

Introduction:
What is Language? What does it mean to know a language?
Linguistics 201
Professor Oiry

1. Human Specialization for language

Our speech organs were and are directly concerned with breathing and eating. However, they have also become highly specialized for use in language. Their structure and shape is unique to our species, as is the highly developed network of neural pathways that exercises control over them during speech production.

Lungs
Vocal cords
Tongue
Teeth
Lips
Nose

Human beings are also especially equipped for the perception of speech. Newborn respond differently to human voices than to other types of sounds, and 6-month-old infants are able to perceive subtle differences among sounds in languages that they never heard before.

2. Creativity

What does it mean to know a language? In order to answer this question, it is first necessary to understand the resources that a language makes available to its native speakers, those who have acquired it as children in a natural setting.

Because communication is not restricted to a fixed set of topics, language must do something more than provide a package of ready-made messages. It must enable us to produce and understand new words and sentences as the needs arise.

The creativity of language goes hand in hand with a second defining characteristic – the presence of systematic constraints that establish the boundaries within which innovation can occur.

You know a lot of things about the structure of the English language. In fact, I dare say you know everything there is to know about it. Systematic constraints are the hallmark of all aspects of language. Consider the way in which sounds are combined to form words.

To give you a first impression, do the following exercises:

(1) Classify the following words into three categories: English words, words that are not English but could be, or impossible English words.

	English word	Possible word	Impossible
<i>bnick</i>			
<i>brick</i>			
<i>blick</i>			
<i>btick</i>			
<i>botick</i>			
<i>trick</i>			
<i>tlick</i>			
<i>tnick</i>			
<i>nbid</i>			
<i>glind</i>			
<i>mgind</i>			

(2) Fill in the blanks in the following sentences with any word that makes sense.

- a. *Harry has a blick cat. And I really like his blick _____, too.*
- b. *John ate sixteen fertuples, and his girlfriend ate _____ fertuples.*

These words are nonsense, but what happened when you were asked to put a word next to it? How did you know what kind of words could go with it?

(3) Fill in the blanks with forms of the nonsense words given.

- a. *I have one wug, and you have two _____.*
- b. *My car is old and grish. It drives really _____.*
- c. *I like to tunick. I am _____ right now, and I _____ yesterday, too.*

So your quality of native speaker allows you to recognize possible words from impossible ones. What about sentences?

(4) Classify each of the sentences below in one of three categories:

- (i) a good, normal, possible sentence of English that makes sense;
- (ii) a sentence that is just nonsense (but is a sentence nonetheless);
- (iii) a sentence that is not possible at all in English (say whether you can glean from these impossible sentences some meaning? What are they trying to say?)

	Good	Nonsense	Impossible
<i>What house did you wonder who built?</i>			
<i>Colorless green ideas sleep furiously.</i>			
<i>Ideas colorless sleep green furiously.</i>			
<i>So, like, are you IMing him or what?</i>			
<i>Hamburgers some John devoured quickly they.</i>			
<i>Mary thinks I don't like herself.</i>			
<i>Happy paperclips usually write doughnuts out of the sky.</i>			
<i>There's many people I wanna talk to.</i>			
<i>The horse that is racing past the barn fell.</i>			
<i>The horse raced past the barn fell.</i>			
<i>Run children the school of out.</i>			

What is the difference between a nonsense sentence and a sentence that is simply impossible? What's wrong with the nonsense sentences? What's wrong with the impossible sentences?

3. Grammar and linguistic competence

Speakers of a language are able to produce and understand an unlimited number of utterances, including many that are novel and unfamiliar. At the same time, they are able to recognize that certain utterances are not acceptable and simply do not belong to their language. This ability is often called **linguistic competence**, constitutes the central matter of linguistics.

In investigating linguistic competence, linguists focus on the mental system that allows human beings to form and interpret the sounds, words, and sentences of their languages. Linguists call this system a **grammar** and often break it down in to the components in (1):

(1)

Phonetics: *The study of physical sounds.* How do we produce sounds? How are sounds transmitted from one person's mouth to another person's ear? How do we perceive sounds?

Phonology: *The study of how people manipulate sounds.* What are the possible sounds in a particular language? What are the possible combinations? How do we manipulate sounds?

Morphology: *The study of word structure and word formation.* How do we make (new) words? Is there an internal structure of words? If so, what does it look like?

Syntax: *The study of sentence structures.* How do we combine words to make a sentence?

Are there any rules?

Semantics: *The study of meaning*. How do we understand the meaning of individual sentences?

Pragmatics: *The study of the role of context in language use*. How does the context affect the way utterances are understood?

The grammar is a system that combines small pieces of language into large ones. This allows us to judge what is and is not a possible word, sound, sentence even if we haven't heard or read such combinations before. Every native English speaker's grammar has encoded that English words cannot begin with pairs of consonant sounds like "bn" or "mb" or "mg" (as we saw in the exercise above).

In the second group of questions in the exercise, you were given nonsense words but you nevertheless knew certain things about them. We want that knowledge to be part of your grammar as well. You knew, subconsciously, that "blick" had the properties of an adjective, like *grey* or *happy*, since it occurred in the position that adjectives do: *a ___ cat*. We have evidence that you knew it was an adjective because you chose a noun, the category of words nouns modify, in the blank spot.

