

Noam Chomsky:

“Language and
Problems of
Knowledge”

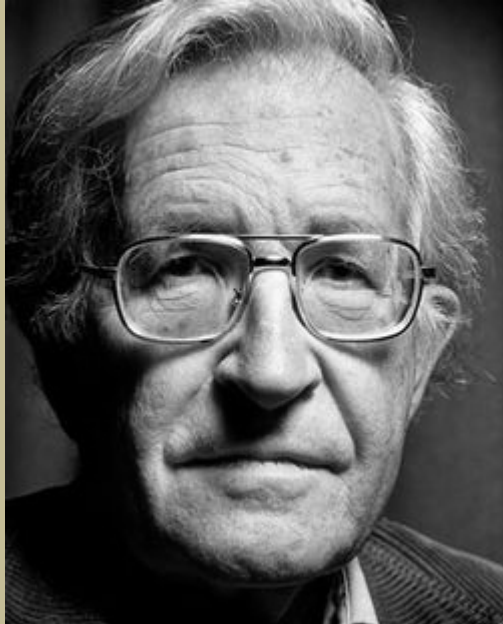
Sarah Fobes



<http://www.chomsky.info/>

Not to be confused:

Noam Chomsky



- Human who teaches linguistics at MIT
- Called “father of modern linguistics”
- Has published over 100 books
- Cited as a source more often than any other living scholar from 1980 to 1992

Nim Chimpsky



- Chimp who knows fragmented ASL
- More charming than Noam
- Hasn't published anything
- (Probably) never been cited as a source

“Language and Problems of Knowledge”

Three key ideas:

1. Universal Grammar
2. I-Language rather than E-language
3. (At least) three kinds of knowledge of a language

Key Idea 1:

Universal Grammar

Universal Grammar (UG)

“...universal grammar is... the system of principles that specify what it is to be a human language. This system of principles is a component of the mind/brain prior to the acquisition of any particular language.”

“Universal grammar describes a ‘language acquisition device’, a system that maps data into language.”

“Theories concerning it are true or false.”

(Chomsky, pg. 11)



Why must UG exist?

Answer: **Poverty of the stimulus**

It is not possible that people get all of their information about language from external stimuli (i.e., hearing others speak).

You have never before heard/read the sentence:

“The giraffe shot the flaming arrow directly into the potato.”

Still, you know what it means.

Perhaps you have heard a sentence with a similar grammatical structure before?

Art – N – V – Art – Adj – N – Adv – P – Art – N

Maybe in this case, but that’s not always true...

For example: Recursion

Nim Chimpsky wears pants.

Allison says that Nim Chimpsky wears pants.

Bertie knows that Allison says that Nim Chimpsky wears pants.

Charlize believes that Bertie knows that Allison says that Nim Chimpsky wears pants.

Dmitri agrees that Charlize believes that Bertie knows that Allison says that Nim Chimpsky wears pants.

Engelbert suspects that Dmitri agrees that Charlize believes that Bertie knows that Allison says that Nim Chimpsky wears pants.

I could keep going infinitely, and if you had the patience, you could still understand the sentence.

A few examples of UG, found in ALL languages:

- Recursion
- Subject-object distinction
- Verbs
- Personal pronouns
- Shifters like “this”, “that”, “these”, “those”, “here”, “there”, “now”.

Universal Grammar (UG)

“At peak periods of language acquisition, children are ‘learning’ several new words a day, meaning that they are in effect learning words on a single exposure. This can only mean that the concepts are already available... and the child’s task is to assign labels to concepts.”
(Chomsky, pg. 29)



Conclusive proof of UG: Nigerian Sign Language

- Deaf children in Nigeria isolated, only few home signs.
- School for deaf children opened in 1977.
- Young children who were still in their critical period of language development created a full language out of the home signs.
- They came up with ways to express concepts that they had no signs for before (like pronouns for people who are not present).
- Important because it showed that children don't just parrot language; they are capable of creating it. That means that they must have the biological faculty to do so.

Similar to creating Creole out of a pidgin language.

