

## Discussion Questions for Language Diversification

1. Language diversification: The map below compares the way people in what are now Morocco, Egypt, and Saudi Arabia may have said the numbers ‘two’ through ‘four’ prior to about the year 600 and how they say them now. We don’t know exactly how the people in what is now Morocco and Egypt would have said these words, but the former would have been speaking a Berber language and the latter would have been speaking a later variety of Egyptian as spoken by the Pharaohs. People in what is now Saudi Arabia would have been speaking something like what we now call “Classical Arabic”.



The year 622 marks the beginning of Islam, which soon began to expand from its Arabian homeland across North Africa and around the Middle East. With this in mind, explain differences between the “then” and “now” numbers in the three areas above and the differences between the “now” numbers in the three areas.

The compared words are as follows:

	Morocco		Egypt		Saudi Arabia	
	Then	Now	Then	Now	Then	Now
‘two’	əššin	tnin	snwy	itnēn	iθnāni	itnēn
‘three’	kəraɖ	tlata	xmtw	talāta	θalāθa	talāta
‘four’	okkoz	reb'a	ifdw	arba'a	arba'a	arba'a

Two kinds of differences:

(1) Different languages: Some variety of Arabic is now spoken in all three countries, having completely replaced the original language of Egypt and having to a great degree displaced and reduced the use of the Berber language(s) native to Morocco.

(2) Difference in Arabic: Once people in these farflung regions all began to speak Arabic, innovations began to be introduced, and the accumulation of different innovations in the different areas eventually left the varieties of Arabic distinct from each other, in fact, so different that Moroccan Arabic, at least, is a different language from the others.

2. Innate vs. learned properties: The table below shows a few differences between one variety of British English and one variety of American English. How do these represent changes in *learned* aspects of language? Give some examples of changes that we would predict could *never* develop between varieties of English.

	<b>British</b>	<b>American</b>
<b>Pronunciation</b>	[gæri:] [ʃedyul]	[gəraʒ] ('garage') [skɛjəl] ('schedule')
<b>Vocabulary</b>	lift pissed (meaning 'drunk')	elevator pissed (meaning 'angry')
<b>Grammar</b>	<b>Q:</b> Will you go? <b>A:</b> I might do. My mother has got old.	<b>Q:</b> Will you go? <b>A:</b> I might. My mother has gotten old.

Pronunciation: The sounds used in the words all fall within the range of sounds of English; the distinct pronunciations are those that speakers would have heard from others in the community. (The British pronunciations are closer to those suggested by the spellings, where American "garage", at least, is closer to the French original.)

Impossible differences: One can be sure that neither dialect would develop whistles as part of their vowel inventory and hand claps as part of their consonant inventory. All languages use a set of consonant sound definable in terms place and manner of articulation of the vocal organs and vowels made by shaping the vocal tract about the vibrating vocal cords used as a sound generator.

Vocabulary: Speakers of the respective communities have learned to call things by the names that others in the community use, i.e. the names are not some kinds of universal property of the items.

Impossible differences: One can be sure that neither community would begin calling and elevator a cable-suspended-room-raised-and-lowered-by-motor (a violation of the "Whole Object Principle") or require that all emotional states be expressed by pictures rather than by words (the principle of non-iconic vocal symbols to concepts).

Grammar: The differences have to do with different choices in inflection and slight differences in word arrangements, features of expression that must be learned by exposure but which remain in the realm of universal principles of word and sentence construction.

Impossible differences: Neither language would develop a question answering technique that required repeating the second word of the question as the first word of the answer or forming a past tense inflection by reversing the initial consonant and vowel of the verb.

3. Early Middle English Vowel Shortening and the Great English Vowel Shift I: Give the phonetic forms for the vowels in the roots in these words and explain how the Modern English vowels correspond to the original vowels seen in Old English.

