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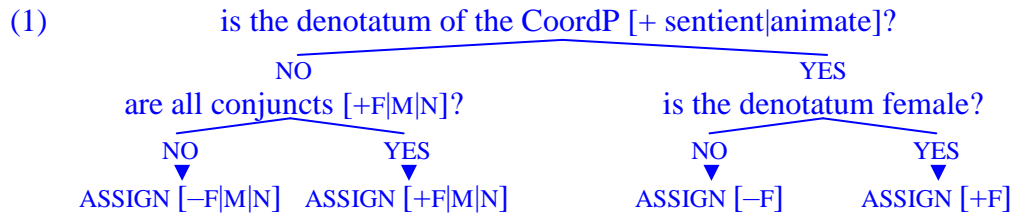homepage: http://www.trees-and-lambdas.info/matushansky/

GENDER-FLUID COORDINATION (REDUX)
Agreement in Multivaluation Constructions, Frankfurt, May 19-20, 2021

1. COORDINATE AGREEMENT: AN INTRODUCTION

The goal of this talk: to argue that gender of coordinate structures is determined semantically, as well as syntactically, and to present a semi-deterministic algorithm for its computation

(1)   is the denotatum of the CoordP [+ sentient|animate]?

          NO   YES

  are all conjuncts [+F|M|N]?   is the denotatum female?

  NO   YES   NO   YES

ASSIGN [−F|M|N]   ASSIGN [+F|M|N]   ASSIGN [−F]   ASSIGN [+F]

Both sides can in principle be iterative (for the semantic gender of non-flesh food in Dyirbal) or Bantu noun classes)

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

There is room for vagueness on the semantic side: e.g., in the Polish example with the sister-in-law and the cake, the CoordP might be viewed as sentient

2. APPLICATION

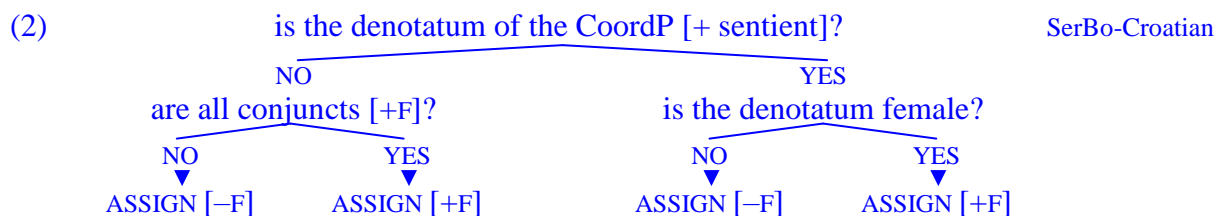Test cases: four three-gender systems encoded via two binary features [α F] and [α M]
- Serbian: masculine default for coordination with the available neuter plural value never present (even for two coordinated neuters)
- Polish: virile (masculine human) vs. everything else
- Romanian: neuter syncretic with feminine in the plural, apparent feminine default for coordination
- Albanian: neuter syncretic with feminine in the plural, apparent masculine default for coordination

2.1. SerBo-Croatian

Empirically (after Despić 2016)
- for a human (sentient) CoordP [+F] ⇔ [female] for all conjuncts, [M] otherwise
- for a non-human CoordP, [+F] ⇔ [feminine] for all conjuncts, [M] otherwise

Algorithm: [+F] is checked and assigned:

(2)   is the denotatum of the CoordP [+ sentient]?   SerBo-Croatian

          NO   YES

  are all conjuncts [+F]?   is the denotatum female?

  NO   YES   NO   YES

ASSIGN [−F]   ASSIGN [+F]   ASSIGN [−F]   ASSIGN [+F]

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

(3) Vocabulary Insertion in the plural:
    a. feminine ending ⇔ [+F]
    b. neuter ending ⇔ [−M;−F]
    c. masculine ending otherwise

For plural neuters (3b), being more specific, bleeds (3c)
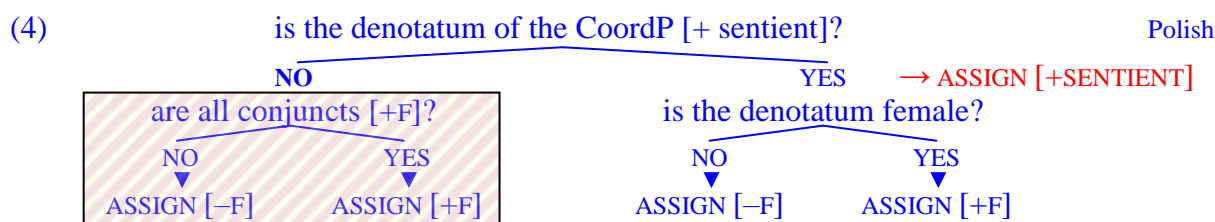In coordination this value bundle is never going to be assigned

2.2. Polish

Standard descriptions: virile (human, non-feminine) vs. non-virile (residue)

Proposal: use standard gender features
  ➢   for a human (sentient) CoordP [+F] ⇔ [female] for all conjuncts, [M] otherwise
  ➢   for a non-human CoordP gender assignment seems irrelevant

Algorithm: [+F] is checked and assigned:

(4)   is the denotatum of the CoordP [+ sentient]?   Polish

        NO   YES   → ASSIGN [+SENTIENT]

    are all conjuncts [+F]?   is the denotatum female?

