For next week, come up with a working hypothesis for what you think the phoneme inventory of Wamesa is, based on the sound clips found in the talking dictionary (http://talkingdictionary.swarthmore.edu/wamesa/). Turn in a) vowel and consonant charts laying out your proposed inventories, and b) a brief writeup of why you came to these conclusions, some evidence, remaining questions, other interesting observations. No more than two pages, please. Do not turn in a list of 900 transcribed words. Don’t expect to find minimal pairs for all sounds, though there’s a few in there; you should be able to find relevant contrasts in similar environments. We’ll talk about your answers in class. If you’re feeling ambitious, you may reference Klamer (2002), uploaded on the Moodle.
Pick an aspect of the phonetics that interests you and do some measurements - VOT, stop closure duration, stress correlates, vowel formants, etc. Use the recordings from the talking dictionary as your source material. For whatever you’re investigating, make sure to measure at least 5 tokens and report the mean. Hand in a writeup giving your measurements, supporting screenshots where appropriate, and a summary of your findings.

A note on open-ended assignments like this one: The idea on open-ended HWs like this is for you to find something that interests you and explore it. There’s no one measurement or result in particular I want everyone to get - you may not end up with any meaningful pattern at all, and that’s fine. What I want is for you to get your hands dirty with some (raw, messy) data, and see what it tells you. The important thing in your writeup is to be clear, be thorough, be concise, and give evidence (/supporting data) for your hypotheses!
So far we’ve seen several (segmental) phonological rules in Wamesa:

- \( /C_1C_2/ \rightarrow [C_2] \)
- \( /C_1 + \{\beta, r, k, b, d\}/ \rightarrow [ND] \) (a nasal-voiced stop cluster at the place of articulation of \( C_2 \))
- \( /V_{[+high, -stress]}/ \rightarrow [-syllabic] \) (aka becomes a glide) adjacent to another vowel, obligatorily where it would create an otherwise absent onset, variably/optionally where it would create a coda or complex onset
- \( /V_aV_a/ \rightarrow [V_a] / C_{unstressed} \)
- \( /a_{[-stress]}/ \rightarrow \emptyset / 2/3sg_{unstressed} \) (unstressed /a/ deletes after the high vowe of the 2sg and 3sg agreement affixes)

We’ve seen how subject agreement works on verbs\(^1\):

<table>
<thead>
<tr>
<th></th>
<th>Prefix</th>
<th>ase ‘to swim’</th>
<th>pera ‘to cut’</th>
<th>ra ‘to go’</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Singular</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1sg</td>
<td>/i-/</td>
<td>y-ase</td>
<td>i-pera</td>
<td>i-ra</td>
</tr>
<tr>
<td>2sg</td>
<td>/bu-/</td>
<td>bu-ase</td>
<td>p&lt;u&gt;era</td>
<td>r&lt;u&gt;a</td>
</tr>
<tr>
<td>3sg</td>
<td>/di-/</td>
<td>di-ase</td>
<td>p&lt;i&gt;era</td>
<td>r&lt;i&gt;a</td>
</tr>
<tr>
<td><strong>Dual</strong></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>1du incl</td>
<td>/tur-/</td>
<td>tur-ase</td>
<td>tu-pera</td>
<td>tun-da</td>
</tr>
<tr>
<td>1du excl</td>
<td>/amur-/</td>
<td>amur-ase</td>
<td>amu-pera</td>
<td>amun-da</td>
</tr>
<tr>
<td>2du</td>
<td>/mur-/</td>
<td>mur-ase</td>
<td>mu-pera</td>
<td>mun-da</td>
</tr>
<tr>
<td>3du</td>
<td>/sur-/</td>
<td>sur-ase</td>
<td>su-pera</td>
<td>sun-da</td>
</tr>
<tr>
<td><strong>Plural</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1pl incl</td>
<td>/tat-/</td>
<td>tat-ase</td>
<td>ta-pera</td>
<td>tan-da</td>
</tr>
<tr>
<td>1pl excl</td>
<td>/amat-/</td>
<td>amat-ase</td>
<td>ama-pera</td>
<td>aman-da</td>
</tr>
<tr>
<td>2pl</td>
<td>/met-/</td>
<td>met-ase</td>
<td>me-pera</td>
<td>men-da</td>
</tr>
<tr>
<td>3pl hum</td>
<td>/set-/</td>
<td>set-ase</td>
<td>se-pera</td>
<td>sen-da</td>
</tr>
<tr>
<td>3pl NH</td>
<td>/si-/</td>
<td>si-ase</td>
<td>si-pera</td>
<td>si-ra</td>
</tr>
</tbody>
</table>

