



Linguistics at the centre of Human mind, Language Acquisition and Language Classroom

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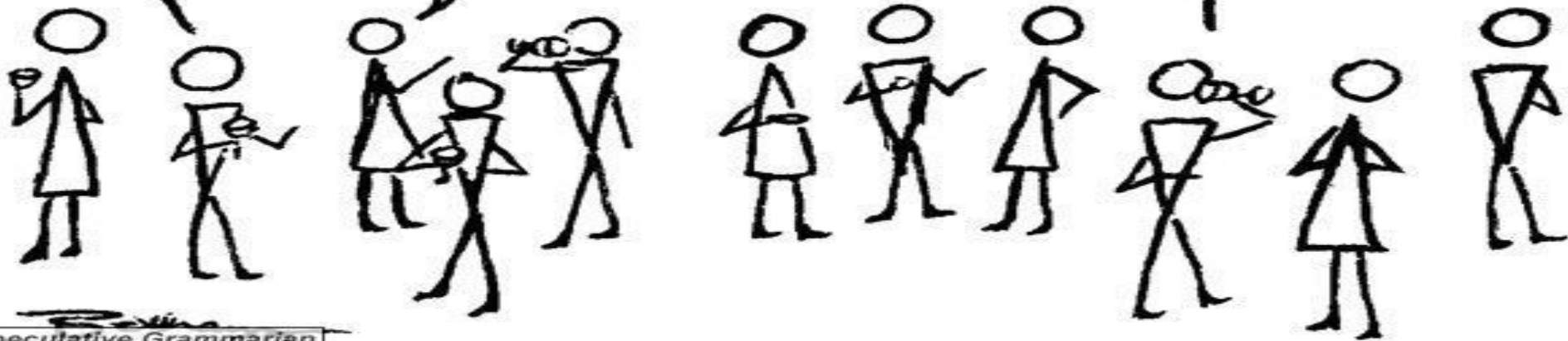
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The linguists strike back

Marine biologist?
Wow, so how many
dolphins do you
own?

So you're an
ophthalmologist?
Fascinating, so
how many
eyes do
you have?

Anesthesiologist, eh?
So do you actually, like,
feel anything?



Fundamental questions in Linguistics (Chomksy 1981, 1986)



What constitutes knowledge of language?



How is such knowledge acquired?

How is such knowledge put to use?

An example of tacit (unconscious) knowledge

1. Jane went out after she had lunch.
she = Jane
2. After Jane had lunch, she went out.
she = Jane
3. After she had lunch, Jane went out.
she = Jane
4. She went out after Jane had lunch.
she = somebody else

The precede-and-command condition (Langacker 1969)

“A pronoun cannot both precede and S-command its antecedent.”



S-command: A node A S-commands another node B iff the lowest S-node which properly dominates A also properly dominates B.

How do children acquire this knowledge?

Λοιπόν Τακη μου, σήμερα θα μάθουμε για την γραμμική προτεραιότητα και την δομική επιβολή. Αλλά πρώτα απ' όλα, να σου εξηγήσω τι είναι οι συμπληρωματικές προτάσεις....

