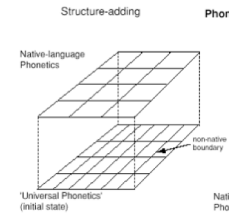


Language & the Mind
LING240
Summer Session II, 2005

Lecture 6
Language Influencing
Perception & Thought

A Recap from Sound Perception

- Changes in performance with development do not reflect changes in the hard-wiring of the brain
- But adult perception of language *is* undoubtedly influenced by the language spoken



A Recap from Sound Perception

- We do “hear” language sounds differently depending on what language we speak. But when we fail to hear a contrast that a speaker of another language does hear, it isn’t because our physical ability to register the sound has disappeared. It’s because we have learned that that type of contrast is not a meaningful contrast for our language.
- Our mental representations of the sounds of words are an abstraction of the physical signal. (ex: Dental d and retroflex D sound the same to English speakers.)
- **We hear language things “through a lens”**

Sapir Whorf Hypothesis

- The structure of one’s language influences the manner in which one perceives and understands the world
- Therefore, speakers of different languages will perceive the world differently

Whorf (1939) The Relation of Habitual Thought & Behavior to Language

- 1) Are our own concepts of time, space, and matter given in substantially the same form by experience to all men, or are they in part conditioned by the structure of particular languages?
- 2) Are there traceable affinities between (a) cultural and behavioral norms and (b) large-scale linguistic patterns?

A Thought About Our World...

- We tacitly buy these claims - witness politically correct language:
 - "hearing impaired" (not deaf)
 - "senior citizens" (not old)
 - "vertically challenged" (not short)



A Possible Relation Between Language & Thought



"Don't you see that the whole aim of Newspeak is to narrow the range of thought? In the end, we shall make thought crime literally impossible, because there will be no words in which to express it..." - George Orwell, 1984

Degrees of Whorfianism

- **Linguistic Determinism** (strong Whorfianism) = Language determines our perception of the world
- **Linguistic Relativism** (weak Whorfianism) = Language biases our perception of the world

Which type of Whorfianism does sound perception support?

What if the strong Whorfian claim were true?

- If the foundational categories of reality are not "in" the world, but are imposed by one's language...people's thoughts can be manipulated by simply manipulating the language
- *Simply remove words that express ideas that you don't want people to entertain (ex: Newspeak)*

Different Whorfian Questions

(Gentner & Goldin-Meadow)

- **Language as a Category Maker:** Does the language we acquire influence *where we make our category distinctions?*
- **Language as a Lens:** Do grammatical characteristics of a language shape speakers' *perceptions of the world?*
- **Language as a Toolkit:** Does language *augment our capacity for reasoning and representation?*

Different Whorfian Questions

(Gentner & Goldin-Meadow)

- **Language as a Category Maker:** Does the language we acquire influence *where we make our category distinctions?*
 - Sound inventory of a language and perception of speech sounds in native & foreign languages
 - Color terms and color perception

Different Whorfian Questions

(Gentner & Goldin-Meadow)

- **Language as a Lens:** Do grammatical characteristics of a language shape speakers' ***perceptions of the world?***
 - Spatial Frames of Reference (relative vs. absolute)
 - Motion Events (manner encoded in verb or PP)
 - Language for Spatial Location Relationships

Different Whorfian Questions

(Gentner & Goldin-Meadow)

- **Language as a Toolkit:** Does language ***augment our capacity for reasoning and representation?***
 - Navigation (combining core knowledge systems info [geometric & color])
 - Number (combining core knowledge systems info [small, exact numbers & large, approximate numbers])
 - Theory of Mind (realizing that someone can have a different point of view than you - when does this realization come, and how?)