

From Number Cycle to Split Plurality and Back in Albanian

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Abstract Albanian plural morphology is analysed in the paper as split between the Num and *n* heads. This is shown to result diachronically from a plural-to-singular reanalysis cycle, where splitting the number morphology between Num and *n* has worked as a competition resolution strategy in Albanian. The system is still in transition, however, and represents a long-lasting state of a dynamic equilibrium.

Keywords Albanian. Plural morphology. Split number. Reanalysis cycle. Competition resolution. Equilibrium.

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Edizioni
Ca Foscari

Peer review

Submitted	2021-09-13
Accepted	2021-12-03
Published	2021-12-21

Open access

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Citation Bozhoviq, G. (2021). "From Number Cycle to Split Plurality and Back in Albanian". *Balcania et Slavia*, 1(2), [1-24] 157-180.

1 Introduction

Modern Albanian has highly elaborate and irregular plural morphology in nouns, where numerous plural markers, including affixes, stem alternation and various combinations thereof, seem to compete for the realisation of plural inflection. This produces a largely chaotic system, with many competitors and many choices, leaving the impression of a state of equilibrium, in which the morphological competition, remarkably, remains seemingly unresolved.

Several important and theoretically or typologically informing questions may be raised about such a language-particular system. First, how did it arise and how, if at all, is the competition between various plural markers eventually resolved? Secondly, how does a language-particular system like this relate to crosslinguistic typologies of plurality? And finally, what a system like this may tell us about the nature of certain morphological phenomena in language more generally? These basic questions will essentially guide this paper.

In § 2, I will provide a descriptive overview of the plural formation strategies in Albanian. These include stem syncretism (§ 2.1), affixation (§ 2.2) and stem alternation (§ 2.3), but also cases of extended exponence (e.g. simultaneous double marking) of the plural (§ 2.4), various other idiosyncratic plurals (§ 2.5) and alternative coexistent plural formations (§ 2.6).

A formal analysis of the observed data is given in § 3, where I argue, following Kramer (2016), that Albanian has a split plurality system (§ 3.1). The analysis is supplemented with a diachronic account (§ 3.2), showing how a plural-to-singular reanalysis cycle has worked to produce the present-day split plural system.

Then I will proceed to the discussion (§ 4). Although deeply grounded in a single language, in this section I will show how the analysis of Albanian plural morphology pursued here may inform our wider theoretical understanding of certain morphological phenomena, such as the dynamics of morphological change, competition resolution and states of equilibria.

2 Albanian Plural Morphology

A noun in Albanian, like *zemra* ‘heart’ in (1), can be morphologically divided into at least two parts, the grammatical stem and the inflection. The morphological shape of the stem is contingent on the noun’s gender (masculine/feminine)¹ and number values (singular/plural),

¹ Old Albanian has also inherited a third, neuter gender, which is in heavy decline in the modern language. Nouns that were originally neuter (such as *krye-t* ‘head’, *mish-të*

as in (1a) vs. (1b). *Zemra* is feminine and belongs to a small class of feminine nouns with their stem ending in an underlyingly syllabic but prosodically deficient (extrametrical for the purposes of stress assignment) $-(\ddot{e})r$. Gender assignment in Albanian nouns is both lexically and phonologically conditioned, however, not all nouns ending in $-(\ddot{e})r$ will necessarily be feminine. There is also a subclass of masculines in $-(\ddot{e})r$, such as *libr-i* ‘book’ (pl. *libra-t*).

(1)

a. *zembr-a* b. *zembr:a-t*
heart.**SG-NOM.DEF** heart:**PL-NOM/ACC.DEF**

The inflection markers, which specify the noun’s case and definiteness, are then attached to the stem. The choice of the stem (singular or plural) and its inherent gender value in turn determines the noun’s inflection class (i.e. masculine singular, feminine singular or plural declension), as different sets of inflectional suffixes will combine only with stems of particular shape and value [table 1]. For example, a stem like *zembr-* in (1a), which is feminine singular, will combine with the feminine singular set of inflectional suffixes in table 1 (medium row), and a stem like *zemra-* in (1b), which is (feminine) plural, will combine with the plural suffixes in table 1 (the third row), when inflected for case and definiteness.

Table 1 Albanian nominal declension classes

	Indefinite paradigm				Definite paradigm			
	Nom.	Acc.	Dat.	Abl.	Nom.	Acc.	Dat.	Abl.
Masculine singular inflection				<i>-i/-u</i>	<i>-i/-u</i>	<i>-in/-un</i>		<i>-it/-ut</i>
Feminine singular inflection		$-\emptyset$ (no overt marking = bare stem)		<i>-(j)e</i>	<i>-(j)a</i>	<i>-ën/-në</i>		<i>-ës/-së</i>
Plural inflection (both genders)			<i>-ve</i>	<i>-(i)sh</i>		<i>-(i)t/-të</i>		<i>-ve</i>

‘meat’ or *ujë-t* ‘water’) are usually assigned masculine now (see e.g. Demiraj 2002, 110-11 *et passim*; Topalli 2011, 219-24). Neuter is, to a various extent, preserved in some of the (mostly Tosk Albanian) dialects (cf., e.g., Çerpja 2017 for the most recent survey, with references therein).

There are various ways to form the plural stem of a noun. In (1b), a plural suffix *-a* is apparently attached to the root *zembr-* to produce the plural form *zemra*. However, this is not the case with all plural stems, and not all plurals are even compositional like this, while some of the plurals are *overcompositional*, i.e. with more than one way of marking the plural present simultaneously. Plural formation in Albanian is a relatively complex enterprise, conditioned by the lexical, phonological and semantic features of various (sub)classes of nouns or even individual nominal roots. In addition, many nouns may form plurals in more than one possible way.²

2.1 Stem Syncretism

Several groups of nouns display number syncretism, i.e. no overt marking of the plural. This is a regular pattern in virtually all feminine nouns with stems ending in a vowel *e*, *i*, *a*, *o* (2), as well as in masculines formed with the agentive suffix *-s* (*-ës*, *-ues*) from verbs and the gentilic suffix *-as* from place names (3).

