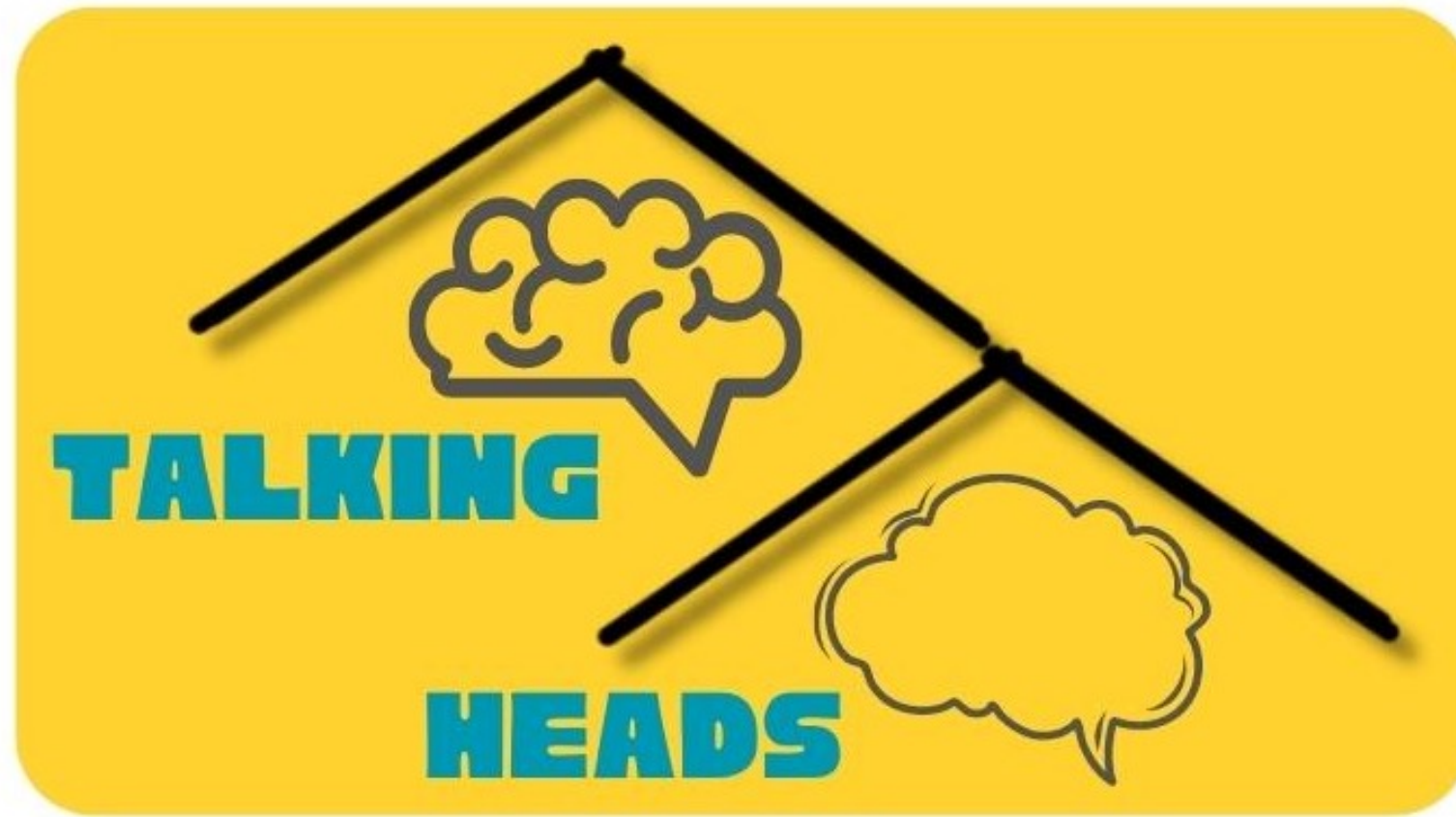


July 10-14 2023

:LOT



# The syntax of talking heads

Martina Wiltschko

ICREA, Universitat Pompeu Fabra



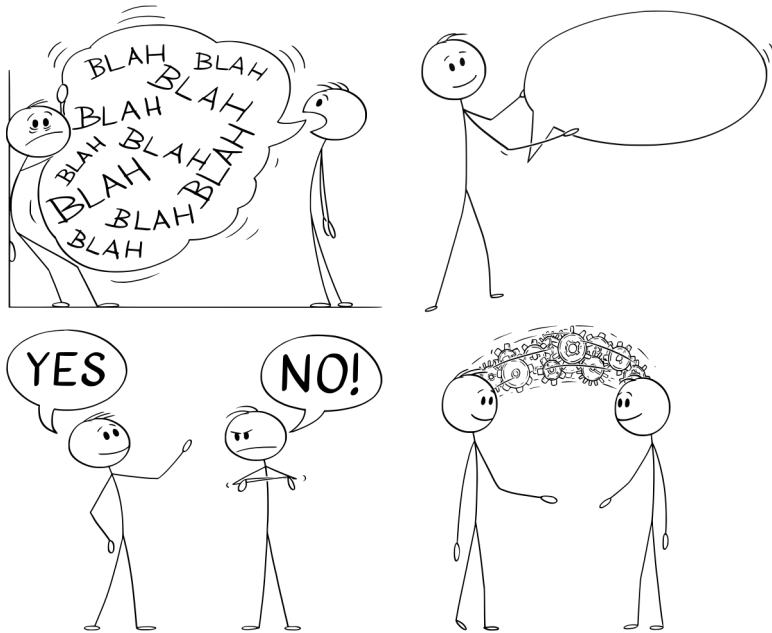
# Who am I?

- Who am I?
- Where am I (from)?
- Why linguistics?
- What is my main interest in linguistics?
- What do I want to achieve in this course?

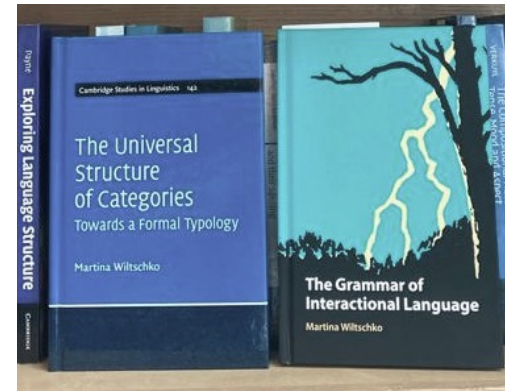
<http://martinawiltschko.com/>

# The syntax of talking heads

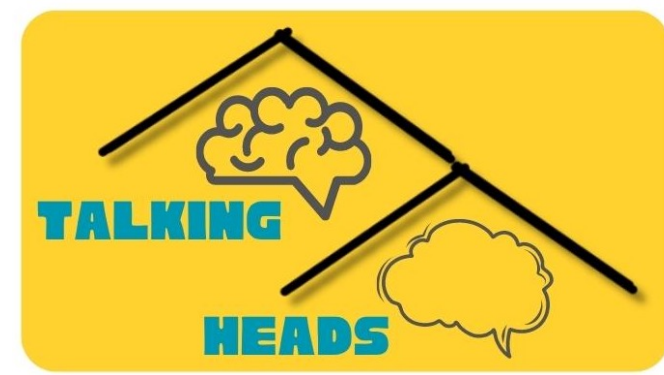
## We are talking heads



## We have talking heads



# Overview of the course



1. The framework: reframing thoughts in interaction
2. Discourse markers: using (new) thoughts.
3. A new window: telling yourself what you think??
4. The syntax of emotions
  1. The syntax of talking heads

# Prologue

Classic sentences of generative analyses:

- (1) Which books did you file without reading?
- (2) Who did you think (\*that) would win?
- (3) *Mary brought the bread, John the cheese, and Bill the wine.*
- (4)
  - a. *I want to/wanna read a book.*
  - b. *What do you want to/wanna read?*
  - c. *Who do you want to/\*wanna read a book?*

# Prologue

- What happens here?



<https://www.youtube.com/watch?v=5gocFvDFFT4>

# Prologue

- What happens here?



Hey... are you a talking head?



As an artificial intelligence developed by OpenAI, I don't have a physical form, so I'm not a "talking head" in the traditional sense. However, I can process and respond to text-based inputs, effectively "talking" through written language. My purpose is to provide accurate information, answer questions, and help users with a variety of tasks.



# Prologue

information, answer questions, and help users with a variety of tasks.



okay... do you have syntactic heads?



In the field of linguistics, a "syntactic head" (also known simply as a "head") is the word that determines the syntactic type of the phrase of which it is a part. For example, in the noun phrase "the big red ball," the noun "ball" is the syntactic head because it determines the overall behavior of the phrase.



As an AI, I don't "have" syntactic heads, but I am designed to understand and generate language based on the principles of grammar, including the concept of syntactic heads. So, when I process language, I use syntactic information (among other things) to understand and generate coherent and meaningful responses. I can understand the structure of phrases and sentences, identifying heads, dependents, and other elements to accurately interpret and produce human language.



