The case for one case / one gender in Romanian : a tentative account of Romanian "declension" (draft)

Alain Kihm (CNRS, Université Paris 8)

1. Introduction: describing the issue

According to traditional grammars Romanian nominals, i.e. nouns and adjectives, inflect for five cases : Nominative, Genitive, Dative, Accusative, and Vocative, and they belong to three genders : masculine, feminine, and neuter, thus making Romanian the most conservative of Romance languages, in this domain at least (see Academia Republicii Populare Romîne, vol. I 1963 – henceforth ARPR – : 57ff., 74ff.) An unprejudiced look at the actual paradigms gives a rather different picture, however.

As far as gender is concerned, so-called neuter nouns are those nouns which are masculine (masc.) in the singular (sg.) and feminine (fem.) in the plural (pl.) as shown by the form of the definite determiner or "article" which attaches to them as a suffix (e.g., *unghiul* / *unghiurile* 'the nail(s)', where /-ul/ is the masc. sg. form of the article, and /-le/ the fem. pl. form of the same). They accordingly command masc. agreement of attribute and predicate adjectives in the sg. (e.g., *teatrul frumos* /theatre-Art$_{msg}$ beautiful$_{msg}$/ 'the beautiful theatre', *Teatrul e frumos* 'The theatre is beautiful'), but fem. agreement in the pl. (*teatrele frumoase* /theatres-Artf$_{pl}$ beautiful$_{fpl}$/ 'the beautiful theatres', *Teatrele sunt frumoase* 'The theatres are beautiful'). In fact, the only morphological clue that Romanian neuter may indeed be a third gender like Latin or Slavic neuter is the pl. ending /-uri/ of, e.g., *unghiuri* 'nails' which is specific to neuters, although not all of them take it (see *teatru* / *teatre* 'theatre(s)').[1] The claim that there are three genders in Romanian is thus seen to rest on not too solid ground.

Let us turn to case.[2] First, Vocative should be put aside, not so much because its use is somewhat limited, but because it is the only nonstructural case in the paradigm.[3] Restricting our attention to structural cases, then, we observe complete identity of all forms for unarticulated sg. and pl., masc. and neuter nouns.[4] In other words, all "inflected" forms turn out to be identical to the Nominative (Nom.), which is itself either identical to the root (cf. masc. *prieten* 'friend', neuter *toc* 'pen') or consists in the root plus an end vowel of still uncertain status (cf. masc. *fiu* 'son' or *cîine* 'dog', neuter *teatru* 'theater') or a pl. ending (cf. *prieteni* 'friends', *tocuri* 'pens'). Case distinctions are uniquely expressed on the functional modifiers of the noun as shown by the following, morphologically analysed example :[5]

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[1] Yet, a few feminine nouns take /-uri/ as a pl. ending "because these substantives, given their meanings, were considered close to neuters" (ARPR : 69, my translation).

[2] I write "case" with a lower-case *c* because I'm not concerned with abstract Case, but with morphologically realized case.

[3] The Vocative endings are /-o/ for fem. sg. "unarticulated" nominals (e.g., *soro!* 'sister!' < *sor*) ; /-e/ for masc. sg. nominals with or without the article (e.g., *profesore!* ~ *profesorule!* 'professor!' < *profesor*); and /-lor/ for pl. nominals of any gender (e.g., *surorilor!* 'sisters!', *profesorilor!* 'professors!'). Pl. Vocative is thus identical to articulated pl. Dative and Genitive. Using the articulated form in the sg. (i.e., *profesorule!* rather than *profesore!*) is supposed to make the address more "affective" (see ARPR: 79). Also note that the Vocative is giving way to the Nominative in the contemporary language, although it certainly cannot be said to be disappearing (see ARPR: 79).

[4] Following tradition I call "unarticulated" (*nearticulat*) every nominal which does not bear a suffixed definite article. Unarticulated nominals can be indefinite (*un prieten* 'a friend') or they can be definite (*acest prieten* 'this friend'). Articulated nominals, in contrast, are always definite.

[5] EV = end vowel. Hyphens are not part of the official spelling.

(1) Îi-am ar tat acest-u-i profesor ruine-le un-u-i vechi ora
to.him-I.have shown this-EV-Dat teacher ruins-Art$_{fpl}$ a-EV-Gen old town
I showed this teacher the ruins of an old town

Note however that Genitive (Gen.) and Dative (Dat.) are again fully identical in both numbers (cf. *unui* 'of/to a', *unor* 'of/to some', *acestui* 'of/to this', *acestor* 'of/to these') and that Accusative (Acc.) is nondistinct from Nom.

In a similar way, case distinctions for articulated nominals appear not on the nominal but on the article as illustrated below:[6]

(2) Îi-am ar tat profesor-u-lui ruine-le vechi-u-lui ora
to.him-I.have shown teacher-EV-Art$_{msgDat}$ ruins-Art$_{fpl}$ old-EV-Art$_{msgGen}$ town
I showed the teacher the ruins of the old town

Here too Gen. and Dat. as well as Nom. and Acc. are undistinguishable in both numbers (cf. *profesorul* 'the teacher', subject or object; *profesorului* 'of/to the teacher'; *profesorii* 'the teachers'; *profesorilor* 'of/to the teachers').[7]

Only with fem. nominals do we observe an internal difference in case marking, and an intriguing one at that : sg. fem. nominals in the Gen. or the Dat., articulated or unarticulated, take the form of the *plural*. This is especially striking when pluralization entails a metaphonical process affecting the root vowel as in *gar / g ri* 'station(s)' or *fat / fete* 'girl(s)'. We thus find *peronul unei g ri* 'the platform of a station', *rochia unei fete* 'the dress of a girl', *peronul g rii* 'the platform of the station', *rochia fetei* 'the dress of the girl'. In the first two examples, the sg. unarticulated Gen. (or Dat.) appears fully identical with the pl. unarticulated Nom. (or Acc.): cf. *cunosc aceste g ri / fete* 'I know these stations / girls'. The final /i/ showing up in the last two examples, on the other hand, might be mistaken for a plural article (cf. *profesorii* 'the teachers'), which it cannot be since the fem. pl. article is always /-le/ in the Nom.-Acc. or /-lor/ in the Gen.-Dat. (cf. *g rile* 'the stations', *g rilor* 'of/to the stations', *fetele* 'the girls', *fetelor* 'of/to the girls'). Rather, it has to be analysed as the Gen.-Dat. form of the fem. sg. article, suffixing to a Gen.-Dat. base which is or ressembles the unarticulated Nom.-Acc. pl. form. The following table may help clarify this complex network:

	Unarticulated	Articulated
Singular	N-A fat G-D fete	fat-a fete-i
Plural	N-A fete G-D fete	fete-le fete-lor

The whole puzzle of the Romanian "declension" lies there. How can we account for this surprising "number polarity", to paraphrase the "gender polarity" of some Afroasiatic languages? And is it related to the apparently real gender polarity of neuter nouns? These questions set the aims of this article. As its title advertises, the theoretical framework I will use to try and answer them is a revised version of Distributed Morphology (DM). A brief exposition of its works, especially those parts that will directly be brought to bear, is therefore in order before we tackle the specific issue.

[6] In adjective-noun phrases the suffixal article appears only once on the first term. For noun phrases and genitive constructions in Romanian, see Dobrovie-Sorin (2000).

[7] In *profesorii* the first /i/ is the pl. morpheme (cf. *profesori* 'some teachers'), and the second /i/ is the masc. pl. article. Both are pronounced as one /i/ – whereas in *profesori* final pl. /i/ is the so-called "asyllabic" // which surfaces as a palatal feature on the preceding consonant.

2. The framework

DM's crucial innovation, as I see it, lies in its assumption of an abstract lexicon to be identified as the *semantic* component of grammar. By this I intend to point to those aspects of meaning that are of direct relevance to grammar – "narrow" semantics if you wish – and which have to be separated from (and interfaced with) conceptual-intentional faculties on the one hand, and encyclopaedic knowledge on the other hand. Lexical items are thus elements or element sets (features or feature bundles in another terminology) which correspond to grammatically expressed concepts, and which may also denote "objects" in the most encompassing sense of the term. The latter, denotational lexical items are called *roots*. Lexical items which express grammatically relevant concepts – e.g., cardinality, tense, etc. – but do not denote may be called *functional*.

Roots have no category inasmuch as they are neither nominal nor verbal.[8] They acquire a category as nouns or verbs by combining with one of two functional elements, *n* and *v*, corresponding to concepts such as "entity" for *n* and "eventuality" for *v* – a shamefully coarse ontology to be sure, but one that will suffice for my purposes. In other words, *n* is the nominalizing element, *v* the verbalizing element.[9]

In standard DM, lexical items project into syntax as heads, and they combine through the syntactic transformation Head Movement. In recent work (see Kihm 2003), I argued that at least part of these combinations can be assumed to proceed inside the lexicon, given a set theoretic approach with two operations, Add and Include. Add yields ordered element sets, thus emulating the syntactic or morphological operation Merge. Functional elements added to roots surface as affixes. Include, in contrast, does not produce ordering, so that included functional elements end up being fused with the root, in the DM sense of "fusion" (see Halle & Marantz 1993). Inclusion thus cannot result in affixation, although it may have phonological reflexes of the apophonic type – cf. the English strong preterites and plurals (*sing* vs. *sang*, *foot* vs. *feet*, etc.) – or by activating some inner morphological site as in the Arabic internal plurals.[10] Typical elements eligible for intralexical combination are gender and number for nouns.

Yet, there are features or elements which only adjoin to a lexical item by virtue of the latter being inserted in a certain syntactic configuration. Structural case is an obvious example. This means that the element set or feature bundle that makes up a lexical item is not complete before all relevant syntactic operations have taken their course. Once this is done, the element set is ready to undergo morphological interpretation, which means for the elements to be linearized and to be spelled out as exponents (or morphemes). Linearization consists in mapping the virtual order of element sets onto a real ordering where precedence is spatially or temporally understood, and it is a necessary correlate of spelling out, since morphemes are actual things which must occupy a defined position with respect to one another.[11]

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[8] Semitic languages show this property of roots in an especially clear way. According to DM, however, they only make perspicuous what is actually a general property of natural language.

[9] There is another use of *v* in the literature, whereby it names a functional head in syntax with various functions which all amount to somehow "round up" the verb phrase or lower phase (see Kratzer 1994; Chomsky 2001). I will not consider this use, nor will I try to find out whether there is a connexion between it and the sense *v* is given in DM.

[10] We have here the morphological counterpart of Kayne's (1994) Linearization Correspondence Axiom: unordered elements cannot be linearized, hence cannot be given autonomous exponence. Note that order is a structural or set-theoretic concept, wheras linearity is a material property. Kayne's basic and very strong claim is that order and linearity *must* be linked.

There are various views of how Spell Out operates. In standard DM, exponents are listed with the features they realize, and the exponent whose features match best with a given feature bundle entering morphology is associated with that bundle (for examples of how it works, see Halle 2000). Another possible view of Spell Out is as a function that takes feature sets as its domain and returns phonological objects (see Kihm 2003). For the purpose of this article, it is not important which of these two competing views – and perhaps other – is more adequate, so I will take a neutral stand about how association is effectively accomplished, although I will adopt the functional format for my representations.

Through Spell Out vocabulary items, that is real words, are produced.[12] To the difference of the lexicon, which constitutes a possibly closed set of roots and functional elements, the vocabulary is thus an open-ended list of nouns, verbs, adjectives, etc. These are then given complete meanings including pragmatic specifications, stylistic overtones and so forth in the encyclopaedia, i.e. that part of the cognitive faculties that can be characterized as knowledge of the world, physical as well as psychological and social.

Let us now return to the lexicon and its connexion to morphology, as the issue of the Romanian declension has essentially to be dealt with at this level. Three functional elements frame this issue, as we saw, viz. gender, number, and case. I will assume, and try to justify the assumption, that not only gender, but also number combines with roots within the lexicon. Only case, insofar as it is structural, shows up as a product of syntactic insertion of a set already consisting in a root plus gender and number. We shall take up gender first, thus illustrating the differential actions of Add and Include.

3. Gender

Assume that gender is one possible realization of the more general category Class, an inherent, distinctive property of nominals (see Kihm to appear).[13] Since nominals result from the combination of a root with *n*, Class may then be viewed as a set of values of *n*, modifying its basic nounness. As mentioned earlier, Romanian is traditionally provided with three genders: masc., fem. and neuter, a highly inadequate division in general, since it confuses two distinct properties: gender as a natural classification based on sex (male vs. female vs. none) and gender as a lexical classification yielding word classes (see Corbett 1991, 1998; Harris 1999). This is well-known, as it is well-known that discrepancies abound between the two properties: cf. *un pa smintit* 'a crazy pasha' where meaning as well as agreement reveal *pa* to be a masc. noun even though its – ending makes it look like a fem. (compare *o fat smintit* 'a crazy girl').

