PART I: PHONETICS

The Sound System of Sorsorol

The Sorsorol dialects are somewhat intricate to record by reason of the occurrence of certain sounds which are difficult for a European to hear. Outstanding is the very peculiar \( \hat{\imath} \) sound. There are certain mixed vowels also extremely difficult to hear correctly. Some of the consonantal symbols thus must be taken as phonemic rather than strictly phonetic, i.e. the values of them vary within certain limits without any resultant change of meaning.

TABLE OF VOWEL SOUNDS

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EXPLANATIONS.

1: tense, close vowel, occurring in all positions: \( \text{i:a} \), where?; \( \text{mi:re} \), stay; \( \text{m'asa'ri:} \), want. It is fully fronted. There are just a few instances, however, where it is drawn back somewhat, into a centralised position, producing a sound that varies between \( \hat{\imath} \) and \( u \). It can hardly be said that \( \hat{\imath} \) has a phonetic value.
1: Meaning never seems to be dependent on this vowel, which sounds rather like the "y" in "pretty", but its occurrence in some words is fairly regular, e.g. fatîr, a paddle; rîgîr, near, as in rîgî r' im, near the house. In these and other instances the vowel is sufficiently clear to justify its inclusion in the alphabet.

1: A relaxed vowel equivalent to the "i" in "bit". It occurs when not under the accent, or when very short and accented. Both types are heard in ɹiɹigiyit, a tree. Not in all instances, however, does an unaccented "i" become relaxed, e.g. ɹigaɹyaɹa, that yonder, in which the initial i is still fairly tense. As an unstressed final, also, the tense form may be found, e.g. xami, you (plural), ɹwârîpi, beach.

e: Is comparatively rare, and appears in the texts chiefly as the first element in the diphthong ei. Occasionally it is found in the body of a word, as a rule apart from the accent: ɹyannejai, give me. It is found as a final in a few words, e.g. xale, or.

e: Very close to the vowel of English "met", and not so open as the French vowel in "père". It is far the commoner sound of e. Examples are too numerous to call for listing here.

A: Actually between the vowel in English man and the fourth cardinal, the French "a" of "la". It is nowhere of phonetic significance, and is chiefly found in the neighborhood of palatal consonants, though not exclusively so. Examples are heard in ɹjâlimat, man, person; ɹwârîpi, beach; ɹmâsi, loom
for weaving; 'pær₁, dry; 'fætæ:t, soon.

a: Approximately the vowel in "father". It is unusual as an initial, all the dialects have developed a velar fricative x or γ in front of what would be an initial a.

o: Very close to the English "o" in "or", but just a little closer, at least when short and unstressed, as in 'farujom, your village and 'dinom, your mother. If the syllable is not closed by a following consonant, the vowel seems to be just a little more tense than in the preceding examples, e.g. xo₀, you (verbal pronoun, singular); and 'e mmaγo, it is good.

o: Like the mid-front e, this vowel is not common as the more open variety, and is close to the "o" of French "notre". It occurs largely in diphthongs, and rarely in some other situations, e.g. do'pi, cut.

u: The open high back vowel is the English vowel in "put", but a little less relaxed. It occurs either under the accent or apart from it, e.g. 'muromur, to make fire by friction; 'podum, your body.

u: Is the vowel in "moon", with full lip-rounding, and does not call for comment.

a: the unrounded "u" heard normally in Japanese and Tamil. It occurs in any position in a word, e.g. usu ri, on top of, and it is particularly common as an element in the diphthong ðu, for which see next page.

Ø: Is the corresponding unrounded ó. It ought, for consistency's sake, to be written e, but this symbol
is less practically convenient. It stands in the same relation to o as u does to u. It does not appear as an initial, but is common either medially or final.

æ: A rare sound, it is like the French "eu" in "peur", "fleur", but without lip-rounding. It can be critical of meaning, e.g. tæ:t, a little, compared with tø:t, bathe.

