# Moro Verbs

Elizabeth Guest 10/9/97

In this document, we outline how to obtain the past, present, and future forms of regular verbs from the root. In all cases we will give the forms with the person class concord 'g' because this is the default for Moro speakers. There are simple rules for obtaining the past and future forms from the root; the present tense form is more complicated. Note that all verb roots end in a vowel, but may start with either a vowel (but not '2') or a consonant. Most verbs end in '0' or 'u'; there are only a few examples of each of the others. As there are only 8 verbs ending in 'a' and there seems to be no pattern to these, we will consider verbs ending in 'a' to be exceptions to the following rules.

Here we consider simple past, present and future tenses. So far we have not investigated how these fit into the tense/aspect system. The analysis given below is based on a list of more than 400 verbs.

The past tense form of the verb is formed from the root in a straightforward way and there are few exceptions. It is formed by adding 'g' or 'ga' to the front of the root, depending on whether the root starts with a vowel of a consonant:

Note however, that the prefix for verbs starting with 'w' can be either 'g' or 'ga'; and verbs starting with 'ci' or 'co', and some verbs starting with 'j' have prefix 'gai'

| verb root  | past form           |               |
|------------|---------------------|---------------|
| <u>t</u> u | ga <u>t</u> u       | drink         |
| naico      | ganaico             | give          |
| afəle      | gafəle              | make sour     |
| erido      | gerldo              | walk          |
| ndro       | gandro              | sleep         |
| idu        | gidu                | work, do      |
| ëgori      | gəgəri ಕ್ಷಿಕ್ರಿತ್ಯ( | read, learn   |
| aro        | garo                | cry, ring     |
| wado       | gawado              | build         |
| waro       | gwaro               | insult        |
| ŋgiţu      | gangitu             | leave         |
| սլս        | guţu                | cut off, burn |
| ëndu       | gëndu               | catch (unit)  |
| ozsdejo    | gotebato            | go back to    |

👌 🧲 Present tense:

The formation of the present is the least straightforward because there are alternatives in the ending for verbs ending in 'o' and 'u'. In this tense is, in many cases formed in a similar way to the past tense except that the vowel at the end of the verb as the past tense is formed, but verbs starting with 'e', 'ë', or 'i' add 'gab' to the beginning of the root. When the verb starts with 'a' either of these possibilities can happen. These changes are size to be started by the starts with 'a' either of these possibilities can happen.

with a consonant, or 'w':

ga + root + last vowel changes as above.

Verbs starting with i:

 $ga + b + (i \rightarrow o) + root + last vowel changes as given below.$ 

Verbs starting with e, ë, or a:

ga + b + root + last vowel changes as given below.

g + root + last vowel changes as given below.

Verbs starting with w, o, u, or a:

The final vowel of the root changes as follows:

do their

do verbs poots ever begin with b"? If not, maybe there is a deletion rule rather than an insertion rule ??

 $o \rightarrow a$ , ia, or wa

u → ia or a or wa

There seems to be no obvious reason for these alternatives, but we can say that in our data, 'o' changes to 'a' and 'u' changes to 'ia' most of the time. The percentages (for my list of over 400 verbs) are as follows:

| root   | preser | nt tense er | ding |
|--------|--------|-------------|------|
| ending | a      | ia          | wa   |
| 0      | 65%    | 32%         | 3%   |
| u      | 73%    | 36%         | 11%  |

This may be cowel harmony

| verb root        | present form   |               |
|------------------|----------------|---------------|
| ţu               | ga <u>t</u> ia | drink         |
| naico            | ganaica        | give          |
| afəle            | gafəlia        | make sour     |
| erldo            | gaberida       | walk          |
| ndro             | gandra         | sleep         |
| Idu              | gabodia        | work, do      |
| ëgori            | gabëgəria      | read, learn   |
| ēndu             | gabëndia       | catch (unit)  |
| aro              | gabara         | cry, ring     |
| wa <b>d</b> o    | gawada         | build         |
| waro             | gwara          | insult        |
| ŋgi <u>t</u> u   | gaŋgitia       | leave         |
| uru              | guția          | cut off, burn |
| ëndu             | gabëndia       | catch (unit)  |
| oreba <u>t</u> o | gorobata       | go back to    |