Some conceptual and terminological clarification is therefore in order. Considering that awareness of phenotypical sex (if any) pertains to encyclopaedic knowledge, I propose to call gender *qua* natural classification e-gender, whereas lexical gender will be called l-gender. Such qualifications as masc., fem., and neuter ought then to be reserved for e-gender exclusively, where they indeed seem to have some worldly foundation. Thus, it is generally true that neuter nouns do not denote animates, except for a handful of exceptions (*animal* 'animal', *personaj* 'character', *planton* 'orderly', etc. – see Lombard & Gâdei 1981: 10-

[11] All in all, the present conception strikes me as quite similar to, although developed independently from, Baker's (2003) analysis of lexical categories.

[12] Or described if one prefers to consider the whole matter in representational rather than computational terms. Between these two interpretations I also stand neutral.

[13] I mean by this that only nominals may be overtly classified according to inherent properties of their *denotata*, such as sex, position in a natural taxonomy (humans vs. animals, etc.), shape (flat vs. elongated objects, etc.), or still other criteria (for a review, see Aikhenvald 2000). Verbs are never classified in this way (e.g., dangerous vs. pleasant activities).

11).[14] More suggestive yet is the fact that nouns that refer to animate or inanimate entities may vary their e-gender accordingly. For instance, *cap* meaning 'head' is neuter with a pl. *capete*, whereas *cap* meaning 'chief' is masc. with a pl. *capi*; similarly, *zmeu* is masc. in the sense of 'dragon', but neuter in the sense of 'kite'. The reverse is not true, however: many inanimate entities are not denoted by neuter nouns, but by nouns that tradition assigns to the masc. or fem. genders. There thus seems to be no predictive connexion from denotation to e-gender or the reverse except insofar as, if all we know of a noun is that it is neuter, then we can almost safely bet that it does not denote an animate.[15]

But how do we know we are dealing with a neuter noun? As mentioned, we only know it when we observe that a given noun controls masc. agreement in the sg., but fem. agreement in the pl., which is why some authors prefer to call such nouns "ambigenous" rather than neuter (see Lombard & Gâdei 1981: 10-11).[16] Notice, however, that by saying this we let confusion creep in again – as we did, by the way, at the end of the last paragraph. Since neuter nouns almost never denote animates, "masc." and "fem." in the foregoing sentence can only mean l-gender, not e-gender. In order to stave off this confusion as much as possible I will henceforth use M and F instead of masc. and fem. when l-gender is what is meant, and the latter only when e-gender (or "traditional" gender) is in question.

Whereas e-gender is an encyclopaedic property, l-gender is a morphological property in the sense that a given nominal is assigned to this or that l-gender because of its *form* rather than its meaning.[17] No notation is needed for neuter, therefore, since no specific form expresses it on the noun or any of its dependents (article, attributive adjective, etc.). In other words, nouns classified as neuter in the encyclopaedia are just those nouns which are assigned two l-genders in the lexicon, M if sg., F if pl., meaning that *n* with which the root combines may receive two values, M or F.[18] Such an account is still too crude, however. In order to refine it, we have to look more closely to the morphological clues of l-gender.

When giving rules for gender assignation, traditional grammars divide nouns according to whether they end in a consonant, a palatalized consonant, or a vowel of such or such a quality (see ARPR I: 60). Generalizations can be obtained, however, given a few rather obvious assumptions. Assume first that final palatalized consonants as in *ochi* [okʲ] 'eye' are the surface realizations of underlying Ci# sequences. This is a fairly standard analysis made plausible by the observation that, putting aside a few unintegrated borrowings such as *rugbi* (also spelled *rugby* and pronounced ['rugbi]), final /i/ always shows up as a palatal feature on the preceding consonant – the famous Romanian "asyllabic *i*" noted // – unless it is preceded by a *muta-cum-liquida* cluster (e.g., *metri* ['metri] 'meters') or it is doubled (e.g., *prietenii* [pri'jeteni] 'the friends' vs. *prieteni* [pri'jetenʲ] 'friends'). Note, however, that /i/ represents a pl. morpheme in these cases (see below), which allows us to generalize further: nonmorphemic final /i/ – i.e., /i/ ending a sg. noun – is always realized as //, unless it is the only vowel in the word, for which there is a single example among nouns, viz. *zi* [zi] 'day', or it is preceded by a vowel and makes a diphthong with it (e.g., *pui* [puI]

[14] Many nouns denoting human or animal collectivities are neuter, on the other hand (e.g., *popor* 'people', *parlament* 'parliament', etc.).

[15] There is also a so-called "personal" gender in Romanian that is syntactically identified – e.g., personal (non pronominal) direct objects must be governed by the preposition *pe*, whereas nonpersonal DOs are directly governed by the verb. Naturally, personal nouns, i.e. nouns denoting humans or personified animals, are almost never neuter.

[16] The plural ending /-uri/ cannot be taken as a sure guide because (i) not only neuter nouns take it; (ii) not all neuter nouns take it, but many take /-e/ like fem. nouns.

[17] This may sound as too strong a claim. I will try to show it can be upheld, however, provided we firmly hold by the distinction between e- and l-gender.

[18] DM conceives of the encyclopaedia as another semantic component which interprets the vocabulary items, that is the actual, usable words.

'chicken'). All these cases can therefore be lumped into one group, that of sg. nouns ending in /I/.

Another group is that of sg. nouns ending in /U/, i.e. syllabic [u] or asyllabic [U]. The crucial observation here is that this ending only appears if the root ends in a *muta-cum-liquida* cluster (e.g., *membru* 'member', *cioclu* 'grave-digger', *ministru* 'minister') or a nonmorphemic, root vowel (e.g. *leu* [leU] 'lion', *vizitiu* [vizi'tiU] 'coachman'). The conclusion follows: final /U/ is an epenthetic vowel that prevents words from ending in a Cr/l cluster or a root vowel.[19] Nouns ending in /U/ may thus be added to the large group of nouns that end in a nonpalatalized consonant, either simple (e.g., *b iat* 'boy', *creion* 'pencil') or in a legitimate final cluster (e.g., *urs* 'bear', *mosc* 'musk'). As for final root vowels, we already dealt with /I/, and note that /U/ apparently need not be added when the vowel is stressed /a/, unstressed /o/, or stressed /u/, as in *cafea* [ka'fa] 'coffee', *cazma* [ka'zma] 'spade', *radio* ['radijo] 'radio' (compare *tablou* [ta'bloU] 'board'), *tabu* [ta'bu] 'taboo'. With the first type, however, epenthetic /U/ shows up before the article (cf. *cafeaua* 'the coffee', *cazmaua* 'the spade') as it does in *ziua* 'the day'.

We thus achieve a significant simplification whereby the whole of the nominal vocabulary is divided into two groups: (a) nouns ending in one or several consonants, possibly with /U/ insertion, or in a root vowel; (b) nouns ending in a morphemic vowel /-e/ or / / (e.g., *cîine* 'dog', *c ma* 'shirt', etc.). What does that give us as far as l-gender assignation is concerned?

Let us begin with (b) and nouns ending in / /. In traditional parlance, they are all fem. save a closed list of masc. exceptions which share the property of denoting male humans, and many of which are either diminutives or Slavic or Turkish borrowings (e.g.*aghiu* 'little devil', *bimba* 'Turkish major', *pap* 'pope', *pa* 'pasha', *pop* 'priest', *tat* 'father', *vl dic* 'bishop' – see Lombard & Gâdei 1981: II 11-12 for a full list).[20] In our terms, we shall say that *n* has the value F with these items, a claim that our strict distinction of l-gender from e-gender allows us to extend to the exceptional items. Moreover, since n_F is associated with a morphological exponent, viz. /-/, we shall assume it combines with the root through the Add operation. The lexical representation of *c ma* 'shirt' is thus the following, where R means root and the index /c ma / is a mere label used to distinguish this root from all other roots in the lexicon:[21]

(3) $\{\{R_{c\,ma}\}\{n_F\}\}$

Take now (a). All the nouns in this group are assigned to masc. or neuter, again with a few listable exceptions, namely nouns ending in stressed /a/ (*cafea*, *cazma*) which are fem., probably due to analogy, and weekday nouns ending in / / – *luni* 'Monday', *mar i* 'Tuesday', *miercuri* 'Wednesday', *joi* 'Thursday', and *vineri* 'Friday' – which are also fem. like *zi* 'day' itself.[22] Let us assume this is a matter for e-gender to take care of, so we can put it aside for the moment. At the level of l-gender, since we are only considering sg. items, masc. and neuter are nondistinct (and irrelevant in any event) and they stand in a privative contrast with F. I therefore propose that *n* receives no value with these items beyond nounness. Such absence of value is then what makes the following assumption plausible: *unvalued* n *is included into the root, which explains why it is not associated with an*

[19] Naturally this is a purely synchronic analysis. Historically we know that masculine nouns of Latin origin now ending in a consonant ended in /-u/ before the 16th century, as a reflex of Latin /-um/ (see Bourciez 1910/1967: 555). Final /-u/ was better preserved in Aromanian, the dialect spoken in Northern Greece, Macedonia, Bulgaria, and Albania.

[20] To this we should add *nou* 'nine', reputedly neuter but actually invariable.

[21] It would certainly be more consistent with the theory to use Chinese characters or Egyptian hieroglyphs at this level. We stop short of that ideal, however, for reasons of convenience.

[22] All these nouns kept the gender of Latin *dies*.

exponent in Morphology. Hence the following identical lexical representations for masc. sg. *plop* ‘poplar’ and neuter sg. *unghi* ‘nail’:

(4) $\{R_{plop}\ \{n\}\}$
(5) $\{R_{unghI}\ \{n\}\}$

F is thus the only l-gender, and it can be present or absent as a value of *n*. If present, n_F combines with the root through the Add operation, and there is a morphological exponent; if absent, *n* combines through the Include operation, and there is no exponent.

This leaves us with the large group of nouns ending in /-e/ which belong to all three traditional genders. For instance, *frate* ‘brother’ is masc., *pîntece* ‘belly’ is neuter, and *carte* ‘book’ is fem. A tempting solution would be to write down all these items under n_F, and let the encyclopaedia decide e-gender. We cannot do that, however, because we need the gender information much earlier, in order to account for the already mentioned crucial fact that *frate*’s Gen.-Dat. is *frate*, whereas *carte*’s is *c r i* .

F-nouns in /-e/ are not a problem because we can easily assign F two subvalues, say Fa and Fe, to adequately represent the difference between *c ma* and *carte*:

(6) $\{\{R_{c\,ma}\ \}\{n_{Fa}\}\}$
(7) $\{\{R_{cart}\}\{n_{Fe}\}\}$

Morphology then includes the following spell-out statements:

(8) $\{n_{Fa}\} \leftrightarrow$ /-/
(9) $\{n_{Fe}\} \leftrightarrow$ /-e/

But what about M-nouns? Our previous analysis, viz. that they correspond to unvalued included *n*, is no longer available since there is now an exponent. Consider however that, since the only value is F, “no value” ought to be interpreted as unmarked for F or [uF]. This liberates a third possibility, i.e. non-F or [–F], which we can use precisely to mark those items which are not F, but are not unmarked. Being valued, $n_{–F}$ cannot be included, hence the lexical representation for *frate*:

(10) $\{\{R_{frat}\}\{n_{–F}\}\}$

That the “same” exponent /-e/ gets associated with the lexical elements $\{n_{Fe}\}$ and $\{n_{–F}\}$ is of course not a problem, since morphology abounds in such mergers. A serious problem, in contrast, is that of distinguishing *frate* ‘brother’, a masc. noun as far as e-gender is concerned, having *fra i* as a pl., from neuters such as *nume* / *nume* ‘noun(s)’ or *dulce* / *dulciuri* ‘sweet(s)’. Recall the distinction is crucial in order to select the right form of the plural article (compare *fra ii* ‘the brothers’ with *numele* ‘the nouns’ and *dulciurile* ‘the sweets’) and to ensure proper agreement. Naturally, this is a general question concerning all nouns that do not include $\{n_F\}$ in their lexical representations. Answering it requires us to examine number marking in Romanian, to which we now turn.

4. Number

Number is inherently connected to gender in Romanian in the sense that all the exponents that realize the former also realize the latter. For instance, the final /-i/ of *prieteni* ‘friends’ tells of two properties at the same time: (a) that the noun is pl.; (b) that it is [uF] in terms of

l-gender, masc. in terms of e-gender.[23] Yet, such a reading off of properties from exponents is never a matter of course in a language like Romanian that shows so little predisposition for one-to-one correspondence of form and meaning. *Pisici* 'cats', e.g., shows the same ending as *prieteni*, yet it is [Fa] and fem. (cf. sg. *pisic* 'cat'); although *fire* 'threads' and *case* 'houses' look alike as far as ending goes, the former is [uF] for l-gender and neuter for e-gender (cf. sg. *fir* 'thread'), whereas the latter has the same gender features as *pisic* (cf. sg. *cas* 'house'), but it does not form the pl. in the same way. Infusing some system into this apparent medley is thus the main aim of this section.

