Focusing on evidence
in introductory linguistics classes

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Foundations of Linguistics

- LING-201, offered every semester, no prereqs

- required for major and minor in linguistics, prereq for many upper-level linguistics classes

- concentrate on 'six subfields,' using *Language Files* or *Contemporary Linguistics*
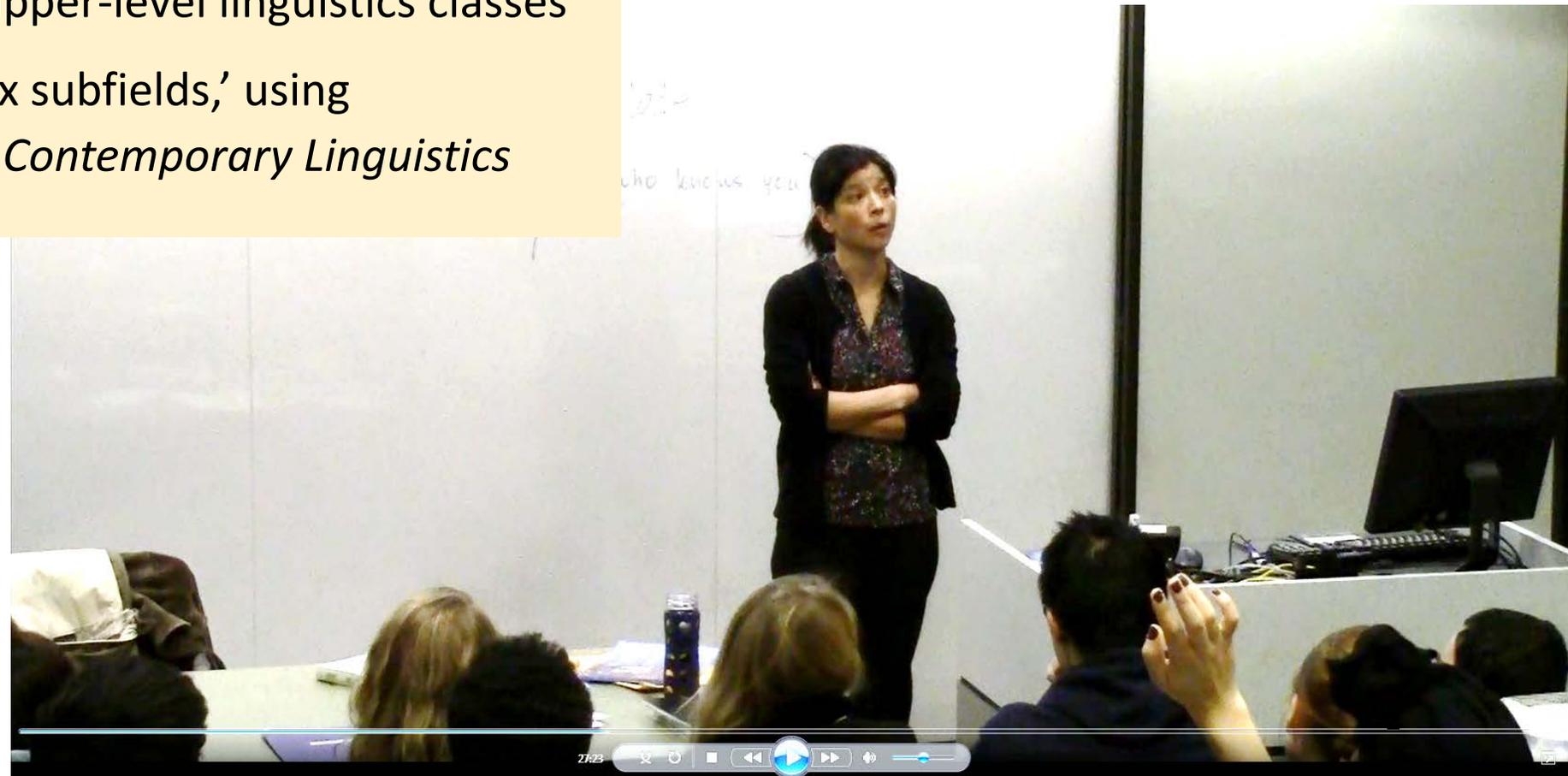
Who takes Foundations of Linguistics?

- 50-60 students/semester

- ≤50% are thinking about major or minor in linguistics

- ≤20% take it to fulfill GER in History, Society and Culture

- The rest take it out of curiosity, because it fits in their schedule, etc…

- Many will never take another linguistics class.

What do we want our various students to take away from this class?

traditional nuts and bolts   **+**   **bigger-picture stuff**

- IPA, allophonic analysis, morphological analysis, syntax trees, terms, etc…

- understanding what kind of discipline linguistics is
- enhancing students' general educational experience

Evidence QEP at Emory

- Since 2015, Emory offers summer training workshops
  for faculty who want to design an **evidence-focused** course

- Topics vary; evidence is 'foregrounded' in assignments, discussions, etc.
  (similar to writing-focused courses)

- Originally for first-year seminars, but applies across courses – even large intro courses

http://evidence.emory.edu/index.html

What is an Evidence-Focused Seminar?