(2)

a. <i>lule: lule</i> flower.SG: flower.PL	b. <i>shami: shami</i> kerchief.SG: kerchief.PL
c. <i>kala: kala</i> fortress.SG: fortress.PL	d. <i>pallto: pallto</i> overcoat.SG: overcoat.PL

(3)

a. <i>çelës: çelës</i> key.SG: key.PL (from <i>çel</i> ‘to open’)	b. <i>mësues: mësues</i> teacher.SG: teacher.PL (from <i>mësoj</i> ‘to teach’)
c. <i>gjilanas: gjilanas</i> a person: persons from Gjiilan	

In addition to these, there are also several other nouns that manifest stem syncretism in the singular and plural lexically, i.e. as a feature of the individual nominal roots, setting them apart from the majori-

² For general synchronic surveys, cf. the standard reference works in Agalliu 2002, 94-105; Buchholz, Fiedler 1987, 249-68; or Newmark et al. 1982, 141-7. For a diachronic survey of individual plural formants in the language, see also Bokshi 2010; Demiraj 2002, 121-32; Orel 2000, 228-31 and Topalli 2011, 226-89 *et passim*, inter alia, and for the variation in plural formation across the Albanian dialects, see Fiedler 2007.

ty of nouns in their respective classes that regularly form plurals in some other way. Such are the ‘irregular’ feminines in *-ë*, which otherwise regularly form plurals by affixation, namely *gjuhë* ‘tongue(s), language(s)’, *ditë* ‘day(s)’, *rrugë* ‘road(s), street(s)’, and masculines sy ‘eye(s)’, *muaj* ‘month(s)’, *qen* ‘dog(s)’, etc.

2.2 Affixation

Affixation is by far the most elaborate plural formation strategy in Albanian. A series of different plural affixes (*-ë*, *-e*, *-a*, *-ra*, *-ër*, *-nj* etc.) compete for the plural formation in the majority of masculine nouns and in the feminine nouns with stems ending in the vowel *-ë* (schwa) or an extrametrical liquid³ *-(ë)r*, *-(ë)rr*, *-(ë)l* or *-(ë)ll*. Which plural affix will be used is mostly contingent on the lexical (e.g., gender), phonological (shape of the stem) and semantic features of a particular nominal (sub)class, so that different affixes are productive and/or selectionally restricted to a various extent.

For example, the affix *-ë* is mostly used to form plurals from masculine nouns denoting persons (4), while *-e* is mostly for inanimates (former neuters), or for masculine nouns ending in a dental (5), unless they are animate (cf. 4b). A semantic distinction is thus occasionally made in the literary language, in e.g. *element-ë* vs. *element-e* ‘elements’, where the plural formed with the suffix *-ë* would denote human entities (“representatives of a certain social stratum or class”, Kostallari et al. 1981, s.v. “element”), as in ‘foreign elements’, i.e. spies.

(4)

a. <i>shok</i> : <i>shok-ë</i>	b. <i>student</i> : <i>student-ë</i>
comrade.SG: comrade-PL	student.SG: student-PL

(5)

a. <i>send</i> : <i>send-e</i>	b. <i>mal</i> : <i>mal-e</i>
thing.SG: thing-PL	mountain.SG: mountain-PL
c. <i>shtet</i> : <i>shtet-e</i>	d. <i>fis</i> : <i>fis-e</i>
state.SG: state-PL	tribe.SG: tribe-PL

For the purposes of nominal concord, plurals formed with *-e* as in (5) pattern with feminine nouns, even though their respective singulars are masculine.

³ On the extrametricality of stem-final liquids and lexical stress assignment in Albanian in relation to its morphological structure more generally, see also Božović 2015 and references therein.

The suffix *-a* is lexically and phonologically conditioned in the sense that it is generally found with feminine nouns ending in *-ë* (6), or with stems ending in an extrametrical liquid, irrespective of their gender (7).

(6)

a. *fushë*: *fush-a*
field.SG: field-PL

b. *vajzë*: *vajz-a*
girl.SG: girl-PL

(7)

a. *zem(ë)r*: *zem-r-a*
heart.SG: heart-PL (feminine)

b. *veg(ë)l*: *veg-l-a*
tool.SG: tool-PL (feminine)

c. *kumbull*: *kumbull-a*
plum.SG: plum-PL (feminine)

d. *lib(ë)r*: *lib-r-a*
book.SG: book-PL (masculine)

Unlike plurals in *-e*, however, the plurals in *-a* seem to be faithful to the gender of their base: all feminines that form plurals in *-a* remain feminine, and all masculines that form plurals in *-a* remain masculine in the plural for the purposes of concord.

Nouns of both genders may also form plurals with the originally collective suffix *-ra* (8). Its distribution seems to be semantically motivated to an extent, in the sense that it tends to combine with mass nouns, or with various nominal roots to produce mass readings.

(8)

a. *fshat*: *fshat-ra*
village.SG: village-PL (masculine)

b. *shi*: *shi-ra*
rain.SG: rain-PL (masculine)

c. *mall*: *mall-ra*
goods.SG: goods-PL (masculine)

d. *gjë*: *gjë-ra*
thing.SG: thing-PL (feminine)

All other plural affixes are specific to certain classes of masculine nouns. These include *-ër*, which seems to prefer some kinship terms and titles (9), *-nj* (*-inj*, *-enj*), which combines with originally nasal stems and palatalises them (10), as well as the combined suffixes *-llarë* and *-lerë*, whose first part is borrowed from the Turkish plural suffix (along with its vowel harmony) and combined with the native suffix *-ë* (11). In addition to the plural of some kinship terms and some of the historical Ottoman Turkish borrowings denoting persons high in the social hierarchy, this suffix may also be used to form family names (Demiraj 2002, 129).