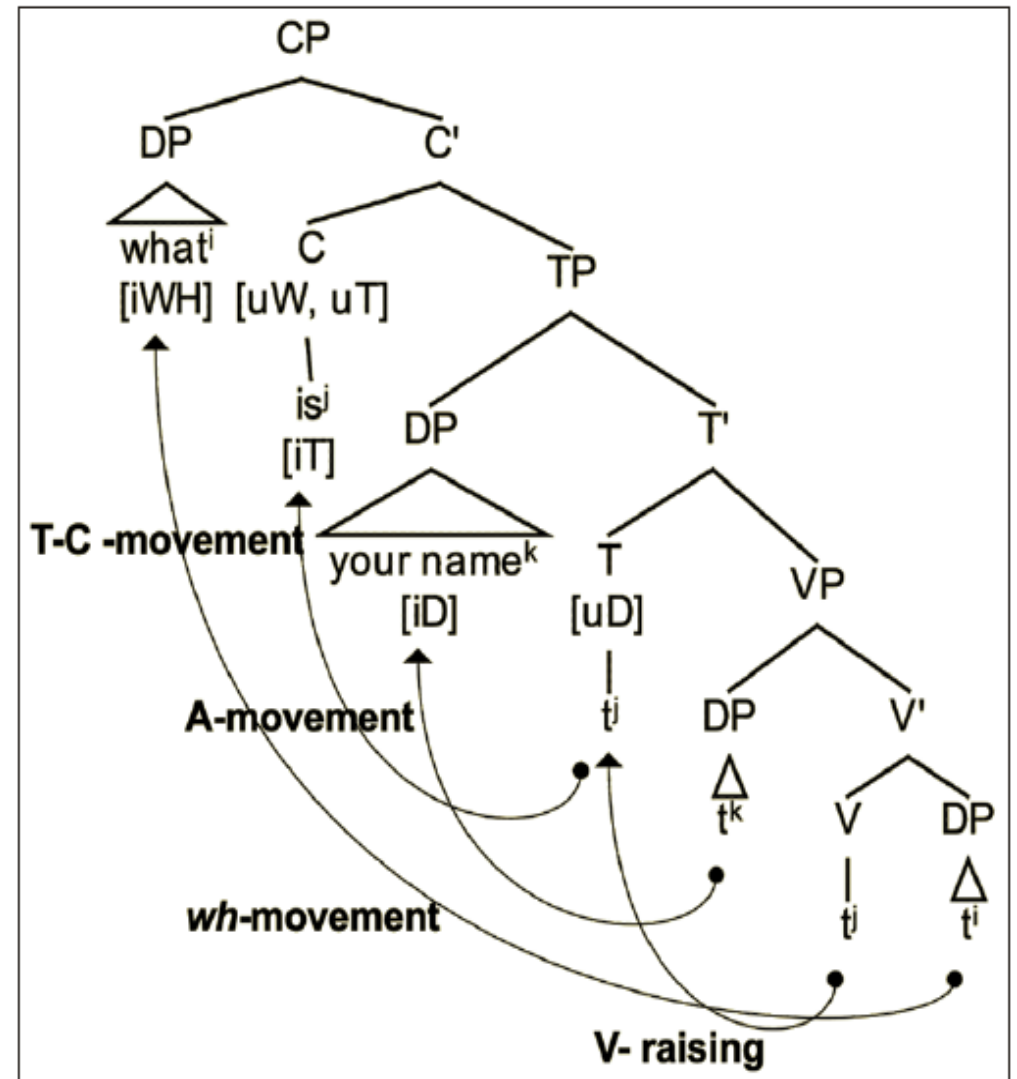


- (1) a. Do you want to look at the chicken?
b. Do you *wanna* look at the chicken?
- (2) a. Who do you want to see?
b. Who do you *wanna* see?
- (3) a. who do you want to fee the dog?
b. *Who do you *wanna* feed the dog?
- (4) a. Who do you want to win the race?
b. *Who do you *wanna* win the race?
- (5) a. Who_i do you want to see t_i?
b. Who_i do you want t_i to feed the dog?

Does the input in (1-3a) and (4a) provide full evidence for the complexity without underlying knowledge as such?.....NO

The complexity in the *Wanna* contraction involves wh-movement and the position of the trace left behind by wh-movement.

- (1) a. Do you want to look at the chicken?
 b. Do you *wanna* look at the chicken?
- (2) a. Who do you want to see?
 b. Who do you *wanna* see?
- (3) a. who do you want to fee the dog?
 b. *Who do you *wanna* feed the dog?
- (4) a. Who do you want to win the race?
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- (5) a. Who_i do you want to see t_i?
 b. Who_i do you want t_i to feed the dog?



(1) a. Do you want to look at the chicken?

b. Do you want to look at the chicken?

(2) a. What do you want to look at?

b. What do you want to look at?

(3) a. What do you want to look at?

b. What do you want to look at?

