Deriving concord in Slavic:
Variation conditioned by percolation and impoverishment

bit.ly/concord-poster
bit.ly/concord-handout

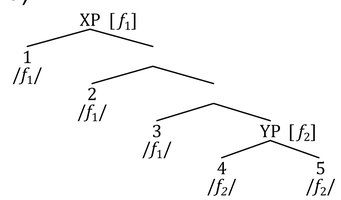
University College London
Anna Grabovac – anna.grabovac.16@ucl.ac.uk

Concord as spell-out

CONCORD – agreement phenomena typically found in the nominal domain

- Results from the spell-out of features from dominating nodes on local terminals (Norris 2014; Ackema & Neeleman 2020)
- The system attempts to maximize the concord domain by percolating features as high as possible (in the syntax) and by realizing them as low as possible (in concord)

(1)



Two sources of language variation

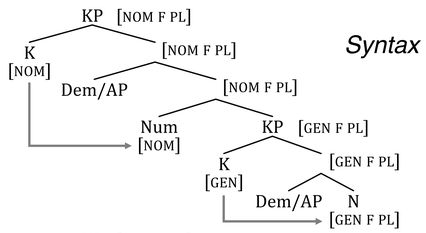
- Height of percolation
  - Determined by relativized heads (Di Sciullo & Williams 1987)
  - Impacted by the degree of (semi)lexicality of the heads involved (Corver & van Riemsdijk 2001; Klockmann 2017, a.o.)
- Impoverishment
  - The application of language-specific impoverishment rules affects the outcome of concord
  - Possible method of domain extension

❖ **A variety of Slavic patterns fall out easily ⟹ novel analysis of numeral constructions**

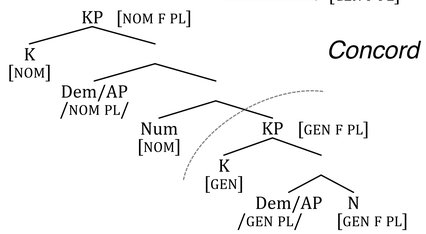
Aligned heterogeneous concord

(2) <èt-i> pjat' <èt-ix>
this-NOM.PL five.NOM this-GEN.PL
star-yx knig
old-GEN.PL book.GEN.F.PL *Russian*
'these five old books'/'five of these old books'

(3a) *Syntax*



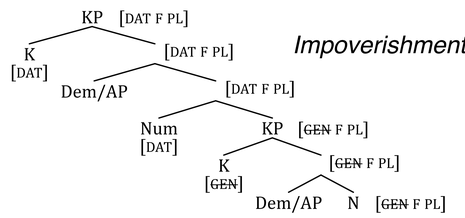
(3b) *Concord*



Downward homogeneous concord

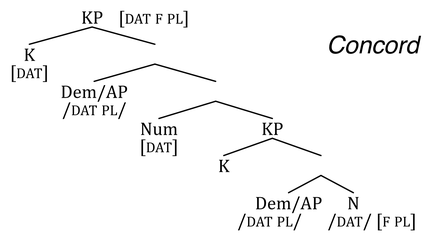
(4) <èt-im> pjat-i <èt-im>
this-DAT.PL five-DAT this-DAT.PL
star-ym knig-am
old-DAT.PL book-DAT.F.PL *Russian*
'to these five old books'/'to five of these old books'

(5a) *Impoverishment*



[GEN] → ∅ / nodes dominated by [DAT]

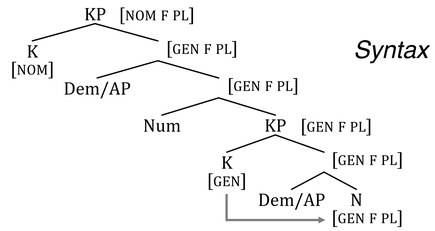
(5b) *Concord*



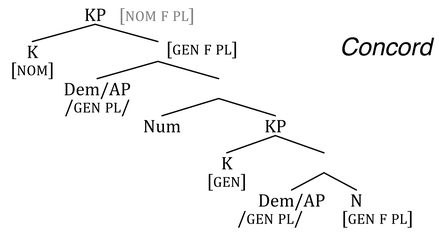
Upward homogeneous concord

(6) <ov-ih> pet <ov-ih>
this-GEN.PL five this-GEN.PL
star-ih knjig-a
old-GEN.PL book-GEN.F.PL *BCS*
'these five old books'/'five of these old books'

