noun no such switch is visible. In Iacurso, as in Italian, some Ns can be seen to alternate between the -*a* plural and the -*i* plural.

	-u [sg]	-i [pl]	-a [pl]
-u, -a	l-u jiðit-u "the finger"		l-i jiðit-a "the fingers"
-u, -i/-a	l-u kurtieɽ-u "the knife"	l-i kurtieɽ-i "the knives"	l-i kurtɛɽ-a "the knives (as a set)"

Figure 2. -*a* and -*i* plurals of Iacurso (Central Calabria, Italy)

As already mentioned, plural agreement on determiners and adjectives is systematically -*i*, independently of whether the singular is masculine or feminine (cf. Fig. 1), and whether the plural inflection is -*i* or -*a*, as further illustrated in (5)–(6). While (5) exemplifies the -*i* or -*a* plural of [masc] -*u* nouns, in (6) a [fem] -*a* noun is involved. Not only determiners, but also adjectives display the -*i* ending throughout.

(5) (a) du-i   pum-a/   pieɽtsik-i   matur-i
        two   apple-PL(A)   peach-PL   ripe-PL
        "two ripe apples/peaches"

    (b) kir-i   dui   kurtɛɽ-a/   kurtieɽ-i
        that-PL   two   knife-PL(A)   knife-PL
        "those two knives"

    (c) l-i   jiðita/   dient-i   lueŋg-i
        the-PL   finger-PL(A)   tooth-PL   long-PL
        "the long fingers/teeth"

    (d) l-i   kurtɛɽ-a   sunu   lavat-i
        the-PL   knife-PL(A)   are   washed-PL
        "The knives are washed."

(6) (a) st-i   buffiett-i   sunu   lueŋg-i
        this-PL   table-PL   are   long-PL
        "These tables are long."

(b) st-a   buffɛtt-a   ɛ   llɔŋg-a
this-F.SG   table-F.SG   is   long-F.SG
"This table is long."

Applying tests devised by Acquaviva (2008) we find that in partitive construction with a singular head of the type "one of . . . ," the gender of the noun on the numeral is determined by its singular form—regardless of whether an *-a* plural is involved. Hence, since *-a* plurals characterize nouns that in the singular are [masc], the ending on "one" in (7) is [masc] *-u* (cf. the first column of Fig. 1). We conclude that there is no evidence in Central Calabrian for the switch of gender that complicates the Italian picture in (1). In other words, we can study the alternation of two pure plurals, in *-i* and *-a*, in their simplest form.

(7)   (a) un-u   dɛ   kir-i   ɔv-a
one-M.SG   of   that-PL egg-PL(A)
"one of those eggs"

      (b) un-u   dɛ   kir-i   lɛtt-a   ɛ   bbiɛcc-u
one-M.SG   of   that-PL bed-PL(A) is   old-M.SG
"One of those beds is old."

Leaving aside for the moment the *-a* plural, the system illustrated in Fig. 1 can be accounted for on the basis of structures like Italian (2), (4), in which the root is associated with an Infl slot and a Class slot, as in (8a, b) for the singular and in (8c) for the plural. The Class slot can host three specifications, namely feminine, masculine and plural. We will say that in Calabrian, the *-i* Infl is associated with semantic content, namely [⊆], since it never appears but as a plural, along the lines of (8). The relation between the Class node and the Infl node in (8c) is one of agreement, specifically they agree with respect to the [⊆] property.[4]

---

4   Technical issues arise concerning the exact operation of the rule of agreement, as pointed out by an anonymous reviewer. We assume that the [⊆] feature is independently introduced on both Class and Infl nodes and then the two features are matched under usual locality constraints—and interpreted as two occurrences of the same feature. This is unlike Chomsky's (2000) Agree, in that it does not present any interpretable/uninterpretable or valued/unvalued asymmetry—though it is identical to it in all other respects (Minimal Search, Identity, etc.).