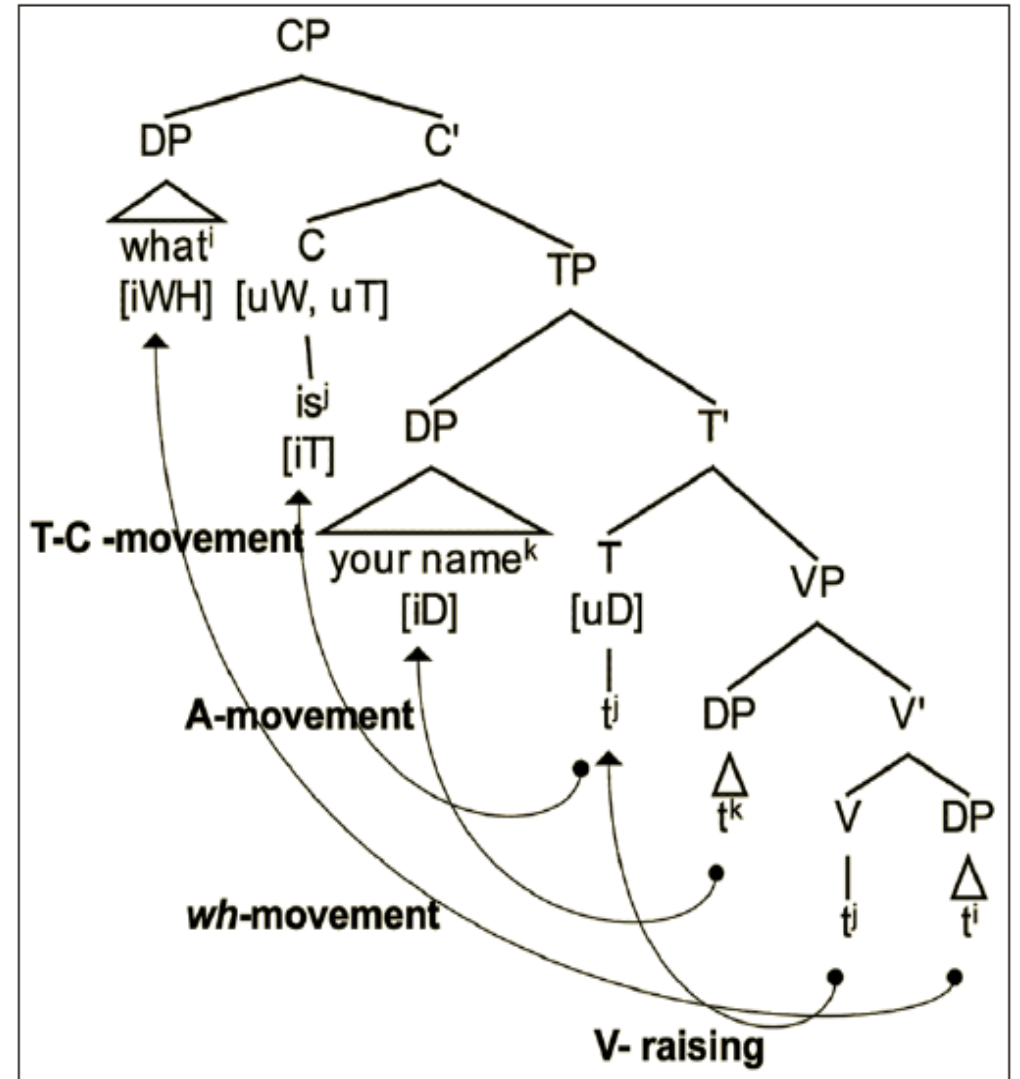
(4) a. What do you want to look at?

b. What do you want to look at?

(5) a. Who do you want to look at?

b. Who_i do you want to look at to feed the dog?

Much of this complex linguistic system is inborn knowledge, just like biological organs we are born with



