

Homework Assignment #4

Due Tuesday September 30th, beginning of class

Name: _____

Question 1: *Maltese definites*

Maltese is a Semitic language spoken on the island of Malta, in the Mediterranean. Consider the following data that show how the definite (the ...) form of a noun is formed. (The symbol ħ represents a voiceless pharyngeal fricative.)

[fellus]	'chicken'	[ilfellus]	'the chicken'
[aria]	'air'	[laria]	'the air'
[mara]	'woman'	[ilmara]	'the woman'
[omm]	'mother'	[lomm]	'the mother'
[kelb]	'dog'	[ilkelb]	'the dog'
[ʔattus]	'cat'	[ilʔattus]	'the cat'
[ħitan]	'walls'	[ilħitan]	'the walls'
[abt]	'armpit'	[labt]	'the armpit'
[ispaniol]	'walls'	[lispaniol]	'the Spanish (language)'

- a. What are the two phonetic forms of the definite marker?

- b. How can you predict where the definite marker goes? What natural classes of sounds seem involved?

Now look at the following data.

[ti:n]	'fig'	[itti:n]	'the fig'
[dawl]	'light'	[iddawl]	'the light'
[sħab]	'clouds'	[issħab]	'the clouds'
[natura]	'nature'	[innatura]	'the nature'

- c. What type of phonological process is responsible for this change and how did it affect the definite marker?
- d. In front of which class of sounds does this process take place?

With the knowledge you gained above, predict the definite form of the following nouns:

[da:r]	'house'	_____	'the house'
[zɪft]	'pitch'	_____	'the pitch'
[aɪz]	'piece of steel'	_____	'the steel'
[ɪŋglɪz]	'English (lang.)'	_____	'the English (lang.)'
[bɪlt]	'city'	_____	'the city'

Question 2: *English plurals*

The English plural morpheme has several allomorphs. Here are two:

[z]: [hænd] 'hand' — [hændz] 'hands'
 [s]: [hɪnt] 'hint' — [hɪnts] 'hints'

Form the plurals of the words below, say them to yourself carefully, and figure out whether they take the [z] or the [s] variant of the plural morpheme:

	[z]	[s]		[z]	[s]		[z]	[s]
song	<input checked="" type="checkbox"/>	<input type="checkbox"/>	cat	<input type="checkbox"/>	<input type="checkbox"/>	dog	<input type="checkbox"/>	<input type="checkbox"/>
bear	<input type="checkbox"/>	<input type="checkbox"/>	group	<input type="checkbox"/>	<input type="checkbox"/>	rock	<input type="checkbox"/>	<input type="checkbox"/>
lamb	<input type="checkbox"/>	<input type="checkbox"/>	hen	<input type="checkbox"/>	<input type="checkbox"/>	ring	<input type="checkbox"/>	<input type="checkbox"/>
pill	<input type="checkbox"/>	<input type="checkbox"/>	laugh _N	<input type="checkbox"/>	<input type="checkbox"/>	love _N	<input type="checkbox"/>	<input type="checkbox"/>
rib	<input type="checkbox"/>	<input type="checkbox"/>	god	<input type="checkbox"/>	<input type="checkbox"/>	bee	<input type="checkbox"/>	<input type="checkbox"/>

Now write down the last sound of each of the words above, f.i.

song	_____ŋ_____	cat	_____	dog	_____
bear	_____	group	_____	rock	_____
lamb	_____	hen	_____	ring	_____
pill	_____	laugh	_____	love	_____
rib	_____	god	_____	bee	_____

And make two lists:

Last sounds of words that take [z]:

Last sounds of words that take [s]:

If you did everything right above a simple pattern should emerge. What characteristic do the [z] roots that take [z] share that distinguishes them from the [s] ones, and vice versa?

Now look at the following words:

house, bus, garage, bush, match, box

They take a third allomorph of the plural morpheme. What does it sound like?

What sounds do these words end in?

Why do you think these roots take this allomorph?

Question 3: *Word final fricatives and stops in German*

Following is a list of words in German

[bɛʌk]	'mountain'	[ʃʌɛk]	'shock'
[bɪlt]	'picture'	[vɛlt]	'world'
[ʃʌɪp]	'write!'	[kɪp]	'tilt!'
[ve:k]	'way'	[vɛk]	'wake (me)!'
[frɛmt]	'foreign'	[hu:t]	'hat'
[tʰu:k]	'train'	[ʃmɔk]	'decoration'
[gʌ:s]	'grass'	[gʌo:s]	'big'
[lo:s]	'lottery ticket'	[ʃla:f]	'sleep'
[ʌ:t]	'advice', 'wheel'		

a. The last sounds of all of these words share one feature. What is it?

When we now look at a list of morphologically related forms, something surprising happens.

[bɛɪgə]	'mountains'	[ʃʌkən]	'shocks'
[bɪldər]	'pictures'	[vɜːltən]	'worlds'
[ʃraɪbŋ]	'to write'	[kɪpən]	'to tilt'
[ve:gə]	'ways'	[vɛkən]	'to wake (someone)'
[frɛmdə]	'foreigners'	[hy:tə]	'hat'
[tʰɪ:gə]	'trains'	[dɪkəreɪt]	'to decorate'
[grɑːzən]	'to grass'	[bɪg]	'big'
[lɔːzɪ]	'lottery tickets'	[slɪp]	'sleep'
[wɛːdər]	'wheels'	[ədvaɪz]	'to advise'

- b. The words on the left behaved differently than the words on the right. How?
(Note: Ignore any changes concerning vowels.)

- c. (extra credit)
Can you state explicitly how this pattern works?

(Hints: You might have to play around with what you think the underlying form is, and if it seems impossible, try to think of the process as the opposite of what you thought of.)