James Herron, Ph.D.

Harvard University

Language And Consciousness

Essential Question of This Lecture

What is the relationship between language and consciousness?

A very old and vexed question, going back to ancient philosophers (Plato and Aristotle).

The basic concepts in the question are also vexed (What is language? What is consciousness?).

Basic Themes We'll Consider

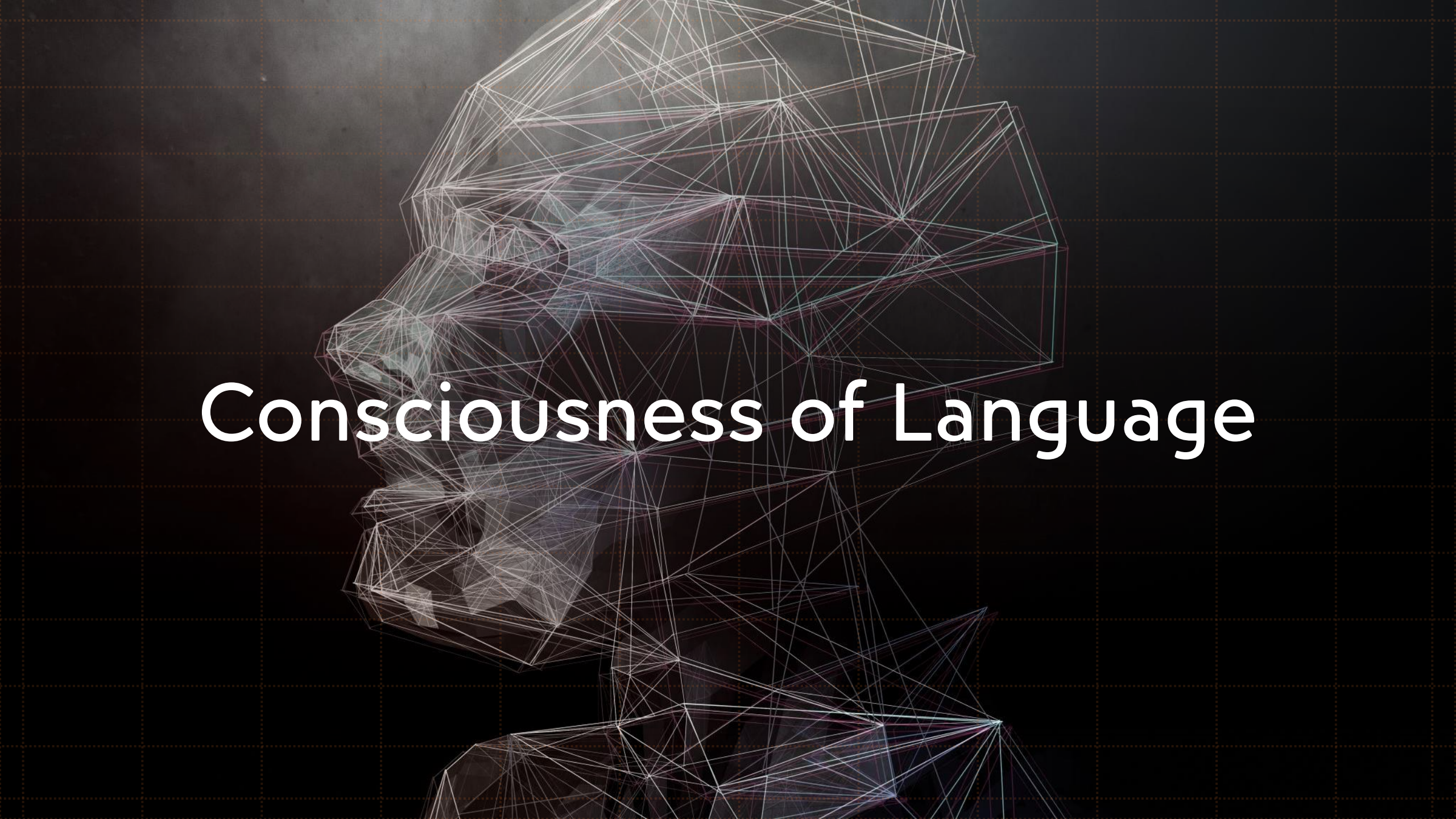
- Do we think in language (do you think in Chinese? Do I think in English?)
- To what extent can we be conscious of language or linguistic processes?
- Does language shape or affect thought?

Do we think in language?

