# MAKING A MERIAM MIR DICTIONARY 

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## 1. INTRODUCTION

The following is an edited transcription and description of a videotape "Making a Meriam Mir Dictionary" recorded in June, 1982, at the School of Australian Linguistics, Batchelor, N.T. (part of Darwin Community College). It is a record of some of the work being undertaken by a group of Murray Island (Mer) students who were then doing first level of the Certificate of Literacy Work at S.A.L. The students taking the course and participating in the video were Ron Day, Nee Wailu, Salkal Gisu, Balaga Zaro, Kalina Kudub and Rita Lui. The video was directed and recorded by Patrick McConvell, with assistance from Paul Black (both lecturers at S.A.L.).

## 2. AIMS OF THE DICTIONARY PROJECT

One of the students, Ron Day, describes the students' aims in coming to S.A.L. in the following terms, in Meriam Mir:
"Ki tabakiauda able mir baratkem a erwerem. Muige kerbi erwerge ki able ziawali mir baratug ziawali dirsireda."

This, translated into English, means:
"We came here to study linguistics, and in our studies, as part of what we are doing, we are preparing a dictionary of the Meriam language."

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Australian Aboriginal lexicography, 19-30.
Pacific Linguistics, A-66, 1983.
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Ron goes on to explain the students' reasons for wanting to make a dictionary:
"There are a few reasons why we are here. One is because the language itself is gradually dying out. Children today don't know how to read or write Meriam. We are trying to get all the knowledge of the language together, and confirm the language, the orthography and all this kind of thing. This is one reason why we are doing a dictionary. Another one would be because we have some people doing research or anthropologists around the islands sometimes. Whatever they discover, if they want to share it with the Islanders, the dictionary would be a great help to them to interpret their discoveries, using the Meriam language."

## 3. PRELIMINARIES TO COLLECTING ENTRIES

One of the first tasks was to decide on the orthography to be used, and for everyone to get familiar with it. There is a literary tradition in Meriam Mir of a small number of books (translations of parts of the Bible, hymn books and so on) dating back to the late nineteenth century. These use a nearphonemic orthography similar to that used by missionaries for Pacific Island languages. At the turn of the century, Islanders such as Passi were producing lengthy manuscripts in Meriam Mir (Ray 1907). The same orthography, with only very minor changes, was used in writing dictionary entries. It consists of: bilabial stops $p \quad b$; alveolar stops $t \quad d$; velar stops $k \quad g$; alveolar fricatives $s \quad z$; bilabial nasal $m$; alveolar nasal $n$; alveolar lateral 1 ; alveolar tap $r$ and a labio-velar semi-vowel $w$ ( $i$ is used to indicate the palatal semi-vowel). There are five vowels: $i \quad u \quad e \quad o \quad a$. Stress (high tone) is indicated by an acute accent over the vowel or by an apostrophe preceding the stressed syllable (see below).

The letters of the alphabet were divided up between the six students. Each student had a file box and $3 \times 5$ inch file cards. Each person had to write down on the cards the dictionary entries for words beginning with his or her own letters. After each person has handled one box for a reasonable time, the boxes were swapped around. This gave the students a chance to familiarise themselves with the whole alphabet, and also to check on the work of the others.

Rita Lui, for instance, was responsible for the file box for letters $R, S$, and $T$, so she was the one who wrote the word teur on a card. We shall use the word teur to illustrate how items are entered on the dictionary file cards.

## 4. THE DICTIONARY FILE CARD

It was important that all the students followed the same plan for writing information on the cards. We used lined file cards with a red line at the top and a larger gap above that. The dictionary entry (Meriam Mir word) was written in the top left-hand corner, above the red line, and was followed in brackets by an abbreviation of its word-class (or part of speech) membership. In the case of our example, these two elements were respectively teur, and (N), standing for Noun, since teur is the name of a fish.

Since we were here first making a bilingual dictionary, we next wrote the definition of the word in English on the second line below the red line. Of ten we could not write a full definition immediately; instead we approached it by successive approximations. For teur, for instance, we simply wrote a wide generic term, 'kind of fish', because that was all we could say about it at the time. Later we found out from a book that the common English name of this particular fish is 'stripey'; we then added this to the card. After that we also discovered, from a technical book, that the scientific name of the fish is 'Lutjanus Carponotatus'. We added this to the card also.

There are quite a number of homonyms in Meriam Mir, especially in monosyllabic words. Teur happens to be one; as well as the name of a fish, it is also the name of a type of bamboo.

