

## An African perspective on clause typing and embedded questions.

Tonjes Veenstra (ZAS Berlin), Laura J. Downing (Göteborg University) & Marleen van de Vate

Karttunen (1977: 39) considers 'indirect alternative and yes/no questions and single and multiple wh-questions as belonging to the same syntactic category.' The Clause Typing Hypothesis (Cheng 1997) essentially states that the clause type/force of a sentence is determined in overt syntax. We show that both claims cannot be upheld. The evidence comes from the syntax and semantics of embedded questions in Bantu languages (Tumbuka), and Benue-Congo languages (Igbo). We show that in these languages embedded questions are syntactically different from root questions, and that embedded questions are not syntactically marked as questions, but realized as relative constructions instead.

In Tumbuka, two different syntactic constructions are used to form indirect questions, a, so-called, *kuti*-construction (1a) or a relative construction (1b):

- (1) a. *Mwanakazi wa-ku-zizwa kuti Mary wa-ka-cita vici mayiro.*  
1.woman 1SBJ-PRES-wonder that M 1SBJ-PST-do what 6.yesterday
- b. *Mwanakazi wa-ku-zizwa ico Mary wa-ka-cita mayiro.*  
1.woman 1SBJ-PRES-wonder 7.REL M 1SBJ-PST-do yesterday  
BOTH: 'The woman wonders what Mary did yesterday.'

The *kuti*-construction embeds a root question; the relative construction is not possible with root questions. This gives the apparent mismatch between the syntax and semantics of the relative construction. This raises two research questions: (A) Is there a difference in interpretation between the two constructions? (B) Why can relative constructions be interpreted as embedded questions?

Semantic approaches to embedded questions predict an asymmetry in the interpretation and distribution of these two constructions. To answer (A), we investigate two semantic distinctions that could potentially set apart the two embedded question strategies of Tumbuka: Extensional vs. Intensional distinction (in the sense of Groenendijk & Stokhof 1984), and Concealed Questions (Nathan 2005, Frana 2010). We predict that: (a) if the extensional/intensional split plays a role in Tumbuka, only intensional verbs like *kuzizwa* (= 'to wonder') are able to embed the *kuti*-construction, and (b) if the relative construction corresponds to a concealed question, only extensional verbs like *kumanya* (= 'to know') should be able to embed the relative construction. These expectations are not borne out, however, as illustrated in (2a-b) and (1a-b):

- (2) a. *kuti-construction*  
*Musepuka wa-ka-manya kuti aŵo ŵa-ka-mu-pa vi-wangwa m-baani.*  
1.boy 1SBJ-PST know that 2.REL 2SBJ-PST 1OBJ-give 8-present COP-2.who
- b. *relative construction*  
*Musepuka wa-ka-ŵa-manya aŵo ŵa-ka-mu-pa vi-wangwa.*  
1.boy 1SBJ-PST-2OBJ-know 2.REL 2SBJ-PST-1OBJ-give 8-presents  
BOTH: 'The boy knew who gave him presents.'

To answer (B), we argue that it is the semantic selectional criteria of the embedding verb that allows a relative clause to be interpreted as an embedded question. Furthermore, we will demonstrate that the relative constructions are not headless relatives, but one with a covert pivot. The question word interpretation of this pivot is due it being in the scope of the question-embedding predicate, thereby turning the whole relative construction into an embedded question.

Cross-linguistically, we show the same strategy occurs in Igbo, the only difference being that in this language the pivot is overt. Like Tumbuka, the embedded constituent is not formally marked as a question, and the question semantics comes from the matrix predicate.

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