

Switch-reference and Discourse Anaphora

Guillaume Thomas, University of Toronto

Overview This presentation discusses the semantics of canonical Switch Reference (SR) marking in Mbyá, a Tupi Guaraní language spoken in Argentina, Brazil and Paraguay by approximately 30,000 speakers. Its main theoretical contribution is an argument that Same Subject marking can track discourse anaphora to sets associated with quantifiers, so that theories of SR marking must be embedded within either a dynamic theory of anaphora, or a theory of E-type anaphora. The talk also makes an empirical contribution to the literature on SR by presenting a detailed analysis of canonical SR in Mbyá, which extends its previous description by Dooley (1989). In particular, I discuss patterns of Same Subject and Different Subject marking with plural referential subjects and quantificational subjects, which present challenges for existing theories of canonical SR.

Basics of SR in Mbya Mbyá has two SR markers: *vy* (SS) and *ramo* or its reduced form *rã* (DS). These particles are attested in two constructions: as parts of sentence initial discourse connectives, and as sentence internal subordination markers. In the first use, they are essentially non-canonical SR markers, which express continuity or change of situation type across independent sentences in discourse (see Dooley 1992). In the second use, Dooley (1989) establishes that they are canonical SR markers, which indicate whether the subject of the marked subordinated clause is the same as the subject of the matrix clause. In this talk, I will only discuss canonical SR, and I leave the important question of the unification of the two uses of SR markers to further research. Dooley (1989) established that the two pivots of canonical SR constructions in Mbyá are subjects (rather than agents or topics), and that their host clauses stand in a subordination rather than coordination construction. This corroborate McKenzie's (2015) observation that canonical SR tends to be restricted to subordination constructions, while non-canonical SR tends to be restricted to coordination constructions. I take Dooley's (1989) description of the syntax of canonical SR constructions as a starting point. My focus is on identifying what counts as 'sameness' and 'difference' of pivots.

SR and Discourse Anaphora Formally precise theories of canonical SR fall in two main camps. Some analyses posit that SS marking indicates coreference/syntactic coindexation of pivots and/or binding of one pivot by the other (see e.g. Stirling 1993 and McKenzie 2012 for semantic analyses, and Finer 1985, Broadwell 1997 or Arregui & Hanink 2018 for syntactic analyses). I also include in this group analyses for which SS marking indicates identity of syntactic features that is assumed to entail coreference (Watanabe 2000, Camacho 2010). Another group of analyses treat SS marking as pivot sharing due to VP conjunction or movement (Georgi 2012, Keine 2013). All these analyses accommodate quantificational pivots only to the extent that one pivot can take scope over the other and bind it, as in the following example from Pitjantjatjara (Bowe, 1990; Georgi (2012):

- (1) Minyma tjuta-ngku pu_nu atu-ra nyina-nyí.
woman many-ERG wood chop-ANT(MERG) sit-PRES
'Many woman would be sitting around making wooden artefacts.'

By contrast, SS marking in Mbyá is used in constructions where one pivot is anaphoric/cataphoric to a set made salient by another quantificational pivot. This is illustrated in example (2), where the matrix subject is anaphoric to the maximal set (i.e. the restriction, see Nouwen 2003) of the subordinated quantificational subject. Anaphora to the reference set (intersection of the restriction and nuclear scope) is also attested in other sentences. Note that there is evidence that (2)

is a case of discourse anaphora rather than bound variable anaphora, unlike (1). Essentially, we show that a bound variable analysis incorrectly predicts that (2) should be consistent with an assertion that many villagers can speak Spanish. SS marking is also used when both pivots are quantifiers, provided the restriction of one quantifier is anaphoric/cataphoric to the maximal or reference set of the other, as illustrated in (3).

- (2) Mbovy'i tekoapygua i-jayvu kuaa espanhol py vy, o-mba'apo tekoa py.
 few villager B3-speak know Spanish in ss A3-work village in
 'Since few of the villagers can speak Spanish, they work in the village.'
- (3) Mava'eve tekoapygua nda-i-jayvu kuaa-i español py vy, mava'eve nd-o-o-i
 no villager NEG-B3-speak know-NEG Spanish in ss no NEG-A3-go-NEG
 tetã my.
 city in
 'Since no villager can speak Spanish, none of them ever goes to the city.'

Examples like (2) and (3) show that 'sameness' of pivots cannot be analyzed as coreference or binding of one pivot by the other, but must be captured as identity of discourse referents in a dynamic semantics, or else as E-type anaphora. In addition, examples of SS marking with two referential subjects as in (4) show that SS marking is not used exclusively when one pivot is anaphoric to the other:

- (4) Juan ha'e Maria o-vaẽ vy, Juan o-mo-potĩ oo.
 Juan and Maria A3-arrive ss Juan A3-caus-clean house
 'When Juan and Maria arrived, Juan cleaned the house.'

In the talk, I will argue that rather than indicating whether one pivot is anaphoric to the other, SR markers are anaphoric or cataphoric to one of the pivots, and indicate whether the value of this anaphor/cataphor is identical to the discourse referent introduced by the other pivot. More precisely, I propose that SS marking is used when a discourse referent that is syntactically associated with the maximal projection of one pivot (i.e. a subject DP) is identical to some discourse referent retrieved by anaphora/cataphora in a domain delimited by the other pivot. To illustrate, the discourse referent associated with the matrix subject DP in (3) stands for the restriction of the quantifier *mava'eve* ('no'), i.e. the set of villagers. This discourse referent is identical to the one that is retrieved by maximal set anaphora to the subordinated pivot. In (4), the discourse referent associated with the matrix subject DP stands for Juan, and is identical to a discourse referent retrieved by anaphora to the subordinated pivot 'Juan and Maria.' Indeed, both conjuncts in the subordinated subject can serve as antecedents for the SR anaphor. The same logic captures patterns of SS marking with disjunctions of referential subjects, which are not themselves referential:

- (5) Context: Juan and Maria are married. They each bought lottery tickets.
 Maria terã Juan o-gana vy, Maria o-jogua ta auto pyau.
 Maria or Juan A3-win ss, Maria A3-buy PROSP car new
 'If Maria or Juan win (the lottery), Maria will buy a new car.'

A formal analysis of the interaction of SR marking with discourse anaphora will be presented in the talk, building on Plural Compositional DRT (Brasoveanu 2010) and recent work on the integration of Compositional DRT with LFG (Haug 2014).