A few theoretical points first. Since Romanian does with two numbers, I will consider plurality the interpretation of the functional element Number combining with roots in the lexicon. I am not convinced there is real need for a Number projection in syntax (NumP) in Romanian or in a general, although I am willing to remain agnostic about the matter. As we shall see, intralexical combination – the minimal assumption in any event – serves our purposes quite well. If Number combines with the root, itself combined with *n*, the resulting nominal is interpreted as pl.; if it does not, the interpretation is sg. by default.[24]

It is time, also, to be more precise about e-gender and agreement, as the issue will figure prominently in the following. Actually, e-gender and agreement ought probably to be viewed as one and the same thing, since the former would have no existence were it not manifested by the latter.[25] Again, my theory of agreement is minimal, viz. feature copy from a controller to a target (see Corbett 1998).[26] The controller is the noun heading a given noun phrase, where I take noun phrase to be synonymous with nominal expression, a cover term for the distinction some syntactic theories do between NP and DP. By "noun", I mean here a vocabulary item, i.e. the morphological spell-out of some element set including a root, *n*, and possibly Number, provided with encyclopaedic properties. E-gender may then be defined as the encyclopaedic interpretation of a particular combination of a root with valued or unvalued *n* realized as a morphophonological form. The rub then lies in the fact that this interpretation does not depend on this form in any simple way. For instance, the element set $\{\{R_{pisic}\}\{n_{Fa}\}\}$ spelled out *pisic* 'cat' is interpreted as fem. by the encyclopaedia. Such an e-gender assignment may indeed be considered prevalent, since it affects the vast majority of nouns ending in /-/. Nevertheless, the element set $\{\{R_{pa}\}\{n_{Fa}\}\}$ spelled out *pa* 'pasha' is interpreted as masc., with different agreement properties than *pisic*, although they share the pl. form (cf. *pa i* 'pashas' and *pisici* 'cats') – and fem. *pisic* does not form its pl. like equally fem. *cas* which has *case* 'houses', but the agreement properties are the same. There is thus a large measure of idiosyncrasy in this, which cannot be reduced.[27]

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[23] Recall that this /-i/ is pronounced as a palatalization feature on the preceding consonant, with some amount of vocalic off-gliding in addition.

[24] Naturally, this tells us nothing about the effective interpretation of sg. and pl. (oneness, genericity, etc.), a different matter which I do not address here.

[25] I therefore agree with Corbett (1991: 4) that "the determining factor of gender is agreement". I dissent from him, however, in that I claim that not all gender is agreement, only e-gender, whereas l-gender is substantive.

[26] This "theory" is thus compatible with Chomsky's (2001) notion of Agree as involving a probe and a goal with matching features, as well as with an oriented conception of Unification . It does not require syntactic movement into an agreeing position (Spec), neither does it preclude it.

[27] It is of course not accidental that, as already mentioned, all nouns like *pa* denote male human beings, which confirms the encyclopaedic nature of e-gender assignment. On the other hand, encyclopaedic knowledge gives no clues for sexless entities, and morphophonological form is no sure guide either.

As for the targets of agreement, I will only consider the article here.[28] Let us assume there is a lexical functional element D, the exponent of which is suffixed to the noun, which shows it to be added to the element set at some point. To account for this, I adopt the now fairly standard analysis according to which the head noun adjoins to D by head movement in syntax (see, e.g., Cornilescu 1992).[29] Apparent support for this analysis comes from the fact that it is actually the first head of a complex noun phrase that takes the article as a suffix (cf. *vechiul prieten* /vechi-ul$_D$ prieten/ 'the old friend'), in which case the direction of agreement is from right to left instead of from left to right. A definite noun phrase or DP spelled out as, e.g., *prietenul* 'the friend'will thus enter Morphology under the following guise, where D, being added last, is linearized to the right of {R$_{prieten}$ {n}}, whereas the latter is not internally linearized because the relevant operation is Include (see above) :

(11) {{R$_{prieten}$ {n}}{D}}

Leaving case aside for the moment, there are four (Nom.-Acc.) exponents of D, namely /-ul/ ~ /-le/, /-a/, /-i/, and /-le/. The first exponent suffixes to masc. sg. nouns and its form is /-ul/ if the noun ends in a consonant (cf. *prietenul* 'the friend'), /-le/ if it ends in /-e/ (cf. *cîinele* 'the dog').[30] This shows the form of the article to be dependent on that of the complete vocabulary item. Therefore, since it is also dependent on the e-gender assigned to the same vocabulary item (compare masc. *cîinele* 'the dog' and fem. *cartea* 'the book'), we conclude that encyclopaedic interpretation must be available as soon as a potential full word is realized.

Now, this has consequences for the way Spell Out is supposed to proceed. It shows that Spell Out is cyclic, in the sense that it successively applies to *added* elements or element sets within the encompassing set delivered to Morphology. Put differently, Spell Out viewed as a function only sees linearized elements; it is blind to nonlinearized (included) elements, which is why *n* in (11) is not associated with an exponent. (This is a point that was already made in a less precise form above; and see fn. 10.) In (11), {R$_{prieten}$ {n}} constitutes the first maximal set to which something is added. It is spelled out as /prieten/ which, being a potential full word, undergoes encyclopaedic interpretation which endows it with the properties of not being pl. – since Number does not belong to the set – and of being masc. "Remnant" D is then spelled out. E-gender and (default) number agreement from the controller actualize the form /-l/ (see fn. 30), then adjusted according to phonological information. That it cannot be but a suffix is due to the fact that it is a member of the element set being processed, but it is not a potential full word. The same applies to the fem. sg. article as in *fata* 'the girl'.[31]

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[28] Taking attributive adjectives in would draw us into useless complications, as we would have to account for why some adjectives have four forms, while other have three, and still other only two. I leave this for future research. Subject – verb/predicative adjective agreement, on the other hand, definitely falls outside the purviews of this article.

[29] Cinque (2004) argues for a process of phrasal rather than head movement. The alternative does not bear on my concerns, as far as I can see.

[30] In fact, the underlying form of the masc. sg. exponent of D is /-l/. We can therefore unify *prietenul* and *cîinele* assuming them both to represent underlying /prieten-.l./ and /cîine-l./, where the dots stand for vowel (V) positions. (I assume a universal CV format as in Lowenstamm 1996). In /prieten-.l./ the V position to the left of /l/ must be occupied, and it is by epenthetic /u/, the existence of which has already been established (see above). The V position to the right may then be left empty. In /cîine-l./, in contrast, it is that position that is filled up by copying the last vowel of the noun. For simplicity's sake, however, and because it is not crucial to my argument, I will continue to treat /-ul/ and /-le/ as surface allomorphs. Notice, as circumstantial support for this decision, that the [l] of /-ul/ is frequently deleted in colloquial pronunciation, which leaves only [u] as the exponent of the article.

[31] The article /-a/ substitutes the /-/ ending that spells out n$_{Fa}$.

An important upshot of this analysis is that D *qua* functional lexical element has no value beyond definiteness. All its further features or properties it gets from agreement, so that the forms it takes are pure morphological creatures.[32] Notice I have been cautious to choose as examples nouns denoting animate entities, i.e. entities that "really" are masc. or fem. What about nouns denoting inanimate entities to which the values of e-gender available in Romanian are inapplicable? If we wish to be coherent, we have to assume that *no e-gender is assigned to those nouns*.[33] In other words, *cas* 'house' is not feminine; what it is is F in the sense of "belonging to the n_{Fa} word class spelled out as /-/", where "word class" is understood as the spell out of l-gender. Similarly, *plop* 'poplar' is not masculine, but M or non-F, i.e. it belongs to the word class negatively defined as not being associated with an exponent.[34]

Between word class or l-gender and e-gender there is naturally an implicature, in the sense that F or M nouns denoting animates most often refer to the female or male members of the species respectively (e.g., *fat* 'girl', *femeie* 'woman', *vac* 'cow', *oaie* 'ewe', *b iat* 'boy', *om* 'man', *bou* 'ox', *berbec* 'ram'). But it is no more than a probabilistic relation that does not hold in two cases: (a) epicene nouns (see fn. 33); (b) F nouns with masc. e-gender because they denote male animates.[35]

The latter group is especially revealing as far as article agreement is concerned. It consists in the already mentioned closed group of masc. nouns ending in /-/ such as *pa* 'pasha'.[36] With them it is l-gender that controls article agreement in the sg., hence *pa a* 'the pasha', not */pa ul/. In the pl., in contrast, as well as with all other kinds of agreement, e-gender reinstates its primacy (cf. *pa ii* 'the pashas', *un pa smintit* 'a crazy pasha', *Pa a e smintit* 'The pasha is crazy'). But there is also a group of nouns ending in /-e/ which all denote male humans (e.g., *bade* 'father [religious]', *haple* 'nincompoop', *gîde* 'hangman', etc. – see Lombard & Gâdei 1981: II 7-8). As such, they fall in with *frate* 'brother', i.e. nouns belonging to the n_{-F} l-gender. The difference is that these nouns take the /-a/ article (e.g., *haplea* 'the nincompoop', *gîdea* 'the hangman', etc.) like nouns of the n_{Fe} l-gender (cf. *cartea* 'the book'), even though they remain masc. as far as agreement beyond the article is concerned.[37] Possibly, n_{-F} was confused with n_{Fe} because of the phonological identity of the exponents, thus attracting the /-a/ article.[38]

A number of things follow from these observations. First, they confirm the necessary distinction between e-gender and l-gender since both can be sources of agreement: in *pa a smintit* 'the crazy pasha', for instance, l-gender controls agreement for the article, whereas e-gender explains the adjective's form. This in turn shows that l-gender, as part of the element set, must be accessible to agreement, a conclusion we reach as well from the fact that nouns denoting inanimates do not receive e-gender, but only manifest l-gender or word class. Apparent complexities arise when both are present whether they fit or not. What does fitting mean? The following proposition seems empirically sound: F fits

[32] So claiming I tacitly assume the indefinite determiner *un* / *o* / *ni te* 'a / some' is not the [–def] counterpart of D, but a different element altogether, perhaps a quantifier.

[33] For so-called epicene nouns such as *pisic /a* '(the) cat (male or female)' or *elefant*(*ul*) '(the) elephant' (male or female), it may be more reasonable, however, to assume that the male or the female was arbitrarily chosen to represent the species (cf. *pisoi* 'tomcat'). The epicene category also includes nouns of profession such as *electrician* or *medic* which refer to male or female electricians or MDs (see ARPR : 63).

[34] All nouns traditionally classified as neuter fall into this category. I will return to this point.

[35] Interestingly, the reverse case, i.e. M nouns assigned fem. e-gender, does not seem to exist, if we don't take epicene nouns into account. This probably has to do with markedness considerations.

[36] To the *pa* -nouns one should add derogative epithets like *n t fle* 'fool' that can be used in the fem. to qualify men, thus compounding the insult (cf. *o n t flea de b iat* 'a stupid boy').

[37] Compare *un gîde smintit* 'a crazy hangman' with *o carte smintit* 'a crazy book'. Some of these nouns are never used without the article (e.g., *prîslea* 'the first-born').

[38] Regularizations do occur. Thus *gîdele* is an acceptable variant of *gîdea* (see ARPR 1963: 85).

with fem.; therefore, uF and –F fit with masc.[39] This gives us two fits, viz. *prietenul–fratele* (u/–F ≡ masc.) and *fata–femeia* (Fa/e ≡ fem.); and one nonfit, viz. *pa a – haplea* (Fa/e ≠ masc.).