# Discussion questions



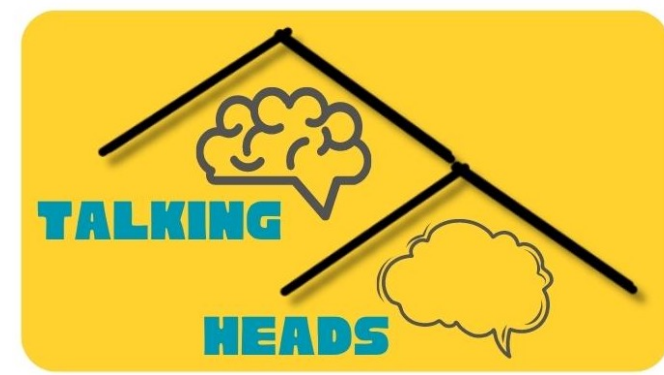
- Are these “talking heads”?
- Do they *have* talking heads?
- What does classic linguistics have to say about these examples?
- What about generative linguistics?

# Today

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  - ”classic” generative assumptions
2. What are syntactic heads?
  - History
  - current assumptions: MERGE vs. CARTOGRAPHY
  - my assumptions: the universal SPINE
3. Interactional language
  - some examples
  - how can we analyse i-language with classic and/or generative assumptions?
4. The interactional spine hypothesis
  - introducing the framework
  - conceptual and methodological implications



# Today



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# Classic assumptions

## **Domains of linguistics**

Phonetics

Phonology

Morphology

Syntax

Semantics

Pragmatics

# Classic assumptions

## Domains of linguistics

Phonetics

Phonology

Morphology

Syntax

Semantics

Pragmatics

## Discussion question

What are the **units of analysis**?

What are the **ingredients** of each domain?

What are the **criteria** to be included in each domain?

How do these domains **relate** to each other?

... in a model of **grammar**?

... in a model of the **knowledge of language**?

# Classic assumptions

What is syntax?

What are the **units of analysis**?

What are the **ingredients** of syntax?

What are the **criteria** to be considered part of syntax??

How does syntax **relate** to other domains?

... in a model of **grammar**?

... in a model of the **knowledge of language**?

# Classic assumptions

What is syntax?

Classic unit of analysis:

**Sentence**

What is a sentence?

# Classic assumptions

What is syntax?

Classic unit of analysis:  
**Sentence**

There is a lot at stake

- Units of analysis express thoughts
- Subject predicate constructs
- Semantic analyses: **Truth conditions**

What is a sentence?

Is it a similar construct than a **word**?

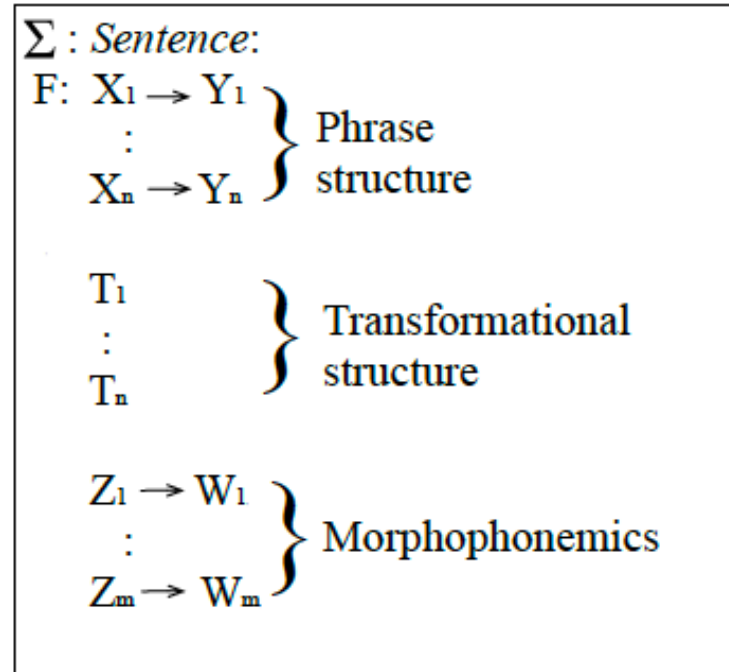
The status of “constructs”/”construction”?



# Decomposing syntax

## Syntactic Structures

Syntax →



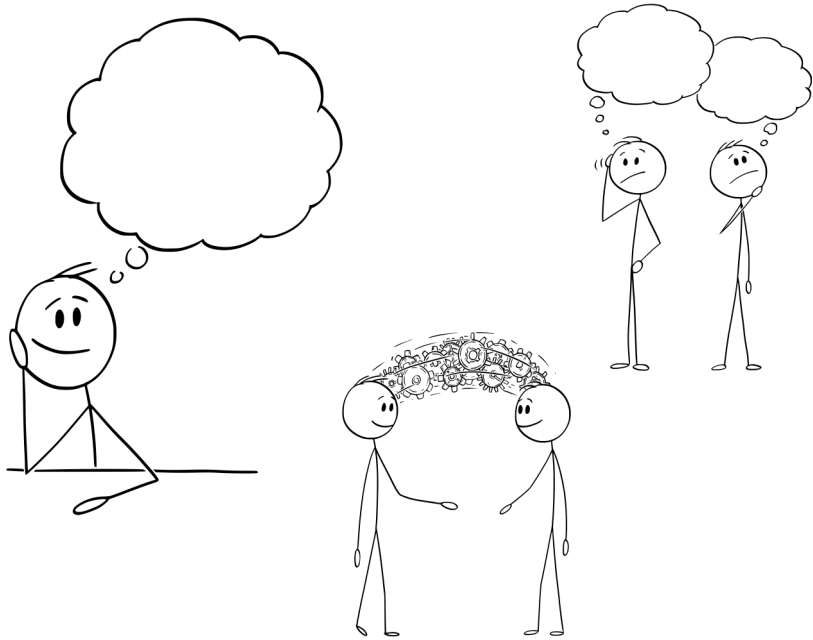
- The building blocks can be smaller than words

$$(1) \quad Af + v \rightarrow v + Af \#$$

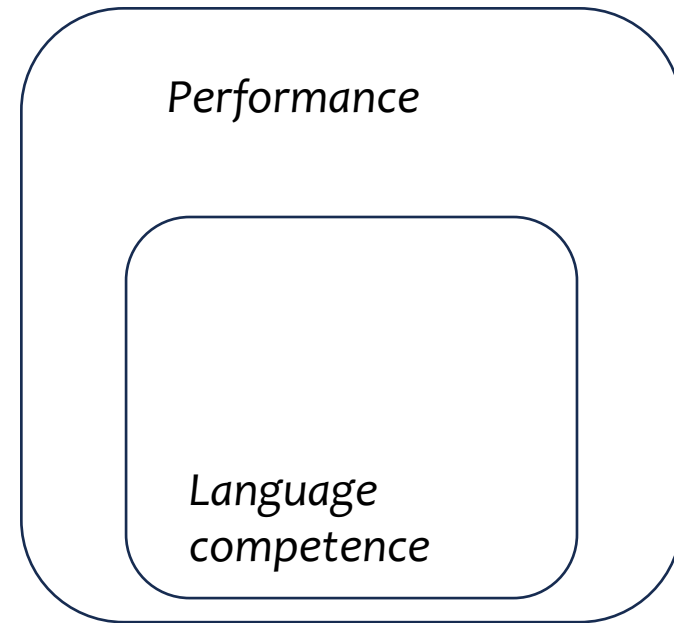
SS: 39 (29ii)

