# LIN6049 Advanced semantics: puzzles in meaning

2024-2025 Luisa Martí

Week 9

# Today

General feedback on puzzle 4

Demonstrative determiners, part 1

- -a justified syntax and semantics for Atara Imere eetasi 'one'
- -how your analysis works for the examples given

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Providing a syntax for eetasi implies providing a syntactic tree for noun phrases with eetasi

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Justifying this tree implies providing reasons why you think this tree is correct. If you can relate it to meaning, do

Providing a syntax for *eetasi* implies providing a syntactic tree for noun phrases with *eetasi* 

Justifying this tree implies providing reasons why you think this tree is correct. If you can relate it to meaning, do. For example, if you generate eetasi in the D position, it means the null D of Atara Imere I proposed in class can't be there. Is that correct? How would you know?

Providing a semantics for *eetasi* implies providing the following 'recipe':

'Eetasi NP VP'

Presupposition: \_\_\_\_\_ (if relevant)

Assertion:

Justifying the semantics: does this give rise to the correct meaning? Show it!

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You need to show how it provides the correct semantics for example (4)...

## (4) Atara Imere

```
Te-gata
              eetasi
                      ee-moe
                                        go
                       3sg.NFUT-sleep
sg-snake
                                        and
              one
          eetasi
                                        kee.
te-gata
                  s-ee-moe
sg-snake one
                  NEG-3SG.NFUT-sleep
                                        NEG
'One snake was sleeping and one snake wasn't
sleeping'
```

Justifying the semantics: does this give rise to the correct meaning? Show it!

...and why (4) is good, but (3) isn't

## (3) Atara Imere

```
#Te-gata ee-moe go
```

sg-snake 3sg.nfut-sleep and

te-gata s-ee-moe kee.

sg-snake NEG-3sg.NFUT-sleep NEG

'A snake was sleeping and the snake wasn't sleeping'

Justifying the semantics: does this give rise to the correct meaning? Show it!

in doing so, you'll have to discuss examples (1) and (2) as well

(1) Atara Imere

Te-gata ee-moe

sg-snake 3sg.nfut-sleep

'A/the snake is sleeping'

(2) Atara Imere

Te-gata eetasi ee-moe

sg-snake one 3sg.nfut-sleep

'One snake is sleeping'

Demonstratives and demonstrative determiners are different from definite articles:

(1) #The computer is old, and the computer is new

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- (2) That is new and that is old

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- (2) That is new and that is old
- (3) That computer is old, and that computer is new

- (1) #The computer is old, and the computer is new
- (2) [That] $_{\rightarrow L1}$  is new and [that] $_{\rightarrow L2}$  is old
- (3) [That computer] $_{\rightarrow L1}$  is old, and [that computer] $_{\rightarrow L2}$  is new

Arguments that the pointing gesture needs to be taken into account by our semantics:

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- (3) [That computer] $_{\rightarrow L1}$  is old, and [that computer] $_{\rightarrow L2}$  is new
- (4) #[That computer] $_{\rightarrow L1}$  is old, and [that computer] $_{\rightarrow L1}$  is new

Arguments that the pointing gesture needs to be taken into account by our semantics:

- (3) [That computer] $_{\rightarrow L1}$  is old, and [that computer] $_{\rightarrow L2}$  is new
- (4) #[That computer] $_{\rightarrow L1}$  is old, and [that computer] $_{\rightarrow L1}$  is new
- 1. If the pointing is to the same location/entity, oddness results

2. Sometimes, if the pointing is removed altogether, we can't interpret the sentence anymore

(5) #That computer is old

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(5) #That computer is old

Pointing includes eye gaze and any other gesture that would be interpreted as picking up a location

3. Sometimes, when the pointing is removed, a different meaning obtains:

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- (6) A woman walked into the room. This/that woman was wearing a funny hat
- → lack of pointing means the demonstrative nature of that and this is lacking

- 3. Sometimes, when the pointing is removed, a different meaning obtains:
- (7) #A woman walked into the room. [This/that woman] $_{\rightarrow L}$  was wearing a funny hat
- → pointing forces the demonstrative nature of that and this to be present. That's weird in (7)

# Building in the deictic component

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Question: how do we build it into the semantics?