Universal Grammar (UG)

“I doubt very much that it makes any sense to speak of a person *learning* a language. **Rather, a language grows in the mind/brain.** Acquiring a language is less something that a child does than something that happens to a child, rather like growing arms rather than wings, or undergoing puberty at a certain stage of maturation.”

(Chomsky, pg. 12)



Key Idea 2:

I-Language rather than
E-Language

I-Language instead of E-Language

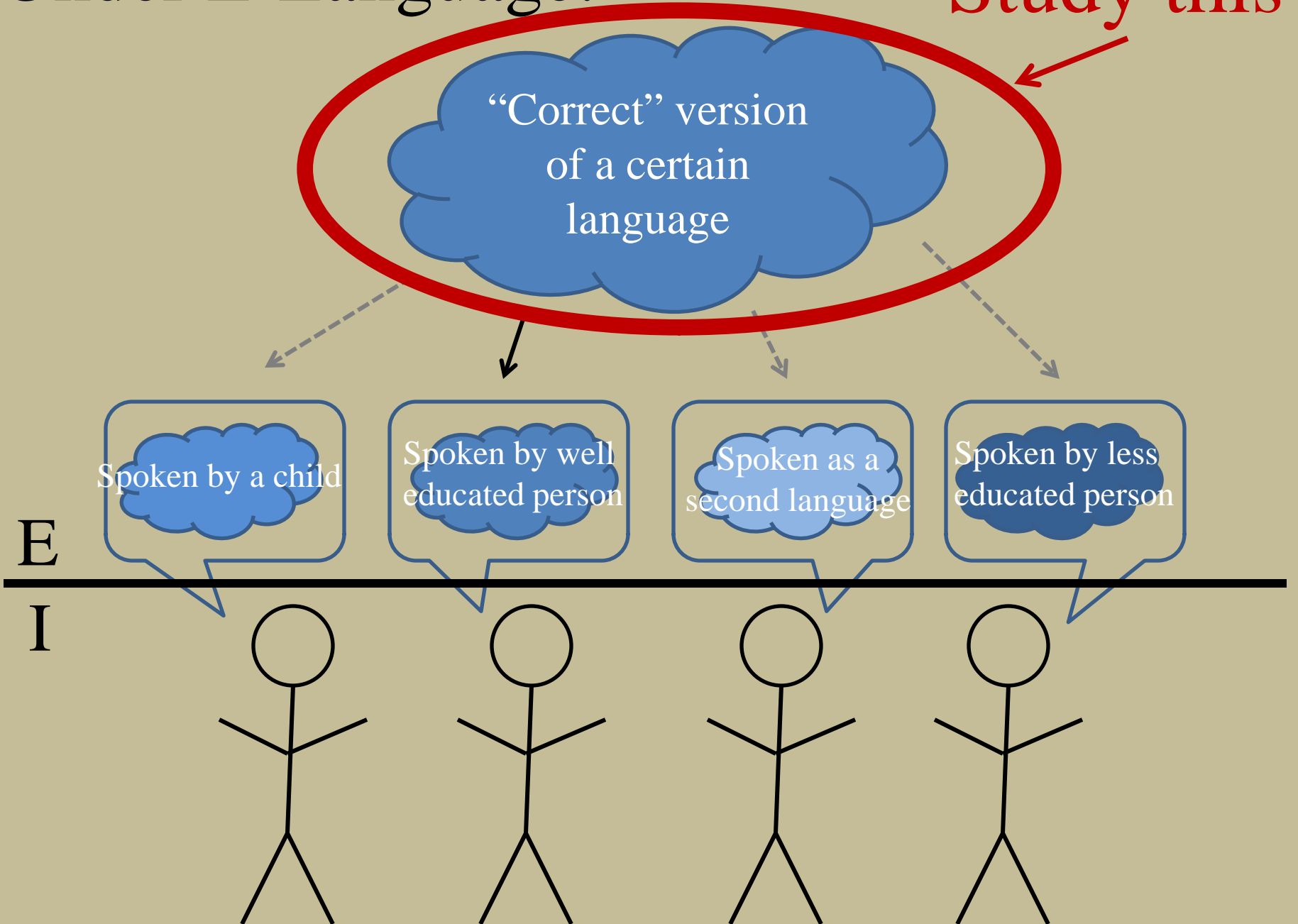
“The general practice has been to define ‘language’ as what I have called... ‘E-Language’, where ‘E’ is intended to suggest ‘extensional’ and ‘externalized’ in the sense that language, so defined, is external to the mind/brain.”

