1 Syntax as a system of rules

Foundations of Syntax

Irina Burukina

irina.burukina@btk.elte.hu

Let us start at the very beginning

Syntax is something related to Language

What is Language?

Language

Language – a system of communication.
Language – a system of signs
A sign = signifier (shape) + signified (mental concept)
(Ferdinand de Saussure)
Signs = words, morphemes.

Signs and How to combine them

Language is not only words.
We need rules to combine them into larger units, such as phrases, clauses and complex sentences.

A clause – a single verb and its dependents.

(1) a. John hugged Mary. – 1 clause, 1 sentence

b. Bill said [that John hugged Mary].
– 2 clauses, 1 sentence

c. Bill asked/promised John [to hug Mary].
– 2 clauses, 1 sentence

Signs and How to combine them

Random combinations will not work:

(2) Mary with boy hit book →

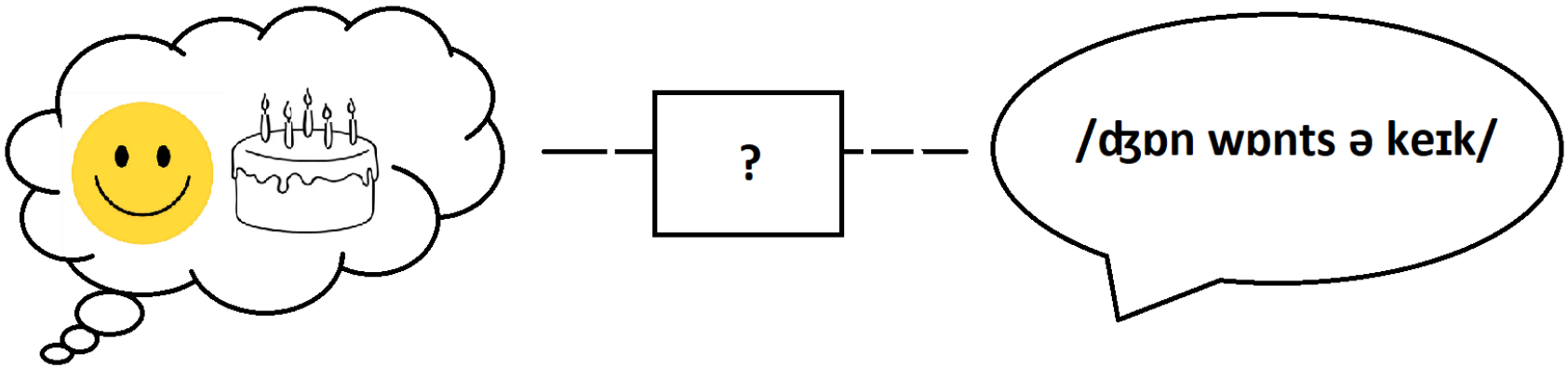
(3) a. Mary hit a boy with a book. (2 interpretations)

b. A boy with a book hit Mary.

c. A boy hit Mary with a book.

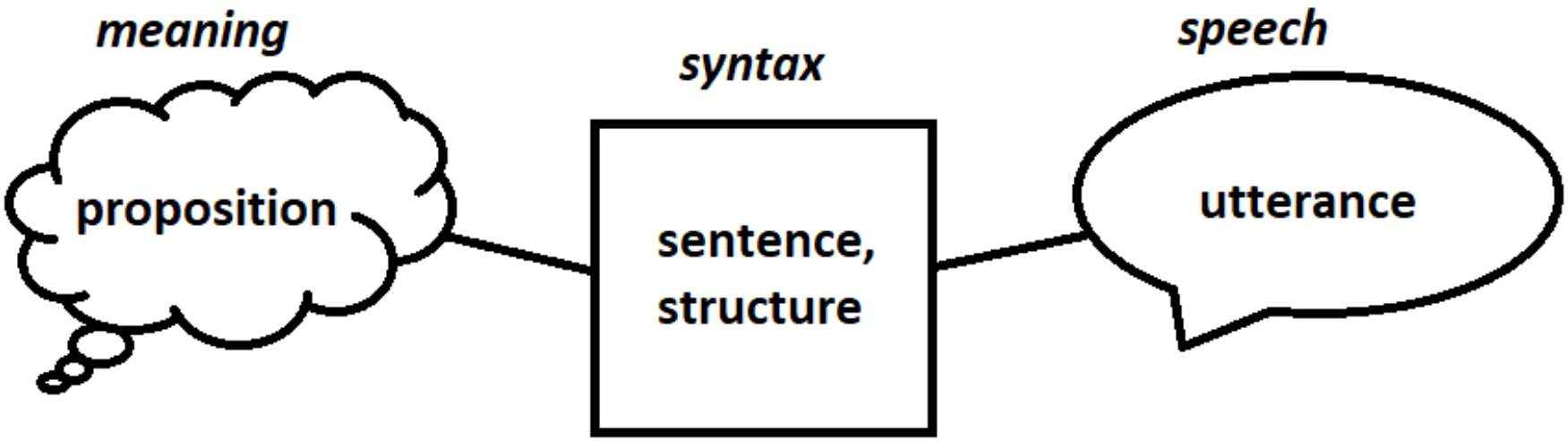
Syntax as a system of rules

Syntax relates form and meaning, speech and semantics.