(8) (a)   Infl   feminine

      Class   Infl
                          -ɛ/-a

  √   Class
  cav-   [fem]
  rɔt-

  (b)   Infl   masculine

      Class   Infl
                          -ɛ/-u

  √   Class
  mɛlun-   [masc]
  fiɟɟuɐl-

  (c)   Infl   plural

      Class   Infl
                          -i ([⊆])

  √   Class
  fiɟɟuɐl-   [masc]/[fem]
  ruɐt-   [⊆]
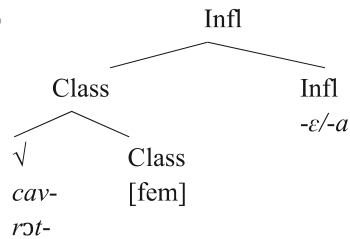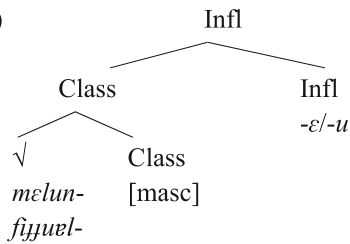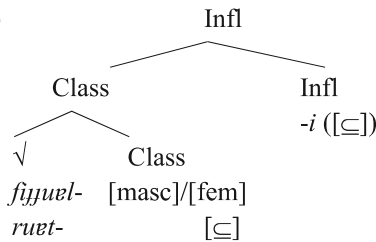
Acquaviva's (2008) semantic characterization of *-a* plurals as consisting of "weakly differentiated parts" appears to hold for Calabrian as well, witness the body part Ns present among *-a* plurals (*dinɔcc-a* "knees," *puddz-a* "wrists," *guvit-a* "elbows," *labbr-a* "lips," *jiðit-a* "fingers," *ɔss-a* "bones"). We take it that Acquaviva's characterization applies to body part Ns in Iacurso and to foodstuff with very much the same properties, such as *ɔv-a* "eggs," *pir-a* "pears," *pum-a* "apples." Other *-a* plurals attach to artifacts; in this respect, note that English also uses a collective singular for "cutlery" or speaks of a "knife set" (cf. *kurtɛɽ-a* "knives") and uses "fields" as a collective plural in "I went into the fields," etc. (cf. *ɔrt-a* "vegetable gardens"). Therefore the *-a* inflection corresponds to a set whose members are rather more like parts of whole than like individuated atoms. At the same time, of course, basic tests like the possibility of numeral quantifiers in (5a–b) or of partitive structures in (7) confirm that we are dealing with plurals.

    The notion of an aggregate of parts is used by Chierchia (2010) to characterize mass denotation. Correspondingly, Manzini and Savoia (forthcoming a) use the feature [aggr] to characterize the content of the so-called neuter *de materia* (neuter with mass denotation) present in Central Italian varieties and which in effects configures

an agreement Class (together with [masc], [fem]) in at least some of them. Thus Manzini and Savoia eliminate the traditional class neuter (Loporcaro and Paciaroni [2011] for a recent approach) in favour of the class [aggr] (mass). At the same time their analysis is incompatible with Borer's (2005) idea that mass status depends on the mere absence of the Div category (see Kučerová and Moro (2011) on the Central Italian neuter). Rather mass has its own positively specified Class content, namely [aggr]—which is a conclusion consonant with that reached by Déchaine et al. (2014) for Bantu.

Assuming the existence of an [aggr] class in Romance or Indo-European, it is tempting to differentiate the -*a* plural from the -*i* plural by associating with the former the properties [⊆, aggregate]. This would yield structures of the type in (9) for *jiðita* "fingers." Note that despite having insisted on the non-availability of gender differences in the morphology of the Iacurso plural, we have nevertheless kept the [masculine] Class property in the representation in (9). This is because anaphoric material in the singular, e.g., "one of them" in (7) shows masculine gender. This confirms that -*a* plurals, though they happen to be connected to a gender change in Italian, have no necessary connection to it.

