How much can you see: What a reprojection-based account of discontinuous agreement would say

Overview I propose a novel syntactic approach to discontinuous agreement, where discontinuity arises through reprojection in order to achieve full agreement. The proposed approach revives the syntactic perspective on discontinuous agreement and explores an analysis of the phenomenon which does not resort to an additional morphological operation like Fission (see e.g. Noyer 1992; Halle 1997). The relevant part for the purpose of this talk is that the central aspect of the proposed account - reprojection in order to achieve full agreement - provides a great basis for a discussion of myopia. Thereby, the analysis raises the following two questions related to locality domains: (i) Are derivations truly myopic? Or (ii) how much may a derivation see in order to know whether the costs of a repair will be worth it, i.e. how much information is available at each derivational step?

Discontinuous agreement describes a phenomenon where φ-features of one argument are expressed through more than one morpheme in the surface form (see the boxes in the Didinga example in (1)). Thus, the main challenge for theories of discontinuous agreement is to explain how *one* syntactic agreement node results in *two* morphemes in the surface form. The account discussed in this talk solves this challenge in the syntax.

(1) h-à-ìrìt-í
1-ASP-cough-1SG
'I am coughing'

Didinga – I am going to illustrate the new approach on the basis of discontinuous agreement in Didinga (Surmic/South Sudan). Didinga exhibits discontinuous agreement in every first person in subject agreement with intransitive verbs (see (1) and (2)). In discontinuous agreement in Didinga, φ-features are exponed with a prefix (*h*-) and different suffixes. Taking a closer look at the exponents, reveals that *h*- expones the [author] feature while the suffixes expone the remaining person and number features. Didinga is especially interesting in that respect because it constitutes a rare combinatorial type where both exponents realize different sub-features of person.

(2) a. h-à-ìrìt-tá
1-ASP-cough-1PL.EXCL
'We (excl.) are coughing'

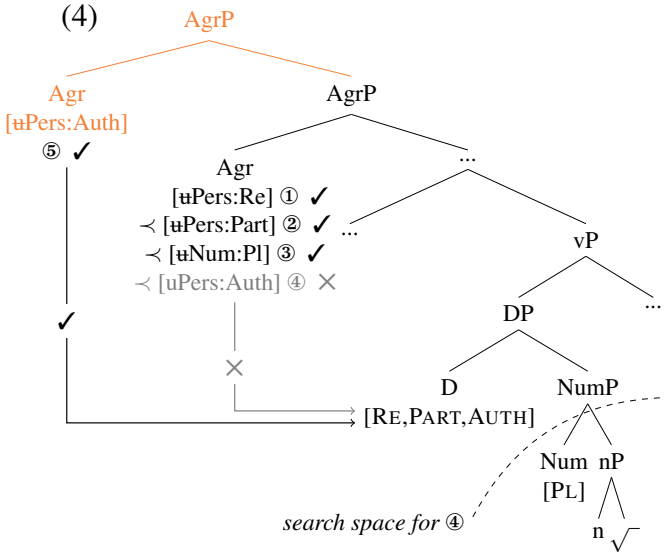
b. h-à-írìt-ì
1-ASP-cough-1PL.INCL
'We (incl.) are coughing'

A syntactic account – In a nutshell, the account consists of two parts: (i) The use of reprojection as an independently proposed syntactic concept (see e.g. Fanselow 2004; Georgi & Müller 2010; Martinović 2022) in order to create a second terminal node in the syntax which leads to the insertion of more than one exponent. And (ii) the connection of reprojection to Agree so that reprojection acts as a repair mechanism if a probe could not be saturated in a first cycle of Agree. Accordingly, discontinuous agreement is the result of reprojection in order to accomplish agreement in this account. In the following, I sketch a concrete implementation of the proposed syntactic account based on the Didinga data. First, I adopt from Ritter (1991) and Danon (2011) among others that person features are located on D and number features on Num in the DP. Hence, person appears higher than number on a goal. Furthermore, I assume that φ-features do not probe in a single bundle but separately (extending e.g. Béjar 2003). I assume that these probes exhibit a language-specific order (see e.g. Georgi 2014 for the language-specific ordering of Merge and Move features). Thus, Agree operations triggered by these probes apply sequentially. For Didinga, I propose the order of probes in (3).

(3) *Order of probes in Didinga:* [uPers:Re] $\prec$ [uPers:Part] $\prec$ [uNum:□] $\prec$ [uPers:Auth]

For the interaction of multiple probes on the same head, I adopt the principle of Nested Agree proposed in Amato (2023) which says that the search space of a probe starts at the point where the previous probe has carried out Agree. The tree in (4) illustrates the derivation with the first person exclusive in Didinga (see (2-a)). The derivation starts with the colorless part of the tree. The first probe searches for a [Re] feature and agrees with the D head (①). Following the principle of Nested Agree the next probe starts its search space at the point where the previous probe has carried out Agree. This works for the next two probes (②, ③). Crucially, this is not the case when it comes to the final probe [uPers:Auth]. The previous probe [uNum:□] agrees with Num. Following the pinciple of Nested Agree, this means that the search space for [uPers:Auth] starts at Num. However, in the case of a first person, the author feature lies on D higher in the tree. Thus, the probe cannot reach the [author] feature from its original position (④). As a repair, the probe reprojects, creating a second terminal Agr node (shown in orange). Subsequently, the probe starts a new cycle of Agree where it can finally find the [author] feature (⑤). Hence, in the case of a first person in Didinga, the derivation results in a distribution of φ-features across two terminal Agr nodes. This leads straightforwardly to the insertion of two exponents (i.e. discontinuous agreement). Note also that the derivation in Didinga provides exactly the distribution of φ-features that we see in the exponents in (1) and (2) where one of the discontinuous exponents realizes the author feature while the other exponent realizes the remaining person and number features. For reasons of space, I cannot provide the derivation of the second and third person in Didinga in this abstract. However, the crucial point is that, in these cases, all relevant person probes are ordered before the number probe (see (3)). Thus, in the second and third person, there won't be a reprojecting probe and all φ-features will be gathered on a single terminal node (leading to the insertion of a single exponent).

(4)



How much can you see? - This question becomes highly relevant by evaluating the process of reprojection (shown in orange in (4)). Reprojection takes place in order to enable [uPers:Auth] to start a new cycle of Agree and find its corresponding feature on D. The question is whether the information that an [author] feature is present and that reprojection will be worth it is already available at this point in the derivation. The answer to this question offers the possibility to discuss (apparent) look-ahead conflicts and its connections to cyclic optimization. In the talk, I provide an implementation of the above sketched analysis in Harmonic Serialism (Prince & Smolensky 1993, 2004, McCarthy 2000). The raised question centering around the present information at each derivational step connects, thereby, directly to the different sizes of cyclic domains which have been proposed in the syntactic literature, ranging from clauses (Ackema & Neeleman 1998), phases (Fanselow & Cávar 2001, Müller 2000a), phrases (Müller 2000b, Heck & Müller 2000, Fischer 2004, Heck 2004), after each step (Chomsky 2000, Epstein & Seely 2002) or being extermely local (Heck & Müller 2013).

Selected references

Amato, Irene (2023). *Auxiliary Selection in Italo-Romance: A Nested-Agree Approach.* John Benjamins Publishing Company • Georgi, Doreen (2014). *Opaque interactions of Merge and Agree: On the nature and order of elementary operations*: Universität Leipzig dissertation.