

## Contrastive topics in Paraguayan Guaraní discourse

The empirical basis of current formal semantic/pragmatic analyses of *contrastive topics* are languages where expressions that denote a contrastive topic are prosodically or morphologically marked, such as English, German, Korean and Japanese (e.g. Jackendoff 1972, Roberts 1996, Lee 1999, Büring 1997, 2003, Hara 2006, Wagner ms). Such analyses cannot account for contrastive topics in Paraguayan Guaraní discourse since in this language neither prosody nor the contrastive topic clitic =*katu* identify the contrastive topic. This paper develops an alternative, formal pragmatic analysis of contrastive topics in Guaraní. The paper also illustrates the methodology of exploring highly context-dependent meanings on the basis of corpora and data elicited from linguistically untrained native speaker consultants.

**Data and empirical generalizations:** The Guaraní clitic =*katu* is syntactically optional and does not contribute to the truth conditions of the utterance in which it occurs. Dictionaries typically translate =*katu* with (Spanish translations of) discourse particles such as ‘well’, ‘indeed’, ‘but’ or ‘rather’, further illustrating its highly elusive meaning. The hypothesis that =*katu* is a contrastive topic marker is based on an extensive analysis of corpus examples containing =*katu*, such as (1), and data collected in fieldwork in Paraguay with five native speakers.

- (1) [Sambo’s father ate 35 mbeju (cassava root starch pattie), his mother ate only 20 mbeju,  
ha Sámbo=**katu** ho’u 54 mbeju.  
and Sambo=CONTRAST 3.eat 54 mbeju  
‘and Sambo ate 54 mbeju.’ (Tetaña: 81)

A *contrastive topic* is an expression that is part of the theme of an utterance (the part of the utterance that is congruent with the current question under discussion (QUD)) and whose denotation is contrasted with that of members of an (implicit) set with respect to a higher QUD (e.g. Büring 2003). *Sambo* in (1) is a contrastive topic: *Sambo* is part of the theme of the utterance (which answers the implicit current QUD ‘What did Sambo eat?’) and *Sambo* is implicitly contrasted with his father and his mother with respect to the implicit higher QUD ‘Who ate what?’.

In contrast to contrastive topic markers in the well-studied languages mentioned above, =*katu* does not mark the contrastive topic of the utterance in which it occurs: =*katu* is a second-position clitic, and the contrastive topic need not be the expression it cliticizes to (prosody is shown to also not identify the contrastive topic). In the discourse consisting of (2A)/(2B), *Estádos Unídos* ‘USA’ is the focus of (2B), since it is the answer to the current QUD in (2A), while *Bob* is the contrastive topic (Bob contrasts with Juana with respect to the higher QUD ‘Who was born where?’). In the discourse (2A’)/(2B), on the other hand, *Bob* is the focus and *Estádos Unídos* ‘USA’ is the contrastive topic. As shown, =*katu* cliticizes to *Bob* in both discourses.

- (2) Who was born where?  
A: Juana was born in Argentina. Where was Bob born?  
A’: Juana was born in Argentina. Who was born in the United States?  
B: [Bób]=**katu** o-nasē [Estádos Unídos]-pe.  
Bob=CONTRAST 3-born States United-in  
‘Bob was born in the United States of America.’

The paper provides empirical evidence that an utterance with =*katu* is acceptable only if the common ground contains **I**) a salient alternative to the contrastive topic and **II**) a set of alternatives to the focus. Utterances like (3) are unacceptable because no individual other than Julia is salient, while utterances like (4) are unacceptable since there are no alternatives to the focus (i.e. of somebody buying something other than milk).

