

Introduction To Linguistics
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**What is
Language?**

Learning Goals

- What do we know when we know a language
- Creativity in language
- Competence/Performance
- What is Grammar
- Language Universals
- Language Development
- Language and Thought

What is Language?

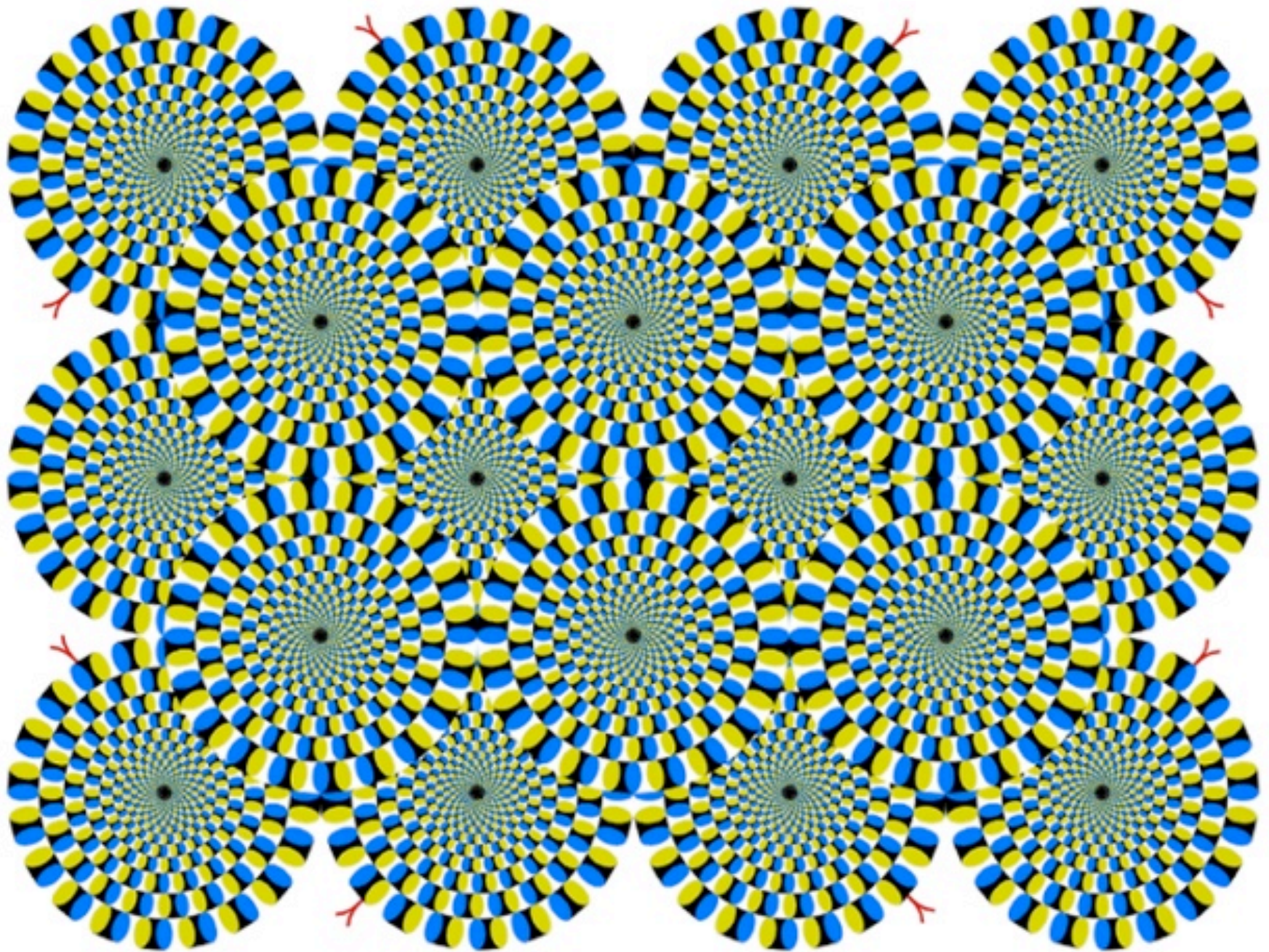
- The ability to use language, perhaps more than any other attribute, distinguishes humans from other animals
- But what does it mean to know a language?