(Chomsky, pg. 7)



Under E-Language:

Study this

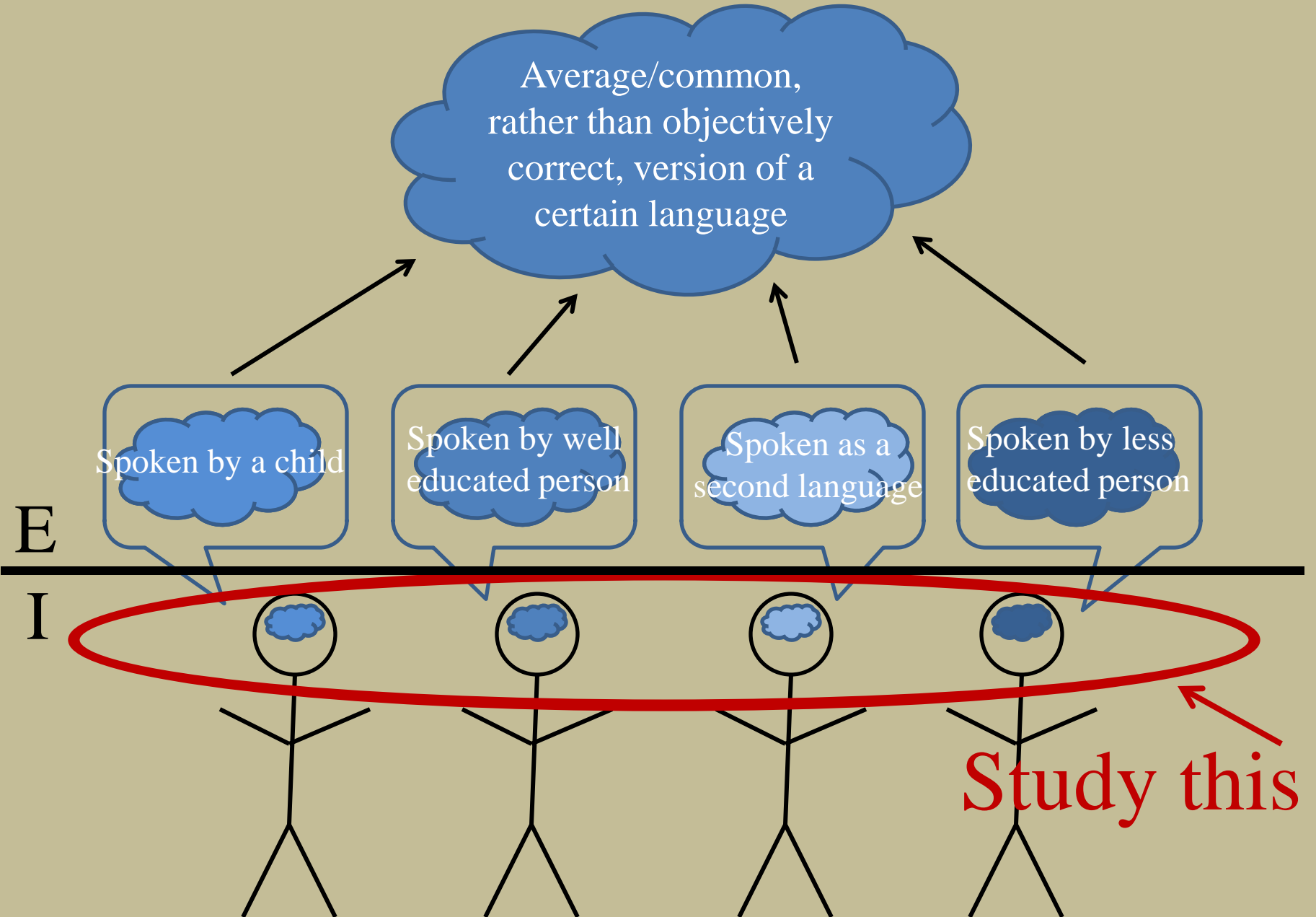


I-Language instead of E-Language

“A better usage would be... to understand the language as what we may call ‘I-language’, where ‘I’ is to suggest ‘intensional’ and ‘internalized’... As contrasted with E-language, (...) I-languages are real entities, as real as chemical compounds.”
(Chomsky, pg. 10)



Under I-Language:



(Possibly) helpful analogy:

Understanding language by looking at E-language is like trying to understand how a computer works by looking at all of the programs that it runs.

Understanding language by looking at I-language is like trying to understand it by looking at the electronics and how they are connected.

Universal grammar is like how all computers use electrical signals (0's and 1's) and logic gates even if they are programmed with different languages.

Key Idea 3:

Three ways of knowing
language

Chomsky tears down Wittgenstein:

- Wittgenstein: Knowledge of language is an ability.
- Chomsky: Real-world Parkinson's example.
 - Someone suffers from Parkinson's and loses ability to speak.
 - Takes medicine and regains ability to speak.
 - Clearly knowledge of language was still there even though ability was gone – medicine wasn't a “language pill”

Instead, (at least) three aspects to knowledge of a language:

1. Internalized system of knowledge of a language
2. Knowing how to speak and understand
3. Knowing that sentences mean what they do

“I slapped Kesha.”

1. Internalized system of knowledge of a language

- The nature of “I” as a concept
- How to refer to other people and objects
- That slapping is transitive – someone must do the slapping, and someone must be slapped.

In this case, Kesha must be slapped.



“I slapped Kesha.”

2. Knowing how to speak and understand

- Need to be aware of the fact that sounds or visual patterns can convey information.
- Need to know how to physically produce or interpret the sounds or visual patterns that will convey the intended words.



“I slapped Kesha.”

3. Knowing that sentences mean what they do.