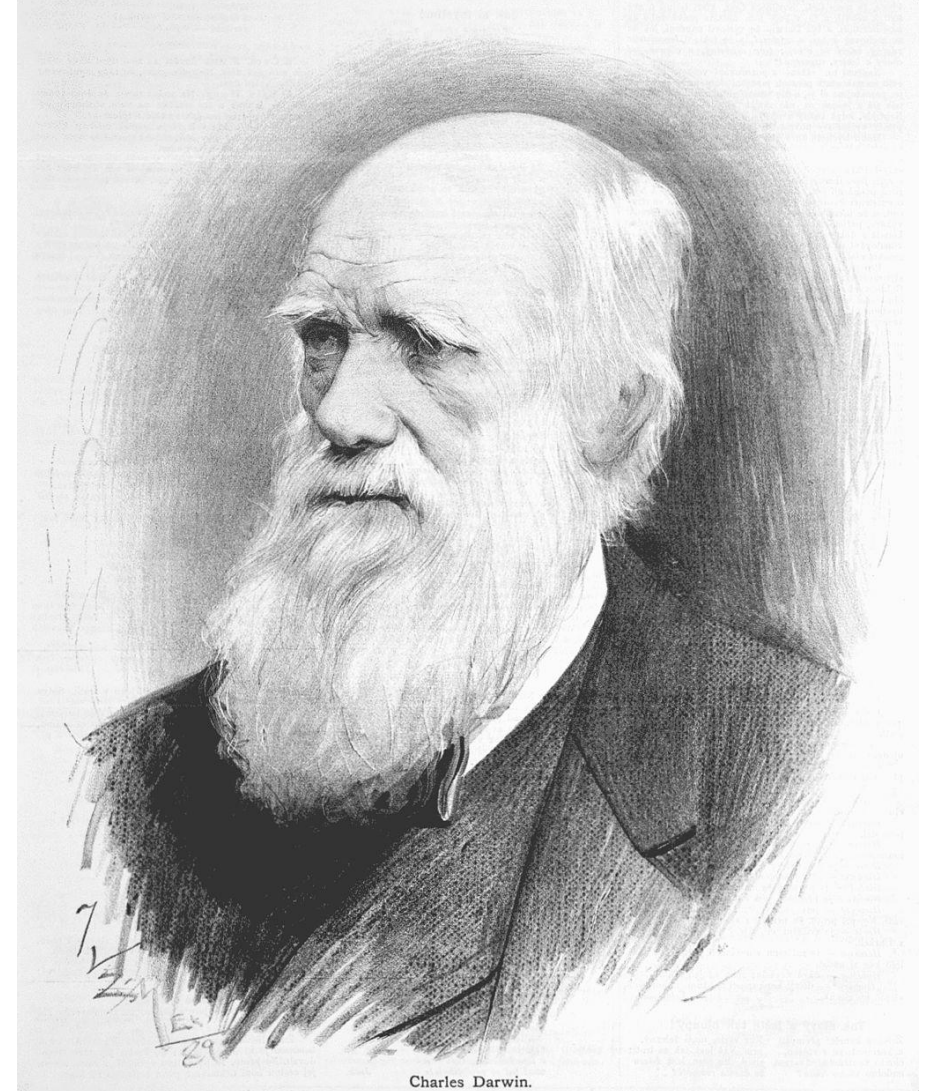
Knowledge of Language and Linguistics

- The unconscious knowledge is systematic and rule-governed
- BUT the main focus of the study of linguistic knowledge is to try to account for language in terms of abstract principles, rather than language-specific rules
- These principles are assumed to be universal, the emphasis being on what languages have in common at some underlying level
- Children seem to develop this complex knowledge of their language beyond the language samples (input) they encounter
- Linguistics models how this knowledge of language is represented in our mind (syntax, semantics, phonology....)

Darwin (1871)'s *The Descent of Men*

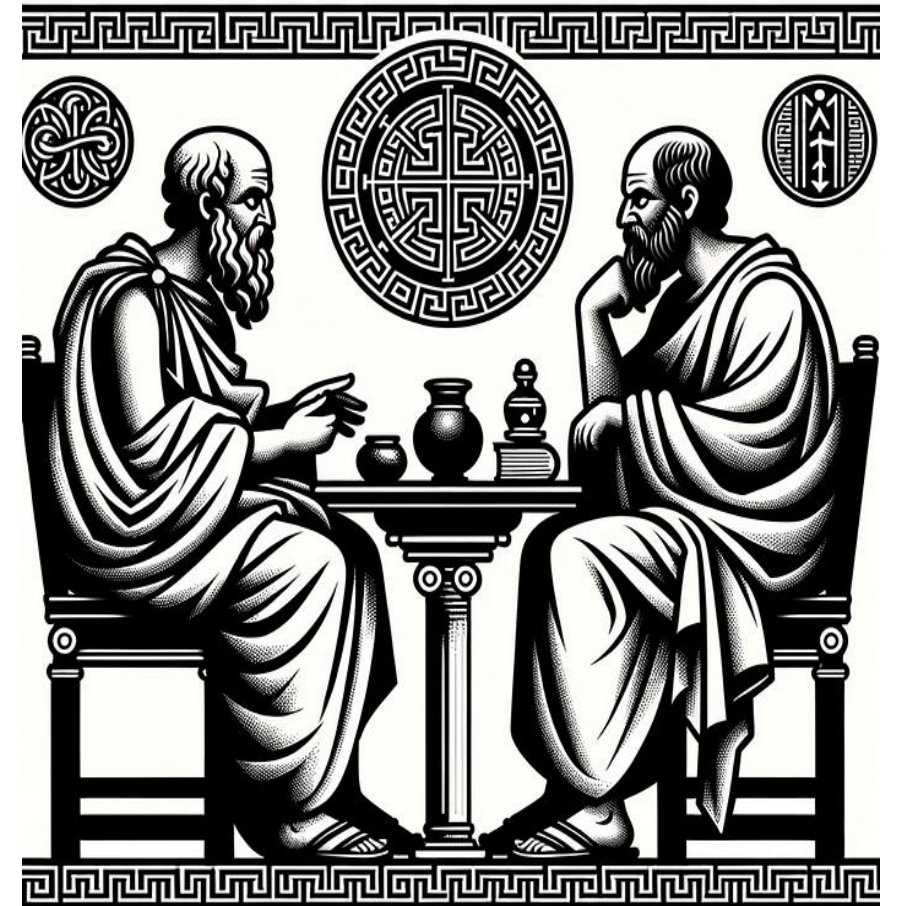
[Language] differs widely from all ordinary arts, for man has an instinctive tendency to speak, as seen in the babble of young children, while no child has an instinctive tendency to bake, brew, or write...

