

### Alternation Problems

#### Russian (Indo-European, spoken in Russia)

	NOM.SG.	DAT. SG.	
a.	xlep	xlebu	‘bread’
b.	grop	grobu	‘coffin’
c.	ʃerep	ʃerepu	‘skull’
d.	xolop	xolopu	‘bondman’
e.	trup	trupu	‘corpse’
f.	sat	sadu	‘garden’
g.	prut	prudu	‘pond’
h.	cvet	cvetu	‘color’
i.	zakat	zakatu	‘sunset’
j.	ras	razu	‘time’
k.	zakas	zakazu	‘order’
l.	les	lesu	‘forest’
m.	us	usu	‘whisker’
n.	storoʃ	storozu	‘guard’
o.	duʃ	duʃu	‘shower’
p.	rok	rogu	‘horn’
q.	porok	porogu	‘threshold’
r.	rak	raku	‘crayfish’
s.	porok	poroku	‘vice’
t.	vagon	vagonu	‘wagon’
u.	vetʃer	vetʃeru	‘evening’

Write a rule in features to express the alternations in the data.

### Kikuria (Bantu, spoken in Tanzania)

VERB	VERB FOR	
sura:ŋga	sura:ŋgera	‘praise’
ta:ŋgata	ta:ŋgatera	‘lead’
βa:mba	βa:mbera	‘fit a drum head’
re:nda	re:ndera	‘guard’
rema	remera	‘cultivate’
ho:ra	ho:rera	‘thresh’
roma	romera	‘bite’
so:ka	so:kera	‘respect’
tatʃora	tatʃorera	‘tear’
si:ka	se:kera	‘close’
tiya	teyera	‘leave behind’
ruya	royera	‘cook’
suka	sokera	‘plait’
hu:ta	ho:tera	‘blow’
ri:ŋga	re:ngera	‘fold’
si:nda	se:ndera	‘win’

Write a rule in features to account for the alternations observed in the data.