**Appendix 2a**

**Single enclitics: Forms and Distribution**

**1sg**

Overview: The main factor determining allomorphemic variation of the 1st-person singular is the tone of the stem-final vowel. Low tone requires the form *=yu1* (with some uncommon use of *=eT* and *=iT*) high tone allows a simple tone marking for the person marking. There are two basic forms for the 1st person enclitic, *=yu1* and *=2*. They are generally in complementary distribution, the former used after stems that end in tones 1 and 2, the latter after stems that end in tones 3 and 4.

|  |  |
| --- | --- |
| **=yu1** | **=2** |
| After all final vowels with tones 1 or 2:  i1, i2  e1, e2  a1, a2  u1, u2  o1, o2 | After all final vowels with tones 3 or 4  a3, a4  o3, o4  u3, u4  i3, i4  e3, e4 |
| **=eT** |  |
| Occasionally after final not front not high vowels with tones 1 or 2:  a1, a2  o1, o2 |
| **=iT** |
| Occasionally after final high back vowels with tones 1 or 2:  u1, u2 |

One word, *xi3xi2* ('aunt') can elide =yu1 leaving a zero marker 1st-person possessor.

xi3xi2=yu1 or xi3xi2=ø

**2sg**

Overview: The main factor determining allomorphemic variation is height of the stem-final vowel. Tone is irrelevant. Nor does the tone of the enclitic vary. The enclitic has a high back vowel if the stem-final vowel is high, a lower back vowel is the stem-final vowel is not high.

|  |  |
| --- | --- |
| **=ũ4** | **=õ4** |
| After all high vowels regardless of tone:  iT  uT | After all non-high vowels regardless of tone:  eT  aT  oT |

**3sgMasc**

Overview: As with 1st-person plural exclusive and 3rd-person plural, enclitic tone is low after a non-high tone (1 and 2) and mid-high (3) after a stem-final high tone (3 and 4). In phrase medial position tone on the latter is lowered to 2.

|  |  |
| --- | --- |
| **=ra1 (medial phrase)** | **=ra1 (phrase final)** |
| After all final vowels with tones 1 or 2:  =ra1 | After all final vowels with tones 1 or 2:  =ra1 |
| **=ra2 (medial phrase)** | **=ra3** (phrase final) |
| After all final vowels with tones 3 or 4:  =ra2 | After all final vowels with tones 3 or 4:  =ra3 |

**3sgFem**

Overview: As with 2nd-person singular, the form of 3rd-person singular female depends upon the quality of the stem-final vowel. However, in this case height does not seem to be the relevant factor. Instead there is a simple division based on the point of articulation of the stem-final vowel. The basic enclitic form *=ã4* shifts to *=ẽ4* after words with a stem-final /a/.

|  |  |
| --- | --- |
| **=ã4** | **=ẽ4** |
| After all vowels except /a/ regardless of tone:  iT  eT  oT  uT | After final vowel /a/ regardless of tone:  aT |

**Manipulable object**

Overview: The forms of the enclitic for manipulable objects ('things') respond to two factors: 1) the final tone of the stem (as occurs with 3sgMasc) and 2) the final vowel of the stem (as occurs with 3sgFem). Unlike 3sgMasc, however, the final tone of the stem is divided into three groups: 1, 2, and 3–4. For the 3sgMasc the tone of the clitic responds to two groups of stem-final tones: 1–2 and 3–4.

|  |  |
| --- | --- |
| **=a1 (medial phrase)** | **=a1 (phrase final)** |
| After all final vowels except /a/ with tone 1:  =a1 | After all final vowels except /a/ with tone 1:  =a1 |
| **=a2 (medial phrase)** | **=a2 (phrase final)** |
| After all final vowels except /a/ with tone 2:  =a1 | After all final vowels except /a/ with tone 2:  =a1 |
| **=a2 (medial phrase)** | **=a3** (phrase final) |
| After all final vowels except /a/ with tones 3 or 4:  =a2 | After all final vowels except /a/ with tones 3 or 4:  =a3 |
| **=e1 (medial phrase)** | **=e1 (phrase final)** |
| After final /a/ with tone 1:  =e1 | After final /a/ with tone 1:  =e1 |
| **=e2 (medial phrase)** | **=e2 (phrase final)** |
| After final /a/ with tone 2:  =a2 | After final /a/ with tone 2:  =a2 |
| **=e2 (medial phrase)** | **=e3** (phrase final) |
| After final /a/ with tones 3 or 4:  =e2 | After final /a/ with tones 3 or 4:  =e3 |

**Animal, wood, water**

Overview: The forms of these three enclitics is invariable:

=ri4 animal

=run4 wood

=ra4 water

all are as given above in any vocalic, tonal, or syntactic context.

