A Recalcitrant Syncretism

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1 The Issue

In Romanian, a class of (neuter) nouns inflect like masculine nouns in the singular and like feminine nouns in the plural:¹

(1)			\mathbf{M}	Ν	F
	SG	NOM/ACC	N-u	N-u	N-ă
		GEN/DAT	N-u	N-u	N-e
	PL	NOM/ACC	N-i	N-e	N-e
		GEN/DAT	N-i	N-e	N-e
	PL	GEN/DAT NOM/ACC GEN/DAT	N-u N-i N-i	N-u N-e N-e	N- N- N-

Likewise, articles and modifiers agreeing with a noun in this class have the same form as articles and modifiers agreeing with a masculine noun in the singular, but the same form as articles and nouns agreeing with a feminine noun in the plural. I will use the term 'neuter nouns' to refer to the members of the relevant class.²

In addition, the F.SG.DAT/GEN is identical to the F.PL (in all cases).³ This syncretism, however, plays only a marginal role in what follows. I will show in section 4 that a paradigm like (2), where all F.SG forms are identical to each other and distinct from the F.PL forms, presents exactly the same type of analytical challenges as the paradigm (1).

¹I proceed on the assumption that the M/N.SG ending is *-u*, which is dropped in word-final position except after certain consonant clusters, e.g. *codru* 'wood'. Some neuter nouns have the plural ending *-uri*, which likewise triggers feminine plural agreement, but which is not found on feminine nouns, except for *vreme–vremuri* 'time'. I tentatively assume that this calls for a distinction between declension classes similar to the Latin contrast between *templum*.SG / *templa*.PL 'temple' and *tempus* / *tempora* 'time' (Romanian *timp* / *timpuri*). Adjectival inflection is identical to nominal inflection. The inflection of the definite article raises issues that will not be addressed here.

²Many of these neuter nouns descend from Latin neuter nouns.

³Both the F.SG.DAT/GEN *e* and the F.PL *e* are replaced by *i* in certain nouns, e.g. *bunică–bunici 'grandmother'* and *ramură–ramuri–ramuri 'branch'*. This alternation may be phonologically controlled.

(2)

		\mathbf{M}	Ν	F
SG	NOM/ACC	N-u	N-u	N-ă
	GEN/DAT	N-u	N-u	N-ă
PL	NOM/ACC	N-i	N-e	N-e
	GEN/DAT	N-i	N-e	N-e

In other words, whether or not F.SG.DAT/GEN = F.PL neither improves or complicates the situation. The paradigm in (1) exhibits no ABA patterns and should be obtainable by positing lexical entries that will make neuter nouns syncretic with masculine nouns in the singular and syncretic with feminine nouns in the plural. But we will see that the paradigm cannot actually be derived on standard nanosyntactic assumptions as I understand them.⁴

2 Bridging fseq gaps

The distribution of forms in (1) is controlled by three different sets of features: gender features, number and case features. Correspondingly, the lexical entries we need will consist of three different layers. To make it possible for the neuter nouns to syncretise both with masculine nouns and feminine nouns, one must decompose the traditional gender features into sets of more primitive features as in (3a) or (3b):

(3)	a.	feminine	=	[F[N[M]]]	>
		neuter	=	[N[M]]	>
		masculine	=	[M]	
	b.	masculine	=	[M [N [F]]]	>
		neuter	=	[N[F]]	>
		feminine	=	[F]	

To create the syncretism between the F.SG.DAT/GEN and the F.PL, number must also be broken up into two features, e.g. plural = $[PL [SG]] > SG.^5$ Likewise, case will be represented as originally proposed by Caha (2009).

Suppose now we go by (3a) and try to capture the syncretism between masculine and neuter nouns in the singular by positing the entry in (4):⁶

⁴It is also not possible to adapt Caha's (2016) treatment of the Czech F/N.SG.GEN = F/N.PL.ACC/NOM syncretism since N.SG.GEN ending is not identical to N.PL in Romanian.