- (3) (In a context where Julia is the only salient third person.)  
 #Júlia mbo'ehára ha ha'é=**katu** chokokue (avei). [acceptable without =*katu*]  
 Julia teacher and she=CONTRAST farmer too  
 (Intended: Julia is a teacher and she is a farmer (too).)
- (4) Context: Maria runs into Celina in the supermarket and says:  
 #Ché=**katu** a-joguá-ta kamby! [acceptable without =*katu*]  
 I=CONTRAST 1sg-buy-going.to milk  
 (Intended: I am going to buy milk.)

**Formal pragmatic analysis** The contribution of =*katu* to the meaning of an utterance is given in (5). Crucially, (5) does not assume that the contrastive topic of the utterance is identified prosodically, morphologically or syntactically.

- (5) An utterance *U* containing =*katu* is felicitous only if *U* is part of a (possibly implicit) contrastive topic strategy.

The contrastive topic strategy, defined in (6), makes use of the contrastive semantic value  $[[U]]^{CT}$ , defined in (7) and adapted from Buring's work, which in turn builds on Rooth's (1992) focus semantic value  $[[U]]^f$ .

- (6) An assertion *U* in discourse *D* is part of a **contrastive topic strategy** iff
- The question move  $M_1$  that immediately dominates *U* has a non-empty set of distinct sister question moves  $\{M_2, \dots, M_i\}$ .
  - There is an question move  $M'$  that immediately dominates the moves  $M_1, M_2, \dots, M_i$ .
  - There exists a  $[[U]]^{CT}$  such that for every  $M$  in  $\{M_1, M_2, \dots, M_i\}$ ,  $[[M]] \in [[U]]^{CT}$ .
- (7) A **contrastive topic semantic value**  $[[U]]^{CT}$  of utterance *U* is a set of sets of propositions obtained by first abstracting over (part of) the theme of *U* (to create a set of propositions  $\{U_1, U_2, \dots, U_n\}$ , and then creating the focus semantic value  $[[U_i]]^f$  for each  $U_i$  ( $1 \leq i \leq n$ ).

The analysis correctly predicts that **example (1)** is acceptable: assuming the QUD for *U* is  $M_1$  'What did Sambo eat?', a set of sister question moves can be plausibly accommodated (per (6a), e.g.  $M_2$  'What did Sambo's father eat?',  $M_i$  'What did Sambo's mother eat?'), as well as a mother question move (per (6b), e.g.  $M'$  'Who ate what?'). Following Hamblin (1973), the meaning of a question is a set of possible answers. Then, per (6c), we can obtain a  $[[U]]^{CT}$  by abstracting over *Sambo* (which is part of the theme of *U*) and *35 mbeju* (the focus), such that for every  $M$  in  $\{M_1, M_2, M_i\}$ ,  $[[M]] \in [[U]]^{CT}$ , namely  $[[U]]^{CT} = \{\{\text{Sambo ate 54 mbeju, Sambo ate cassava root, Sambo ate a chicken leg...}\}, \{\text{Sambo's father ate 35 mbeju, Sambo's father ate cassava root, Sambo's father ate a chicken leg...}\}, \{\text{Sambo's mother ate 20 mbeju, Sambo's mother ate cassava root, Sambo's mother ate a chicken leg...}\}, \dots\}$ . **Examples (3) and (4)**, on the other hand, are correctly predicted to be unacceptable since they fail (6c) and (6a), respectively.

As in other languages, the contrastive topic strategy can be largely implicit in Guaraní, as in example (1). Evidence that =*katu* presupposes a contrastive strategy, as given in (5), comes from elicited discourses in which the question moves are all or mostly explicit, as well as utterances where =*katu* occurs under the scope of a modal, in the antecedent of a conditional or the complement of a propositional attitude verb like *-mo'ã* 'think/believe'.

**Implications:** Guaraní =*katu* is a contrastive topic marker but differs from other such markers in e.g. not presupposing the adversative/polarity implication. The proposed pragmatic analysis extends the formal treatment of contrastive topics to Guaraní, a language under-represented in semantic/pragmatic research, and allows for a cross-linguistic comparison of contrastive topics.