

Arabic “sun” and “moon” letters (repeated from Data Handout #3)

Arabic is a South Semitic language of the Afro-Asiatic family spoken in the Middle East, North Africa, and in other parts of the world. Traditional grammars of Arabic divide the consonants into two types, “sun letters” and “moon letters”, based on whether or not they cause full assimilation of lateral in the the definite prefix *ʔal-*.

ʔaffams ‘the sun’	raʒul ‘man’	
ʔadda:r ‘the house’	xa:tam ‘ring’	
ʔazzajt ‘the oil’	ba:b ‘gate’	
ʔannahr ‘the river’	sana ‘year’	
ʔaθθawb ‘the garment’	mawt ‘death’	
	harab ‘escape’	
ʔalqamr ‘the moon’	ðalq ‘tip of the tongue’	
ʔalfaras ‘the mare’	walad ‘boy’	
ʔalkita:b ‘the book’	tiʒa:ra ‘commerce’	
ʔalharb ‘the war’	laban ‘milk’	
ʔalʔab ‘the father’	yada ‘lunch’	(Kenstowicz 1994)

Indonesian nasals

Indonesian is a Malayo-Polynesian language of the Austronesian family, spoken in Indonesia. A particular verbal prefix has the general form [mƏN-], where [N] can be a labial [m], alveolar [n], postalveolar [ɲ], or velar [ŋ] nasal.

məmbantu ‘help’	məŋhituŋ ‘count’	
məntʃatət ‘note down’	məŋambil ‘take’	
məndəŋar ‘hear’	məŋisi ‘fill up’	
məŋgambar ‘draw a picture’	məŋundaŋ ‘invite’	(Halle and Clements 1983)

Cuzco Quechua ejectives and aspiration

Cuzco Quechua is a Quechuan language, spoken in Peru. Cuzco Quechua has a three-way contrast between plain, aspirated, and ejective voiceless stops.

<i>attested</i>		<i>unattested</i>	
tanta ‘collection’	wirp’a ‘lip’	*p ^h r, *p’r, etc.	
t ^h anta ‘worn out’	rakt’a ‘thick’	*t ^h k, *t’k, etc.	
t’anta ‘bread’	musk ^h ij ‘to smell’	*k ^h s, *k’s, etc.	(Parker 1997)

Farsi trills and taps

Farsi (a.k.a. Persian) is an Indo-Iranian language of the Indo-European family, spoken in Iran.

ærtef ‘army’	ahar ‘starch’	ahari ‘starched’
farsi ‘Persian’	behtær ‘better’	bæradær ‘brother’
qædri ‘a little bit’	hærntowr ‘however’	berid ‘go’
rah ‘road’	tʃar ‘four’	biræŋg ‘pale’
ris ‘beard’	tʃedʒur ‘what kind’	tʃera ‘why’
ruz ‘day’	ʃir ‘lion’	darid ‘you have’

(Tserdanelis and Wong 2001)

English coronal stops and nasals

eighth cats nutshell tree
width beads bloodshot dream
seventh since banshee Conrad

Sanskrit voicing and aspiration/murmur

Sanskrit is an Indo-Iranian language of the Indo-European family, used as a religious and literary language in India. Sanskrit has four types of underlying plosives: plain, voiced, aspirated, and murmured. (The following data has been simplified and regularized. Some of the details of the data may be incorrect, but the pattern represented here is an actual pattern found in Sanskrit.)

/rip ^h /	‘snarl’	/bud ^{fi} /	‘know’
rip ^h ate	‘(PRES)’	bud ^{fi} ate	‘(PRES)’
ripsjati	‘(FUT)’	b ^{fi} utsjati	‘(FUT)’
/rab ^{fi} /	‘seize’	/pa ^t ^h /	‘read’
rab ^{fi} ate	‘(PRES)’	pa ^t ^h ate	‘(PRES)’
rapsjati	‘(FUT)’	pa ^t sjati	‘(FUT)’
/svid/	‘sweat’	/lag/	‘attach’
svidate	‘(PRES)’	lagate	‘(PRES)’
svitsjati	‘(FUT)’	laksjati	‘(FUT)’
/ra:d ^{fi} /	‘succeed’	/dag ^{fi} /	‘reach to’
ra:d ^{fi} ate	‘(PRES)’	dag ^{fi} ate	‘(PRES)’
ra:tsjati	‘(FUT)’	d ^{fi} aksjati	‘(FUT)’

(based on Whitney 1889)

German fricatives

German is a Germanic language of the Indo-European family, spoken in Germany, Austria, and Switzerland. Many speakers of German have three voiceless dorsal fricatives: palatal [ç], velar [x], and uvular [χ].

iç	‘I’	kɔlçɔ:zə	‘kolkhoz (collective farm)’
liçt	‘light’	dɔlçə	‘dagger’
ra:çən	‘to reach’	miç	‘milk’
lɛçəlɪn	‘to smile’	maŋç	‘many a’
ɛçt	‘real’	fɛnçəl	‘fennel’
by:çə	‘books’	dʊrç	‘through’
kɔyçt	‘gasps’		
lœçə	‘holes’	çemi:	‘chemistry’
		çi:na	‘China’
bux	‘book’	çirʊrk	‘surgeon’
laux	‘leek’	çini:n	‘quinine’
rauxən	‘to smoke’		
ho:x	‘high’		
lɔx	‘hole’		
axt	‘eight’		
laχən	‘to laugh’		
faχt	‘shaft’		

(Klatt, Klatt, and Messinger 1984; Weise 1996)