And in the last set of questions about whole sentences, we discovered that your knowledge of English allows you to judge that some sentences, ones you never heard before, could never be possible sentences.

4. All languages have a grammar

It could not be any other way. If a language is spoken, it must have a phonetic and phonological system; since it has words and sentences, it must have a morphology and a syntax; and since these words and sentences have systematic meanings, there must obviously be semantic principles as well. In other words, each spoken language must have an intricate system of knowledge that encompasses sound and meaning as well as form and structure.

5. All Grammars are equal

Contrary to popular belief, there is no such thing as a primitive grammar, even in places untouched by modern science or technology. Some people say that such-and-such languages have "no grammar" or "less grammar". This is a myth. Indeed, some of the most complex linguistic phenomena we know about are found in societies that have neither writing nor electricity.

All languages have grammar. If a language is spoken (even not written) or signed, it has a phonetic and phonological system. Since it has words and sentences, it has a morphology and a syntax. These words and sentences have meaning so it has a semantics. All grammars are equal, too. There are no "primitive" or "inferior" languages. This is especially important when looking at different varieties/dialects

of a language – different languages spoken by specific groups of people, in a specific regions, that are very similar but not identical to each other. African American English and the Brooklyn dialect of English are excellent examples, often perceived as being inferior to Standard English. A related point is that languages don't differ in principle in how hard they are to learn. Children can learn any language very easily. As an adult, you may have an easier time learning a language more similar to your own, but that is completely relative to what language you speak yourself.

In sum, linguists don't even think of trying to rate languages as good or bad, simple or complex. Rather, they investigate language in much the same way that other scientists study nails or stars – with a view to simply figuring out how it works.

The type of grammar that is in a grade school grammar book is called a **prescriptive** grammar, because it tells you what to do. The type of grammar that we are interested in is called a **descriptive** grammar, because it tries to capture and describe the regularities in people's linguistic behavior.

6. Grammars are alike in basic ways

In considering how grammars can differ from each other, it is easy to lose sight of something even more intriguing and important – the existence of principles and properties shared by all human languages.

When languages differ from each other, there are often constraints on how much variation is possible.

7. Grammars change over time

The features of language that are not universal and fixed are subject to change over time. Indeed, within these limits the grammars of all languages are constantly changing. Some of these changes are relatively minor and occur very quickly. Other changes have a more dramatic effect and typically take place over a long period of time.

8. Inaccessibility: grammatical knowledge is subconscious

Knowledge of a grammar differs in important way from knowledge of arithmetic, traffic rules, and other subjects that are taught at home or at school: it is largely subconscious and not accessible to introspection (that is, you can't figure out how it works just by thinking about it).

Speakers of a language know what sounds right and what doesn't sound right, but they are not sure how they know.

9. What linguists do

We have seen that language is quite complex, and that we have a lot of unconscious knowledge of it. But what exactly do linguists do with all of this?

Just as any other science, linguistics tries to bring order and understanding to a wild jungle of data. The first task when looking at any linguistic data is to find regularities: what sorts of patterns are there that can easily be extended by applying them to new cases?

Here's a simple example of a fairly regular looking pattern:

(6) Singular	Plural
<i>cat</i>	<i>cats</i>
<i>dog</i>	<i>dogs</i>
<i>table</i>	<i>tables</i>
<i>chair</i>	<i>chairs</i>
<i>star</i>	<i>stars</i>
<i>moon</i>	<i>moons</i>
<i>idea</i>	<i>ideas</i>
<i>freedom</i>	<i>freedoms</i>
<i>dream</i>	<i>dreams</i>

What is the change in meaning? What formal change occurs?

In the case at hand, these questions are easy to answer. But in a way, this is what a lot of linguistic analysis boils down to: How are linguistic forms related to meanings?

Here's another example from another language. What regularities can you find? (Hint: In trying to identify regularities, ask yourself what minimal formal changes there are and what effects they have)

(7) *Cree form English gloss*

- | | |
|---------------------|--------------------------|
| 1. tʃi:ma:n 'canoe' | 2. nitʃi:ma:n 'my canoe' |
| 3. so:niya 'money' | 4. niso:niya 'my money' |
| 5. wiya:f 'meat' | 6. niwiya:f 'my meat' |

10. A few words about writing

We speak language and we perceive it and we write it and we read it. However, the

ability to speak and perceive language arises long before we learn how to read and write it. Reading and writing are learned skills. So they really don't represent any real part of **linguistic competence**. So we will not talk about the written word, only spoken language. Writing systems are highly conventionalized ways of recording language. They work well enough within a language to represent words but were never designed to capture sounds and consequently speech in other languages. They are also not always consistent, as we can see from the following rather extreme example.

One could say that the spelling 'ghoti' can be pronounced the same as the word 'fish': 'gh' in *laugh* is pronounced f, 'o' in *women* is pronounced i, 'ti' in *nation* is pronounced sh. Obviously this is an extreme case but it illustrates that the mapping between letters and sounds in English is intricate and highly conventional system. English spelling will prove inadequate for representing speech sounds, which is something we will do at the end of the semester when we study phonetics and phonology.