(9)

a. <i>prind: prind-ër</i> parent.SG: parent-PL	b. <i>mbret: mbret-ër</i> king.SG: king-PL
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(10)

a. <i>dru: dru-nj</i> tree.SG: tree-PL	b. <i>gjarpër: gjarpër-inj</i> snake.SG: snake-PL
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(11)

a. <i>baba: baba-llarë</i> father.SG: father-PL	b. <i>xhaxha: xhaxha-llarë</i> father's brother.SG: <i>id.</i> -PL
c. <i>bej: bej-lerë</i> Ottoman bey.SG: bey-PL	d. <i>Niko-llar-ë</i> a toponym in southern Albania, 'descendants of Niko (Nikolla)' (a family name turned into toponym)

There are other marginal suffixes, as well, which are attested only in several words or even in a single word. The plural of *njeri* 'human', for instance, is *njerëz*, with the plural suffix *-ëz/-zë* (Topalli 2011, 247), which is not much productive elsewhere.

2.3 Stem Alternation

A third possible way to form plural stems in Albanian, in addition to stem syncretism and affixation, is allomorphic stem alternation.⁴ Stem alternation may affect masculine nouns ending in a velar *-k*, *-g*, which palatalise to *q*, *gj* (12a-b), or a liquid *-r*, *-ll*, which palatalise to *-j* (12c-d).

(12)

a. <i>ujk /ujk/: ujq /ujc/</i> wolf.SG: wolf.PL	b. <i>zog /zog/: zogj /zoʃ/</i> bird.SG: bird.PL
c. <i>bir: bij</i> son.SG: son.PL	d. <i>ishull /ifuʃ/: ishuj</i> island.SG: island.PL

⁴ For a detailed survey of morphophonological alternations in the plural, see Meshaj (2012, 115-35).

Palatalisation, too, is largely lexically conditioned, however. Not all masculine nouns that meet the phonological conditions for palatalisation will necessarily form plurals in that way, e.g. we have *grek* ‘Greek’, with the plural form *grek-ë*, in addition to *turk* ‘Turk’, which forms the palatalised plural *turq*, patterning with *ujq* in (12a). Similarly, *mik* ‘friend’ has the plural *miq*, but *shok* ‘friend, comrade’ has a more ‘regular’ plural *shok-ë* (4a).

A related phenomenon to palatalisation, which affects consonants, is metaphony, which may affect masculine nouns with stem vowels *a* or *e*, alternating with *e* and *i*, respectively, in the plural (13). Palatalisation and metaphony often co-occur, as in (13b-d). Exceptionally, metaphony is found in a single feminine noun, as well, viz. *natë* ‘night’, which has the plural *net*.

(13)

a. <i>dash</i> /daʃ/: <i>desh</i> /deʃ/	b. <i>ka</i> /ka/: <i>qe</i> /ce/
ram.SG: ram.PL	ox.SG: ox.PL
c. <i>plak</i> /plak/: <i>pleq</i> /plec/	d. <i>mashkull</i> /maʃkuɫ/: <i>meshkuj</i> /meʃkuj/
old man.SG: id.PL	male.SG: male.PL

Historically, palatalised and metaphonic stems probably formed the plural regularly by affixation with an unattested, but reconstructable suffix **-i* (< earlier **-oi*). This segment was lost due to apocope, but it left a [+palatal] feature on the plural stems, which mutates both the non-palatal consonants and stem vowels. This mutation was allophonic at first, but later became morphophonologized (cf. Demiraj 2002, 123, 124-5 *et passim*; Topalli 2011, 231-3).

2.4 Extended Exponence

It is not uncommon for plural stems in Albanian to be marked in more than one way simultaneously, i.e. by two consecutive affixes or by stem alternation plus a plural affix. The suffixes *-llarë/lerë* in (11), for example, are one such instance of multiple exponence, to the extent to which the Turkish plural suffix *-llar/ler* is synchronically segmentable from the more productive masculine plural suffix *-ë*. A similar case is the plural of *gju* ‘knee’, *gjunjë*, which has both the palatalised nasal stem suffix *-nj* and the more ‘regular’ suffix *-ë*. A different ordering is found in *prift-ër-inj*, the plural of *prift* ‘priest’ with the nasal stem suffix following an even more idiosyncratic plural suffix *-ër*. Two subsequent plural suffixes, *-(ë)z* and *-ër*, in addition to stem-vowel metaphony, are also found in the plural form *vëlle-z-ër* from *vëlla* ‘brother’, making it arguably a unique case of triple plural marking in Albanian.

More productive cases (even with very recent loanwords) of extended exponence (i.e. double marking of the plural) include stem alternation (palatalisation, metaphony or both), in combination with a plural suffix, most frequently *-e* (14), but also *-ër* (15) and *-ra* (16).

(14)

a. <i>rrezik: rreziq-e</i> danger, risk.SG: <i>id.</i> -PL	b. <i>bllok: blloq-e</i> block.SG: block-PL
c. <i>varg: vargj-e</i> chain.SG: chain-PL	d. <i>breg: brigj-e</i> coast, shore.SG: <i>id.</i> -PL
e. <i>gardh: gjerdh-e</i> fence.SG: fence-PL	f. <i>kopsht: qipsht-e</i> garden.SG: garden-PL (dialectal)
g. <i>yll: yj-e</i> star.SG: star-PL	

(15)

a. <i>atë: et-ër</i> father.SG: father-PL	b. <i>kunat: kunet-ër</i> brother-in-law.SG: <i>id.</i> -PL
--	--

(16)

<i>asht: esht-ra</i> bone.SG: bone-PL
--

2.5 Other Idiosyncrasies in the Plural Formation

Not discussed above are also certain non-productive morphophonological alternations, that are characteristic only of individual roots, such as the monophthongization in the plural form *gra* from *grua* ‘woman’, or the diphthongization in *vjet* from *vit* ‘year’. These may also co-occur with palatalisation, as in *kuaj* from *kalë* ‘horse’, or take idiosyncratic plural suffixes, such as the marginal suffix *-m* in the plural form *djem* from *djalë* ‘boy’ (< **djal-m*), which also triggers stem-vowel metaphony (cf. Demiraj 2002, 130, 132; Topalli 2011, 247-8).