(modified from Darwin (1871))



Poverty of Stimulus (PoS)

- The idea behind such child language acquisition originates from a long-standing philosophical question, *Poverty of Stimulus*
- Plato's *Meno*: Plato's record of a conversation between Socrates and Meno, debating about whether certain knowledge (e.g, virtue, geometry) can be learned or is inborn knowledge
- See Gil, Marsden and Tsoulas (2018) for a linguistic guide to PoS, from ancient philosophy, language acquisition and computational linguistics



Interim Conclusion: We are amazing!

(and we proved ourselves beating GenAI even before we reached age 4)



VS.



LLMs (Large Language Models)
of GenAI generate new language
texts/speech

Children are a competent
language speaker by age 4

Conclusion 1: We are amazing! (and we proved ourselves beating GenAI even before we reached age 4)



VS.



Uses billions and trillions of parameters as database

Language database for children is extremely tiny in comparison

Conclusion 1: We are amazing! (and we proved ourselves beating GenAI even before we reached age 4)



VS.



Language development, a long time coming with scientific advances

Language development in place despite cognitive ability yet to grow

Conclusion 1: We are amazing! (and we proved ourselves beating GenAI even before we reached age 4)



VS.



Not completely error free yet

No errors in adulthood (but only mistakes)

Conclusion 1: We are amazing! (and we proved ourselves beating GenAI even before we reached age 4)



Generative AI as system
(database running out in 2
years)

VS.



Generative Grammar as system
(a part of our biological system
without needing further database)

What about second language (L2) learners?

- L2 learners have a lot more database than L1 children.
 - Already have language learning experience – L1 Grammatical system
 - Input from language classroom – Grammar instruction with L2 language input
 - L2 input outside the classroom
- A lot more database, yet the complete mastery of L2 is rare

Second Language Acquisition (SLA) on surface

Most L2 learners are normally introduced to L2 in classrooms (unlike L1)

The final attainment of L2 tends to vary among different learners (unlike L1)

Learners' progress rates tend to vary among different learners (unlike L1)

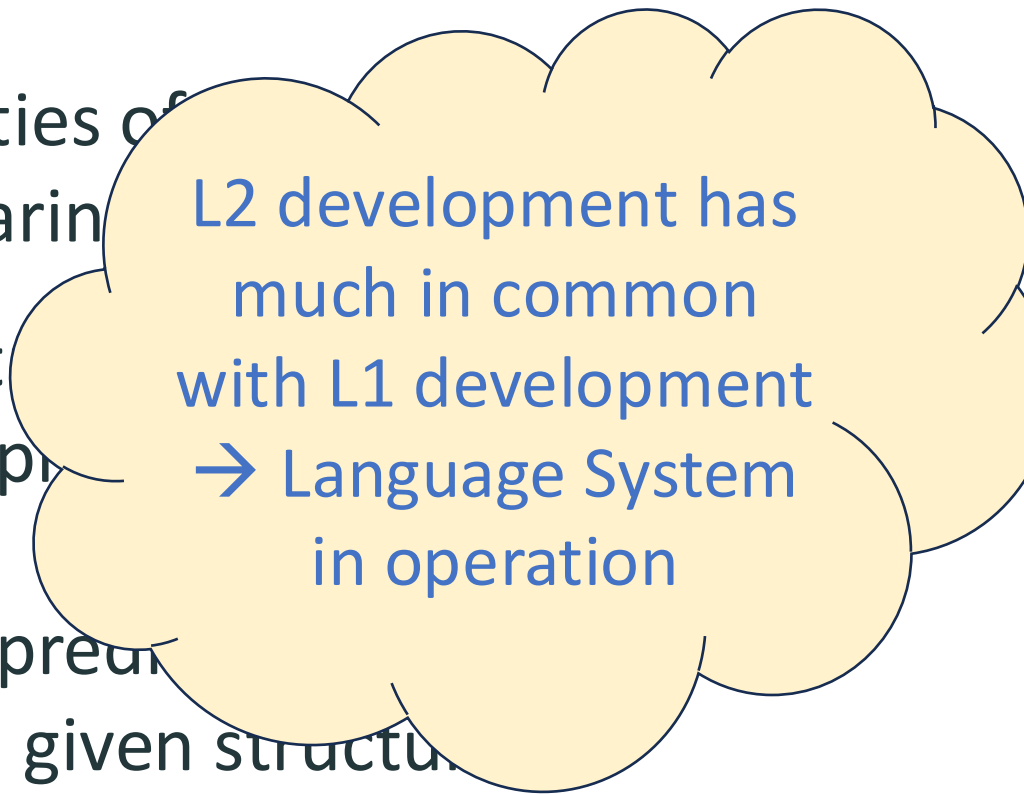
May look like an entirely different language development from first language acquisition, BUT...