A generalization emerges from these data: article agreement is with l-gender; all other agreements are with e-gender when it is assigned, i.e. when the noun denotes an interestingly sexed animate. And there seems to be a clear reason for this division, since among all items that are susceptible to agree only the article belongs to the element set which also includes the root and *n*. Yet, a brief comparison with French suffices to show this to be a sufficient, but by no means a necessary condition. In French, the article *le*/*la*/*les* is not morphologically attached to the noun, but it procliticizes to the NP. Therefore, it does not share an element set with the root and *n*. However, there are no mismatches like *pa a smintit* in French; agreement is always with l-gender, even when it and e-gender clash : cf. *la sentinelle folle* 'the crazy sentry', not *fou*, although it was until very recently a generally known fact that sentries could only be males.[40] Even pronouns referring to *sentinelle* have to be fem. (cf. *Où est la sentinelle folle? Elle* (**il*) *s'est enfuie* 'Where is the crazy sentry? S/he ran away.').[41]

This shows the need to distinguish two matching relationships, viz. matching of lexical features and matching of encyclopaedic properties inasmuch as morphology expresses them in a fitting or nonfitting way. If we retain "agreement" for the latter relationship, we may call the other type "concord" (see Wechsler & Zlati 2003). In Romanian, then, gender concord is seen to be strictly local, within the element set that includes a root, *n* with a certain value or no value, and the article. Beyond this local domain there is agreement. With a majority of animate-denoting nouns the distinction is not apparent, because l- and e-gender fit. It is not apparent with inanimate-denoting nouns either, since they are not assigned e-gender on encyclopaedic grounds, meaning that l-gender and e-gender are nondistinct. Only with a small number of animate-denoting nouns where l-gender and e-gender do not fit does the difference between agreement and concord show up on the surface.[42] The crucial peculiarity of French, then, is that the issue of l- and e-gender fit simply does not arise in this language because there are no morphological clues to gender in the noun *qua* vocabulary item itself (cf. *la sentinelle* vs. *le rebelle* 'the rebel'), but only statistical phonological clues (see Corbett 1991: 57-62). The upshot is that l-gender (F or uF) only shows on the article, from which it is copied via nonlocal agreement onto everything that relates to and covaries with the head noun. E-gender plays no role except trivially, in the sense that there is a strong tendency for nouns denoting females or males to be associated with the F-form *la* or the uF-form *le* of the article respectively.[43] No grammatical consequences follow from this tendency, however, contrary to what is the case in Romanian.[44]

We can now come to number marking, as it is intimately linked to gender assignment, as mentioned earlier. Also as mentioned, I assume a lexical functional element

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[39] Given their foundation in the external world, fem. and masc. are substantive classes, not opposite values of a Boolean feature. In other words, masc. is not equal to [–fem.] or the other way around.

[40] Of course there are epicene nouns in French such as *un*/*une artiste*, *le*/*la ministre* (in recent usage), but that is a different matter.

[41] Compare *Unde e pa a? El* (**ea*) *e în curte* 'Where is the pasha ? He (*she) is in the yard.'

[42] Moreover, this is only the case in the sg. as we shall see presently.

[43] Although there is but one form *les* in the pl., the contrast is not neutralized (cf. *les sentinelles folles* 'the crazy sentries' vs. *les rebelles fous* 'the crazy rebels'). For derived nouns such as *dérivation* or *gendarmette* 'woman gendarme', all fem., we will assume l-gender to be a property of the suffix, itself a lexical item.

[44] That there are few nouns like *sentinelle* in French, just as there are few nouns like *pa* or *haple* in Romanian, does not invalidate the argument, precisely because it is those nouns that turn out to be revealing of the underlying system.

Number, meaning roughly "countably more than 1", that combines with the combination of a root and *n*.[45] The whole set is then interpreted as pl. Without Number, the same set is interpreted as sg. This being so, a few observations must be made.

The first one is that the kind of nonfit of l- and e-gender we have just seen in the sg. does not occur in the pl.[46] That is to say, the unarticulated pl. of *pa* is *pa i* 'pashas', not */pa e/ (compare *cas* / *case* 'house(s)), similar to *prieteni* 'friends', the pl. of *prieten*; and the articulated pl. is *pa ii* 'the pashas' with the M pl. article /-i/ one finds in *prietenii* 'the friends'. Likewise, the pl. of *gîde* 'hangman' is *gîzi* 'hangmen', and the pl. of *gîdea* 'the hangman' is *gîzii* 'the hangmen'.[47] Shall we conclude that pl. formation and article concord in the pl. depend on e-gender after all? We shall not, because other types of nonfits occur, which suggest quite a different account.

To begin with, it would be hasty to view /-/ as the M pl. ending, because many F nouns take it, e.g. *inim* / *inimi* 'heart(s), *pisic* / *pisici* 'cat(s)', *gar* / *g ri* 'station(s)', *vulpe* / *vulpi* 'fox(es)', *carte* / *c r i* 'book(s)', etc.[48] Conversely, many M nouns take the F pl. ending /-e/ – e.g., *fir* / *fire* 'thread(s)', *ac* / *ace* 'needle(s)', *cuvânt* / *cuvânte* 'word(s)', etc. – and those are the nouns which grammatical tradition assigns to the neuter gender. In addition, numerous neuter and F nouns form the same plural in /-uri/: e.g., *val* / *valuri* 'wave (s)', *dulce* / *dulciuri* 'sweet(s)', etc., for neuters; *ceart* / *certuri* 'quarrel(s)', *sor* / *surori* 'sister(s)', *vreme* / *vremuri* 'time(s)', etc., for F nouns. The difference between all these nouns and the *pa –gîde* type, however, is that the pl. articulated form shows them to be "really" F : cf. *pisicile* 'the cats', *vulpile* 'the foxes', *cuvântele* 'the words', *valurile* 'the waves', *surorile* 'the sisters', etc.

The tacit standard assumption that plurals are formed *from* the corresponding singulars seems to me to be the main impediment to devising a reasonably general account of such complex facts. In contrast to it, I wish to uphold the alternative assumption that singulars and plurals constitute *parallel formations* from the same root, for which there are theoretical as well as empirical grounds. From a theoretical viewpoint this assumption tallies with a view of pl. formation as a derivational rather than inflectional process (see Beard 1995). It is a definitory property of derivations that they can be based on forms (roots or stems) that are not themselves full, usable forms. That pl. formation can proceed in this way is demonstrated massively by such a phenomenon as internal or "broken" plurals in Arabic and other Afroasiatic languages (see Kihm 2003; also see Acquaviva 2004 on Irish and Scottish Gaelic). But it also shows in Romanian despite the fact that pl. formation looks more "agglutinative", since it involves adding a discrete morpheme.

Take for instance a pair like *p turic* / *p turele* 'small blanket(s)'. *P turic* [p tu'rik] is a diminutive of *p tur* ['p tur] / *p turi* ['p tur] 'blanket(s)'. Yet, its pl. *p turele* [p tu'rele] is formed not on the stem or complex root *p turic-* but on a stem *p turel-*that has no independent existence – the articulated plural form is *p turelele* [p tu'relele] 'the blankets'. Other examples are *lop ic* / *lop ele* 'small shovel, trowel' (cf. *lopat* / *lopei* 'shovel(s)'), *tuf nic* / *tuf nele* 'chrysanthemum(s)'. In the last one, there is not even a simple vocabulary item corresponding to the apparent diminutive.[49] Similar cases, not involving diminutive formation, are represented by *zi* / *zile* 'day(s)' or *baclava* / *baclavale*

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[45] I specify "countably" because singulars too can refer to more than one token of the concept when used generically as in the proverb *Lupul schîmb p rul, dar n ravul ba* 'The wolf changes its hair, but not its ways'.

[46] Recall we are still not taking case into account, so everything in this section applies to the so-called "Nom.-Acc." form only.

[47] Here and in the following I will not concern myself with the phonological processes – palatalization, umlaut – which accompany pl. formation.

[48] For clarity's sake I write /-/ the pl. ending, and /-i/ the pl. masc. article, even though both represent underlying /I/.

[49] *Tufan* means 'oak' or 'club', so it is unlikely to be related to *tuf nic* .

'baklava(s)', *canava* / *canavale* 'canvas(ses)', *nuga* / *nugale* 'nougat', *za* / *zale* 'stitch(es)'.[50] They all show a virtual stem ending in /l/ in the pl., which does not occur outside this form, and where the /l/ cannot justifiably be said to be underlying in the sg. as there is no independent, e.g. etymological, reason for its presence (see *canava* from French *canevas* or *nuga*). In the articulated sg. form the same nouns use an equally virtual stem ending in nonsyllabic /U/ – cf. *ziua* ['ziUa] 'the day', *baclavaua* [bakla'vaUa] 'the baklava', and so forth.

Another evidence of the derivational character of Romanian pl. formation is the not exceptional availability of more than one pl. for a given sg. Sometimes they are mere variants, e.g. *arip* / *aripi* ~ *aripe* 'wing(s)', *cămin* / *căminuri* ~ *cămine* 'chimney(s)', *stradă* / *străzi* ~ *străde* 'street(s)', etc. The two forms are stylistically distinct insofar as the first one is deemed "recommendable" (*recomandabil* – see ARPR: 66-67), but both are grammatical. In other cases, they are specialized: e.g., *roată* 'wheel' has two pl., *roți* and *roate*; *roți* is the general form, whereas *roate* appears in the expression *a pune bețe în roate*, lit. "to put sticks in the wheels", i.e. "to put a spoke in the wheel". In still other cases, the pl. may take on a shade of meaning that is lacking in the sg. or even a different meaning altogether – cf. *apă* 'water' / *ape* 'waters' or 'reflections', *lapte* 'milk' / *lapți* 'milks' or 'roe'. All this is symptomatic of derivation as opposed to inflection (see Halle 1973 for English and Russian examples of similar phenomena).

What does it mean for the sg. and the pl. to be viewed as parallel formations? In the present framework it means that the ways a root and *n* combine (i.e., through Add or Include) and the values *n* receives are not necessarily the same when Number is also combined or when it is not. Let us consider first a simple case where they are the same, viz. that of M nouns ending in a consonant in the sg., the pl. of which ends in /-/, e.g. *prieten* / *prieteni* 'friend(s)'. As argued above, these nouns involve inclusion of unvalued *n*, as shown again in (12), where the double arrow means "A is spelled out as B" or "B spells out A" :

(12) $\{R_{prieten}\ \{n\}\} \leftrightarrow$ *prieten*

The pl. counterpart can be represented as in (13) with Number added to the {R {n}} set:

(13) $\{\{R_{prieten}\ \{n\}\}\{Number\}\} \leftrightarrow$ *prieteni*

A more precise representation showing function composition is (14), built on the assumption that the Spell Out functions successively applies to every added set, and successive functional applications are composed (see Raffelsiefen 1992):

(14) $((\{R_{prieten}\ \{n\}\} \leftrightarrow /\text{prieten}/) \times (\{Number\} \leftrightarrow /\text{-}/)) \leftrightarrow /\text{prieten}/$

From this, we conclude that /-/ is the exponent of the lexical functional element Number when it is *added* to an element set. Number and unvalued *n* interpreted as M then control concord of the article, spelled out /-i/, hence *prietenii* 'the friends' represented in (15) where C is a concord index whose values are copied from what precedes D in the set :

(15) $((\{R_{prieten}\ \{n\}\} \leftrightarrow /\text{prieten}/) \times (\{Number\} \leftrightarrow /\text{-}/)) \times (\{D_{C\,=\,M,Number}\} \leftrightarrow /\text{-i}/)) \leftrightarrow /$ prietenii/

The foregoing conclusion carries over to other M nouns as well as to F nouns which pluralize with the same suffix /-/. Let us take the latter first as they will allow us to introduce a few more necessary assumptions.

[50] All these words are F and stressed on the last syllable in the sg., on the penultimate in the pl.

Examples are *gar* / *g r i* 'station(s)' and *carte* / *c r i* 'book(s)'. The lexical-morphological representation of sg. *gar* is as in (16):

(16) $(\{R_{gar}\} \leftrightarrow /gar/) \times (\{n_{Fa}\} \leftrightarrow /-/) \leftrightarrow /gar/$

To account for the pl. all we have to do is to assume that, given sg./pl. parallelism, *n* is not added when Number is, but it is included instead:[51]

(17) $((\{R_{gar}\ \{n_F\}\} \leftrightarrow /gar/) \times (\{Number\} \leftrightarrow /-/)) \leftrightarrow /g\ r/$

Now, this solution seems to run counter to our previous assumption that only unvalued *n* can be included. Actually it does not, because what this constraint says is that there is a correlation between between being included and having a specific exponent. As values of *n*, F_a and F_e are associated with exponents, respectively /-/ as in *gar* and /-e/ as in *carte* 'book'; but *F* is not, as shown by those F nouns that end in a root vowel such as *zi* 'day', *luni* 'Monday' and further weekdays, *cafea* [ka'f<u>a</u>] 'coffee', etc. (see above). They all should be represented as in (18):

(18) $\{R_{zi}\ \{n_F\}\} \leftrightarrow /zi/$

In other words, *F* does not count as a value of *n* preventing its inclusion because n_F like plain *n* is not associated with an exponent.[52] Thus, (17) not only illustrates the proposition that *n* can be combined through different operations in the sg. and the pl., but also that it can be given different values.[53] At the same time, since n_F is still F as l-gender goes, we explain why $\{R_{gar}\ \{n_F\}\}$ controls fem. concord of the article as in *g r i l e* 'the stations', represented in (19) (see [15]) :

(19) $((((\{R_{gar}\ \{n_f\}\} \leftrightarrow /gar/) \times (\{Number\} \leftrightarrow /-/)) \times (\{D_{C\,=\,F,Number}\} \leftrightarrow /-le/)) \leftrightarrow /g\ rile/$

A competing solution, closer in spirit to traditional practice, would be to consider /-/ the spell out of the combination of n_{Fa} or n_{Fe} with Number, with two unfortunate consequences. First, it makes the identity of the endings in *prieteni* and *g r i* a mere case of homonymy, whereas our analysis sees it as one and the same ending, the exponent of Number "by itself". Secondly, it forces us to accept that the same elements are associated with two exponents, viz. /-/ and /-e/ as in *cas* / *case* 'houses' or *iesle* / *iesle* 'manger(s)'. Our account, in contrast, treats /-e/ as a separate exponent as we shall see presently. Notice that concatenating /-/ ~ /-e/ and /-/, i.e. assuming that both $n_{Fa/e}$ and Number are added, and leaving it to phonology to delete the first vowel in the sequence [… /e] does not look as a plausible solution either. Indeed, such a deletion would be completely *ad hoc*, the expected outcome being rather […/e ɪ] as shown by items such as *femeie* [fe'meɪe] 'woman' or *oaie* ['†<u>a</u>ɪe] 'ewe', the pl. of which are *femei* [fe'meɪ] and *oi* [oɪ]. The roots obviously are /feme/ and /†<u>a</u>~o/, to which /-/ attaches, being then realized as nonsyllabic /ɪ/.[54]

[51] This will be modified when we take case into account.

