

# Semantics of the disjunction in Turkish Alternative Questions

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# Alternative questions

- (1) Did John drink tea or coffee?  
*≈ Is it the case that John had a warm beverage?*  
(Yes/no question)
- (2) Did John drink TEA or COFFEE?  
*≈ Which one of the following did John drink: tea or coffee?*  
(Alternative question)

(3) Zeynep çay mı iç-ti (yoksa) kahve mi?

Zeynep tea mI drink-PST (or<sub>Alt</sub>) coffee mI

Did Zeynep drink tea or coffee?

≈ *Which one of the following did Zeynep drink: tea or coffee?*

- (3) Zeynep çay mı iç-ti (yoksa) kahve mi?

Zeynep tea mI drink-PST (or<sub>Alt</sub>) coffee mI

Did Zeynep drink tea or coffee?

≈ Which one of the following did Zeynep drink: tea or coffee?

- (4) 太郎が コーヒーを 飲んだ か (それとも)

Taro-ga koohii-o non-da ka (soretomo)

Taro-NOM coffee-ACC drink-PST KA (or<sub>Alt</sub>)

お茶を 飲んだ か

ocha-o non-da ka

tea-ACC drink-PST KA

Did Taro drink coffee or tea?

≈ Which one of the following did Taro drink: coffee or tea?  
(Uegaki, 2014b)

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- We will assume the formal semantics framework in Heim and Kratzer, 1998 and von Fintel and Heim, 2011 and adopt Hamblin/Karttunen's semantics of questions.
  - Questions are denoted by sets of their semantically congruent answers (propositions).
- (5) Does Mary smile?  
*whether Mary smile*  
 $= \{ \lambda w'. \text{ Mary smiles in } w', \lambda w'. \text{ Mary does not smile in } w' \}$



# Alternative Questions

(6) Did Alphonso sing or dance?

*whether Alphonso danced or sang*

$= \{\lambda w'. \text{ Alphonso danced in } w', \lambda w'. \text{ Alphonso sang in } w'\}$

- (Han and Romero, 2004, Beck and Kim, 2006, Uegaki, 2014a, Uegaki, 2014b, cf. Guerzoni and Sharvit, 2014, Wu, 2022)
- Exhaustivity and mutual exclusivity (Biezma & Rawlins, 2012)

# Gračanin-Yüksek, 2016

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(7) Zeynep çay mı iç-ti                      (yoksa) Zeynep kahve mi  
Zeynep tea mI drink-PST (or<sub>Alt</sub>) Zeynep coffee mI  
iç-ti?  
drink-PST  
Did Zeynep drink tea or did she drink coffee?

# Atlamaz, 2023

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- Bidimensional semantics of questions in Turkish
- The disjuncts are narrow focus questions. Alternatives are introduced by focus.
- Semantically, the AltQ represents a simple set union of the two disjuncts.
- Gricean reasoning limits the alternatives → exhaustivity
- "Sam said TEA or COFFEE. She stated two alternatives explicitly. If there was a third option, she would overtly state it. Therefore, there must be only two options." (Atlamaz, 2023)



# Data

(8) Zeynep çay mı iç-ti (yoksa) kahve mi?

Zeynep tea mI drink-PST (or<sub>Alt</sub>) coffee mI

Did Zeynep drink tea or coffee?

≈ *Which one of the following did Zeynep drink: tea or coffee?*

# Data

- (8) Zeynep çay mı iç-ti (yoksa) kahve mi?  
Zeynep tea mI drink-PST (or<sub>Alt</sub>) coffee mI

Did Zeynep drink tea or coffee?

≈ *Which one of the following did Zeynep drink: tea or coffee?*

- (9) a. Çay iç-ti.  
tea drink-PST  
She drank tea.
- b. Kahve iç-ti.  
coffee drink-PST  
She drank coffee.

# Data

(10) Zeynep çay mı iç-ti (yoksa) kahve mi?