trans

In addition to these there is a set of verbs which behaves differently. These are the verbs ending in 'alo' or 'ano'. These verbs do not change their final vowel for the present tense and in fact the past and present tenses are identical in their spelling. However there is a difference in tone. The past tense has high tone on the last vowel of the root before 'alo' or 'ano', whereas the present tense is pronounced with low tone on this vowel. This does not seem to be a general rule for all verbs, but some other verbs, where the past and present forms are clearly different do follow a similar pattern. and coinside -gotherigh agent destructions There are compained terbs

| Examples | The state of the s |            |                  |
|----------|--|------------|------------------|
| root     | past   | present    |                  |
| ŋəranano | gaŋəránano   | gaŋərànano | be happy         |
| cianano  | gaiciánano   | gaiciànano | be sad           |
| irətiano | gitetíano  | giçətlano  | be stupid        |
| eriano   | geríano  | geriano    | be untrustworthy |

also aire wano

need he book intention more 3 trate for more

This is made using the auxiliary gidi which comes before the future form of the verb. This tense also has vowel changes at the end of the verb root. These are as follows: here o joknow askerner ego Keiner stones

The main part of the root is formed by adding 'ane' or 'an' to the beginning of the root, depending on whether the root starts with a vowel or a consonant. When the root starts with 'n', only the prefix 'a-'is added:

verbs starting with a consonant (except n): ano + root + last vowel changes as above

verbs starting with n:

a+root +last vowel changes as above

verbs starting with a vowel:

an + root + last vowel changes as above

Note that verbs starting with 'w' can follow either rule. Generally if 'ga' is added in the past and present forms, 'ano' is talk about verbs order y in over file lot added in the present tense, and likewise for 'g' and 'an', but this is not always the case.

| verb root    | future form |             |                                       |
|--------------|-------------|-------------|---------------------------------------|
| <u>t</u> u   | aŋɔṯi       | drink       |                                       |
| naico        | aŋənaice    | give        |                                       |
| afəle        | aŋəfəle     | make sour   |                                       |
| erldo        | aŋerlde     | walk        |                                       |
| ndro         | aŋəndre     | sleep       |                                       |
| I <b>d</b> u | aŋidi       | work, do    | · · · · · · · · · · · · · · · · · · · |
| ëgori        | aŋëgəri     | read, learn |                                       |
| аго          | aŋare       | cry, ring   |                                       |
| wado         | aŋɔwade     | build       |                                       |

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through all
designations
of else unde

| waro    | anware    | insult        |
|---------|-----------|---------------|
| ngitu   | aŋiţi     | leave         |
| uru     | anuri     | cut off, burn |
| ëndu    | aŋëndi    | catch (unit)  |
| oţsdejo | anorebate | go back to    |

On the whole the formation of the future tense is regular. However there are several exceptions. Sometimes the ending becomes 'we' or 'wi' and in this case, the present tense form ends with 'wa'. However there are cases where the 'wa' is the ending in the present tense, but the future is formed in the usual way.

Examples

| root   | present   | future            |           |
|--------|-----------|-------------------|-----------|
| doru   | gadorwa   | anodorwi          | stop      |
| оте    | goria     | aŋorə <u>t</u> e  | make red  |
| ofte   | gotra     | aŋoţre <u>t</u> e | grow      |
| otemer | garemetwa | anstemeren        | keep      |
| məlu   | gaməlwa   | aŋəməluiti        | be cold   |
| moru   | gamerwa   | anomori           | jump over |

Note that the future tense prefix, ano, changes according to concord, but not in the usual way. Concord agreement is as follows:

| normal concord | future concord |
|----------------|----------------|
| g-             | aŋo-           |
| 1-             | alə-           |
| η-             | aŋə-           |
| r-             | -618           |
| y              | aiyə-          |
| ñ-             | aiñə-          |
| n-             | anə-           |
| d-             | ado-           |

The "i" is a transition vowel,
not a real vowel.
There I troughe shouldn't
be there.

At should be there
were as of it should be there

# Example sentences

Maje gidi anose aicoba. Liji lidi aləse aicəba. Pere nidi anose aicoba. Rido ridi arəse ŋaiña. Yama yidi aiyəse raţai. Nomona ñidi aiñosi naiña. Ndəbel nidi anəse ŋəbəda. Dëuria didi adəse ŋwana.