Initially we put such words on the same cards with indexes (1) for the fish name, and (2) for the bamboo, in the case of teur. It was often difficult to decide at the outset whether the words were truly unconnected homonyms, or whether one meaning represented a semantic extension of the other. It is the latter case where we should really record the two items as senses (1) and (2) on a single card.

The policy for the present task was to write homonyms and extensional meanings indiscriminately on a single card to begin with, then to transfer the information about one of the items to a separate card, if and when it became clear that it was a true homonym.

So, teur (2) (the bamboo) was initially written on the same card as tuer (1) (the fish). A generic meaning was first written (as with the fish): 'a kind of bamboo'. Since no books or experts on bamboos were available at the time, no English or scientific name was known, so some of the characteristics of the specific bamboo teur were recorded, as an aid to later positive identification: 'big, with large hole'. This was followed by 'sp?', which means 'species unknown', at that stage.

Information on teur (2) (the bamboo) will probably later be transferred onto a different card, and erased from the original card (students were encouraged to work in pencil). However, when this is done, cross-references are recorded on the original cards, pointing out the existence of the homonyms. Synonyms are also cross-referenced on both cards, by writing in brackets ( $=$ [the synonym]) after the word class membership on the top line. Neither teur (1) nor (2) have synonyms, but large number of items do, including some fish names, for example, koit $=$ mamam lar, 'coral trout'.

## 5. COLLECTING THE WORDS

Basically, three ways of finding words for the dictionary entries were used:
(1) a method based on the sound of the word;
(2) a method based on the meaning of the word;

This method mainly involved looking in detail at a particular semantic field (to continue our example, the fish family), and compared the meanings of the different words within the field (for example, teur 'stripey' and kar 'blue tusk fish').
(3) a method based on picking words from texts - stories that the students were writing themselves or transcribing from stories recorded from other people. Sentences from these stories could also be used as examples of the usage of the words, and themselves written on the card, or a textual reference recorded.

Thus, teur was actually collected by method (2), inspection of the semantic field, but it could equally have been gleaned from a sentence in a text such as the following:
(1) ka no teur digwati able kige I only stripey caught that night LOC 'I caught only stripey last night.'

One technique used in method (1) (the sounds of words) was to go through the possible combinations of letters that can form words in Meriam Mir, in alphabetical order, and pick out those combinations which are actual words. To help with this, we sometimes used a 'word generator'; several sets of cards on a single spiral binding, each set of which can be leafed through separately. The cards were:
(a) first, the set of consonants plus a blank card;
(b) second, the set of vowels;
(c) third, the set of consonants and vowels, plus a blank card.

With this three-set generator, all monosyllables could be generated: vowel or consonant initial; open or closed syllable; single vowel or diphthong final. Additional word generators were made to produce disyllables and longer words.

The word generator was used by systematically going through 'possible words' in alphabetical order, and recording those which actually occur. Ron Day gave an illustration of this by going through monosyllables with three letters having initial ba-.

Of the 'possible words' which are in conformity with Meriam Mir phonotactic constraints, a high proportion are found to be actual words. For monosyllables beginning with ba-, the following were recorded:

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bab 'father'
bad 'a sore'
bag 'cheek'
bak (1) 'bed bug'
    (2) 'place name on Mer'
bam (1) 'turmeric'
    (2) 'yellow'
bar 'North-west wind season'
baz 'cloud'
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As the students went through the words collected, they were also able to compare them with a Meriam vocabulary collected by Sidney Ray on the Cambridge Anthropological Expedition to the Torres Straits at the turn of the century (Ray 1907).

## 6. DICTIONARY WORK AND PHONOLOGICAL ANALYSIS

The exercise of collecting words according to their sound sequences also led into areas of phonology. It gave an idea of which combinations of letters (phonemes) were possible and which were impossible as words (that is, we learnt about phonotactics). It also provided a large number of examples of words of different shapes, and combinations of phonemes, against which we could test our tentative phonemic analysis.

One particular problem which concerned us was whether Meriam Mir really has five vowel phonemes, as the old orthography suggests, or more, and what the significance of stress was.

By having the entries on cards, we could sort the cards in different ways to look into different problems. For example, we wanted to find out if the a vowel had the same phonetic realization in different environments. As one test of this, the cards with a vowels in monosyllables were pulled out, and photocopied on one sheet. Then one of the students, Salkal Gisu, read out the words slowly to the other students to see if they could hear a difference in the a vowel.

