

## Coordinating Adjectives in Italian: A Multidominant, Summative Agreement Approach

Luke Adamson, Harvard University (NSF Postdoctoral Research Fellowship, Grant No. 1911708)

**Background:** Coordinated nominal expressions such as (1) and (2), where two or more singular (SG)-inflected adjectives modify a plural- (PL) inflected noun, present a puzzle (Belyaev et al 2015, Arregi and Nevins 2013, Harizanov and Gribanova 2015, Shen 2018, a.o.): if modifiers agree with a head noun in number, how can the noun inflect for different number features from the modifiers?

- (1) le mani destra e sinistra (2) i poteri legislativo, esecutivo e giudiziario  
the.PL hand.PL right.SG and left.SG the.PL power.PL legislative.SG executive.SG and judiciary.SG  
'the right hand and the left hand' 'the legislative, executive, and judiciary powers (three)'

**Proposal:** We propose that Italian (split-)coordinated modifier expressions are derived through multidominant structure in which two coordinated phrases containing distinct *a*Ps dominate the same *n*P (see Bobaljik 2017 on a related suggestion for adjectival hydras in Romance). The PL number of the noun in (1-2) is the result of resolution of SG features on *n*P, similarly to coordination resolution (see Grosz 2015 on summative agreement in RNR), with *a*P agreement being for the *n*P's resolving [SG] features. Contrasting postnominal and prenominal adjectives, we further argue that this type of 'semantic' agreement is restricted to configurations where the phrase containing the *n*P c-commands the agreement target, supporting a general agreement asymmetry independently observed for (among other things) semantic agreement with committee nouns in British English (Smith 2015, 2017). This proposal has implications for the theory of both nominal and coordinate structure, and for the workings of DP-internal agreement.

**Data:** Though it is tempting to attribute SG features of the *a*Ps to agreement with relative pronouns inside separate (reduced) relative clauses, this is not viable: i) the adjectives need not have predicative sources (3) and ii) relativization with full clauses is not possible for split reference (4).

- (3a) i presidenti [italiano e iraniano] (3b) #Il presidente è italiano.  
the.M.PL president.PL Italian.M.SG and Iranian.M.SG the president is Italian  
'the president of Italy and the president of Iran' 'The president is the president of Italy.'  
(4) \*i gemelli<sub>j+k</sub>[[che è simpatico]<sub>j</sub> e [che è antipatico]<sub>k</sub>  
the.M.PL twin.PL that is nice.M.SG and that is mean.M.SG  
'the twins, one who is nice and one who is mean'

Under an analysis where the two *a*Ps are coordinated (Arregi and Nevins 2013 for Bulgarian), *a*P stacking (of non-constituents) in each conjunct is incorrectly predicted to be impossible, whereas a multidominant analysis correctly predicts it to be grammatical (5). Under an ATB analysis in which identical *n*Ps move out of each conjunct (Harizanov and Gribanova 2013 for Bulgarian), neither gender nor number mismatch between conjuncts is expected to be possible, contrary to fact (6-7).

- (5) ?i lobi [[frontale destro] e [occipitale sinistro]]  
the.M.PL lobe.PL frontal.SG right.SG and occipital.SG left.SG  
'the frontal right lobe and the occipital left lobe (of the brain)'  
(6) ?i presidenti italiano e singaporiana  
the.M.PL president.PL Italian.M.SG and Singaporean.F.SG  
'the president of Italy (a man) and the president of Singapore (a woman)'  
(7) ?gli angoli [acuti e retto] del triangolo

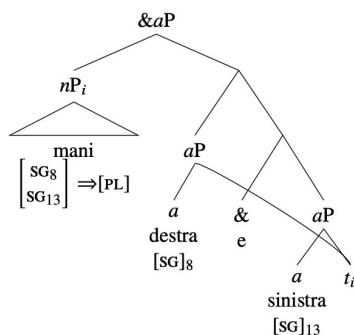
the.M.PL angle.PL acute.PL and right.SG of.the triangle

‘the acute angles and the right angle of the triangle’

A multidominant analysis also correctly predicts that the nominal phrase shared between the conjuncts can be internally complex, containing its own modifier (8), and also that a modifier outside of the coordinate phrase can scope over the entire coordinate phrase (9).