GEVS = Great English Vowel Shift

EMVS = Early Middle English Vowel Shortening

<u>Old English</u> Unless otherwise noted, spelling = pronunciation	<u>Modern English</u>
wīd, wīdþu	wide, width [wayd], [wɪdθ]: OE ī > [ay] by GEVS in 'wide'; OE ī > short [ɪ] in 'width' by EMVS because of two following consonants and hence does not undergo GEVS
clāne, clānlichness <sup>1</sup>	clean, cleanliness [klin], [klenlɪnəs]: OE ā > [i] by GEVS in 'clean' (see footnote in reader); OE ā > [ɛ] by EMVS and hence does not undergo GEVS
late (lāte in late OE), latera	late, latter [lāte], [latera]: late OE ā > [i] by GEVS in 'clean' (see footnote in reader); OE ā > [ɛ] by EMVS and hence does not undergo GEVS
hālig [hōlig], hālgian [hōlgian]	holy, hallow (the g became w and o was inserted later) [holi], [həlo] REMEMBER: The long [ā] of OE represented two vowel sounds, namely, long [ɔ̄] as in the words here and long [ā] (which came from lengthening of short [a] in some cases in late OE). OE [ɔ̄] > [o] by GEVS in 'holy'; OE [ɔ̄] > [ɔ] by EMVS in 'hallow', which had two consonants after the vowel in OE, though the [g] is now gone
ūt, ūtmost	out, utmost (I don't understand why OE -mest is now -most) [awt], [ʌtmost]: OE [ū] > [aw] by GEVS in 'out'; OE [ū] > [ʊ] (and later > [ʌ]) by EMVS in 'utmost' and hence did not undergo GEVS

<sup>1</sup> Old English had long and short  $\bar{a}/\text{æ}$ . By the time of Middle English,  $\bar{a}$  had fallen together in pronunciation with long  $\bar{e}$  in most words and hence underwent the Great Vowel Shift as if it were  $\bar{e}$ .

mōn, mōnaþ	moon, month (the <i>-a-</i> of <i>mōnaþ</i> was lost in Middle English)  [mun], [mʌnθ]: OE [ō] > [u] by GEVS in ‘moon’; OE <i>mōnaþ</i> lost the unstressed “a” very early, maybe even while still being written, so [ō] > [o] (and later > [ʌ]) by EMVS in ‘month’ and hence did not undergo the GEVS)
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4. Early Middle English Vowel Shortening and the Great English Vowel Shift II: The Old English words in the left hand column have not survived into Modern English. Give the pronunciation and likely spelling that they *would* have if they had survived. The notes on the right give you some changes you probably could not predict.

Old English word	Meaning	Modern English pronunciation	Comments
rīce	‘kingdom’	[rayč]	final “c” would become č]
rōd	‘cross’	[rud]	
cūþlic	‘evident’	[kuθli] or [kʌθli]	“c” = [k], “þ” = [θ], “lic” becomes “ly” in Modern English
fēran	‘travel’	[fir]	“an” is an infinitive ending, which drops in Modern English
hād [hōd]	‘rank’	[hod]	
ēce	‘eternal’	[ik] or [ič]	the final <i>e</i> would have been lost; the [k] may have changed to [č] before the front vowel <i>e</i> before it was lost
ēcnes	‘eternity’	[eknəs]	“c” = [k]

‘**kingdom**’: The long “i” of OE would undergo the regular Great Vowel Shift change to [ay].

‘**cross**’: The long “o” of OE would undergo the regular Great Vowel Shift change to [u].

‘**evident**’: The long “u” of OE would have been shortened to short “u” by EME Vowel Shortening before the two consonants “þl”. It would therefore not undergo the Vowel Shift and would come out as either the “u” of ‘but’ or the “u” of ‘put’. (These two pronunciations of “short u” were dialect variants which spread differentially across the language.)

‘**to travel**’: The long “e” of OE would undergo the regular Great Vowel Shift change to [i].

‘**rank**’: The long [ō] “open o” of Late OE would undergo the regular Great Vowel Shift change to [o].