\(^1\)The data in this HW is written using orthography, not IPA. Important points of difference are: \( y = [j], ng = [\eta], \) and \( v = [\beta] \).
And we’ve amassed a bit of a lexicon. Here’s some words, affixes, and clitics we’ve seen already to get you started on this assignment. (Stressed [a]s are marked as such):

- **pl:** -si
doog: wona
I: yau
to eat (tr): áne

- **sg:** -i
child: mararia
he/she/it: andi
to hug: tapu

- **applicative:** it-
mosquito: kamumi
this: nini
to go home: vavou

- **causative:** on-
coconut: anggadi
all: vura
to hit: rora

- **essive:** ve-
fish: dia
knife: nioi
to fall: táwa

topicɑlizer: =ma
two: muandu
tree: ai
to be angry: kasio

- **3pl.human:** -sia
fire: adia
shark: suomuse
to grill: nunu

- **definite determiners:** =ne (proximal), =pa (default/medial), =wa (distal)

To answer the questions in this problem set, feel free to consult the data given here, previous handouts, and class notes. Some questions will require you to check the talking dictionary; the directions will tell you when that’s the case.

**Part 1**

Let’s start slow. Here are some fully glossed example sentences:

1. **Wona=pa-i  di-ane  dia=wa-si.**
dog=DET-SG 3SG-eat fish=DET-PL
‘The dog eats those fish’

2. **Yau i-rora  kamumi=pa  muandu.**
I 1SG-hit mosquito=DET two
‘I hit the two mosquitoes’

3. **Mararia=pa-sia  vura sem-bavou**
child=DET-3PL.HUM all 3PL.HUM-go.home
‘All the children go home.’

4. **Nioi nini=ma  tat-i-pera  anggadi.**
knife this=TOP 1PL.INCL-APPL-cut coconut.
‘We use this knife to cut a coconut.’

**Q 1:** How would you say:

(a) The coconut falls.
(b) The children hug all the sharks.
(c) You (pl) use fire to grill the fish (sg).
Part 2

Here's some additional data. Morpheme breaks and morpheme-by-morpheme glosses are no longer given:

(5)  
Yau yane piderekari pasi.
'I eat mangos'

(6)  
Piderekari pasi vura siate.
'All the mangoes are delicious'

(7)  
Sereni nei kota diate.
“This papaya is also delicious.”

(8)  
Au buane sereni vekake pai.
'You eat the green papaya.'

(9)  
Pibata nini=ma kike. Diase.
'This turtle is green. It swims.'

(10)  
Maneta pa sandu susamuai nawa pasi sivekake.
'The two friends collect baskets which are green.'

(11)  
Sandu sunggasio suomuse katu pa toru.
'They two are angry at the three small sharks.'

Q 2: What are the Wamesa roots for:

(a) mango?
(b) papaya?
(c) you?
(d) delicious?
(e) also?
(f) green?
(g) turtle?
(h) they two (3du)?
(i) collect?
(j) basket?
(k) small?
(l) three?
(m) friend?

Q 3: Give morph-by-morph glosses and English translations (as given here in examples 1-3) for the following Wamesa sentences:

(a) Au kota nunu suomuse.
(b) Mararia katu nesia sendora piderekari veate wasi.
(c) Ai pai viesereni.
(d) Maneta pasia sembetoru.
(e) Nawa pasi metisamuai dia pasi vura.

Part 3

Q 4: Go to the talking dictionary and look up the word for ‘ripe’. The word as spoken in the sound clip doesn’t match the root form given as a headword. Why not? Be specific. How would you say ‘the mango is ripe’ in Wamesa?

Q 5: Using the talking dictionary, create three new sentences using nouns and verbs not already used in this assignment. Make sure to use different person/number combinations, and at least one applicative construction.

Part 4

In class, we briefly discussed an example with the word ‘sit’. Look at the following examples:

(12) Imasoi.
    ‘I sit’
(13) Imaso na ai pai.
    ‘I sit in the tree.’
(14) Yau imaso na wana.
    ‘I sit over there.’
(15) Yau isera.
    ‘I see’
(16) Yau iserai.
    ‘I see (something).’
(17) Yau isera au.
    ‘I see you’

Q 6: What are the roots for ‘sit’ and ‘see’?

Q 7: There’s a morphological alternation going on with these verbs that we haven’t talked about yet. What’s the morpheme, and what does its function seem to be?
Take a look at some of the other dictionaries at http://talkingdictionaries.swarthmore.edu. Find other examples of on- or offline dictionaries. Think about what sorts of challenges are involved in creating a dictionary. What do the examples you looked at do well? What do they stumble on? What sorts entries or information do we want to include in a dictionary, and what gets left out? How does this vary based on the intended audience? Come prepared to talk about these ideas in class.