2.6 Nouns with Alternative Plurals

For the majority of nouns, however, plural stem formation is in fact not fixed. Many nouns can actually form more than one possible plural stem according to the patterns described above, sometimes with slightly different semantic nuances or stylistic values, as in the pair

elemente vs. *elementë* mentioned above (in § 2.2), but more often in free variation.

This is the case, e.g., for numerous feminine nouns ending in *-ë*, such as *brinjë* ‘rib’, *copë* ‘piece’, *grykë* ‘throat’, *lëkurë* ‘skin’, *pikë* ‘drop, spot’ etc., whose plurals may either be syncretic with the singular or formed regularly, by suffixing the plural marker *-a* (i.e. *brinj-a*, *cop-a* etc.). In a similar fashion, owing to its originally collective semantics, *-ra* is able to combine with most nouns that otherwise form plurals in some other way or whose plurals are otherwise syncretic (e.g. *kohë* ‘time’: plural *kohë* or *kohë-ra*; *çudi* ‘surprise, wonder’: *çudi-ra* ‘wonders’).⁵

Similarly, many masculine nouns that meet the morphophonological criteria for stem alternation may either: (a) undergo palatalisation and/or metaphony, (b) attach an affix like *-e* in addition to stem allomorphy, thus manifesting extended exponence of the plural, or (c) form plurals with another, more ‘regular’ plural affix that does not trigger any stem alternation. This is illustrated in (17).

(17)

- | | |
|--|---|
| a. <i>oxhak</i> : <i>oxhaq-e</i> OR <i>oxhak-ë</i>
chimney.sg: chimney-PL | b. <i>hendemek</i> : <i>hendemek-e</i> OR <i>hendemek-ë</i>
ditch.sg: ditch-PL |
| c. <i>flamur</i> : <i>flamuj</i> OR <i>flamur-ë</i>
flag.sg: flag-PL | d. <i>portokall</i> : <i>portokaj</i> OR <i>portokall-e</i>
orange.sg: orange-PL |
| e. <i>vend</i> : <i>vend-e</i> OR <i>vis-e</i>
place.sg: place-PL | f. <i>shpend</i> : <i>shpend-e</i> OR <i>shpezë</i>
fowl.sg: fowl-PL |
| g. <i>vit</i> : <i>vjet</i> OR <i>vit-e</i>
year.sg: year-PL | |

In addition, different suffixes discussed in § 2.2 are actually in competition for the realisation of plural in many nouns, including those with (various extents of) stem alternations in addition to the affixation; cf. examples in (18).

⁵ Although *-ra* originally is a collective suffix, and the collective semantics is still felt to an extent in some of the formations, it should be noted that no difference in meaning (i.e. collective interpretation) is in fact necessary for the plurals formed with *-ra*. For the most part, *-ra* functions as a ‘regular’ plural suffix synchronically, as in *fshatra* ‘villages’ or *çudira*, with just ‘typical plural’ semantics: unlike true collective plurals, plurals in *-ra* may refer to specific groups of items, they may combine with cardinal numerals, etc. (cf. Kramer 2016, 531-2 for similar arguments from Amharic).

(18)

a. *yll*: *yj* (stem alternation) OR *yj*-e OR *yj*-ëz OR *yj*-(ë)*ra* etc.
star.SG: star-PL

b. *ujk*: *ujq* (stem alternation) OR *ujq*-ër OR *ujq*-(ë)*ra* etc.
wolf.SG: wolf-PL

c. *gjalm*(ë): *gjelm* (stem alternation) OR *gjelm*-e OR *gjelm*-ër OR *gjelmitër*
OR *gjalm*-e (without stem alternation) OR *gjalm*-a etc.
yarn.SG: yarn-PL

d. *kopsht*: *kopsht*-e OR *kop*(ë)*sht*-a OR *kopsht*-inj OR *qipsht*-e etc.
garden.SG: garden-PL

In that way, for numerous nouns, the choice between undergoing stem allomorphy or not, in addition to attaching any one of the numerous plural affixes or staying without an affix, as in (17)-(18), may even create *dozens* of different possible plural forms, which are attested in various Albanian (mostly Tosk) dialects (cf. Fiedler 2007, for a comprehensive survey of plural formation strategies in Albanian).

On the other hand, for some (mostly Geg Albanian) speakers, there is also an opposite tendency for levelling the plural variation, manifested in the expansion of the affix *-a* to create forms like *element-a*, *dokument-a*, *plakat-a*, *autobus-a*, *student-a*, *oxhak-a* (cf. in contrast 17a), *çelës-a* (cf. the unaffixed plural *çelës* in (3) above), etc. Recall that *-a* is the most frequent plural suffix for feminine nouns, and that it also combines with a subclass of masculine stems. Analogically from there, it spreads to encompass the majority of other masculines as well, thus eliminating both the other plural affixes that are in competition with each other, and the stem allomorphy that is associated with them and that regularly produces cases of multiple exponence (double marking) of the plural.

2.7 Interim Summary

So far we have seen how the plural stem formation strategies in Albanian may vary from stem syncretism (i.e. no overt marking of number whatsoever), via more or less productive affixation, with more or less selectional restrictions on particular plural affixes, to various stem allomorphy patterns and purely idiosyncratic formations. Particularly curious are instances of extended exponence (including apparent borrowing of an inflectional affix from Turkish), and an almost unhindered variation and irregularity in Albanian nominal plural formation.

In the following section, I will provide a formal analysis of the observed competition in plural marking in Albanian, building mostly

on Kramer (2016), but supplying it also with a diachronic account of how (and why) this dynamic plural formation system came into place.

