GENDER FEATURES IN COORDINATION
GTD 2020, Utrecht, January 31, 2020

1. COORDINATE AGREEMENT: AN INTRODUCTION

For people studying gender systems the behavior of plurals resulting from the coordination of two singulars serves as an indicator of how agreement works in the singular.

The goal of this talk: to argue that gender of coordinate structures is determined semantically, as well as syntactically, and therefore cannot be used to probe into the syntax or morphology of gender.

Test cases: four three-gender systems

- Serbian: masculine default for coordination with the available neuter plural value never present (even for two coordinated neuters)
- Romanian: neuter syncretic with feminine in the plural, apparent feminine default for coordination
- Albanian: neuter syncretic with feminine in the plural, apparent masculine default for coordination
- Polish: virile (masculine human) vs. everything else

Broader context: is neuter a gender or a lack thereof?

2. SERBIAN COORDINATION (DATA FROM DESPIĆ 2016)

In Serbian (actually, BSC), as well as many if not all other Slavic languages, there is no doubt as to the existence of the neuter:

(1) a. ona devojka that.FSG girl
b. onaj dečak that.MSG boy
c. jedno pile one.SG.N chicken

Gender distinctions are retained in the plural:

(2) a. Ova žena i ona devojka su stigl-e. Despić 2016
   this woman and that girl are arrived.F.PL
   *This woman and that girl arrived.

   b. Ovaj čovek i onaj dečak su stigl-i.
   this man and that boy are arrived.M.PL
   *This man and that boy arrived.

   (3) Sela/brda su izgorel-a/*izgorel-i.
   villages/hills AUX.PL.3 burned.N.PL/M.PL
   *Villages/hills were burned.

However, coordination of two neuter NPs does not trigger neuter agreement:

(4) Naše selo i celo jedno brdo su izgorel-i/*izgorel-a u požaru.
   our village and whole one hill AUX.PL.3 burned.M.PL/N.PL in fire
   *Our village and one whole hill were burned in the fire.

In fact, masculine plural agreement is what is triggered by any other combination of genders in coordination:
(5) a. Jedan dečak i jedna devojčica su došli/*došle.
   One boy and one girl arrived.

b. Jedan dečak i jedno pile su došli/*došla.
   One boy and one chicken arrived.

c. Jedna devojčica i jedno pile su došli/*došla/*došle.
   One girl and one chicken arrived.

To complete the picture, in the singular neuter is the default:

(6) Prihvatiti krivicu ni je lak-o.
   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.

(8) a. CoordP [+F,−M] Coord’ [−F,−M]
   and
   b. CoordP [+F,−M] Coord’ [−F,+M]
   and
   c. CoordP [+F,−M] Coord’ [−F,−M]
   and
   d. CoordP [−F,−M] Coord’ [−F,−M]
   and

More specifically and quite reasonably: it is okay to have no feature value for [masculine] in the presence of the [+ feminine] value (because the former is predictable from the latter), 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 chłopy/ludzie
      nice V.PL boys/people
      nice boys/people

Sadowska 2012:220
In the singular the same syncretism is governed by animacy:

(11) a. animate: PL.ACC = PL.GEN

kurczak/kurczaka/kurczaka 'chicken'

Sadowska 2012:136

b. inanimate: PL.ACC = PL.NOM

szlafrok/szlafrok a 'robe'

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

Some girls and some boys came into the room.

b. Chłopcy i dziewczynki weszli/*weszły do pokoju.

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 and the/a child loved each other very much.

b. Siostry i matka czytały/*czytały.

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

Yet the neuter is the morphological default in the singular!

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


A mother, a daughter and a pram suddenly appeared.

b. Bratowa i tort byli/były już w drodze. Zieniukowa 1979

The sister-in-law and the cake were already on the way.

It is not the formal presence of the [masculine] value, cf. (13a). It is the non-applicability of the values [feminine] and [neuter]. Yet Corbett could argue that (13a) 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:

\[(15) \quad \text{a. Pies i kot jedli/jadły.} \quad \text{Corbett 1991:285} \]
\[
\begin{aligned}
dog.M \quad \text{and cat.M ate V.PL/NV.PL} \\
\text{The/a dog and the/a cat ate/were eating.}
\end{aligned}
\]

\[(15) \quad \text{b. Hania i Reks bawili/*bawiły się piłką.} \quad \text{Kopcińska 1997:68} \]
\[
\begin{aligned}
girl.F \quad \text{and foal.N/fur.coat.N matched V.PL to self} \\
The girl and the fur matched.
\end{aligned}
\]