The man will eat food. The men will eat food. The girl will eat food. The goat will eat grass. The locusts will eat leaves. The kids will eat grass. The monkeys will eat figs. The camel will eat sorghum. ai-y8 06- NO

navative

# Subject Agreement on Moro Verbs and Moro Pronouns

#### Elizabeth Guest 29/11/97

Moro verbs must agree with their subject. There are two sets of subject pronouns, but explicit pronouns are not always required. Object pronouns are attached to the verbs and can be found in the middle or at the end of the verb depending on the tense/aspect. In Moro, only people can be referred to by a third person pronoun. All animals and things have to be referred to in full.

## **Subject Pronouns**

There are two form of subject pronouns, and so far, we do not know when each should be used.

| 1st person sing                    | ig <del>ë</del> nəñi | ñi            |
|------------------------------------|----------------------|---------------|
| 2 <sup>nd</sup> person sing        | aganəŋa              | ŋa            |
| 3 <sup>rd</sup> person sing        | gënəŋu               | ŋu            |
| 1 <sup>st</sup> person dual        | lëləŋ                | ləŋ           |
| 1 <sup>st</sup> person plural incl | nëndr                | nëndr / lëndr |
| 1st person plural excl             | m̃agananda           | nanda / landa |
| 2 <sup>nd</sup> person plural      | ñaganəñaŋ            | ñaŋ           |
| 3 <sup>rd</sup> person plural      | lënəŋulu             | ŋulu          |

## **Subject Agreement Prefixes**

The subject agreement prefixes vary depending on the tense/aspect of the verb. In the past and present they are:

| 1          | i-                    |
|------------|-----------------------|
| you (sg)   | a-                    |
| he/she/it  | Ø (concord agreement) |
| we (dual)  | la- / lə-             |
| we (inclu) | la- / lə-             |
| we (excl)  | ña-                   |
| you (pl)   | ña-                   |
| they       | Ø (concord agreement) |

Note that these prefixes are attached to the prefix 'ga'. (Maybe we should really analyse these prefixes as iga-, aga-, etc.)

The alternatives for we dual and we inclusive are used interchangeably. There is no other variation in the prefixes because all verbs start with g (or concord) + vowel in both the past and present tenses. Note that for the  $2^{nd}$  person plural inclusive, there is a suffix in addition to the prefix. This suffix is added to the end of the verb, except when the verb is compound in which case '-ar-' is added after the last consonant in the root. For example for the verb to lie, 'kəbalo' (= kəbo + alo), the form for we (inclusive) is 'ləgakəbaralo'. Note that in compound verbs, the last vowel of the verb is lost in the join.

When the suffix '-r' is added to the end of a verb, there are some morphophonemic changes:

- When the verb ends in 'o' or 'u' (past), 'r' replaces this vowel.
- When the verb ends in 'e', 'a', or 'i', '-r' is added onto the end of the verb.

#### Examples:

| -<br>-    | abərto (ride)        | tu (drink)        | aijəba (deny) | re <del>d</del> o (chop) |
|-----------|----------------------|-------------------|---------------|--------------------------|
| I         | ñi igabər <u>t</u> o | ñi igatu          | igaijəba      | igare <del>d</del> o     |
| You sg)   | ŋa agabər <u>t</u> a | ŋa aga <u>t</u> u | agaijəba      | agare <del>d</del> o     |
| he/she    | ŋu gabər <u>t</u> o  | ŋu ga <u>t</u> u  | gaijəba       | gare <del>d</del> o      |
| we (dual) | ləŋ lagabərto        | ləŋ lagatu        | lagaijəba     | ləgare <del>d</del> o    |
| we (incl) | nëndr lagabərtr      | nëndr lagatr      | lagaijəbar    | ləgaredr                 |

we (excl) nanda ñagabərto nanda ñagatu ñagaijəba ñagaredo you (pl) ñan ñagabərto ñan latu ñaga tu ñagaicəba ñagaredo they nulu labərto nulu latu laijəba laredo

The future tense is made up of the future form of the verb and an auxiliary. The prefixes given above for past and present are added to the auxiliary, but the verb has a different set of subject agreement prefixes. These are:

I ñi- or ñeyou (sg) ŋahe/she/it aŋɔwe (dual) alɔwe (incl) alɔ- + -r
we (excl) ñayou (pl) ñathey alɔ-

In all cases, if the verb starts with a vowel, the vowel on the prefix is dropped. The suffix '-r' for we (incl) replaces the last vowel of the verb. When the verb starts with 'r' or 't', the prefixes for we (dual and incl) become 'at-' and if the verb starts with 't' this becomes 'r'. We do not yet have enough examples to determine which of the two 1st person sing prefixes should be applied for any given verb.