(9) DP plural aggregate

```
                      DP                          plural aggregate
                   /      \
                  D        Infl
               /    \     /    \
              D     Infl Class   Infl
              l-    -i [⊆]  / \    -a  ([aggr])
                          √   Class
                       jiðit-  [masc],[⊆], [aggr]
```
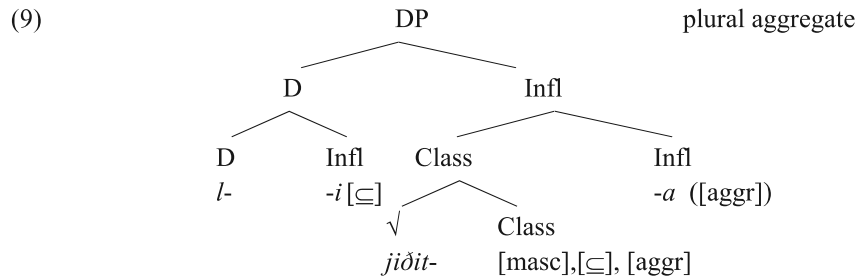
The structure of Class in (9) implies a very elementary ontology, consisting in the squaring of the two properties [⊆] [aggr]—each of which can be represented by specialized morphology in the natural languages we are considering. In fact, in consonance with the minimalist program, we hold that the syntax and the lexicon are relatively impoverished, albeit quick and efficient means, to restrict meaning, whose articulations are ultimately determined by contextual enrichment. Our claim therefore is syntactic, namely that [aggr]/zero crossed with [⊆]/zero is what is represented syntactically (in the type of languages we are considering).

Acquaviva (2008, 155–56) comments on "the dimness of some grammatical intuitions" going on to state that "the lack of individual distinctive properties is a matter of how the lexical predicates are conceptualized, and this often leads to variation among speakers and uncertain intuitions for one and the same speaker." This is consistent with what we are proposing here; rephrasing Acquaviva, the Iacurso speakers who indifferently

render Italian *coltell-i* "knives" with *kurtɛɽ-a* or *kurtiɐɽ-i* simply have two different ways of presenting the predicative content "knife"—namely as consisting of individuated atoms or as consisting of non-individuated atoms. In this sense the label proposed by Déchaine et al. (2014) for what we have called here Class, namely NAsp, seems particularly appropriate.

It remains for us to discuss our characterization of -*a* in (9) as endowed with the content [aggr]. [5] Before doing so, however, we briefly discuss the proposal by Acquaviva (2008) that the -*a* plural is lexically fixed, at least in Italian. On the contrary, the approach that we have taken here is that -*a* plurals is a productive inflectional phenomenon (albeit a lexically conditioned one). Some support for our position come from diminutives. Simplifying a complex descriptive situation (Savoia et al. forthcoming), diminutives suffixes are transparent to the gender Class of the root, while at the same time determining their own choice of inflectional class; thus -*itʃiɐɽ*- in (10) is associated with the -*u* and -*a* inflectional classes in the [masc] and [fem] respectively. As expected on the basis of the inflectional classes of Fig. 1, diminutives ordinarily have an -*i* plural. However, if the content of the root (body part, foodstuff, etc.) warrants it, they can also have an -*a* plural, replicating the conditions described by Fig. 2. What shows that -*a* is not a "lexical plural" (not in Iacurso anyway) is that it can be associated with the diminutive of *pɛð-ɛ* in (10b), which cannot otherwise take the -*a* plural, like Nouns of the -*ɛ* inflectional class in general. In other words, our argument is that -*a* cannot be lexical because it may depend on derivational processes.

(10) (a) ɔss-itʃiɐɽ-u/   ɔss-itʃiɐɽ-i/   ɔss-itʃɛɽ-a
           bone-DIM-M.SG   bone-DIM-PL   bone-DIM-PL(A)
           "little bone/bones"

      (b) dui   pɛð-itʃiɐɽ-i/   pɛð-itʃɛɽ-a
           two   foot-DIM-PL   foot-DIM-PL(A)
           "two little feet"

Diminutives, and in general evaluative morphology, are beyond the scope of the present work. Nevertheless, following Savoia et al. (forthcoming), we will assume that diminutives have their own dedicated projections (Cinque 2015), immediately above Class.

