

2. Okpe (Hoffmann 1973). Like other West African languages Okpe has a contrast between two types of vowels, which we will consider here to be tense versus lax. Phonetically this contrast is operative only in Okpe mid vowels, where tense *e* and *o* contrast with lax *ɛ* and *ɔ* (transcribed here as *dɛ* and *dɔ*). In addition, any vowel can be contrastively oral or nasal (indicated by the tilde). List the UR for all the morphemes, state the rules accounting for the alternations, indicate any necessary ordering restrictions, and provide derivations for the infinitive, 1 sg. past, and 3 sg. continuative of 'buy', 'bury', 'fill', and 'eat'. Assume that all root morphemes are monosyllabic in UR and that all glides are derived by rule. You may also assume that *a* is lax.

Imperative	Infinitive	3 sg. past	1 sg. past	3 sg. contin.	Gloss
<i>da</i>	<i>ɛda</i>	<i>ɔ dare</i>	<i>me dare</i>	<i>ɔ da</i>	'drink'
<i>dɛ</i>	<i>ɛdɛ</i>	<i>ɔ dɛrɛ</i>	<i>me dɛrɛ</i>	<i>ɔ dɛ</i>	'buy'
<i>lɔ</i>	<i>ɛlɔ</i>	<i>ɔ lɔrɛ</i>	<i>me lɔrɛ</i>	<i>ɔ lɔ</i>	'grind'
<i>dā</i>	<i>ɛdā</i>	<i>ɔ dārɛ</i>	<i>me dārɛ</i>	<i>ɔ dā</i>	'fly'
<i>tɔ̄</i>	<i>ɛtɔ̄</i>	<i>ɔ tɔ̄rɛ</i>	<i>me tɔ̄rɛ</i>	<i>ɔ tɔ̄</i>	'dig'
<i>zɛ</i>	<i>ɛzɛ</i>	<i>ɔ zɛrɛ</i>	<i>me zɛrɛ</i>	<i>ɔ zɛ</i>	'run'
<i>wɔ</i>	<i>ɛwɔ</i>	<i>ɔ wɔrɛ</i>	<i>me wɔrɛ</i>	<i>ɔ wɔ</i>	'bathe'
<i>ti</i>	<i>ɛtyo</i>	<i>o tiri</i>	<i>mi tiri</i>	<i>o tyɛ</i>	'pull'
<i>ru</i>	<i>ɛrwo</i>	<i>o ruru</i>	<i>mi ruru</i>	<i>o rwɛ</i>	'do'
<i>sī</i>	<i>ɛsyō</i>	<i>o sīrī</i>	<i>mi sīrī</i>	<i>o syɛ̄</i>	'bury'
<i>zū</i>	<i>ɛzwō</i>	<i>o zūrū</i>	<i>mi zūrū</i>	<i>o zwɛ̄</i>	'fan'
<i>se</i>	<i>ɛse</i>	<i>o seri</i>	<i>mi seri</i>	<i>o se</i>	'fill'
<i>so</i>	<i>ɛso</i>	<i>o sori</i>	<i>mi sori</i>	<i>o so</i>	'steal'
<i>nē</i>	<i>ɛnē</i>	<i>o nērī</i>	<i>mi nērī</i>	<i>o nē</i>	'defecate'
<i>gbō</i>	<i>ɛgbō</i>	<i>o gbōrī</i>	<i>mi gbōrī</i>	<i>o gbō</i>	'rot'
<i>kpe</i>	<i>ɛkpe</i>	<i>o kperi</i>	<i>mi kperi</i>	<i>o kpe</i>	'beat'
<i>re</i>	<i>ɛryɔ</i>	<i>ɔ rere</i>	<i>me rere</i>	<i>ɔ rya</i>	'eat'
<i>so</i>	<i>ɛswɔ</i>	<i>ɔ soro</i>	<i>me soro</i>	<i>ɔ swa</i>	'sing'
<i>tē</i>	<i>ɛtyō</i>	<i>ɔ tērɛ</i>	<i>me tērɛ</i>	<i>ɔ tyā</i>	'refuse'
<i>rhe</i>	<i>ɛrhyo</i>	<i>ɔ rhere</i>	<i>me rhere</i>	<i>ɔ rhya</i>	'come'