

Language culture and thought

The Sapir-Whorf hypothesis

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- The relationship between language and culture has fascinated, and continues to fascinate, people from a wide variety of backgrounds.
- That there should be some kind of relationship between the sounds, words, and syntax of a language and the ways in which speakers of that language experience the world and behave in it seems so obvious as to be a truism.
- It would appear that the only problem is deciding the nature of the relationship and finding suitable ways to demonstrate it.

- There is a long-standing claim which has intrigued many anthropologists and linguists.
- It is known as the Sapir-Whorf hypothesis and says that the structure of a language influences how its speakers view the world.
- According to this hypothesis, the structure of a language determines the way in which speakers of that language view the world.

- It is most usually associated with the linguist Sapir and his student Whorf and is referred to as the Linguistic relativity hypothesis, Sapir–Whorf hypothesis, or the Whorfian hypothesis.
- Sapir maintains that language and culture are inextricably related so that you could not understand or appreciate the one without a knowledge of the other.
- The following passage summarizes Sapir's views (1929b, p. 207)

- Whorf extended these ideas by saying that there was a 'predisposition'; in Whorf's view, the relationship between language and culture was a deterministic one.
- One of Whorf's strongest statements is the following (Carroll, 1956, pp. 212–14)

- The background linguistic system (in other words, the grammar) of each language is not merely a reproducing instrument for voicing ideas but rather is itself the shaper of ideas... We dissect nature along lines laid down by our native languages. The categories and types that we isolate from the world of phenomena we do not find there because they stare every observer in the face; on the contrary, the world is presented in a kaleidoscopic flux of impressions which has to be organized by our minds – and this means largely by the linguistic systems in our minds. We cut nature up, organize it into concepts, and ascribe significances as we do, largely because we are parties to an agreement to organize it in this way – an agreement that holds throughout our speech community and is codified in the patterns of our language. The agreement is, of course, an implicit and unstated one, but its terms are absolutely obligatory; we cannot talk at all except by subscribing to the organization and classification of data which the agreement decrees.

- Human beings do not live in the objective world alone, nor alone in the world of social activity as ordinarily understood, but are very much at the mercy of the particular language which has become the medium of expression for their society. It is quite an illusion to imagine that one adjusts to reality essentially without the use of language and that language is merely an incidental means of solving specific problems of The fact of the matter is that the 'real world' is to a large extent unconsciously built up on the language habits of the group. . . . communication or reflection. We see and hear and otherwise experience very largely as we do because the language habits of our community predispose certain choices of interpretation.

- Although this view is a deterministic one, Whorf actually twice uses the word 'largely'. He does not go all the way to say that the structure of a language completely determines the way its speakers view the world.
- He goes on to add (p. 214):

- This fact is very significant for modern science, for it means that no individual is free to describe nature with absolute impartiality but is constrained to certain modes of interpretation even while he thinks himself most free. The person most nearly free in such respects would be a linguist familiar with very many widely different linguistic systems. As yet no linguist is in any such position. We are thus introduced to a new principle of relativity, which holds that all observers are not led by the same physical evidence to the same picture of the universe, unless their linguistic backgrounds are similar, or can in some way be calibrated.

Linguistic relativism

- A weaker version of the Sapir-Whorf hypothesis is that the structure does not determine the world-view but is still extremely influential in predisposing speakers of a language toward adopting a particular world-view.
- It is the more widely held version of the Sapir-Whorf hypothesis as it sees language as influencing rather than determining how people construe the world.

- This hypothesis holds that the ways in which people categorise things in the world are affected by the ways in which their language categorises things grammatically.
- The idea that categories of thought are influenced by categories of language is often referred to as 'linguistic relativism' of the 'Sapir-Whorf hypothesis'.

Linguistic determinism

- The extreme version of this idea is that categories of language determine categories of perception:
 - a person would not be able to imagine things in any other way than the way dictated by his/ her language.
 - differences in linguistic structure cause speakers of different languages in some sense to see the world differently.

- We are at the mercy of our language. People live in distinct worlds because they speak different languages.
- According to this strong version, speakers see the world through the mental map constructed by language and cannot see the world in any other way.

Eskimos: vocabulary differences

- Different words for falling snow: wind-driven snow, slushy (snow that is lying on the ground and has started to melt) snow, snow on the ground, and hard-packed snow.
- All these substances/ forms of snow have only one word in English. This leads to the conclusion that Eskimos are bound to see the world differently from an English person.
- This is mainly due to the fact that their language provides them with a mental map through which they look at the world.
- The same world but two different world views, two different ways of perceiving the world.