---

5   Technical issues arise concerning the implementation of agreement, as pointed out by an anonymous reviewer. Recall that in fn. 3 we proposed that agreement identifies multiple occurrences of the same feature (under locality, etc.) so that it is interpreted just once. Evidently rather than identity, we must now invoke non-distinctness as the crucial property that allows agreement to take place, since the Infl in (9) picks up just the [aggr] Class feature.

Equivalently Class could be conceived as a field of (ordered) projections, including gender, size (diminutives, augmentatives), number (count/mass, but also singulative introduced in Romance as in other languages by diminutives), etc. As indicated in (11) the information concerning the gender selected by the root (specifically masculine) is preserved in the diminutive. A plural -*a* form can attach to the diminutive of Ns which admit of the [⊆, aggregate] mass plural, including body parts ("feet").

(11)

```
                          Infl
                _____
               Dim                    Infl
          _____              -a  ([aggr])
        Class        Dim
      _____       -itʃɛʈ-
     √      Class
    pɛð-   [masc], [⊆], [aggr]
```
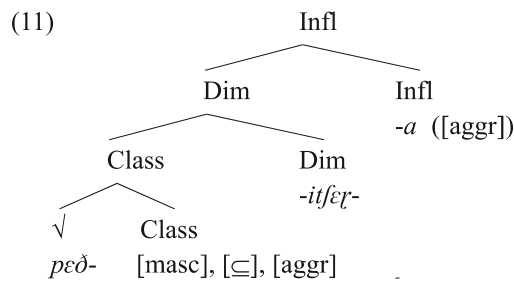
We are finally in a position to come back to the question that started the present investigation—concerning the syncretism of plural and gender in the -*a* ending. In the structure in (8c) we have embedded the assumption that the Infl element -*i* is associated with interpretive content, namely [⊆]. As discussed in the text, -*i* never turns up as nominal Infl except as a plural; this is made explicit in the lexical entry in (12a). In turn, from the point of view of number specifications, -*a* in (9), (11) is unambiguously associated with [aggr], so that we suggested that -*a* does in fact have an [aggr] content. Obviously, if we are to continue assuming that there is a single Infl item -*a* occurring in the (feminine) singular as well, [aggr] must be associated with -*a* only optionally, as in (12b). In the absence of other restrictions, we predict nevertheless that the property [aggr] may be present on -*a* in the singular as well. This is fairly trivially verified by the fact that the inflectional -*a* class will include mass nouns (e.g., *pɛʈr-a* "stone"). When -*a* selects roots with individual content, like "wheel" in Fig. 1, it is not associated with the [aggr] content, because of its optionality.

(12) (a) -*i*:   Infl, [⊆]
      (b) -*a*:   Infl, ([aggr])

Even with all the limitations noted, the lexical entry in (12b) provides an explanation of sorts for the syncretism of inflectional class and number morphology that we were seeking. Indeed, given the discussion that precedes, we can point to a positively specified property of -*a* that bridges between singular and plural namely [aggr]. In other words, it is in virtue of the property [aggr] that -*a* turns up both as a plural, and a singular inflectional

class marker. What escapes this analysis is the fact that -*a* happens to be feminine (at least by default). The latter is a matter to be learned by the child.[6]

3.   Sursilvan -*a*

Sursilvan varieties of Romansh, such as that of Vattiz (Lumnezia Valley), differ from the Italian varieties considered in Sections 1–2 in that they have an -*s* plural, rather like Spanish in (3), which combines both with bare masculine bases, and with feminine bare or -*a* bases, i.e., [√, Class] ones, as summarized in Fig. 3. There are no other declensions in the relevant varieties, specifically not a masculine -*o* declension or a masculine/feminine -*e* declension.