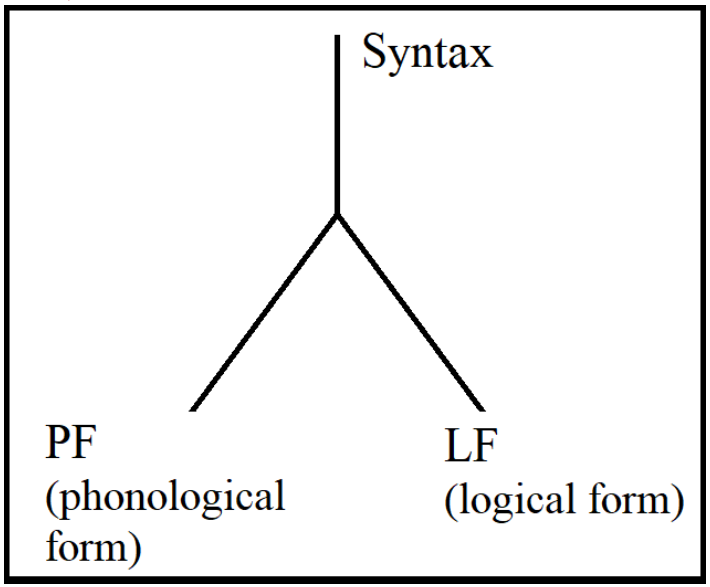
Syntax as a system of rules

Syntax relates form and meaning, speech and semantics.



Syntax as a system of rules

The derived syntactic structure is send to the interfaces:
PF = Phonological Form
(Spell-Out: linearization, vocabulary insertion).
LF = Logical Form (interpretation).
Y/T-model:



Signs and How to combine them

Regularities:

(4) a. look (PRESENT) + ed = looked (PAST)
b. work (PRESENT) + ed = worked (PAST)
c. jump (PRESENT) + ed = jumped (PAST)

→ Children overgeneralize. They recognize a rule and try to apply it without an exception, producing the forms goed, comed, runed

Signs and How to combine them

Syntax = a system of rules.

Question: Is syntax for human languages only?

Animal languages

Chimpanzees: different calls.

*Book: In the shadow of man, by Jane Goodall

Chimpanzees

Chimpanzees

- Hoo
- Waa
- Hoo + Hoo + ... + Hoo + Waa – a food source, another group, crossing a valley, etc.

Hoo face

Waa face

← A system of communication
but not a system of compositional rules.

Animal languages

Campbell's monkeys: a system of calls.

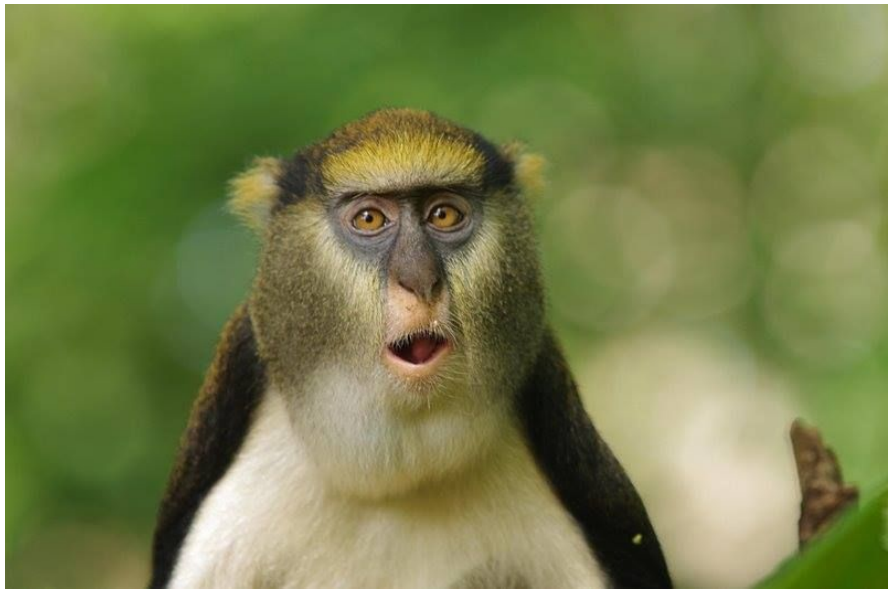


Figure: A Campbell's monkey impressed by syntax

*See work by Philippe Schlenker

Campbell's monkeys

Campbell's monkeys

Calls:

