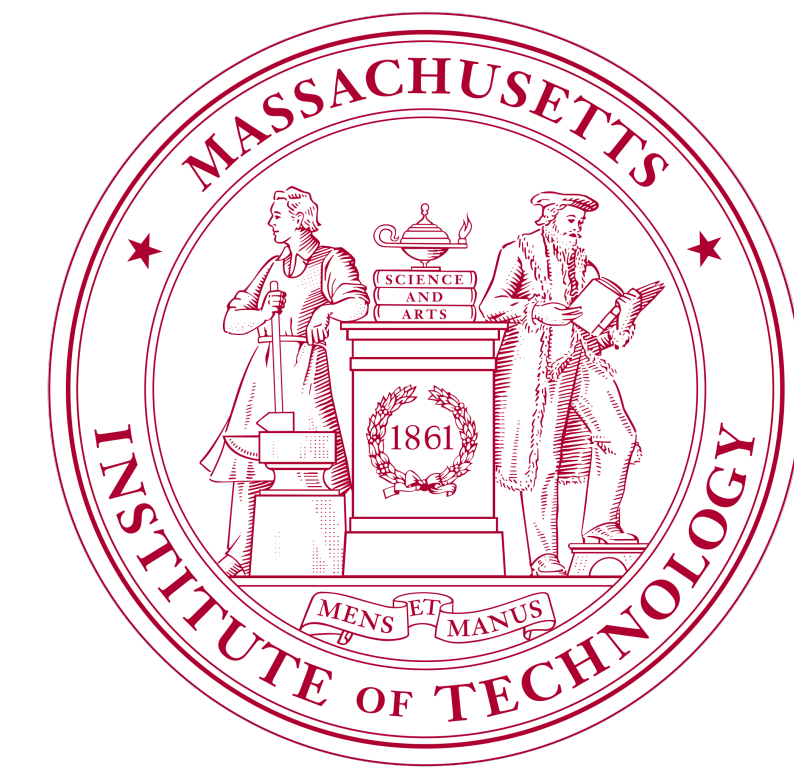


# Complementizers in Laz are attitude sensitive

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## 1. Introduction

- Articulating attitude verbs and embedded clauses calls for:  
[Kratzer, 2006, 2016; Hacquard, 2006; Moulton 2009; a.o.]

### “More action for complementizers!”

- The Laz complementizer system provides evidence for:
  - Complementizers that introduce **an event predicate akin to “say” or “think,”** which we model as their union ( $S \cup T$ ),
  - Some embedded clauses compose with predicates via **event summation** ( $\oplus$ ).

## 2. Complementizers in Laz

Laz (< South Caucasian) has 3 types of finite subordination

[Öztürk & Pöchtrager (2011), Demirok & Öztürk (2015)]

### ① NA-subordination:

OK across the board, except under manner of speech predicates.

- (1) [CP Şana noseri **na** on] ✓aceren / ✓iduşunams / \*k’iu  
Şana smart NA is believes / thinks / screamed  
‘S/he believes/thinks/\*screamed that Şana is smart.’

### ② YA subordination:

Restricted to *t’k’v* (‘say’), *ts’v* (‘tell’), and *iduşun* (‘think’).

- (2) [CP Şana noseri on **ya**] \*aceren / ✓iduşunams / \*k’iu  
Şana smart is YA believes / thinks / screamed  
‘S/he \*believes/✓thinks/\*screamed that Şana is smart.’

### ③ YA DO subordination:

**Q:** How are clauses embedded under manner of speech predicates?

**A:** With YA subordination and the conjunction DO.

- (3) [CP Şana noseri on **ya**] **do** k’iu  
Şana smart is YA DO screamed  
‘S/he screamed that Şana is smart.’

**Additional fact about YA DO:** any VP can occur with YA DO

- (4) [CP Sebaþ’-on **ya**] **do** fuk’aras para niçams  
good.deed-is YA DO poor money gives  
‘S/he gives money to the poor, saying/thinking it’s a good deed.’

- Plan:** i. Derive co-occurrence restrictions  
ii. Understand what YA DO contributes.

## 3. Proposal

- ① NA clauses co-occur with semantically transitive attitude verbs.  
They restrict the internal argument of the attitude verb.

[Kratzer 2006, 2016; Chung & Ladusaw 2001]

- (5) a. ✓  $\llbracket \text{say} \rrbracket = \lambda x. \lambda e. \text{say}(e)(x)$   $x \in \text{individuals with content}$   
b.  $\times \llbracket \text{scream} \rrbracket = \lambda e. \text{scream}(e)$   
(6) a.  $\llbracket \text{NA} \rrbracket = \llbracket \text{that} \rrbracket = \lambda p. \lambda x. \text{content}(x) \subseteq p$   
b.  $\text{Restrict}(\llbracket \text{say} \rrbracket, \llbracket \text{NA} \rrbracket(p)) = \lambda x. \lambda e. \text{say}(e)(x) \wedge \text{cont.}(x) \subseteq p$

- ② YA introduces a predicate of events we call  $S \cup T$ .  
YA clauses end up having **VP meanings**.