	-∅, -s [masc]	-a, -as [fem]	-∅, -s [fem]
sg	iʎ meuŋ "the hand"	l-a rɔd-a "the wheel"	l-a nuʃ "the nut"
pl	iʎ-s meuŋ-s "the hands"	l-a-s rɔd-a-s "the wheels"	l-a-s nuʃ-s "the nuts"

Figure 3. Inflection classes of Vattiz (Lumnezia Valley, Switzerland)

The -*s* plurals have all of the relevant properties of count plurals, for instance that of being associated with numerical quantifiers (cf. the plural in Fig. 4). The same semantics that we have so far imputed to -*a* plurals appears to be associated in this language with singular -*a* forms, alternating with bare masculine bases, as in Fig. 4.[7] The similarity with the -*a* plurals of, say, Central Calabrian is confirmed by the fact that the -*a* singular of Vattiz, applies to the same roots, including notably body parts that come in a "cohesive" set (*bratʃ-a* "arm set," *det-a* "finger set") or "weakly differentiated" individuals such as foodstuffs (*mail-a* "apple set," *per-a* "pear set"). Indeed the natural translation for these expressions in a language like English (or Italian) is a plural.

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6   It is worth noting that the classical historical account of Indo-European feminine singular/neuter plural -a (see the summary in Clackson 2007, 107) is that a neuter/collective plural -a was extended to a new inflectional class for collective/abstract singulars—which only secondarily came to coincide with the default class for feminine animates. Viewed as a projection on the historical, external axis of an analysis motivated on internal grounds, this reconstruction appears to be quite compatible with the present discussion.

7   The changes undergone by the base *mail-* are phonological; thus [il] palatalizes to [ʎ], while the sequence [ls] is realized as [lts].

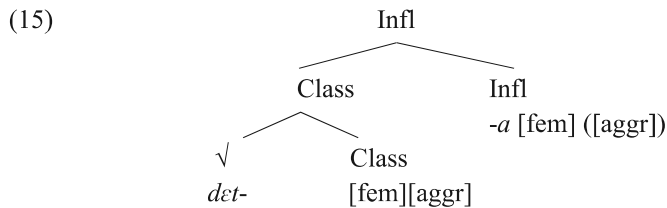|	[masc]	-*a* [fem]
sg	in maʎ "an apple"	l-a mail -a "the apples" (as a generic, etc.)
pl	du-s mailt-s "two apples"	

Figure 4. Count/aggregate alternations in Vattiz (Lumnezia Valley, Switzerland)

Needless to say, -*s* plurals agree in plurality with determiners and adjectives and also trigger plural agreement on the verb (the copula *ain*), as (13). The singular status of -*a*, even in alternations of the type in Fig. 4, is confirmed by agreement with the verb in (14), namely by the presence of the 3rd singular form of the copula *ai*; agreement with determiners and adjectives is in the feminine singular.

(13) (a) iʎ-s   kɔrn-s   ain   liung-s
         the-PL   horn-PL   are   long-PL
         "The horns are long."

     (b) kwɛl-s   mailt-s   ain   marʃ-s
         that-PL   apple-PL   are   rotten-PL
         "Those apples are rotten."

(14) (a) si-a   bratʃ-a   ai   kwərt-a
         his-F.SG   arm-F.SG   is   short-F.SG
         "His arms are short."

     (b) l-a   dɛt-a   ai   liuŋg-a
         the-F.SG   arm-F.SG   is   long-F.SG
         "The fingers are long."

     (c) l-a   mail-a   ai   marʃ-a/   kurdad-a
         the-F.SG   apple-F.SG is   rotten-F.SG fallen-F.SG
         "The apples are rotten/have fallen."

     (d) kɔnt-a   mail-a
         how.much-F.SG   apple-F.SG
         "How many apples?"