There is a centralised low vowel, approaching the "u" in "but", but it has not seemed necessary to indicate this very rare sound, which has no semantic value.

**DIPHTHONGS**

The list of diphthongs in Sonsorol is rather long, and several of them are difficult for Europeans. Particularly such a form as a:\[1\] should be noted; it is one in which not only is the first element long, but the second is almost facultative. The following is the list of diphthongs:

æe as in mæe, breadfruit
ai faivi, woman
ae wa'naet, when
ai maik, swordfish; 'taitei, take precedence
a:1 ma:i1, forehead decoration (contrast ma:l, coral)
ao wao, top; maoraor, sweat
au jau, needle; sauruai, my friend
au mauw, war; tawd, puffer fish
a:u sa:u, piece; ta'ma:u, bad
ei lei, agent of action; i'tei, my name
eu Tobi example, in Eilers, pada'ye'unan, tridacna
ou wow, rafter of house
phi  rphi, coconut oil; Tobi ra'horifphi, fog.
Sonsorol prefers phi, as in 'xalifphi, hibiscus,
Ulithi 'xulifphi.

Phi  Pannphi, Palau; urphiap, old woman

HOMONYMS AND NEAR HOMONYMS

Like most other languages, Sonsorol can show examples of homonyms. It would seem that these are not very numerous, but they include the following:

eta
1. to chew betelnut; 2. a stick used in weaving

ul
1. a lobster; 2. to pull, drag

taitei 1. to excel, precede; 2. to shave

Sometimes meaning depends on vowel length only, as in Sonsorol pa:x, excrement, and pax, to defecate - which loses its stress when combined with the verbal particle and so loses its vowel length - 'e pax, he defecates. Small differences in sound may produce serious differences in meanings, as the following pairs of words will show:

mak, tattooing as compared with ma:k, kind of
garfish

'pannu, coconut leaf  Pannphi, Palau
i'tei, my name     i'tphi? who?
teifphi, thirsty    taipvphi, new
phi, tired          phi, new

Examples of apparently meaningless voicing and devoicing of consonants will be given later; the last pair of words but one above will show that a distinction between voiceless (φ) and voiced (v) consonants may sometimes be important, though often it does not seem to be so.
ACCENT OF WORDS AND SENTENCES

Sonsorol has both stress and pitch accent or tone. The musical tone is more noteworthy in Sonsorol than in Tobi (and Ful and Merir usually agree more closely with Sonsorol), but unfortunately it proved to be impossible to make a study of Sonsorol tones by reason of mechanical difficulties, as already mentioned. It may nevertheless be said that tone does not serve to distinguish meaning in this language, i.e., it is not a tonal language, but at the same time the entire speech is rich in tone-variations which only in part coincide with emphasis or other semantic elements. It appears to be emotional rather than linguistic in nature. A study of it is highly to be desired.

The stress accent is marked, but not excessively so; it is, for instance, not so strong as in English or Russian. While there can be little doubt that the accent normally fell on the last syllable but one in the older form of the language, at the present day it may also fall on the final syllable or the last but two. In these instances causes are at work which could only be shown by comparative and historical methods, and which therefore fall outside the scope of the present study.

1. Accent on the Penultimate

The bulk of simple Sonsorol words of two syllables carry the accent on the last but one. By "simple words" is intended words that do not carry suffixes of grammatical import. The addition of such a suffix may cause the stress to change. In the following examples the accent symbol (') is placed BEFORE the accented syllable: 'fa'u', to do, make; 'dewwa, very; e 'lia, it is holy; yanneja'ya'mami, give it to us; yapa'pala, to make a sign.
2. Accent on the Final Syllable

Examples: méta, what?; ríweis, child; ni far, its meaning, purpose; támor, a chief. Final diphthongs also carry the accent on their first element (i.e. Sonsorol diphthongs are 'rising'): ítei, my name; fítouw, how many?; ítɔu, who?; e tæítei, he excels; yə pəu, have power. As a rule, where cognate words exist in other languages, it is possible to show that these accented final syllables were once not final at all, but that a syllable has been lost. In some instances a combination of words with another following raises a final vowel which is not normally heard. Such "facultative" vowels will be treated below. In other instances comparison shows that morphological considerations lie at the root of what seems to be a phonetic peculiarity, e.g. do pi, to cut (wood) is really a transitive form, in which dɔpi has received another final i as a transitive sign. The same applies to mWasarí:, to want; yatoádi: to destroy, spoil.