- (8) *i partiti politici [liberale e conservatore]* (9) *le mie belle mani destra e sinistra*  
 the.PL party.PL political.PL liberal.SG and conservative.SG the my beautiful hands right and left  
 ‘the liberal and conservative political parties (one of each)’ ‘my beautiful left and right hands’

**Analysis:** Adopting a roll-up framework for postnominal ordering in Romance (e.g. Cinque 2010) with an *aP* over *nP* structure, we propose that postnominal *aP*s undergo spec-head agreement with moved phrases (cf. Nevins 2011, Bonet et al. 2015). Following Grosz (2015), multidominant structure licenses “summative” resolution of multiple features on the same node: for the present cases, multiple number or gender features can be present on an *nP* shared between conjuncts, with modifiers in each agreeing for one of the resolving features. In (1), the *nP* containing *mani* bears two [SG]s with distinct referential indices (see Grosz 2015), and each modifier agrees with a distinct [SG]. As in coordination, the resolution of two [SG]s on the *nP* yields [PL] (expressed on the noun). The tree below shows a simplified structure of (1) (a revision to which is offered in the presentation).



The summative analysis correctly predicts that, as in

coordination resolution, mismatch for gender/number between the conjuncts is grammatical (6,7).

Following Smith (2015,2017), we take resolving agreement to involve interpretable features, which are only accessible when a goal c-commands the probe: a configuration treated here (more restrictively) as spec-head. We correctly predict that prenominal *aP*s, which c-command *nP*s, cannot bear the resolved PL marking (9), and that feature mismatches are impossible with prenominal *aP*s (examples not included).

- (9) *la(/\*le) vecchia e nuova generazione/\*generazioni di X-Men*  
 the.F.SG(the.F.PL) old.SG and new.SG generation.SG/\*PL of X-Men  
 ‘the old generation and new generation of X-Men’

This agreement analysis also correctly derives the behavior of modified conjoined *nP*s, for which a prenominal asymmetry has been observed (e.g. Cinque 2010): the resolved plural is grammatical for a postnominal *aP* but not a prenominal *aP* (10).

- (10) (Ci trattò) con {immenso/\*immensi rispetto e affetto /rispetto e affetto immensi}.  
 Us treated with immense.SG/PL respect.SG and affection.SG respect and affection immense.PL  
 ‘They (sg) treated us with immense respect and affection.’

**Implications:** The current work contributes to our understanding of what types of coordinated expressions are derived through multidominance, and synthesizes a theory of agreement with a theory of coordination resolution. The agreement asymmetry supports i) a unity of agreement relations in the clausal domain and in the nominal domain, *pace* some influential analyses of nominal concord (e.g. Norris 2014) and ii) a dual-feature approach to semantic agreement. The work also addresses cross-linguistic extensions, pointing to potential sources of variation that may capture differences observed for German, Hindi, and Bulgarian, among others.

**References:** Arregi, K. and A. Nevins. (2013). Contextual neutralization and the elsewhere principle. Belyaev, O. et al. (2015). # mismatches in coordination: an LFG analysis. Bobaljik, J. 2017. Adjectival hydras: Restrictive modifiers above DP? Cinque, G. (2010). The syntax of adjectives. Grosz, P. (2015). Movement and agreement in RNR constructions. Harizanov, B. and V. Gribanova. (2015). How ATB movement interacts with nominal concord in Bulgarian. Norris, M. (2014) A theory of nominal concord. Shen, Zheng. (2018). Feature arithmetic in the nominal domain. Smith, Peter. (2015) Feature mismatches: Consequences for syntax, morphology, and semantics. Smith, Peter. (2017). The syntax of semantic agreement in English.