[52] Theoretically, nothing excludes F nouns ending in a (non palatalized) consonant. That this type does not exist in Romanian may be due to the parochial reason that it does not occur either in Latin or in the Slavic languages from which Romanian heavily borrowed. There are such nouns in Spanish (cf. *la pared* 'the wall') or in Catalan (cf. *la llar* 'the hearth').

[53] A more dramatic instance are Arabic internal pl., feminine irrespective of the sg.'s gender.

[54] The articulated form for *femei* is *femeile* [fe'meile]. Lombard & Gâdei (1981: II 27) give no articulated form corresponding to *oi*, but cf. *viile* ['viile] 'the vineyards' (unarticulated pl. *vii* [viɪ], unarticulated sg. *vie* ['viɪe], articulated sg. *via* ['viɪa]). Other cases in point are *manta* [man'ta] / *mant i* [man't ɪ] 'coat(s)', *a* / *ei* 'saddle(s)', etc., all F nouns ending in a root vowel.

We can now turn to the other M nouns with a /-/ pl. ("real" M as opposed to neuters). For nouns like *frate* 'brother' or *cîine* 'dog' final /-e/ was considered the exponent of n_{-F}, homonymous with F /-e/ spelling out n_{Fe}. The pl. *fra i* and *cîini* ought therefore to be accounted for like *g r i* , namely assuming that n_{-F}, stripped of its diacritic, is included in the presence of Number:

(20) $(\{R_{frat}\ \{n\}\} \leftrightarrow /frat/) \times (\{Number\} \leftrightarrow /-/)) \leftrightarrow /fra\ i/$

The articulated forms *fra i i* 'the brothers' and *cîinii* 'the dogs' are like *prietenii* 'the friends'.[55]

The same analysis holds for the types *pa* 'pasha' and *gîde* 'hangman'. As we saw, these masc. nouns are F in the sg. insofar as their roots combine with added n_{Fa} and nF_e respectively, and they control F concord of the article (*pa a* 'the pasha', *gîdea* 'the hangman'). In the pl. they behave like *frate* or like *gar* and *carte*, except that included *n* loses all values, not just the *a* and *e* specifications of *F*. Hence the following representation for *pa i* 'pashas':

(21) $(\{R_{pa}\ \{n\}\} \leftrightarrow /pa/) \times (\{Number\} \leftrightarrow /-/)) \leftrightarrow /pa\ i/$

The articulated forms *pa i i* 'the pashas' and *gîzii* 'the hangmen' are then as expected.

Since M nouns ending in /-u/ (e.g., *membru* 'member, *leu* 'lion') or a root vowel (e.g., *ochi* 'eye') have been shown to be essentially nondistinct from M nouns ending in a consonant, this exhausts the issue of "real" M and of nouns forming their pl. with /-/ generally (see Lombard & Gâdei 1981: II 8-13 for details).

The next item on the agenda consists in F names that form their pl. with /-e/, e.g. *cas* / *case* 'houses' and *iesle* / *iesle* 'manger(s)'. Since /-/ was seen to represent Number by itself, it follows that /-e/ must be Number plus something. Indeed, I will assume it to be the exponent of the combination of Number with n_{Fa} or n_{Fe}, which makes /-e/ the F pl. ending of Romanian. Moreover, given that /-e/ amalgamates l-gender and plurality in the sense that neither receives a specific exponent, the combination has to be in the Include mode. The proper representation of /-e/ is thus $\{n_{Fa/e}\ \{Number\}\}$, and that of, e.g., *case* 'houses' is as in (22):

(22) $(\{R_{cas}\} \leftrightarrow /cas/) \times (\{n_{Fa}\ \{Number\}\} \leftrightarrow /-e/)) \leftrightarrow /case/$

It also applies to nouns like *iesle* which must not be considered invariable despite appearances. It is just that, as already noticed, the exponent of n_{Fe} happens to be identical with that of $\{n_{Fa/e}\ \{Number\}\}$. Not all homonymies can or should be eliminated.

F nouns ending in a root vowel like *baclava* / *baclavale* 'baklava(s)', *stea* [st<u>a</u>] / *stele* 'star(s)', *zi* / *zile* 'day(s)' fall under this analysis as well. They differ from *cas* / *case* in that with them *n* has plain *F* as a value and is included with the root in the absence of Number, as argued above, whereas we have to assume that it is included with Number when the latter is present, hence (23) for, say, *zile* 'days':

(23) $(\{R_{zi}\} \leftrightarrow /zi(l)/) \times (\{n_F\ \{Number\}\} \leftrightarrow /-e/)) \leftrightarrow /zile/$

This allows us a further generalization considering that the same exponent is associated with all combinations of n_F with Number, whatever its specification, *a*, *e*, or nothing. We can

[55] Recall the /-le/ of *fratele* 'the brother' and *cîinele* 'the dog' is a phonological variant of /-(u)l/, having nothing to do with the F pl. /-le/ of *g r i l e* 'the stations'.

therefore remove this specification from (22) and posit one exponent $\{n_F \{Number\}\} \leftrightarrow$ /-e/ next to $\{Number\} \leftrightarrow$ /-/.

The last possible ending for F pl. nouns is /-uri/ as in *marf* / *m rfuri* 'merchandise (s)'. As they have this ending in common with the so-called neuter nouns, we shall examine it together with the latter to which we now turn.

As we saw, "ambigenous" would be a better denomination for this class, since it consists in nouns that are M in the sg. and F in the pl. (cf. *Firul e alb* – not **alb* – 'The thread is white' vs. *Firele sunt albe* – not **albi* – 'The threads are white'). I will keep the traditional label for convenience. Clearly, the formal apparatus we achieved in order to deal with M and F nouns provides us with everything we need to account for neuters in a simple and, I think, adequate way.

Since they are M in the sg., they should be represented as such, i.e. either {R {n}} or {{R}{n_{-F}}}. The first formula describes such items as *fir* / *fire* 'thread(s)', *b* / *be e* 'stick(s)', *val* / *valuri* 'wave(s)', *cadavru* / *cadavre* 'corpse(s)', *lucru* / *lucruri* 'thing(s)', *bici* [bi] / *bice* 'whip(s)', *meci* [me] / *meciuri* 'match(es)', *sombrero* / *sombrere* 'sombrero (s)', *moto* / *motouri* 'motorbike(s)'; the second one corresponds to, e.g., *nume* / *nume* 'name (s)', *dulce* / *dulciuri* 'sweet(s)'. Adding Number entails a very simple process: *n* is included in the same set as Number, hence the following representations for *fire* and *dulciuri*:

(24) $(\{R_{fir}\} \leftrightarrow$ /fir/) $\times$ ({n {Number}} $\leftrightarrow$ /-e/)) $\leftrightarrow$ /fire/
(25) $(\{R_{dulc}\} \leftrightarrow$ /dul /) $\times$ ({n_{-F} {Number}} $\leftrightarrow$ /-uri/)) $\leftrightarrow$ /dulciuri/

What these formulae reveal is that {n {Number}} and {n_{-F} {Number}} are given the same interpretation in terms of l-gender as {n_F {Number}}. That is to say, the generalization achieved above was still too partial: all inclusions of *n*, whatever its value, with Number are F, and there is only one exponent next to $\{Number\} \leftrightarrow$ /-/, viz. (26):

(26) {$n_{()}$ {Number}} $\leftrightarrow$ /-e/ ~ /-uri/

That /-e/ and /-uri/ must indeed be considered unpredictable variants of one and the same exponent is due to the already known fact that /-uri/ is a possible pl. ending for F nouns (cf. *marf* / *m rfuri* 'merchandise(s)').[56] I say "unpredictable" because there is no way, as far as I know, to explain (synchronically) why this noun takes /-e/, but that noun takes /-uri/. That is just something speakers have to learn. Another thing they have to learn is which M nouns are M throughout, and which form an F pl. that qualifies them as neuters. This acquired knowledge could certainly be noted in the grammar – e.g., with a diacritic on *fir* / *fire*-type nouns to mark them off from nouns like *fior* / *fiori* 'shudder(s)' – , a mere convenience, however, devoid of theoretical significance.[57]

I will return in the final section to the generalization expressed in (26) to assess its consequences for the present explanatory framework. Meanwhile, and before we turn to case, I wish briefly to examine a few remaining instances of neuter nouns for the sake of completeness (see Lombard & Gâdei 1981: II 37ff.).

First, there are a very few nouns like *buzunar* 'pocket' which may form an apparently M pl. (*buzunari*) next to the more usual F pl. (*buzunare*), but which are always counted as neuters because even their /-/ pl. controls F concord of the article (*buzunarile*

[56] Pl. in /-uri/ originally come from Latin neuter pl. in /-ora/ (e.g., *tempus* / *tempora* 'time(s)'). Their present analysis also accounts for the fact that they were easily extended to nouns that are F in the sg.
[57] This is not to say there is not some measure of predictability, but the criteria are not grammatical, they belong to world knowledge (see ARPR: 58-59). Also see Lombard & Gâdei (1981: I 14ff.) on the issue of the native speakers' *Sprachgefühl*, especially with nouns which are "felt" to be neuter even though they have no pl.

'the pockets'). They do not endanger our analysis, however, since we know that /-/ is a possible ending for F nouns (cf. *g r i* 'stations', *pisici* 'cats'). What we have to do, then, is assign the following representation to *buzunari*:

(27) $(\{R_{buzunar}\ \{n_F\}\} \leftrightarrow /buzunar/) \times (\{Number\} \leftrightarrow /-/)) \leftrightarrow /buzunar/$

That is to say, rather than combining with Number, *n* exceptionally joins the root, taking on the *F* value. The fact it is a marked option in terms of economy – as it involves not only "displacing" *n* as in *pisici*, but also giving it an entirely new value – probably explains its rarity. Nouns ending in a root vowel or glide like *studiu* ['studɪu] 'study' (*studiul* 'the study') and forming an F /-/ pl. (*studii* ['studi(ɪ)] 'studies', *studiile* ['studiile] 'the studies') deserve the same treatment.

Equally rare, actually limited to this one item, is the case of *zece* 'ten', where /-e/ spells out n_{-F} in the (M) sg. (*zecele* 'the ten'), and n_{-F} becomes n_F in the pl. (*zeci* 'tens', *zecile* 'the tens').[58]

5. Case

As already noted, the Romanian case system is conventionally viewed as consisting in four cases, viz. nominative (Nom), accusative (Acc), genitive (Gen), and dative (Dat), with roughly the same functional correlates as in Latin.[59] In fact, only two cases are formally distinguished, Nom-Acc and Gen-Dat. Moreover, if the noun is M sg. and pl. or F pl., the contrast only shows on determiners as demonstrated below:[60]

(28)(a) Prieten-ul / un prieten a venit.
friend-$Art_{MsgNom-Acc}$ / $a_{MsgNom-Acc}$ friend has come
The/a friend came.
(b) Am v zut film-ul / un film.
I.have seen film-$Art_{MsgNom-Acc}$ / $a_{MsgNom-Acc}$ film
I saw the/a film.
(c) Am fost la cas prieten-ului / unui prieten.
I.have been to house friend-$Art_{MsgGen-Dat}$ / $a_{MsgGen-Dat}$ friend
I went to the/a friend's house.
(d) L-am vîndut prieten-ului / unui prieten.
it-I.have sold friend-$Art_{MsgGen-Dat}$ / $a_{MsgGen-Dat}$ friend
I sold it to the/a friend.

