



Language 1

Features of and Structure in Language

What is Language?

- A set of *symbols* and *principles* for combining these symbols that allow for communication and comprehension.
- 5 Key Properties of Language
 - creative
 - structured
 - meaningful
 - referential
 - interpersonal



- Spoken languages are composed of a hierarchy of building blocks that combine to form higher- and higher-level categories. At the bottom of this hierarchy are: _____ .
- A. morphemes
- B. phrases
- C. phonemes
- D. words

Structured

- Language is structured at many levels; this structure determines what is and is not well formed and how meaning is conveyed

- Words

plan

*tlan

- Phrases

the very tall boy

*very boy tall the

- Sentences

The boys climbed the trees

*climbed the trees the boys

Asterisks indicate something this is not allowed in English

Meaningful

- Words and sentences convey ideas and concepts
- Structure & Meaningfulness are independent features of language
 - Colorless green ideas sleep furiously
This is structured but not meaningful

Referential

- Language is used to describe and make reference to things in the world
 - that dog, the boy, this flower, me, you, each other,...
- Reference and meaning are independent
 - That dog is barking.
referential & meaningful
 - All men are created equal.
non-referential, but meaningful



Interpersonal





Levels of language

- Phonology (sound structure)
- Morphology (structure of words)
- Syntax (structure)
- Semantics (meaning)
- Pragmatics (context)



- How do languages differ at the level of sound?
- A. Languages differ in their use of rhythms within phrases.
- B. Languages differ in their use of tone.
- C. Languages differ in their use of word stress.
- D. All of the above answers are correct.

Phonology

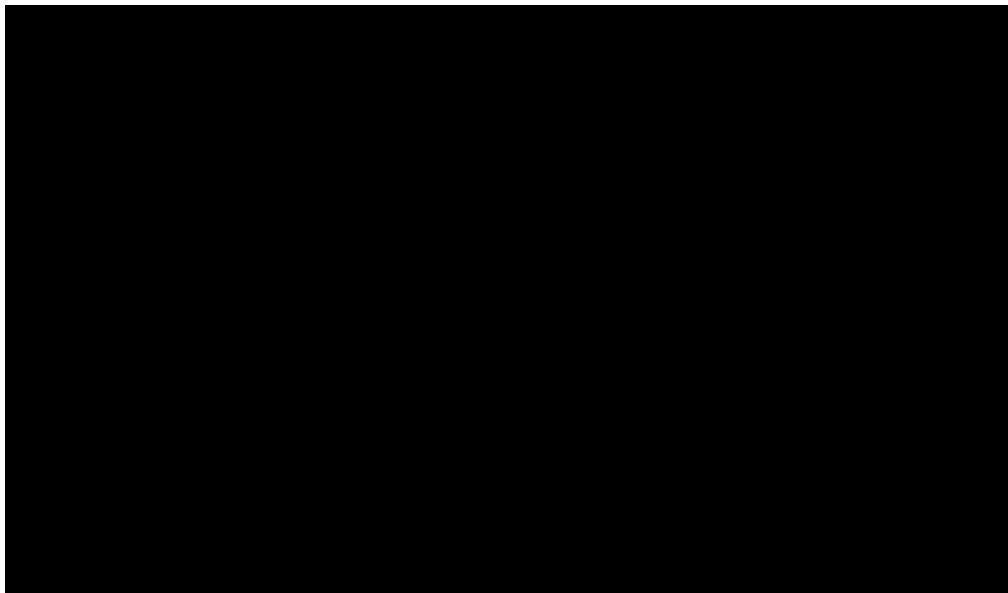
- The study of the sound patterns of language
- Phoneme: The smallest unit of sound that can be altered to change the meaning of a word
- In English, the words *gin*, *kin*, *pin*, *tin*, *win* all have different meanings due to the fact that the initial sound, or phoneme, is different

Tone

- The way that the pitch of a word or utterance changes
- Tone plays a role in English
 - Discriminating between different words or forms of words: e.g., *object*
 - Discriminating different sentence constructions
- Unlike English, in many Asian languages, tone is a basic feature distinguishing syllables

How Tones Distinguish Syllables in Mandarin Chinese

From <http://www.wku.edu/~shizhen.gao/Chinese101/pinyin/tones.htm>



Example of Tones Changing Meaning

tone:	high	rising	falling then rising	falling
Mandarin:	mā	má	mǎ	mà
English:	mother	linen, hemp	horse	scolding, to scold

A mother who is riding on a horse thinks that it is slow and so she curses it.

Mā ma qí mǎ mǎ màn mā mà mǎ.





