Allophone/phoneme Problems
11 January 2022

Muher (Semitic, spoken in Ethiopia)

laʔ	‘surpass!’	niɬʔiɬ	‘uproot!’
k’iɬiɬf	‘cut!’	liʔimu	‘pick it!’
jiləʔmu	‘he picks’	k’utt’a	‘anger’
k’əmba	‘chatter!’	k’al	‘voice, word’
k’inəbbam	‘he nicked’	faʔəm	‘he scraped’
k’əmk’im	‘sip alcohol!’	jilək’mu	‘he picks’
fiʔər	‘be fat!’	məsk’əl	‘cross’
jinəʔlu	‘he uproots’	jəlk’im	‘let him pick’
tət’ənk’əʔ	‘be careful!’	k’una	‘only one’
buk’e	‘plant shoot’	bənk’e	‘in what?’
ərk’iʧʧ’a	‘kick’	buʔe	‘plant shoot’
fik’ər	‘be fat!’	nik’il	‘uproot!’
lak’	‘surpass!’	lik’imu	‘pick it!’
tət’ənk’ək’	‘be careful!’	sank’a	‘wooden door’
jinək’lu	‘he uproots’	fak’əm	‘he scraped’

(data from Rose fieldnotes)

Analyze the distribution of [k’] and [ʔ]
Determine their allophonic/phonemic status.
Give evidence to support your answer. Remember to include a rule/rules showing the environment if there are allophones.

Ejaghem (Ekoid Bantu spoken in Nigeria and Cameroon)

a.	abən	‘he broke’	i.	mbən	‘I broke’
b.	aβən	‘he danced’	j.	mbən	‘I danced’
c.	abɛ	‘he escaped’	k.	mbɛ	‘I escaped’
d.	aβɛ	‘he planted’	l.	mbɛ	‘I planted’
e.	adi	‘he ate’	m.	ndi	‘I ate’
f.	aɾi	‘he cried’	n.	ndi	‘I cried’
g.	adaŋ	‘he tried’	o.	ndaŋ	‘I tried’
h.	aɾaŋ	‘he touched’	p.	ndaŋ	‘I touched’

Determine the distribution of the sounds [b, β] and [d, ɾ].
Are they allophones of the same phoneme or of different phonemes?
What phonological processes are occurring with the ‘I Xed’ forms?

Tohono O'odham (Uto-Aztecan, spoken in Arizona)

a.	ʤihsk	'aunt'	n.	dɔʔaʔk	'mountain'
b.	ʧuːl̥	'corner'	o.	ʧɯwaʔg̥	'clouds'
c.	wahʧum̥	'drown'	p.	taht	'foot'
d.	ʤɯwɯhkɔh	'cut hair'	q.	ʔahidaʔk	'year'
e.	tɔnɔm̥	'be thirsty'	r.	hɯhtahpspʧu̥	'make it 5'
f.	hɯʤɯl̥	'self'	s.	ʧihkpan̥	'work'
g.	stahtɔnɔmːah	'thirsty times'	t.	ʔiːdą̊	'this'
h.	mɯɖɯdam̥	'runner'	u.	tɔhntɔ̥	'degenerate'
i.	tɔdsid	'frighten'	w.	ʧɯpɔsid	'brand'
j.	gahtw̥	'to shoot'	x.	ʧɯhʧ̥	'name'
k.	gɯʔɯdtą̊	'get big'	y.	ʤumal̥	'low'
l.	tobidk	'White Clay'	z.	waʔʤiwih	'swim'
m.	spadmahkam̥	'lazy one'	aa.	ʤuːʔw̥	'rabbits'

Identify the distribution of the set of sounds [t d] compared to [ʧ ʤ].
Are they allophones of the same phoneme or different phonemes? What is the evidence?
Draw a phoneme/allophone diagram to illustrate the distribution