

Language and Reality/ Word Meaning

HUL 243

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Language and Reality

- Language is recruited for tasks that are non-linguistic
- With bilinguals, event perception is affected by the particular language that is recruited
- Difficult to establish a causal relationship between language and thought

Language of thought hypothesis

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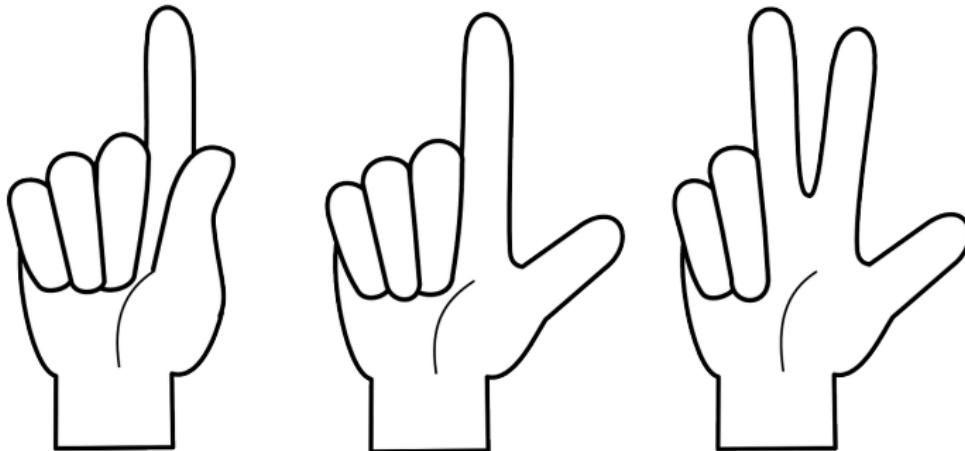
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No strict identification of language and thought

- There is evidence of thinking without language
- Language underspecifies meaning

- Numerical reasoning does not seem to require existing linguistic categories for the concepts



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Language of thought

- Imagine your long term memory consists of knowledge about your immediate family
- The content of that knowledge is a set of propositions e.g. Alex is the father of Andrew, Alex is male

Abel parent-of Me

Gordie uncle-of Me?

Abel is-male

Bella parent-of Me

Bella is-female

Claudia sibling-of Me

Claudia is-female

Duddie sibling-of Me

Duddie is-male

Edgar sibling-of Abel

Edgar is-male

Fanny sibling-of Abel

Fanny is-female

Gordie sibling-of Bella

Gordie is-male

- In order to deduce whether Gordie is an uncle, you need to:-
 - ▶ Find parents
 - ▶ Look for siblings
 - ▶ Distinguish uncles/aunts
- By checking all these, we can deduce that Gordie is indeed my uncle
- The **representation** of these family relations looks like it's in English
- However, as per the language of thought hypothesis, such representations are a form of **mentalese**

Mentalese

- Thinking occurs in a mental language called **Mentalese**
- It resembles a natural language— but it is not (there are words that combine into sentences e.g. Alex is the father of Andrew)
- Mentalese is a representation where the ‘content’ or ‘gist’ of the conceptual knowledge is captured
- We can also think of mentalese as the mind’s *lingua franca*: it allows us to describe/deduce/carry out instructions

Mentalese

- The existence of mentalese also explains why speakers often compress their thoughts and underspecify meaning
- Hearers fill out their own version of the intended meaning from the language presented to them
- Perhaps this underspecification takes place because speakers are putting their thoughts into language i.e. **translating** from Mentalese to English, Hindi or Russian



- An extension of the Mentalese proposal is that the language of thought is **universal**
- Human beings have essentially the same cognitive architecture and mental processes, though they speak different languages
- In this sense the 'language of thought hypothesis' diverges from linguistic relativity

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- Words can be identified at the level of writing: when a word is defined as separated by white space, it is an **orthographic word**
- They can also be defined at the level of phonology: sequence of sounds: buses, bags, bats
- At the level of syntax, the same semantic word can be represented by grammatically distinct variants
 - ▶ He walks like a duck
 - ▶ He's walking like a duck
 - ▶ He walked like a duck
- For the purposes of **semantic** analysis, we'd like to say that these are instances of the same word *walk*

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Leonard Bloomfield

"A word .. is a free form, which does not consist entirely of (two or more) lesser free forms; in brief, a word is a *minimum free form*

- Bloomfield's definition is distributional: it identifies words as *free forms* because they can occur on their own (independently)
- This works fairly well for most cases:
 - ▶ house, yellow, walk, fast
 - ▶ I, you, we, them
 - ▶ Kamala, Donald, Delhi

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 - ▶ house, yellow, walk, fast
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- It is less clear whether words like *the*, *my*, *a* are 'free' forms as they must be bound to words like *a car* or *the house*

- The distributional definition can be applied when we attempt to 'scramble' the words
 - Elements within a word will resist scrambling
-
- ① the₁ + boy₂ + s₃ + walk₄ + ed₅ + slow₆ + ly₇ + up₈ + the₉ + hill
10
 - ② slow₆ + ly₇ + the₁ + boy₂ + s₃ + walk₄ + ed₅ + up₈ + the₉ + hill
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 - ③ up₈ + the₉ + hill 10 + slow₆ + ly₇ + walk₄ + ed₅ + the₁ + boy₂ + s₃
 - ④ * s₃ + boy₂ + the₁
 - ⑤ * ed₅ + walk₄

What about *boy the* ? It appears to be a free form, but cannot actually show up in any order

Bloomfield..

None of these criteria can be strictly applied, many forms lie on the border line between bound forms and words, or between words and phrases;

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Senses

- Three grammatical words represent one semantic word e.g. *walking*, *walked*, *walk* represent *walk*
 - However, the reverse is possible: the same grammatical word represents several different semantic words
-
- He scored a goal with his left foot
 - They made camp at the foot of a mountain
 - I ate a foot-long sandwich

Senses

- Each of these uses has a different meaning
- We can refer to them as the different **senses** of the word *foot*

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- Dictionary writers will usually *list* the senses one after the other, after the lemma form
- This grouping together of senses is called a **lexical entry**

Senses

- Senses are notoriously difficult to pin down



- A standard example of a word with two meanings associated with a single form is *bank*

- ▶ *bank*: land at river edge
- ▶ *bank*: financial institution

- Here the two meanings are quite distinct
- If two meanings associated with the same phonological form are distinct— the form is **ambiguous**

- We can take another case of two meanings associated with a single form
 - ▶ *aunt*: father's sister
 - ▶ *aunt*: mother's sister
- However, here the meanings are more intuitively *united* rather than separate as "parent's sister"
- If two meanings associated with the same phonological form are united, and non distinguished— the form is **vague**

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 - I went to the bank and so did Bill
 - I went to the bank (fin institution) and so did Bill (river's edge)
 - The above sentence is unacceptable— and if used, usually in a humorous/comedic sense

- Puns can be constructed with ambiguous but not vague structures
- *Soaring pork prices hog headlines and sow discontent*

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- ① paint a portrait in oils on canvas
- ② paint a landscape with watercolours on paper
- ③ paint a mural on the wall
- ④ paint a decorative border on a wall
- ⑤ paint the walls of a room
- ⑥ paint the exterior of a house/fence/wall
- ⑦ paint furniture
- ⑧ paint stripes on the parking lot
- ⑨ paint on a digital tablet using a pen

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- Some senses of painting are closer to each other (more united in their senses) as compared to others