

**Term paper assignment:** a detailed, theoretically informed analysis of some complex subsystem of a language's morphology. To be delivered in four stages:

- An informal, 5- to 7-page sketch or outline of the morphological subsystem that you choose is due on **Thursday, February 9**. Be sure to indicate a preliminary source or list of sources for your data.
- A preliminary draft of your paper is due on **Thursday, March 23**.
- During the last two weeks of the semester, you will give a short, in-class presentation of your project (30 minutes or so with 5 or so minutes afterwards for questions and discussion).
- The final draft of your paper is due on **Thursday, April 27**.

### Choices:

*Subsystem:* This subsystem can relate to inflection, derivation, or compounding, or to the interface of any of these with some other grammatical component. You should choose a morphological subsystem that encompasses a reasonably large number of lexemes; for instance, a project focusing on the idiosyncratic morphology of BE or on the unproductive suffix *-th* in *width* would be too narrow in scope. Some possible topics are given below. These are just examples; you do not need to choose one of them.

*Approach:* The approach that you take to the analysis of your data may be theoretical, typological, historical, corpus-based, or computational.

*Language:* You may work on any natural language or languages. You may have a particular language in mind that you'd like to work on, but you should also feel free to choose a language that is entirely new to you. You could even browse through exotic grammars on the 4<sup>th</sup> floor of Young Library, where books with call numbers in the P to PM range (especially PH to PM) should present lots of good possibilities. Below are some language families/subfamilies many of whose members have interesting morphological systems. (Your language doesn't have to belong to any of these families; these are only suggestions.)

Afro-Asiatic	Indo-European	Kiranti	Nilo-Saharan	Uralic
Algic	Iroquoian	Munda	Oto-Manguean	
Austronesian	Kartvelian	Muskogean	Siouan	

In any event, you should avail yourself of one or more very good grammars of your chosen language. For the purposes of this project, avoid languages for which no good description is available.

### Analysis:

You should structure your analysis in whatever way seems most logical to you, but you should try to do all of the following things.

1. *Briefly identify the language to which your morphological subsystem belongs.*

What family does it belong to? Where is it spoken? By whom? (An indispensable source of genetic, geographical and demographic information on every spoken language is the Ethnologue, <http://www.ethnologue.org/>.)

2. *Give an informal description of the set of data that you will examine.*

The exact nature of this set of data will vary widely with the choice of topic. If you are analyzing the system of conjugation classes of a language, the data should include representative paradigms, whose structure you should informally describe.

## Conjugation of some Old English verbs

			SINGAN 'sing' (strong-3a)	STELAN 'steal' (strong-4)	FREMMAN 'perform' (weak-1)	LEORNIAN 'learn' (weak-2)	
Finite	Present	Indicative	1 sg	<i>singe</i>	<i>stele</i>	<i>fremme</i>	<i>leornie</i>
			2 sg	<i>singest</i>	<i>stilst</i>	<i>fremest</i>	<i>leornast</i>
			3 sg	<i>singeþ</i>	<i>stilþ</i>	<i>fremeþ</i>	<i>leornap</i>
			pl	<i>singap</i>	<i>stelap</i>	<i>fremmap</i>	<i>leorniap</i>
		Subjunctive	sg	<i>singe</i>	<i>stele</i>	<i>fremme</i>	<i>leornie</i>
			pl	<i>singen</i>	<i>stelen</i>	<i>fremmen</i>	<i>leornien</i>
		Imperative	sg	<i>sing</i>	<i>stel</i>	<i>freme</i>	<i>leorna</i>
			pl	<i>singap</i>	<i>stelap</i>	<i>fremmap</i>	<i>leorniap</i>
	Past	Indicative	1 sg	<i>sang</i>	<i>stæl</i>	<i>fremede</i>	<i>leornode</i>
			2 sg	<i>sunge</i>	<i>stæle</i>	<i>fremedest</i>	<i>leornodest</i>
			3 sg	<i>sang</i>	<i>stæl</i>	<i>fremede</i>	<i>leornode</i>
			pl	<i>sungon</i>	<i>stælon</i>	<i>fremedon</i>	<i>leornodon</i>
		Subjunctive	sg	<i>sunge</i>	<i>stæle</i>	<i>fremede</i>	<i>leornode</i>
			pl	<i>sungen</i>	<i>stælen</i>	<i>fremeden</i>	<i>leornoden</i>
Nonfinite	Participle	Present	<i>singende</i>	<i>stelende</i>	<i>fremmende</i>	<i>leorniende</i>	
		Past	<i>(ge)sungen</i>	<i>stolen</i>	<i>fremed</i>	<i>leornod</i>	
	Infinitive	Synthetic	<i>singan</i>	<i>stelan</i>	<i>fremman</i>	<i>leornian</i>	
		Periphrastic	<i>tō singanne</i>	<i>tō stelanne</i>	<i>tō fremmanne</i>	<i>tō leornianne</i>	