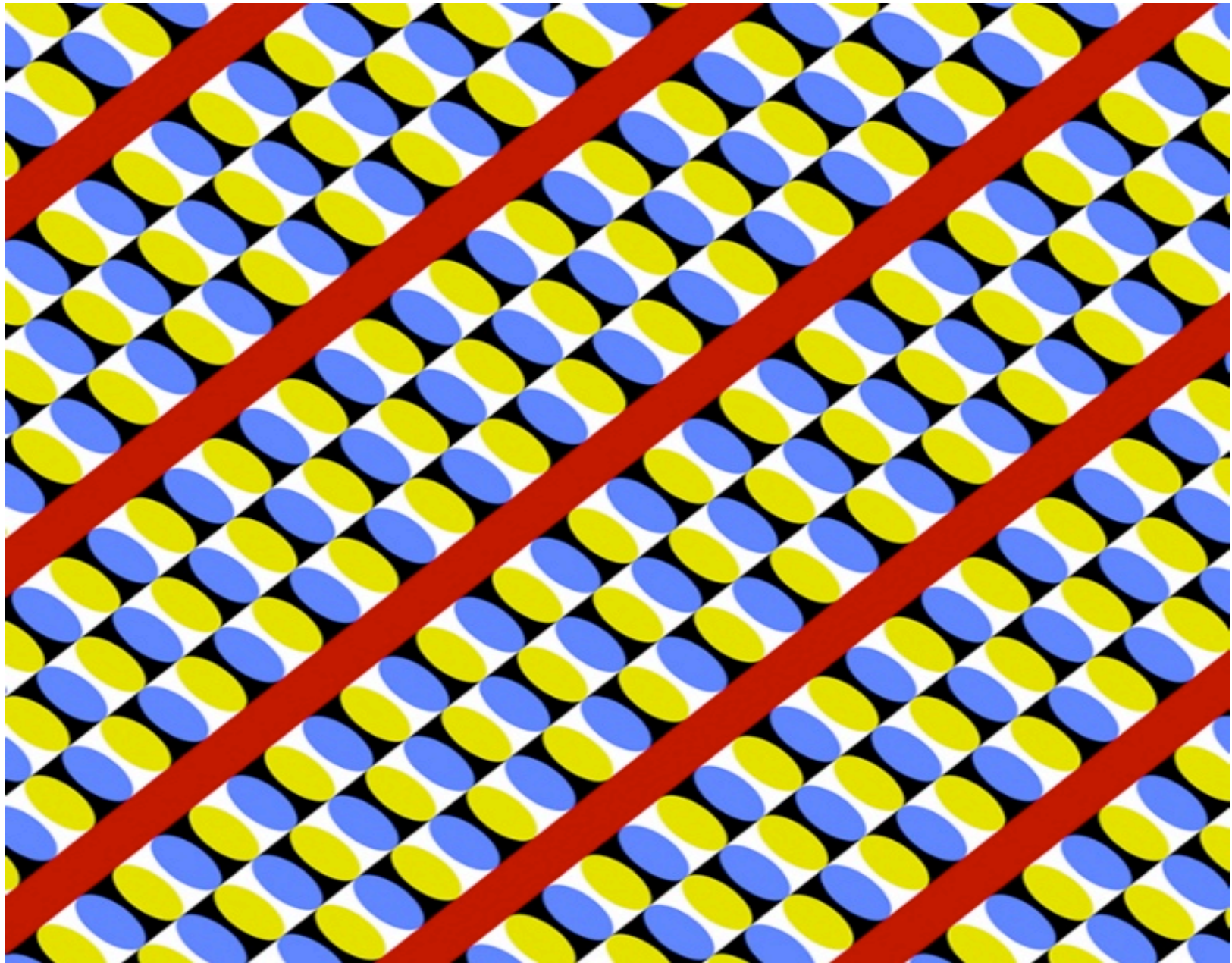
Linguistic Knowledge

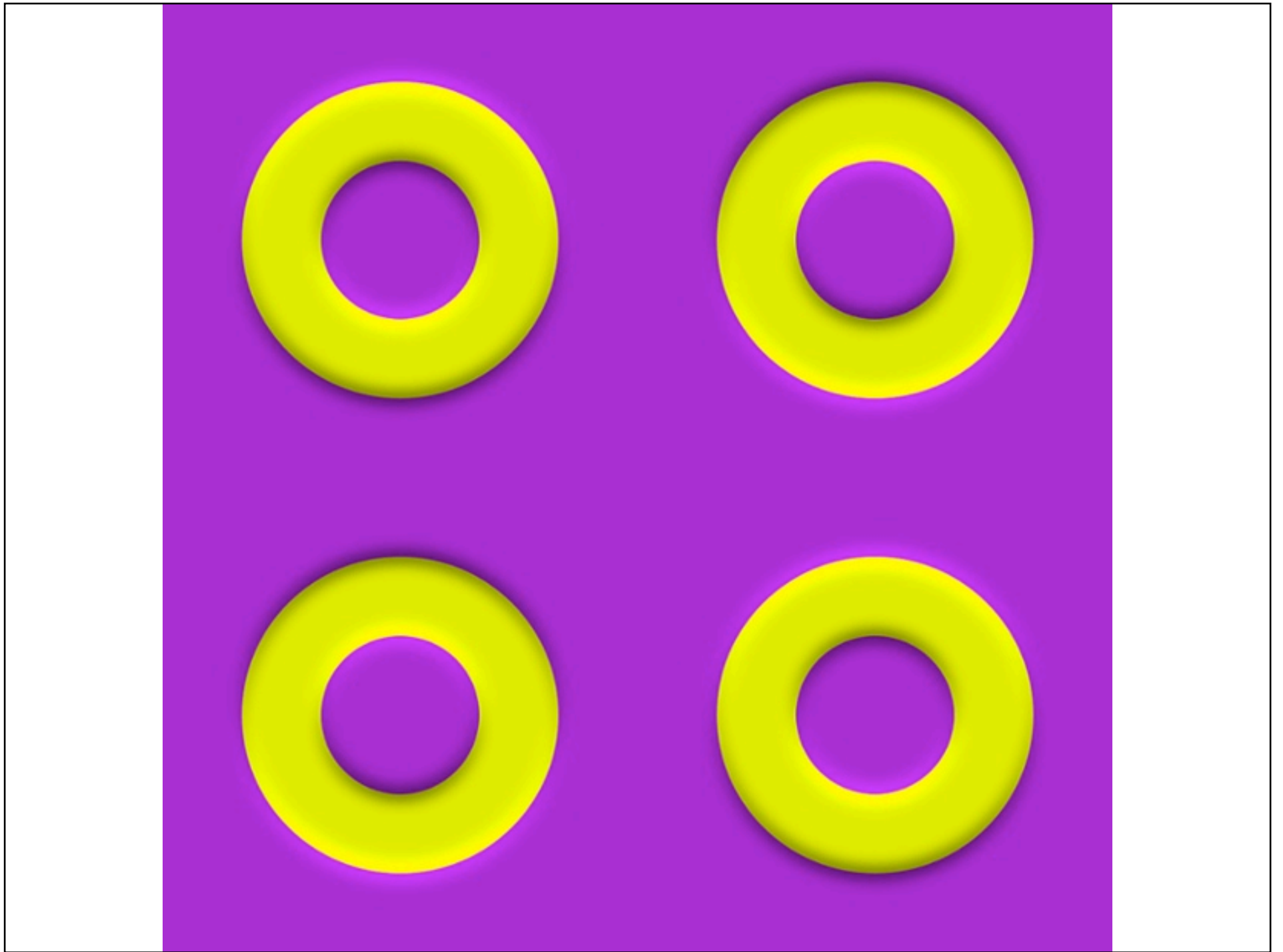
- When you know a language, you can speak (or sign) and be understood by others who know that language
- Five-year-olds already know their first language(s)
- The ability to use a language requires profound knowledge that most speakers don't know that they know