While almost all courses offered at Emory involve evidence, evidence-focused first-year seminars offer a unique opportunity to learn about the important role evidence plays in academic study. In an evidence-focused seminar, you will learn about the nature of evidence, the role of evidence, and what counts as evidence related to the course topic.

Why learn about evidence? Studying evidence will help you produce new knowledge through research and study, be a smart consumer of knowledge in this technological age, make informed decisions based on evidence, and understand other people in a diverse global community.

Recognizing the scientific method across disciplines

- every few weeks (after a unit test),
  ~20 minutes of class discussion
  focusing on a question that I provide

An ungraded, optional question on Homework 4. Most answered it, some very thoughtfully.

4. *(This question won't be graded; I just want to hear your thoughts.)* We have been practicing the scientific method in this class, although I haven't (yet) called your attention to it. Indeed, the scientific method plays a central role in the study of linguistic structure. Thinking back over the last several weeks, can you remember exercises that involved practicing the scientific method? How do you think the application of the scientific method is different in linguistics from in (other) natural sciences? (Sub-question: In what ways do you think linguistics is/is not a natural science?)

Questioning underlying assumptions

Introduction to morphology

Broadly speaking, **morphology** is the study of the rules and principles that determine how **words** are formed.

What is a word? This is actually not an easy question to answer. If I ask you how many words the first sentence of this paragraph has, you'll probably all answer: ____. But how do you know this?

Here are four possible definitions of **word**; each of them is flawed. What's wrong with each? For (b)-(d), try to come up with counterexamples.

a) A word is something that's written with spaces around it.

b) A word is a syllable.

c) A word is a unit of meaning.

d) A word is a unit of meaning that could be pronounced by itself.

We're not going to answer the question *What is a word?* in this class. At this point, I just want you to recognize that it is a real question. There are entire books and conferences devoted it!

Morphology unit starts with a broader discussion of '**What is a word?**' instead of going straight into the detailed analysis.

Making generalizations with limited evidence

Introductory evidence-focused exercise

Here are some sample sentences from 'Language X.' I have provided an IPA transcription and a full-sentence English translation of each example.

(*IPA stands for International Phonetic Alphabet. We'll learn how to use it next week.*)

1	di kwɛli paa	They killed a leopard.
2	ku kaali ka	We saw a snake.
3	di nɛni ka belei su	They saw a woman on the road.
4	e naloŋ ka belei su	He saw a man on the road.
5	ku nɛni toli	We called a woman.
6	ku naloŋ ka bɛlɛi mu	We saw a man in the house.
7	di kwɛli ka	They saw a leopard.
8	naloŋ e pa	A man came.
9	nɛni e naloŋ toli	A woman called a man.
10	di naloŋ ka bɛlɛi mu	They saw a man in the house.
11	ku ŋwɛni ta ka	We saw a bird's nest.
12	di nɛni a mɔlɔŋ ŋuma	They stole the woman's (raw) rice.
13	di kwɛli lɔŋ paa	They killed a young leopard.
14	i ŋgiwai lokwa	You (sg.) beat the dog.
15	ŋa tɛ ŋaloŋ tɔnɔ ja	I bought one egg.
16	di nuai toli	They called the people.
17	nuai di pa	The people came.
18	ka li ndɔwɔi su	You (pl.) went into the bush.
19	ŋa ɣila tɔnɔ ka	I saw one dog.
20	ku lia	We forgot.
21	jala e naloŋ njiŋ	A lion bit a man.
22	nuai di lɔ k͡pele	The people drank palm-wine.
23	e wulɔ tama ja	She bought much oil.
24	naloŋ tɔnɔ e pu	One man ran.
25	di ŋa sɛŋkau ŋuma	They stole my money.

Getting students in the habit of supporting claims with examples

1. Suppose this was the only surviving document in this language. Do your best to answer the following questions based on this document only. For each answer, underline cite specific examples that support your claim. Don't worry if you're not sure about some of the grammatical terms used here – just ask Dr. Pak or a fellow student.

   a. What's the **basic order of subject, verb and object** in this language?

   b. Does the verb in this language change its form to indicate **tense** (e.g. past, future)?

   c. Does the verb change its form to agree with the **subject** (i.e., Are verbs conjugated)?

   d. How many **pronouns** does this language have? Try to present the pronouns in a chart. Are there any instances where this language has two distinct pronouns and English has only one (or vice versa)?

2. Which of your answers above do you feel the most confident about? Which do you feel the least confident about? Why?

3. Now suppose you discover a surviving speaker of this language. What questions could you ask this speaker that would help you answer some of the questions above that you were unsure about? **Be as specific as you can.**

Making the most plausible generalizations

- More detail isn't necessarily better. This exercise reminds students that we're ultimately interested in what's going on in speakers' minds.