Second Language Acquisition (SLA): Main research findings to date ...

- Native-like knowledge is not entirely impossible in many properties of L2.
- L2 Learners come to know some properties of L2 - more than what they have been exposed to L2 input (hearing/reading English);
 - Without any relevant classroom instructions;
 - Where they can't infer from similar properties in L1
- Learners' output (speech) often follows predictable paths with predictable stages in the acquisition of a given structure

Second Language Acquisition (SLA): Main research findings to date ...

- Native-like knowledge is not entirely impossible in many properties of L2.
- L2 Learners come to know some properties of L2 that they have been exposed to L2 input (hearing)
 - Without any relevant classroom instruction
 - Where they can't infer from similar patterns
- Learners' output (speech) often follows predictable stages in the acquisition of a given structure.



L2 development has much in common with L1 development
→ Language System in operation

Linguistics informs SLA research

- Feature reassembly Hypothesis (Lardiere, 2008)
 - L2 learners establish one-to-one mapping in lexicon between L2 and 1, and reassemble features where the mismatches are
- Bottleneck Hypothesis (Slabakova 2008)
 - Functional morphology creates a bottleneck for the acquisition of L2 Syntax
- Interface Hypothesis (Sorace 2005)
 - Discourse presents a persistent difficulty even in L2 learners with near-native proficiency

Research into language classroom

- These L2 hypotheses predict what CAN be acquired and what canNOT be readily acquired
 - If NOT acquired, can it be learned;
 - Can instruction lead to acquisition/learning of the given target property in L2?
- Recent L2 research shows instruction can alter the trajectory and outcome of L2 (Snape and Yusa 2013, *inter alia*)

Implications of research to grammar teaching

- Linguistics informs “what” to teach (vs. “How”)
(Whong, Gil and Marsden 2014)
- SLA research can predict “what of language ” L2 learners have persistent problems with
- Example from Rankin (2013) for L1 German speaking learners of L2 English

English word order problem for L1 German speakers

(Rankin 2013)

- Rankin compares a variety of word order problems in L2 English in German learners and identifies that:
 - there are few problems in word order in questions and with negation;
 - learners from various backgrounds suffer from residual problems with other word order variants due to adverb placement and the occurrence of apparent V2 structure in English.
- Rankin proposes **what** to teach should consider what L1 group in question
- Implication for classroom: form-focused instruction on adverb placement and on inversion in declaratives for German learners and other V2 L1 learners.

Clitic pronouns in L2 Greek

(Mangana and Gil, 2023, in preparation)

Verbs with two objects: GEN_{IO}_ACC_{DO}

ο Petros **του** ton dini
the. Petros.NOM **him.GEN** **him.ACC** gives
'Petros gives it to him'

Verbs with two objects: ACC_{IO}_ACC_{DO}

με παίρνει τηλέφωνο
me.ACC take _3rd person_sing **phone.ACC**
“s/he gives me a call”

Clitic pronouns in L2 Greek

(Mangana and Gil, 2023, in preparation)

- Genitive and accusative in Modern Greek qualify as dependent cases which are assigned in opposition to a lower and a higher argument, respectively.
- Genitive assignment is sensitive **not** to a specific theta role such as possessor, experiencer, source or goal, but to the presence of a lower argument in the VP domain.