- (7)  $\llbracket S \cup T \rrbracket = \llbracket \text{say} \rrbracket \cup \llbracket \text{think} \rrbracket$

**Intuition:** saying and thinking (inner speech) form a natural class of events that involve **linguistic production** [cf. \*belief]

- (8)  $\llbracket \text{YA} \rrbracket = \lambda p. \lambda x. \boxed{\lambda e. S \cup T(e)(x)} \wedge \underbrace{\text{content}(x) \subseteq p}_{\llbracket \text{NA} \rrbracket(p)(x)}$

- ②a They can compose via Predicate Modification.

- (9) Artek [CP Şana noseri on **ya**] [VP iduşunams]  
Arte Şana smart is YA thinks  
‘Arte thinks that Şana is smart.’  
a.  $\llbracket \text{VP} \rrbracket = \lambda x. \lambda e. \text{think}(e)(x)$   
b.  $\llbracket \text{CP} \rrbracket = \lambda x. \lambda e. S \cup T(e)(x) \wedge \text{cont.}(x) \subseteq \{w : \text{smart}(\S)(w)\}$   
c.  $\text{Predicate Modification}(\llbracket \text{VP} \rrbracket, \llbracket \text{CP} \rrbracket) = \lambda x. \lambda e. \text{think}(e)(x) \wedge \text{content}(x) \subseteq \{w : \text{smart}(\S)(w)\}$

→ This derives the selection facts in (2):  $\llbracket \text{believe} \rrbracket \wedge \llbracket S \cup T \rrbracket = \emptyset$   
 $\llbracket \text{think/say} \rrbracket \wedge \llbracket S \cup T \rrbracket \neq \emptyset$

- ②b They can compose by a sum forming operator  $\oplus$ , encoded in DO.

- (10) [CP it’s a good deed YA] **DO** [VP gives-money] cf. (4)  
a. ✓ Event summation:  
 $\lambda e. \exists e_1, e_2, x[\text{give-money}(e_1) \wedge S \cup T(e_2)(x) \wedge e = e_1 \oplus e_2 \wedge \text{content}(x) = \{w : \text{giving-money-is-a-good-deed}(w)\}]$   
b.  $\times$  Event identification/Predicate Modification:  
 $\lambda e. \text{give-money}(e) \wedge S \cup T(e)(x) \wedge \text{content}(x) = \{w : \text{giving-money-is-a-good-deed}(w)\}]$

→ Kratzer (2016): Events introduced by manner of speech verbs are identified (not summed) with saying events.

This poster: Event identification doesn’t work in at least cases like (4)/(10)  $\rightsquigarrow$  **sum-formation is required in general**.

## 4. Supporting evidence

**Claim#1:** YA encodes the meaning of  $\llbracket S \cup T \rrbracket = \llbracket \text{say} \rrbracket \cup \llbracket \text{think} \rrbracket$ .

**Claim#2:** YA DO is compositional.

- ① DO sums individuals, in addition to being able to sum events

- (11) Şana **do** Arte-k ok’i-coxaman-**an**  
Şana and Arte-ERG RECIP-call.IMPF-PL  
‘Şana and Arte are calling each other.’

- ② YA DO is **not** a generalized clause linker:  $S \cup T$  meaning obligatory

- (12) #Mç’imu **ya do** viğvari  
it.rained YA DO I.got.wet  
a. #‘I got wet, saying/thinking it rained.’  
b. Intended: ‘I got wet because it rained.’

- ③ YA incorporates  $\llbracket S \cup T \rrbracket$ : **Bare ya clauses**

- (13) Berepek [noseri voret] **ya**.  
children smart we.are YA  
Lit: The children say/think ‘we are smart.’  
Context: The children each said ‘I’m smart.’

- (14) Berek ğoma uneneli uneneli vingirare ya.  
child yesterday silent silent I.will.swim YA  
‘The child<sub>1</sub> **yesterday silently** said that s/he<sub>1</sub> will swim.’

- ④ There is **no ellipsis**: YA (DO)  $\neq$  YA say/think (DO)

- (15) *Tsoxle* vizgalare **ya** \*(t’k’u) do *uk’ule* uk’ap’u  
first 1.will.walk YA said and later ran  
‘S/he *first* said ‘I will walk,’ and s/he *later* ran.’

- (16) a. Mi-k mp’olis vore **ya** ✓(t’k’u)  
who-ERG in.city I.am YA said  
‘Who said ‘I’m in Istanbul?’’  
b. Arte-k nak vore **ya** \*(t’k’u)  
Arte-ERG where I.am YA said  
‘Where did Arte say ‘I am *t*?’’  
no VP above YA → no extraction out of YA clause

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