It's All in the Syntax: Closest Conjunct Agreement in Spanish

Overview. The principles governing the interaction of coordination and agreement processes are a current research question (Nevins & Weisser, 2018; Bhatt & Walkow, 2013). This study outlines how this interaction occurs in Spanish [D N & N] structures that display closest conjunct agreement (CCA) with pre- and postnominal adjectives (1b-c). I argue that both prenominal and postnominal CCA found in such structures may be explained syntactically. Prenominal CCA is explained via syntactic Agree. Postnominal CCA is triggered by movement of ConjP out of a reduced relative clause (PrtP). It results from both a certain semantic specification of ConjP and the unavailability of suitable goals for AP in the structure, forcing it to expand its probe search space and value both gender and number features from N_2.

Evidence. Pre- and postnominal CCA is obligatory in [D N & N] structures that possess a *joint* reading, in which both N conjuncts refer to the same entity. *Split* readings, denoting two distinct entities, typically possess structure [[DN]&[DN]], in which prenominal elements agree with the conjunct they modify. Postnominal elements either agree with the conjunct they modify or the coordination as a whole. For number features, this is always plural. Gender agreement either defaults to masculine if the conjuncts are of mixed gender or matches the gender of both conjuncts. These distinctions notwithstanding, corpus data from both plural (Spanish Language Corpus (Web-Dialects; CdE:New) (Davies 2016)) and singular (Demonte & Pérez-Jiménez, 2012) conjuncts demonstrate that CCA is an available and frequent agreement strategy in Spanish [D N & N] structures that possess readings ambiguous between *joint* and *split*. In such structures, prenominal CCA is obligatory and postnominal CCA is optional (40-50% of cases).

Analysis. I analyze CCA structures in which both pre- and postnominal modifiers scope over the entire coordination as NP conjunction (2) (cf. Camacho, 2003). *Joint-split* readings are the result of *set product* (Heycock & Zamparelli, 2005): given two or more sets (each conjunct's denotation), the operation takes a member from each set, performs set union on the resulting tuple, and returns the set of all results (3).

I assume both (morpho)syntactic and semantic features are present in the derivation of the coordinate structure (4) (e.g. Wechsler, 2011). These feature sets reflect the existence of simple versus complex probes (Murphy & Puškar, 2018): simple probes possess only one set of features and need to value all features from the same goal, while complex probes may value distinct features from different goals and participate in Multiple Agree (e.g. Carstens, 2001). N conjuncts are doubly valued for CONCORD (morphosyntactic) (number, gender, case) and INDEX (semantic) (number, gender, person) features. D is also doubly valued. AP possesses only CONCORD features. ConjP posseses only INDEX features, which it values by semantically joining the indices of the N conjuncts. Its number feature can be either singular if the structure incurs a *joint* reading or plural if it is *split*. Crucially, I follow Bošković (2009) in assuming that features acting as probes undergo deletion as soon as they are targeted by a probing operation.

Prenominal CCA may be explained via Agree (Chomsky, 2000). D and AP (generated as the specifier of a functional head of the extended projection of NP (Cinque, 2010)) probe down the tree to value features. AP, a simple probe, needs to value both number and gender features from the same goal; it finds a suitable goal in N_1, matching all CONCORD features. D, possessing both sets of features, is a complex probe. After AP is valued, D agrees with AP in its CONCORD features; these features are morphologically expressed. In the case that prenominal AP is not present, D agrees in its CONCORD features with N_1. D values its INDEX features from ConjP, which impact subsequent verbal agreement if ConjP is in subject position.

Postnominal CCA in joint-split constructions is optional (2). I assume postnominal AP is generated in a reduced relative clause (PrtP) for indirect modification (Cinque, 2010; Demonte & Pérez-Jiménez, 2012). ConjP is base generated below AP and moves up to eventually merge in Spec PrtP (Bhatt, 1999, Sleeman, 2017; cf. Kayne, 1994, Cinque, 2010). PRO functions as a purely syntactic object that possesses no features (Iatridou et al., 2001). For agreement, postnominal AP has two options. Option (i), resulting in canonical agreement that resolves the genders and numbers of the conjuncts, occurs if ConjP lacks a joint-split reading. In this case, ConjP's features are the union of its conjuncts. At the beginning of the derivation, AP lacks

a suitable goal for Agree in terms of CONCORD features, so it must value its features from ConjP's INDEX features. Option (ii), resulting in CCA, occurs when ConjP possesses a joint-split reading. In this case, ConjP, rather than joining the semantics indices of its conjuncts, stores the featural information of each conjunct independently. Such a complex structure prohibits AP from successfully probing ConjP's features. Additionally, N_1 is not a suitable target for AP, as it is already targeted by prenominal elements (either AP or D, in the absence of prenominal AP). Movement of ConjP to Spec PrtP is triggered to fulfill PrtP's EPP feature and to allow for reconstruction effects of ConjP inside PrtP (Bhatt, 2002). As a result of this movement, AP expands its search space and values features from N_2, resulting in CCA.

Further issues and analysis. For the current study, the PRO inside of the reduced relative clause that hosts the postnominal AP poses a potential compositional problem. I follow Bhatt (1999, 2002) in assuming that PRO is semantically vacuous and combines with the relativized subject via Direct Predication, yielding <e,t>. Direct Predication is a strictly local operation, such that no A' movement is necessary for relativization (i.e. predicate formation) on the subject position. PRO can thus combine with ConjP via predicate modification.

Theoretical implications. Nevins & Weisser (2018) outline three classes of proposals that address CCA across languages. Spanish has been analyzed as Two-Step Agree, which situates part of agreement in PF and allows for linear-order effects (e.g. Demonte & Pérez-Jiménez, 2012; Bonet, 2013). The current proposal argues against Two-Step Agree for Spanish in favor of a fully syntactic account. The current proposal also counters proposals that that ConjP either comes with an inherent feature of [-SING] (Dalrymple &, Kaplan 2000) and/or is unspecified for gender (Badecker, 2007) and instead argues for a complex featural makeup of ConjP that actively participates in Agree.

Examples and Figures.

(1) a. Esta canción anima los corazones y mentes cubanos.
this song animates the.M.PL heart.M.PL and mind.F.PL cuban.M.PL
'The song inspires Cuban hearts and minds.'

b. ?Esta canción anima los corazones y mentes **cubanas**.
this song animates the.M.PL heart.M.PL and mind.F.PL cuban.F.PL
'The song inspires Cuban hearts and minds.'

c. Esta canción anima **las/*los** mentes y corazones cubanos.
this song animates the.F.PL/*the.M.PL mind.F.PL and heart.M.PL cuban.M.PL
'The song inspires Cuban hearts and minds.'

(2) un horno criollo para cocer **su** **propio** pan y pizza
a oven homemade for to-cook POSS.3.SG own.M.SG bread.M.SG and pizza.F.SG
deliciosa / **deliciosos**
delicious.F.SG / M.PL
'a homemade oven to cook his/her own delicious bread and pizza'

(3) Set Product (SP): $SP(S^1,..., S^n) = _{def} \{X : X=A^1 \cup ... \cup A^n, A^1 \in S^1,..., A^n \in S^n \}$

(4) $[_{DP}$ D $[_{XP}$ AP X $[_{PrtP}$ $[_{ConjP}$ n_1 Conj $n_2]_i$ $[PRO_i$ AP/Prt $t_i]$]]]

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