

Don't you see that the whole aim of Newspeak is to narrow the range of thought?

**In the end we shall make thoughtcrime literally impossible, because there will be no words in which to express it.**

## **Thought control (cont'd)**

Every concept that can ever be needed, will be expressed by exactly *one* word, with its meaning rigidly defined and all its subsidiary meanings rubbed out and forgotten. ... Already, ... we're not far from that point. But the process will still be continuing long after you and I are dead.

**Every year fewer and fewer words, and the range of consciousness always a little smaller.**

**... The Revolution will be complete  
when the language is perfect.**

# How many words for snow are there in Eskimo?



## Franz Boas

Just as English uses derived terms for a variety of forms of water (liquid, lake, river, brook, rain, dew, wave, foam)

that might be formed by derivational morphology

from a single root meaning 'water' in some other language,

so Eskimo uses the apparently distinct roots *aput* 'snow on the ground', *gana* 'falling snow', *piqsirpoq* 'drifting snow', and *qimuqsuq* 'a snow drift'.  
(1911)



## Benjamin Lee Whorf

We have the same word for falling snow, snow on the ground, snow packed hard like ice, slushy snow, wind-driven flying snow--whatever the situation may be.

To an Eskimo, this all-inclusive word would be almost **unthinkable**; he would say that falling snow, slushy snow, and so on, are sensuously and operationally different, different things to contend with; he uses different words for them and for other kinds of snow

*(1940)*

# The New York Times

February 9, 1984

Editorial cites Whorf in reference to a "tribe" distinguishing "one hundred types of snow";

<http://www.mendoza.com/snow.html>

<http://www.putlearningfirst.com/language/research/eskimo.html>

- Does one word for two different things prevent us from distinguishing them?
- Do two words for things prevent us from thinking about them as similar?

English

snow

Yupik

qanuk

falling snow

aniu

snow on the ground

**qanikcaq**- snow on the ground (derived from the root *qanuk*)



## Ancient Greek words for snow:

**neíphein** = "to snow"

**niphás** = "snowflake"

**khiôn** = "snow (on the ground or falling)"

Couldn't Plato tell the difference?

# Linguistic relativity & Grammar

## Hopi time

### Whorf:

the Hopi language has "no words, grammatical forms, constructions, or expressions

that refer directly to what we call 'time'"

That doesn't mean that they don't have time-related words!

Hopi temporal expressions include:

taavok - yesterday, qaavo - tomorrow, tooki - last night,

Kyelmuya, Kyaamuya, Paamuya - 3 of the traditional lunar months um

hisat tiitiwa? - when were you born?

ason nu noosani - I will eat later.

## **Whorf's claim:**

The Hopi don't refer to our concept of time: divided up into units, rather than continuing along

BUT: it's hard to assess what that would mean.

Culturally,

the Hopi have ways to refer to small units of time,

and

they have a sophisticated calendar (which divides up time in units)

# Linguistic relativity & Grammar

## Aspectual differences

**I went**      **I was going**      **I had gone**  
**I will have gone**      **I will be going**      etc.

In describing a picture like this,

**English** speakers normally make use of such distinctions.



**English** speakers say, for example:

The boy fell out... and the dog was being chased by the bees.

*(5 years old)*

He's [the dog is] running through there, and he [the boy] fell off.

*(3 years, 8 months old)*

**Spanish** speakers make similar distinctions.

Se cayó el niño y le perseguían al perro las avispas. *(5 years old)*

"The boy **fell** and the wasps **were chasing** the dog."

Se cayó... El perro está corriendo. *(3 years, 4 months old)*

"The boy **fell**... The dog **was running**."

In **German**, for example, the following verb forms are equivalent to more than one English verb aspect.

**fällt** = "falls" *or* "is falling"

**ist gefallen** = "fell" *or* "has fallen" *or* "was falling"

**rennt** = "runs" *or* "is running"

**rannte** = "ran" *or* "has run" *or* "was running"

For the same picture, German speakers often **resort to indirect strategies**:

Der ist vom Baum runtergefallen und der Hund läuft schnell weg.

