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DECOMPOSING AND RECOMPOSING GENDER FEATURES

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1. INTRODUCTION

Gender is a syntactic phenomenon (not only, but):

- (1) *Genders are classes of nouns reflected in the behavior of associated words (Hockett 1958:231).*

Gender is *a* noun classification system:

- term usually used for languages that distinguish masculine and feminine (IE++)
- noun classes of Bantu languages are genders
- unlike *word classes* (e.g., conjugation/inflection/declension classes) they manifest themselves syntactically: via agreement

How many genders are there and how are they encoded?

2. THE ROMANIAN PUZZLE

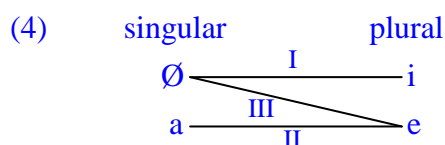
Romanian (Hall 1965, Jakobson 1971, Mallinson 1984, Croitor and Giurgea 2009, etc): three agreement classes: masculine, feminine and heteroclite:

Similar situation in **Albanian** but also in **Telugu** (Corbett 1991) and **Lak** (Corbett 1991 after Kibrik 1979)

<p>(2) a. bărbat interesant man interesting.M.SG <i>interesting man</i></p> <p>b. scaun interesant chair interesting.M.SG <i>interesting chair</i></p> <p>c. fată interesantă girl interesting.F.SG <i>interesting girl</i></p>	<p>(3) a. bărbați interesați men interesting.M.PL <i>interesting men</i></p> <p>b. scaune interesante chairs interesting.F.PL <i>interesting chair</i></p> <p>c. fete interesante girls interesting.F.PL <i>interesting girls</i></p>
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Descriptively, only two options in either number

- Hall 1965 (also about Italian): call it what you want, it doesn't matter
- Jakobson 1971; Hoffman 1989, Cojocaru 2003, most other traditional grammars: it is neuter
- Bazell 1937ff. and many native Romanian sources (see Croitor and Giurgea 2009 for references): it is not neuter for historical reasons
- Mallinson 1984: the third class must be a neuter: it does not behave as masculine or feminine nouns do when conjoined with genuine masculine or feminine nouns
- Corbett 1991, following him Dobrovie-Sorin and Giurgea 2013: three controller genders and two target genders



What you call it doesn't matter, what matters is how you analyze it

2.1. Neuter as the lack of gender

Farkas 1990: neuter nouns have no gender (the gender feature is binary, [α F]):

- (5) feminine: [+F]
 masculine: [-F]
 neuter: []

In addition, there are defaults: in the plural the [+F] feature is inserted by default, and the lack of gender is realized as masculine:

- (6) a. [+PL] \rightarrow [+PL,+F] feature cooccurrence restriction
 b. [] \rightarrow [-F] feature specification default

The latter is standard. The former is language-specific (also, we don't like this type of rules anymore)

Further complication: genderless referents use the feminine form of the demonstrative (while triggering masculine singular agreement)

- (7) Petru e acasă. Asta e uluitor/*uluitoare. Farkas 1990
 Peter is home this.F.SG is amazing.M.SG/*F.SG
Peter is home. This is amazing.

This is handled by a separate rule:

- (8) DEM [] \rightarrow DEM [+F]

Problem: masculine agreement!

Speculative solutions: somehow this feminine feature doesn't count

Croitor and Giurgea 2009: the masculine singular pronoun is used for resuming neuter nouns (ex. from Dobrovie-Sorin and Giurgea 2013:277):

- (9) Dacă cineva găsește un bagaj pierdut, să-l aducă aici.
 if somebody finds a luggage.N lost.M SUBJ-CL.3MSG.ACC bring.3 here
If somebody finds lost luggage, they should bring it here.

\Rightarrow neuter nouns are *not* featureless

2.2. One morphological solution

Farkas 1990, Giurgea 2014, Kramer 2015b: [α F] vs. []

Corbett 2012:31: what is [] in such a system? Is it not an extra feature value?