Morphology

- The study of the internal structure of words in a language
- Morpheme: smallest meaningful combination of sounds in a language

Strategies for Forming Words

- All languages have *lexical* units of some kind – utterances of one or more syllables that refer to meaning categories, or to relations between categories
- One strategy for creating words is to generate many modifications of a few syllables
 - Tone
 - Adding prefixes and/or suffixes
 - Anti / dis / **establish** / ment / arian / ism
 - Navajo is a particularly *agglutinative*
- English uses many separate word forms and auxiliaries:
go / goes / went / has gone / will go / will have gone



Morphology & Word Formation

dog

one morpheme

cowboy

two morphemes

dogs [dog + s]

two morphemes

unlike

two morphemes

Words

Arbitrary symbols with referents or meanings assigned to them by the users

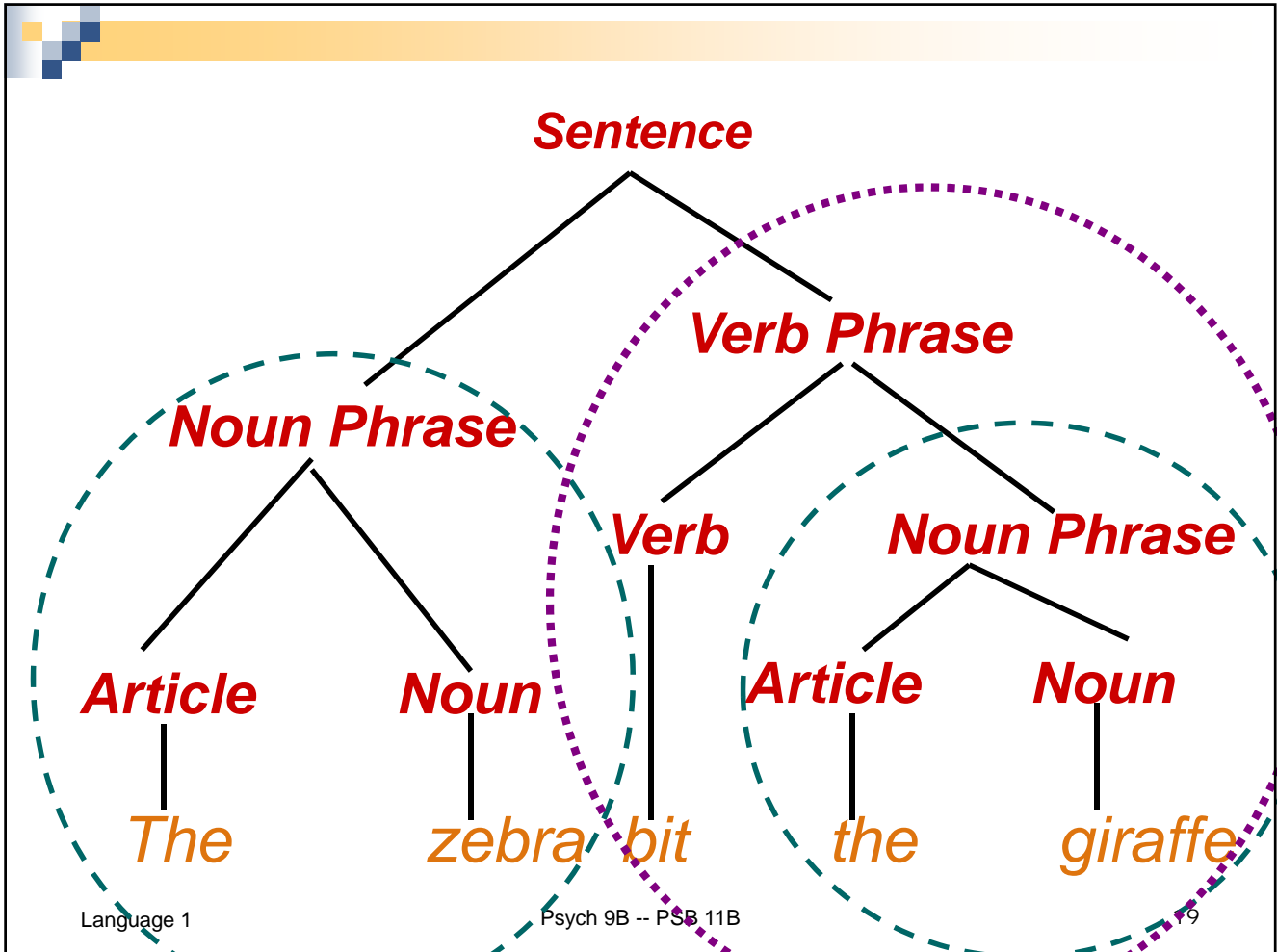
Do the following words sound or look like the animal shown here:
chien, hund, perro?
(They all are words for dog in European languages.)

