

- (5) a. Jedan dečak i jedna devojčica su došli/*došle.
 one.M.SG boy and one.F.SG girl AUX.PL.3 arrived.M.PL/F.PL
One boy and one girl arrived.
- b. Jedan dečak i jedno pile su došli/*došla.
 one.M.SG boy and one.SG.N chicken AUX.PL.3 arrived.M.PL/N.PL
One boy and one chicken arrived.
- c. Jedna devojčica i jedno pile su došli/*došla/*došle.
 one.F.SG girl and one.SG.N chicken AUX.PL.3 arrived.M.PL/N.PL/F.PL
One girl and one chicken arrived.

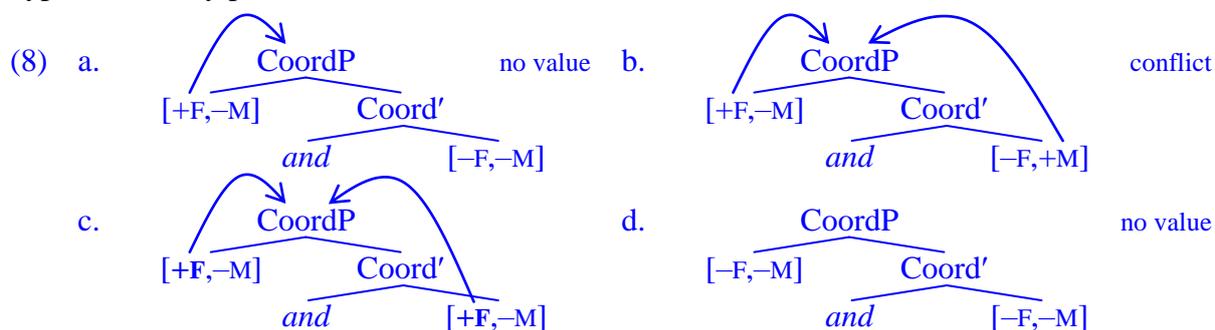
To complete the picture, in the absence of number-gender specification neuter is the default:

- (6) Prihvatiti krivicu ni je lak-o.
 accept.INF fault.ACC NEG.AUX.SG easy.SG.N
To admit one's fault is not easy.

Despić 2016: an explicit proposal about how gender is assigned in coordination

- (7) [GENDER ±masculine and ±feminine]
 a. not possible: [+masc, +fem]
 b. masculine: [+masc, -fem]
 c. neuter: [-masc, -fem]
 d. feminine: [-masc, +fem]

Hypothesis: only positive features values are transmitted.



More specifically and quite reasonably: it is okay to have no feature value for [masculine] in the presence of the [+feminine] value, as in (8) (because the minus value is predictable from the plus value), but in all other cases the value of the missing feature cannot be established

Conflict and lack of value lead to no value and default (masculine) agreement

No precise formulation of this default

How cross-linguistically valid is this?

3. THE POLISH VIRILE

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

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

- a. mil-i chłopcy/ludzie
 nice.V.PL boys/people
nice boys/people

Sadowska 2012:220

- b. mił-e dziewczyny/dzieci
nice.NV.PL girls/children
nice girls/children
- (10) 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:

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

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

- (12) 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:

- (13) a. Matka i dziecko kochali/*kochały 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

This is similar to the Despić story above. But the marked values would have to be different: we would need the features [$\pm F$] and [$\pm N$]

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

- (14) 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. (13a). Yet Corbett could argue that (13a) is human and therefore exceptional

But once you say so, why stop?

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:

- (15) 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 (15a) 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):

- (16) 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. Marta Ruda, p.c.
 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 applicability of the feature [sentient] to the coordination as a whole that makes it possible to check whether the conjuncts can be considered as sharing the semantic feature [feminine]**

The Despić data from Serbo-Croatian can be regarded now in the same way: if the plus value of a gender feature on the coordination makes correct predictions about the gender of the conjuncts, use it; no value otherwise

Pragmatic computation also explains the optionality and speaker variability

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

- (17) a. Matka z ojcem wrócili. Trawiński 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 on (formal) features

4. THE ALGORITHM

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

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

The first question is the locus of variation in (15), etc.

The second question on the formal side can involve different features

The coordination is assigned gender features in function of the second answer

4.1. Where lies the variation?

The semantic break-off point: [sentient] (for some systems probably [animate])

Safe bet: a three-gender system can be encoded by two bivalent features (see Matushansky 2019 for evidence for Romanian)

(18) Features and bundles

[+ F] (or maybe [+ F;– M], doesn't matter)

[+ M] (or [– F;+ M])

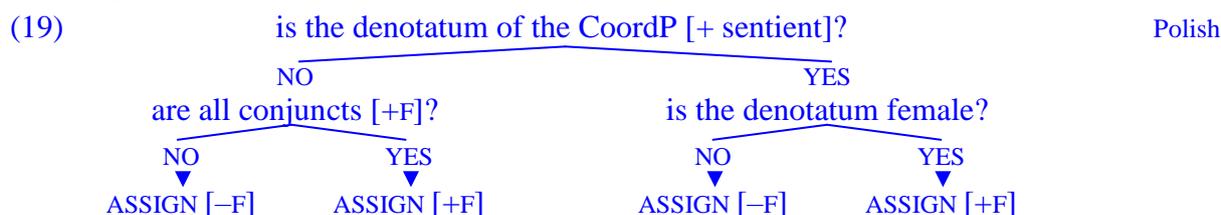
[– F;– M] (neuter)

Entailment relations: the plus value of one gender feature entails the minus value of the other

Which features and/or values are used for computation?