Minimal pairs involving stress/pitch differences were also noted when compiling the dictionary. Such stress/pitch differences had not previously been written in Meriam Mir, although there are a fair number of minimal pairs, such as:
$\begin{array}{ll}\text { tábo } & \text { snake } \\ \text { tabó } & \text { neck }\end{array}$
(Acute accent indicates primary stress/high pitch here.) Such pairs were recorded on the two tracks of Language Master cards, for ease of comparing the members of the pair visually and aurally. Since the most common (unmarked) stress pattern is for primary stress to fall on the second syllable, this type was left unmarked, but all items in the dictionary with stress on the first
syllable were marked either with an acute accent on the first vowel, or an apostrophe preceding the first syllable (the latter being easier for ordinary typewriters and printing purposes). Examples are tabo or 'tabo for 'snake' versus tabo for 'neck'. Since ambiguity is usually resolved by the context, the students do not normally use a stress diacritic in everyday writing of stories and so on, but try to use it consistently in dictionary entries.

As well as the distinction between first- and second-syllable stressed items in disyllabics and polysyllabics, there is also a related distinction in monosyllables which has to be recorded on the dictionary cards. There are pairs which appear to be homonyms (at least with younger speakers) if only the plain citation forms are considered. An example is:

> pim (1) grasshopper
> (2) finger

However, if inflected or derived forms of such nouns, with suffixes, are also examined, a distinction appears both of first versus second syllable stress, and (probably determined by this) vowel quality. For example, there are two ergative forms of pim:

$$
\begin{array}{lll}
\text { pím-ide } & \text { ['pimIde] } & \text { grasshopper-ERG } \\
\text { pim-íde } & \text { [pI'mide] } & \text { finger-ERG }
\end{array}
$$

To indicate this difference in the two items pim, a stress mark is used on the entry for pim 'grasshopper' - pím or 'pim - to indicate that, unlike the word for 'finger', it has initial stress in suffixal forms.

Another case in which such differentiation of first and second syllable stress is necessary is in reduplicated adjectives, usually derived from nouns. An example of this is the word ídid 'charmed', from íd 'a charm' (note stress marking). This reduplicated form is a member of a minimal pair with idid (second syllable stress) 'alive'.

## 7. DEFINITIONS AND SEMANTICS

The words id 'charm' and idid bring us to aspects of definition, which can be particularly hard where the word is bound up with cultural concepts which are themselves hard to express in English. They may require quite long explanations, instead of, or in addition to a short English gloss. Such words are usually best approached through a detailed consideration of the semantic field involved: our method (2) above.

Ron Day gave the following explanation of id and idid, which he himself admitted, only touched the surface of the concepts involved:
"id is like a charm, but it's not really a charm. It usually refers to a kind of protection. In the old days at Murray Island, they used to worship a pagan god called Malu Bomai. To go fighting in the wars, or even swimming or diving, they used to carry the id for protection. If you double it, to make idid, that would mean that, for instance,
if I go swimming, I'll be sure that I'll be in safe hands I won't be attacked by sharks or anything like that because I'll be under the protection of Malu Bomai. The water would be idid."

In making the Mer dictionary, as well as discussing the conceptual field around certain sets of words in terms of the Mer culture, we also made extensive use of illustrated reference books on fish, birds and plants. This helped the students with identifying the species, finding the English gloss and scientific names. By using several different works, a fairly comprehensive and accurate coverage of at least one area, that of fish names (McConvell 1983), has been achieved. The students hope to cover other semantic fields in this way later.

## 8. EDUCATIONAL SPIN-OFFS OF THE DICTIONARY WORK

As progress was made with the basic dictionary work, other projects developed from it. Some of the results of these projects will be used in educational and literacy work on Murray Island. Although the Meriam Mir language is currently not used in school on the Island, there is a move amongst the Islanders to introduce it.

One of the projects was a simple illustrated alphabet book of 'Fish Names' - Gurira Lar (sea fish). The students also made simple small-sized caption books, one on the theme of creatures of the sea. For younger learners, simple matching games were made, designed to teach both reading in Meriam Mir and identification of species using the Meriam Mir names. One of these games involved a board in which fish names appeared on one side and pictures of the fish on the immediate reverse position, with a small hole next to the word and picture, through which a pencil could be poked. Pairs of children could either:
(a) test reading by having one child look at and call out the fish name and another child, facing him/her on the other side of the board, poke the pencil through the hole next to the relevant word; or
(b) test species identification by having one (literate) child read the word out and the other poke the pencil through the hole next to the relevant picture.

Another game involved matching cards in which half a picture of a fish was on one side of a card and half the word for that fish on the reverse. Children would have to match the two cards for the two halves of the words together and check if it was correct by turning over the two cards and seeing that the two halves of the fish-picture also matched.

