

## DOUBLE-AGREEMENT VERBS IN BRAZILIAN SIGN LANGUAGE

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Agreement in Sign Languages (SLs) has been largely debated by many researchers. Although there are different theoretical proposals, it is clear that different types of verbs trigger different arrays of agreement. If we consider a more general classification of verbs, regarding the agreement pattern they show, we can classify them into three different categories: (i) plain verbs; (ii) regular agreement verbs – RAV; and (iii) backward agreement verbs - BAV. The examples are given in (1-3).

- (1) JOHN<sub>a</sub> LOVE MARY<sub>b</sub> ‘John loves Mary.’
- (2) JOHN<sub>a</sub> <sub>a</sub>HELP<sub>b</sub> MARY<sub>b</sub> ‘John helps Mary.’
- (3) JOHN<sub>a</sub> <sub>b</sub>INVITE<sub>a</sub> MARY<sub>b</sub> ‘John invites Mary.’

In Brazilian Sign Language (Libras), the verb LOVE (1) is a plain verb. This kind of verb does not show agreement relations overtly on its morphology. There is no movement or path of the verb associated with the loci of its arguments. HELP (2) is an example of a regular agreement verb. This group of verbs shows agreement by means of movement and/or orientation features. To put it differently, there is a movement between locations associated with the arguments: it goes from the locus of the subject to the locus of the object. INVITE (3) is also an agreement verb. However, the path of the movement goes from the object location towards the subject location, the opposite of (2). This group of verbs is called backward agreement verb (BAV).

This work aims at presenting a syntactic derivation for RAV and BAV, based on some recent findings within the Minimalist Program and on the theory about agreement, Case and ergativity (Chomsky 2001; Miyagawa 2010; Baker 2008; Woolford 2006; and others).

Chomsky (2001) claims that Case and agreement are two sides of the same coin. However, Baker (2008) shows that this close relation is not straightforwardly consistent through all the languages around the globe. In this sense, Baker proposes the Case-Dependency of Agreement Parameter: “F agrees with DP/NP only if F values the case feature of DP/NP or vice versa” (Baker, 2008: 155). In this sense, according to Baker, most languages present a very close relation between Case and agreement, because they set this parameter.

The proposal here is that the Case-Dependency of Agreement Parameter is set in Libras. Therefore, the agreement pattern will depend on the Case received by the DPs during the syntactic derivation. Once there is no case marker in the language, we consider that the agreement relations in the sentence will reflect the Case borne by each DP.

Following Chomsky (2001), Miyagawa (2010), and others, agreement is the result of an Agree relation between a  $\phi$ -probe and the  $\phi$ -features of a DP. Once there are two different agreement slots in Libras, there are two different  $\phi$ -probes in the language. Following linguistic tradition, we can say that one  $\phi$ -probe is related to subject agreement and the other one is related to object agreement. The former is merged on C and percolates down to T (Chomsky 2008, Miyagawa 2010) and the latter is merged on the head of vP.

According to Quadros (1999), Libras is a nominative language. So, subjects are marked with nominative Case and objects receive accusative Case. Considering Regular Agreement Verbs we can claim that the first slot, which agrees with the subject, actually agrees with the nominative argument of the sentence. On the other hand, the second slot agrees with a non-nominative argument, to wit the accusative DP.

- (4) [SUBJECT<sub>SUBJ</sub> VERB<sub>OBJ</sub> OBJECT] → [SUBJECT<sub>NOM</sub> NOMINATIVE.DP VERB<sub>NON-NOMINATIVE.DP</sub> OBJECT<sub>ACC</sub>]

Thus far, the claim is that RAVs show a nominative array of agreement, in which the subject of the sentence bears nominative Case and agrees with the  $\phi$ -probe on T; therefore, agreement occurs on the first slot of the verb. The object is marked with accusative Case and agrees with the  $\phi$ -probe on v (marked on the second agreement slot of the verb). Note that there is a very close relation between the Case of the DP and the nature of the  $\phi$ -probe: the  $\phi$ -probe on T agrees with the nominative DP and the  $\phi$ -probe on v agrees with the accusative DP.