# Classic (generative) assumptions

Language is primarily for thought

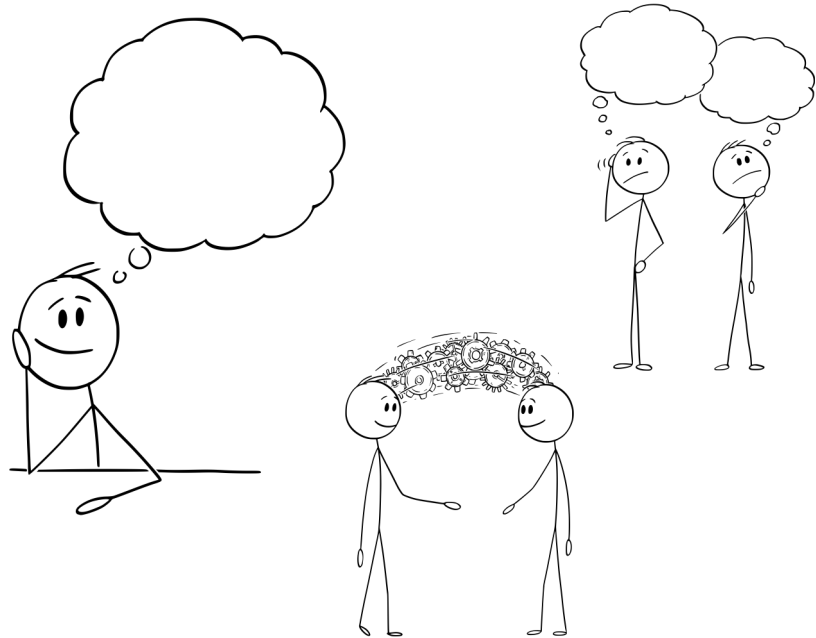


Language is **used** in communication



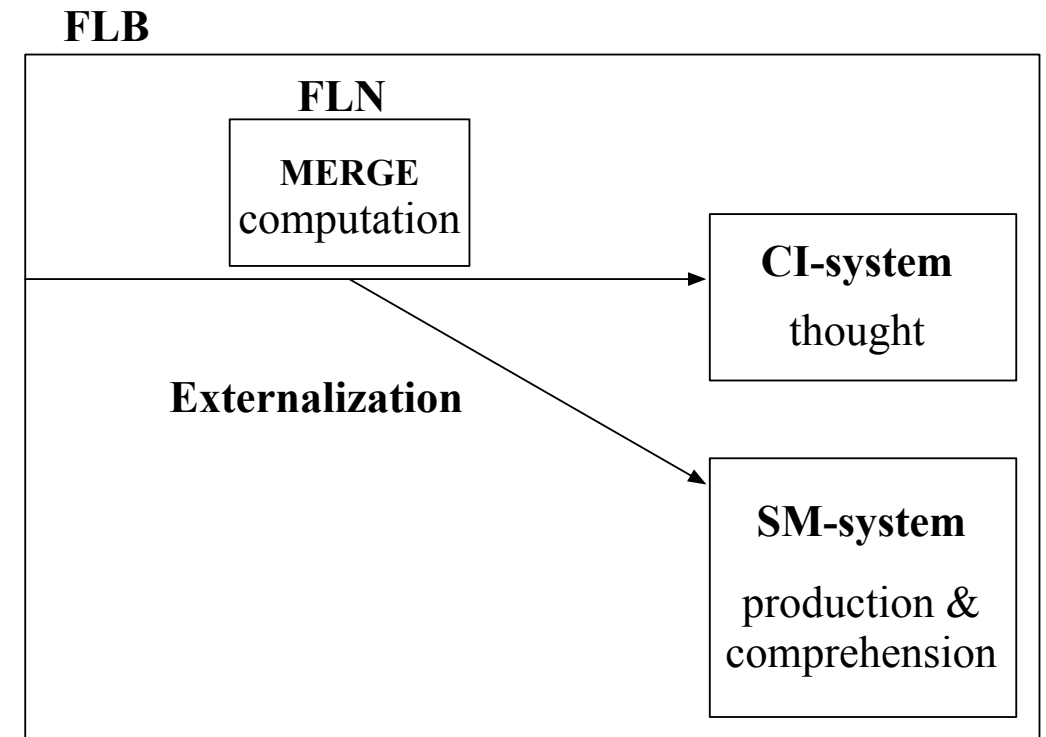
# Classic assumptions

Language is primarily for thought



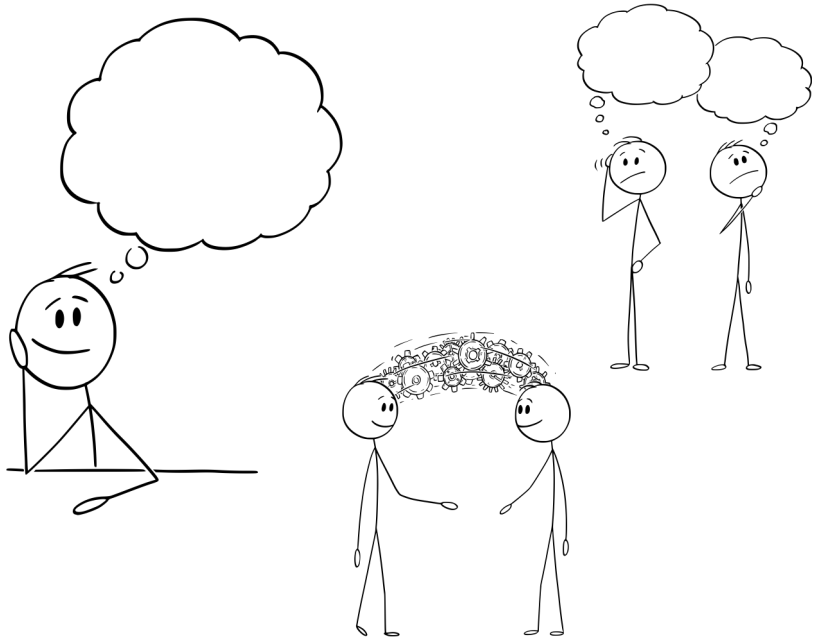
Language is **used** in communication

Language is primarily for thought



# Alternatives

Language is primarily for thought



Communicative competence

“the **ability** to function in a truly communicative setting”

Savignon (1972)

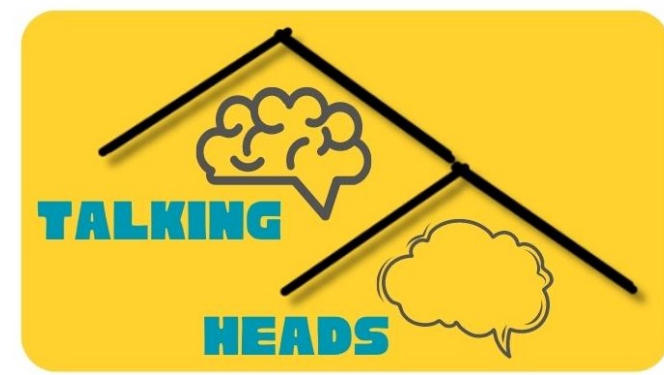
Campbell and Wales 1970

Hymes 1972,

Keenan (Ochs) 1974

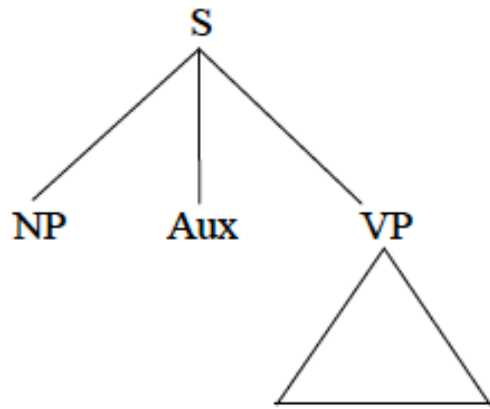
Language is **used** in communication

# Today

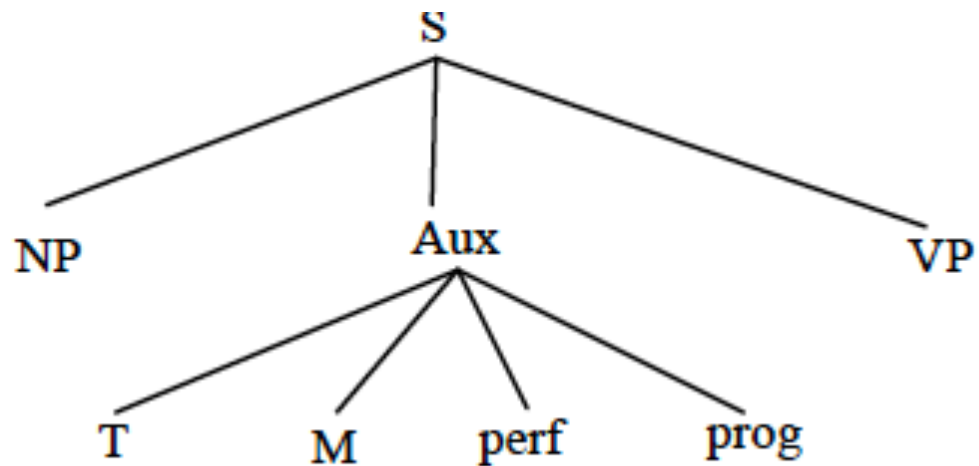


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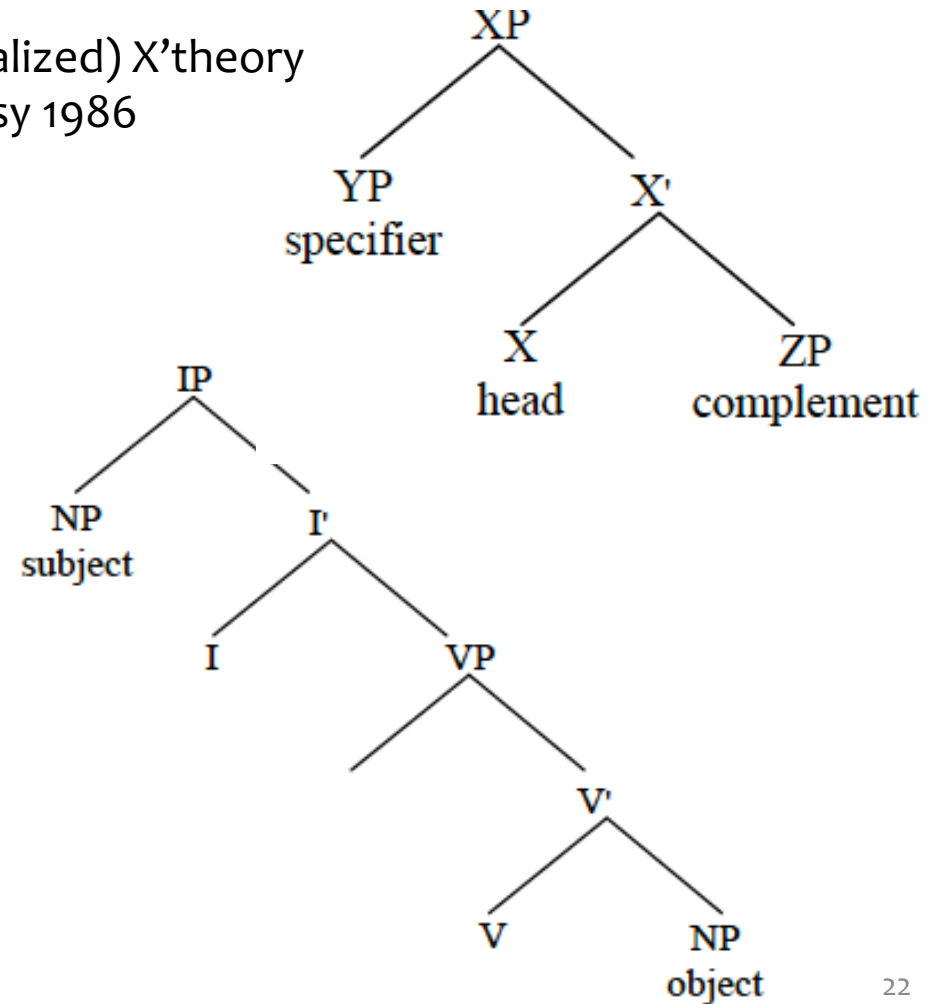
# What are syntactic heads?