⁵Alternatively, the singular is just the absence of a number feature. As far as I can tell, this would not affect the conclusions in the text.

⁶It has been pointed out in the literature that using pointers leads to the prediction that certain ABA patterns should be possible (Taraldsen 2012; Vanden Wyngaerd

(4) $u \leftrightarrow [SG[N[M]]]$

If matching is defined as in (5) ('bidirectional mapping'), (4) will not apply to a masculine noun, since the node N in (4) finds no match in (6):

(5) The tree X in an entry M ↔ X matches a tree Y generated by the syntax if and only if the root node A of Y has the same label as a node B in X and

(i) every daughter of A matches a daughter of B and

(ii) every daughter of B matches a daughter of A.

(6) [SG [M]]

Similarly, if we go by (2b), we will have (7), which will not be applicable to neuter nouns (in (8)), because of clause (ii) of (5):

- (7) $u \leftrightarrow [SG [M [N [F]]]]$
- (8) [SG [N [F]]]

In the next subsection, we will see that there is no solution based on 'pointers' following the proposal by Caha & Pantcheva (2012), because neuter nouns syncretize both with masculine nouns and feminine nouns.

Then, I will look at the prospects of deriving the paradigm in (1) by removing clause (ii) from (5), as suggested by Pavel Caha (p.c.):

(9) The tree X in an entry $M \leftrightarrow X$ matches a tree Y generated by the syntax if and only if the root node A of Y has the same label as a node B in X and every daughter of A matches a daughter of B.

It will turn out that (1) is still intractable.

3 No account using pointers

As already stated, I begin by abstracting away from F.PL = F.SG.DAT/GENand case features will therefore not appear in any structural representations. I also assume that N.SG = M.SG, N.PL = F.PL require F > N > M or M > N > F because of *ABA.

For either arrangement x > N > y, the syncretism of N with x and the syncretism of N with y call for pointers to two distinct morphemes M and F that must determine the choice of the correct surface ending when the number layer is reached. But the smaller one of M and F will block the bigger one for [N [x]] by the Elsewhere Principle.

^{2018).}

Assuming F > N > M, N.SG = M.SG leads to postulating the following entries (with (10) the item pointed to by (11)):

- $(10) \qquad M \leftrightarrow [N [M]]$
- $(11) \qquad u \leftrightarrow [\text{ SG } [M]]$

Accounting for N.PL = F.PL would require (12)-(13) (where likewise (13) contains a pointer to (12)):

- $(12) \qquad F \leftrightarrow [F [N [M]]]$
- $(13) \qquad e \leftrightarrow [PL [SG [F]]]$

but by the Elsewhere Principle, (10) blocks (12) for [N [M]], with the consequence that *-e* is not assigned to neuter nouns in the plural.

With M > N > F, we would have (14)-(15) to account for N.SG = M.SG.

- $(14) \qquad M \leftrightarrow [M [N [F]]]$
- $(15) \qquad u \leftrightarrow [\text{ sg } [M]]$

and N.PL = F.PL must be obtained by positing (16)-(17):

(16)
$$F \leftrightarrow [N[F]]$$

(17) $e \leftrightarrow [PL [SG [F]]]$

By the Elsewhere Principle, (16) blocks (14) for [N [F]] so that the N.SG should now have the ending *-e*. Thus, adopting (5) and using pointers to bridge fseq gaps seems to fail to provide an account of the Romanian facts. But I will return to this issue in section 6.

4 No account using unidirectional matching

Abandoning pointers in favor of 'unidirectional matching' as defined in (9), we will still find that the paradigm in (1) cannot be derived even when abstracting away from F.PL = F.SG.DAT/GEN, i.e. if the paradigm were to have been as in (2). Essentially, the problem is now that differentiating forms based on gender distinctions is rendered impossible by the fact that the difference between the number of heads in the gender layer in two entries can be neutralized by the number of heads in higher layers and vice versa so that the Elsewhere Principle fails to choose between two competing entries.