'[This NP] <sub>→L</sub> VP'	
Presupposition:	(if applicable)
Assertion:	
'[That NP] <sub>→L</sub> VP'	
Presupposition:	(if applicable)
Assertion:	

'[This NP] <sub>→L</sub> VP'	
Presupposition:	(if applicable)
Assertion:	
'[That NP] <sub>→L</sub> VP'	
Presupposition:	(if applicable)
Assertion:	

'[This NP]<sub>→L</sub> VP'

Presupposition:

Assertion:  $\{x: x \text{ is an NP in s} \cap \{x: x \text{ VPs in s}\} \neq \emptyset$ 

'[This NP]<sub>→L</sub> VP'

Presupposition: \_\_\_\_\_

Assertion:  $\{x: x \text{ is an NP in s and } x \text{ is in L in s} \cap \{x: x \text{ VPs in s}\}\$ 

≠ Ø

'[This NP]<sub>→L</sub> VP'

Presupposition: \_\_\_\_\_

Assertion: {x: x is an NP in s and x is in L in s and speaker

points at L in s}  $\cap$  {x: x VPs in s}  $\neq$  Ø

'[This NP]<sub>→L</sub> VP'

Presupposition:

Assertion: {x: x is an NP in s and x is in L in s and speaker points at L in s and L is close to the speaker in s}  $\cap$  {x: x VPs in s}  $\neq$   $\emptyset$ 

'[That NP]<sub>→L</sub> VP'

Presupposition:

Assertion:  $\{x: x \text{ is an NP in s and } x \text{ is in L in s and speaker}$ points at L in s and L is not close to the speaker in s $\}$   $\cap$   $\{x: x \text{ VPs in s}\} \neq \emptyset$ 

Do demonstrative determiners carry a presupposition?

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- (8) [Context: in a competition where there can only be one winner]
  - # [That winner] $_{\rightarrow L3}$  will receive a lot of money

Do demonstrative determiners carry a presupposition?

- (8) [Context: in a competition where there can only be one winner]
  - # [That winner] $_{-L3}$  will receive a lot of money
- (9) # [That moon] $_{\rightarrow L6}$  has risen

Do demonstrative determiners carry a presupposition of anti-uniqueness?

- (8) [Context: in a competition where there can only be one winner]
  - # [That winner] $_{L3}$  will receive a lot of money
- (9) # [That moon] $_{\rightarrow 16}$  has risen

Do demonstrative determiners carry a presupposition of anti-uniqueness?

- (8) [Context: in a competition where there can only be one winner]
  - # [That winner] $_{\rightarrow 1,3}$  will receive a lot of money
- (9) # [That moon] $_{\rightarrow L6}$  has risen follows from there only being one winner in (8) and only one moon in

(9)?

'[That NP]<sub>→L</sub> VP'

Presupposition: |{x: x is an NP in s}| > 1

Assertion:  $\{x: x \text{ is an NP in s and } x \text{ is in L in s and speaker}$ points at L in s and L is not close to the speaker in s $\}$   $\cap$   $\{x: x \text{ VPs in s}\} \neq \emptyset$ 

'[That NP]<sub>→L</sub> VP'

Presupposition: |{x: x is an NP in s}| > 1

an anti-uniqueness presupposition

Assertion:  $\{x: x \text{ is an NP in s and } x \text{ is in L in s and speaker points at L in s and L is not close to the speaker in s} \cap \{x: x \text{ VPs in s}\} \neq \emptyset$ 

However:

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(10) I don't know if there are any other cars in this showroom, but [that car] $_{\rightarrow L3}$  looks expensive

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(10) I don't know if there are any other cars in this showroom, but [that car] $_{\rightarrow L3}$  looks expensive

speaker is explicitly saying that there may not be any other cars in the showroom, so they can't be presupposing that there is more than one car in the showroom

However:

(11) [We live in a neighbourhood that forbids cars on its roads. One day we wake up to find a white car parked outside our apartment. A while later you tell me:]

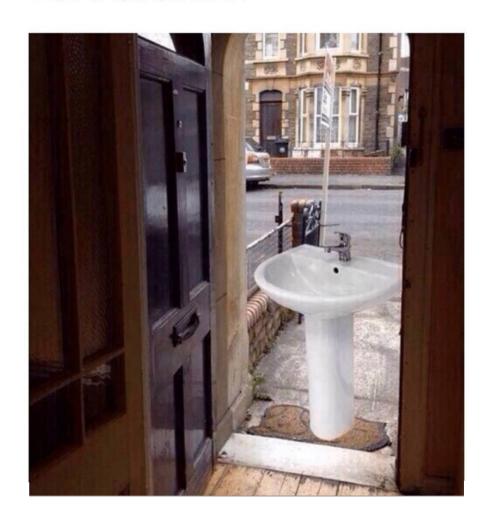
[That car] $_{\rightarrow L4}$  is still parked outside

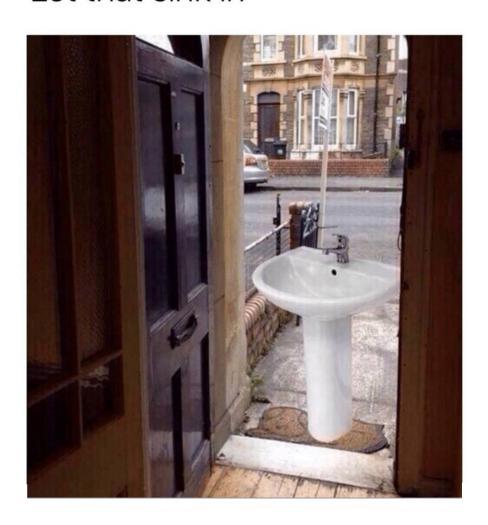
But what about:

