Ilokano

This problem was composed by Bruce Hayes (UCLA) based on his own fieldwork. Ilokano is an Austronesian language spoken in the Northern Philippines and in many emigrant communities. The data in this problem were elicited by Bruce Hayes in the 1980s from May Abad, a UCLA undergraduate, and by May from her mother and her aunt.[1]

Data

Ilokano has only two distinct suffixes, /-an/ and /-en/, which combine in some cases with prefixes to form circumfixes. For simplicity, Bruce shamelessly altered the data to include only the suffix part of a circumfix, and I am going along with that.

[tulad]	'to mimic'	[tuladen]	'mimic-goal focus'
[gataŋ]	'to buy'	[gataŋen]	'buy-goal focus'
[taraj]	'to run'	[tarajan]	'place to run to'
[saŋit]	'to cry'	[saŋiten]	'to cause to cry'
[basa]	'to read'	[basaʔen]	'read-goal focus'
[saka]	'foot, leg'	[sakaʔan]	'place where one walks barefoot'
[pja]	'health'	[pjaʔen]	'to make healthy'
[t͡ʃjenda]	'store'	[t͡ʃjendaʔan]	'marketplace'
[babawi]	'to regret'	[babawjen]	'regret-goal focus'
[masahe]	'massage'	[masahjen]	'massage-goal focus'
[komadre]	'godmother of one's child'	[komadrjan]	'the reason why there are komadres'
[maneho]	'driver'	[manehwan]	'drive-goal focus'
[saŋo]	'front'	[saŋwen]	'to cause to face forwards'
[santo]	'saint'	[santwan]	'to make into a saint'

Additionally, May Abad would occasionally produce forms like [ko.mad.r̰ean] instead of [ko.mad.rjan] 'the reason why there are komadres', and similarly with other mid-vowel stems like [maneho̰an] 'drive-goal focus'. However, forms like /basa-en/ always came out with a glottal stop

[1] Bruce Hayes and May Abad. 1989. Reduplication and Syllabification in Ilokano. *Lingua* 77. 331-374.

[basaʔen]; never *[basaẹ̯n], nor *[basa̯en] ‘read-goal focus’.

In this squib, present a phonological analysis of the above data including an account for the optionality described. You may use any formal framework you like such as serially ordered rules, classic OT, stratal OT, or harmonic serialism. You may even use some combination of rules and constraints, provided you are clear how they interact with each other. Explain why your analysis is better than at least one alternative.

The points below that need to be mentioned in the essay ought to be *integrated* into the paper in appropriate places.

Make sure you:

1. justify underlying forms
2. state the relevant generalizations
3. provide formal description of these generalizations
4. justify any rule orderings or constraint rankings
5. illustrate your points with well-chosen examples, derivation tables or OT tableaus

It will be helpful to organize your essay around individual phenomenon. In the formal part, try to interleave presentation of the data with analysis.

General Tips

- Don’t try to derive a single UR for the suffixes [-an, -en]. They are distinct suffixes and you can assume distinct URs /-an, -en/.
- Assume the following about feature theory. The glide /j/ differs from the vowel /i/ solely in the feature [syllabic]. /j/ differs from /e/ in the features [syllabic] and [high]. The glide /w/ differs from the vowel /o/ in the features [syllabic] and [high]. The phonetic symbols [a̯], [e̯], and [o̯] are glides that are homorganic with the vowels [a], [e], and [o], respectively. They differ only in the feature [syllabic].
- Cross-linguistically low glides are rare, if attested at all. High glides are common, and mid glides are less common. This suggests a markedness scale with low glides being the most marked and high glides being the least marked.

Tips for an OT analysis (if you choose to do one)

- The appropriate strategy here is to characterize Ilokano phonotactics in a coherent set of constraints, then specify how underlying forms (created by suffixation) are rendered compatible with the phonotactics, by ranking specific Faithfulness constraints low enough.
- Be sure to include *all* Faithfulness constraints that get violated in your grammar.
- Here are a set of representative forms below which you may use as the basis of your analysis.

Ill-formed rival candidates are also shown for each output form. It's recommended to include enough constraints to rule out these ill-formed candidates. This does not mean a tableaux is required for each one. You may explain why a candidate for some underlying form is non-optimal in the text. You might also like to be creative and think of other plausible candidates.

UR	SR	Rivals
/tulad/	[tu.lad]	*[tul.ʔad], *[tul.ad]
/abut/	[ʔa.but]	*[a.but]
/basa-en/	[ba.sa.ʔen]	*[bas.a̰en], *[ba.saḛn], *[ba.sa.en], *[ba.sen], *[ba.san], *[ba.sa.ten]
/babawi-en/	[ba.baw.jen]	*[ba.ba.wi.ʔen], *[ba.ba.wi.en], *[ba.ba.win], *[ba.ba.wen], *[ba.bau.jen]
/komadre-an/	[ko.mad.rjan]	*[ko.mad.ri.ʔan], *[ko.mad.rḛan], *[ko.mad.ri.an], *[ko.mad.ran], *[ko.mad.rin]

- At least one of the candidates above is harmonically bounded; i.e. can never win because it has a superset of the violations of another candidate (which is said to bound it). Identify a harmonically bounded candidate and a rival candidate that bounds it.
- A "Hasse diagram" (i.e. a diagram in which an arrow links the members of each necessarily-ranked pair) of the rankings you found is a useful way to summarize your analysis. Include one.