**Assignment #5: Process interaction in Kalinga**

Due Friday, Feb. 20

**Data notes**

* Inspired by Kenstowicz & Kisseberth (1979)’s problem on the related langauge Keley-i (ch. 8).
* Unfortunately, the data here are from two dialects: the Guinaan dialect of Lubuagan Kalinga (Gieser 1970) and Limos Kalinga (Ferreirinho 1993 & Wiens 1995). Data not from Gieser are **bold**, just for your information, but pretend that all the data could come from the same speaker (I have no reason to think they couldn’t).
* A bit of consonant allophony is suppressed.

**Instructions**

* First, develop an OT account of the data in parts A-D.
* Then—this is the hard part, and should take up a couple of pages—discuss what issues you run into in extending your accounts to the data in part E (see additional notes there).
	+ Discuss the problems that your OT account faces—you don’t have to solve the problems, but make it clear what they are.
	+ Discuss the problems that an SPE-style rule account faces, and discuss whether any of the ideas you’ve seen about intrinsic rule ordering or non-ordering can help.

**Tips**

* I’ve indicated stress wherever Gieser indicated it (for some data, I just don’t know because it wasn’t transcribed). Don’t try to account for stress alternations—you can just assume, for SPE analysis, a rule “assign stress” (you only need to order it correctly) and, for OT analysis, a constraint “don’t have incorrect stress”.

**A.** Account for *o*-deletion

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| --- | --- | --- | --- |
|  |  | *X+an* |  |
| 1. taliŋód
 | ‘not exposed (e.g., to view)’ | taliŋdán | ‘to screen (something) (e.g., from view)’ |
| 1. domdomóg
 | ‘kind of ceremony’ | domdomgán | ‘to have *domdomog* for (something)’ |
|  |  | *ʔi+X* |  |
| 1. boʔá
 | ‘?’ | ʔibʔá | ‘to break up (e.g. a large stone so that it can be removed)’ |
| 1. sonód
 | ‘obstruction’ | ʔísnod | ‘to use as *sonod*’ |
|  |  | *ma+X* |  |
| 1. ʔosít
 | ‘?’ | maʔsít | ‘to dry up (as a source of water)’ |
| 1. ʔopíʔ
 | ‘shell’ | maʔpiʔán | ‘to be husked, skinned, shelled’ |
| 1. sogób
 | ‘burning’ | masgób | ‘to be burned, burnable’ |
|  |  | *X+on* |  |
| 1. posót
 | ‘bundle’ | postón | ‘to bundle (something, e.g. kindling)’ |
| 1. pásoʔ
 | ‘wedge’ | pasʔón | ‘to use a *paso* on (something)’ |
|  |  | *X+an* |  |
| 1. ʔodón
 | ‘valuable property’ | ʔodnán | ‘to hold (something)’ |
| 1. lawós
 | ‘hiring of carabao’ | lawsán | ‘to hire (someone’s carabao)’ |
|  |  | *ma+X+an* |  |
| 1. ʔotóp
 | ‘roof’ | maʔotpán | ‘to be roofed’ |
| 1. sújop
 | ‘sleep’ | masujpán | ‘place/time to sleep’ |
|  |  | *i+X+an* |  |
| 1. típoj
 | ‘soup that accompanies rice in a typical meal’ | itipján | ‘to use as *tipoy* for (someone)’ |

**B.** Account for the various forms of the “linking” suffix.

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| 1. dowá
 | ‘two’ |  |  |
| 1. púlu
 | ‘(tens unit)’ | dowám púlu | ‘twenty’ |
| 1. bolóʔ
 | ‘pig’ | dowám bolóʔ | ‘two pigs’ |
| 1. manúʔ
 | ‘chicken’ | dowám manúʔ | ‘two chickens’ |
| 1. káju
 | ‘tree’ | dowáŋ káju | ‘two trees’ |
| 1. ʔáju
 | ‘tree’ (variant pron.) | dowán ʔáju | ‘two trees’ |
| 1. gasút
 | ‘hundred’ | dowáŋ gasút | ‘two hundred’ |
| 1. ŋípon
 | ‘tooth’ | dowáŋ ŋípon | ‘two teeth’ |

Here are four more affixes that display a similar alternation. In explaining what happens next to /w/, keep in mind that /w/ is both [+dorsal] and [+labial].

|  |  |  |  |
| --- | --- | --- | --- |
| 1. pajáw
 | ‘rice terrace’ | simpajáw | ‘owner of a *payaw*’ |
| 1. banóŋ
 | ‘retaining ridge around a *payaw*’ | simbanóŋ | ‘one rice terrace’ |
| 1. maltabá
 | ‘large cast iron cooking vessel’ | simmaltabá | ‘one *maltaba*-full’ |
| 1. tawón
 | ‘year’ | sintawón | ‘one year’ |
| 1. dáŋan
 | ‘span (8 inches)’ | sindáŋan | ‘one *dangan*’ |
| 1. salóp
 | ‘ganta’ | sinsalóp | ‘one *salop*’ |
| 1. ʔapisʔíl
 | ‘piece (e.g. of rattan)’ | sinʔapisʔíl | ‘one *ʔapisʔil*’ |
| 1. kabáju
 | ‘horse’ | siŋkabáju | ‘owner of a horse’ |
| 1. gasút
 | ‘hundred’ | siŋgasút | ‘one hundred’ |
| 1. ŋádan
 | ‘name’ | siŋŋádan | ‘one who has a (certain) name’ |
| 1. líbu
 | ‘thousand’ | sillíbu | ‘one thousand’ |
| 1. walág
 | ‘tobacco, matches distributed at a gathering’ | siwwalág | ‘one giving *walag*’ |