Kramer 2015b: a DM morphology solution: radical underspecification

- (10) a. [C], [+F] \Leftrightarrow -ă feminine singular
 b. [C] \Leftrightarrow \emptyset masculine and neuter singular
 c. [C], [-F], [+PL] \Leftrightarrow -i masculine plural
 d. [C], [+PL] \Leftrightarrow -e feminine and neuter plural

Kramer 2015b:174: for the feature bundle [C],[+FEM],[+PL] (10d) is used, as plural is higher than gender on the feature hierarchy (following Noyer 1997:1xxv)

The facts in (7) are treated by assuming that such pronouns have no number in addition to having no gender

It makes sense: gender is often neutralized in the plural. But necessitates explicit assumptions about how Vocabulary Insertion proceeds (effectively resulting in rule ordering)

However...

Kramer's system relies on the hypothesis that agreeing categories (pronouns, demonstratives, adjectives) do not have declension classes, i.e., that the feminine singular ending is always *-ă* and the masculine singular ending is always *-Ø/u-*

This is not correct (Dobrovie-Sorin and Giurgea 2006:830-833):

- (11) *auriu* vs. *aurie* 'golden-yellow.MSG/FSG'
ateu vs. *atee* 'atheist.MSG/FSG'
mare 'big.SG'

The neuter syncretism in the system of Romanian has a principled nature

This is why cross-paradigm impoverishment is a better solution (cf. also Kramer 2015a):

- (12) a. $[-F] \rightarrow \emptyset / __ [-PL]$
 b. $[+F] \rightarrow \emptyset / __ [+PL]$

Advantages: the general nature of the syncretism

Disadvantages:

- for coordination of animates, the default gender is the masculine (Giurgea 2014)
- there is no technical way to encode whether one of the two non-neuter genders is more marked than the other. Is this a correct prediction given the previous point? (Formally, $[-F]$ is in no way less marked than $[+F]$)
- technically, this is not the neuter merging with the masculine in the singular and with the feminine in the plural – this is the masculine and the feminine merging with the neuter (which is historically obviously incorrect)

The system could have been the other way around for plurals (and then the neuter would have merged with the masculine, as in French), for the singular (and then the neuter would have merged with the feminine) or even for both

Can we find the last two options somewhere? Or is this a principled absence?

2.3. Empirical issues

From the morphological standpoint something unexpected happens with syncretic adjective classes:

- (13) a. no gender distinctions in the plural: *auriu* 'golden-yellow'

	masculine	feminine
singular	<i>auriu</i>	<i>aurie</i>
plural	<i>aurii</i>	

- b. no number distinctions in the feminine: *ateu* 'atheist'

	masculine	feminine
singular	<i>ateu</i>	<i>atee</i>
plural	<i>atei</i>	

- c. no gender distinctions in the singular or in the plural: *mare* 'big'

	masculine	feminine
singular	<i>mare</i>	
plural	<i>mari</i>	

For the adjectives where gender distinctions are neutralized in the plural (13a, c), the plural marker used is the masculine one

Feminine singular is the only cell in the paradigm to distinguish the oblique (genitive/dative) case from the direct (nominative/accusative). In all adjectives and in most nouns it is identical to the feminine plural

So how does impoverishment interact with Vocabulary Insertion?

In the general case, impoverishment should obviously precede Vocabulary Insertion, or the wrong Vocabulary Item would be inserted

Can it be argued that the root is inserted and blocks the impoverishment mechanism in (12b) or triggers a different one?

- (12) a. $[-F] \rightarrow \emptyset / __ [-PL]$
 b. $[+F] \rightarrow \emptyset / __ [+PL]$

Just blocking wouldn't help: the $[+F][+PL]$ specification would still trigger the insertion of -e, contrary to fact (because -i requires $[-F]$)

One option: insert the $[-F]$ value:

- (14) $\emptyset \rightarrow [-F] / __ [+PL] \& \{ \text{auri-}, \text{mar-...} \}$

Another option: a special plural allomorph -i:

- (10) e. $[C], [+PL] \Leftrightarrow -i / __ \{ \text{auri-}, \text{mar-...} \}$

Same in (13b): the form used is specified as $[+PL]$

- insert the (syntactically and semantically uninterpretable) $[+PL]$, as in (14)
- introduce a special feminine singular allomorph -e, as in (10e)

Both solutions seem intuitively wrong

And in addition, the oblique (genitive/dative) case on singular feminine nouns is also -e