‘**eternal**’: (See ‘to travel’ above.)

‘**eternity**’: Although this word shares the root *ēc-* with #6 ‘eternal’, the long “e” of ‘eternity’ would be shortened to short “e” by EME Vowel Shortening before the two consonants *-cn-*. The vowel would therefore not undergo the Vowel Shift.

5. Comparative Method—finding regular sound correspondences and reconstructing original sounds. Hebrew, Ethiopic (Ge'ez), and Arabic are members of the Semitic family of languages, a fact long established by the existence of regular sound correspondences between the languages. These languages all have their own orthographies. The words are transcribed in the phonetic alphabet. A *macron* over a vowel means the vowel is long. What REGULAR SOUND CORRESPONDENCES IN INITIAL CONSONANTS do these words show which would allow us to say that these languages form a genetic group? Try to reconstruct the original sounds from which the differing sounds in these languages must have developed.

Hebrew	Ethiopic (Ge'ez)	Arabic	
zānāb	zanab	ḏanabun	'tail'
zəʔeb	zəʔb	ḏiʔbun	'wolf'
šālōš	salasta	ḥalāḥun	'three'
šəmonē	samāni	ḥamānin	'eight'
šāqal 'weigh'	ሰላላላ 'hang'	ḥaqula 'be heavy'	'weigh, be a burden'
šālōm	salām	salāmun	'peace'
šamāyim	samāy	samāʔun	'heaven'
šēn	sənn	sinnun	'tooth'

proto-Semitic	Hebrew	Ethiopic (Ge'ez)	Arabic	
*z	z	z	ḏ	'tail', 'wolf'
*θ	š	s	ḥ	'three', 'eight', 'weigh'
*s	š	s	s	'peace', 'heaven', 'tooth'

Note that although Hebrew has [š] in two cases and Ethiopic has [s] in two cases, we have to reconstruct three different sound for the ancestral language, proto-Semitic because there are three *correspondence sets*. By claiming that sound change follows regular patterns, would could not say that sometimes [s] turns into [š] and sometimes into [θ] or the like.

6. Mass Comparison—as a method of discovering relationship between languages. Use the vocabulary items to assign the languages to genetic groups.

a. There should be several fairly clear groups. The words for 'coffee' in all the languages are similar. Would this resemblance provide evidence that at a very deep historical level these languages are probably all related? Why or why not?

	Indo-Iranian		Turkic		Dravidian	
	Farsi	Hindi	Uzbek	Turkish	Telugu	Tamil
'two'	do	do	ikki	iki	reṇḍu	iraṇḍu
'three'	se	tiin	uč	üç	muudu	muunru
'four'	čar	čaar	türt	dört	naalugu	naalu
'foot'	pa	per	oyok	ayak	paadam	aḍi
'tooth'	dædan	dāat	tiš	diş	pannu	pal

'full'	por	bhəra	tūlik	dolu	niᅇu	nirai
'die'	morde	mərna	ūlmok	ölmek	caccu	saavu
'coffee'	ghæve	kaaphii	kaxva	kahve	kaafii	kapi

The words for 'coffee' cannot show some deep relationship that links all the languages. 'Coffee' was certainly not something familiar to humans at the dawn of human history. It has been recently introduced, and all the languages get the word (and in some cases, the product) from the same source. In this case, the word comes from an Arabic word that means 'brown' or 'dark'.

b. Though we can identify some sound correspondences among the apparently related languages, identifying *systematic* sound correspondences doesn't play much role in arriving at reasonable groupings. What allows us to claim with some confidence that our groupings are correct even without establishing *systematic sound correspondences*?

Because of the *arbitrary (non-iconic)* relationship between form and meaning, it could not be just an accident that we find numerous words that mean the same thing AND look very much alike between the color-coded pairs of languages. We might expect one or two such "accidents", for example, we might say English 'tooth' looks kind of like the Uzbek word, but such resemblances are not repeated for the other words.