Zeynep tea mI drink-PST (or<sub>Alt</sub>) coffee mI

Did Zeynep drink tea or coffee?

≈ *Which one of the following did Zeynep drink: tea or coffee?*

# Data

- (10) Zeynep çay mı iç-ti                      (yoksa) kahve mi?  
Zeynep tea mI drink-PST (or<sub>Alt</sub>) coffee mI  
Did Zeynep drink tea or coffee?  
*≈ Which one of the following did Zeynep drink: tea or coffee?*
- (11) a. #İki-sin-i                      de iç-ti.  
two-POSS-ACC too drink-PST  
She drank both.
- b. #İki-sin-i                      de iç-me-di.  
two-POSS-ACC too drink-NEG-PST  
She drank neither.

# Data

- (12) *Context: I believe it's possible that Zeynep speaks both English and Turkish, or either one of them.*

#Zeynep Türkçe mı bil-iyor (yoksa) İngilizce  
Zeynep Turkish mI know-PROG (or<sub>Alt</sub>) English  
mi?  
mI

Does Zeynep speak Turkish or English?

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Does Zeynep speak Turkish or English?

- One of the disjuncts must be true (existence)

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Does Zeynep speak Turkish or English?

- One of the disjuncts must be true (existence)
  - Only one of the disjuncts must be true (uniqueness)
  - Exhaustivity under Atlamaz, 2023 covers existence, but does so through implicature.
- Does not predict infelicity!

# Lexical entry for $OR_{Alt}$ (yoksa)

$$(13) \quad A \cup_{ex} B = \{x : [x \in A \text{ or } x \in B] \text{ and } x \notin A \cap B\}$$

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(13)  $A \cup_{ex} B = \{x : [x \in A \text{ or } x \in B] \text{ and } x \notin A \cap B\}$

- (14) Zeynep çay mı iç-ti                      (yoksa) kahve mi?  
Zeynep tea mI drink-PST ( $or_{Alt}$ ) coffee mI

Did Zeynep drink tea or coffee?

*≈ Which one of the following did Zeynep drink: tea or coffee?*

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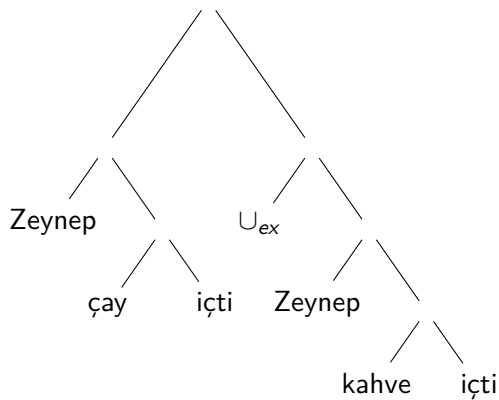
- (14) Zeynep çay mı iç-ti (yoksa) kahve mi?  
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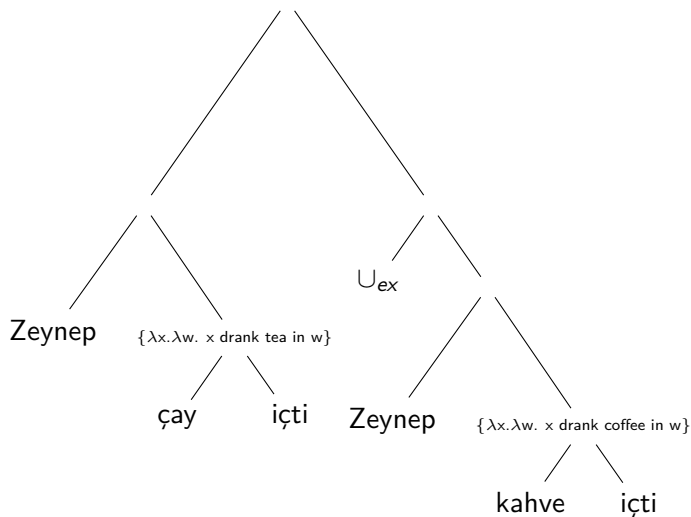
*≈ Which one of the following did Zeynep drink: tea or coffee?*