According to Chierchia (2010), a mass singular is a plurality of sorts, namely a whole made up of parts. Thus a singular mass noun is like a plural count noun in that both include a multiplicity—namely a multiplicity of individuals, or a multiplicity of parts. In this perspective, we

are not surprised that the Romance -*a* morphology can turn up denoting both a "cohesive" plural of "weakly differentiated" parts, as in Italian (1) or Central Calabrian in Section 2, and a mass/collective singular, as in Sursilvan (14). Specifically, Sursilvan -*a* introduces a collective interpretation in combination with a subset of roots available to be interpreted as an aggregate of similar individuals, namely the same roots (body parts, foodstuff, etc.) that trigger -*a* plurals in Italian varieties. Suppose we characterize the mass/collective singular of Sursilvan as [aggr], stressing the continuity with the Italian -*a* plural. The difference between the two is simply that the Sursilvan -*a* [aggr] forms are singular, in other words no [⊆] properties are involved, so that the structure for *dɛta* "finger set" is as in (15).

(15)

```
                        Infl
              ┌──────────┴──────────┐
            Class                  Infl
        ┌─────┴─────┐          -a [fem] ([aggr])
        √          Class
       dɛt-       [fem][aggr]
```

The lack of plural [⊆] properties in (15) correctly predicts agreement in the singular between phrases such as *la dɛta* and the verb (cf. [14a–c]). On the other hand, *dɛta* in (15) triggers an -*a* agreement with its D; the same is true of Quantifiers, cf. (14d), and of adjectival and participial modifiers and predicates, cf. (14a–c). In (15) we have modelled this agreement as involving both [fem] gender and [aggr] properties. Thus the structure in (15) prospects the existence of a Class [aggr] property that enters into -*a* agreement. When the -*a* Infl is not [aggr], furthermore, it is univocally associated with [fem]. Indeed, as far as we can tell, the -*a* masculine class of standard Italian, Spanish, etc. (e.g., Italian *poet-a* "poet," *poet-i* "poets") is not found in Sursilvan (cf. *poet* "poet," *poet-s* "poets"). This suggests a relatively rich lexical entry for the Infl element -*a*, as an exponent of [fem] and optionally [aggr] in (16).

(16)   -*a*:   Infl, [fem], ([aggr])

The only other inflectional element present in Fig. 3–4 is the -*s* plural.[8] The natural conclusion to draw is that it is identified with the pure [⊆] morpheme and node, as in (17), yielding plural structures essentially like Spanish (3), cf. (18) below.

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8   Perfect participles in the masculine plural present an -*i* Infl element, which evidently parallels Italian -*i*. This is exemplified in (i) from the variety of Vella (Lumnezia Valley).

(i)   il-s   tʃɔp-s   lava-i
         the-PL   jacket-PL   washed-M.PL
         "the washed jackets"

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(17)   *-s*:   [⊆]

Nothing prevents the *-a* morphology in (16) and the *-s* morphology in (17) from combining if *-a* is simply [fem]. This is true also for root predicates referring to body parts, foodstuffs, etc., that might otherwise be compatible with the alternation in Fig. 4—as indicated in (18) for *ureʎ -a(-s)* "ear(s)." At the same time, [aggr] *-a* cannot combine with *-s*, despite the fact that the combination of features [aggr], [⊆] has been used in Section 2 to account for Central Calabrian. The obvious difference between the structure of Sursilvan in (18) and that of Central Calabrian in (9) has to do with the different position of the [⊆] content—and we may provisionally associate the incompatitibility of [⊆] with [aggr] to the position that [⊆] takes.

(18)

```
                              [⊆]
                   ┌───────────┴─────────┐
                 Infl                   [⊆]
            ┌──────┴──────┐              -s
         Class          Infl
       ┌───┴───┐         -a
       √     Class
     ureʎ-   [fem]
```
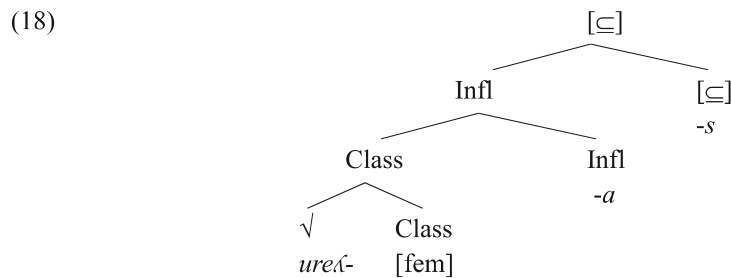
There is another difference between the [⊆] morphology of Sursilvan and that of Spanish. As indicated in Fig. 3, the Sursilvan masculine singular generally coincides with the bare lexical base; in present terms this means that Romance languages admit not only three-tiered structures like Sursilvan (18) and two-tiered structures like Italian (2), (4)—but also simple trees like consisting of a root and its class specification, as in (18') for Sursilvan *maʎ* "apple."