- QUESTION: Do we think in English or Chinese or Tagalog or Apache?
- ANSWER: Probably not.
- WHY NOT? Because many cognitive processes seem to be non-linguistic or pre-linguistic (perception, categorization, inference, etc.)

Is there a language of thought?

- Chomsky's view: we think in an internal language, which he calls "mentalese."
- We understand almost nothing about the structure or character of mentalese.
- External languages (Chinese, English, Navajo) are transformations or translations of mentalese constrained by the limitations of the vocal or other external production system.


Consciousness of Language

Consciousness of Language

To what extent are we consciousness of language?

The large majority linguistic processes are unconscious.

Consciousness of language requires a sensory medium through which linguistic signals an be experienced (sound, writing, movement).

Metalinguistic awareness.

Metalinguistic Awareness

"I DIDN'T SAY "NEVER."

"I DID NOT MEAN TO IMPLY THAT YOU WERE THE WORST STUDENT."

"I DON'T KNOW HOW TO SPELL MISSISSIPPI"

"THE SUBJECT DOES NOT AGREE WITH THE VERB"

Unconscious Aspects of Language

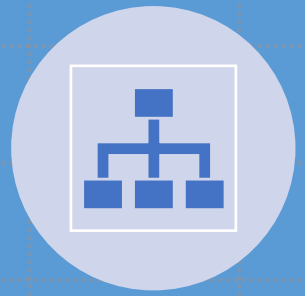
Interpreting and producing language involves multiple levels of unconscious processing (phonology, morphology, syntax, semantics, and pragmatics).

Thse processes operate below the level of conscious awareness.

If we try to become consciousness of these processes, we often mischaracterize or misunderstand them

Example of Unconscious Processing: Syntax (aka Grammar)

Languages have a mathematical like structure that generates the sentences we utter.



The nature of this underlying structure can be understood with formal analysis.

Judgements of Grammaticality

Who did Mary tell the man that hit bill?

**Who did Mary tell the story that Bill hit?*

Most native speakers are completely unable to articulate the reasons underlying judgement of grammaticality.

Additional Evidence of the Unconsciousness of Language: Folk Grammar

Folk grammatical judgements about “proper grammar” are often arbitrary at best.

Folk grammar often systematically misconstrues the actual grammatical patterns of the language

Modularity and Consciousness

Jerry Fodor: the mind is composed of “horizontal” and “vertical” faculties (modules).

Horizontal faculties are general-purpose processes capacities that operate across different domains (problem solving, inferences).

Vertical faculties or modules are specialized and operate in one area (language, perception); modules are automatic, “fast” and “dumb.”