3. Accent on the Antepenultimate

Sometimes the stress is laid on a syllable more than two from the end, e.g. jàlimat, man, person; tìnarago, put away, do away with; kàmara, his actions. These words are fairly numerous and must be learned by hearing. Sometimes it is possible to suggest reasons for antepenultimate stress, but none that are any use to a learner. As a matter of fact such words are not really but only apparently numerous, being rather common words. The basic rule of the language is still that the stress falls on the last syllable but one of a word.

Occasionally accent may serve to distinguish words, e.g. fāruje, to draw, tatoo; fārɔje, island, village.
4. **Sentence Stress**

Not only has the accent of the individual word to be learned, but also the effect of combining words in sense-groups. Such combinations often involve a change of the stress, which listening suggests may link up with the pitch or tone pattern of the phrases. One characteristic trait of sentence stress is the throwing back of a major accent to the verbal particle, which from the point of view of sense would not be expected to carry an accent at all. In the examples following only the sentence accent is marked for the sake of simplicity, the individual word stresses being neglected:

limaru dabar 'e java, two ducks are swimming.

i kiatº du: Papa Digosra 'e yada pipie ri pºu, I believe God the Father has all power (a phrase from the Catechism).

pipie ri titina 'e mori yanaya, every word has been said.

fitouw na 'e mire? how many of them are there?

Some words are enclitics, e.g. me´tame? what? (as against the simple me´tta), in me´tame xai rama? what are we to say?; frequently i:a, where? advances the accent of the preceding word towards itself by a syllable, emi're-i:a? where does he live? where is he?

5. **Vowel Harmony**

Although the idea that vowels of a root and its affixes should harmonise is not a general principle in these languages, there are occasional examples in which a vowel of one syllable is made to harmonise with the vowel of the preceding syllable. Thus me, a defining particle (see Syntax) may become mo, as in me´tta me i:a kura? What does he know? but me´tta mo xo kura? what do you know? The relative
particle we appears as wo in a similar manner in the combination wo xo, "thou who", and the indefinite tense particle bwe becomes bwo before a back vowel: \textit{e mweri e bwo ut\textsuperscript{a}}, it looks as though it may rain. This change sometimes occurs in a context that still awaits explanation e.g. \textit{e bwo weti papai}, wait for father; \textit{e bwo kie ra rama\'mami}, speak thou to us. Probably \textit{e} in each case should be xo.

6. **Vowel Length**

Vowel length is often very noticeable, e.g. in m\textsuperscript{w}asa\textsuperscript{r}i: want, but it seems only rarely to have semantic value. One instance in which it does has been given above.

7. **Furtive Vowels**

A particular feature of the Sonsorol language is the occurrence of vowels that, while not whispered as a rule, are yet only slightly heard and sometimes not heard at all. They are best called "furtive" vowels, and in this Grammar they are written somewhat above the line, as a\textsuperscript{1}, ma\textsuperscript{1}, etc. Strictly speaking they should be written half-size, but this cannot be done on this typewriter. Such furtive vowels may occur:

1. as finals, after a consonant,
2. after a full, generally long vowel, and before a consonant, when they are acoustically similar to falling diphthongs,
3. after non-final consonants a furtive \textit{i} or \textit{u} produces palatalisation or velarisation (respectively) of the consonants.