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| 1. pádas
 | ‘experience’ | ʔimpádasna | ‘he tried (it)’ |
| 1. bagá
 | ‘telling’ | ʔimbagána | ‘he told (it)’ |
| 1. múla
 | ‘plant’ | ʔimmúlana | ‘he planted (it)’ |
| 1. táʔbu
 | ‘pouring, spilling (e.g. a liuid)’ | ʔintáʔbuna | ‘she poured (it) out’ |
| 1. dagás
 | ‘that sent with someone’ | ʔindagásna | ‘he sent (it) with someone’ |
| 1. saʔad
 | ‘place, position’ | ʔinsáʔadna | ‘he set (it) in place’ |
| 1. kilaw
 | ‘process of partially cooking certain parts of an animal’ | ʔiŋkilawna | ‘he *kilaw*-ed (it)’ |
| 1. gaga
 | ‘killing of something to feed workers’ | ʔiŋgagana | ‘he used (it) for *gaga*’ |
| 1. ŋina
 | ‘monetary transaction’ | ʔiŋŋinana | ‘he sold (it)’ |
| 1. laga
 | ‘weaving’ | ʔillagana | ‘she used (it) for weaving’ |
| 1. walit
 | ‘gift to certain ones at death observance’ | ʔiwwalitna | ‘he gave (it) as a *walit*’ |

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| 1. páda
 | ‘?’ | mampáda | ‘the same’ |
| 1. baʔál
 | ‘loincloth’ | mambaʔál | ‘to wear a loincloth’ |
| 1. mumá
 | ‘chew of areca nut and betel leaf’ | mammumá | ‘to chew *muma*’ |
| 1. tadúm
 | ‘sharpness’ | mantadúm | ‘to be sharp’ |
| 1. dagsún
 | ‘heaviness’ | mandagsún | ‘to be heavy’ |
| 1. sagána
 | ‘preparation’ | mansagána | ‘to prepare’ |
| 1. niʔʔót
 | ‘stickiness’ | manniʔʔót | ‘to be sticky’ |
| 1. ʔomós
 | ‘bath’ | manʔomós | ‘to bathe’ |
| 1. kapí
 | ‘coffee’ | maŋkapí | ‘to prepare or drink coffee’ |
| 1. gidú
 | ‘movement (of body)’ | maŋgidú | ‘to move’ |
| 1. ŋína
 | ‘monetary transaction’ | maŋŋína | ‘to buy’ |
| 1. libbát
 | ‘rising from sitting’ | mallibbát | ‘to start out (as on a trip)’ |
| 1. wátwat
 | ‘something distributed to those attending a gathering’ | mawwátwat | ‘to distribute *watwat*’ |
| 1. jápit
 | ‘thinness’ | majjápit | ‘to be thin (e.g. cloth’ |

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| 1. ponʔad
 | ‘base’ | maŋimponʔad | ‘bottommost’ |
| 1. boloj
 | ‘house’ | maŋimboloj | ‘one using a house’ |
| 1. tuʔud
 | ‘supporting post’ | maŋintuʔud | ‘provider (for a family)’ |
| 1. dola
 | ‘below’ | maŋindola | ‘lowest’ |
| 1. saʔud
 | ‘below’ | maŋinsaʔud | ‘lowest’ |
| 1. ʔapon
 | ‘direction toward’ | maŋinʔapon | ‘furthest toward’ |
| 1. gasat
 | ‘luck, fortune’ | maŋiŋgasat | ‘one who has *gasat*’ |
| 1. ŋatu
 | ‘high’ | maŋiŋŋatu | ‘topmost’ |
| 1. lapʔat
 | ‘top’ | maŋillapʔat | ‘outer (layer), topmost’ |

**C.** Account for the interaction between *o*-deletion and assimilation. Don’t account for the extra C that sometimes comes between the stem and *–ana*. (The data here are lopsided because of the point Gieser happened to be making: there are few examples illustrating the infixes without *o*-deletion. That’s not a property of the language, though; the infixes occur with all kinds of stems.)

You don’t need to account for where the infix is inserted. You can assume it’s already in the right spot underlyingly, e.g. /d-um-akol/.

