Mythbusting: "Words"

Omer Preminger



Commencement, May 2017

Hello!

- My name is Omer Preminger
- I'm a faculty member here in the Department of Linguistics at the University of Maryland
- Among the courses I teach are undergraduate *Syntax II*, as well as the course in *Linguistic Field Methods*
- I work on syntax, mostly in languages that are understudied / underdocumented

Hello!

- My name is Omer Preminger
- I'm a faculty member here in the Department of Linguistics at the University of Maryland
- I'm also Associate Director of the University of Maryland / Maryland Language Science Center's *Guatemala Field Station*



• where we work with the local community on the indigenous Mayan languages Kaqchikel, Tz'utujil, and K'iche'

(more on this towards the end)

Doing science with humans on language

- We are all experienced users of language
- This both *helps* and *hinders* research on language
- It *helps*, because we have readily available "data generators" (people!) whenever we want to explore something or test a hypothesis
- It hinders, because as language users, we have all kinds of preconceptions about language
 - which are just that preconceptions

(For the sake of comparison, imagine if everyone who had a working heart thought themselves to be an instant cardiologist.)

- → Part of what we try to teach our students in the LING program is to think <u>critically</u> about human language
 - o and to distinguish facts from preconceptions

A little bit about what we do here (cont.)

• In that vein, I would like to invite you all to think critically with me, about something we all grew up thinking is central to language:

<u>words</u>

Do you know any "words"?

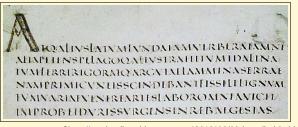
- Everybody who's sitting here probably thinks they know a whole bunch of words!
- → It might interest you, then, that *nobody in the history of human thought* has ever come up with a <u>working</u> definition for what a "word" is.
 - To give you a taste of the problem, let's review a few common-sense attempts at an answer to the question, *What is a "word"?*

- (i) word \equiv "the thing we write between spaces/punctuation"
 - PROBLEM 1:



- doesn't know how to read or write
 - ⇒ doesn't know words?!

- (i) word \equiv "the thing we write between spaces/punctuation"
 - PROBLEM 2:



[http://anglandicus.blogspot.com/2013/06/irish-scribal-habits-scriptio-continua.html]

- many writing systems, incl. early Latin & Greek, did not use spaces (a.k.a. "scriptio continua")
 - ⇒ the authors of these texts didn't know words?!

- (i) word \equiv "the thing we write between spaces/punctuation"
 - PROBLEM 2:
 - this is not just about ancient scripts, by the way
 - modern-day Chinese script lacks anything we would identify as a "word boundaries"
 - modern-day Vietnamese script has spaces, but they are between every pair of syllables
 - meaning that the written units are smaller than what we'd identify as "words"

(and there are many other examples of this sort)

- (i) word \equiv "the thing we write between spaces/punctuation"
 - PROBLEM 3:



"me again..."

"When I finally learn to write, I am going to have a good deal of trouble learning where spaces go and where they don't."

"This, despite the fact that I allegedly already 'knew words' before learning to write."

- (i) word \equiv "the thing we write between spaces/punctuation"
 - PROBLEM 4:



- today used to be "two words" (to-day) in the 19th century, and is now "one word" (one of many such examples)
 - but it is not clear that <u>anything</u> has changed about this expression, other than how it's written

- (i) word ≡ "the thing we write between spaces/punctuation"
 - PROBLEM 5:

Wa-hake-natar-a-kwétar-A-'. MOHAWK FACT-MSS/1sO-bread-Ø-cut-BEN-PUNC 'He cut the bread for me.'

[Baker 1996:27]

- There are languages in which there's no natural counterpart to our Anglo-centric (or Indo-European-centric) notion of "word"
 - and this doesn't seem to be a problem for the, um, language-ness of these languages

So let's try something else...

- (ii) word \equiv "the smallest <u>meaningful</u> unit of language"
 - This initially looks quite promising
 - o exam means something, but -xa- doesn't seem to
 - But this approach runs into problems pretty quickly:
 - believable is a "word," right?
 - but we can't really say that believable doesn't have meaningful subparts
 - namely, believ(e) + -able
 (the latter meaning something like "able to be X'ed")
 - ⇒ "words" (can) have meaningful subparts