The oblique is syncretic with the direct (nominative/accusative) elsewhere

2.4. Gender as a complex of features

Suppose -e- is the paradigm default and it isn't the case that there is reduction to the feminine in the plural, it is reduction to the elsewhere case

The neuter thus cannot be analyzed as the lack of features: the neuter feature bundle is not realized as the default in the singular, so it has to be more specified than the default

Hence we need a more complex feature system

(15) Features and bundles

- $[+F]$ (or maybe $[+F; -M]$, doesn't matter)
- $[+M]$ (or $[-F; +M]$)
- $[-F; -M]$ (neuter)
- $[\pm SG]$ (as opposed to $[\pm PL]$, for no special reason)
- $[\pm OBL]$ (although a privative feature is also possible)

(16) Vocabulary Insertion rules

- a. $[+F][+SG] \Leftrightarrow -\check{a}$ feminine singular
- b. $[+SG] \Leftrightarrow -\emptyset$ masculine and neuter singular
- c. $[-SG] \Leftrightarrow -i$ plural
- d. $[] \Leftrightarrow -e$ default

The singular is self-evident, and the feminine singular -e- in such adjectives as in (13a-b), as well as in some nouns (declension class VI-a, Dobrovie-Sorin and Giurgea 2006:836) can be accounted for by the impoverishment rule (17):

(17) [GENDER][NUMBER] → Ø / ___ [+SG][+F] {√AURI-, √ATE-..., VI-a} aurie_{FSG}, atee_{FSG}

For two-ending adjectives, as in (13c), we specify a different environment (singular forms of both genders) for the same impoverishment rule:

(18) [GENDER][NUMBER] → Ø / ___ [+SG]{√MAR-...} mare_{SG}

The plural rules for Vocabulary Insertion won't work, unless we assume a global context for the same impoverishment rule:

(19) [GENDER][NUMBER] → Ø / ___ [-M][-SG] feminine and neuter plural

To handle the i-plurals in (13a, c) we assume an impoverishment rule that, applying as it does in a more specific context, precedes the rule in (19) and bleeds it:

(20) [GENDER] → Ø / ___ [-SG]{√AURI-, √MAR-...} aurii_{FPL}, mari_{FPL}

Finally, as is easy to see, we need two impoverishment rules to deal with the oblique case:

This is a simplification, see section 4.1 for the full picture

(21) a. [CASE][GENDER][NUMBER] → Ø / ___ [+F][+SG][+OBL] feminine oblique
b. [CASE] → Ø

Everywhere, except in the feminine singular, the oblique case is identical to the direct case

(21a) ensures the syncretism of the oblique feminine singular with the direct feminine plural without assuming that these two cells have anything in common

Advantages:

- the entire system is compatible with the diachronic development of Romanian
- the number of impoverishment rules dealing with the most productive adjective classes has diminished (to just one)
- as the neuter is less marked than either the masculine or the feminine, it is still a markedness-reducing Impoverishment rule
- the oblique feminine singular syncretism is naturally explained
- the default to the masculine *-i-* in the plural of most e-adjectives is accounted for
- two out of three proposed lexically restricted impoverishment rules for the direct cases follow the pattern independently motivated for feminine plural
- the coding of neuter in the lexicon becomes distinct from the lack of specification

Disadvantages: two gender features instead of one

A special story will have to be told about the demonstrative

Outstanding question: coordination

3. SEMANTIC GENDER

As noted above, the morphological default for animates in Romanian is the masculine:

Obviously, the conjunction of two feminine animates is feminine

(22) a. Maria și tata au fost vazuti. Farkas and Zec 1995
Maria and father were seen.M.PL
Maria and her/my/the father were seen.

b. Maria și persoana cu barbă au fost vazuti.
Maria and person.F with beard were seen.M.PL
Maria and the person with a beard were seen.

(23) a. Vorbește cu cineva priceput/*pricepută. Dobrovie-Sorin and Giurgea 2013:6
talk.IMP.F.2SG to somebody skillful.MSG/FSG
Talk to someone skillful.

- b. Respect profesorii.
 respect.1SG teacher.DEF.MPL
I respect teachers (male and female).

This another reason not to believe that the default plural is the feminine

But if the lack of features is realized as -e, why is it realized as -i with animates?