Similarly in the pl. we find, for (28a-b), *prieteni*(*-i*) '(the) friends' and, for (28b-c), *prieteni-lor / unor prieteni* 'of the/some friends'; and with an F pl. noun, *fete*(*-le*) '(the) girls' and *fete-lor / unor fete* 'of the/some girls'. From these data alone we gather that Nom-Acc has a null exponent, and that the exponents of Gen-Dat are /-ui/ in the M sg. (cf. *-lui*, *unui*) and /-or/ in the pl. (cf. *-lor*, *unor*) for the article, the indefinite determiner and a few similar demonstrative or quantifiying items.

Given a feature system like that proposed by Halle (2000: 133-134) for Latin, the merger of Gen. and Dat. is in the order of things. Halle assumes three Boolean features,

[58] *Doi* 'two (masc.)', *trei* '3', *cinci* '5', *opt* '8', and *zero* '0' are also neuter and they form their pl. with /-uri/. The remainder *unu* '1', *patru* '4', *ase* '6', *apte* '7', and *nou* '9' are reputed to be neuter as well, but they do not pluralize.

[59] As mentioned in the introductory section I leave the vocative aside.

[60] I separate the article from the noun with a hyphen for clarity. Recall this is not done in standard orthography. In (28b) I use a noun denoting an inanimate in order to avoid irrelevant complications.

oblique, structural, and superior, such that [–oblique] items are arguments of the verb (subjects or direct objects), [+oblique] items are non-arguments (indirect objects or adjuncts); [+structural] items are assigned case because of syntactic position, [–structural] items on semantic grounds; [–superior] items stand in governed positions, [+superior] items do not.[61] Gen. and Dat. are thus described by the feature sets [+oblique, +structural, –superior] and [+oblique, +structural, +superior]. The ungoverned character of Dat., whether it can be defended for Latin or not, is certainly inapplicable to Romanian where indirect objects are clearly governed, either by the verb, or by a secondary verb à la Larson, or by an abstract adposition. Therefore, Dat. is [–superior] as well and nondistinct from Gen. As for Nom. and Acc., which do differ in terms of government, but are both [–oblique] and [+structural], it is a well-known fact that they fell together very early due to phonological deletion of their characteristic endings /-s/ and /-m/, on the one hand, and the loss of free word order in favour of SVO, on the other hand.[62]

Given this and the absence of marking of Nom.-Acc., we can devise a very simple case system for determiners, calling Gen.-Dat. [+case] and Nom.-Acc. [–case] (see Murrell & tef nescu-Drg ne ti 1970). More precisely, we can assume that the composed element set treated by morphology contains the element {case} or not, depending on the syntactic position it is linked to. Put differently, there is a lexical functional element {case} similar to {number}, except that it is not "freely" activated – in the sense that it usually is the speaker's decision whether s/he refers to one or several tokens of a concept – but obligatorily whenever a noun phrase fulfils a grammatical function that demands it.

Two hypotheses can then be entertained concerning the attachment of the case element when present: either it combines with the noun and is copied onto the article or the indefinite determiner through concord or agreement; or it combines with the latter only. The second hypothesis seems more consistent with the data so far, since they show case to be overtly realized on the determiners, not on the noun. Moreover, nouns following the few prepositions that require case (Gen-Dat) on their complements appear always to be articulated, even though nouns governed by prepositions are normally bare irrespective of their definiteness statute (cf. *pe scaun* 'on the/a chair' vs. *deasupra scaunului* 'over the chair' or *deasupra unui scaun* 'over a chair').[63] Yet, this can be taken to indicate that articulation is then the only means to manifest case, as it has no exponent on the noun itself (see fn. 63). This last claim must be relativized, moreover, because F sg. nouns do show an exponent for case, as we shall see shortly.[64] I will therefore rally to the first hypothesis.

In (28a-b), case is not present in the element set corresponding to the noun phrases *prietenul* and *un prieten*.[65] In (28c-d), in contrast, *prietenului* receives the following morphological representation:[66]

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[61] Halle is cautious to call this system "provisional". In the present framework, to the extent they are valid, these features ought to be seen as elements the combination of which receives the case label. Working out such a conception lies well beyond the limits of this article.

[62] Earlier in the Eastern Romance languages, i.e. Italian and Romanian, than in the Western languages where /-s/ proved more resilient (see below about Old French).

[63] Prepositions like *pe* 'on' – the overwhelming majority – are said to govern Nom.-Acc. Actually, given the present analysis, they govern no (morphosyntactic) case.

[64] F nouns preceded by case-governing prepositions also appear in the articulated form (cf. *în cas* 'in the/a house' vs. *deasupra casei* 'over the house' or *deasupra unei case* 'over a house'). The same argument holds, however, since *în case* would be interpreted as meaning 'in the/some houses', i.e. with *case* showing not case, but number (see below), which entails that **deasupra case* is ungrammatical, it has to be *deasupra casei* or *deasupra caselor* 'over the house(s)'.

[65] I take no stand as to whether these noun phrases bear capitalized Case or not. If they do, it has no morphological exponent, which is all I am concerned about.

[66] I assume the [u] preceding /l-ui/ is an epenthetic vowel inserted by late phonology (see above).

(29) ((({$R_{prieten}$ {n}} ↔ /prieten/) × ({case} ↔ / /)) × (({$D_{C=M}$} ↔ /l/) × ({C_{case}} ↔ /ui/)))
↔ /prietenului/

In (29), / / notates the null exponent, and I assume the case element is reinserted through concord (C) in the D subset, rather than being a diacritic on D itself like l-gender, because of the obvious analysis of *-lui* as /l-ui/. Naturally, {number} may also be present, in which case we get *prietenilor* 'of/to the friends' and *unor prieteni* 'of/to some friends'. The hitch here is that the case-marked pl. article presents us with a form /-lor/ that cannot apparently be broken down as /-l-or/ since /-l/ seems to spell out the sg. article, whereas the exponent of the caseless pl. article is /-i/ – unless we assume that number concord is a feature of {case} when it is expressed, whereas {D} only bears l-gender concord. *Prietenilor* would then be represented as follows:

(30) (((({$R_{prieten}$ {n}} ↔ /prieten/) × ({number} ↔ /-/)) × ({case} ↔ / /)) × ({$D_{Cr=M}$} ↔ /l/)
× ({$C_{number-case}$} ↔ /or/)))) ↔ /prietenilor/

The analysis embodied in (30) is consonant with all our previous results which showed /l/ to be not so much the exponent of the sg. M article as that of the M article when number is not present. It is not present here, since the concord index is split, number going to {case}. Further confirmation comes from *unor*. To make things clearer, I give the paradigm of the indefinite determiner: [67]

(31) $un_{masc.sg}$ $un\text{-}ui_{masc.sgcase}$
$un\text{-}ii_{pl}$ $un\text{-}or_{plcase}$
$o_{fem.sg}$ $un\text{-}ei_{fem.sgcase}$

As it appears, only the ending varies when case is expressed. In the sg., i.e. in the absence of {number}, it varies according to e-gender (hence masc. and fem. instead of M and F – cf. *un pa* 'a pasha'); in the pl., only case is morphologically relevant.[68] In all cases, what may be considered the unmarked stem *un* (as opposed to *o*) shows up. Therefore *unor* must be represented thus:

(32) (({Indef} ↔ /un/) × ({$Agr_{number-case}$} ↔ /or/)) ↔ /unor/

Turning to masc.sg *unui* ['unuɪ] and fem.sg *unei* ['uneɪ] we see that the gender contrast correlates with the quality of the vowel, [u] vs. [e]. It seems reasonable, therefore, to consider /u/ a thematic vowel here bearing the e-gender value masc. it receives through agreement.[69] To generalize even a bit further, we should probably view it as a local representative of *n* with an *a priori* unspecified gender value, as in adjectives. Hence the following representation for *unui*, where number is not involved :

(33) ((({Indef} ↔ /un/) × ({$n_{Agr=masc.}$} ↔ /u/)) × ({Agr_{case}} ↔ /i/))) ↔ /unui/

[67] The exact structural position of *un* and other quantifiers relative to the noun phrase is of no import for my purpose.
[68] Instead of *unii* (*unii prieteni* 'some friends') uninflected *ni te* may be used (*ni te prieteni* 'some friends'). I do not know why *unii* ['uni] seems to include the plural article.
[69] It is its historic identity in any event.

Naturally, this analysis carries over to the case marked M article *-lui*, so (29) should be revised as (34), where the [u] of *-lui* is the thematic vowel that does not show on *prieten* (any longer) :[70]

(34) (((({$R_{prieten}$ {n}} ↔ /prieten/) × ({case} ↔ / /)) × ((({$D_{C=M}$} ↔ /l/) × ({$n_{C=M}$} ↔ /u/)) × ({C_{case}} ↔ /i/)))) ↔ /prietenului/

Unei is like *unui* except for the e-gender value and the spell-out of *n*:

(35) ((({Indef} ↔ /un/) × ({$n_{Agr=fem.}$} ↔ /e/)) × ({Agr_{case}} ↔ /i/))) ↔ /unei/

The main good point of such an analysis is that it allows us to isolate two specific exponents of case, viz. /i/ when number concord or agreement is not involved, /or/ when it is. Note that {case} ↔ /i/ is kept distinct from {number} ↔ // by the way they attach: only the latter may directly follow a final consonant (cf. *prieteni(i)* '(the) friends'), whereas the former requires a preceding thematic vowel that spells out *n* agreeing or concording for e- (*unui*, *unei*) or l-gender (*lui*). This is why {case} ↔ /i/ always surfaces as nonsyllabic [ɪ]. We shall see presently how F nouns support this result. Also note that the foregoing representations make it very tempting to identify the case element with the abstract adposition that may be assumed to govern the noun phrase in syntax. I will return to this in order, among other things, to try and account for why number concord/agreement should be a feature of case.

All that precedes applies to M nouns, and also to F pl. nouns. As mentioned in the introductory section, however, F *sg.* nouns are special insofar as they do have a particular case-marked form identical with the pl. form. I illustrate by giving the examples in (28) again, substituting *fat* 'girl' for *prieten* and making use of the results just achieved:[71]

(36)(a) Fat-a / o fat a venit.
girl-$Art_{FsgNom-Acc}$ / $a_{fFgNom-Acc}$ girl has come
The/a girl came.
(b) Am v zut cas-a / o cas .
I.have seen house-$Art_{FsgNom-Acc}$ / $a_{FsgNom-Acc}$ house
I saw the/a house.
(c) Am fost la cas fete-i / un-e-i fete.
I.have been to house $girl_{pl}$-Gen-Dat / a-fem.sg-Gen-Dat $girl_{pl}$
I went to the/a girl's house.
(d) L-am vîndut fete-i / un-e-i fete.
it-I.have sold $girl_{pl}$-Gen-Dat / a-fem.sg-Gen-Dat $girl_{pl}$
I sold it to the/a girl.

These data raise two questions: (a) What serves as an article, i.e. where does definiteness come from in *fetei* 'of/to the girl', since /i/ seems to spell out case, and /fete/ is identical with unarticulated *fete* 'girls'? (b) Why is the pl. unarticulated form – or something that is the spit image of it – used in Gen.-Dat. sg. contexts? I will take up the latter issue first.

Consider Old French. It has a two-case noun declension for which the noun phrase meaning "the wall" traditionally serves as an illustration:

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[70] Recall the article concords for l-gender, whereas the indefinite determiner agrees for e-gender.
[71] The pl. equivalents of (36a-d) are *Fetele / unii~ni te fete au venit* '(The) girls came'; *Am v zut casele / unii~ni te case* 'I saw (the) houses; *Am fost la cas fetelor / unor fete* 'I went to the house of the/some girls'; *L-am vîndut fetelor / unor fete* 'I sold it to the/some girls'. I substitute 'house' to 'girl' in (36b) for the same reason I did in (28b).

(37)

	Singular	Plural
Subject	li murs	li mur
Object	le mur	les murs

This is usually analysed as implying that the subject case (*cas sujet*) is marked on the head noun in the sg. (with /-s/) and the object case (*cas régime*) unmarked, whereas it is the reverse in the pl. This in turn implies that /-s/ would be a case morpheme in the sg., but a case-number morpheme in the pl.

An alternative account is possible, however, which may be more in line with the subsequent evolution, whereby the subject case was dropped and only the forms of the object case remained, overt contrasts being thus reduced to number as in Modern French. Indeed, given the logic of markedness, such a two-way system should be interpreted as a Boolean opposition of [+case] vs. [–case], as we did for Romanian. Contrary to Romanian, however, everything points towards the subject case being the marked member, i.e. [+case], in Old French, viz.: (a) its final demise (unmarked forms tend to win); (b) the fact that the object case had many more uses; (c) its being marked only on M nouns (not all!), while F nouns only show the number contrast of, e.g., *la porte* 'the door' vs. *les portes* 'the doors', both forms used for subjects and objects (on all this, see Nyrop 1965, Chapter II; Ménard 1976: 20-25).