**1plIncl**

Overview: The main factor determining allomorphemic variation is position of the stem-final vowel: front vs. non-front. The vowels of the enclitic are at points of articulation distinct from that of the stem-final vowels. Tone is irrelevant.

|  |  |
| --- | --- |
| **=o4** | **=e4** |
| After front vowels regardless of tone:  iT  eT | After non-front vowels regardless of tone:  aT  uT  oT |

**1plExcl**

Overview: As with 3rd-person singular masculino and 3rd-person plural, enclitic tone is low after a non-high tone (1 and 2) and mid-high (3) after a stem-final high tone (3 and 4). In phrase medial position tone on the latter is lowered to 2.

|  |  |
| --- | --- |
| **=ndu1 (medial phrase)** | **=ndu1 (phrase final)** |
| After all final vowels with tones 1 or 2:  =ndu1 | After all final vowels with tones 1 or 2:  =ndu1 |
| **=ndu2 (medial phrase)** | **=ndu3** (phrase final) |
| After all final vowels with tones 3 or 4:  =ndu2 | After all final vowels with tones 3 or 4:  =ndu3 |

**2pl**

Overview: The form of this enclitic is invariable:

=ndo4 in any vocalic, tonal, and syntactic context

**3pl**

Overview: As with 3rd-person singular masculino and 1st-person plural exclusive, enclitic tone is low after a non-high tone (1 and 2) and mid-high (3) after a stem-final high tone (3 and 4). In phrase medial position tone on the latter is lowered to 2.

|  |  |
| --- | --- |
| **=na1 (medial phrase)** | **=na1 (phrase final)** |
| After all final vowels with tones 1 or 2:  =na1 | After all final vowels with tones 1 or 2:  =na1 |
| **=na2 (medial phrase)** | **=na3** (phrase final) |
| After all final vowels with tones 3 or 4:  =ndu2 | After all final vowels with tones 3 or 4:  =ndu3 |

**Summary of enclitic forms and factors that affect their realization**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Person** | **Forms** | **Stem-final vowel position** | **Stem-final tone** | **Position in phrase** |
| 1sg | =yu1  vs.  =2 | --- | 1/2  vs.  3/4 | --- |
| 2sg | =ũ4  vs.  =õ4 | high vowel (*i, u*)  vs.  not high vowel (*a, e, o*) | --- | --- |
| 3sgM | =ra1  vs.  =ra2  =ra3 | --- | 1 and 2  vs.  3 and 4  3 and 4 | medial/final  vs.  medial  final |
| 3sgF | =ã4  vs.  =ẽ4 | not /a/  vs.  /a/ | --- | --- |
| Things | *=a1/=e1*  vs.  *=a2/=e2*  *v*s.  *=a2/=e2*  *=a3/=e3* | not /a/ (*=aT*)  vs.  /a/ (*=eT*) | 1  vs.  2  vs.  3 and 4  3 and 4 | medial/final  vs.  medial/final  vs.  medial  final |
| animal  wood  water | =ri4  =run4  =ra4 | --- | --- | --- |
| 1plIncl | =o4  vs.  =e4 | front (*i, e*)  vs.  non-front (*a, o, u*) | --- | --- |
| 1plExcl | =ndu1  vs.  =ndu2  =ndu3 | --- | 1 and 2  vs.  3 and 4  3 and 4 | medial/final  vs.  medial  final |
| 2pl | =ndo4 | --- | --- | --- |
| 3pl | =na1  vs.  =na2  =na3 | --- | 1 and 2  vs.  3 and 4  3 and 4 | medial/final  vs.  medial  final |