## Examples:

| I You sg) he/she we (dual) we (incl) we (excl) you (pl) | abərto (ride) igidi ñabərtwe agidi nabərtwe gidi anabərtwe ləgidi alabərtwe lagidr alabərtwr ñagidi ñabərtwe ñagidi ñabərtwe | tu (drink) igidi ñiti agidi ŋati gidi aŋəti lagidi aləti lagidr alətr<br>ñagidi ñati | aijəba (deny) igidi ñaijəbete agidi naijəbe gidi anaijəbe ləgidi alaijəbe ləgidr alaijəbr ñagidi ñaijəbe | redo (chop) igidi ñerede agidi narede gidi anorede logidi arrede logidr arredr ñagidi ñarede ñagidi ñarede |
|---|--|--|--|--|
| you (pl) they   | ñagidi ñabərtwe  | ñagi <del>d</del> i ña <u>t</u> i  | ñagidi ñaijəbe   | ñagidi ñarede  |
|   | lidi alabərtwe   | Ii <del>d</del> i alə <u>t</u> i   | lidi alaicəbe  | lidi arrede  |

### Compound verbs

The behaviour of compound verbs is slightly different. The subject agreement prefixes remain the same, but any tense/aspect ending on the verb is replaced by the 'alo', 'tia' or 'ano' ending. However we need to discuss the placement of '-r' for we (incl). In past and present, this suffix becomes the infix '-ar-' and it is inserted after the last consonant in the root. For the future, the infix is '-ər-'.

#### Example:

kəbalo: kəbo + alo

past: ləgakəbaralo future: aləkəbəralo

## **Object Pronouns**

Object pronouns may be inserted at the end or in the middle of a verb. In the past tense, they go at the end; in the present and future tenses they are inserted after the tense marker part of the verb (that is after 'ga-') We do not have enough data to determin the behaviour of the suffix '-r' used to differentiate we (incl).

The object pronoun suffixes for the past tense are:

I -ñe or -ñi
you (sg) -aŋahe/she/it -ma
we (dual) -nde
we (incl) -ndr
we (excl) -nde

werbs end in a vowel, there are some morphophonemic changes when these suffixes are added:
when the verb ends in 'u', this vowel becomes 'i' or sometimes 'w' before '-ana', and 'o' in all other cases.
When the verb ends in 'o', or 'e', the vowel disappears when '-ana' is added, but becomes 'o' in all other cases.
When the verb ends in 'a' this vowel disappears when '-ana' is added.

## Examples

|           | uru (bury) | mo (marry) | aijəba (deny) | erado (ask)            |
|-----------|------------|------------|---------------|------------------------|
| 1         | gurañe     | gaməñe     | gaijəbañi     | gerədəne (             |
| You sg)   | guriaŋa    | gamaŋa     | gaijəbana     | gerə <del>d</del> iaŋa |
| he/she    | gurəma     | gaməma     | gaijəbama     | gerə <del>d</del> əma  |
| we (dual) | gurənde    | gamənde    | gaijəbande    | gerədənde              |
| we (incl) | gurəndr    | gaməndr    | gaijəbandr    | gerədəndr              |
| we (excl) | gurənde    | gamənde    | gaijəbande    | gerədənde              |
| you (pl)  | gurənde    | gamənde    | gaijəbande    | gerə <del>d</del> ənde |
| they      | gurəlo     | gaməlo     | gaijəbalo     | oleberseg              |

The object pronoun infixes for the present are:

| 1         | -iña-      |
|-----------|------------|
| you (sg)  | -ŋa-       |
| he/she/it | -ma-       |
| we (dual) | -ndə-      |
| we (incl) | -ndə- + -r |
| we (excl) | -ndə-      |
| you (pl)  | -ndə-      |
| they      | -lə-       |
|           |            |

These pronouns are inserted after 'ga-' and before the verb root. When the verb starts with a vowel the 'e' of the infix is replaced by the verb vowel.