(Anagnostopoulou & Sevdali 2007)

- Clitics are not salient in the input. They are never stressed, they don't bring new information into discourse, as they refer to already mentioned entities
- The input learners get during formal instruction is less than enlightening.
- How can they be taught?

Need to bring clitics and their association with verbs into learners' attention!

- A new way of introducing clitic form is designed using four different verb groups
- An intervention study supports this new instruction design

4 Verb groups:

V1

ONE complement in ACC

(a) με κοιτάζει
me.ACC looks_3rd person sing
 "S/he looks at me"

V2

ONE complement in GEN

(b) μου τηλεφωνεί
me.GEN phones_3rd person sing
 "S/he calls me"

V3

Either ONE complement in ACC (DO) or TWO complements in ACC (DO) and GEN (IO)

(c) την ετοιμάζει μόνος του
her fem .ACC prepares_3rd person sing himself sing NOM
 "He prepares it (e.g. the salad) himself – monotransitive"

(d) μου ετοιμάζει μια έκπληξη
me.GEN prepares_3rd person sing a_ surprise fem ACC
 "S/he prepares a surprise for me"

V4

Vs used as ditransitive [(f) = (d)], but also in expressions with one NP in ACC and clitic in ACC too

(e) με παίρνει τηλέφωνο
you.ACC take_3rd person sing phone.ACC
 "S/he calls me" - "s/he gives me a call" - "s/he gives me a ring"

(f) μου παίρνει δώρο
me.GEN takes_3rd person sing present.ACC
 "S/he gets me a present"

TEACHING MATERIALS and ACTIVITIES

Διδασκαλείο Νέας Ελληνικής Γλώσσας
Νατάσα Μαγγανά

Εγώ σε βοηθάω. Εσύ με βοηθάς;

1. Ταιριάζω τις προτάσεις με τα σκίτσα και λέω ποιος βοηθάει ποιον!

1. Την βοηθάει να περάσει τον δρόμο. _____
2. Τον βοηθάει να περάσει τον δρόμο. _____
3. Τα βοηθάει να περάσουν τον δρόμο. _____
4. Τους βοηθάει να περάσουν τον δρόμο. _____
5. Την βοηθάει με τα μαθήματα. _____
6. Τις βοηθάει με τα μαθήματα. _____
7. Τον βοηθάει με τα μαθήματα. _____
8. Την βοηθάει με τις δουλειές του σπιτιού. _____
9. Τον βοηθάει με τις δουλειές του σπιτιού. _____
10. Τους βοηθάει με τις δουλειές του σπιτιού. _____



2. Γράψτε άλλα ρήματα σαν το βοηθάει εδώ:

1. Με _____
2. _____
3. Σε _____
4. Τον _____
5. _____
6. Την _____
7. _____
8. Το _____
9. _____
10. Μας _____
11. Σας _____
12. Τους _____
13. _____
14. Τις _____
15. Τα _____



3. Σε ένα χαρτί γράφετε προτάσεις σαν αυτές που είδαμε στην άσκηση 1.

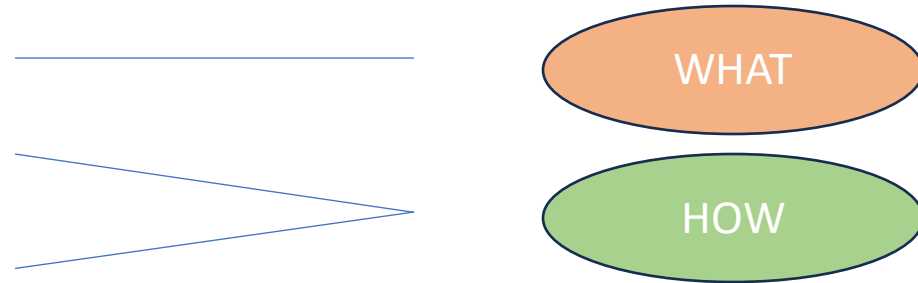
Change
implemented
into teaching
materials
(Mangana 2025)



Room for Grammar teaching in classroom?