  NO   YES   NO   YES

ASSIGN [−F]   ASSIGN [+F]   ASSIGN [−F]   ASSIGN [+F]

Prediction: virile agreement for two neuter human-denoting conjuncts
Update (Barbara Citko, p.c.): neither virile nor non-virile is that great.

(5)   Vocabulary Insertion in the plural
       a.   virile ending ⇔ [+sentient, −F]
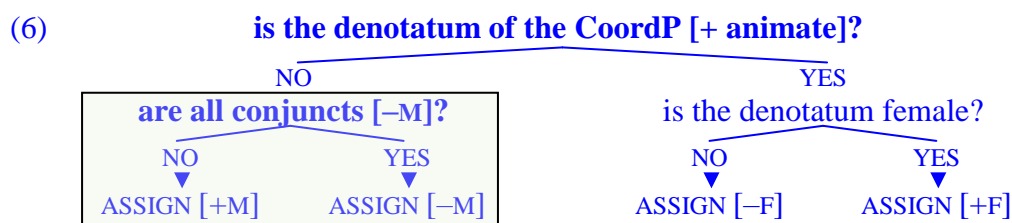   b.   non-virile ending otherwise

Feature assignment on the formal side has no empirical consequences

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

2.3. Romanian (modified from the longer version)

Empirically, inanimates behave differently:
  ➢   for a human (sentient) CoordP [+F] ⇔ [female] for all conjuncts, [+M] otherwise
  ➢   for an inanimate CoordP, [+M] ⇔ [masculine] for all conjuncts, [-M] otherwise

(6)   **is the denotatum of the CoordP [+ animate]?**

        NO   YES

    are all conjuncts [−M]?   is the denotatum female?

  NO   YES   NO   YES

ASSIGN [+M]   ASSIGN [−M]   ASSIGN [−F]   ASSIGN [+F]

Assuming that [+F] entails [−M], the feminine and the neuter share the feature [−M] (see also Matushansky 2019 for a different take, where *-e-* is the paradigm default)

(7)   Vocabulary Insertion in the plural
       a.   feminine ending ⇔ [−M] (entailed by [+F])
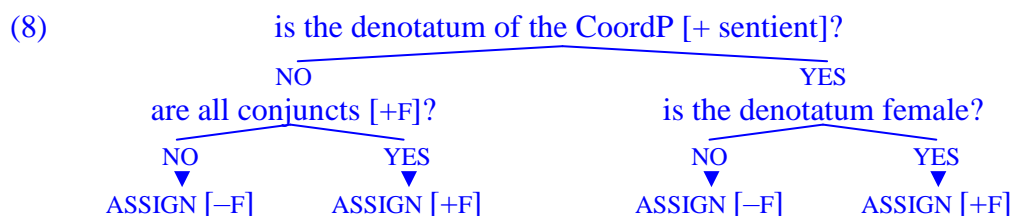   b.   masculine ending otherwise

(Croitor 2008 via) Croitor and Giurgea 2009: experimental analysis of gender agreement with a conjoined inanimate subject. Setting aside plurals:
  ➢   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%)
  ➢   everything else is by preference feminine plural

Whence variation? Hypothesis to consider: some nouns may lack one of the gender features in their underlying representation

2.4. Albanian

The Albanian system is the same as in Polish and SerBo-Croatian (masculine is the default in the plural):

(8)   is the denotatum of the CoordP [+ sentient]?

               NO   YES

      are all conjuncts [+F]?   is the denotatum female?

    NO   YES   NO   YES

ASSIGN [–F]   ASSIGN [+F]   ASSIGN [–F]   ASSIGN [+F]

(9)   Vocabulary Insertion in the plural (like in SerBo-Croatian):
        a.   feminine ending ⟺ [+F]
        b.   masculine ending otherwise

Johnson 2014: in experiments resolution never occurred

2.5. For a non-syntactic approach

The same rules define gender for the plural comitative constructions (Dyła 1988, Trawiński 2005):

(10) 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

3. CONCLUSION & DISCUSSION

Gender assignment in coordination can be accounted for by a two-step algorithm separating formal and semantic gender features
I didn't look at conjunctions containing plurals or numeral NPs though

Hypothesis: features are computed only if necessary

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]?

No obvious variation on the semantic side
The rest is accounted for by the language-specific Vocabulary Insertion rules

Questions from the post-conference discussion:

(i)   Katharina: How do you determine the semantic/pragmatic features [sentient] and [female] on the CoordP?

(ii)   Anke, Barbara and Katharina: **What is the nature of the algorithm?**: Is it part of the grammar? If so, how do the different modules of grammar interact? What do you assume about the features?: Are all semantic and syntactic features visible at once? (I thought the standard assumption is that syntactic features are only visible to the syntax, semantic features are only there for the semantics.) Or is the algorithm extra-grammatical, that is, is feature resolution a general cognitive process like suggested in Harbour's paper about number agreement?