Cant help but use language

- Try to not understand what I am saying
- Just as impossible as trying not to be fooled by optical illusions
- You cannot stop blinking or having peripheral vision
- For example: Rotating Snakes – the circular snakes appear to rotate spontaneously in your peripheral vision as a result of the peripheral drift illusion. Notice how the movement stops when you look directly at a collection of concentric circles. The illusion is probably caused by unconscious rapid eye movements and blinking







Knowledge of the Sound System

- When we know a language, we know what sounds (or signs) are used in the language and which sounds (or signs) are not
- This also includes knowing how the sounds of the language can be combined
 - Which sounds may start a word
 - Which sounds may end a word
 - Which sounds may follow each other within a word

Knowledge of sound system

- Knowing the sounds of your language also involves knowing how your face looks when you produce them
- McGurk effect hear da da, but what is pronounced is ba ba, but lips move to ga ga

McGurk effect



Knowledge of Words

- Knowing a language also means identifying certain strings of sounds as meaningful words
- Most words in all languages are arbitrary connections of sound to meaning



<i>hand</i>	<i>main</i>	<i>nsa</i>	<i>ruka</i>
(English)	(French)	(Twi)	(Russian)

History of words

- Knowing a language does not mean we know its history or the etymology of words.
- Many words of English have a common ancestor with similar words in other languages
- Languages changes so there will always be proto-languages
- The structure of protolanguages 'dies' with its speakers.

Ancestral Protolanguages

- One way we can tell if languages are genetically related is if they have a large number of sound correspondences
 - Where an English word begins with an *f*, the corresponding word in French and Spanish begins with a *p*:

<u>English /f/</u>	<u>French /p/</u>	<u>Spanish /p/</u>
<i>father</i>	<i>père</i>	<i>padre</i>
<i>fish</i>	<i>poisson</i>	<i>pescado</i>

- From these correspondences, we can hypothesize that Indo-European had a /p/ since more related languages have the /p/ form, and that at some point the /p/ became /f/ in the Germanic group
- This does not mean that a modern speaker of English has this knowledge as part of her grammar

Knowledge of Words

- The conventional and arbitrary relationship between form and meaning is also true in sign language



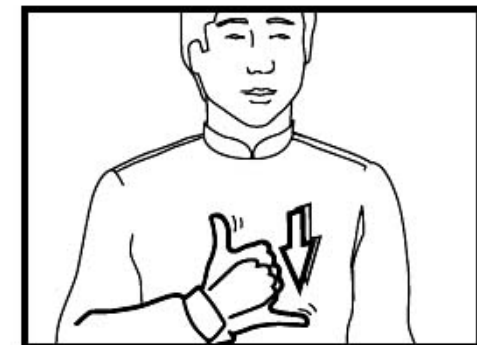
FATHER (ASL)



FATHER (CSL)



SUSPECT (ASL)



SUSPECT (CSL)

Knowledge of Words

- **Sound symbolism:** there are some words whose pronunciation seems to reflect the meaning
 - Onomatopoeia:
 - English *cock-a-doodle-doo* and Finnish *kukkokiekuu*
 - English *gobble gobble* and Turkish *glu-glu*
 - English *gl* and the concept of sight:
 - *glare, glint, gleam, glitter, glossy, glance, glimpse*
but there is also
 - *gladiator, glucose, glory, glutton, globe, etc.*

Creativity of Linguistic Knowledge

- Every language has an infinite number of possible sentences
- Knowing a language enables you to:
 - Create a sentence that has never been uttered before
 - Understand a sentence that has never been uttered before
- Most sentences we use are new; very few sentences are stored in our brains

Knowledge of Sentences and Nonsentences

- Language is more than a set of words because words must be ordered in certain ways to create sentences
- Our knowledge of language allows us to separate possible sentences from nonsentences
 - *What he did was climb a tree*
 - **What he thought was want a sports car*

Linguistic Knowledge and Performance

- **Knowledge:** what we know about a language (**linguistic competence**)
 - Mostly unconscious knowledge about sounds, structures, meanings, words, and rules for combining linguistic elements
- **Performance:** how we use this knowledge in actual speech production and comprehension
 - We can theoretically create an infinitely long sentence, but physical constraints make this impossible
 - In speech we stammer, pause, and produce slips of the tongue

What Is Grammar?