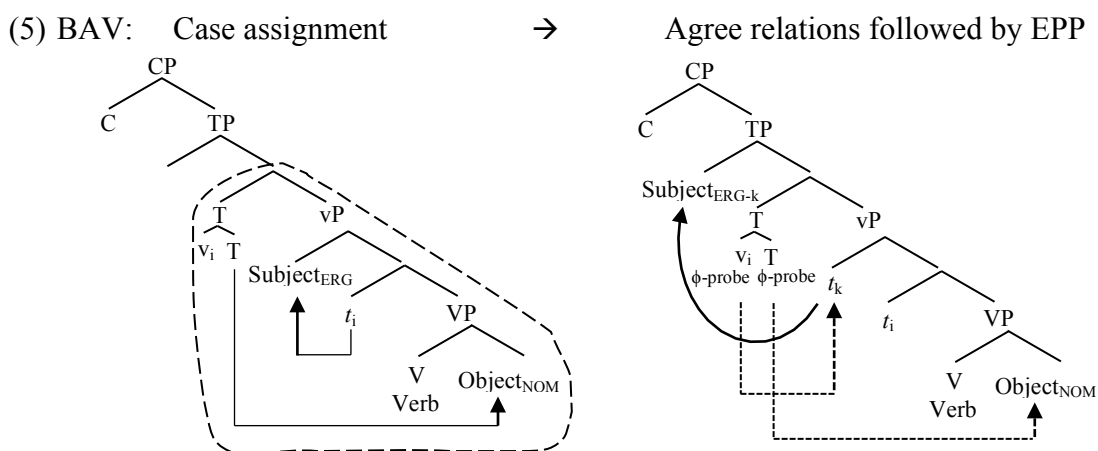
In Backward Agreement Verbs, the first agreement slot of the verb agrees with the object of the sentence, while the second agreement slot agrees with the subject. We have considered so far that the first agreement slot of the verb is the realization of the  $\phi$ -probe on T and, therefore, agrees with a nominative DP. In this sense, the conclusion is that the object receives nominative Case.

However, this claim brings us some questions, to wit: (i) which Case does the subject receive? (ii) how the object receives the nominative Case, if apparently it does not move to a position outside of the vP? (iii) why the non-nominative subject moves up to Spec,IP in order to satisfy the EPP, but not the nominative object?

First, we have to define the Case of the subject of a BAV sentence. By doing the tests proposed by Woolford (2006), we claim that the subject receives inherent ergative Case. For example, one of those tests points to the fact that all subjects of backward agreement verbs are typically agents. So, this  $\theta$ -relatedness reinforces our saying that the subject of a RAV receives inherent ergative Case.

To answer the second question, we propose that in Brazilian Sign Language there is a movement of v to T<sup>1</sup>. This v-to-T movement makes the in situ object visible to T and available to receive nominative Case. This claim is consistent with the notion of phase extension (Den Dikken, 2007). We also propose this movement, because the subject establishes an Agree relation with the  $\phi$ -probe on v, which is only possible if v is higher in the tree than the subject. Moreover, it is important to say that in Libras there is no V-to-T movement (Quadros, 1999) so the verb stays in its base-generated position.

Finally we need to explain why it is the ergative subject that moves to Spec,TP in order to satisfy the EPP requirement. Again, the explanation relies on the v-to-T movement. According to Chomsky (2008), Miyagawa (2010) and others, what triggers the EPP is the agreement between T and a DP. However, when v moves to T, the  $\phi$ -probe of v is moved along to that position. So, this new complex head (v+T) has two  $\phi$ -probes and therefore two Agree relations with two different DPs: the subject and the object. Thus both the subject and the object are available to move to Spec,TP to satisfy the EPP. The subject is the one who moves because of the MLC (Minimal Link Condition). The syntactic derivation of a BAV is illustrated in (6).



<sup>1</sup> A similar proposal is presented by Pfau, Salzmann and Steinbach (2011). The authors claim that in DGS there is a v-to-T movement in both regular agreement verbs and plain verbs. The authors also present an analysis of backward agreement verbs as ergative constructions. However, they adopt a different theoretical background.

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