Criticism

- Still this hypothesis has been criticised by a big number of scholars
- They think that the examples can be explicated or paraphrased in other languages which means that people can understand the world view of Eskimos.
- This in a way undermines the force of the examples provided by Whorf: Whorf could explain his examples to English speakers.

Grammatical difference between languages: Hopi

- Whorf describes some startling differences between the English and Hopi grammar.
- In English as in most other European language, there is a fundamental division of words is nouns and verbs.
- In the Hopi language things are very different. For notions such as 'lightning', 'flame', and wave are not nouns at all but verbs.
- They would use sentences like **'these kids out there are noising too much'**



- **-Hopi grammatical categories provide a 'process' orientation toward the world,**
- Categories in SAE (Standard Average European) give SAE speakers **a fixed orientation toward time and space** so that they not only 'objectify' reality in certain ways but even distinguish between things that must be **counted**, e.g., **trees, hills, waves, and sparks**, and those that **need not be counted**, e.g., **water, fire, and courage**.

- **Standard Average European (SAE)** is a concept introduced by Whorf (1939)
- Whorf likely considered Romance and West Germanic to form the core of the SAE
- **Romance/ Latin languages** : Spanish, Portuguese, French, Italian and Romanian.

Possible effect of these different structural characteristics on thought

The Hopi see the world as essentially :

- **An ongoing set of processes;** objects and events are not discrete and countable; and time is not apportioned into fixed segments so that certain things recur, e.g., minutes, mornings, and days.
- In Hopi, time and space flow into each other.

- the Hopi units of time were not considered objects that can be counted like most of the comparable English words that are described by nouns (*a day, an hour* etc.).
- He argued that only the Hopi word for "year" was a noun, the words for days and nights were ambivalent between **noun** and **verbs**, but that all other cyclic events and periods were described by adverbial particles used as modifiers for the sentence

- Speakers of SAE regard nearly everything in their world as discrete, measurable, countable, and recurrent; time and space do not flow into each other; sparks, flames, and waves are things like pens and pencils; mornings recur in twenty-four-hour cycles; and past, present, and future are every bit as real as gender differences.

- These kinds of distinctions may also have an effect on how speakers learn to deal with the world, i.e., they can have consequences for both cognitive and cultural development.
- For example, the words **fist**, **wave**, **spark**, and **flame** are nouns in **English**,

- we know that houses and rocks, cats and trees comprise a different order of ‘things’ from **fists** and **waves**.
- Their existence is of a different kind.
- These words can appear **as verbs in Hopi**.

Nootka (a language spoken in Western Canada)

British Columbia in Canada

City of Vancouver



- This is another example given by Whorf to give support to his claims about language.
- In this language all words seem to be verbs.
- The equivalent of '**there used to be a cabin**' in Nootka is '**It used to cabin**'.

- In this view different speakers will experience the world differently insofar as the languages they speak differ structurally...if one language makes distinctions that another does not make, then those who use the first language will more readily **perceive the differences in their environment** which such linguistic distinctions draw attention to.

- If your language classifies certain material objects as long and thin and others as roundish, you will perceive material objects that way; they will fall quite ‘naturally’ into those classes for you.
- Your language controls your ‘world-view.’ Speakers of different languages will, therefore, have different world-views.

- In the Whorfian view, language provides a screen or filter to reality; it determines how speakers perceive and organize the world around them, both the natural world and the social world.
- **Consequently, the language you speak helps to form your world-view:**
 - It defines your experience for you; you do not use it simply to report that experience. It is not neutral but acts as a filter.

- Romaine (1999) states the position as follows:
 - ‘No particular language or way of speaking has a privileged view of the world as it “really” is. The world is not simply the way it is, but what we make of it through language. The domains of experience that are important to cultures get grammaticalized into languages . . . [and] no two languages are sufficiently similar to be considered as representing the same social reality.’

The grammatical category of number in **English** and in **Yucatec Maya**

- Lucy (1992a, 1996) tried to test Whorf's ideas.
- He used the grammatical category of number (countable and uncountable nouns) in English and in Yucatec Maya.
- Both languages mark nouns for plural.

Belize in the Yucatan peninsula



- **Eventhough the two language mark nouns for plural there are still differences :**
 - **English** has a contrast between ‘**count**’ nouns like **tree** and **book** and ‘**mass**’ nouns like **water** and **sugar** (we say trees and books but not waters and sugars, except in very marked circumstances).
 - **Yucatec** pluralization is optional and then only for nouns denoting **animates**.