If you are considering the morphotactic pattern of some class of words, the data should include a breakdown of several words according to that pattern along with an informal description of each part of the pattern.

## Morphotactics of Swahili verbs (partial)

subject agreement prefix	tense prefix	relative prefix	object agreement prefix	verb stem	relative suffix
<i>a-</i>			<i>vi-</i>	<i>soma</i>	<i>-vyo</i>
<i>a-</i>	<i>na-</i>	<i>vyo-</i>	<i>vi-</i>	<i>soma</i>	

'which he reads'

'which he is reading'

If you are analyzing a particular category of derivatives, the data should include lists of derivatives and their bases, whose derivational relation you should informally describe.

Derived verbs in -ize					
Base	Derivative	Base	Derivative	Base	Derivative
<i>burglar</i>	<i>burglarize</i>	<i>American</i>	<i>Americanize</i>	<i>analysis</i>	<i>analyze</i>
<i>climate</i>	<i>climatize</i>	<i>brutal</i>	<i>brutalize</i>	<i>harmony</i>	<i>harmonize</i>
<i>crystal</i>	<i>crystallize</i>	<i>civil</i>	<i>civilize</i>	<i>memory</i>	<i>memorize</i>
<i>demon</i>	<i>demonize</i>	<i>commercial</i>	<i>commercialize</i>	<i>Miranda</i>	<i>Mirandize</i>
<i>digit</i>	<i>digitize</i>	<i>equal</i>	<i>equalize</i>	<i>scrutiny</i>	<i>scrutinize</i>
<i>diphthong</i>	<i>diphthongize</i>	<i>fictional</i>	<i>fictionalize</i>	<i>Tantalus</i>	<i>tantalize</i>
<i>glamor</i>	<i>glamorize</i>	<i>general</i>	<i>generalize</i>	<i>mechanical?</i>	<i>mechanize</i>
<i>hospital</i>	<i>hospitalize</i>	<i>ideal</i>	<i>idealize</i>	<i>sensitive?</i>	<i>sensitize</i>
<i>ion</i>	<i>ionize</i>	<i>immobile</i>	<i>immobilize</i>	<i>systematic?</i>	<i>systematize</i>
<i>lion</i>	<i>lionize</i>	<i>italic</i>	<i>italicize</i>	—	<i>recognize</i>
<i>magnet</i>	<i>magnetize</i>	<i>legal</i>	<i>legalize</i>		
<i>poster</i>	<i>posterize</i>	<i>local</i>	<i>localize</i>		
<i>pressure</i>	<i>pressurize</i>	<i>modern</i>	<i>modernize</i>		
<i>terror</i>	<i>terrorize</i>	<i>neutral</i>	<i>neutralize</i>		
<i>vandal</i>	<i>vandalize</i>	<i>popular</i>	<i>popularize</i>		
<i>vapor</i>	<i>vaporize</i>	<i>public</i>	<i>publicize</i>		
<i>victim</i>	<i>victimize</i>	<i>rational</i>	<i>rationalize</i>		
<i>winter</i>	<i>winterize</i>	<i>real</i>	<i>realize</i>		
<i>woman</i>	<i>womanize</i>	<i>visual</i>	<i>visualize</i>		

