

THE LANGUAGE INSTINCT: INTRODUCTION

“The most complex ability and set of facts that any human being ever acquires is the (implicit) knowledge of a native language.”

- **Linguistics**

The science of Language

- **Linguist**

- (1) Someone who speaks several languages (a “polyglot” or “multilingual”)
- * (2) **A specialist in the field of Linguistics**

This course will explore some of the things Linguists have to say about Language

- **Language as a feature of human biology (“the language instinct”)**

- Humans have specialized “organs of language” in the same way they have “organs of walking” or “organs of vision”,
- Children acquire language the same way they acquire the ability to walk: they have the disposition to do this because they are human.

Consider the following pairs of sentences:

“I’m going to deliver you a presentation on language.”

“I’m going to give you a presentation on language.”

Is there anything strange about the wording of either of these sentences?

(1) “Bush persuaded Congress to cut taxes.”

(2) “Bush promised Congress to cut taxes.”

Who is cutting taxes in (1)?

Who is cutting taxes in (2)?

(1) “Who’s been sleeping in my bed?”

(2) “When did you stop smoking pot?”

What does one have to presuppose to ask each of these questions?

In the following phrases from various languages, would any other wording be acceptable?

English: **two big white cows**

Spanish: **dos grandes vacas blancas**

Rumanian: **două vaci mari și albe**

Chinese: **liá#N tβ₂@ta~ pa:I nju!**
two “classifier” big white cow

Korean: **kÓÈn hin so tu maji**
big white cow two “classifier”

Hausa: **manyán shanu farare biyu**
big cows white two

How are we able to make linguistic judgments such as those above?

- Our parents didn't teach us when we were children
- We didn't learn these things in high school English classes
- There is nothing that we can point to in the form of the sentences, like word ordering

We might ask

- How does a spider know the good places to put a web.
- How do ducks know to fly south in the winter? How do they know where south is?

For these questions, we would say that it is an “instinct”. The same is true for acquisition of intuitions about language.

- **What a human language is and what it is not**
 - How language is distinct from other communication systems (to be explored in later lectures)
 - Properties shared by all human languages (see below)

Two related claims:

(1) All languages have equal expressive power as communication systems (there are no “primitive” languages) (Pinker, pp. 12-16)

- What would it mean for a language to be “primitive”?
 - Small vocabulary?
 - No written form?

- Could you imagine a language without ...
 - A distinction between objects and actions?
 - Ways to distinguish speaker ('me') from hearer ('you') from one spoken about ('him/her/them')?
 - Ways to ask questions?
 - Ways to differentiate negative from affirmative?
 - Ways to "quantify" (numbers, 'all', 'few', 'many', etc.)?
 - A way to express conditions ('if')?
 - Ways to distinguish completed events from events not yet begun?

We expect these and many other features to exist in any language we encounter, and it turns out that they do.

(2) *All languages follow rules of GRAMMAR (a native speaker of a language cannot speak "ungrammatically")* (Pinker 16-19)

What would it mean to speak "ungrammatically"?

Is the sentence below ungrammatical?

"I can't get no satisfaction."

The answer depends on what we mean by "grammar".

Two uses of the word "grammar":

- (a) Following the practice of a socially determined "standard" in constructing utterances (= "prescriptive grammar")
- (b) Following a system of (unconscious) rules in constructing utterances**

An example: Rules of *Negative Agreement*

Affirmative: I can get some satisfaction.

Negative, Dialect 1: I can't get any satisfaction.

Negative, Dialect 2: I can't get no satisfaction.

Compare French ...

Je vois quelque chose.
I see some thing

'I see something.'

Dialect 1: Je ne vois rien.
I not see nothing

'I don't see anything.'

Dialect 2: Je vois rien.
I see nothing

'I don't see anything.'
(“I see nothing”)

In French, it is actually Dialect 2 which is "sub-standard", even though that is the dialect which more closely resembles the standard English expression.

- **Does the universality of Language *prove* that it is biologically innate?**
(Pinker 19 ff.)

One might claim that ...

“People are universally smart and have universal needs. Maybe people *invented* language independently several times.”

Not likely!

- Children acquiring a language recreate their native language each generation by “rebuilding” it from the “parts” they hear around them in speech—people do not “decide” on the form language should take. (Pinker 28-31)

Example 1—Pidgins → Creoles (Pinker 20-23): In social situations where the adults communicated using a *pidgin*—a type of “makeshift” language used by adults who have been thrown together and do not share a language—children who had only the pidgin as input have transformed this into a *creole*—a “full” language with all the properties of languages which have developed through normal language evolution.

Example 2—Nicaraguan Sign Language (NSL) (Pinker 23-25): In the 1980’s in Nicaragua, when special schools for deaf children were originally created, the first children in the schools used a “pidgin-like” system of communication through signs. Younger children who were exposed to this type of signing developed a more consistent and fluent variety of NSL.