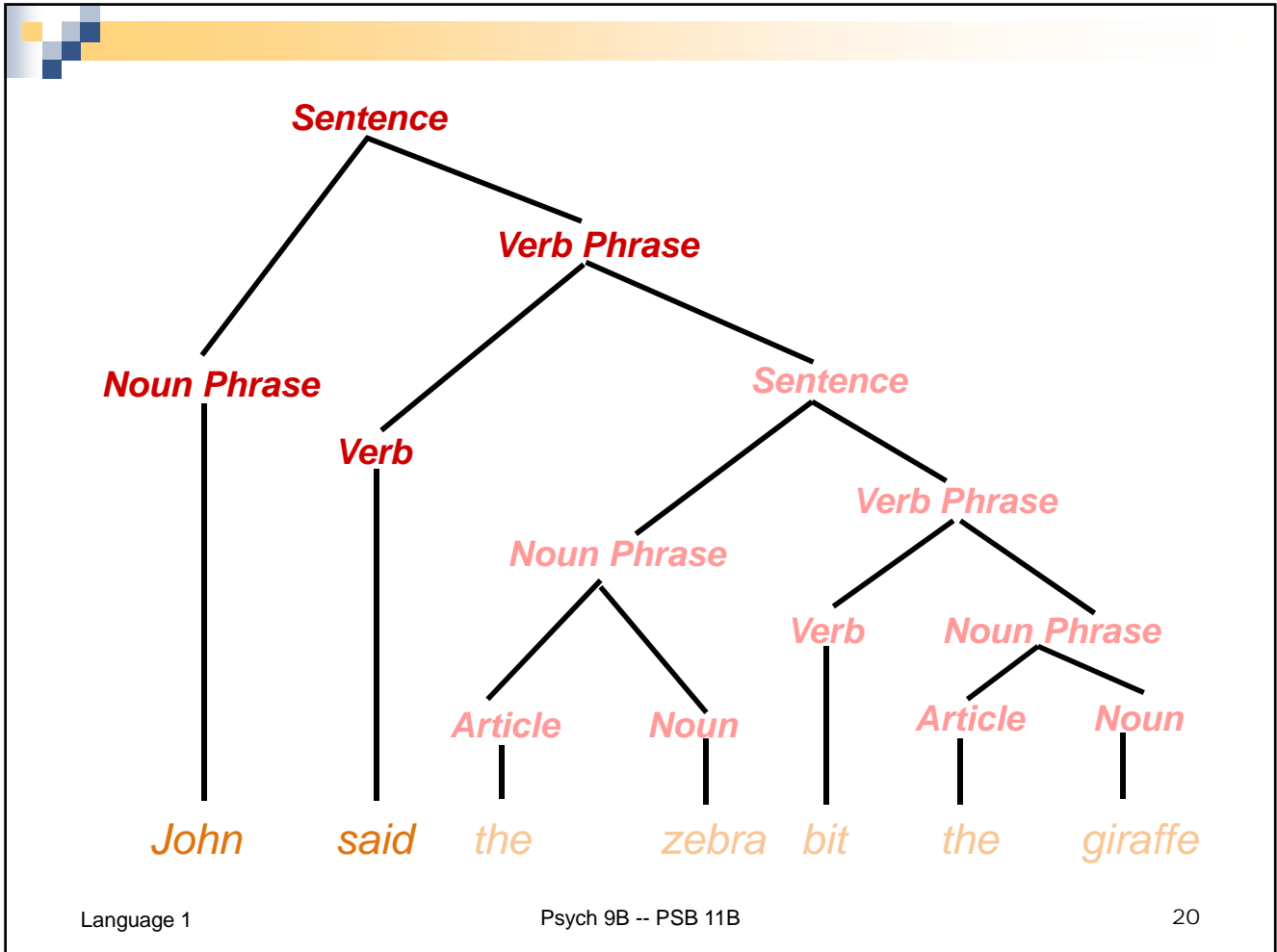


What about this ASL version?
<http://www.signingsavvy.com/sign/DOG>

Syntax

- Rules that specify how words can be combined into phrases and sentences that are considered “well formed” by speakers of a language
 - They are **implicitly** known **psychological principles**
 - Known by adults, young children and members of unschooled societies
- The same words can be ordered into different sentences with very different meanings
 - Mary is happy to know Tom
 - Tom knows Mary is happy.