(18')

```
              Class
          ┌─────┴─────┐
          √         Class
        maʎ-        [masc]
```
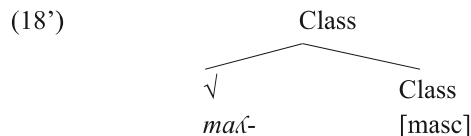
Despite the situation depicted in (19), a masculine singular *-s* ending survives in predicative contexts (Haiman and Benincà 1992, Manzini and Savoia 2005, 2012). In (19) we provide relevant examples from another variety of the Lumnezia Valley, Vella. The *-s* singular inflection characterizes both predicative adjectives (19a–c) and participles (19d). The subject of the predication can be animate, as in (19a–b) or inanimate, as in (19c–c') including mass nouns, e.g., "milk" in (19c'). Furthermore, case is irrelevant—witness the adjective in (19e), which is predicated of a direct object.

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(19) (a) kwai om ai kwərt-s/ grɔnd-s
    that man is short-M.SG tall-M.SG
    "That man is short/tall."

  (b) el ai   meʎer-s ke jɛu
    he is   better-M.SG than I
    "He is better than me."

  (c) kwai rakwənt ai   ver-s
    that story is   true-M.SG
    "That story is true."

  (c') kwai/ iʎ latʃ   ai   buŋ-s
    that/the milk is   good
    "That/the milk is good."

  (d) iʎ   afɔn ai   ɲiu-s
    the   boy is   come-M.SG
    "The boy has come."

  (e) jɛu vai viu el   kuntent-s/ grɔnd-s
    I   have seen him happy-M.SG tall-M.SG
    "I saw him happy/tall."

Singular predicative adjectives/participles do not bear -*s* endings in contexts where the argument they are predicated of has a propositional content, as in (20a–b) and/or when the subject is an expletive with a DP/CP correlate, as in (20b–c). Perfect participles of transitive/unergative verbs, which do not agree with the subject but have an invariable ("default") inflection, also do not bear singular -*s*. Finally, the -*s* inflection, while possible, is not necessary with quantificational subjects, including wh-phrases in (21a), negatives and existentials in (21b).

(20) (a) kwai ai   ver
    that is   true
    "That is true."

  (b) i(ʎ) ai   meʎer da klama tai
    It is   better to call you
    "It is better to call you."

(c) i(ʎ)   ai   ɲiu   afɔn-s
    it   is   come   child-PL
    "There have come children."

(21) (a) tʃĩ   ai   ɲiu-s
    the   boy   come-M.SG
    "Who has come?"

(b) nidʒin/   tsitʃĩ   ai   ɲiu(-s)
    nobody   somebody   is   come(-M.SG)
    "Nobody/somebody has come."

The characterization of plural as [⊆], seen in (17), is compatible with Borer's (2005) conclusion that plurality predicates divisibility of any given root property. In Borer's conception, Div does not attach specifically to plurals, but equally characterizes count singulars. It is therefore tempting to hypothesize that Sursilvan -*s* externalizes the [⊆]/ Div property in predicative contexts, independently of singular or plural number, as schematized in (22) for *kwərts* "short-M.SG." For present purposes, we can simply restrict singular -*s* to [masc] bases by stipulation.