Pidgins

- No one’s native language
- Used in restricted situations (work, trading)
- Variation in use, influenced by speaker’s native languages

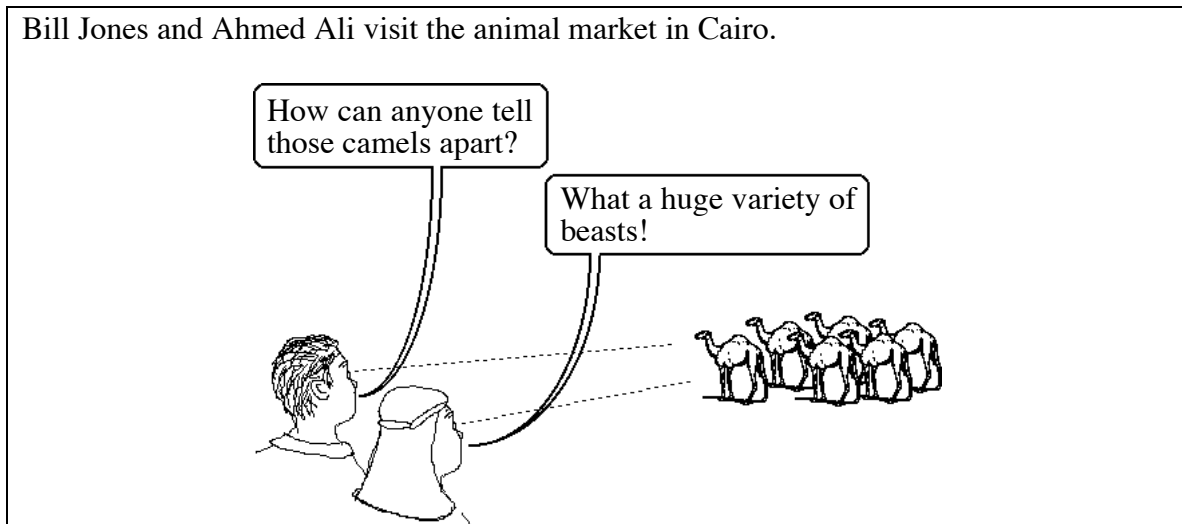
Creoles

- The native language of its speakers
- Used in all social contexts needing language
- Individual variation no greater than that in any language community

- The ability (or inability) to use complex and fluent language is not related to intelligence or other abilities. (Pinker 34-43)

Example—Specific Language Impairment (SLI) vs. Williams Syndrome (Pinker 37-43): People with SLI make errors that no unimpaired native speaker of a language would make, e.g. *I was make 140 box*, yet on all measures of general intelligence, they score in the normal range or better. People with Williams Syndrome (also called “chatterbox” syndrome) speak fluently—even over-fluently—and grammatically, yet on measures of general intelligence they score well below normal.

- **The autonomy of language: the separation of Language and thought**
- The Whorf Hypothesis (“Linguistic Determinism”): The structure of our language determines how we see the world, i.e. a language CAUSES its speakers to see the world in a way that speakers of other languages do not see it. ... *But does it???* (Pinker 48-57)
- Some defects in Whorfian claims:
 - EQUATING THOUGHT WITH THE LANGUAGE USED TO EXPRESS THE THOUGHT: Saying, “The barrel is empty,” even though it is full of gasoline vapor is not what makes one think that the barrel is empty. In fact, it is just the opposite—the invisibility of gasoline vapor to human vision is the cause of the thought and its linguistic expression. See Pinker, pages 49-50.
 - CIRCULAR REASONING: Apache speech ↔ Apache thought—The way Apache speakers express themselves linguistically shows that their world view differs from that of English speakers. **But Whorf’s reasoning is CIRCULAR!** How do we know the world views differ? Their modes of linguistic expression differ. Why do their modes of linguistic expression differ? They have different world views. See Pinker, page 50.
 - MYTHS AND MISINTERPRETATIONS: Many of Whorf’s examples are myths—urban legends!, Examples mentioned in Pinker are Eskimo words for snow (Pinker 54); Hopi (non-)expression of time (Pinker 53).
 - FAILURE TO STAND UP TO SCIENTIFIC SCRUTINY: Controlled experimental studies provide no support for the hypothesis that language shapes thought—color perception (Pinker 56); Chinese understanding of counterfactuals (Pinker 56-57).



CONCLUSION ... Language *reflects* distinctions people make about the world, it does not *cause* them to make those distinctions.

- In VOCABULARY, human physiology and psychology (e.g. color terminology—Pinker 52) or things that have special importance to a culture (e.g. Eskimos and snow, desert nomads and camels—Pinker 54-55) determine what distinctions languages will make in the words they use.
- GRAMMATICAL STRUCTURE has no relation to thought structure: People speaking languages with very different grammatical structures may have similar cultures and vice versa. For example, most languages of East Asia require the use of elaborate systems of honorifics relating to social status, yet the languages are vastly different in structure—see the next lecture!

Is language necessary for thought and can there be language without thought?

- Can we think without language? (Pinker 57-63)

Using nothing but language, could you explain precisely to someone the difference between the way two people look? An example: We can recognize faces—a type of thought—but we cannot put such a thought into words in a way that parallels our face-recognition ability.