- Hok – an eagle
- Boom – a falling branch / group travel
- Krak – a leopard

Campbell's monkeys

- Hok-oo – something happens in the canopy
- Krak-oo – general alarm call

→ -oo = suffix, 'softens the meaning'

*These monkeys also have dialects! Check Professor Schlenker's website for more information: <online>

Campbell's monkeys

- Boom + boom + krak-oo + ... + krak-oo
  – falling trees or branches
- Boom + boom + krak-oo + hok-oo ...
  – a neighbouring group of Campbell's monkeys

Do they have Syntax?

Animal languages:

- (Almost) no compositionality
- No complexity
- Limited number of possible combinations

Human languages vs. Animal languages

Human languages:

- Compositionality:
  A + B = meaning A + meaning B
  John + walk + ed = John walk-ed
- Complexity
- Infinite number of possible combinations

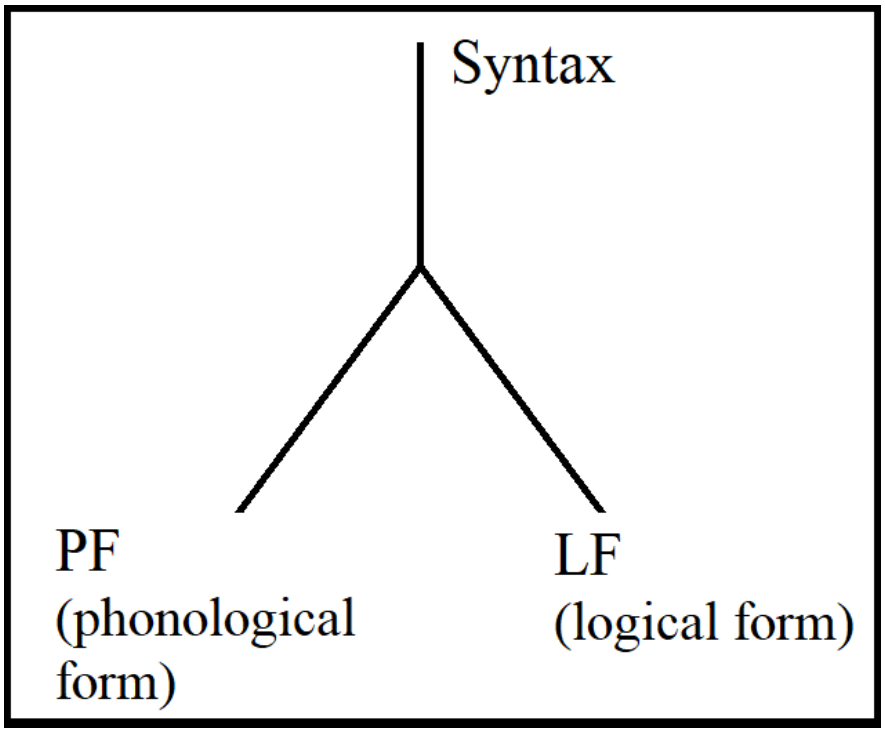
→ Humans can talk about various things, abstract notions, different time periods and places, possible worlds (for instance, think about the difference between John eats meat./John can eat meat./John must eat meat).

Interim summary

Language = signs + rules

Language = lexicon + syntax

Syntax: rules to generate all grammatical sentences.



Interim summary

Generative grammar – as linguists, we model the rules that allow us to build all grammatical sentences and that reject all ungrammatical sentences.

We come up with a group of rules (i.e. grammar) based on the actual language data (empirical observations). Our rules are hypotheses – they must make predictions and be falsifiable. Our theory must be descriptively and explanatory adequate.

Exercise

Below you will find several Sanskrit verbs (a) and their translations into English, written in a different word order (b). Match the Sanskrit verbs with the correct translations.

(5) a. nayasi, icchati, anayam, nayāmi, icchasi, icchāmi, anayat

b. I want, you lead, he wants, I lead, I led, you want, he led

*The answer is on the next slide.

Exercise

- nay-as-i, a-nay-am, nay-ām-i, a-nay-at
- icch-at-i, icch-as-i, icch-ām-i
- you lead (PRES), I lead (PRES), I led (PAST), he led (PAST)
- I want (PRES), he wants (PRES), you want (PRES)

nay = drive, icch = want

a- PAST, -i PRESENT

-am- I, -as- YOU, -at- HE