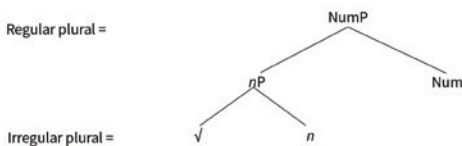
3 Analysis

Since Ritter (1991), it has been argued for the existence of a syntactic node Num(ber), the head of an additional functional projection Num(ber)P above the lexical NP (between DP and NP), to accommodate number inflection. NumP is assumed to be crosslinguistically the default syntactic location of number features within the DP. On the other hand, more recent research on idiosyncratic plurality, such as irregular and 'lexical' plurals, argues for a possibility that number features may also be found elsewhere in the DP, most notably on the categorial head *n*, i.e. closer to the root (cf. Acquaviva 2008; Alexiadou 2011; Harbour 2011, among others; Kramer 2016 for a survey and references therein).

Assuming a DM-style word structure, in which lexical categories are made up of a category-neutral root ($\sqrt{\quad}$) and a category-determining head, as the little *n* for nominals (cf. e.g. Marantz 1997; 2001), Kramer argues that number features are in fact split between Num for morphologically regular plurals and the nominalizing head *n* for idiosyncratic (i.e. irregular) plurals in Amharic (19), and proposes a three-way morphosyntactic typology of plurality, as in (20), in which:

[l]anguages can have wholly Num-based plurals (e.g. English), *n*-based plurals (or possibly closer-to-root plurals, where all plurals act idiosyncratically), or split plurality (an irregular/regular contrast in plurality expressed through two different heads). (Kramer 2016, 555)

(19)



(adapted from Kramer 2016, 534)

(20)

Morphosyntactic typology of plurality (Kramer 2016, 555):

- a. Num-based plurality (English, Hebrew, etc.)
- b. *n*-based plurality (Somali, Halkomelem Salish, etc.)
- c. Split plurality (Amharic)

In the remainder of this section, I will argue that the Albanian plural formation system belongs to the split or ‘hybrid’ type, involving both Num and *n* heads, like that of Amharic (20c), according to most of the diagnostics for split plurality that are identified in Kramer (2016). After that, I will show how this particular formal analysis relates to the facts of Albanian historical grammar. In particular, I will argue that the phenomenon described in classical Albanology as “singularization of plurals” (Çabej 2012) can be formally modelled as a Jespersen-like plural-to-singular reanalysis cycle,⁶ in which the reanalysis of old plurals as singulars has led to a ‘renewal’ of various innovative plural forms. In formal terms, it will be shown that the old plural morphology was ‘pushed down’ from Num to *n* and reanalysed as part of the nominal stem, so that various innovative plural markers could appear in (now empty) Num, competing among themselves for the realisation of plural morphology. A “niche competition” was created, in the sense of Aronoff (2016; 2019), so that, in effect, splitting the plural features between Num and *n*, in order to maintain a system like the one in (19), has emerged in Albanian as a possible competition resolution strategy.⁷

3.1 Split Plurality

A crucial notion for understanding split plurality systems is that of morphosyntactic *regularity* of a plural formation strategy, which is reflected in its productivity and the degree of selectional restrictions. ‘Regular’ morphology tends to be more productive, with less selectional restrictions, while ‘irregular’ morphology entails more lexically constrained and idiosyncratic structures, which are therefore less productive.

Albanian plural formation strategies, as described in § 2, may be represented on a continuum of morphosyntactic regularity along those lines, as in **table 2**.

⁶ Jespersen (1917) is credited for formulating a cyclic change in sentential negation marking, which is now termed *Jespersen’s cycle*. In a cyclic change like this, historical loss or weakening of a grammatical expression is followed by its ‘renewal’ by another element in the same function. Many such cyclic changes, involving not only negation, but other functional items as well, including pronouns, auxiliaries and modals, prepositions etc., have been described since (e.g. cf. van Gelderen 2009; 2011; 2016).

⁷ For a similar connection between a Jespersen-like cycle and competition resolution, which is advocated for in demonstratives, see also Vindenes 2018.

Table 2 The continuum of morphosyntactic regularity in Albanian nominal plurals

syncretism	more ‘regular’ (i.e. productive) plural affixes (like <i>-a</i> , <i>-e</i> , <i>-ë</i>)	more lexically restricted affixes (like <i>-ër</i> , <i>-llarë</i> , <i>-ëz</i> , etc.)	stem allomorphy	doubly marked and other lexically idiosyncratic plurals
more regular, least selectional restrictions ← → less regular, most selectional restrictions				

It should be noted that not every plural system in which different morphological strategies or vocabulary items compete for the realisation of plural is a split one, however. On the contrary, the mere existence of regular and irregular plural morphology in the context of different lexical roots, is rather an argument (as per Occam’s razor) in favour of plural features hosted under the *single* Num node. In systems like these, the grammar resolves the competition by imposing contextual restrictions on different allomorphs that compete for the realisation of Num. In such cases, the competition is resolved by the Pāṇinian (‘elsewhere’) principle, and such systems are therefore *not* split systems.

In split number systems, on the other hand, the difference between regular and irregular morphology is a structural (formal) one, not just realisational. Here, regular plural morphology is inserted at Num[+PL], while the high selectional restrictions and lower productivity of the ‘irregular’ plurals come instead from their being of an entirely different category; namely, the realisations of plural features under the lower head *n*. This is why double (or even *triple*) plural marking, with both ‘regular’ and ‘irregular’ markers, may co-occur on a single noun (recall § 2.4), a thing that should be impossible under the Pāṇinian principle, but is readily available in Albanian. Also, this is why there are overabundant alternative ways to form plurals even from the same noun in Albanian (as in § 2.6), either using the more ‘regular’ or the ‘irregular’ morphological strategies from table 2, or a combination thereof. Again, under the Pāṇinian principle, where the competition is contextually resolved, that too should be impossible. In other words, in split systems like these, as Kramer (2016) points out, the regular and irregular morphology do not actually compete for the realisation of the same syntactic head; rather, they are associated with separate functional projections (as in 19).

The Albanian situation as sketched in table 2 is, *mutatis mutandis*, highly reminiscent of the one described by Kramer for Amharic, where the morphologically ‘regular’ plurals are formed via a Num[+PL] combining with a *nP*, whereas ‘irregular’ plurals are in fact formed by combining *n*[+PL] morphology with the root. In order to test the hypothesis that Albanian is a split-number language like Amharic, we will check the Albanian data against the diagnostics that are used as evidence for a Num/*n* split by Kramer (2016, 532–40). These are summarised in (21).