## **Examples**

|           | uru (bury) | mo (marry) | aijəba (deny) | egədo (ask)                         |
|-----------|------------|------------|---------------|-------------------------------------|
| 1         | gaiñura    | gaŋama     | gaiñaijeba    | gaiñer <del>ad</del> ia             |
| You sg)   | gaŋura     | gaiñəma    | gaŋaijəba     | ganerodia                           |
| he/she    | gamura     | gamama     | gamaijəba     | gamerə <del>d</del> ia              |
| we (dual) | gandura    | gandəma    | gandaijəba    | ganderədia                          |
| we (incl) | gandurar   | gandəmar   | gandaijəbar   | ganderədiar                         |
| we (excl) | gandura    | gandəma    | gandaijəba    | ganderə <del>d</del> ia             |
| you (pl)  | gandura    | gandəma    | gandiajəba    | ganderədia                          |
| they      | galura     | galəma     | galaijəba     | gal <del>e</del> rə <del>d</del> ia |

The object pronoun infixes for the future tense are similar to those for the present tense, but their are some differences. The pronouns are inserted after the subject agreement prefix. The pronoun prefix for 'me' is '-ñə-', and there is no pronoun infix for you (sg) In the latter case the last vowel of the future prefix changes to 'a'. When the verb starts with a vowel, the verb vowel replaces the infix vowel and in this case, there are no changes when the object is you (sg).

#### **Examples**

| •         | uru (bury)                  |                            | - 25-1 Z.1 X                            | * / *                       |
|-----------|-----------------------------|----------------------------|---|-----------------------------|
| 7         |                             | mo (marry)                 | aijəba (deny)                           | egə <del>d</del> o (ask)    |
| 1         | gi <del>d</del> i aŋəñuri   | gi <del>d</del> i aŋəñəme  | gi <del>d</del> i aŋəñaijəbte           | gi <del>d</del> i aŋəñerəde |
| You sg)   | gi <del>d</del> i aŋuri     | gi <del>d</del> i aŋame    | gi <del>d</del> i anaijəbete            | gi <del>d</del> i anerode   |
| he/she    | gi <del>d</del> i aŋəmuri   | gidi anəmame               | gidi anəmaijəbete                       | gidi aŋəmeţəde              |
| we (dual) | gi <del>d</del> i aŋəduri   | gi <del>d</del> i anəndəme | gidi anəndaijəbete                      | gidi anənderəde             |
| we (incl) | gi <del>d</del> i aŋəndurər | gi <del>d</del> i anəndəmr | gidi anəndaijəbetr                      | gidi anənderədr             |
| we (excl) | gi <del>d</del> i anənduri  | gi <del>d</del> i anəndəme | gidi anəndaijəbete                      | gidi anənderəde             |
| you (pl)  | gidi anənduri               | gi <del>d</del> i anəndəme | gidi anəndaijəbete                      | gidi anənderəde             |
| they      | gi <del>d</del> i aŋəluri   | gi <del>d</del> i aŋələme  | gi <del>d</del> i aŋəlaijəbe <u>t</u> e | gidi anəletəde              |
|           |                             |                            |   |                             |

# Compound Verbs:

In the present and future tenses, object pronouns are added to compound verbs in the same way as to non-compound verbs and the suffix 'r' used for we (incl) is added in the same way as for subject pronouns. However the addition of object pronouns in the past tense is different. In this case, the pronouns are generally added to the verb root in the normal way and then the 'alo' or 'ano' suffix is added. There are some exceptions for this for the 1st person sing object, but to really find out what is going on, we need to know more about how compound verbs are formed.

#### Examples (past tense):

|           | bəriano (encourage) | ŋəranano (be happy) | iruwano (be sorry) |
|-----------|---------------------|---------------------|--------------------|
| I         | gabəreñano          | gaŋəreñenano        | giruwiñano         |
| You sg)   | gabəriaŋano         | gaŋəriaŋanano       | giruwianano        |
| he/she    | gabəremano          | gaŋəremanano        | giruwimano         |
| we (dual) | gabərendano         | gaŋərendenano       | giruwindano        |
| we (incl) | gabərəndrano        | gaŋərendrnano       | giruwindrano       |
| we (excl) | gabərəndano         | gaŋərəndenano       | giruwindano        |
| you (pl)  | gabərəndano         | gaŋərəndenano       | giruwindano        |
| they      | gabərelano          | gaŋərelənano        | giruwilano         |

# Notes (Questions still to be answered)

- We need examples of combinations of subjects and objects. This is especially needed for the future tense as I suspect that it is fairly straight forward for the others.
- Some of the morphophonemics needs looking into more closely, again with more examples. The morphophonemics here should cover as many cases as in the paper on verbs.
- The whole issue of how compound verbs are formed and their behaviour needs more investigation.