Starting with F > N > M (and still leaving out case features), N.SG = M.SG should be attributed to the entry in (18):

(18) $u \leftrightarrow [SG[N[M]]]$

Since the plural -*i* is unique to masculine nouns, we will also have:

(19) $i \leftrightarrow [PL[SG[M]]]$

but (18) and (19) are the same size so that the Elsewhere Principle will not prevent *-i* from occurring also on masculine singular nouns in free variation with *-u*. (One will notice that the extra node that makes (18) as big as (19) is the N that would make (18) inapplicable to masculine nouns under bidirectional matching.)

Shifting to M > N > F doesn't help. The entry in (20) will now account for N.SG = M.SG while (21) accounts for N.PL = F.PL:

(20) $u \leftrightarrow [SG[M[N[F]]]$

 $(21) \qquad e \leftrightarrow [PL [SG [N [F]]]$

but (20) and (21) are the same size and so, N.SG = e is not excluded.

5 Adding F.PL = F.SG.DAT/GEN doesn't help

We have seen that a paradigm like (2), which differs from (1) in that there is no case-sensitive SG = PL syncretism, cannot be derived on standard assumptions.

Putting F.PL = F.SG.DAT/GEN back in so that we return to (1), does not alleviate our problems. Assuming F > N > M, we would have (22)-(23), which are identical to (18)-(19) (repeated below as (24)-(25)) with the same number of case features added to each:

- (22) $u \leftrightarrow [\text{ DAT } [\text{ GEN } [\text{ ACC } [\text{ NOM } [\text{ SG } [\text{ N } [\text{ M }]]]]]]$
- (23) $i \leftrightarrow [\text{ dat } [\text{ gen } [\text{ acc } [\text{ nom } [\text{ pl } [\text{ sg } [\text{ m }]]]]]]$
- $(24) \qquad u \leftrightarrow [SG [N [M]]]$
- (25) $i \leftrightarrow [PL[SG[M]]]$

So, the Elsewhere Principle still does not prevent *-i* from occurring in masculine singular nouns. In addition, adding case features leads to a new problem. Capturing F.PL = F.SG.DAT/GEN = e while F.SG.ACC/NOM = a, requires (26)-(27):

(26) $e \leftrightarrow [\text{ DAT } [\text{ GEN } [\text{ ACC } [\text{ NOM } [\text{ PL } [\text{ SG } [\text{ F } [\text{ N } [\text{ M }]]]]]]]$

(27) $\check{a} \leftrightarrow [\text{ ACC } [\text{ NOM } [\text{ SG } [\text{ F } [\text{ N } [\text{ M }]]]]]$

But (27) is smaller than (22) so that N/M.SG.ACC/NOM should have *a* rather than *u*. Adopting M > N > F removes this problem, but another

problem remains. We would now have:

- (28) $e \leftrightarrow [\text{ DAT } [\text{ GEN } [\text{ ACC } [\text{ NOM } [\text{ PL } [\text{ SG } [\text{ N } [\text{ F }]]]]]]]$
- (29) $\check{a} \leftrightarrow [\text{ ACC } [\text{ NOM } [\text{ SG } [\text{ F }]]]]$
- (30) $i \leftrightarrow [\text{ dat } [\text{ gen } [\text{ acc } [\text{ nom } [\text{ pl } [\text{ sg } [\text{ m } [\text{ n } [\text{ f }]]]]]]]]$
- (31) $u \leftrightarrow [\text{ DAT } [\text{ GEN } [\text{ ACC } [\text{ NOM } [\text{ SG } [m [N [F]]]]]]]$

(28) and (31) are the same size so that N.SG should alternate freely between u and e.