If you are working with statistical data, provide that data and explain how it was gathered.

type	tokens	type	tokens	type	tokens	type	tokens
GODZILLA	580	ERRORZILLA	2	DATAMAZILLA	1	POWZILLA	1
MOZILLA	102	FED-ZILLA	2	GARTHZILLA	1	RATZILLA	1
BRIDEZILLA	30	GATT-ZILLA	2	GAS-ZILLA	1	ROCKZILLA	1
BABYZILLA	17	HOLLYZILLA	2	GROOMZILLA	1	SHOPZILLA	1
CHUBZILLA	9	MOMZILLA	2	HOGZILLA	1	SNITZILLA	1
DOGZILLA	8	NUNZILLA	2	JAW-ZILLA	1	STOPZILLA	1
COWZILLA	7	RINGZILLA	2	JOZILLA	1	SUNZILLA	1
RODZILLA	7	SATZILLA	2	LANDREZILLA	1	SWAGZILLA	1
UPAZILLA	7	ARZILLA	1	LCOPZILLA	1	TEENZILLA	1
CADZZILLA	5	BOOTZILLA	1	MANZILLA	1	TODDZILLA	1
CORDZILLA	3	CLOGZILLA	1	MAZEZILLA	1	VAUDEZILLA	1
GOLFZILLA	3	CLONEZILLA	1	MEGZILLA	1	<b>Total</b>	821

If you have questions about the sort of data set that would be most suitable for your project, please do talk with me.

3. Identify the particular question(s) about your subsystem that you will attempt to answer. What is unexpected or unusual or unobvious about your subsystem?

4. Propose an answer to the question(s), then provide detailed discussion of how and why your answer works.

### The paper itself:

Your paper should consist of single-sided, double-spaced pages, submitted on paper and stapled. As for the length, you might aim for 15 to 25 pages, but if it's a bit shorter or a bit longer, that's not necessarily a problem; the main thing is to give an analysis that is thorough and precise and to let the length take care of itself.

### Some examples:

**Example A – Position classes.** In many languages, affixes are organized into position classes. Swahili verbs, for example, have the organization in (i).

Morphotactics of Swahili verbs (partial)						
indicative negative prefix	subject agreement prefix	tense prefix	relative prefix	object agreement prefix	verb stem	relative suffix
<i>ha-</i>	<i>ni-</i>	<i>li-</i>	<i>ye-</i>	<i>ni-</i>		<i>-ye</i>
	<i>u-</i>	<i>ta-</i>	<i>o-</i>	<i>ku-</i>		<i>-o</i>
	<i>tu-</i>	<i>na-</i>	<i>lo-</i>	<i>tu-</i>		<i>-lo</i>
	<i>m-</i>	<i>me-</i>	<i>cho-</i>	<i>wa-</i>		<i>-cho</i>
	<i>a-</i>		<i>yo-</i>	<i>m-</i>		<i>-yo</i>
	<i>u-</i>		<i>o-</i>	<i>u-</i>		<i>-o</i>
	<i>li-</i>		<i>o-</i>	<i>li-</i>		<i>-o</i>
	<i>ki-</i>		<i>yo-</i>	<i>ki-</i>		<i>-yo</i>
	<i>i-</i>		<i>yo-</i>	<i>i-</i>		<i>-yo</i>
	<i>u-</i>		<i>vyo-</i>	<i>u-</i>		<i>-vyo</i>
	<i>wa-</i>		<i>zo-</i>	<i>wa-</i>		<i>-zo</i>
	<i>i-</i>		<i>zo-</i>	<i>i-</i>		<i>-zo</i>
	<i>ya-</i>			<i>ya-</i>		
	<i>vi-</i>			<i>vi-</i>		
	<i>zi-</i>			<i>zi-</i>		
	<i>zi-</i>			<i>zi-</i>		
<i>si-</i>						