Dobrovie-Sorin and Giurgea 2013 discuss animacy, but give [+ human] examples, so the exact feature involved is yet unclear

One possible answer: gender on CoordP is not impoverished in the same way as elsewhere

- a) why should gender be impoverished on the source, not on the target?
 b) why should animates and inanimates behave differently (cf. Croitor 2008, Croitor and Giurgea 2009, Giurgea 2014)?

- (24) Gențile și sacul nu au fost recuperate. Giurgea 2014
 purses_F.DEF and bag_M.DEF not have.3PL been recovered.F.PL
The purses and the bag have not been recovered.

This is not about morphology

3.1. Apparent digression: the Polish virile

Polish: three genders (FMN) in the singular, two in the plural:

- (25) virile (masculine plural, personal plural) vs. non-virile

- a. mil-i chłopcy/ludzie Sadowska 2012:220
 nice.V.PL boys/people
nice boys/people
 b. mił-e dziewczyny/dzieci
 nice.NV.PL girls/children
nice girls/children

- (26) a. virile: PL.ACC = PL.GEN Sadowska 2012:125
 ci narratorzy/tych narratorów/tych narratorów ‘those narrators.NOM/ACC/GEN’
 b. non-virile: PL.ACC = PL.NOM
te psy/te psy/tych psów ‘those dogs.NOM/ACC/GEN’

In the singular the same syncretism is governed by animacy:

- (27) a. animate: PL.ACC = PL.GEN Sadowska 2012:136
 kurczak/kurczaka/kurczaka ‘chicken.NOM/ACC/GEN’
 b. inanimate: PL.ACC = PL.NOM
szlafrok/szlafrok/szlafroka ‘robe.NOM/ACC/GEN’

In coordination: virile realizes the feature [+human] in the absence of other gender features:

- (28) a. Dziewczynki i chłopcy weszli/*weszły do pokoju. Citko 2004
 girls.F and boys.M came.V.PL/came.NV.PL into room
Some girls and some boys came into the room.
 b. Chłopcy i dziewczynki weszli/*weszły do pokoju.
 boys.M and girls.F came.V.PL/came.NV.PL into room
Some boys and some girls came into the room.

Human coordination triggers virile agreement as long as the conjuncts are not both feminine or both neuter:

- (29) a. Matka i dziecko kochali/*kochali się bardzo mocno. Ruda 2011
 mother.F and child.N loved.V.PL/NV.PL REFL very much
The/a mother and the/a child loved each other very much.
- b. Siostry i matka czytały/*czytali. Corbett 1991:284
 sisters.F and mother.F reading.NV.PL/V.PL
The sisters and the mother were reading.

In other words, the features [feminine] and [neuter], if present at the level of the coordination, block the virile form. However, in the absence of other gender features the non-virile form is also used, making neither of the two the default

Corbett: the presence of the values [masculine] and [human] inside the conjunction, whether these are syntactic or semantic, permits the virile form:

- (30) a. Mama, córeczka i wózek ukazali/ukazały się nagle. Corbett 1991:286
 Mother.F daughter.F and pram.M showed.V.PL/NV.PL REFL suddenly
A mother, a daughter and a pram suddenly appeared.
- b. Bratowa i tort byli/były już w drodze. Zieniukowa 1979
 sister-in-law.F and cake.M were.V/NV already on way
The sister-in-law and the cake were already on the way.

It is not the formal presence of the [masculine] value, cf. (29a). It is the non-applicability of the values [feminine] and [neuter]. Yet Corbett could argue that (29a) is human and therefore exceptional

Coordination of animates patterns similarly (but with more preference for the virile form), while the coordination of a human feminine and a masculine animate requires the virile form:

- (31) a. Pies i kot jedli/jadły. Corbett 1991:285
 dog.M and cat.M ate.V.PL/NV.PL
The/a dog and the/a cat ate/were eating.
- b. Hania i Reks bawili/*bawiły się piłką.
 Hania.F and Rex played.V.PL/NV.PL REFL ball.INS
Hania and Rex [a dog] were playing with a ball.