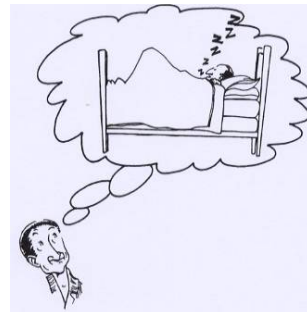






Syntax and Phonology Interact

- Is (3) just a “sloppy” version on (1)?
 - A. Yes
 - B. No
- Is (4) just a “sloppy” version on (2)?
 - A. Yes
 - B. No

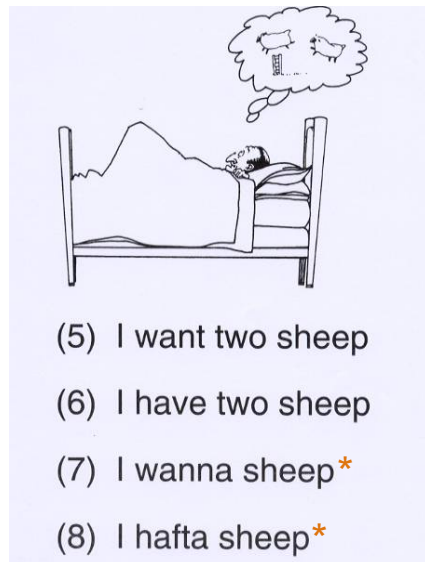


- (1) I want to sleep
- (2) I have to sleep
- (3) I wanna sleep
- (4) I hafta sleep

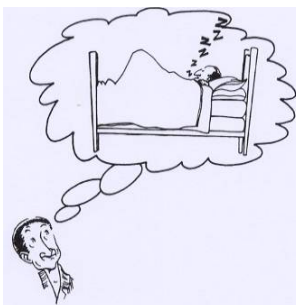


Syntax and Phonology Interact

- Is (7) just a “sloppy” version on (5)?
 - A. Yes
 - B. No
- Is (8) just a “sloppy” version on (6)?
 - A. Yes
 - B. No



Syntax and Phonology Interact



- (1) I want to sleep
- (2) I ~~have to~~ sleep
- (3) I wanna sleep
- (4) I hafta sleep



- (5) I want two sheep
- (6) I ~~have two~~ sheep
- (7) I wanna sheep*
- (8) I hafta sheep*

- English phonology does not allow the consonant sequence **v** followed by **t** in a spoken word
- Speakers convert **vt** to **ft**



Distinction between Voiced and Voiceless Consonants

<u>Voiceless</u>	<u>Voiced</u>	<u>Place</u>	<u>Manner</u>
F	V	Labio-Dental	Fricative
P	B	Bilabial	Plosive
S	Z	Alveolar	Fricative
K	G	Velar	Plosive
T	D	Alveolar	Plosive

Voiced-Voiceless Sequences are Prohibited by a Phonological Rule

- English phonology prohibits a voiced consonant to be followed by a voiceless consonant within a single word
 - “Have” ends with **v** which is voiced
 - “To” starts with **t** which is voiceless
 - So “Have To” considered as one word must be spoken as “Hafta”
 - This rule also explains “used to” becoming “Useta”
- “Wanna” and “Gotta” result from a similar rule
- Plurals formed with an **s** versus a **z** sound



The Voiced/Voiceless Rule is Obeyed in Early Childhood

Child sees



Experimenter says either

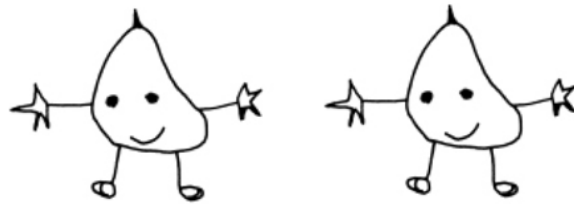
This is a wug.

Or

This is a wuk.

The Voiced/Voiceless Rule is Obeyed in Early Childhood

Child sees



Experimenter says

Now there are two of them.

Now there are two _____?

Results: The children who told wug said **wugz**

The children who were told wuk said **wuks**



Summary: Structure in Language

- Rules of formal structure are acquired by children without formal teaching
- These rules are deduced by youngsters given a sample of English speech
- More generally
 - Language is highly structured
 - Even young children know and honor the structural facts of their language in their language use.
- Even the most informal (sloppy?) speech can be explained by acknowledging that it is constrained by implicit structural principles



Looking Forward

- For Wednesday
 - Gleitman: Ch. 10, pp. 385- 396
- Chapter Test 4 **will** be on Wednesday, Nov. November 26th
- Coffee today at Phoenix Grill