Canonically, position classes don't do anything surprising; they obey a kind of template. (Position classes are therefore sometimes called "templatic morphology".) But the following noncanonical position-class phenomena make the template metaphor look less apt:

- **ambifixal class:** containing both prefixes and suffixes
- **parallel classes:** have some or all of the same affixes
- **portmanteau class:** contains an affix that spans two or more other classes
- **reversible classes:** whose relative ordering isn't fixed

Swahili exhibits the first three phenomena.

**Project:**

- Questions: How does Swahili deviate from the canonical characteristics of position classes? What are the properties of Swahili verb morphology that cause it to deviate in these ways?
- Solution

**Example B – Synaffixes.** The morphologist Laurie Bauer has proposed the term *synaffix* to refer to composite affixes that sometimes function as units. For instance, the suffix *-ist* (*idealist*, *altruist*) and the suffix *-ic* (*historic*, *cyclic*) are independent suffixes in English. They may combine as independent units (*idealistic*, *altruistic*), but sometimes *-istic* seems to function as a unit (*characteristic* / \**characterist*, *simplistic* / \**simplist*). Thus, the domain of stems to which *-ist* attaches is not identical to the domain of stems to which *-istic* attaches. Moreover, the meaning of an *-istic* adjective isn't necessarily a function of the meaning of a corresponding *-ist* noun; for instance, the meaning of *stylistic* isn't obviously based on that of *stylist*. Also, the productivity of a synaffix may differ significantly from that of its component affixes:

Newspaper texts in the Corpus of Contemporary American English (COCA; Davies 2008–):

Suffix	Productivity*
<i>-ity</i>	.002
<i>-able</i>	.008
<i>-abil-ity</i>	.012

\*i. e. potential productivity (Baayen 2003, 2009): hapaxes with morphology *m* / tokens with *m*

**Project:**

- Questions: What are some of the principle synaffixes of English? What is the evidence favoring their recognition as synaffixes? How does English morphology represent this status?
- Solution

**Example C – Multiple exponence.** In the Pengo language, a verb's perfect inflection presents a striking case of multiple exponence:

Past- and perfect-tense forms of HUR 'see'  
in Pengo [S. Central Dravidian]

		Singular	Plural
Past	1 <sup>st</sup>	<i>hur-t-aŋ</i>	EXCL. <i>hur-t-ap</i> , INCL. <i>hur-t-as</i>
	2 <sup>nd</sup>	<i>hur-t-ay</i>	<i>hur-t-ader</i>
	3 <sup>rd</sup>	m. <i>hur-t-an</i>	<i>hur-t-ar</i>
		f. <i>hur-t-at</i>	<i>hur-t-ik</i>
		n. <i>hur-t-iŋ</i>	<i>hur-t-iŋ</i>
Perfect	1 <sup>st</sup>	<i>hur-t-aŋ-n-aŋ</i>	EXCL. <i>hur-t-ap-na</i> , INCL. <i>hur-t-ah-na</i>
	2 <sup>nd</sup>	<i>hur-t-ay-na</i>	<i>hur-t-ader-na</i>
	3 <sup>rd</sup>	m. <i>hur-t-an-na</i>	<i>hur-t-ar-na</i>
		f. <i>hur-t-at-na</i>	<i>hur-t-ik-n-ik</i>
		n. <i>hur-t-iŋ-na</i>	<i>hur-t-iŋ-n-iŋ</i>

**Project:**

- Question: What are the properties of Pengo verb morphology that cause it to deviate from the canonical absence of multiple exponence in inflectional morphology?
- Solution