- Does linguistic structure mirror thought? Examples like the following show that it does *not*... (Pinker 69-73 gives other types of examples as well)

- Grammatical form \neq thought structure

English: **The dog chased the cat.**

Korean: **Kega koyaNilÈlc'ocÓgatta.**
 dog cat chased

Tagalog: **Hinabol ng aso ang pusa.**
 chase the dog the cat

Malagasy: **Nanaraha ny saka ny alika.**
 followed the cat the dog

- Linguistic sense often \neq intended sense

They are living on a shoestring.

I've got you under my skin.

You're out to lunch.

- Utterances with recognizable linguistic structure but expressing no thought

Colorless green ideas sleep furiously.

This is Stanley Unwin signy hoffer with wubbleyou all joyphoned.

(from Stanley Unwin, a British radio personality)

Discussion Questions on Language as an “Instinct”

1. Things we know by “instinct”

a. Put the phrase **two big white cows** into a language you know other than English. What is the word order? Are other orders possible? Are there things other than word order that the language requires, such as agreement between adjective and noun?

b. Answer the same question about the following (or other phrases you make up):

I gave money to the church. *or* I gave the church money.
but not *I gave to the church money. *or* * I gave money the church.

c. Who is doing the learning in each of the following sentences?

My chimpanzee is easy to teach.
My chimpanzee is eager to teach.

d. How many students “understand” in each of the following sentences?

You are the one student who understands.
You are the only student who understands.
You are not the one student who understands.
You are not the only student who understands.

e. Did John’s team lose?

John regrets that his team lost the game.
John assumes that his team lost the game.

2. In each pair of sentences below, one would be called “ungrammatical” in sense (a) on page 11 of the APS book (it does not conform to a norm of “standard” English) whereas the other would be called “ungrammatical” in sense (b), the linguist’s sense (it does not follow the system of “rules” of native speakers of English). For each pair,

- state which is ungrammatical in sense (a) and which in sense (b).
- state what the “standard” native English version would be.
- try to decide WHAT makes the sentence ungrammatical in sense (a) or (b).

a. Me and my friend talked for three hours.
Me talked for three hours.

b. We no need no stinking badges!
We don’t need no stinking badges!

c. Tell me why are you ignoring me.
Tell me why you ignoring me.

d. Finish quickly your carrots.
Finish your carrots quick.

3. Here are some examples of questions by a native speaker of Arabic learning English (data from L. Selinker & S. Gass, *Workbook in Second Language Acquisition*, Rowley, MA:Newbury House, 1984, p. 75):

- a. What you said you like to make?
 - b. What did you learn doing?
 - c. What you call?
 - d. Where your house?
 - e. Where she is from?
 - f. Why this “Khalwa” funny name?
- √ How is this “interlanguage” like a pidgin?
- √ How does this differ from a child acquiring a first language?
- √ Why does an example like this call into question the notion that humans might have “invented” language?

4. Hausa, spoken in Nigeria and other parts of West Africa, has the following simple color words: *fari* ‘white’, *baki* ‘black’, *ja* ‘red’, *kore* ‘green’, *shudi* ‘blue’. Other color terms are derived in various ways, e.g. *ja-ja-ja-ja* “red-red-red-red, reddish” (= ‘pink’), *ƙasa-ƙasa* “earth-earth” (= ‘brown’), or *ruwan goro* “tint of kola” (= ‘orange’, since chewing kola nuts turns one’s saliva orange). The Whorf Hypothesis claims that our linguistic categories shape our perceptions. This incorrectly predicts that we might just as well find people whose primary color terms are ‘pink’, ‘brown’, and ‘orange’ and who see the world in variants of those colors. Why is this prediction false?

5. Here is a table of verb tenses in Chibemba, a Bantu language of Zambia. *Ba* is a plural person subject prefix; *-bomb-* is the verb root; grave accent = low tone, acute accent = high tone. (Data from T. Givón, *Studies in Chibemba and Bantu Grammar*, *Studies in African Linguistics*, Supplement 3, 1969, pp. 174-176.)

ba-àléé-bomba	‘They were working.’ (some time before yesterday)
ba-áléé-bomba	‘They were working.’ (yesterday)
ba-àcíláá-bomba	‘They were working.’ (earlier today)
ba-á-bomba	‘They have just worked.’ (within the past 3 hours)
ba-léé-bomba	‘They are working.’ (now)
ba-á-láá-bomba	‘They will work.’ (within about the next 3 hours)
ba-léé-bomba	‘They will work.’ (later today)
ba-ka-bomba	‘They will work.’ (tomorrow)
ba-ká-bomba	‘They will work.’ (sometime after tomorrow)

“This demonstrates that Chibemba speakers do not think of time as an single “flow” up to the present and away from the present, but rather as a set of discrete periods or “slots” into which events fit.” ARGUE AGAINST THIS CLAIM ABOUT THE WAY CHIBEMBA SPEAKERS VIEW TIME.

6. In what ways do the following items show thought and language to be separate cognitive processes?

- a. Describe the difference between the smell of frying bacon and frying hamburgers.
- b. What I mean when I say, “Hold your horses!”
- c. The sentence, “I can do what I cannot do that I can do.”