(21)

Evidence for a Num/*n* split (from Kramer 2016, 540):

- a. Ordering of plural morphemes in the double plural
- b. Lack of productivity of the irregular plural vs. uniform productivity of the regular plural
- c. Selectional restrictions on the irregular plural vs. lack of restrictions for the regular plural
- d. Semantic idiosyncrasies more common for the irregular plural
- e. Gender distinctions displayed only by irregular plurals
- f. Ban on realizing a gender suffix and an irregular plural suffix at the same time
- g. Category changes accomplished only by irregular plurals

As for the most obvious argument from morpheme ordering (21a), recall that in cases of simultaneous multiple marking of the plural, the more ‘irregular’ a plural formation strategy is on the continuum in table 2, the closer it will appear to the root (or even surface *on* the root itself, in the case of stem alternations). This was the case, e.g., with *gju-nj-ë* ‘knees’, *baba-llar-ë* ‘fathers’ etc., where the more productive, less idiosyncratic masculine plural suffix *-ë* comes after the more lexically restricted affixes *-nj* or *-llar*. Given that affixes *-nj* and *-llar* are stem-formative (for the nasal stems) and subcategorizing (defining a highly specific subclass of masculine nouns), respectively, they are more reminiscent of the nominalising morphology that we expect to find at *n*, while the distributional properties of *-ë* are more like the ‘typical’ plural inflectional morphology at Num.

More ‘irregular’ plural formation strategies in table 2 are *relative* less productive and more restricted than the more ‘regular’ formations, as per (21b-c). Unlike Amharic, however, there is not a sharp contrast here, so that not even the most regular plurals are uniformly productive in Albanian. This may be accounted for by the historical and typological differences between the two languages: namely, Albanian has inherited gender-based lexical restrictions for all its inflectional markers from the proto-language, because that is how the competition between different affixes was resolved typically for Indo-European languages at an earlier stage, in that way still ‘feeding’ their present-day distribution in the language. Nevertheless, there is a clear continuum in the *degree* of productivity and the amount of selectional restrictions between different plural markers in Albanian, so that e.g. an affix like *-a* may combine with both masculines and feminines, irrespective of their gender (recall, e.g., feminine *zembr-a* and masculine *libr-a*), while there are other affixes or plural formation strategies such as stem allomorphy that only affect masculine stems or even specific subclasses of masculines (recall § 2.3 and purely lexical discrepancies such as the plurals *grek-ë* from *grek* ‘Greek’ vs. *turq* from *turk* ‘Turk’, or *shok-ë* from *shok* ‘friend, comrade’ vs. *miq* from *mik* ‘friend’).

This is what makes the irregular plurals in a split plurality system more ‘derivation-like’ than ‘inflection-like’, according to Kramer, which is precisely because of their belonging to *n*-related, not Num-related morphology:

the ‘irregular’ plural is only attested with certain roots, and paradigmatic gaps are typical of category-determining head (e.g., *n*) and root combinations [...] In other words, irregular plurals have selectional restrictions on stems. This is highly reminiscent of (traditionally defined) derivational morphology, which also has strict selectional restrictions [...] Although the derivational / inflectional distinction has no theoretical status in Distributed Morphology, it often corresponds to the distinction between non-category-defining heads like Num (inflectional) and category-defining heads like *n* (derivational). (Kramer 2016, 535)

In Albanian, this is additionally corroborated by the fact that the more ‘irregular’ plural marking is typically preserved in derivation, e.g. in the adjective formed with *-or*, *prindër-or* ‘parental’, from *prind* (9); the adverb formed with *-isht*, *ujqër-isht* ‘wolf-like’, from *ujk* (12 viz. 18b); the feminine formed with *-eshë*, *bejler-eshë* ‘wife of a bey’, from *bej* (cf. 11), etc.

The higher sensitivity of the more ‘irregular’ plurals in Albanian to the gender of the stem corresponds, at the same time, to Kramer’s criteria (21e-f), although again, allowing for the apparent typological differences between Albanian and Amharic. As we already noted, the more ‘irregular’ plural markers in Albanian are inherently gendered, while the more ‘regular’ markers like *-a* may equally take both masculine and feminine stems. According to Kramer,

[t]he restriction of gendered plurals to irregular plurals is puzzling unless gender is a feature on *n*, thus creating a feature bundle that has both gender and number. (2016, 537)

Recall also that, in Albanian, some plural affixes like *-e* may switch the gender of the noun from masculine to feminine (so that the singulars like *send*, *mal*, *shtet* are masculine for the purposes of concord, while the respective plurals *send-e*, *mal-e*, *shtet-e* are feminine; cf. *Shtetet e Bashkuar-a* ‘United-FEM States’).⁸

A split analysis of plurality also predicts that idiosyncratic interpretations will be more likely with the plurals associated with *n*, than with the ‘regular’ plurals associated with Num (21d). Also, by virtue

⁸ For more on this phenomenon from a diachronic and a Balkanological perspective, see Demiraj 1966; Topalli 1995, inter alia.

of being categorising heads, the plural markers associated with *n* may serve as nominalising affixes, while those associated with Num may not engage in category changing (21g). Although this is not observed in our Albanian data, this is readily explainable, too, by the fact that semantics and derivational processes are to a large extent language-specific, and that not all formal possibilities may be necessarily exploited in every language. This is not to say that semantic idiosyncrasies or category changes with the more ‘irregular’ plural morphology in Albanian are impossible. Rather, the Num/*n* split in Albanian plural morphology should be understood as a more *gradual* one, in which the plural markers that may be associated with *n* have been relatively recently ‘pushed down’ from Num to *n* by reanalysis, and this is a still ongoing process. Therefore, due to the historical ‘noise’ and the differences in the exact details of their respective grammaticalization paths, it is not perhaps as straightforward as it is in Amharic. The exact dynamics of this reanalysis cycle will be discussed in the following section.

