

On the Syntax and Semantics of Alternative Questions in Chadic

The answerhood conditions of alternative questions have been compositionally derived in different yet related ways (von Stechow 1991, Romero & Han 2003, Beck & Kim 2006). One point of deviance between the different analyses consists in the size of the disjuncts assumed to enter semantic interpretation. To illustrate consider the alternative question in (1-Q) and its congruent answers in (1-A). (The focus structure of alternative questions – expressed by rising ‘/’ and falling ‘\’ accents – will be discussed below.) As shown in Beck & Kim (2006), the answerhood conditions of (1-Q) can be derived on the basis of the LFs in (2) (where Q is the interrogative complementizer and strike-through indicates deletion at PF). I will not go into the arguments put forward to motivate the different structures (for discussion see e.g. Han & Romero 2002). Rather, I will discuss another *a priori* possible LF that has not yet been considered in detail, see (3), where the disjuncts are full interrogative clauses. (4) shows that it is possible in principle to coordinate two *yes/no*-questions disjunctively, and that such a disjunction gives rise to the same answerhood conditions as an alternative question of the form of (1-Q).

Empirical evidence for the structure in (3) comes from Tangale (Chadic, Afro-Asiatic). (5) is an alternative question of the Shongom dialect of Tangale. The form of the verb indicates that the object DP is focused (see Kenstowicz 1987, Hartmann & Zimmermann 2007a; note, however, that object focus can remain unexpressed in the Chadic languages, see Hartmann & Zimmermann 2007b). The optional sentence-final particle *ya* is a question marker that can occur in matrix *yes/no*-questions but not in *wh*-questions, see (6). Importantly, the question expressed by (5) can also have a different form, see (7) (the form in (5) is preferred if the non-final marker is omitted.) The non-final occurrence of *ya* in (7) strongly suggests that this sentence has the structure in (8). This conclusion is also supported by the form of embedded alternative questions, see (9), where the interrogative complementizer *kan* occurs twice in the embedded clause.

The answerhood conditions of (7) can be derived from the LF in (8) as follows. The two CP disjuncts in (8) denote *yes/no*-questions. Thus, in the framework of Groenendijk & Stokhof (1982) they denote propositional concepts which define a bi-partition of the logical space: into the propositions *that Mairo ate beans/that Mairo did not eat beans* and into *that Mairo ate rice/that Mairo did not eat rice*, respectively. Now assume that *yaa* has the denotation in (10) (cf. Zimmermann 2001 for a non-Boolean definition of disjunctions as a conjunctive list of epistemic possibilities). By (10), *yaa* forms the intersection of the partitions defined by the propositional concepts *q* and *q'*. Accordingly, the denotation of (8) partitions the logical space into the four propositions *that Mairo ate beans, but no rice/that Mairo ate rice, but no beans/that Mairo ate beans and rice/that Mairo neither ate beans nor rice*. This is not yet the correct result. The first two propositions must be strengthened and the latter two must be eliminated. This can be achieved by taking the focus structure of alternative questions into consideration. The empirical evidence suggests that the alternative object DPs *beans* and *rice* bear an F-feature. Assume that the F-feature denotes the exhaustification operator in (11). (For simplicity, I assume that *beans* and *rice* denote generalized quantifiers over entities.) Then, (8) partitions the logical space into the propositions *that the food Mairo ate was beans/that the food Mairo ate was rice/that the food Mairo ate was beans and the food Mairo ate was rice/that the food Mairo ate was not beans and the food Mairo ate was not rice*. The third proposition is contradictory and the fourth is incompatible with the existence presupposition of the σ -operator that is part of the operator in (8) (in conjunction with the closure clause of Zimmermann (2001)). Hence, we derive the correct answerhood conditions for (7).

Data

- (1) Q: Did John drink /TEA or \COffee?
A₁: He drank tea. A₂: He drank coffee.
- (2) a. [CP Q-did [DisjP [TP John drink tea] or [TP ~~John drink~~ coffee]]]
b. [CP Q-did [TP John [DisjP [VP drink tea] or [VP ~~drink~~ coffee]]]
c. [CP Q-did [TP John [VP drink [DisjP tea or coffee]]]]
- (3) [DisjP [CP Q-did [[TP John drink tea]]] or [CP Q-did [[TP ~~John drink~~ coffee]]]]
- (4) Q: Did John drink /TEA or did he drink \COffee?
A₁: He drank tea. A₂: He drank coffee.
- (5) Mairo ed-go-n d'om yaa lakikoro (ya)?
M. eat-PERF_E-FOC beans or rice Q
'Did Mairo eat beans or rice?'
- (6) a. Mairo ed-ug d'om ya? b. Ed-ug d'om nong (*ya)?
M. eat-PERF beans Q eat-PERF beans who Q
'Did Mairo eat beans?' 'Who ate beans?'
- (7) Mairo ed-ug d'om (ya) yaa lakikoro (ya)?
M. eat-PERF beans Q or rice Q
'Did Mairo eat beans or rice?'
- (8) [DisjP [CP [TP Mairo edug d'om] ya] yaa [CP [TP ~~Mairo edug~~ lakikoro] ya]]
- (9) Laku pongo-m kan Mairo shoro modo kan shoro-n shau.
L. know-NEG whether M. sowed millet whether sowed-FOC guinea corn
'Laku does not know whether Mairo sowed millet or guinea corn.'
- (10) $[[yaa]] = \lambda q \lambda q' \lambda i \lambda j [q(i)(j) \wedge q'(i)(j)]$
- (11) $[[F]] = \lambda i \lambda \mathcal{Q} \lambda P [\mathcal{Q}(i)(\lambda i \lambda x' (x' = \sigma \nu . P(i)(x)))]$

References

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