Dual Consciousness

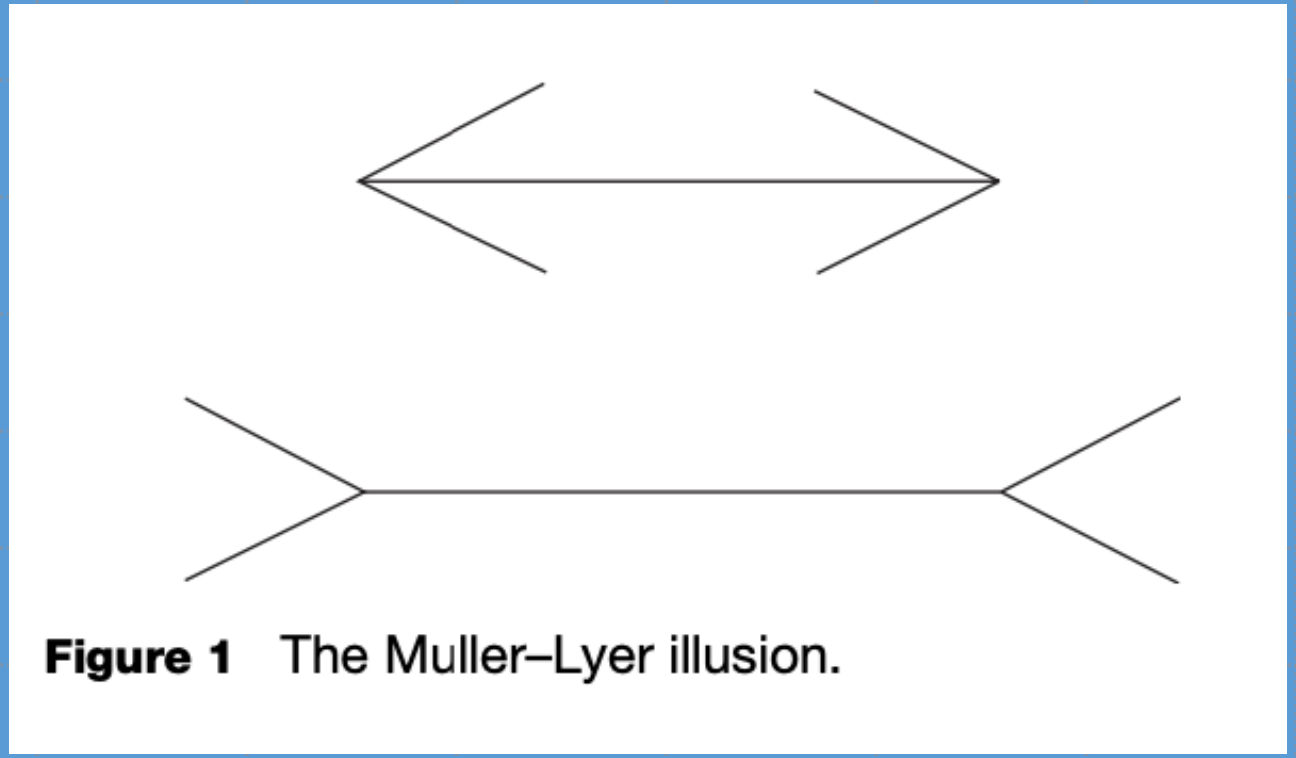


Figure 1 The Muller–Lyer illusion.

Stroop's Task: Respond only to the font color, not the word meaning

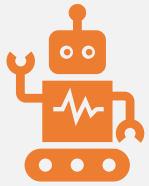
Blue Red Orange

Purple Green

Dual Consciousness: What Languages "Sound Like"

- As native Chinese speakers, you know what English "sounds like;" perhaps you know what French and Spanish "sound like."
- It is likely you do know what Chinese "sounds like."
- Why? Because your linguistic module automatically and involuntarily processes Chinese; you cannot "hear" Chinese as sounds, only as meanings.

The Point about Modularity



Modularity makes language processing an obligatory, unconscious process.

Modularity places most aspects language processes outside of the reach of consciousness.

Does Language Influence Consciousness?

The Problem of Linguistic Relativity

DOES THE STRUCTURE OF LANGUAGE (AT ANY LEVEL) SHAPE OR INFLUENCE CONSCIOUSNESS?

IF SO, TO WHAT EXTENT DOES LANGUAGE INFLUENCE THOUGHT?

WHICH ASPECTS OF LANGUAGE INFLUENCE THOUGHT?

An Unconvincing Case?

- Lexical differences among languages: Inuit words for “snow”

The Sapir-Whorf Hypothesis

Thought and perception are influenced by grammatical structures that are:

1. Habitual
2. Obligatory
3. Uconscious

Examples of the Relevant Grammatical Structures

- Pronoun gender marking in English
- Verb tense and mood
- Substance/mass versus object nouns
- Numeral noun classifiers

Case Study: Mass versus Count Nouns in Yucatec Mayan and English

Lucy (1992) studied mass versus count nouns in Yuctatec Mayan and English

The different grammatical patterns seemed to produce different degrees of salience of shape versus substance for speakers of the different languages.

Case Study: Japanese and English Speakers Learning Object versus Substance Nouns

- Imai and Gentner (1996) studied how Japanese and English-speaking children learned the distinction between object and substance nouns.
- Finding: the object/substance distinction is innate and university; however, grammatical influence was in ambiguous cases was evident among older children.

Case Study: Numerical Cognition Among the Piraha

The Piraha language has two words for numbers, which can be translated as “1 or 2” and “many”

Experiment: Piraha subjects viewed an array of 4 objects for an extended period; they were then presented with an arrays of 4 objects and arrays of 5 objects and asked which matched the first array.

Piraha subjects often failed at this task.

Precise number is not a salient feature of the world for Piraha speakers.

Conclusions about Linguistic Relativity

- Much uncertainty remains.
- Cognition and perception are mainly independent of language when it comes to basic aspects of cognition: perception of objects and patterns, natural kinds, causation, inferences.
- Language (particularly grammar) does seem to exert marginal influence in ontologically ambiguous cases.

Major Claims About Language and Consciousness

1

We do not think mainly in external language but in mentalese, about which we know little.

2

Most aspects of linguistic interpretation and production are unavailable to consciousness.

3

Language shapes consciousness in minor but yet to be determined ways.

Thank you for your attention!

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