4.2. Polish

First step: [\pm sentient]:



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”

(20) Gender realization in the plural

a. virile ending \Leftrightarrow [+ sentient, –F]

b. non-virile ending otherwise

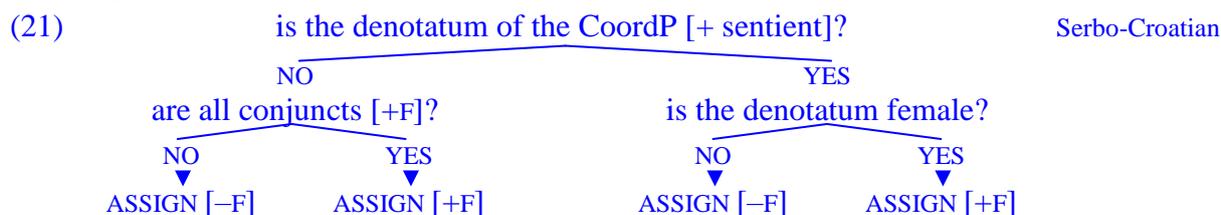
Why [–F] and not [+M]? Because I want the masculine to be the default for humans. Yet this predicts virile agreement for two neuter human-denoting conjuncts – check!

Feature assignment on the formal side has no empirical consequences

No apparent need for the feature [\pm M] (except in the singular)

4.3. Serbo-Croatian

First step: [\pm sentient]:



No apparent need for the feature [\pm M], except in Vocabulary Insertion

- (22) Gender realization in the plural:
- feminine ending \Leftrightarrow [+F]
 - neuter ending \Leftrightarrow [-M; -F]
 - masculine ending otherwise

For plural neuters (22b), being more specific, bleeds (22c)
In coordination this value bundle is never going to be assigned

The locus of variation: in Vocabulary Insertion rules

4.4. Romanian: the impoverished neuter

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

- | | |
|--|--|
| <p>(23) 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>(24) 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> |
|--|--|

Descriptively, only two options in either number

- (25) singular plural
- | | | |
|-------|-----|---|
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| a | III | e |
| ————— | | |
| | II | |

The morphological default for animate coordination in Romanian is the masculine:

Obviously, the conjunction of two feminine animates is feminine

- (26) 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.

But the inanimate coordination behaves differently (Croitor 2008, Croitor and Giurgea 2009, Giurgea 2014):

- (27) 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.

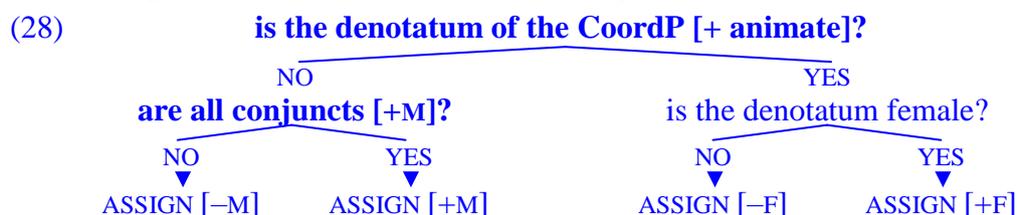
(Croitor 2008 via) Croitor and Giurgea 2009: experimental analysis of gender agreement with a conjoined subject

The data do not allow me to determine if their animates are human

- 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 (or is it human?)
- **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

Here both gender features are active in the computation:



Assuming that [+F] entails [-M], the feminine and the neuter share the feature [-M]
The actual story is more complicated, see Matushansky 2019

The locus of variation: the feature chosen for assignment on the formal side

The semantic side could also use [\pm M], as the Vocabulary Insertion rules for plural appeal to the feature [-M] (Matushansky 2019)

The feature [\pm F] is relevant in the singular

What happens with the conjunction of an inanimate masculine plural and an inanimate neuter singular?

Perhaps pragmatics + closest-conjunct agreement

4.5. Albanian

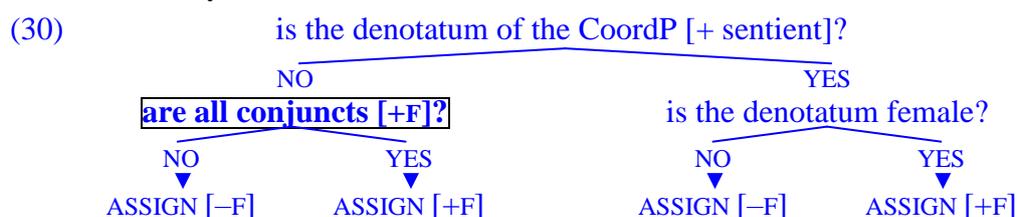
Newmark, Hubbard and Prifti 1982:133: Albanian has a class of nouns that are masculine in the singular and feminine in the plural:

- 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 tē gjata* ‘long.F.PL steps’)

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**):

- (29) a. Mali dhe deti ishin të bukur.
 mountain(AMB).DEF and sea(AMB).DEF be.IMPf.3PL AGR.PL beautiful.M.PL
The mountain and the sea were beautiful.
- b. 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 the same as in Polish and Serbo-Croatian:



The Vocabulary Insertion rules for plural appeal to the feature [-M] (Matushansky 2019)
The feature [\pm F] is relevant in the singular

5. CONCLUSION

Gender assignment in coordination can be accounted for by a two-step algorithm separating formal and semantic gender features

There are two loci for cross-linguistic variation in the algorithm:

- does animacy or humanity drive the formal/semantic divide?
- is the feature activated on the formal side [$\pm F$] or [$\pm M$]?

Alternative to explore: the second point of variation is in the formal feature assigned after the second step on both sides

No obvious variation on the semantic side

The rest is accounted for by the language-specific Vocabulary Insertion rules

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