Week 2 assignment: Quechua

Data:

qori  ‘gold’  tʃɔjɔʎu  ‘corn on the cob’  q’omir  ‘green’
niñri  ‘ear’  moqo  ‘runt’  hoq’ara  ‘deaf’
p’uʎu  ‘blanket’  jujʃa  ‘he recalls’  tuʎu  ‘bone’
api  ‘take’  sutʃi  ‘name’  onqɔj  ‘be sick!’
tʃiʎwi  ‘baby chick’  tʃʰiʃʃiʃ  ‘he whispers’  qetʃʃuʃ  ‘he disputes it’
p’isqo  ‘bird’  musoʃχ  ‘new’  tʃunʃa  ‘ten’
tʃuʃu  ‘ice’  qʰəʃa  ‘lazy’  tʃeqʃa  ‘straight’
qaʃ  ‘you’  noqa  ‘I’  tʃaxra  ‘field’
tʃeqʃaŋ  ‘he hates’  soχʃa  ‘six’  aχʃa  ‘thus’
ʌixʃa  ‘small shawl’  qosa  ‘husband’  qara  ‘skin’
alqɔχ  ‘dog’  senʃa  ‘nose’  karu  ‘far’
atɔχ  ‘fox’  qaŋkuna  ‘you’  pusaχ  ‘eight’
tʃ’aki  ‘dry’  watεχ  ‘again’  waŋτaj  ‘hit’
ḥaku  ‘let’s go’  waŋqaj  ‘tears’  kəŋka  ‘roasted’
tʰakaj  ‘drop’  waleχ  ‘good, well’  wautʃa  ‘poor’

Note: I’m not sure if the workbook I’m getting this from uses “j” to mean IPA [j]. I assumed it does, but this should not be crucial to the problem either way.

Directions:

• Figure out the phonemic status of [i], [e], [u], [o].
• Figure out the phonemic status of [k], [q], [x], [ʃ], [ŋ], [n].
  Note that [q] is different from [q’] and [qʰ]. Look only at [q]
• If any of these sounds are allophones of the same phoneme, figure out the rules that govern the choice of allophone.

Present your solution in prose, as if it were a (very short!) paper.

Suggested format: Begin with a short paragraph giving some background on the language (you can use [www.sil.org/ethnologue]). Make your proposal about the vowels, and give some supporting evidence (e.g., minimal pairs, description of complementary contexts). State all rules in prose and in rule notation. Give an example of an underlying form and the result of applying the rule to it. Then do the same for the consonants. Feel free to comment on other analyses that (i) could be correct (say what kind of data you’d need to choose between your analysis and the alternative) or (ii) couldn’t be correct (say why). Append a list of underlying forms for all the words in the data.

Your rules should be general: use features to refer to natural classes. Your rules should be precise: imagine you’re trying to construct a Quechua-speaking machine—do your rules tell the machine exactly what to do for each word?

Except for the opening paragraph, don’t do any additional research. Just use the data given here.