- Main considerations in current global textbooks:

- Grammar (language)
- cultural representation
- authenticity



(Harwood 2014, Yildiz 2021, Yildiz and Harwood 2023)

- Grammar (language, the object of teaching) is being squeezed out
- Without improving grammar teaching, other pedagogical methods may not be fully effective

Grammar represents language, the object of teaching

- We love language and yet fears Grammar (Mangana 2024)
- By the rich body of research in Linguistics, we have so much better understanding of language
- Linguistics can offer the best description of language and feed into Grammar taught in classroom (Georgiafentis, Klidi and Tsokoglou 2020), leading to the effective use of classroom time

Grammar in current textbooks lagging behind

- Yet, Grammar in current textbooks has not kept up (since 1970's)
- Sometimes misleading, in contradiction to the use of L2 (Bruhn de Garavito 2013; Gil et al. 2019; Sabir 2018; Lopez 2019)
- Not targeting where the learner difficulty lies (Tung and Gil (in preparation); Garcia-Alvarez & Gil (in preparation))

Linguistics to Grammar teaching

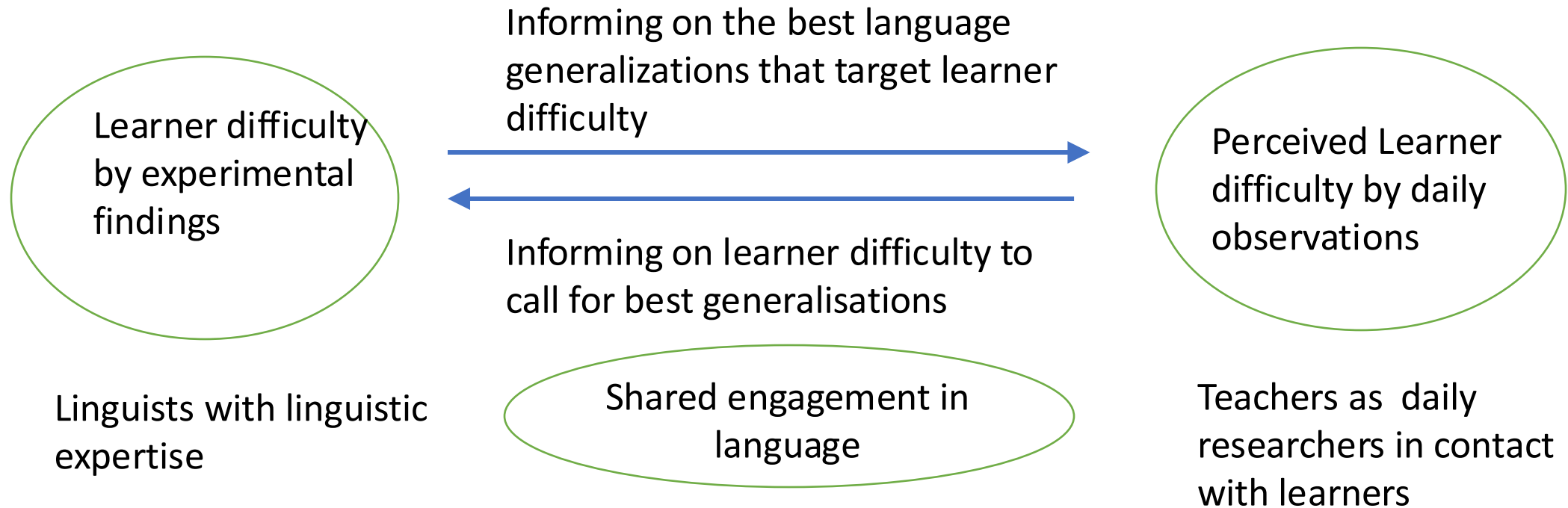
- Linguistics can offer the best description of language and feed better into Grammar taught in classroom (Georgiafentis, Klidi and Tsokoglou 2020)
- SLA research tells what learners have problems with, and what to focus on in classroom and textbooks (Whong, Gil and Marsden 2013)
- Dedicated Research Group in Athens: "Linguistics and Grammar Teaching" (<https://grammar-en.uoa.gr/>)



Conclusion

- What next?
- Keep doing what we already do, and more importantly, find next steps to bring changes to real practice
- Need to bridge between research and practice
- Who? Researchers? Teachers?
- One bridge? Many different bridges (expertise) needed along the way between these two disciplines
- As a linguist, which bridge would you be contributing to, to make a meaningful difference?

Conclusion



Conclusion

- So much work to be done
- Linguists are ready to move forward and have so much to contribute to the real world.
- Are you ready?



Ευχαριστώ!

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