Chomsky 1957



(Generalized) X'theory  
Chomsky 1986

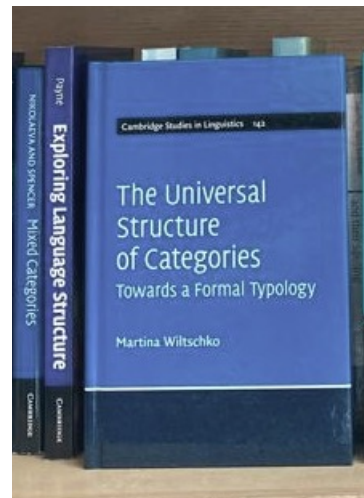
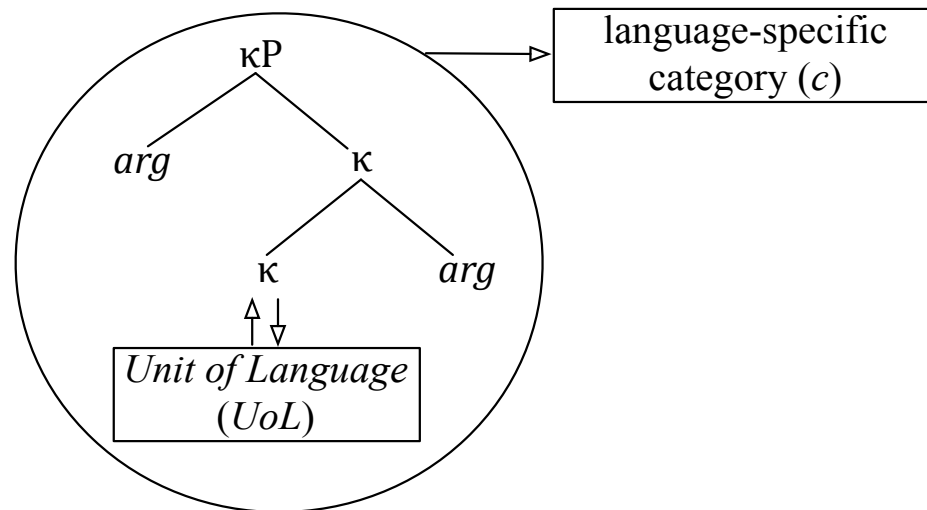




# The universal spine hypothesis

Language-specific categories ( $c$ ) are constructed from a small set of universal categories  $\kappa$  and language-specific UoLs

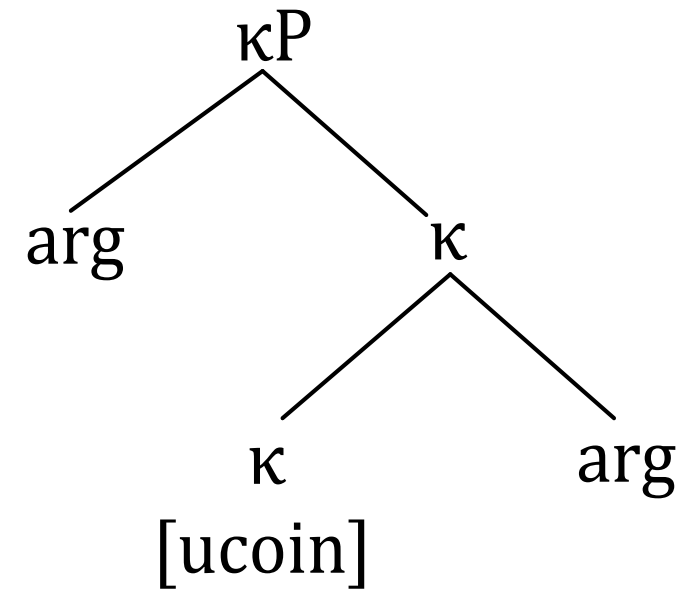
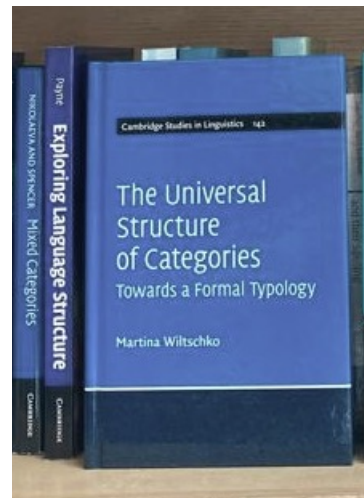
$$c = \kappa + \text{UoL}$$



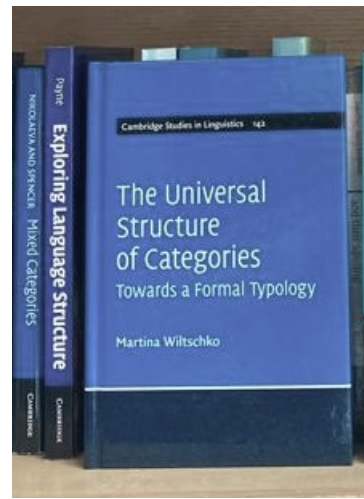


# The universal structure of the categorizer

- Transitive
- Relational
- Possibility for language-specific substantiation

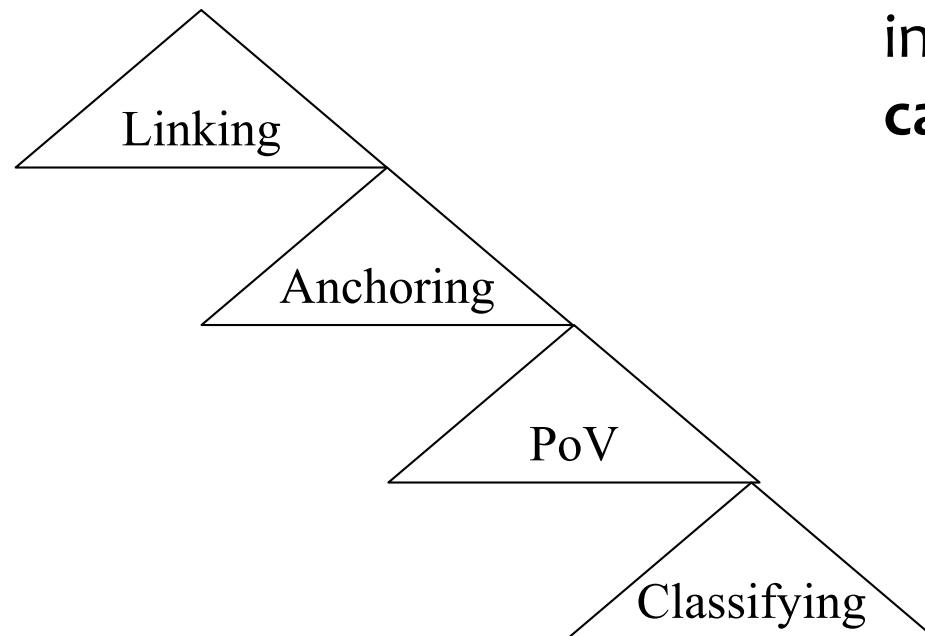


# the spine

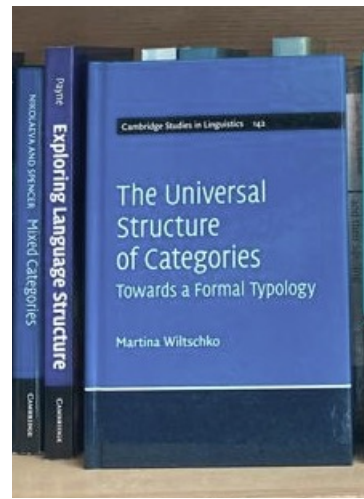


A way to understand universals and variation in the inventory of **grammatical categories**

beyond merge



# the spine



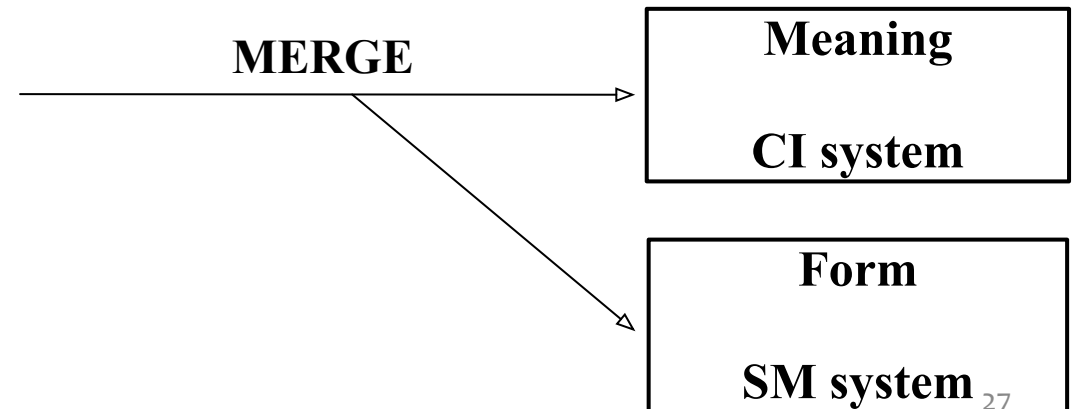
## principle of compositionality

The meaning of a **complex expression** is determined by the meaning its constituent parts **and they way they are combined.**