The spelling game 'Scrabble' was also played, using tiles designed for the Meriam Mir alphabet. The 'Scrabble' board and tiles were also used to construct crosswords. One crossword was made specifically to include only fish names, and was published in our School of Australian Linguistics newsletter (Ngali, June 1982).

Making a crossword raised a lot of interesting questions about approaches to dictionary making, since the information in the 'clues' to a great extent paralleled the information to be recorded in the dictionary entry. This would include both elements on the definition and information about synonyms and homonyms; for example, one clue in the crossword is mamam larira nerut nei 'another name for mamam lar (coral trout)'.

## 9. THE MONOLINGUAL DICTIONARY

This exercise was particularly valuable when we started to work on the monolingual dictionary, making Meriam Mir definitions of Meriam Mer words. Crossword clues were refined, and essential elements of definitions selected. The Meriam Mir definitions were recorded on the reverse of the bilingual dictionary card. For instance, on the back of the card for teur 'stripey' (our earlier example), the following was written:
(2) teneb-ira kaimeg bambam
snapper GEN 'mate'
'a fish with yellow stipes, companion of teneb (snapper)'

This English translation does not adequately convey the meaning of the Meriam Mir definition, which involves some concepts whose basis is not the same as concepts in English. On the right hand side we have lar, the generic term, translated here as 'fish'. However, lar can also be translated 'meat', and includes (in one of its senses at least) also turtle and dugong; but it may also be used to refer to inedible fish (that is, those which are not meat). The generic term for vegetable food, lewer, also displays a possibly parallel polysemy, since it also means (specifically) 'yam'. Investigations of the semantics of these fields, in contrast to English, are being continued by the students.

A high-level generic term, such as lar, is usually included in a Meriam Mir definition, as well as, on many occasions, a lower-level generic hyponym; for example, tup for the 'sardine' class of fish, discussed below. In the case of teur, there is a clear feeling that the fish forms a group with teneb, which looks similar and behaves similarly, but there is no explicit generic term covering both. In this case, the phrase terebira kaimeg 'snapper's friend or companion (kaimeg)' is used. This concept of kaimeg is important in Meriam ethno classification, but has not so far been clearly delineated. It involves some notion of common class membership, but also (perhaps distinctly) of travelling together, perhaps of occupying a similar ecological niche.

The third element of the definition here is the specific physical characteristic, which in this case distinguishes teur from teneb: bambam warwar 'with yellow stripes'. In producing definitions in this part of the dictionary, the initial policy has been to allow a fair degree of freedom to the students to include the characteristics which appear to them, looking through the eyes of their culture, as the most salient, and not to impose a conceptual grid from the outside. Gradually, a picture of the type of factors involved in indigenous classification could be built up, and perhaps applied more consistently to dictionary construction. The following are the factors so far used by the students in Meriam Mir definitions of fish (McConvell 1983):
(a) Physical
(1) size relative to (indigenous) 'genus'
(2) having/not having a particular organ/texture
(3) having a large/small particular organ
(4) colour of fish
(5) colour of particular organ/feature
(6) beauty/ugliness of particular organ
(7) looks 'like' another fish
(8) type of meat/fat
b) Behaviour
(1) general habitat (for example, coral reef)
(2) specific habitat (for example, south west of Mer)
(3) 'character' ('tricky', for instance)
(4) kaimeg ('mate') of another fish
(5) feeds on particular species

As well as these characteristics, very of ten mentioned is the mythological significance of different species. A number of common fish occur as characters in local myths. Reference may be made to the role they have in the story, the kinship relation with other fish in the story, and/or their relationship with geographical features of the Islands or reefs which they created or interacted with in some way, and which in some cases bear their name.

An example of this is the well-known story of Nageg ('Trigger-fish') and Geigi ('Trevally'). Nageg is Geigi's mother; the story also involves a number of other fish species and displays an implicit classification of fish according to depth of the water in which they are found, and preferred fishing technique (McConvell 1983).

## 10. SEMANTIC FIELDS AND ETHNOCLASSIFICATION

Definitions led us further into the study of semantic fields in detail, to discover further vocabulary, and to determine, if possible, the structure of the semantic field. Such investigation thus makes possible, in turn, a more systematic approach to writing definitions, using established indigenous taxonomies, and so on.

Students generally chose a field, and wrote out definitions of the different words in the field and related concepts. Thus, for instance, one student wrote out words for several types of coconut, together with definitions in Meriam Mir. These definitions yielded more words for parts of the coconut, developmental stages, which were discussed, and further defined. As well as assisting with the basic dictionary, such work could ultimately contribute to elements of an encyclopaedia of Meriam knowledge.