Given this, we are no longer forced to the somewhat awkward disjunction in the meaning of /-s/, now case, now case and number. Rather, we may see it as the exponent of a larger category, call it NI for noun inflection. In the absence of number, NI is case; it is number otherwise. To spell it out: *(li) murs* is inflected for case, not for number; *(les) murs* is inflected for number, not for case; *(le) mur* is uninflected for both case and number; finally, *(li) mur* must not be inflected either, because if it were, /-s/ would have to be case – since subject is the marked case – but it cannot in the presence of number, hence no exponent can be realized.[72] In F nouns, on the other hand, and the M nouns that decline like F nouns, NI is purely number.

This is precisely the analysis I wish to propose for Romanian. There are two differences with Old French. First, Gen.-Dat. is [+case], whereas in Old French Gen. and Dat. (prepositional objects) side with direct objects in being uninflected – a consequence of the different organizations of the systems. Secondly, sg. F nouns show case marking in Romanian, rather than sg. M nouns as in Old French. Although the ultimate explanation may be historical, recall the connexion we have established between case and number as far as concord/agreement is concerned. It can now be seen as a realization of the category or lexical element NI, in the sense that case and number constitute noun inflection, and they can be realized simultaneously on determiners (/lor/, /unor/) and on determiners only, as will become clear shortly. Recall also that F *n*, i.e. n_{Fa} and n_{Fe}, may combine with number, whereas M *n*, i.e. plain *n* or n_{-F}, never does. It follows that the possibility to combine *n* and number, i.e. F l-gender, is a prerequisite for case being able to be realized on the noun itself. This makes nouns like *fat* similar to Old French *mur*, and /-e/ similar to /-s/ insofar as it represents the spell-out of NI, interpreted as case in the absence of number, as number otherwise. *Fete* in *rochia unei fete* 'a girl's dress' will then be represented as in (38), and *fete* in *rochiile unor fete* 'some girls' dresses' or *Ni te fete au venit* 'Some girls came' as in (39) (compare [22]):[73]

[72] We might say that *li mur* is negatively inflected for number in comparison with *les murs*, and negatively inflected for case in comparison with *li murs*. As for the article, *li* shows only case, *le* is uninflected like fem. *la*, and *les* is inflected for number, not for case.

[73] I write V in the spell out of R_{fat} to suggest that the vowel is underspecified at this pre-umlaut stage.

(38) (({R_{fat}} ↔ /fVt/) × ({n_{Fa} {NI=case}} ↔ /e/)) ↔ /fete/
(39) (({R_{fat}} ↔ /fVt/) × ({n_{Fa} {NI=number}} ↔ /e/)) ↔ /fete/

What about nouns like *gar* / *g ri* 'station(s)', for which I assumed that n_F combines with the root rather than number (see [17])? Here, I can only propose a guess, namely that the condition that *n*, then necessarily having the value *F*, combine with number was extended so that the presence of n_F in the element set became sufficient for NI to be case in the absence of number. Hence (40) for *g ri* in *u a unei g ri* 'the door of a station', and (41) for *u ile unor g ri* 'the doors of some stations' or *Cunosc multe g ri* 'I know many stations':

(40) (({R_{gar} {n_F}} ↔ /gVr/) × ({NI=case} ↔ /-/)) ↔ /g r /
(41) (({R_{gar} {n_F}} ↔ /gVr/) × ({NI=number} ↔ /-/)) ↔ /g r /

From the viewpoint of exponence, i.e. reading the arrows from right to left, it means that /e/~/i/ spelling out case is associated with the elements NI and n_F, no matter whether they are compacted into one complex element as in (38) or whether they are disjoint as in (40), provided they pertain to one element set undergoing one spell of morphological interpretation. Or, to put it in standard DM terms, /e/~/i/ spells out the features [Dat-Gen, F, –number] or the features [(F), +number], which must be matched by features of the whole vocabulary item being spelled out.

These items should be contrasted with the members of the *pa* set, for which we find, e.g., *p l ria unui pa a* 'the hat of a pasha', not */unui pa i/ – but *Cunosc mul i pa i* 'I know many pashas'. The difference is that nouns like *pa* do not include n_F at all in the pl. (see above). Therefore, they do not meet the condition that n_F and {number} must combine, directly or at a distance, for NI to be instantiated. Hence the fact that, although F in the sg., they do not show a special form for Gen.-Dat.

We also obtain a straightforward explanation for why neuter nouns do not behave like F nouns, which they are in the pl. (cf. *u a unui teatru* 'the door of a theatre', not */unui teatre/ after pl. *teatre* 'theatres'). It is simply because they are non-F in the sg., so n_F is not present in any position in the element set and the condition for NI being realized and interpreted as case is not fulfilled. We also understand why */fetor/ or */g ror/ are not possible forms to say 'of/to (some) girls/stations': NI in the noun is pure number in a plural context, but /or/ spells out case and number.

Of course, this is a very impoverished system, as well as an economical one, not to say miserly, since it makes do with one exponent which exploits the logic of oppositions to the hilt (A if not B, i.e. the exclusive disjunction). Such morphemes as Old French /-s/ or Romanian /-e/ might thus be called "toggle morphemes". Only with determiners do we find something like a full-fledged declension similar to that of Latin or Serbo-Croatian, with a case ending /i/ in the sg. (e.g., *lui*, *unui*, *unei*) and a syncretic case-number ending /or/ in the pl. (e.g., *lor*, *unor*).

Empirical support is given by the observation that a number of F nouns that have no pl. for semantic reasons – e.g., *foame* 'hunger', *sete* 'thirst', *linte* 'lentils', *lene* 'sloth' – also do not enjoy a special form for Gen.-Dat. sg., although it is a morphological possibility: e.g., *foame*'s Gen.-Dat. could be */fom/, but there is no such form.[74] That it is not because the form simply cannot exist due to the absence of pl. is shown by those other F nouns that do have a special Gen.-Dat. sg. form although they do not (normally) pluralize, such as *pace* 'peace', *unei p ci* 'of/to a peace', but */p ci/ to mean 'peaces' (see Lombard 1974: 49-50). Our assumption of one NI exponent spelling out case *or* number nicely accounts for these

[74] One thus finds *durerile foamei* 'the pains of hunger'.

discrepancies; with the first group of nouns, NI does not occur at all in the set composition including the root and *n*;[75] it does in the other group, but only with a case interpretation.

We can now deal with the second issue, viz. what expresses definiteness in *(casa) fetei* '(the house) of the girl'? Given what precedes, it turns out to have an easy answer, already suggested in the introductory section, viz. that final /i/ has to be the Gen.-Dat. form of the sg. F article. Actually this is the standard solution, even though descriptive grammars seem somewhat reluctant to voice it in such plain terms. *Fetei* will thus be represented as follows:

(42) $((\{R_{fat}\} \leftrightarrow /fVt/) \times (\{n_{Fa}\ \{NI=case\}\} \leftrightarrow /e/)) \times (\{D_{C=F,case}\} \leftrightarrow /i/)) \leftrightarrow /fetei/$

6. Summary and conclusion

We started with a putative rich system of three genders and four (or five) cases for Romanian nominals. At the close of our investigation, we end up with a very streamlined organization. Our first step was to draw a clear line between gender *qua* "natural" classification (encyclopaedic or e-gender) and gender *qua* grammatical class (lexical or l-gender). This distinction allowed us to bring down the number of l-genders, i.e. marked values of the nominalizing lexical element *n*, to one, viz. <F>, with two subvalues associated with different exponents, $<F_a>$and $<F_e>$. Note that contrary to <F> which I take to be substantial, $<F_a>$ and $<F_e>$ are mere notational devices, entirely identical with the spell-out formulae $n_F \leftrightarrow /a/$ and $n_F \leftrightarrow /e/$. Likewise, <–F> should be seen as a diacritic which I use in order to mark off those cases where unvalued *n* is added instead of included in the sg., being thus associated with an exponent (/e/). Two classes of nouns thus result: F nouns and non-F nouns, which I call M for convenience. In the latter, *n* receives no value beyond nounness itself.[76]

Valuing *n* is a matter for the lexicon in the DM sense of the term. Lexical items, i.e. element or feature sets, translate into encyclopaedic items (actual words). Part of the translation consists in matching l-gender with e-gender. Non-F nouns that translate as denotations of persons or personalized beings get interpreted as masc.; F nouns under the same conditions become fem., except for a limited stock such as *pa* 'pasha' or *pop* 'pope' which happen to refer to male characters and are thus treated as masc. Nouns that do not denote persons or personalized beings are not assigned e-gender. Many of them receive the conventional label "neuter", but this is not a self-standing category in any way. Neuter are those nouns which do not refer to persons (except for a handful of exceptions) and are non-F in the sg., but F in the pl.[77]

The l- vs. e-gender distinction has a syntactic consequence, as it leads us to assume two different feature-matching processes, agreement and concord. Concord concerns l-gender, and it is local, from the noun to the article. The articulated form of, e.g., *pa* is thus

[75] These nouns are thus indeclinable. Note the option is open that NI then integrates the D set. Indeclinable are also nouns like *înv toare* 'schoolmistress', i.e. F nouns ending in *-toare* and denoting persons. Since F nouns with the same ending but not denoting person inflect normally (e.g., *lipitoare* 'leech', *unei lipitori* 'of/to a leech', *lipitori* 'leeches'), this is a good argument – next to compelling syntactic ones – for considering that the encyclopaedic feature [female person], which triggers the interpretation of F l-gender as e-gender fem., may be morphologically active, which in turn has consequences for how components are interfaced. I leave this for future research.

[76] This is the only class in so-called "genderless" languages such as Hungarian or Turkish.

[77] The ambigenic character of Romanian neuter is further demonstrated by the fact that predicate adjectives qualifying mixed-gender conjuncts appear in the pl. F form, as in *Peretele i poarta sunt v ruite* 'The wall and the door are whitewashed' (Lombard 1974: 98). *Peretele* 'the wall' is non-F sg., *poarta* 'the door' is F sg., *v ruite* 'whitewashed' is F pl. as if it agreed with one pl. neuter noun.

pa a ‘the pasha’, showing the F article concording with an F noun which is otherwise interpreted as masc. Agreement, on the other hand, has to do with e-gender and it targets all the other items that covary with the noun, i.e. demonstratives, quantifiers (including the indefinite determiner) and attribute or predicate adjectives, hence *acest pa tîn r e smintit* ‘this young pasha is crazy’, where *acest* ‘this’, *tîn r* ‘young’, and *smintit* ‘crazy’ all show their non-F form, here interpreted as masc. in agreement with the exceptional masc. e-gender of the F head noun.

Plurality represents the meaning of the functional lexical element {number} which may be part of the element set that constitutes a noun in the lexicon and in the input to morphology. Absence of {number} means sg. by default. If *n* (possibly bearing the diacritic <–F>) is included with the root when {number} is present, the latter is associated with the exponent // – “pure” number. Otherwise, {number} combines with n_F, necessarily added, and its exponents are /e/ (*case* ‘houses’), // (*pisici* ‘cats’), or /ur/ (*unghiuri* ‘nails’).

Finally, case inflection (leaving Vocative aside) boils down to another privative contrast of no (morphological) case vs. case. If we wish to keep traditional labels for convenience, we shall use Nom.-Acc. for no case, and Gen.-Dat. for case. Only on the article and other determining items is this contrast always expressed. On the noun itself, the evidence warranting morphological case assignment is the fact that F nouns show the same form in the Gen.-Dat. sg. as they do in the pl., where case and no case are nondistinct. This I accounted for by assuming that, unless {number} spells out by itself (in non-F nouns), its combination with n_F yields a complex element I call NI for noun inflection. NI is a toggle element which is either case, then not number, or number, then not case. Masc. F nouns like *pa* which do no present this pl.-like form in the Gen.-Dat. sg. (*unui pa* ‘of/to a pasha’) are again crucial for showing that disjunctive NI results from the combination of n_F with {number}. When n_F is absent, in the pl. or across the board, NI boils down to plain {number}. The same happens with non-F sg. paired with F pl., i.e. neuters, now because of the absence of n_F in the sg. In other words, n_F has to be present in the whole paradigm for NI to be instantiated.