(22)

In their discussion of Sursilvan, Manzini and Savoia (2012) propose that the -*s* morpheme is quantificational in nature and is found only in environments where a quantificational closure is not provided by determiners and quantifiers of the noun. This is too strong in present terms, since [⊆] simply predicates divisibility of the root content, as we just saw. However, we may retain the conclusion that predicative adjectives must have a richer structure than modifier adjectives (embedded under the functional layers of the noun). Specifically, we propose that both plurals and singulars must be embedded under the morphology [⊆], introducing individuating properties, in order for predication to take place. This behavior is subject to parametrization—in other Romance languages predicative and modifier adjectives are treated alike, in German predicative adjectives are inflectionally poorer than categories within the DP (Haiman and Benincà 1992).

    If the structure in (22) is to hold, on the other hand, the -*s* adjective cannot agree with the DP of which it is predicated with respect to the [⊆] feature, given that in (19c') a mass noun

is the subject of the adjectival predication. This state of affairs reminds us of linker structures, as seen for instance in Balkan languages, where (predicative) adjectives are obligatorily preceded by an article (Lekakou and Szendroi 2012, Franco et al. 2015 for recent accounts). As shown in the Albanian example in (22), though phi-features agreement holds, the preadjectival linker is represented by the definite article, even if the subject of the predication is indefinite. In other words, we propose that embedding under the individuating layer in (22) has the same formal role as embedding under the linkers layers in (23).[9]

(23) dial-i/   një   dialë   i   bukur
      boy-the.M.SG   a.M.SG.   boy-M.SG   the.M.SG   nice
      "the/a nice boy"

The fact that -*s* is excluded in (20) remains to be accounted for. In fairly traditional terms, one may say that in (20) predicative adjectives and participles agree in the neuter gender with the expletive *i(t)*, which differs morphologically from both masculine and feminine singular, i.e., *El/Ela* (cf. [19b, e]); the same would also be true of the demonstrative in (20a). However, this does not quite account for the sensitivity of agreement to the presence of indefinite subjects, as in (21). The latter belong to the class of elements (wh-phrases, Negative Polarity Items, existentials) standardly modelled as free variables (Heim 1982) (closed by existential quantification, negation, etc.). Furthermore, Manzini and Savoia (2012) propose that expletive pronouns are variables, which are assigned a value at the C-I interface via predication—namely equated to the DP or sentential correlate in postverbal position. Thus we may want to substitute the generalization that the -*s* predicative singular inflection is incompatible with the neuter with a different generalization, namely that it is incompatible with free variable subjects.

Summarizing, Sursilvan varieties provide evidence for [fem], [aggr] Class externalized by -*a*. In addition the language has an -*s* ending specialized for the [⊆] content. The latter has a straightforward plural reading that combines with both [masc] and [fem]. Less straightforwardly -*s* has a singular masculine reading on predicative adjectives/participles. We have proposed that it is the same -*s* which forms the plural, hence the [⊆] content is independent of pluralization.

4.   Conclusions

In Central Calabrian, the -*a* plural is a mass plural, resulting from the combination of the plural content [⊆] of and the [aggr] content. As for the -*a* Infl element, it has optional

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9   An anonymous reviewer objects that by hypothesis [⊆] has an interpretable content, while linkers are ordinarily assumed to be uninterpretable. One could however argue that they are interpreted, namely as resumptive clitics are, as Ds bound by higher Ds/Qs (Franco et al. 2015, and see also Lekakou and Szendroi 2012).

[aggr] content. Vice versa the -*i* Infl specializes for [⊆] content. In short, Central Calabrian has [masc] and [fem] gender Classes—and what would be traditionally called a neuter plural, here understood to correspond to an [⊆, aggr] class.

In turn, Sursilvan provides evidence for a [fem], [aggr] Class externalized by -*a*. In addition the language has an -*s* ending specialized for the [⊆] content. The latter has a straightforward plural reading that combines with both [masc] and [fem], but not with [aggr]. Interestingly -*s* also has a singular masculine reading on predicative adjectives/ participles. We have proposed that it is the same -*s* which forms the plural, hence the [⊆] content must be capable of expressing the count content independently of pluralization.

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