So it is not the formal presence of the relevant features, it is rather whether the coordination can be perceived as [+human] (or more likely, as sentient or as a potential attitude holder, and the virile agreement on (31a) would only occur in fairy tales)

Test cases: coordination of a feminine human and a neuter nonhuman (animate or inanimate), and of a feminine human and a feminine nonhuman. There are speakers who accept the virile form there and others that don't (for the general combination of a human and nonhuman):

- (32) a. Dziewczyna i futro pasowali do siebie. Kopcińska 1997:68
 girl.F and fur.coat.N matched.V.PL to self
The girl and the fur matched.
- b. Dziewczyna i źrebię/futro nie *pasowali/pasowały
 girl.F and foal.N/fur.coat.N NEG matched.V.PL/NV.PL
 do reszty kompozycji na zdjęciu.
 to rest composition on photo
The girl and the foal/the coat didn't match the rest of the photo composition.

Conclusion: it is not the human feature from one conjunct and the masculine feature from the other conjunct, as Corbett speculates; **it is the non-applicability of the feature [feminine] (or [neuter]) to both conjuncts that makes it possible to check whether the coordination can be considered as [+human]**

The computation of the [+human] feature takes place if the gender feature is not fixed by the conjuncts of the same gender

Pragmatic computation also explains the optionality and speaker variability

Confirmation: plural comitative constructions (Dyła 1988, Trawinski 2005):

- (33) a. Matka z ojcem wrócili. Trawinski 2005
 mother.F with father.M came back.V.PL
The mother and the father came back.
- b. Oddział z ojcem wrócili.
 department.M with father.M came back.V.PL
The department and the father came back.

No chance these are computed by a dumb summing up procedure

So what we need is a computational algorithm for coordination: the features [feminine] and [neuter] appear on the plural exhaustively: if they apply to both conjuncts. If and only if these features are absent on the coordination as a whole, is the feature [human] computed, and then on purely semantic grounds. [+human] is therefore a marked value for exponence, but it only appears when other formal values are absent, which makes it less marked than those

3.2. Return to Romanian

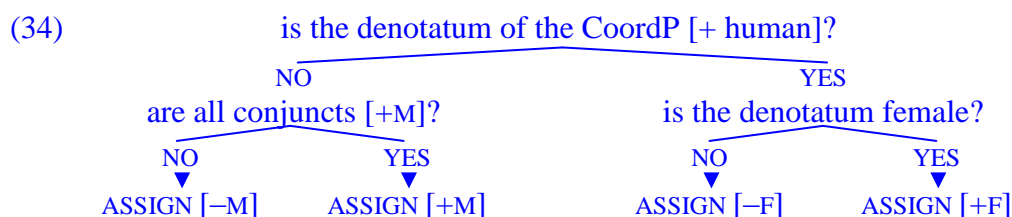
Gender features on coordination are computed by a different algorithm

Croitor 2008, Croitor and Giurgea 2009: experimental analysis of gender agreement with a conjoined subject

- standard prescriptive grammars are wrong: there is a lot of variation
- if the conjuncts differ in gender, agreement is in the masculine if at least one of the conjuncts is animate
- the conjunction of two inanimate masculine nouns is masculine plural (92%)
- the conjunction of an inanimate masculine plural and an inanimate neuter singular (either order) split half and half
- everything else is by preference feminine plural

In essence, we are observing a two-step procedure:

- is the denotatum of the CoordP [+human]?
- are there shared features?



In essence both second queries translate into a formal procedure as “assign the feature [+M|F], check if there is a clash. If yes, assign the opposite value”

Repeating Vocabulary Insertion rules:

- (16) a. [+F][+SG] ⇔ -ă feminine singular
 b. [+SG] ⇔ -Ø masculine and neuter singular
 c. [-SG] ⇔ -i plural
 d. [] ⇔ -e default

The plural gender impoverishment rule targets the feature [-M]:

(19) [GENDER][NUMBER] → Ø / __ [-M][-SG]

feminine and neuter plural

To complete the picture we need a redundancy rule (or two):

- (35) a. [+F] → [+F][-M]
b. [+M] → [+M][-F]

We could avoid this by appealing just to the feature [M] on the right-hand side, but this would make the unmarked [-M] value interpretable ([-M] → entails female)

What we are seeing is that the two gender sub-features do not have the same status (although it is not that of interpretability)

And this is normal (cf. Polish)

3.3. Extension: Albanian

Newmark, Hubbard and Prifti 1982:133: Albanian has a class of nouns that are masculine in the singular and feminine in the plural:

- i. inanimate masculine nouns that form the plural with the suffix *-e*
- ii. inanimate masculine nouns with the plural suffix *-ra*, which is the suffix used for mass nouns and the suppletive noun *mall/mira* ‘goods, property.SG/PL’
- iii. some others with the plural in *-a* (e.g., *hap* ‘step.M’, *hapa të gjata* ‘long.F.PL steps’)

The substance nouns in (ii) above used to be and in some dialects still are neuter

These are claimed to be distinct from the neuter, which is a limited class appearing with the morphologically distinct articles in the nominative singular (p.133)

Mëniku and Campos 2012, but also W. 1887 don’t mention neuter at all; Camaj 1984:10 says it has virtually disappeared

The description in NHP suggests that the neuter in the dialect they describe can be treated as a semi-productive sub-case of the ambigeneric:

- a. de-participial nominalizations: *të ardhurit* ‘the.N arrival.DEF.SG.N’, *të ecurit* ‘the.N walking.DEF.SG.N’, etc.
- b. deadjectival nominals: *të errët-i-t* ‘the.N darkness’, *të kuq-të* ‘the.N red’, etc.
- c. a number of substance nouns like *brumë* ‘dough’, *drithë* ‘cereal’, which have mostly changed to masculine in contemporary Albanian
- d. *ballë-t* ‘forehead’ (became masculine in contemporary Albanian) and *krye-t* ‘head’

With the exception of (c)-(d), this looks like the Spanish neuter *lo* (cf. Lujan 1972, Hallebeek 1987-1988, 1992:67, Bosque and Moreno Cabrera 1990, Leonetti 1999:829ff. and references therein, Pomino and Stark 2007, Villalba 2009, Aguilar Guevara and García Rodríguez 2018, etc.):

- (36) lo azul de la bóveda celeste
LO blue of the heavens
the heavenly blue

McNally and de Swart 2015

If there is no distinct neuter, the picture is as in Romanian. And if there is?

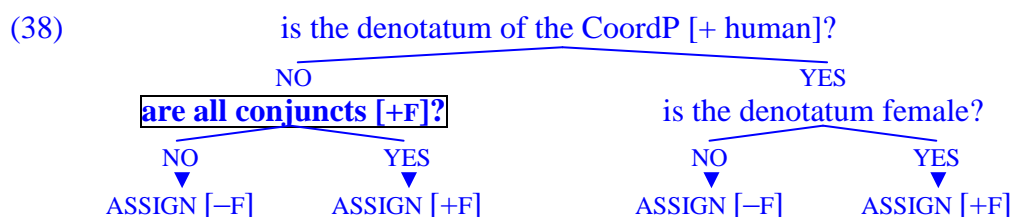
Then it seems that we need an interpretable [neuter] feature (perhaps, [mass], as suggested for Asturian, cf. Mascaró 2011, Bonet 2013, or [discrete], cf. Pomino and Stark 2007?)

Giurgea 2014: coordination where one conjunct is ambigeneric triggers masculine agreement (and in fact, **coordination of inanimates with different genders is always compatible with masculine agreement**):

- (37) a. Mali dhe deti ishin të bukur.
mountain(AMB).DEF and sea(AMB).DEF be.IMP.3PL AGR.PL beautiful.M.PL
The mountain and the sea were beautiful.

- b. Deti e qielli ishin të ndritshëm.
 sea(AMB).DEF and sky(M).DEF be.IMP.3PL AGR.PL bright.M.PL
The sea and the sky were bright.
- c. Lumi dhe liqeni janë të mbushur me peshq.
 river(M).DEF and lake(AMB).DEF be.3PL AGR.PL full.M.PL with fish
The river and the lake are full of fish.
- d. Gjuri e kofsha mbetën të sëmurë.
 knee(M).DEF and thigh(F).DEF remain.PRET.3PL AGR.PL ill.M.PL
The knee and the thigh remained ill.

The Albanian system is not so different!



Nominal declension in Albanian is a lot more complex than in Romanian, so (19) would not work at the same level of universality, but to capture the meta-syncretism it will do

4. CONCLUSION AND FURTHER QUESTIONS

We have argued that Romanian (and Albanian) can't be handled with just one gender feature

Evidence for this comes from three sources:

- feminine singular oblique in -e
- syncretic adjective classes: plural in -i and feminine in -e
- masculine agreement for non-feminine animates

We need the masculine to also be a default in the plural, which means that we need more than one default

As a result, we obtain a rational system that is diachronically motivated and more economic

Is an extra feature too high a price?