In sum, Romanian noun morphology can be seen to make maximal use of privative contrasts, which allows it to function with one l-gender (F), one marked number interpreted as pl., and one marked case, the latter only in all-F nouns. This restriction suggests that the system is even more streamlined than we first supposed it to be. Actually, there are two types of nouns in Romanian: all-F and not all-F, the latter including entirely non-F nouns (*prieten* ‘friend’, *ochi* ‘eye’), masc. F nouns (*pa*), and neuters. Not all-F nouns do not inflect in the relevant sense of the term; they only pluralize.[78] Only all-F nouns inflect by means of the toggle category NI = {nF {number}} interpreted as case, i.e. Gen.-Dat., or number. This confers a very special status upon the lone l-gender F, which seems to entertain a particular relationship with the expression of number. This, we saw, is due to the fact of F *n*, i.e. n_{Fa} and n_{Fe}, to be combinable with number, whereas M *n*, i.e. plain *n* or $n_{–F}$, is not – number then shows up “by itself” with /-/ as an exponent. Combining *n* and number, i.e. F l-gender, is thus a prerequisite for realizing case on the noun itself.

A question we should ask now is whether other languages that can be interestingly compared with Romanian also assign such a role to the feminine *qua* l-gender. A language that immediately comes to attention is Albanian, since it is related to Romanian by rather close areal bonds in addition to the more distant genetic kinship (see Sandfeld 1930), and its vocabulary also includes a large amount of ambigenous nouns pairing sg. M with pl. F, such as *kafshimi* /kafshim-i = bite-the$_M$/ ‘the bite’ vs. *kafshimet* /kafshim-e-t = bite-Pl-the$_F$/ ‘the bites’, *mali* /mal-i = mountain-the$_M$/ ‘the mountain’ vs. *malet* /mal-e-t = mountain-Pl-the$_F$/

[78] Recall there are good arguments to the effect that pl. formation is not inflectional. In particular, as pointed out above, Romanian plurals show common features with Arabic internal pl., which clearly are parallel formations with respect to the corresponding sg. (see Kihm 2003).

'the mountains', and so forth (see Boissin 1975: 73). Yet, Albanian also possesses a small class of "really" neuter nouns, and its noun inflection is more elaborate than that of Romanian. For this reason, a potentially more fruitful comparison, I think, is with Italian.

Italian is well-known for having a sizeable number of F pl. in *-a* paired with M sg. in *-o* such as *il braccio* / *le braccia* 'the arm(s)', *il cervello* / *le cervella* 'the brain(s)', *il muro* / *le mura* 'the wall(s)', *il uovo* / *le uova* 'the egg(s)', etc. (see Acquaviva 2002 for a recent and enlightening account). Despite the etymology of the ending (Latin neuter pl. *-a* as in *templum* / *templa* 'temple(s)'), such pairs cannot be directly compared with the Romanian neuters, however. Indeed, F pl. in *-a* are collective plurals, they refer to wholes or masses, and they nearly always coexist with ordinary pl. in *-i* referring to pluralities of tokens. For instance, *le cervella* refers to the whole of someone's brainstuff (as in *farsi saltare le cervella* 'to blow one's brains out'), whereas *i cervelli* designates a plurality of separate brains.[79]

Such an explicitly collective meaning is of course absent in Romanian F pl. paired with non-F sg. They are mere pl. which can, but need not be interpreted as collectives. Yet, there is a connexion. The lexical formula of the Italian morpheme /-a/ in the present framework has to be $\{n_F \{Group\}\}$, where I take Group to be a rough label for a lexical element akin to Number, but with partially different semantics (on these matters, see Link 1983; Ojeda 1992; Zabbal 2002). According to Acquaviva (2002), "/-a/-collectivization" is a derivational process, whereas ordinary pluralization is inflectional. We saw, however, that pl. formation in general can be considered derivational, and that is especially obvious with the Romanian neuters, the pl. of which constitute parallel developments from the same root with respect to the corresponding sg. In a pair such as *fir* / *fire* 'thread(s)', e.g., the lexical representation of the sg. is $\{R_{fir} \{n\}\}$, while that of the pl. is $\{\{R_{fir}\}\{n_F \{Number\}\}\}$, similar to the representation we would assign to *(le) mura*, viz. $\{\{R_{mur}\}\{n_F \{Group\}\}\}$. In both cases, the <F> value of *n* comes up as an inherent property of the pl. or collective, which cannot be predicted from the sg. In that sense, Italian /-a/-collectives and Romanian neuters are indeed analogous to Arabic internal pl. (i-pl.).

There is a difference, however, and that is that the Group meaning of Italian /a-/-collectives can never be neutralized – probably because Group is more specific than Number, being a subset of it, since Group implies Number, but not the reverse. Number can be neutralized, in contrast, in Romanian all-F nouns where $\{n_F \{Number\}\}$ is analysed as the inflectional element NI. This gives us the following picture. Italian /a-/-collectives and Romanian F pl. paired with non-F sg. are indeed comparable – with each other and with i-pl. – insofar as they both include an <F> value not present in the corresponding sg. and an element of plurality. There is therefore a breach of lexical integrity – i.e., the notion that in a paradigm A_i, A_j, A_k…, the base A should be invariant in terms of feature composition, in particular it should belong to the same gender or word class. On the other hand, since the element of plurality is Group in Italian, i.e. more specific than Number, "a-pl." cannot denote individual plurality, hence the parallel existence of "general" pl.[80] In Romanian, in contrast, the element of plurality is simply Number – as it is in Arabic i-pl. as well, despite the speculative origin of the latter as collectives, as opposed to the external "real" pl. (e-pl.). In fact, it can be shown that the difference between i- and e-pl. is purely morphological, synchronically at least (see Kihm 2003).

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[79] In Rumantsch this formation gave rise to an almost fully productive collective class whose members, contrary to (Modern) Italian, are actually sg.: cf. *il crap* 'the stone', *ils craps* 'the stones', *la crappa* 'the (heap of) stones' (Liver 1982: 24). Note that Romanian has one and only one plural in - , viz. *ou(l)* / *ou (le)* '(the) egg(s)', which happens to translate Italian *il uovo* / *le uova*, the one *-a* plural for which there is no associated *-i* plural – which makes it the only Italian full equivalent of the Romanian neuters.

[80] *Le uova* 'the eggs' is probably an exception: since there is no parallel */gli uovi/, *uova* must make do for group as well as for individual pl.

Such is the case in Romanian as well, where the counterparts of Arabic e-pl. – i.e., pl. which include nothing more than the sg. except plurality itself – are the pl. of non-F nouns (*prieteni* 'friends') and of all-F nouns (*fete* 'girls', *pisici* 'cats'). The Romanian system thus consists in two orthogonal contrasts: as far as inflection is concerned, all-F nouns, which inflect for case-or-number, contrast with non-F and neuter nouns, which do not; in terms of lexical integrity, on the other hand, neuter nouns, which add <F> in the pl., contrast with non-F and all-F nouns, which add nothing but plurality. There is therefore a partial correlation between non-inflection and lack of lexical integrity, since neuter nouns, despite taking <F>, or because they take it only in the pl., do not inflect. Why should that be so? And why is <F> the intrusive value?

Let us once again assume pluralization to be a derivational process across the board. Derivation has nothing to do with lexical integrity. Actually, its common effect is to change the category of the base it applies to. We therefore expect pluralization to have that capacity as well. Romanian neuters and Arabic i-pl. show that it does. Yet, pl. formation is a function from nouns to nouns, which implies that the changes it may operate must be minimal, as the result has still to be a noun. Now, two features only, it seems, can be changed in a noun without erasing its identity as a noun: its class, i.e. the value of *n* combined with the root, and its type as a count or a mass noun. Italian /a-/-collectivization effectuates both changes: *cervella* is mass and F, whereas *cervelli* is count and non-F, both being pl., group or individual. In the Romanian neuters, only the first change takes place.[81] What matters, however, is that such changes are entirely in the order of things given the derivational nature of pl. formation. Why they are not more frequent cross-linguistically is an interesting but, I think, subordinate question.[82]

Finally, all evidence points to the fact that the changes are uniquely oriented: they must proceed from unmarked to marked (see Acquaviva 2004 for a similar conclusion concerning Irish and Scottish Gaelic). Mass or group pl. are likely to be marked with respect to count or individual pl. On the other hand, in a class system like that of Romanian based on the privative contrast of 1 and ∅, the lone l-gender is *ipso facto* marked. We therefore predict there cannot exist a language like Romanian except that it would systematically pair F sg. with non-F pl.[83]

References

Academia Republicii Populare Romîne. 1963. *Gramatica limbii romîne, vol. I*. Bucureti : Editura Academiei Republicii Populare Romîne.

Acquaviva, P. 2002. "Il plurale italiano in *-a* come derivazione lessicale", *Lingue e linguaggio* 2, 295-326.

– 2004

Aikhenvald 2000

Baker 2003

Beard 1995

Boissin, H. 1975. *Grammaire de l'albanais moderne*. Paris : Chez l'auteur.

Bourciez, E. 1910/1967. *Eléments de linguistique romane*. Paris: Klincksieck.

[81] It is a matter for discussion whether only the first change or both changes occur with Arabic i-pl. I leave this issue aside.

[82] In Romanian itself, non-F and all-F nouns show that the change need not occur. After all, not all derivations are category-changing.

[83] "Gender polarity" languages the stock example of which is Somali are *not* like Romanian, because in Somali "masculine" and "feminine" seem to be equally marked. This in turn suggests that what Somali presents us with is a very impoverished noun class system rather than gender (see Kihm to appear).

Chomsky, N. 2001. “Derivation by phase”. In M. Kenstowicz (ed.), *Ken Hale: A Life in Language*, 1-52. Cambridge (Mass.): MIT Press.
Cinque, G. 2004. A phrasal movement analysis of the Romanian DP, unpublished ms., University of Venice.
Corbett, G.G. 1991. *Gender*. Cambridge: Cambridge University Press.
– 1998. “Morphology and agreement”. In A. Spencer & A.M. Zwicky (eds), *The Handbook of Morphology*, 191-205. Oxford : Blackwell.
Cornilescu, A. 1992. “Remarks on the determiner system of Romanian: the demonstratives *al* and *cel*”, *Probus* 4, 189-260.
Dobrovie-Sorin, C. 2000. “(In)definiteness spread: from Romanian genitives to Hebrew construct states nominals”. In V. Motapanyane (ed.), *Comparative Studies in Romanian Syntax*. Amsterdam: Benjamin's.
Halle, M. 1973. “Prolegomena to a theory of word-formation”, *Linguistic Inquiry* 4, 3-16.
– 2000. “Distributed morphology : impoverishment and fission”. In J. Lecarme, J. Lowenstamm, & U. Shlonsky (eds), *Research in Afroasiatic Grammar*, 125-149. Amsterdam: John Benjamins.
Harris 1999
Kayne 1994
Kihm, A. 2003. “Les pluriels internes de l’arabe: système et conséquences pour l’architecture de la grammaire”, *Recherches linguistiques de Vincennes* 32, 109-155.
– To appear. “Noun classes, gender, and the lexicon-syntax-morphology interfaces”. In G. Cinque & R.S. Kayne (eds), *Handbook of Comparative Syntax*. Oxford: Blackwell.
Kratzer 1994
Lever, R. 1982. *Manuel pratique de romanche : sursilvain – vallader*. Chur : Verlag Lia Rumantscha / Ligia Romontscha.
Link, G. 1983. “The logical analysis of plural and mass terms : a lattice-theoretical approach”. In R. Bäuerle et al. (eds), *Meaning, Use, and Interpretation in Language*, 302-323. Berlin : Walter de Gruyter.
Lombard, A. 1974. *La langue roumaine: une présentation*. Paris : Klincksieck.
– & C. Gâdei. 1981. *Dictionnaire morphologique de la langue roumaine*. Bucure ti : Editura Academiei Republicii Socialiste România.
Lowenstamm 1996
Ménard, P. 1976. *Syntaxe de l’ancien français*. Bordeaux : Sobodi.
Murrell, M. & V. tef nescu-Dr g ne ti. 1970. *Romanian*. London : Hodder & Stoughton.
Nyrop, K. 1965. *Grammaire historique de la langue française, vol. 2*. Copenhagen : Gyldendal.
Ojeda, A.E. 1992. “The semantics of number in Arabic”. In C. Barker & D. Dowty (eds), SALT II. *Proceedings of the Second Conference on Semantics and Linguistic Theory*, 303-325. Columbus: Ohio State University.
Raffelsiefen, R. 1992. “A nonconfigurational approach to morphology”. In M. Aranoff (ed.), *Morphology Now*, 133-162. Albany: State University of New York Press.
Sandfeld, K. 1930. *Linguistique balkanique: problèmes et résultats*. Paris : Klincksieck.
Wechsler, S. & L. Zlati . 2003. *The Many Faces of Agreement*. Stanford: CSLI Publications.
Zabbal, Y. 2002. The semantics of number in the Arabic noun phrase, Master Thesis, University of Calgary.