

# 2011 Solutions

## (G) Ulwa Possessives (1/2)

### GI.

By organizing the given words by possessor, we can see the common element that means “my”, “your”, “his/her”, etc.:

**1<sup>st</sup> person singular:** none

**1<sup>st</sup> person plural (exclusive):** *tai-kina-tai, wai-kina-ku*

**1<sup>st</sup> person plural (inclusive):** *gaad-ni, sik-ni-bilh, pau-ni-mak*

**2<sup>nd</sup> person singular:** *dii-ma-muih, uu-ma-mak*

**2<sup>nd</sup> person plural:** *bilam-mana, suu-mana-lu*

**3<sup>rd</sup> person singular:** *as-ka-na, kapak-ka, kii-ka, sapaa-ka*

**3<sup>rd</sup> person plural:** *bilam-kana, dii-kana-muih, karas-kana-mak, wasa-kana-la*

This gives us *kina*, *ni*, *ma*, *mana*, *ka*, and *kana* as the common meaning elements (or “morphemes”). We don’t know what the 1<sup>st</sup> person singular (“my”) form is, yet. From the relationship between the singulars and plurals in the 2<sup>nd</sup> and 3<sup>rd</sup> persons, we can hypothesize, though, that adding *na* to a singular makes a plural, and thus “my” is likely to be *-ki-*. This will be confirmed later on, when we find a leftover *-ki-* that has to mean “my” in “my cat”.

The positioning of these morphemes is puzzling, however, often seeming to be placed at an unpredictable position *within* the word. (The word for this is “infix”, by analogy with “prefix” and “suffix”.) It looks as though there are two basic options: put it after the first syllable, or after the second. (The syllabification scheme of Ulwa can be deduced from what sequences of letters can be broken by these infixes, and by the way the words are broken down into puzzle pieces.) There are a number of words where the morpheme is apparently a suffix, but note that these are all words with 1- or 2-syllable bases—the generalization “after the 1<sup>st</sup> or after the 2<sup>nd</sup>” captures these as well.

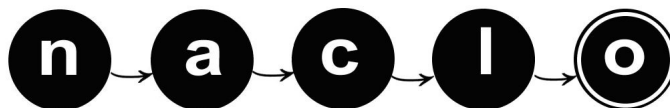
If we reorganize the words according to the position of the infix, another pattern emerges:

**After the 1<sup>st</sup> syllable:** *as-ka-na, dii-kana-muih, dii-ma-muih, gaad-ni, kii-ka, sik-ni-bilh, suu-mana-lu, pau-ni-mak, tai-kina-tai, uu-ma-mak, wai-kina-ku*

**After the 2<sup>nd</sup> syllable:** *bi-lam-kana, bi-lam-mana, ka-pak-ka, ka-ras-kana-mak, wa-sa-kana-la*

These two groups, in addition to differing by the position of the possessive infix, also differ according to the shape of the first syllable. When the syllable has a double vowel, or ends in a consonant (that is, when it’s of the shape CVV, CVC, or CVVC), the infix comes directly afterward. On the other hand, when the first syllable is just a short CV, the infix comes after the *next* syllable.

(What’s happening behind the scenes: Linguists call these *heavy* and *light* syllables. Ulwa words get stressed on the initial syllable if it’s heavy, and on the second syllable when the first is light, and the infix always comes right after the stressed syllable.)



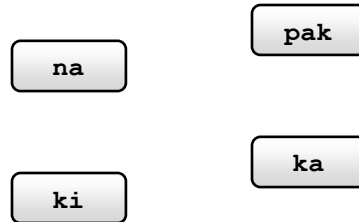
# 2011 Solutions

## (G) Ulwa Possessives (2/2)

In G1, the words are pre-syllabified for you to make it easier to discern where syllable boundaries are. Following the two patterns above (which-infix-to-choose and where-to-put-it) gives us the following solutions:

### Answer:

a.	“his/her grey squirrel”	<b>taikatai</b>
b.	“our (inclusive) heaven”	<b>iinibin</b>
c.	“your (plural) iguana”	<b>kahmanama</b>
d.	“his/her gun”	<b>arakkabus</b>
e.	“your (singular) lemon”	<b>liimama</b>
f.	“their woodpecker”	<b>kulukanaluk</b>
g.	“our (exclusive) time”	<b>taimkina</b>
h.	“my cat”	<b>miskitu</b>



### G2.

Four pieces should remain, and properly arranged they form:

Ulwa word	English Translation
<b>kapakkina</b>	<b>our (exclusive) manner</b>

### Grading:

G1: 3/4 points per correct answer, with half credit if the possessive marker was placed a syllable off.

G2: 15/4 points for the correct word (no partial credit), 6 points for the correct translation.

Total: 15 points

