

Restrictions on Rogative and Responsive Verb Complements in Uyghur - Lightning Talk

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Introduction

Many languages distinguish the complements of extensional and intensional predicates.

- (1) a. Extensional Predicates: know, tell
- b. Intensional Predicates: wonder, guess, ask

Data from Uyghur (collected with native speaker in Cambridge, MA) suggests:

- (2) a. Uyghur syntactically distinguishes the complements of extensional and intensional predicates.
- b. Extensional predicates can embed intensional complements when embedded under a modal verb.

My contribution: I suggest that these facts can be explained by:

- (3) a. Intensional Predicates are inherently complex: extensional + modal.
- b. Intensional Complements are more complex than originally thought:
 Three world arguments rather than **two**.

Uyghur Data

In Uyghur, complementizer **dep**, derived from *de* “say”, embeds interrogative complements of intensional predicates.

- (4) Reyhan kim tort-ni yé-d-i **dep** sori-d-i.
Reyhan who cake-ACC eat-PST-3 DEP ask-PST-3
‘Reyhan asked who ate the cake.’

dep is incapable of embedding interrogative complements of extensional predicates.

- (5) *Reyhan kim tort-ni yé-d-i **dep** bil-i-du.
Reyhan who cake-ACC eat-PST-3 DEP know-NPST-3
Intended: ‘Reyhan knows who ate the cake.’

dep is grammatical under an extensional predicate if the extensional predicate is in the complement of a modal verb.

- (6) Reyhan kim tort-ni yé-d-i **dep** bil-gü-si kel-d-i.
Reyhan who cake-ACC eat-PST-3 DEP know-DES-POSS.3 want-PST-3
‘Reyhan wondered/wanted to know who ate the cake.’

Previous Analyses

As per (Karttunen 1977; Groenendijk and Stokhof 1982); the definitions of Intensional and Extensional Predicates.

- (7) a. **Extensional**: complement is index dependent
- b. **Intensional**: complement is index independent

Partee and Rooth (1983); Suñer (1993): extensional and intensional complements are of different types:

Both have two world arguments; extensional have one open $\langle s, t \rangle$, intensional have both open $\langle s, \langle s, t \rangle \rangle$

- (8) a. $\llbracket \text{Extensional} \rrbracket: \phi = \lambda w. \phi(w) = \phi(w')$
- b. $\llbracket \text{Intensional} \rrbracket: \phi = \lambda w' \lambda w. \phi(w) = \phi(w')$

No type decomposition: verbs take complements directly:

- (9) a. $\llbracket \text{know} \rrbracket \in \langle \langle s, t \rangle, \langle e, t \rangle \rangle = \lambda p_{\langle s, t \rangle} \lambda x. \text{know}(p, x, a)$
- b. $\llbracket \text{ask} \rrbracket \in \langle \langle s, \langle s, t \rangle \rangle, \langle e, t \rangle \rangle = \lambda q_{\langle s, \langle s, t \rangle \rangle} \lambda x. \text{ask}(q, x, a)$

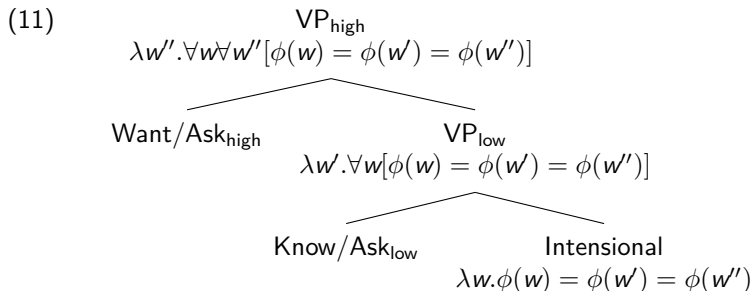
How to rescue type mismatch: intensional complement and extensional predicate?

Application of Proposal

Intensional complements have three world arguments: only one is open.

- (10) a. $\llbracket \text{Extensional: } \phi \rrbracket = \lambda w. \phi(w) = \phi(w')$
b. $\llbracket \text{Intensional: } \phi \rrbracket = \lambda w. \phi(w) = \phi(w') = \phi(w'')$

Complex predicates open and quantify over two worlds: this leaves one world to be coreferent with the matrix.



Consequences

Intensional complements are more complicated than extensional complements: difference is how many worlds, not how many open worlds.

Intensional predicates can be decomposed into two attitude predicates.

Index independence arises from a disconnect between the actual world and the world in which knowledge is held.

(12) $\phi(w) = \phi(w') = \phi(w'') =$
 ϕ is true of the actual world; ϕ is true of the wanted world; ϕ is true of the world that is wanted to be known.

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