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|  |  | *actor-focus infix* |  |
| 1. **dakol**
 | ‘big’ | **dumakol** | ‘to become big’ |
| 1. **lamók**
 | ‘soft’ | **lumamók** | ‘to become soft’ |
| 1. bosí
 | ‘?’ | bumsí | ‘to open (as numerous boils)’ |
| 1. ʔopíl
 | ‘wrapping of glutinous rice with a certain leaf’ | ʔumpíl | ‘to engage in *ʔopil*’ |
| 1. **lotóp**
 | ‘dive’ | **lumtóp** | ‘to dive’ |

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|  |  | *object-focus infix* |  |
|  |  | *+na* |  |
| 1. **baju**
 | ‘?’ | **binajuna** | ‘he pounded (it)’ |
| 1. **pokpok**
 | ‘?’ | **pinokpokna** | ‘he chopped (it)’ |
| 1. **ʔimus**
 | ‘?’ | **ʔinimusna** | ‘he asked (him)’ |
| 1. bosí
 | ‘?’ | binsína | ‘he opened (it)’ |
| 1. solíg
 | ‘crowding out, displacing’ | sillígna | ‘it displaced (it)’ |
| 1. ʔodáw
 | ‘requesting’ | ʔindáwna | ‘he asked for (it)’ |
| 1. dopá
 | ‘fathom’ | dimpána | ‘he measured (it) by *dopa*’ |
| 1. gobá
 | ‘firing of newly-made clay pots’ | gimbána | ‘she fired (them)’ |
| 1. ʔomós
 | ‘bath’ | ʔimmósna | ‘she bathed (it)’ |
| 1. botáʔ
 | ‘broken piece (e.g. of clay pot)’ | bintáʔna | ‘she broke (it)’ |
| 1. ʔodáw
 | ‘requesting’ | ʔindáwna | ‘he requested (it)’ |
| 1. bosát
 | ‘sudden break in, e.g. a tie’ | binsátna | ‘he snapped (it)’ |
| 1. ponú
 | ‘filling (a container)’ | pinnúna | ‘she filled (it)’ |
| 1. toʔóp
 | ‘satisfaction’ | tinʔópna | ‘he satisfied (someone)’ |
| 1. sogób
 | ‘burning’ | siŋgóbna | ‘he burned (it)’ |
| 1. doŋól
 | ‘report’ | diŋŋólna | ‘he heard (it)’ |
| 1. ʔolót
 | ‘tightening’ | ʔillótna | ‘he made (it) tight’ |
|  |  | *+ana* |  |
| 1. ʔosít
 | ‘?’ | ʔinsitána | ‘she drained (it) off’ |
| 1. ponú
 | ‘?’ | pinnuwána | ‘she completed filling (it)’ |
| 1. ʔitód
 | ‘giving’ | ʔinitdána | ‘he gave to (him)’ |

**D.** This next affix behaves a little differently. For convenience, assume that it’s separated from the stem by a different type of morpheme boundary, = (instead of + as for all the affixes above). Then you can formulate rules and constraints that refer to the = boundary.

|  |  |  |  |
| --- | --- | --- | --- |
| 1. pajáw
 | ‘rice terrace’ | mamajáw | ‘one making, having a *payaw*’ |
| 1. báju
 | ‘pounding in a mortar’ | mamáju | ‘one pounding in a mortar’ |
| 1. tampóʔ
 | ‘rice flour’ | manampóʔ | ‘one pounding rice into flour’ |
| 1. díla
 | ‘tongue’ | maníla | ‘one who takes the tongue (of an animal butchered)’ |
| 1. suŋbát
 | ‘answer’ | manuŋbát | ‘one who answers’ |
| 1. káju
 | ‘wood’ | maŋáju | ‘to go after fire wood’ |
| 1. gijáb
 | ‘notch’ | maŋijáb | ‘one doing notching’ |
| 1. ʔáwat
 | ‘receiving’ | maŋáwat | ‘one receiving’ |

**E.** Here are the problematic data—be sure to look at them carefully.

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| 1. bosí
 | ‘?’ | mamsí | ‘one to open (e.g., a boil)’ |
| 1. podít
 | ‘?’ | mamdít | ‘that which is crushed (e.g. insects)’ |
| 1. topá
 | ‘winnowing | mampá | ‘one winnowing’ |
| 1. tobód
 | ‘materials for construction’ | mambód | ‘one getting *tobod*’ |
| 1. sonód
 | ‘obstruction’ | mannód | ‘one obstructing’ |
| 1. todóʔ
 | ‘pointing with forefinger’ | mandóʔ | ‘one pointing his finger’ |
| 1. sogób
 | ‘a burning’ | maŋgób | ‘one doing burning’ |
| 1. soŋá
 | ‘one kind of ceremony when sacrifice is made’ | maŋŋá | ‘that sacrificed in *songa*’ |
| 1. solíg
 | ‘crowding out, displacing’ | mallíg | ‘that which crowds out’ |
| 1. gosáj
 | ‘collapse, disassembly’ | maŋsáj | ‘that which razes (e.g. a house)’ |
| 1. ʔomós
 | ‘bath’ | maŋmós | ‘one who bathes (someone)’ |