How many gender features can a language have in principle?

There are other proposals, with the neuter treated as [+M, +F], also constructed on the basis of coordination in Slavic (Despić 2016 for Serbian) or of syncretism in the German declensional paradigm (Wiese 1999, Müller 2011, Opitz et al. 2013)

4.1. Bonus points: minor classes and declensions

The proposed impoverishment rules can account for the remaining (minor) adjectival classes and some nominal declension classes

Adjectives are simpler. Two more classes (+ the indeclinable adjectives):

- (13) d. apparent dedicated masculine plural: *tenace* 'tenacious'

	masculine	feminine
singular		tenace
plural	tenaci	

No special rules needed: it is just the singular in (13c) without its plural (the plural is regular)

- include the root $\sqrt{\text{TENAC-}}$ in the environment for (18), that's it

(13) e. **apparent dedicated feminine plural: *vechi* 'old'**

	masculine	feminine
singular		veche
plural	vechi	

Dobrovie-Sorin and Giurgea 2006:832: the masculine singular is actually the regular \emptyset here, the final -i is part of the stem and the -u allomorph appears before the suffixal article (*vechiul* 'old.DEF')

No special rules needed:

- the plural is the i-plural of (13c): include the root $\sqrt{\text{VECHI-}}$ in the environment for (20)
- the singular follows the e-feminine pattern in (13a-b): include the root $\sqrt{\text{VECHI-}}$ in the environment for (17)

Table 1: Romanian declension classes (from Dobrovie-Sorin and Giurgea 2006:836)

Major types	singular		plural	gender	examples
	direct	oblique			
I	\emptyset /-u		-i	masculine	băiat 'boy', maestru 'master'
IIa	\emptyset /-u		-e	neuter	vas 'vase', teatru 'theater'
IIb	-u		-i	neuter	consiliu 'council'
III	\emptyset /-u		-uri	neuter	gard 'fence', lucru 'thing'
IVa	-ă	-e	-e	feminine	fată 'girl'
IVb	-a	-le	-le	feminine	stea 'star'
Va	-ă	-i	-i	feminine	vacă 'cow'
VIa	-e		-i	masculine	iepure 'rabbit'
VIb	-e	-i	-i	feminine	carte 'book'
Minor types					
IIc	-u		-ie	neuter	frâu 'rein'
Vb	-ă		-i	masculine	tată 'father'
VIIa	-e		-e	feminine	directoare 'manager'
VIIb	-e		-e	neuter	nume 'name'
VIIIa	-ă	-e	-uri	feminine	lipsă 'lack, shortcoming'
VIIIb	-ă	-i	-uri	feminine	treabă 'work, business'
IX	-e	-i	-uri	feminine	vreme 'time, weather'
X	-e		(none)	masculine	bade, nene 'uncle'

The classes I, II-a and IV-a are identical to [+M], [-M,-F] and [+F] adjectives respectively

The classes II-b, II-c, IV-b have more complex stems, see DSG2006:836, and II-b is subject to the rule (20), removing gender in the plural to yield the *i*-ending

The class III has a stem augment (-*ur*-) in the plural, but otherwise behaves as a neuter

This augment triggers the rule (20), removing gender in the plural to yield the *i*-ending

Then there are the classes with an e-singular: VI, VII, IX and X

They can be specified just for gender and be subject to rule (17), removing ϕ -features in the singular

Then there are the feminine classes with an i-plural: V-a (V-b is semantically masculine), VI-b, VIII and IX

These are subject to the rule (20), removing gender in the plural

The classes VIII and IX have a stem augment in the plural

Remains unexplained: the systematic syncretism between the plural direct form and the singular oblique form of feminine nouns and adjectives

One exception: VIII-a, which we do handle

The system we have proposed does not have a way of deriving i-obliques except by assuming a separate allomorph. Independent evidence for such an allomorph: demonstratives and other functional adjectives show this oblique -i in addition to the homophony with the direct plural

4.2. The demonstrative

Genderless referents use the feminine form of the proximal demonstrative (while triggering masculine singular agreement)

- (39) Petru e acasă. Asta e uluitor/*uluitoare. Farkas 1990
 Peter is home this.F.SG is amazing.SG.M/*.F.SG
Peter is home. This is amazing.