- **Grammar** = the knowledge speakers have about the units and rules of their language
 - Rules for combining sounds into words, word formation, making sentences, assigning meaning
 - When a sentence is ungrammatical in a linguistic sense, it means that it breaks the rules of the shared mental grammar of the language

Descriptive Grammar

- **Descriptive grammar:** a true model of the mental grammar of language speakers
 - In other words, a descriptive grammar describes the linguistic rules that people use when they speak their language
 - The point of view of a descriptive grammarian is that grammars from every language and dialect are equal

Prescriptive Grammar

- **Prescriptive Grammar:** attempts to prescribe what rules of language people *should* use to speak “properly”
 - The view of a prescriptive grammarian is that some grammars are better than others
- During the Renaissance, a middle class of English speakers wished to talk like the upper class, so they started buying handbooks that told them how to speak “properly”
 - Bishop Robert Lowth’s *A Short Introduction to English Grammar with Critical Notes* (1762)

Prescriptive Grammar

- Lowth decided that “two negatives makes a positive,” therefore people should not use double negatives
 - Despite the fact that everybody was already using double negatives in English (and communication was just fine)
 - Despite the fact that many languages of the world *require* the use of double negatives

Dialects

- Prescriptive Grammars usually argue for a standardized dialect.
- Regional forms or forms restricted to group class are frowned upon
- Dialects have grammars
- Rules are systematic

The “Standard”

- **Standard American English (SAE)** is the dominant (or **prestige**) dialect in America
 - Nobody actually speaks SAE (it’s an idealization), and it is not defined precisely
- When a standard is the dialect of the wealthy and powerful, people may be required to speak that dialect in order to get ahead
- Ross (1954) noticed differences in the speech of British upper class (U) and non-upper class (non-U) speakers
 - Non-U speakers wanted to sound U, and U speakers wanted to avoid non-U speech
 - Non-U speakers often **hypercorrected**, or deviated from the norm thought to be “proper English”

The “Standard”

- Every dialect is equally expressive, logical, complex, and systematic
 - All dialects represent a set of rules or lexical items in the minds of speakers, and any value judgments on dialects are social judgments
- British received pronunciation (RP) omits *r* in certain environments and is considered the standard pronunciation
- In the American northeast, dialects that omit the *r* are considered to be “substandard” and the prestige dialect maintains the *r*
 - What is considered a prestige dialect has a social basis, not a linguistic one

Dialect - Lexical Differences

- Regional dialects may also differ lexically
 - British: *lift* American: *elevator*
 - British: *pants* American: *underpants*
 - Boston: *tonic* Los Angeles: *soda*

 - Los Angeles: *freeway*
 - New York: *thruway*
 - New Jersey: *parkway*
 - England: *motorway*

Dialect- Phonological Differences

- There are systematic pronunciation differences between American and British English
 - For example, Americans put stress on the first syllable of a polysyllabic word, and British speakers put the stress on the second syllable in words like *cigarette*, *applicable*, *formidable*, *laboratory*
 - Americans may pronounce the first vowel in *data* as [e] or [ei] but vast majority of British speakers would only use [e]

Dialect - Syntactic Differences

- Appalachian English has several syntactic differences from Standard English
 - Double modals
 - *You might should go home.*
 - *He might could do it.*
 - Double objects
 - *I caught me a fish.*
 - Progressives
 - *He came a-runnin'.*

Teaching Grammar

- A **teaching grammar** explicitly states the rules of a language and is used to learn another language or dialect.
 - Teaching grammars assume the student already knows one language and then compares the grammar of the new language to the one they already know

Language Universals

- **Universal Grammar (UG)** refers to the universal properties that all languages share
 - Part of a biologically endowed human language faculty
 - The basic blueprint that all languages follow
- It is a major goal of **linguistic theory** to discover the nature of UG

The Development of Grammar

- All normal children acquire language relatively quickly and easily and without instruction
- Children learn the world's languages in the same way and pass through the same stages of acquisition
- If children are born with UG, then they can acquire language so quickly and easily because they already know the universal properties of language and only need to learn the specific rules of the language(s) they are acquiring

Sign Languages: Evidence for language universals

- Deaf children exposed to sign languages go through the same stages of language acquisition as hearing babies
 - Deaf children babble with their hands
 - Signed languages are organized in the brain just like spoken languages are

What Is Not (Human) Language

- Some features of human language:
 - **Discreteness**: the ability to combine linguistic units to make larger units of meaning
 - **Creativity**: the ability to create and understand never-before-uttered sentences
 - **Displacement**: the ability to talk about things that are not physically present
 - Allows for discussion of past events, abstract ideas, lying, etc.