In Turkish, the plural suffix is sometimes pronounced *-ler* and sometimes pronounced *-lar*. **All of the following statements are factually correct, but one is preferable to the others. Why?**

a) *-ler* is used when the preceding vowel is e, i, y or ø, and *-lar* is used when the preceding vowel is a, ɨ, o or u.

b) *-ler* is used when the preceding vowel is front and *-lar* is used when the preceding vowel is back.

c) *-ler* is used when the preceding vowel is high or mid, front, and unrounded or rounded, and *-lar* is used when the preceding vowel is high or mid, back and rounded or high or low, back and unrounded.

This wording makes it clear that a statement can be 'technically correct' without being very good.

1.	'stone'	taş	taşlar
2.	'face'	yüz	yüzler
3.	'donkey'	eşek	eşekler
4.	'banana'	muz	muzlar
5.	'fish'	balık	balıklar
6.	'tooth'	diş	dişler
7.	'ear'	kulak	kulaklar
8.	'flower'	çiçek	çiçekler
9.	'eye'	göz	gözler
10.	'son'	oğul	oğullar
11.	'arm'	kol	kollar

Recognizing that linguistic knowledge isn't directly accessible

Suppose a team of linguists is trying to figure out if 'Language M' is a **tone language** or not.

o Larry asks a speaker: 'Does your language have tones?' The speaker says, 'Yes.' Larry concludes that Language M is a tone language.

o Jim asks a speaker, 'Can you think of a pair of words that mean different things and are pronounced exactly the same except for the pitch?' The speaker says, 'No, I can't.' Jim concludes that Language M is *not* a tone language.

o Sally conducts an elicitation session. She asks the speaker 'How do you say *water*?' The speaker says /**si**/ with *rising* pitch. Then she asks, 'How do you say *sister*?' The speaker says /**si**/ with *falling* pitch. Sally concludes that Language M is a tone language.

Sally's approach is better than Jim's, which is in turn better than Larry's. But **there are flaws in all three linguists' methods and/or reasoning. Identify as many problems as you can with each.**

Students consider hypothetical research scenarios and ask: 'Why wouldn't this count as sufficient evidence?'

The scenarios are meant to be a bit silly. In considering them, students are forced to think about how we *can* tap into our linguistic knowledge, **articulating standards for evidence**.

Linking evidence to a claim

- Sometimes students make a claim, present evidence, but neglect to explain *how* the evidence is supposed to support the claim. Here *I* provide both claim and evidence, so students can focus on articulating the connection between them.

Suppose you're trying to figure out what kinds of **syllables** Swahili allows. Each of these documents could be used to support the following claim:

Claim: **Swahili does not allow closed syllables.**

- Explain how Document A supports this claim. State precisely how the logic behind the argument would work.

- Explain how Document B supports this claim. State precisely how the logic behind the argument would work.

Document A

	Loanwords from Arabic	
adaba	(< Ar. ʔadab)	'good manners'
kisi	(< Ar. qis)	'estimate'
ratibu	(< Ar. rattib)	'arrange'
wakati	(< Ar. waqt)	'time'
madini	(< Ar. maʕdin)	'metal'
maki	(< Ar. maʕq)	'thickness'
milki	(< Ar. milk)	'possession, dominion'
kaburi	(< Ar. qabr)	'grave, tomb'
dhaifu	(< Ar. daʕiif)	'weak'
fariji	(< Ar. farridʒ)	'comfort'
shahamu	(< Ar. ʃaħm)	'fat, lard'
duni	(< Ar. duun)	'inferior, low'
sakifu	(< Ar. saqqif)	'make a stone floor'
kuzi	(< Ar. kuuz)	'earthenware pitcher'

	Loanwords from English	
burashi		'brush'
bulangeti		'blanket'
reli	(< rail)	'railway'
paipu	(< pipe)	'motor horn'
stimu	(< steam)	'power (of electricity)'
kilabu		'club'
madigadi		'mudguard'
stesheni		'station'

Document B

Mara kwa mara tunawaona watoto wengi ambao hawana heshima na adabu nzuri kwa *wakubwa* wao, au pengine kwa wageni wanaofika katika mji fulani. Nimeona katika miji, hasa Nairobi, Mombasa na Dar es Salaam, mama wengine wenye watoto ambao hawawapeleki shuleni kusoma. Basi, mama hawa wakimwona mgeni, humwambia mtoto, "Mwombe peni *ukanunue* mkate." Mtoto huondoka *na kumwamkia* yule mtu shikamuu kubwa, halafu akamwomba peni *la* mkate. Peni lile mtoto hunyang'anywa *na* mama aka-nunua sigareti ama kitu kingine *apendacho* yeye.

Thanks!

These slides are on my website (www.marjoriepak.com),
and you can email me (mgpak@emory.edu) with any questions.

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