Lucy's hypothesis

- Lucy hypothesized that :
 - English speakers would be more conscious of the numbers of objects they see than Yucatec Speakers.
 - They would also see more objects as countable (since they have count noun for both animates and inanimates).

- He asked speakers of the two languages to look at pictures of ordinary village life and, using a cleverly devised non-verbal test requiring sorting and recall, found that the two groups did differ in the predicted directions:

- English speakers were sensitive to numbers for animate entities and objects, in remembering and classifying, but not for substances.
- Yucatec speakers were sensitive to number only for animate entities . . .

- The two groups had very similar patterns of response for the animate and substance referents where the two languages roughly agree in structure.
- They, however, differed with respect to **ordinary object referents**, that is, where the grammars of the two languages are in maximal contrast. (1996, pp. 49–50)

- Other tests produced similar results.
- Some evidence, therefore, does exist for the kind of claims Whorf made. Given such evidence, we are faced with the task of drawing defensible conclusions.
- Those conclusions are generally different from the ones that Whorf drew.

- Carroll, J B 1956 *Language, Thought, and Reality: Selected Writings of Benjamin Lee Whorf* M.I.T. Press, Boston.

Hopi (Uto-Aztecan language) northeastern Arizona, USA



Hopi language

- Hopi grammatical categories provide a **‘process’** orientation toward the world.
- Categories in SAE (Standard Average European) give SAE speakers **a fixed orientation** toward time and space:
 - They ‘objectify’ reality in certain ways.
 - They distinguish between things that must be counted, e.g., trees, hills, waves, and sparks, and those that need not be counted, e.g., water, fire, and courage.

Possible effect of these different structural characteristics

- In Hopi, objects and events are an ongoing set of processes.
- They are **not discrete** and countable.
- Time is not apportioned into fixed segments so that certain things recur, e.g., minutes, mornings, and days.
- In Hopi, time and space flow into each other.

Possible effect of these different structural characteristics

- Time in Hopi
- For example, "three days", Hopi would say the equivalent of "on the third day", using ordinal numbers.
- Whorf argues that the Hopi do not consider the process of time passing to produce another new day, but merely as bringing back the daylight aspect of the world.

Possible effect of these different structural characteristics

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- I find it gratuitous to assume that a Hopi who knows only the Hopi language and the cultural ideas of his own society has the same notions, often supposed to be intuitions, of time and space as we have, and that are generally assumed to be universal. In particular he has no notion or intuition of TIME as a smooth flowing continuum in which everything in the universe proceeds at an equal rate, out of a future into a present and into a past After a long and careful analysis the Hopi language is seen to contain no words, grammatical forms, construction or expressions that refer directly to what we call 'time', or to past, present or future ... (Whorf 1956:57)

Nootka in Western Canada



Testing Whorf-Sapir Hypothesis

Countable and uncountable nouns in English and Yucatec Maya

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Yucatec Maya in Yucatan Peninsula



Yucatec Maya in Yucatan Peninsula



English and Yucatec

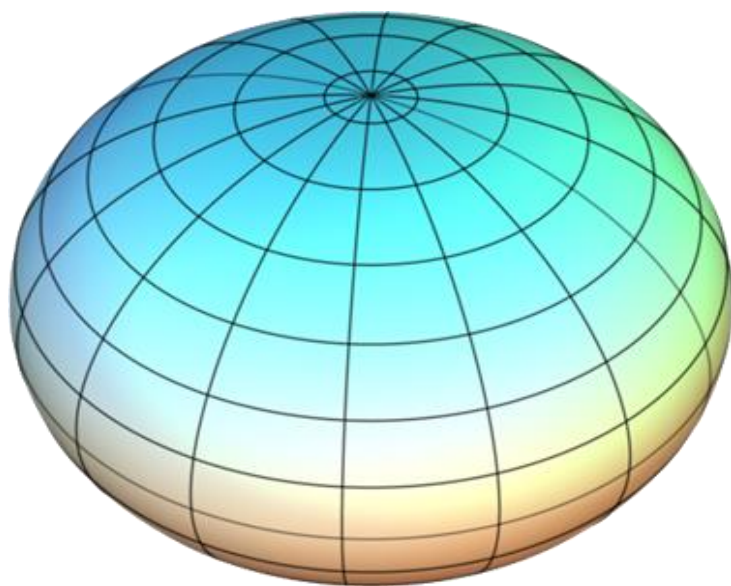
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English and Yucatec

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- Carroll, J B 1956 *Language, Thought, and Reality: Selected Writings of Benjamin Lee Whorf* M.I.T. Press, Boston.
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