(7a) *Syntax*



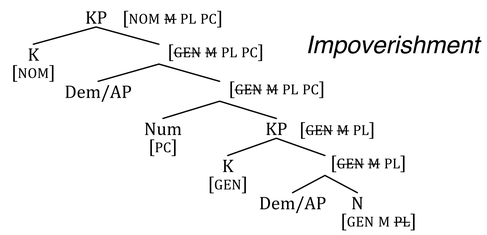
(7b) *Concord*



Non-aligned heterogeneous concord

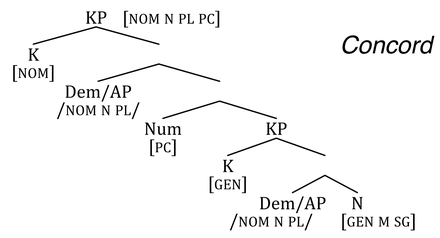
(8) <ov-a> dv-a <ov-a>
this-NOM.N.PL two-N this-NOM.N.PL
gladn-a tigr-a
hungry-NOM.N.PL tiger-GEN.M.SG *BCS*
'these two hungry tigers'/'two of these hungry tigers'

(9a) *Impoverishment*



[GEN] → ∅ / non-terminal nodes dominated by [PC]
[M] → ∅ / non-terminal nodes dominated by [PC]
[PL] → ∅ / N dominated by [PC]

(9b) *Concord*



Agreement-based alternatives

- Rely on atypical probes (e.g., AP)
- Compromise either 1-1 mapping or c-command (Ackema & Neeleman 2020)
  - Maintain c-command ⟹ 1-1 mapping must be abandoned since features (case, φ) originate on different nodes
  - Maintain 1-1 mapping ⟹ only KP (which dominates the probe) contains all relevant features
- Potential solution: probe agrees with N once N's features are valued
  - Problematic with aligned and non-aligned heterogeneous patterns
  - Both upward and downward agreement must be allowed
  - Bidirectional agreement may be avoided with pied-piping (e.g., Klockmann 2017), but this usually results in violations of Universal 20 (Greenberg 1963; Cinque 2005)

Conclusions and takeaways

- Concord via domination provides a simple analysis of general concord patterns
- The system easily derives complex patterns, such as those found with Slavic numeral constructions
- Impoverishment has a global effect within the extended projection
- Attributing language variation to impoverishment and the semi-lexicality of numerals produces a cross-linguistically cohesive account

References: **Ackema, Peter & Ad Neeleman**. 2020. Unifying nominal and verbal syntax: Agreement and feature realization. In Alexiadou, A. & H. Borer (eds.), *Nominalization: 50 years on from Chomsky's* Remarks, 29–52. Oxford: Oxford University Press. **Cinque, Guglielmo.** 2005. Deriving Greenberg's Universal 20 and its exceptions. *Linguistic Inquiry* 36.3: 315–332. **Di Sciullo, Anna Maria & Edwin Williams**. 1987. *On the definition of word*. Cambridge, MA: MIT Press. **Greenberg, Joseph**. 1963. Some universals of grammar with particular reference to the order of meaningful elements. In Greenberg, J. (ed.), *Universals of language*, 73–113. Cambridge, MA: MIT Press. **Klockmann, Heidi.** 2017. *The design of semi-lexicality: Evidence from case and agreement in the nominal domain*. Utrecht: LOT. **Norris, Mark.** 2014. A theory of nominal concord. Doctoral dissertation, University of California Santa Cruz.