These demonstratives have an unusual paradigm to begin with: they are augmented with -a

(40)

	singular		plural	
	masculine	feminine	masculine	feminine
direct	ăsta	asta	ăștia	astea
oblique	ăstuia	ăsteia	ăstora	

Without the augment they are almost regular (a-lengthening in the feminine direct), but these shorter forms are only used in fixed expressions (Dobrovie-Sorin and Giurgea 2013:855)

Kramer 2015b: this is accidental, a special form used for genderless and numberless forms of the demonstrative

Our two options:

- a notational variant of Kramer's proposal: a special Vocabulary Item for [PROX]
- think more deeply about the phonology of the direct masculine singular ending: it might be that the final [a] here is part of the stem (perhaps as with II-c and IV-b, which are both neuter)

Everyone has to say something special

4.3. Further alternatives

4.3.1. Distributed gender

Given that gender in the plural is different from that in the singular, it is reasonable to assume that the number node can be specified for gender

Giurgea 2008: the gender feature is **generated on Num** as well as on N and there is selection. Num has two genders (F/M), N has three (I, II, III):

- (41) (i) Num [M.SG] selects for N in classes I and III
 (ii) Num [F.SG] selects for N in class II
 (iii) Num [M.PL] selects for N in class I
 (iv) Num [F.PL] selects for N in classes II and III

Giurgea 2014: This system does not appear to predict the fact that the coordination of two neuters triggers feminine plural agreement (rather than masculine plural):

- (42) Scaun.ul și dulap.ul sunt scumpe/*scumpi. Giurgea 2014
 chair.N.DEF and wardrobe.N.DEF be.3PL expensive.F.PL/expensive.M.PL
The chair and the wardrobe are expensive.

Indeed, both conjuncts are [M] as witnessed by the article. So why is the conjunction not [M]?

Croitor and Giurgea 2009: feminine is the default in the plural, and the Num above the coordination accesses the nouns themselves

Croitor 2008, Croitor and Giurgea 2009: experimental analysis of gender agreement with a conjoined subject

- standard prescriptive grammars are wrong: there is a lot of variation
- the conjunction of two inanimate masculine nouns is masculine plural (92%)
- the conjunction of an inanimate masculine plural and an inanimate neuter singular (either order) split half and half
- everything else is by preference feminine plural

Kramer 2015b:

- why there is no feminine singular/masculine plural controller gender?
- the characteristics of neuter nouns as inanimate mass is unexplained

But all these problems are not about gender on Num, these are about formal representation of gender

In essence, we want gender to be a sufficiently complex thing so that the neuter might have something in common with both of the feminine and masculine

4.3.2. Gender construction

Bateman and Polinsky 2009: there are actually only two genders and they are determined by the declension class separately for singular and plural

Two classes in the singular:

- **Semantic gender assignment:** female-denoting animate nouns are in class A, male-denoting nouns are in class B
- **Formal gender assignment:** nouns that end in [ə] (spelled ă) or [e] are in Class A, and nouns with all other endings (consonant, -i, -o, -u) are in class B.

Two classes in the plural:

- plural nouns ending in -i₁ are in class C
- nouns taking all other plural markers (-e, -uri, -i₂) are assigned to class D

Assumption: there are two distinct i-plurals

So class is determined by the denotation and the declension class (with some listed exceptions) and rules connect them to agreement markers (sets I (M) and II (F)):

- (43) A → Set II, singular
 B → Set I, singular
 C → Set I, plural
 D → Set II, plural

These sets are (target) genders

Issues:

- it's not two genders (= classes). Two in the singular and two in the plural is four, no gain
- gender (= set) is not a property of a lexical item
- nothing explains why there are no nouns that are A/C (feminine in the singular, masculine in the plural)

Kramer 2015b:

- Bateman and Polinsky 2009:64-65: coordination facts remain unexplained
- no connection between nouns in the class B/D and lack of animacy

But there is also a much deeper issue here. What is *class* in this story? Where is it located? What is its formal status?

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