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):

\[(16) \quad \text{a. Dziewczyna i futro pasowali do siebie.} \quad \text{Kopcińska 1997:68} \]
\[
\begin{aligned}
girl.F \quad \text{and fur.coat.N matched V.PL to self} \\
The girl and the fur matched.
\end{aligned}
\]

\[(16) \quad \text{b. Dziewczyna i źrebię/futro nie *pasowali/pasowały} \quad \text{Marta Ruda, p.c.} \]
\[
\begin{aligned}
girl.F \quad \text{and foal.N/fur.coat.N NEG matched V.PL/NV.PL} \\
doszty kompozycji na zdjęciu. \\
\text{to rest composition on photo} \\
The girl and the foal/the coat didn't match the rest of the photo composition.
\end{aligned}
\]

Conclusion: it is not the human feature from one conjunct and the masculine feature from the other conjunct, as Corbett speculates; \textit{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 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

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 (Dyla 1988, Trawinski 2005):

\[(17) \quad \text{a. Matka z ojcem wrócili.} \quad \text{Trawinski 2005} \]
\[
\begin{aligned}
mother.F \quad \text{with father.M came back V.PL} \\
The mother and the father came back.
\end{aligned}
\]

\[(17) \quad \text{b. Oddział z ojcem wrócili.} \quad \text{Trawinski 2005} \]
\[
\begin{aligned}
department.M \quad \text{with father.M came back V.PL} \\
The department and the father came back.
\end{aligned}
\]

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
4. **The Algorithm**

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

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

The second question on the formal side can involve different features.

In function of the second answer different gender features are assigned.

### 4.1. Where lies the variation?

The semantic break-off point: [human] or [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: [±human]:

(19) is the denotatum of the CoordP [+ human]?

<table>
<thead>
<tr>
<th>NO</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO</td>
<td>YES</td>
</tr>
</tbody>
</table>

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

- virile ending ⇔ [+HUMAN, –F]
- non-virile ending otherwise

Feature assignment on the formal side has no empirical consequences

No apparent need for the feature [±M]

### 4.3. Serbo-Croatian

First step: [±human]:

(21) is the denotatum of the CoordP [+ human]?

<table>
<thead>
<tr>
<th>NO</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO</td>
<td>YES</td>
</tr>
</tbody>
</table>

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”
No apparent need for the feature [±M], except in Vocabulary Insertion:

(22) Gender realization in the plural:
   a. feminine ending ↔ [+F]
   b. neuter ending ↔ [−M;−F]
   c. masculine ending otherwise

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

4.4. Romanian: the impoverished neuter

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

(23) a. bărbat interesant
    man interesting.M.SG
    man interesting

   b. scaun interesant
    chair interesting.M.SG
    chair interesting

   c. fată interesantă
    girl interesting.F.SG
    girl interesting

(24) a. bărbați interesanți
    men interesting.M.PL
    interesting men

   b. scaune interesante
    chairs interesting.F.PL.
    interesting chair

   c. fete interesante
    girls interesting.F.PL.
    interesting girls

Descriptively, only two options in either number

(25) singular plural
    Ø  I  II  III  e

The morphological default for animates in Romanian is the masculine:

Obviously, the conjunction of two feminine animates is feminine

(26) a. Maria și tata au fost vazuti.
    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.
    purseF,DEF and bagM,DEF not have.3PL been recovered.F.PL
    The purses and the bag have not been recovered.

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

Here both gender features are active in the computation:

(28) is the denotatum of the CoordP [+ human]?

NO YES

are all conjuncts [+M]?

NO YES

are all conjuncts [+F]?

NO YES

is the denotatum female?

NO YES

is the denotatum feminine?

NO YES


Assuming that [+M] entails [–F], 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 [±M], as the Vocabulary Insertion rules for plural appeal to the feature [–M] (Matushansky 2019)

The feature [±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’, hapë të 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:

(30) is the denotatum of the CoordP [+ human]?

NO YES

are all conjuncts [+F]?

NO YES

are all conjuncts [+M]?

NO YES

is the denotatum female?

NO YES

is the denotatum feminine?

NO YES


The Vocabulary Insertion rules for plural appeal to the feature [–M] (Matushansky 2019)

The feature [±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 [±F] or [±M]?

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

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

6. REFERENCES


Zieniukowa, Jadwiga. 1979. Składnia zgody w zdaniach z podmiotem szeregowym we współczesnej polszczyźnie [The syntax of agreement in sentences with coordinate subjects in modern Polish]. Slavia Occidentalis 36, pp. 117-129.