Knowing that these specific words in this order mean that I, Sarah Fobes, struck with the palm of my hand the face of the talentless blonde who for some inexplicable reason made the song “Tik Tok.”

Seriously, WTF.



Also noteworthy:

“It is doubtful that any sense can be given to the idea that language *is* a communication system, though it can be used for communication, along with much else.”

(Chomsky, pg. 20)



Thought precedes communication

A few gems:

“The **choices** [of essentially all other language scholars except Chomsky] **have generally been questionable** ones.” (7)

“One might argue that [the study of E-language] is a **pointless pursuit.**” (8)

“In my view [questions about set-like properties of languages] are quite **meaningless and empty.**” (9)

“There are so **many well-known problems** with [Quine’s] conception that **I will simply drop it.**” (12)

“To say that it is all knowing-how, hence unproblematic, is merely a form of **anti-intellectualism, little more than an expression of lack of curiosity.**” (15)

“A rather striking feature of the widespread conception of language as a system of abilities, or a habit system of some kind, or a complex of dispositions, is that it has been **completely unproductive. It led precisely nowhere.**” (15)



Recap: “Language and Problems of Knowledge”

Three key ideas:

1. Universal Grammar
2. I-Language rather than E-language
3. (At least) three kinds of knowledge of a language

Questions:

- What do you think of the idea of language as a real, physical thing that can be grown, like an arm?
- Does the existence of a biologically-based UG shed new light on any old philosophical questions? Do any questions stop making sense?
- When does it make sense to ask questions about E-language? About I-language? Which is more helpful in answering questions about sense and reference?
- What might language be used for besides communication, as Chomsky suggests?

Thanks for your attention.



References:

http://en.wikipedia.org/wiki/Noam_Chomsky

http://en.wikipedia.org/wiki/Nim_Chimpsky

http://en.wikipedia.org/wiki/Nicaraguan_Sign_Language

Professor Bonnie Urcioli in the Anthropology Department.