Answer: this very much depends on our assumptions re: mixed agreement:

(11) on the presupposition that our doctor is a woman   Russian

    a.   Naš   vrač   prišël   vovremja.
            our.MSG   doctor.M   arrived.MSG   on.time
            Our doctor arrived on time.

    b.   %Naš   vrač   prišla   vovremja.
            our.MSG   doctor.M   arrived.FSG   on.time

    c.   *Naša   vrač   prišël   vovremja.
            our.FSG   doctor.M   arrived.MSG   on.time

    d.   Naša   vrač   prišla   vovremja.
            our.FSG   doctor.M   arrived.FSG   on.time

(12) a.   ton   phénomène   de fille   French
            your.M   phenomenon.M   of daughter.F
   *your phenomenal daughter*

    b.   ton   vache   de   mari
            your.M   cow.F   of   husband.M
            your bastard of a husband

A formally masculine NP may trigger feminine agreement if it refers to a female and vice versa. How is this achieved? ~~Let me count the ways…~~

One possible way: introduce the intervening (semantic) features on a functional head and let them be licensed at LF:

(13) a.   Sauerland 2004   b.   Pesetsky 2013
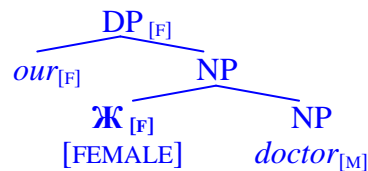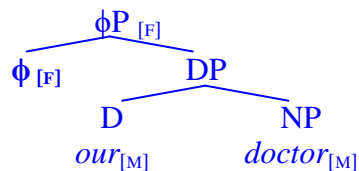
   c.   ⟦FEMALE⟧ = λf . λx : x is a human female . f (x)

So all in all, if I were forced to make a choice, I would go for "insert interpretable features where compatible and license them at LF (or fail to)"

3.1. Greek (after Adamson and Anagnostopoulou 2021)

Empirically, inanimates behave differently:

➢   for a human (sentient) CoordP [+F] ⟺ [female] for all conjuncts, [+M] otherwise
➢   for an inanimate CoordP, [+M|F] ⟺ [M|F] for all conjuncts, [–M; –F] otherwise

(14)
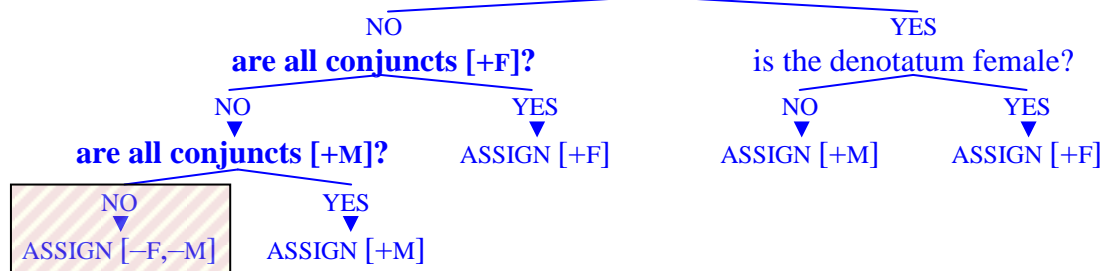
Possibility: always assign [+M] on the semantic side and let it entail [–F]

(15) Vocabulary Insertion in the plural
   a.   feminine ending ⇔ [+F]
   b.   masculine ending ⇔ [+M]
   c.   neuter otherwise

Correct prediction: coordination of animate neuters produces [+M]

However, **agreement with [H + I] coordination is ungrammatical** unless the gender of the conjuncts is shared

Hypothesis: specified neuter entails [–animate]

3.2. Icelandic (after Thorvaldsdóttir 2019)

Setting aside one-conjunct agreement,
   ➢   for a human (sentient) CoordP [+F] ⇔ [female] for all conjuncts, [+M] otherwise
   ➢   for an inanimate CoordP, [+M|F] ⇔ [M|F] for all conjuncts, [–M; –F] otherwise

However, the neuter agreement is possible also with two masculine animates!

(16) Hundur-inn   og   fugl-inn   eru   þyrst-Ø.   Thorvaldsdóttir 2019
   dog-the.M.SG and bird-the.M.SG are   thirsty-N.PL
   The dog and the bird are thirsty.

Thorvaldsdóttir 2019: this is default agreement

She also notes that neuter plural is a semantic gender used for nouns denoting mixed gender groups (*mæðgin* 'mother and son', *feðgin* 'father and daughter', *hjón* 'husband and wife')

3.3. Latin (after Johnson 2013, 2014)

Setting aside one-conjunct agreement,
   ➢   for a human (sentient) CoordP [+F] ⇔ [female] for all conjuncts, [+M] otherwise
   ➢   for an inanimate CoordP, [+M|F] ⇔ [M|F] for all conjuncts, [–M; –F] otherwise

Alas, no proper experiments can be run here.

4.   SELECTED REFERENCES

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