*(5 years old)*

"He **fell** down from the tree and the dog **runs** away quicky"

Er rannte schneller und immer schneller. *(9 years old)*

"He **ran** faster and faster"

Der Hund rennt rennt rennt. *(adult)*

"The dog **runs** runs runs"

Similarly in **Hebrew**:

Hu nafal ve hakelev barax. *(5 years old)*

"He **fell** and the dog **ran** away"

Hayeled nafal... ve hakelev boreax. *(5 years old)*

"The boy **fell**... and the dog **runs** away"

# Conclusions:

All speakers are clearly **aware** of the aspect in the scenes

But they usually express only those aspectual distinctions that are built into the language.

It's just a **tendency**, though:

**one-fourth** of the time, English and Spanish speakers **fail** to use relevant distinctions in their languages; and

**three-fourths** of the time, German and Hebrew speakers go out of their way to indicate the aspect **indirectly**.

# Linguistic relativity & vocabulary

## Germanic space

<u>English</u>	<u>German</u>
<b>on</b>	<b>auf</b>
	<b>an</b>

**auf** = **horizontal** surface    *cup on a table*  
*spider on a ceiling*  
*band-aid on shoulder*

**an** = **vertical** surface, or no clear orientation

*picture, poster on a wall*  
*band-aid on leg*  
*raindrops on a window*  
*fly on a window*  
*leaves on a twig*

## English

**on**

## Dutch

**aan**

**op**

**aan** = attached by a **fixed point**; prevented from manifesting tendency toward separation

*clothes on a line*

*coathook on a wall*

*picture on a wall (hanging from a nail)*      *apple on a twig*

*icicles on a roof*

*handle on a pan*

*dog on a leash*

*pull-toy on a string*

*balloon on a string*

**op** = supported from **underneath** (i.e. horizontally), or **broadly** on flattish surface, or **living** creature; seen as essentially stable

*cup on a table*

*bandaid on a leg or shoulder*

*poster on a wall (glued tight)*      *sticker on a refrigerator*

*paint on a door*

*raindrops on a window fly on a*

*window*

*spider on a ceiling*

*snail on a wall*

But:

cultural and scientific traditions  
of Germany, Holland, and England are  
**closely related and very similar.**

Whorf considers them all as part of  
"Standard Average European" culture.

If these fundamental spatial distinctions don't indicate differences in  
thought,

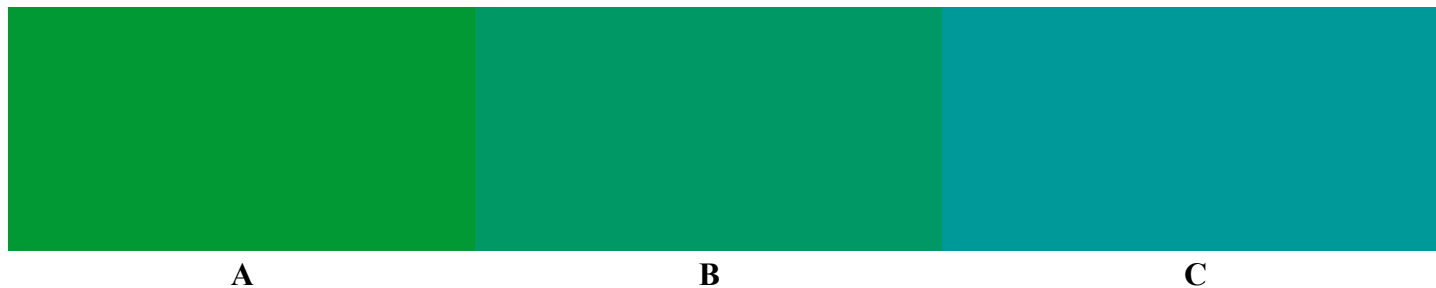
then it's doubtful that any more "exotic" distinctions indicate  
anything significant about thought processes. Speakers of German or  
Dutch have to **attend** to these issues of orientation or attachment  
when choosing a preposition, but speakers of all languages  
**understand the underlying concepts.**

# Color Perception

<u>English</u>	<u>Tarahumara</u>
green	“grue”
blue	

## Experiment I

Subjects were shown **three close colors in the blue-green range**, asked to choose the one that's most different from the other two.



**Result: name strategy**

## Experiment II

Speakers were shown only two of three adjacent colors at once, and asked to compare the degree to which A is greener than B:



and the degree to which C is bluer than B:



**Results: no effect of vocabulary**