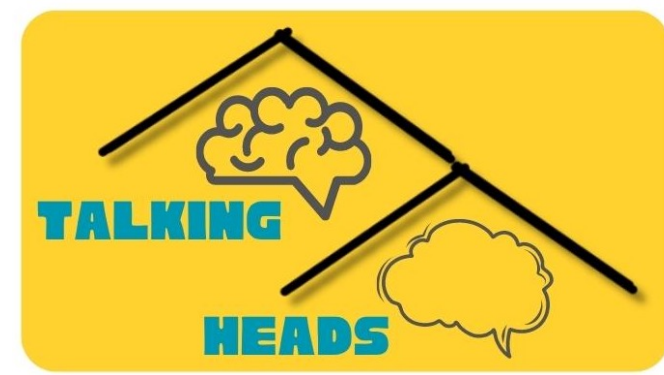
And a way to understand how composition (syntax) contributes to meaning

**Grammar** =<sub>def</sub>

an intrinsically structured system that **mediates the relation between form and meaning** of complex expressions



# Today



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# Interactional language

Language changes in interaction

- (1) a. The dog is in front of the fan
- b. **Wow**, the dog is in front of the fan
- c. **Oh**, the dog is in front of the fan
- d. The dog is in front of the fan, **eh?**
- e. The dog is in front of the fan, **huh?**
- f. **But Charlie**, the dog is in front of the fan
- g. The dog is in front of the fan, **Charlie.**

# Interactional language

- (1) a. The dog is in front of the fan
- b. **Wow**, the dog is in front of the fan
- c. **Oh**, the dog is in front of the fan
- d. The dog is in front of the fan, **eh**?
- e. The dog is in front of the fan, **huh**?
- f. **But Charlie**, the dog is in front of the fan
- g. The dog is in front of the fan, **Charlie**.

- Discussion question

Are these UoLs part of the sentence?

Do they belong to syntax?

Do they belong to competence?

How do we analyse them?

Truth conditions?

# Austrian German: geh/ma

(1) [Die Lena hot an neichn Hund]

Det Lena has a new dog

‘Lena has a new dog.’

(2) **Geh** [die Lena hot an neichn Hund]

[Die Lena hot **doch** an neichn Hund]

You should know this

(3) **Ma** [die Lena hot an neichn Hund]

[Die Lena hot **leicht** an neichn Hund]

I’m surprised

# Austrian German: geh/ma

Context: Mariana and Reingard are on a walk and from a distance they see their friend Lena who is walking with a dog, they have never seen before:

- R:
- a. \* Die Lena hot an neichn Hund  
'Lena has a new dog.'
  
  - b. \***Geh** die Lena hot an neichn Hund  
\*Die Lena hot **doch** an neichn Hund
  
  - c. **Ma**, die Lena hot an neichn Hund  
Die Lena hot **leicht** an neichn Hund

You should know this

I'm surprised



# Austrian German: geh/ma

I: Vielleicht wü die Lena an von unsare Hundal  
Maybe wants det Lena one of our dog.dim  
'Maybe Lena wants one of our puppies.'

R: a. ?? Die Lena hot an neichn Hund  
'Lena has a new dog.'

b. **Geh** die Lena hot an neichn Hund  
Die Lena hot **doch** an neichn Hund

c. \* **Ma**, die Lena hot an neichn Hund  
\* Die Lena hot **leicht** an neichn Hund

You should know this

I'm surprised

# Double positives: distributional restriction

I: Pedro quiere un perro.

Peter want a dog.

‘Peter wants a dog.’

R1: Sí

R2: Sí sí!

# Double positives: distributional restriction

I: Pedro quiere un perro.  
Peter want a dog.  
'Peter wants a dog.'

R1: Sí

R2: Sí sí!

R3: Claro que sí.

Clear that yes

'Of course.'

R4: \*Claro que sí sí.

# Double positives: interpretive restriction

I: Da Peta hot si an fuas brochn.

DET Peter has REFL INDEF foot broken

‘Peter broke his leg.’

R: Jo jo. → p = old information

“responding with doubled *ja* “indicates that the prior utterance contains already known information (...) and that therefore the current action should be stopped.”

Golato & Fagyal 2008: 249

# Double positives: interpretive restriction

I: Da Peta hot si an fuas brochn.  
DET Peter has REFL INDEF foot broken

R: i) Jo!  
Yes HL% → p = old information

# Double positives: interpretive restriction

I: Da Peta hot si an fuas brochn.  
DET Peter has REFL INDEF foot broken

- R: i) Jo!  
Yes HL% → p = old information
- ii) Jo?  
Yes LH% → p = new information

# Double positives: interpretive restriction

I: Da Peta hot si an fuas brochn.

DET Peter has REFL INDEF foot broken

R: i) Jo jo! → p = old information

ii) Jo jo? → p = old information

# Double positives: interpretive restriction

I: Da Peta hot si an fuas brochn.

DET Peter has REFL INDEF foot broken

- R: i) Jo? (Is des wirkli woa?)  
'Is this really true?'  
(Warum sogst ma den des?)  
'Why are you telling me that?'
- ii) Jo jo? (\*Is des wirkli woa?)  
'Is this really true?'  
(Warum sogst ma denn des?)  
'Why are you telling me that?'



# *huh* as a universal word

## **Extract 1** American English [NB, 1:1:19]

1. G It's not too bad,
2. E Huh? [hã ↗ ]
3. G 'S not too bad,

Dingemanse et al. 2013

≈ There is a problem in the communication?

≈ I don't understand?

≈ Can you clarify?

≈ What?

# huh as a universal word

## Extract 1 American English [NB, 1:1:19]

1. G It's not too bad,
2. E Huh? [hã ↗]
3. G 'S not too bad,

It's a universal

## Extract 2 Siwu (Ghana) [Maize1\_1017013]

1. A *mm, nɛ uiba nɛ*  
YES SO he:NOT:come SO  
Mm, so he didn't come.
2. B **ã?** [ẽ: ↗]
3. A *nɛ uiba nɛ*  
SO he:NOT:come SO  
SO he didn't come.

## Extract 3 Lao (Laos) [CONV\_050815c\_03.10]

1. A *nòòj4 bòò1 mü2 sùak4 vaa3 nòòj4*  
N. NOT have rope Q.MARK N.  
Noi, don't you have any rope, Noi?
2. B **aa?** [hã ↗]
3. A *bòò1 mü2 sùak4 vaa3*  
NOT have rope Q.MARK  
Don't you have any rope?

# huh as a universal word

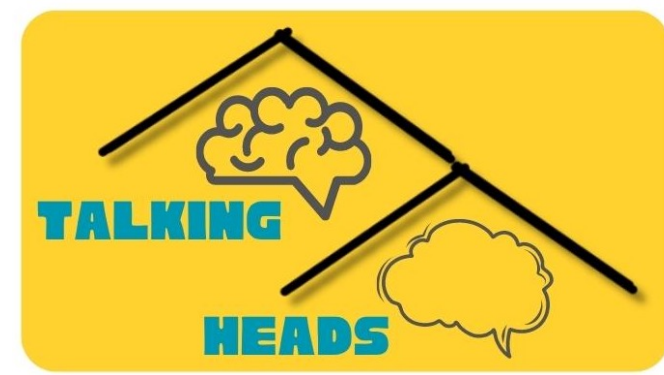
It's a universal

**Table 1.** Question words (“what?”) and interjections (“huh?”) for initiating repair in ten languages.

Language	Question word	Interjection
Cha'palaa	ti	ʔa:↘
Dutch	wat	hɜ ↗
Icelandic	kʰva:θ	ha↘
Italian	kʰɔza	ɛ: ↗
Lao	i'ɟiaŋ	hã: ↗
Mandarin Chn.	ʂəmə	ã: ↗
Murriny Patha	ʧaŋgu	ã: ↗
Russian	ʃtɔ	a: ↗
Siwu	be:	ã: ↗
Spanish	ke	e ↗