- (ii) word ≡ "the smallest <u>meaningful</u> unit of language"
 - In fact, things get even worse for this definition
 - you might try to save the previous example by saying something like: "believe is itself a word; that's why believable is a complex entity"
 - → but what about the atroc(i)- part in atrocious and atrocity?
 - clearly, there is a shared, meaningful subpart among these two "words"
 - (after all, we wouldn't want to say that it's an accident that they both start with atroc(i)-)
 - but since atroc(i)- is not a "word"
 - we now must admit that there are meaningful subparts to "words"

- (ii) word \equiv "the smallest <u>meaningful</u> unit of language"
 - On the flip side, there are things we would have to call "words" that don't seem to have any meaning at all...!
 - the whole kit and caboodle
 - to and <u>fro</u>
 - if I had my <u>druthers</u>
 - o run the **gamut**

[Harley 2006:10]

- (ii) word \equiv "the smallest <u>meaningful</u> unit of language"
 - In fact, this phenomenon seems to occur both above and below the "word" level:
 - o complet(e)- + -ion ⇒ completion<u>but:</u>
 - \circ compet(e)- + -ion \Rightarrow competion
 - Instead:
 - \circ compet(e)- + -it + -ion \Rightarrow competition
 - **▶** But what is this "-it"?
 - ANSWER: (Harley 2006)
 It is a *caboodle* a bit of language that is only meaningful in the context of the larger expression it is part of

A few more relevant observations

- If all we have is these strings of meaningful little elements (with or without spaces in between them) —
 - maybe what's special about "words" is that they are those strings of meaningful pieces that we've encountered before
 - or that we are used to encountering
 like: breakable, blackboard, commencement, and so forth

o nope:

- any friend of yours is a friend of mine
- use only as directed
- may the force be with you
- ... and so forth

[Jackendoff 1997; Marantz 2001]

A few more relevant observations (cont.)

- maybe what's special about "words" is that they can combine in creative/unexpected ways
 - kick the ball means what we expect it to mean
 - given the pieces, kick + the + ball
 - but kick the bucket does not
 - creative/unexpected
- o nope:
 - $horrif(y) + -ic \Rightarrow horrific$
 - · as we would expect, given its parts
 - but terrif(y)- + $-ic \Rightarrow terrific$
 - creative/unexpected!

Consequences

The bottom line is that in an expression like "the commencement":

- There's no qualitative difference between
 - how -ment relates to commence

and —

• how the relates to commencement

Or, to put it in the parlance of our times: #NoWords

(Except in the obvious sense of written text, in some languages.)

Consequences (cont.)

Why is this important?

Once we don't presuppose that language must be shoehorned into the preconceived template of "words" — interesting things happen:

- linguistic communities that happened to develop writing systems different from ours (e.g. Vietnamese) start looking less 'exotic'
- removing these illusory differences can reveal hidden commonalities
 - for example...

Consequences (cont.)

• Q'anjob'al is a Mayan language – spoken in Santa Eulalia (Guatemala)

(among other places)



Kaqchikel is another Mayan language – spoken in Patzún (Guatemala)
 (among other places)



Consequences (cont.)

- Here's how you say "She saw you" in Q'anjob'al: maxach yila'
- And here's how you say "She saw you" in Kaqchikel: xarutz'et
- ⇒ Looks different, right...?
 - Not if you break these down into their parts, <u>ignoring</u> so-called "words":
- (1) max-ach y-ila' PAST-you he/she-see

- (2) x-a-ru-tz'et PAST-you-he/she-see
- same pieces, in the same order
 - and note: the writing systems for these languages are very late, colonial/post-colonial additions

Take-home message

- As language users, we have all kinds of preconceptions about what language consists of
- In particular, as speakers of Western European languages (like English):
 - we might think that the notion of *word* is central to what it means to know a language
- But when examined critically, there seems to be nothing that systematically corresponds to where we put "spaces."
- ⇒ It is important to subject our common-sense notions about language to <u>scientific</u> investigations
 - which sometimes yield results that are very different from what our initial, common-sense notions might suggest

- The same is true in all parts of linguistics that our students study
 - syntax & morphology (the parts we just talked about)
 - semantics & pragmatics: the study of meaning, how the meaning
 of complex expressions arises from the meanings of their parts, and
 how language interacts with context
 - phonetics & phonology: the study of linguistic sounds and sound systems
 - language acquisition: the study of how children learn their native language(s)
 - psycholinguistics: the study of how language is processed and produced in real time
 - **neurolinguistics**: the study of how the human brain processes and produces language
 - **computational linguistics**: the formal and quantitatively precise modeling of linguistic knowledge and linguistic processes

☆ THANK YOU **☆**

And congratulations to our newly-minted graduates!!!