3.2 Number Cycle

A split analysis of plurality in Albanian is also corroborated diachronically. Albanian is shown to have undergone a process called “singularization of plurals” (cf., e.g., Çabej 2012; Demiraj 1985; 2002, 119–21; Orel 2000, 223–4 et passim; Topalli 2011, 289–93), by which the historical plural forms were reanalysed as singulars, and the original singular forms of nouns were lost. This has led to a phase of formal syncretism between the singular and the plural, which then sparked the creation of innovative plural formations, in order to restore the formally lost number opposition.

This process is attested in its phase of plural-to-singular syncretism in Old Albanian authors, e.g. in Buzuku we find *qytet* as both the plural and the singular form of the present-day *qytet* ‘town’, plural *qytet-e* (Demiraj 2002, 119–20). Being a borrowing from the Latin *civitat-em*, the phonetically regular Albanian reflex should have been **qytat* in the singular. The attested form *qytet* is apparently a metaphonized plural of **qytat*, which was in Buzuku’s times ‘singularised’, i.e. reanalysed as a singular. An innovative plural formation *qytet-e*, with a ‘redundant’ plural affix *-e*, has entered the language in the meantime, in order to restore the formal opposition between the singular and the plural.

A similar plural-to-singular reanalysis cycle is described by Bates and McKenzie (2021) for pronominal systems. It is shown to proceed through five phases, initiated by semantic reanalysis (feature drop), whereby the originally plural form β , in the pair $\alpha_{[SC]} : \beta_{[PL]}$, loses its plural feature and becomes a general form (‘bare β wins’), while the

singular α is lost. In some languages, then, the cycle may continue when a new plural form $\gamma_{[PL]}$ emerges to denote the plural and pushes the general form to denote the singular ('singularise'). The number opposition in $\beta_{[SG]} : \gamma_{[PL]}$ is thus reinstalled [fig. 1].

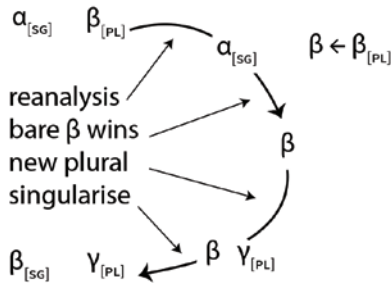
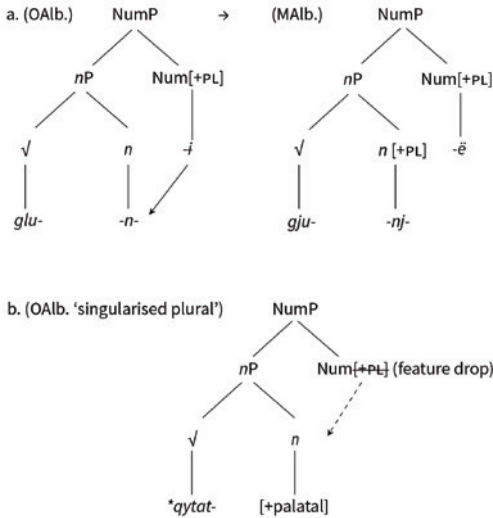


Figure 1 The plural-to-singular reanalysis cycle (adapted from Bates, McKenzie 2021, 13)

Extending this analysis to the nominal domain, we may observe all five stages of the number cycle at play in Albanian. The initial stage had a morphologically regular, unattested but reconstructable opposition in number marking, e.g. **qytat* : **qytat-i*. The original inflection **-i* was lost due to apocope, but left a trace in the initially allophonic stem-vowel umlaut (**qytät-i* > **qytät-*). This form was then phonologized and generalised as Buzuku's syncretic ('bare') form *qytet*. A new affixal plural *qytet-e* emerges and the old plural *qytet* is now singularised.

A split plurality analysis, advocated in the previous section, equally accounts for the historical processes of the 'singularization of plurals' (i.e. loss of the original number distinction) and the emergence of innovative plural markers. The loss of old plural markers such as **-i* and the consequent semantic reanalysis and generalisation of the old plural stems, has left the Num node morphologically empty, either by literally deleting the segmental material associated with it, or by 'pushing down' the old plural morphology, synchronically surviving as stem allomorphy, from Num to *n*, in analogy with the now prevalent apocopated plurals. This has allowed for other (more 'regular' from a synchronic point of view) affixal plural markers to redundantly reappear and to compete among themselves for the realisation of Num. This has also produced the possibility of double marking of the plural, as in *gju-nj-ë*, where the nasal stem formant is both palatalized, thus preserving trace of the old plural marker that was apocopated (viz. lowered to *n* by reanalysis), and followed by an innovative plural affix *-ë*. This is illustrated in (22a). An intermediate (i.e. Buzuku) stage with generalised plurals is shown in (22b).

(22)



The loss of the original number distinction, i.e. lowering of Num morpho(phono)logy to *n*, has created a very unstable system in Albanian, in which speakers have been forced to employ numerous available plural formation strategies in order to reinstall the opposition, including different plural affixes and stem allomorphy (and various possible combinations thereof). This is the reason behind the almost unhindered variation in Modern Albanian plural stem formation, as no particular morphological strategy has had an advantage over another. In that sense, splitting the number features between Num and *n* has worked as a competition resolution strategy in Albanian: different plural formation strategies are associated with separate syntactic heads and therefore won't compete for the realization of the same node.

However, the competition resolution in Albanian plural morphology is still an ongoing process, and this is why some plural markers (like *-ër*, which in some cases is reminiscent of 'regular' plurals, and in others seems closer to 'irregular' plurality) may occasionally fluctuate between both Num and *n*. Consider, e.g., the extended plurals *vëllezër* 'brothers' and *priftërinj* 'priests'. In the former, *-ër* is the second suffix (after the more restricted *-ëz*), and represents a regular plural formation strategy for masculine kinship terms. In the latter, however, *-ër* is the middle suffix, and it is more restricted and less productive in comparison to the more regular plural extension (for nasal stems) *-inj*. In this case, *-ër* effectively functions as a categorising morpheme, which is further corroborated by it appearing in other nouns derived from *prift*, e.g. in the feminine *priftër-eshë* 'priestess; priest's wife'. This is why a continuum like the one in ta-

ble 2, rather than sharp categorical distinctions, is better suited for the description of such fluctuating and fuzzy phenomena.