doi:10.1371/journal.pone.0078273.t001

# Today

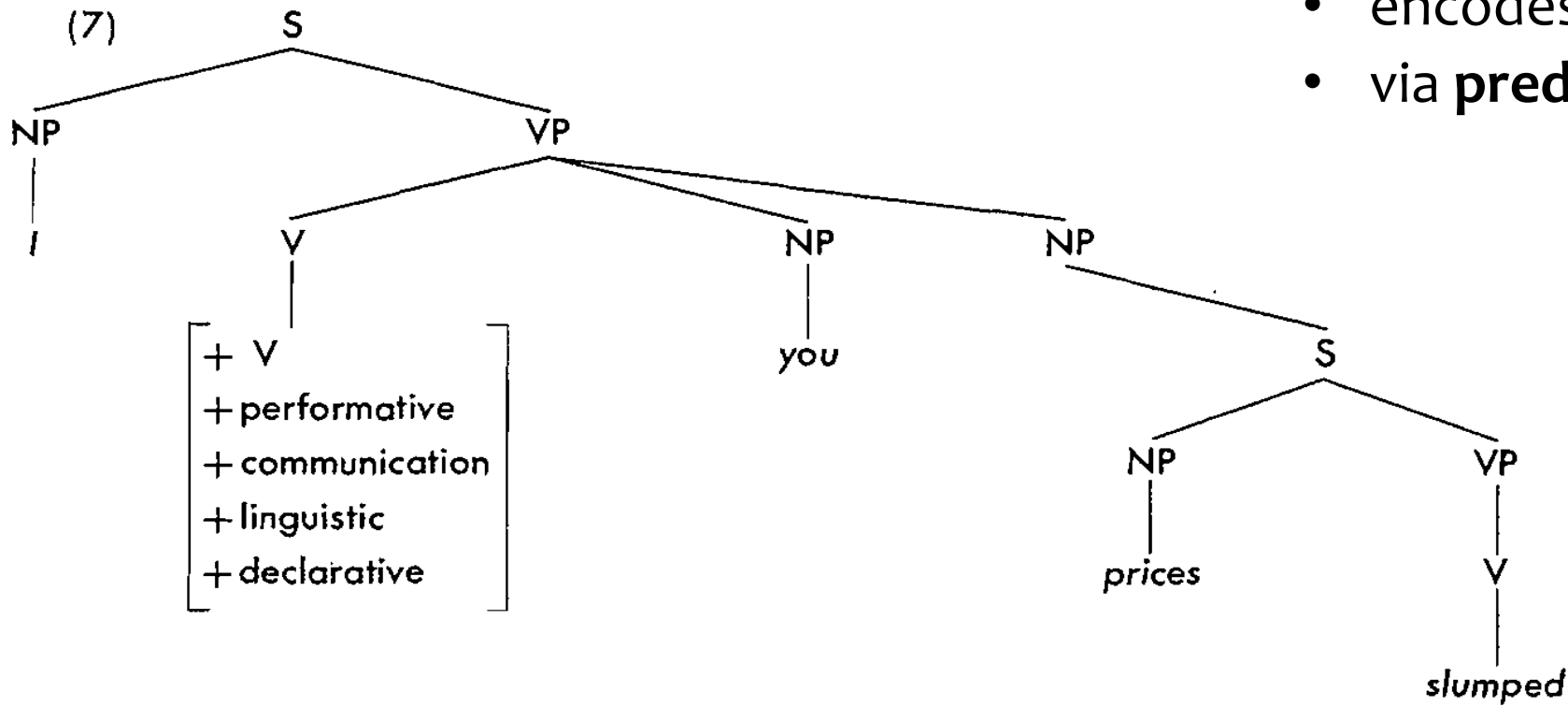


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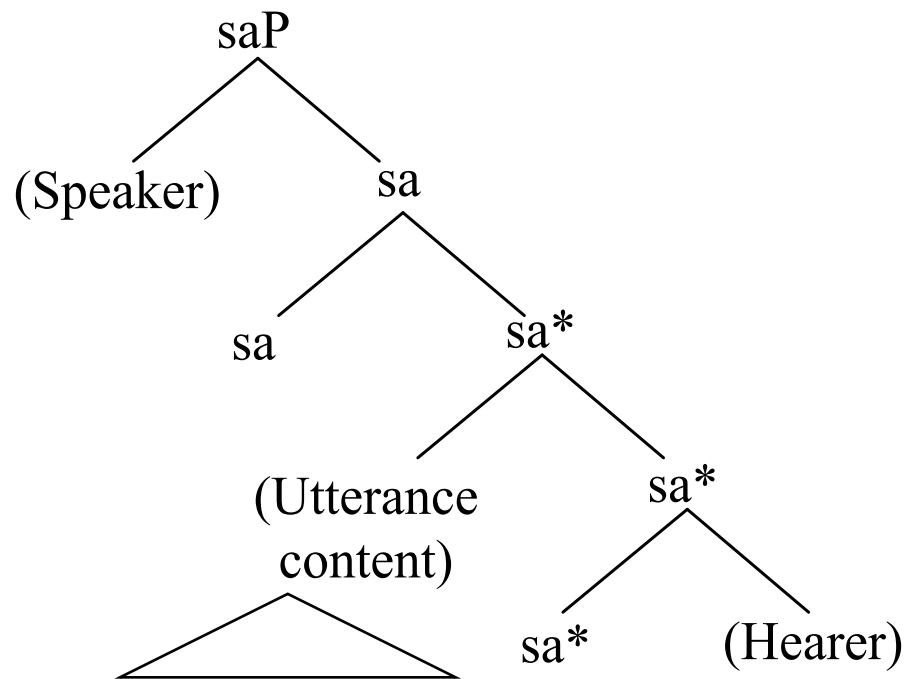
# Performative Hypothesis

Syntax at the top:

- encodes **speech acts**
- via **pred-arg structure**



# (Neo)-Performative Hypothesis

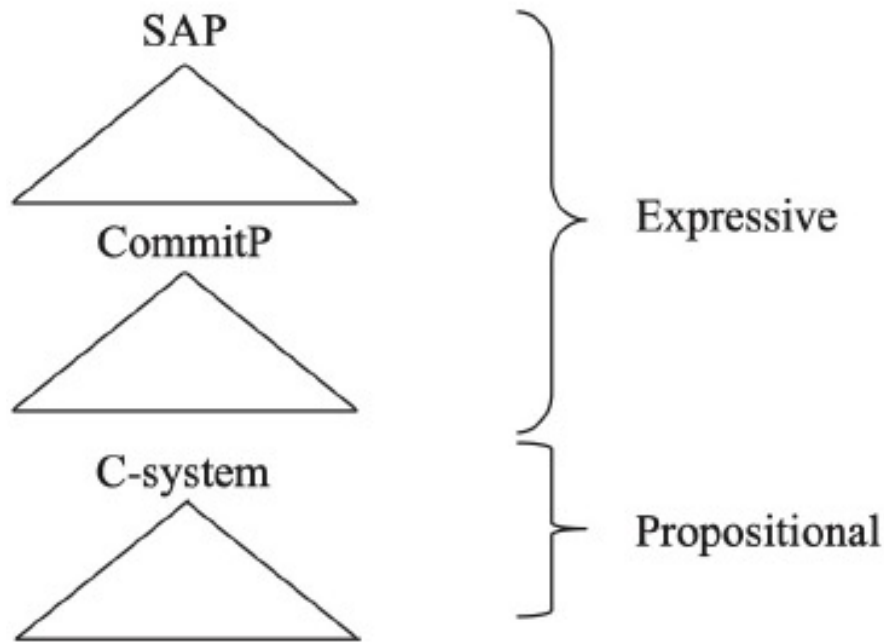


Speas & Tenny 2003: 320

Syntax at the top:

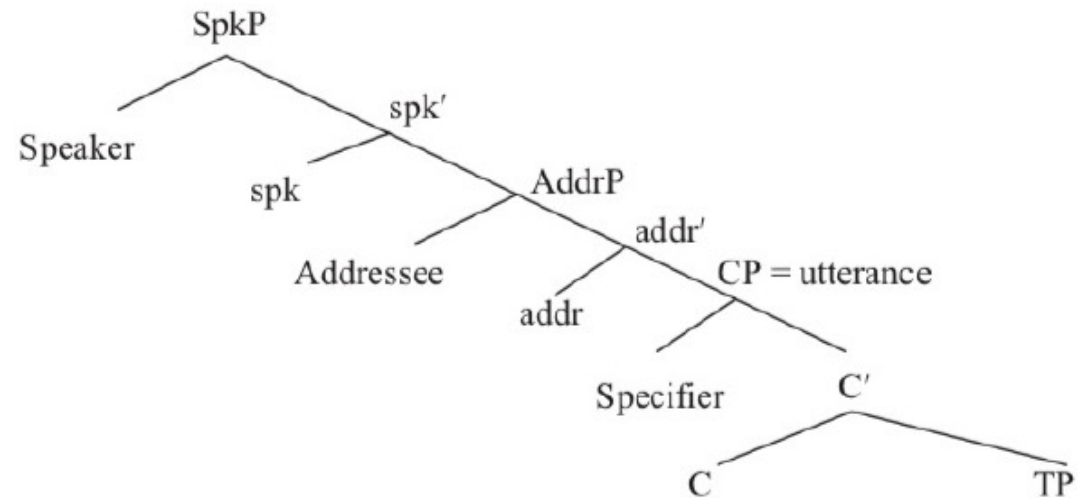
- encodes **speech acts**
- via **functional categories**
- inspired by **Speech Act theory**

# (Neo)-Performative Hypothesis



Syntax at the top:

- encodes **speech acts and commitments**
- via **functional categories**
- inspired by **Speech Act theory** and **commitment-space semantics**