- (15)  $\{p_1\} \cup_{ex} \{p_2\} = \{p : \forall w \in p, [w \in p_1 \text{ or } w \in p_2] \wedge w \notin p_1 \cap p_2\}$   
 $\{\text{Zeynep drinks coffee}\} \cup_{ex} \{\text{Zeynep drinks tea}\} = \{p : \forall w \text{ such that } p \text{ is true in } w, [\text{Zeynep drinks coffee in } w \text{ or Zeynep drinks tea in } w] \text{ and } [\text{Zeynep does not drink coffee and tea in } w]\}$

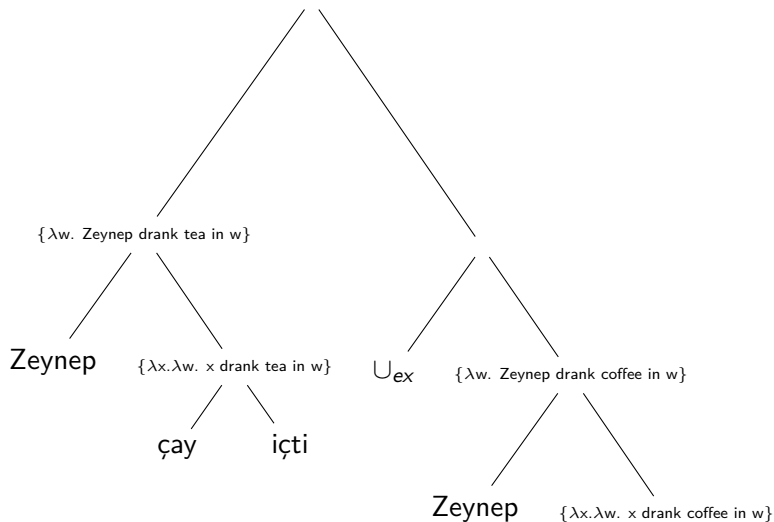
# Calculation



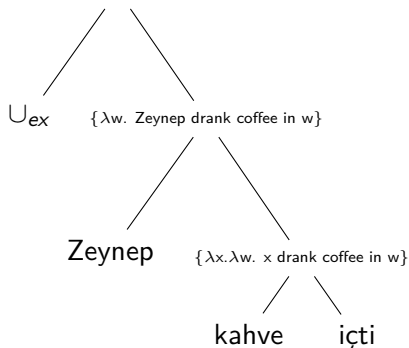
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$$\lambda A. \{p : \forall w \in p, [w \in \{\lambda w. \text{Zeynep drank coffee in } w\} \text{ or } w \in A] \wedge w \notin \{\lambda w. \text{Zeynep drank coffee in } w\} \cap A\}$$




# Calculation

- $\lambda A. \{p : \forall w \in p, [w \in \{\lambda w. \text{Zeynep drank coffee in } w\} \text{ or } w \in A] \wedge w \notin \{\lambda w. \text{Zeynep drank coffee in } w\} \cap A\}$   
 $(\{\lambda w. \text{Zeynep drank coffee in } w\})$
- $\{p : \forall w \in p,$   
 $[w \in \{\lambda w. \text{Zeynep drank coffee in } w\} \text{ or } w \in \{\lambda w. \text{Zeynep drank tea in } w\}]$   
 $\wedge w \notin \{\lambda w. \text{Zeynep drank coffee in } w\} \cap \{\lambda w. \text{Zeynep drank tea in } w\}\}$

ご視聴誠にありがとうございました！

Thank you!



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<https://ruveydatriesstuff.github.io/>

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- Alternative way: restricting/updating the context.



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- Licensed by context
- Alternative way: restricting/updating the context.
  - Can they be conversation starters? Is it pragmatically or semantically licensed?
  - Optionality of the disjunction head