As fish were our special subject, this field was particularly examined. The students discovered hierarchical taxonomic structure in fish (lar), of which the following diagram shows one part:


Here, lar (roughly 'fish') is divided into several 'families' which have generic names, as well as 'families' which do not have generic names, and individual species which are not classified into 'families'. One 'family' is the class tup, usually translated locally as 'sardines'. Within this family there are two more tiers in the hierarchy. The tier immediately below consists of four species; kes-kes, ari-ari, kos, and merdud, all of which may optionally be qualified by the generic tup, for example, kos tup. One of these, kos, is further subdivided into three distinct species, one of which is the 'real' kos (thus, the name kos appears at two levels in the hierarchy), and the other two have distinguishing qualifiers pai and waremet. It seems that the word kos must obligatorily be used with these, however.

In some other cases there are two or three names for different stages in growth of one species ('small'; 'middle-sized'; 'over-sized'). Whether the concept of one 'species' here always corresponds to that in European scientific classification, is not yet clear.

## 11. VERBS

So far we have only talked about nouns. Since nouns are inflected by suffix, it is always clear what the stem form is and how it can be inserted alphabetically into the dictionary. With verbs, however, the matter is not so easy, since they have both prefixal and suffixal inflections, and it is not always immediately clear what the stem form is, particularly at the present stage, when morphological analysis has not been completed.

The form of the verb to be used as the dictionary entry has not been decided at the stage we are dealing with. It was felt that the form should be as close as possible to the stem form. There could be problems in using the stem form as derived by morphological analysis if this did not constitute an actual verb form, but only an abstract entity, since most of the users of the dictionary would not have any acquaintance with linguistics. Consistent use of a particular verb form, such as the infinitive, or the imperative, was to be preferred, since these appeared at first sight to have no prefixes. Later work seems to show, however, that this still does not overcome all problems in choosing a dictionary entry form for verbs.

Another question is: how predictable are the verb paradigms for any particular entry form? Obviously a preferred verb entry form would be one to which the least number of additional forms of the verb would have to be added in order to make the entire paradigm predictable from the dictionary entry. This presupposes a fairly full account of verb conjugation, which is not yet completed.

For example, there are many forms of the verb'to go', with prefixes and suffixes. Some of these, in the future tense, are as follows:

| $k a$ | ia-ka | na-bakiamu-1u |
| :--- | :--- | :--- |
| ma | ia | bakiamu will go' |
| $e$ | ia | o-bakiamu |$\quad$ 'You will go'

Now it would not make sense to record all these forms in the dictionary, especially as they would occur in different alphabetical positions due to the prefixes. However, in the case of the verb forms above, it is easy to see that there is a stem -bakiamu- (set off by hyphens), with prefixes na- and wa-, and suffixes $-1 u,-l e i$, and $-1 a m$. Luckily, this stem form bakiamu is also the actual singular imperative form, so could reasonably be chosen as the dictionary form.

Unfortunately, however, this is not the whole story. In the future plural, a different stem, bakiaw appears for the verb 'to go', for example:
wi ia o-bakiaw-are 'They (more than 3) will go'

As a result, this must either be entered in the dictionary too, or another regular explanation found for it, to appear in the grammar. Nor is the stem form for all verbs, as arrived at by segmentation analysis, always the same as the imperative form. A nominal form of the verb (the gerund) is probably preferred as the most convenient citation form by the students, but again, it does not always bear a regular relationship to the stem. How predictive it is of other verb forms is a matter for further investigation. All these considerations emphasized to the students the necessity for doing morphological analysis side-by-side with the dictionary work.

## 12. WORDS FROM TEXTS

The third important way of collecting words for the dictionary is to take them from texts in Meriam Mir. As there is not much literature in existence in Meriam Mir, many of the texts used were produced by the students themselves. They wrote the stories themselves, or transcribed tapes of stories they recorded from other people. The students hope to record more such stories from older people at Mer (Murray Island), transcribe them and discuss difficult words with the older people. In this way, they hope to collect more words for the dictionary, improve the quality of the definitions, and add to the examples used to illustrate the usage of the words.

Ron Day has this to say in conclusion:
"Now we have come to the end of our first session at S.A.L. and are ready to go home. When we get home, we would like to discuss with the elders of the community, and the community itself, the people, what we are doing in our studies. A most important part of our studies is the dictionary. Because there are some words that we are not sure of, when we are on holidays, we will collect as much information as we can from the old people to help us in the dictionary work."

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