6 Discussion

The singular form of neuter nouns in Romanian seems to be inherited from Latin where singular neuter and masculine nouns also had the same inflection except in the nominative. But the N.PL = F.PL syncretism is unexpected in this perspective. In Latin, neuter nouns had the ending -*a* in the nominative and the accusative case in the plural contrasting both with the masculine ending and the feminine -*ae* (nominative) and -*as* (accusative) in the declension classes were feminine nouns inflect differently from masculine nouns. While the Romanian plural -*e* is a predictable reflex of -*ae* in phonological terms, it seems unlikely that it could also have derived from the N.PL -*a*. That is, it seems unlikely that N.PL = F.PL = -*e* could be set aside as an instance of accidental homophony due to sound change.

If so, it seems significant that the paradigm in (1) cannot be derived by the usual tools made available by Nanosyntax, and we should look for ways of adding or refining our assumptions. In particular, one might want to take a closer look at the Elsewhere Principle.

In the preceding discussion of the analytical options, it was taken for granted that this principle simply compares the number of nodes in competing entries. In particular, all the problems that have arisen along the way, are due to the assumption that nodes in different structural layers (or 'sub-fseqs') are weighted equally at any point of the lexicalization process. But I have not been able to find a way of changing this that would be consistent with the fact examined here.

Also, the problems identified in sections 4 and 5 would not have arisen if we didn't adopt the definition of matching in (9) (unidirectional matching) instead of the one in (5) (bidirectional matching). But given what we saw in section 3, sticking with (5) seems impossible to the extent that (5) calls for pointers.

However, there is a way of overcoming the problem discussed in section 3, if the standard nanosyntactic toolbox is enriched by a last resort mechanism allowing the lexicalization procedure to backtrack and overwrite an earlier choice enforced by the Elsewhere Principle if it turns out that this earlier choice makes full lexicalization impossible. Suppose, for example, we posit the entries (32)-(35), where pointers appear only as needed in view of (5):

- (32) $u \leftrightarrow [\text{ DAT } [\text{ GEN } [\text{ ACC } [\text{ NOM } [\text{ SG } [M]]]]]$
- (33) $i \leftrightarrow [\text{ dat } [\text{ gen } [\text{ acc } [\text{ nom } [\text{ pl } [\text{ sg } [\text{ m }]]]]]]$
- (34) $e \leftrightarrow [\text{ DAT } [\text{ GEN } [\text{ ACC } [\text{ NOM } [\text{ PL } [\text{ SG } [F]]]]]]$
- $(35) \qquad \breve{a} \leftrightarrow [\text{ ACC } [\text{ NOM } [\text{ SG } [\text{ F } [\text{ N } [\text{ M }]]]]]$

By (5), (33) is inapplicable to singular nouns, and is correctly confined to masculine plural nouns, and (35) is only applicable to feminine singular nouns.

The pointers to M and F are introduced by (36)-(37) (identical to (10) and (12) in section 3):

- $(36) \qquad M \leftrightarrow [N [M]]$
- $(37) \qquad F \longleftrightarrow [F [N [M]]]$

In section 3, we observed that the Elsewhere Principle would select *M* over *F* for the input [N [M]], raising the question how (34) could ever get to assign *-e* to neuter plural nouns. But notice that neither (33) nor (34) is applicable to (38) with *M* previously chosen as the spellout of [N [M]]:

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(38) [ PL [ SG [ M ]]]
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In other words, the number features cannot be lexicalized. At this stage of the derivation, I suggest, the system backtracks to the point where [N [M]] was lexicalized by M and removes M as a candidate so that F is chosen instead. If so, the e will subsequently be introduced into neuter plural nouns by (34) applying to [PL [SG [F]]].

If this suggestion is on the right track, bidirectional matching as defined in (5) must be maintained together with the use of pointers. But as noted in footnote 6, the use of pointers allows certain ABA patterns to be created, and the question should be examined whether these patterns are robustly documented.

References

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