Another possible option for resolving the ongoing competition between various plural markers in Albanian is analogical levelling, and this is precisely what speakers of some dialects opt for, by expanding the use of the affix *-a* (recall, e.g., *element-a*, *oxhak-a*, *çelës-a* etc. in § 2.6). Both competition resolution strategies – splitting the plural markers between different heads and levelling a single marker across all stems – are, as we have seen, ultimately motivated by the loss of the original Num(ber) morphology.

4 Discussion

In this section, I will briefly comment on the broader theoretical significance of the previously analysed Albanian data. There are three main points that the Albanian number cycle and split plurality allow us to make, and these are: (a) the role of phonology in morphological change, (b) the durativity of mechanisms driving structural change, and (c) the dynamics of competition resolution and the nature of morphological equilibria.

4.1 Phonology-Driven Morphology

The plural-to-singular reanalysis cycle, like the one we have described for Albanian, is argued to be motivated by semantic reanalysis (feature drop) and overall pragmatic factors in the pronominal systems (Bates, McKenzie 2021). Likewise, in Albanian historical grammar (following the analysis made in Çabej 2012), the cause of the ‘singularisation of plurals’ is also often sought in semantics, viz. the inherent “intensifying” or “collectivizing” (thus e.g. Bokshi 2005) meaning of the plural forms, which allows for their generic use. Other views include speculations on the possible frequency effects and the formal factors driving the plural-to-singular reanalysis, such as phonological change and the working of analogy (Demiraj 2002, 119-20; Topalli 2011, 290-2).

However, given that the number cycle in Albanian was formally initiated by the apocope of word-final syllables, which contained the inflectional material, one has to account for the role of phonology in morphological change. Even though the question of primacy of form or meaning in language is always one of ‘the chicken and the egg’, and leaving aside for now the speculations regarding the ultimate cause and motivation of the diachronic ‘singularization of plurals’ in Albanian, what this particular plural-to-singular reanalysis process shows is that at least in the sequence of events, phonological change precedes, if not causes, morphological reanalysis. In this case, both

semantic reanalysis with the generalisation of plural stems, and the subsequent emergence of innovated plurals, were preceded and may very well be motivated by the fact that the original morphological information was simply lost due to a regular phonological process.

The decisive effect of phonological processes is visible in the synchronically surviving stem alternations in Albanian. Following the loss of old plural markers, an originally allophonic variation of the stem consonants and vowels was morpho(phono)logized as stem allomorphy. From a diachronic perspective, this conforms to some autonomous approaches to morphology, according to which “morphology exists because morphophonology exists”, i.e. “phonology gives rise to morphophonology which gives rise to morphology” (Carstairs-McCarthy 2010).

4.2 The *longue durée*

Once a morpho/phonological change is on its way, as has happened when the loss of old plural marking initiated the number cycle and plural split in Albanian, it may have long-lasting effects on language structure. E.g. splitting number features in Albanian was not a single event in which various plural markers were distributed between Num and *n* at once, but it has had a lasting, profound influence on various plural formations and related phenomena in the language.

Long-lasting processes like these usually produce fluctuating, gradual continua with fuzzy boundaries, rather than neat and sharp categorical contrasts. Crosslinguistically, this is why many language-particular systems will not fit easily into some of the theoretically predefined ‘types’, as the ones in (20). For this reason, a plural system like Albanian may be better described in diachronic terms, as *transitory* between an (older) Num-based plurality and a (more innovative) split plurality.

At the same time, however, every single change in the language creates pressure on the system to resolve and re-establish regularity. This is why all diachronic changes ultimately *are* directional toward some (system-internal) goal.

4.3 Equilibrium

Finally, while it is true that speakers will aim to (eventually) resolve an ongoing competition in the language, and that there are, in that sense, no true stable equilibria (as per Gause’s ecological principle; cf. Aronoff 2019), competition resolution itself may be a long-lasting process, not a single event, so that at any given time it may still have no clear outcome, and hypothetically may even ultimately fail.

This is currently the case with the Albanian plural system. A seemingly naïve (morpho)phonological split between the historical and emerging plurals in the language has led to an apparent state of equilibrium, in the sense of Aronoff (2016, 47), “in which no competitor has a clear advantage and such states may persist for long periods”.⁹ Yet, this state of equilibrium is not static, as different competition resolution strategies, including Pāṇinian-style blocking of certain plural affixes, analogical levelling and the general shift toward a split-number system, have been operating in Albanian in an attempt to resolve the competition induced by the number cycle.

Still, this dynamic equilibrium is best manifested in the abundance of alternative plural formations for the majority of nouns, including the plural forms that have been innovatively (re-)produced by the aforementioned competition resolution strategies themselves, thus *expanding* the stock of available plural formations, rather than reducing it as would be expected.

5 Conclusion

In this paper, I have argued that plurality in Modern Albanian is best analysed as a split number system resulting from an ongoing competition between various plural markers, that was in turn triggered by the phonological history and reanalysis of historical plurals in the language.

The analysis, based on Kramer (2016), contributes the Albanian data to the existing corpus of literature on distributed number morphology across different functional heads in the nominal domain.¹⁰ In addition, supplemented with a language-specific diachronic perspective, it emphasises the gradual and transitory nature of the N/n split in Albanian.

In turn, this may add to our better understanding of the structural mechanisms behind the inception, duration and the ultimate outcome of morphological competition and the states of equilibria.

⁹ Aronoff makes note of a similar state of equilibrium in Maltese plural morphology.

¹⁰ See, e.g., most recently Dali and Mathieu 2021 for a monographic treatment focusing mostly on Arabic; Božović 2020 for a similar preliminary analysis of the West South Slavic data.

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