What Is Not (Human) Language

- Parrots can mimic words, but their utterances carry no meaning
- They cannot dissect words into discrete units
 - *Polly* and *Molly* don't rhyme for a parrot
- They cannot deduce rules and patterns to create new utterances
 - If the parrot learns “Polly wants a cracker” and “Polly wants a doughnut” and learns the word “bagel,” the parrot will not say “Polly wants a bagel”

What Is Not (Human) Language

- **Birdcalls** convey messages associated with the immediate environment
- **Bird songs** are used to stake out territory and attract mates
 - There is no evidence of internal structure in these songs, although they may vary to express varying degrees of intensity
- Birdcalls and songs are similar to human languages in that they contain regional dialects, are passed down from parents to offspring, and can only be acquired before a certain age

What Is Not (Human) Language

- **Honeybees** have a communication system that relies on dance to convey information about the location and quality of food sources to the rest of the hive
 - *Round dance*: food source is within 20 feet from the hive
 - *Sickle dance*: food source is 20 to 60 feet from the hive
 - *Tail-wagging dance*: food source is more than 60 feet from the hive
 - The number of repetitions of the basic pattern in the tail-wagging dance indicates the precise distance, with a slower repetition rate indicating a longer distance

What Is Not (Human) Language

- The bee dances are theoretically able to create an infinite number of messages
 - But, the messages are confined to the subject of food sources
 - If there are any special circumstances regarding the food source, the bee cannot convey that information

Can Animals Learn Human Language?

- Nonhuman primates have communication systems in the wild to convey information about the immediate environment and emotional state (stimulus-response)
- Humans have attempted to teach human language to other primates
 - These nonhuman primates were taught sign languages because their vocal tracts cannot produce the sounds of human language

Can Animals Learn Human Language?

- Washoe
- Koko
- Nim Chimpsky
- Sarah, Lana, Sherman, Austin
- Kanzi
 - Researchers concluded that while nonhuman primates can string two signs together and show flashes of creativity, their use of language is nowhere near human linguistic ability

Language and Thought

- **Sapir-Whorf Hypothesis:** the theory that the structure of a language influences how its speakers perceive the world around them
- **Linguistic determinism:** the strongest form of the Sapir-Whorf hypothesis which claims that the language we speak *determines* how we perceive the world
 - Whorf claimed that the Hopi people do not perceive time in the same way as speakers of European languages because the Hopi language does make grammatical distinctions in tense

Language and Thought

- **Linguistic relativism:** a weaker form of the hypothesis which claims that different languages encode different categories which can influence a speaker's perceptions of the world
 - Navaho: *green* and *blue* expressed as one word
 - Russian: *siniy* (“dark blue”) and *goluboy* (“light blue”)
 - Zuni: *yellow* and *orange* are expressed as one word

Language and Thought

- The strong form of the Sapir-Whorf hypothesis is clearly false
 - We can translate between languages
 - We can learn additional languages
 - If we don't have a particular word for a concept, we can express the concept with a string of words

Language and Thought

- Hopi does have a system for expressing time. Hopi uses words for days of the week, parts of the day, etc. to express tense rather than using word endings like English
- Although languages differ in their color terms, speakers can perceive differences even if their language does not have a word to express the difference

Language and Thought

- Some psychologists have suggested that speakers of gender-marking languages think about objects as being gendered
 - In Spanish the word “bridge” is masculine (*el puente*), and Spanish speakers described a bridge with masculine adjectives such as *big, dangerous, long, strong, and sturdy*
 - In German, the word “bridge” is feminine (*die Brücke*) and German speakers described a bridge with feminine adjectives such as *beautiful, elegant, fragile, pretty, and slender*
- This evidence seems to support a weak version of linguistic relativism