- (8) [Context: in a competition where there can only be one winner]
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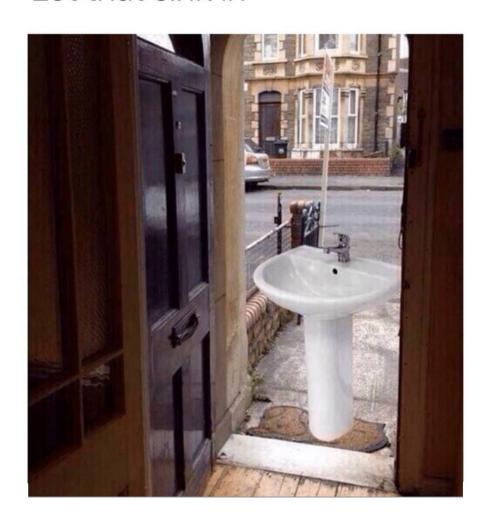
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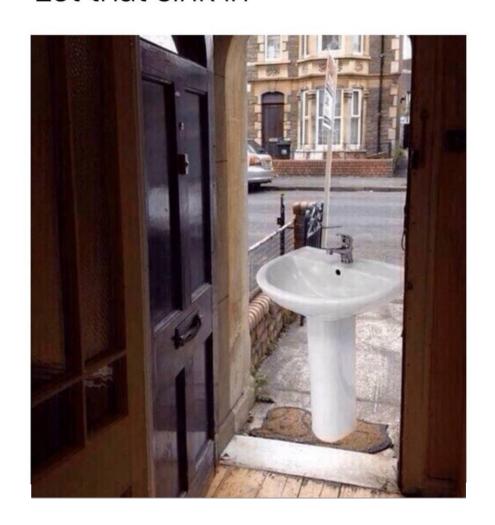


(12) Let  $[THAT]_{\rightarrow L}$  sink in



(12) Let  $[THAT]_{\rightarrow L}$  sink in

(13) Let [that sink] $_{\rightarrow L}$  in



- (12) Let [THAT] $_{\rightarrow L}$  sink in
- (13) Let [that sink] $_{\rightarrow L}$  in
- (14) # Let [THAT sink] $_{\rightarrow L}$  in

So it is when demonstrative determiners are focused that an anti-uniqueness effect obtains, not otherwise

(9) # [THAT moon] $_{\rightarrow L6}$  has risen

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(9) # [THAT moon]<sub>→L6</sub> has risen

'the object in the situation located in L6 which I'm pointing at is a moon that has risen, and other objects in the situation which are moons have not risen'

So it is when demonstrative determiners are focused that an anti-uniqueness effect obtains, not otherwise

(9) # [THAT moon] $_{\rightarrow L6}$  has risen

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i.e., other moons have not risen

So it is when demonstrative determiners are focused that an anti-uniqueness effect obtains, not otherwise

(9) # [THAT moon] $_{\rightarrow L6}$  has risen

'the object in the situation located in L6 which I'm pointing at is a moon that has risen, and other objects in the situation which are moons have not risen'

i.e., other moons have not risen  $\Rightarrow \#$ 

Is this special to demonstrative determiners?

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(15) Bill only introduced John to MARY

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(15) Bill only introduced John to MARY

"Bill introduced John to Mary, and Bill introduced John to nobody else"

Is this special to demonstrative determiners? No, focus seems to generally have this effect

(16) Bill only introduced JOHN to Mary

"Bill introduced John to Mary, and Bill introduced nobody else to Mary"

Is this special to demonstrative determiners? No, focus seems to generally have this effect

(15) Bill only introduced John to MARY

(16) Bill only introduced JOHN to Mary

So the anti-uniqueness effect (that there have to be other NPs in addition to the one I'm pointing at) is not due to the determiner itself, it's due to focus

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So we shouldn't build an anti-uniqueness presupposition into the semantics of demonstrative determiners

'[That NP]<sub>→L</sub> VP'

Presupposition:  $|\{x: x \text{ is an NP in s}\}| > 1$ 

Assertion:  $\{x: x \text{ is an NP in s and } x \text{ is in L in s and speaker}$ points at L in s and L is not close to the speaker in s $\}$   $\cap$   $\{x: x \text{ VPs in s}\} \neq \emptyset$ 

'[That NP]<sub>→L</sub> VP'

Presupposition:  $\frac{|\{x: x \text{ is an NP in s}\}| > 1}{|\{x: x \text{ is an NP in s}\}|} > 1$ 

Assertion:  $\{x: x \text{ is an NP in s and } x \text{ is in L in s and speaker points at L in s and L is not close to the speaker in s} <math>\cap \{x: x \text{ VPs in s}\} \neq \emptyset$ 

Do demonstrative determiners have any other kind of presupposition?