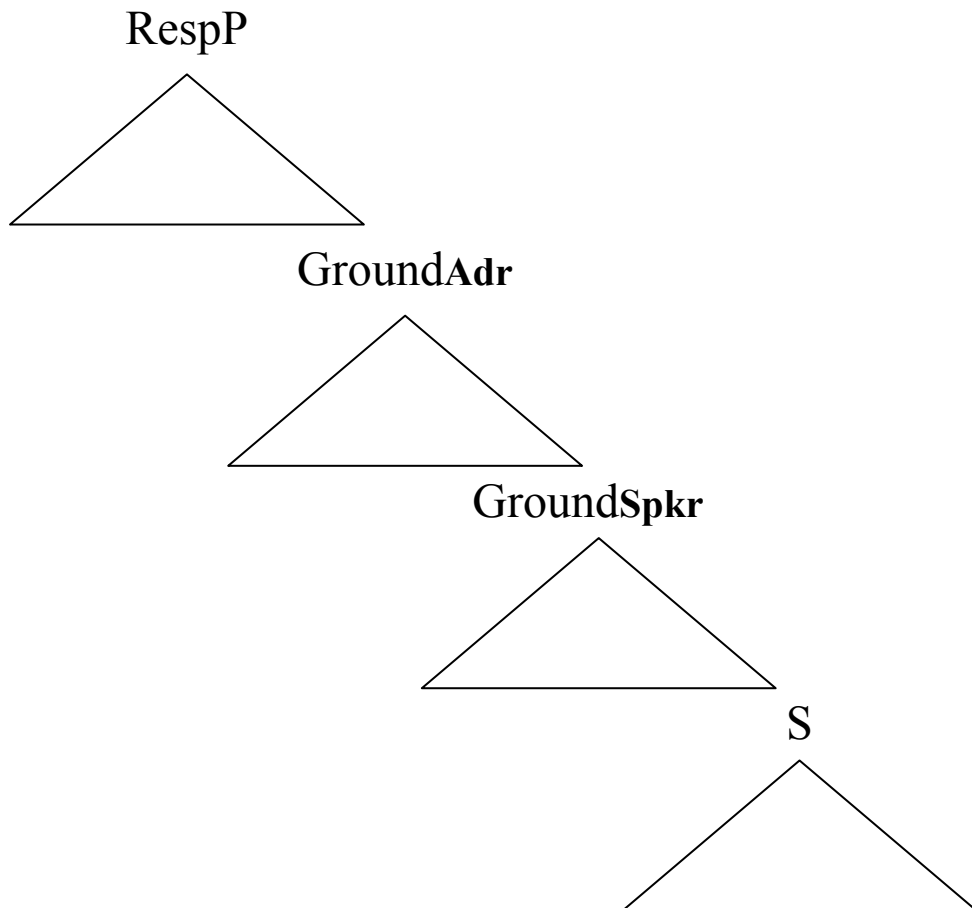


Miyagawa 2022

# The interactional spine hypothesis (ISH)

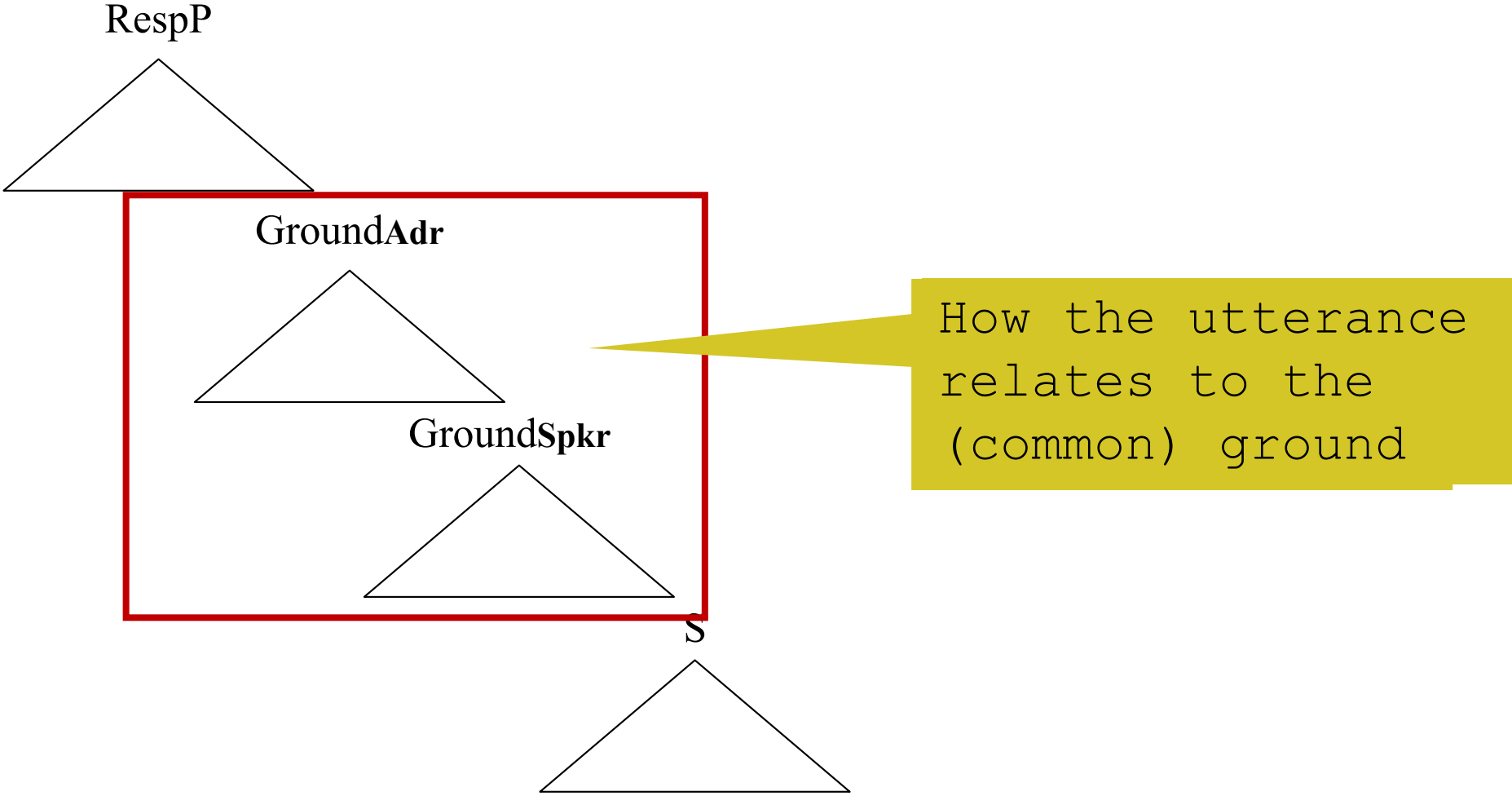
Syntax at the top:

- regulates **grounding and tabling/turn-taking**
- via **functional categories**
- inspired by **Conversation Analysis** and **Interactional linguistics**



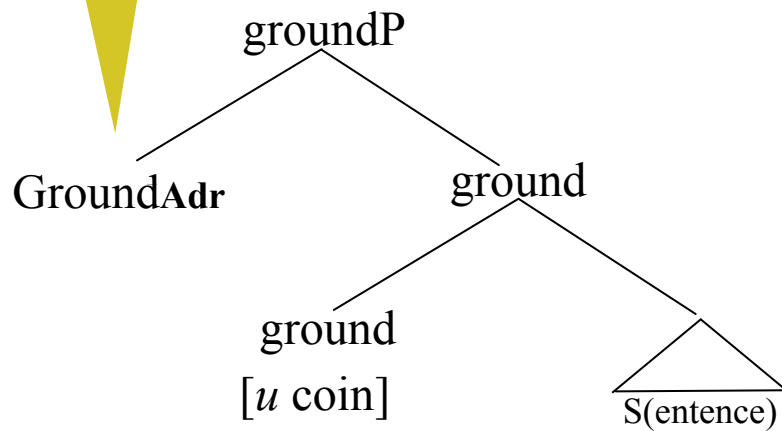


# The interactional spine hypothesis (ISH)

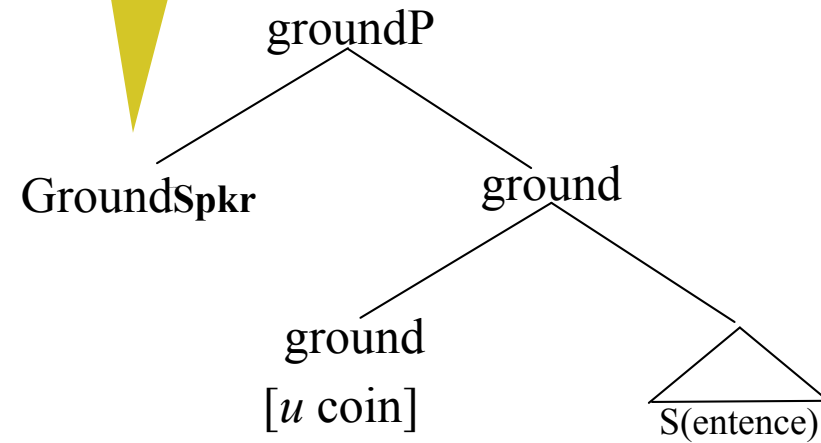


# The interactional spine hypothesis (ISH)

What I'm saying  
{is/is not} in  
your ground

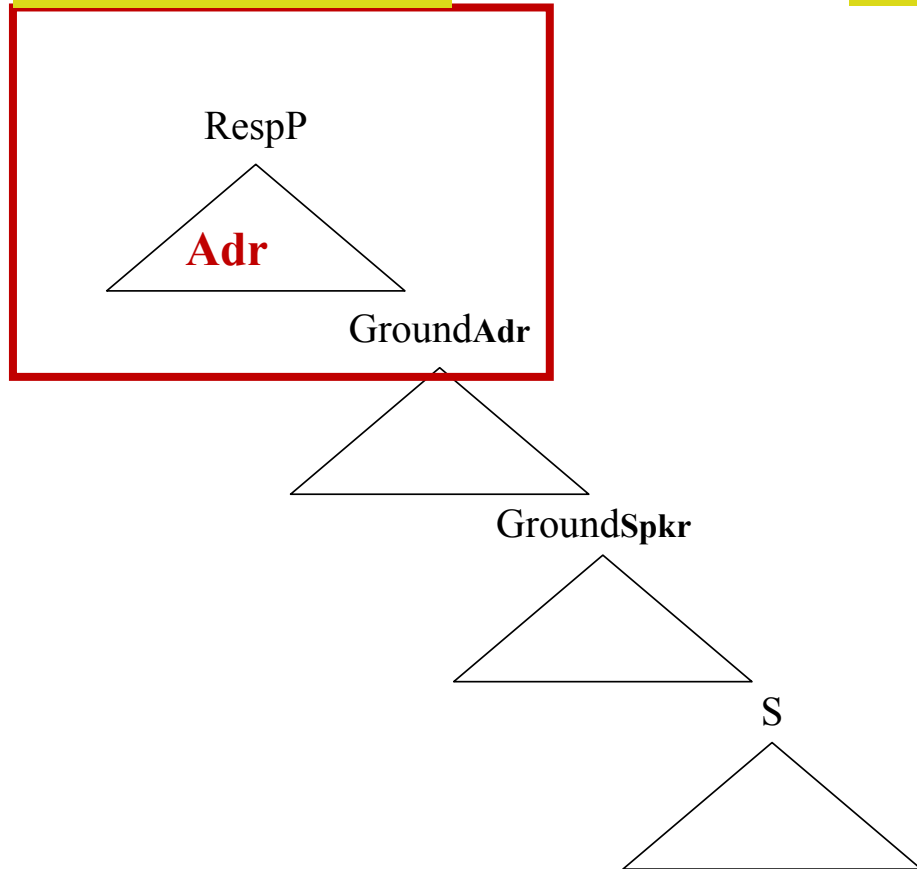


What I'm saying  
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my ground

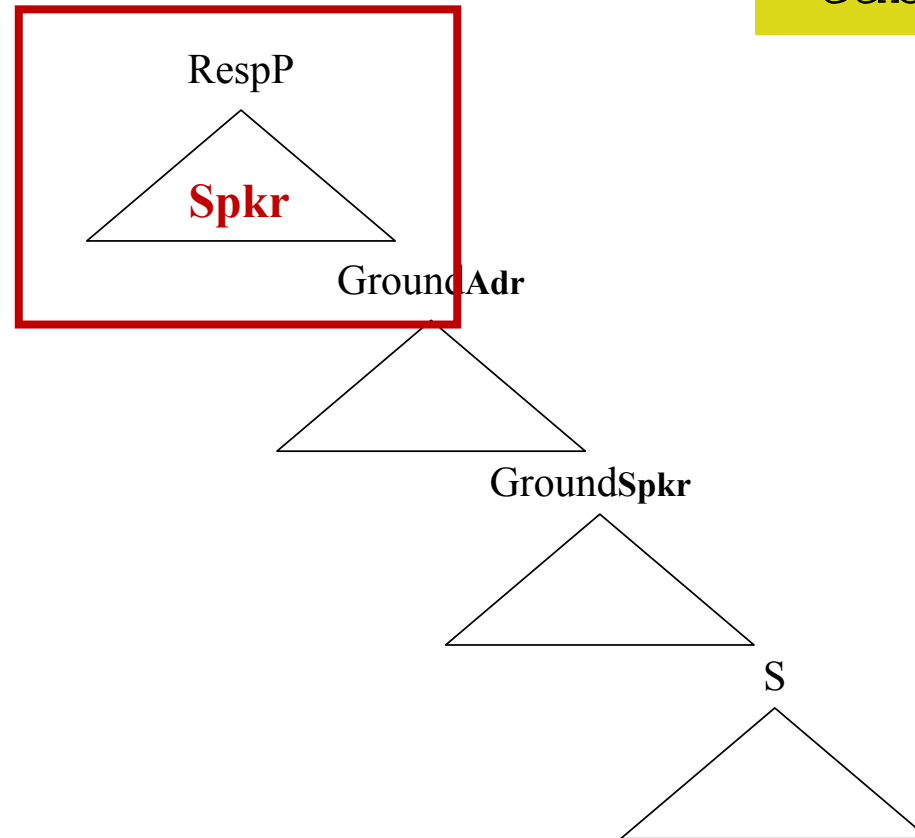


# The interactional spine hypothesis (ISH)

Initiating  
move



Reacting  
move

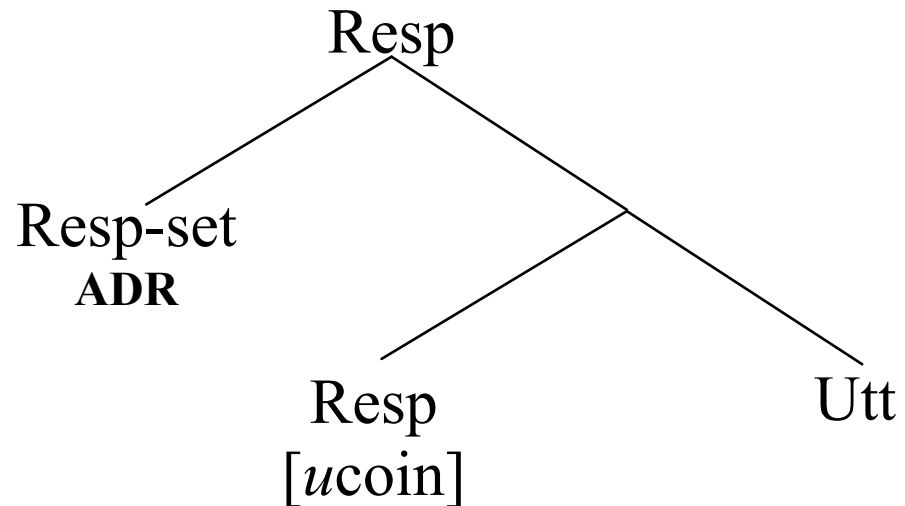


How the utterance  
relates to the  
"table"

# The interactional spine hypothesis (ISH)

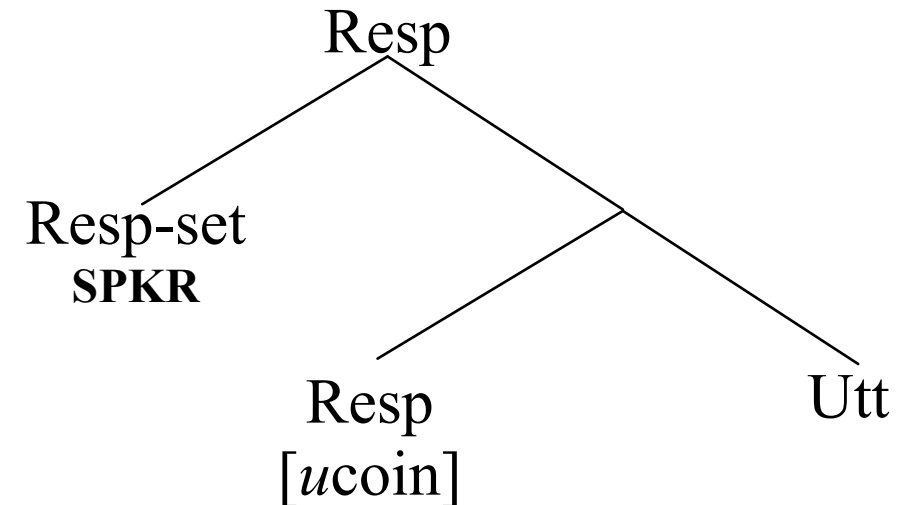
What I'm saying  
{is/is not} in  
**your** response-set

INITIATION:



What I'm saying  
{is/is not} in  
**my** response-set

REACTION:



# Not everything is ON the spine

- There still is room for pragmatics off the spine
  - Not all moves have to be typed as initiating or reacting.
  - Move-typing is only necessary when the current move violates the normal course of an interaction

Preference for agreement and contiguity

[Sacks 1987](#)

Violating maxims

[Westera 2013](#) on S-final rise

# Overview of the course



1. The framework: reframing thoughts in interaction
2. Discourse markers: using (new) thoughts.
3. A new window: telling yourself what you think??
4. The syntax of emotions
  1. The syntax of talking heads

# How to prepare for tomorrow



- Come with a unit of i-language in a language you speak
- Tips for finding one:
  - What do you say when you:
    - request confirmation (something S-final)
    - If you have to disagree (something S-initial)
    - If you are surprised (something S-initial, or free-standing)
    - If you tell the addressee something they already know
    - ...

# How to prepare for tomorrow



- Come with a unit of i-language in a language you speak
- Think about its...
  - Function
  - Distribution
  - Intonation
  - Selectional restrictions
  - ...



# How to prepare for tomorrow



- Come with a unit of i-language in a language you speak
- Think about its...
- Is it describable/analysable in terms of the ISH?
  - RespP: initiation or response
  - GroundP: Adr or Spkr-oriented?
  - XP or X