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(17) [Pointing to a distant group of students in L11:] # [That student] $_{-L11}$  came to office hours earlier

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(17) [Pointing to a distant group of students in L11:] # [That student] $_{-L11}$  came to office hours earlier

There can't be more than one NP being pointed at!

Do demonstrative determiners have any other kind of presupposition?

(18) [Pointing to a distant pile of books on a table:]  $\# [That book]_{\rightarrow L7}$  is fascinating

There can't be more than one NP being pointed at!

'[That NP]<sub>→L</sub> VP'

an anti-uniqueness presupposition: 'not just one NP'

Presupposition:  $\frac{|\{x: x \text{ is an NP in s}\}| > 1}{|\{x: x \text{ is an NP in s}\}|} > 1$ 

Assertion:  $\{x: x \text{ is an NP in s and } x \text{ is in L in s and speaker points at L in s and L is not close to the speaker in s} <math>\cap \{x: x \text{ VPs in s}\} \neq \emptyset$ 

'[That NP]<sub>→L</sub> VP'

a uniqueness presupposition: 'just one NP being pointed at'

Presupposition: |{x: x is an NP in s and x is in L in s and speaker points at L in s and L is not close to the speaker in s}| = 1

Assertion:  $\{x: x \text{ is an NP in s and } x \text{ is in L in s and speaker points at L in s and L is not close to the speaker in s} \cap \{x: x \text{ VPs in s}\} \neq \emptyset$ 

(9) # [THAT moon] $_{\rightarrow L6}$  has risen

'the unique object in the situation located in L6 which I'm pointing at is a moon that has risen, and other objects in the situation which are moons have not risen'

(9) # [THAT moon] $_{\rightarrow L6}$  has risen

'the unique object in the situation located in L6 which I'm pointing at is a moon that has risen, and other objects in the situation which are moons have not risen'

(9) # [THAT moon] $_{\rightarrow L6}$  has risen

the unique object in the situation located in L6 which I'm pointing at is a moon that has risen, and other objects in the situation which are moons have not risen'

(9) # [THAT moon] $_{\rightarrow L6}$  has risen

the unique object in the situation located in L6 which I'm pointing at is a moon that has risen, and other objects in the situation which are moons have not risen'

(9) # [THAT moon] $_{\rightarrow L6}$  has risen

the unique object in the situation located in L6 which I'm pointing at is a moon that has risen, and other objects in the situation which are moons have not risen'

'just one NP being pointed at' + 'not just one NP'

⇒ # because focus presupposition is not met

(19) [Clearly pointing to a certain book on a table, on which there are two additional books][THAT book]<sub>→18</sub> is fascinating

(19) [Clearly pointing to a certain book on a table, on which there are two additional books] [THAT book]<sub>→L8</sub> is fascinating

'the unique object in the situation located in L8 which I'm pointing at is a book and fascinating, and other objects in the situation which are books are not fascinating'. I.e., other books are not fascinating

(19) [Clearly pointing to a certain book on a table, on which there are two additional books] [THAT book]<sub>→L8</sub> is fascinating

'the unique object in the situation located in L8 which I'm pointing at is a book and fascinating, and other objects in the situation which are books are not fascinating'. I.e., other books are not fascinating

'[That NP]<sub>→L</sub> VP'

Presupposition:  $|\{x: x \text{ is an NP in s and } x \text{ is in L in s and speaker points at L in s and L is not close to the speaker in <math>s\}| = 1$ 

Assertion:  $\{x: x \text{ is an NP in s and x is in L in s and speaker points at L in s and L is not close to the speaker in s} <math>\cap \{x: x \text{ VPs in s}\} \neq \emptyset$ 

'[This NP]<sub>→L</sub> VP'

Presupposition: |{x: x is an NP in s and x is in L in s and speaker points at L in s and L is close to the speaker in s}| = 1

Assertion:  $\{x: x \text{ is an NP in s and x is in L in s and speaker points at L in s and L is close to the speaker in s} <math>\cap \{x: x \text{ VPs in s}\} \neq \emptyset$ 

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- -pointing, which is not usually considered to be part of linguistic representations, is part of them in this proposal
- -it has an effect on meaning, that is, a semantics
- -pointing then just like any other grammatical element

What happens if there's no pointing?

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(5) #That computer is old

What happens if there's no pointing?

- (5) #That computer is old
- (6) A woman walked into the room. This/that woman was wearing a funny hat

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Puzzle 6!