Examples:

1. furtive diphthongs: ma\textsuperscript{1}l, forehead decoration;
tala¹k¹, to sail (intr.); ita¹l, their names. The last example shows that the vowel is only furtive and not a real diphthong, because the stem is ita-, name, and the suffix -l or perhaps -1e, their.

2. after final consonants: tala¹k¹, to sail; yametak¹, sick; lil¹, to marry (li = spouse); xotiw¹, east; jät¹, the chin; fitek¹, work; rabut⁰, snake; najdir⁰, edge of canoe; 'talebwɔr⁰u, first month of the year; tali'ar⁰, outermost bar of outrigger.

Such furtive vowels are fully voiced but faint, and as a rule not whispered at all. Sometimes dialects differ in the presence or absence of a furtive vowel, e.g. Son. ma¹k, Tobi ma:k, a large needle fish, swordfish variety. The same division is found in post-consonantal furtive i: e.g. Son. pa:x, Tobi p¹ax, excrement.

3. A furtive i after non-final consonants. The commonest examples are the combinations g¹, k¹, ƞ¹. The last sound is very rare in Oceania but examples are to hand in Sonsorol, and the resultant combinations sound as though a y had been slipped in after the consonant: '(Conv:tu, octopus, sounds rather like 'ngyi:tu'; 'pak¹e, travelling basket, rather like pa-kyé (in French spelling); raig¹e, bracelet, as rai-gyé. Even after an initial long consonant such a furtive vowel is possible; the verb 'to carry' is heard as k:a or k:¹a (to be spelled as kka or kk¹a).

A furtive u may perhaps be better written as a small 'w' in such combinations as b⁻w and m⁻w. In
some instances the sound appears to be more marked and of more regular occurrence: in these the 'w' is written on the line as a full letter, e.g. bwe, indefinite verbal particle, as against the conjunction ba or b\textsuperscript{w}a, that. So m\textsuperscript{w}asa\textsuperscript{r}i:, to want (Sonsorol and Merir word only).

What may be called an occasional furtive vowel or facultative vowel is heard in many instances after a final consonant when a following connected word begins with a consonant, e.g. 'jālimat, man> 'jālimat\textsuperscript{a}ra, that man; pat, a piece cut off> \textsuperscript{b}pat\textsuperscript{a}ri ta:ri, a piece of rope. Vowels of this type are exceedingly common, and in most cases can be shown to have been the original final vowels of their respective words. They are best called "facultative" vowels, as they are revived only under certain circumstances, and the vowel that thus becomes a break between two consonants is determined by the original vowel ending of the word.

**TABLE OF CONSONANT SOUNDS**

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<thead>
<tr>
<th>Labial</th>
<th>labio-dental</th>
<th>dental-alveolar</th>
<th>palatal</th>
<th>velar</th>
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</thead>
<tbody>
<tr>
<td>Plosives</td>
<td>p, b</td>
<td>t, d</td>
<td>c</td>
<td>k, g</td>
</tr>
<tr>
<td>Nasals</td>
<td>m</td>
<td>n</td>
<td>η</td>
<td></td>
</tr>
<tr>
<td>Fricatives</td>
<td>f, v</td>
<td>s (z), ʒ (θ)</td>
<td>j</td>
<td>x, γ</td>
</tr>
<tr>
<td>Lateral</td>
<td></td>
<td>(l)</td>
<td>(r)</td>
<td></td>
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<tr>
<td>Rolled</td>
<td></td>
<td>r</td>
<td></td>
<td></td>
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<tr>
<td>Continuants</td>
<td>w</td>
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<td>(w)</td>
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</tbody>
</table>

Some of the consonants call for explanation. The group of labials is practically the same as in English, but they are never aspirated. The same is true for the labio-dentals
There is certain instability about ɹ and ɬ; especially in Tobi there is a tendency towards ɬ. The dental-alveolar plosives are, as indicated, a little variable in their formation. The ɬ tends to be dental; ɭ, however, is interdental, something like English th in there. The strict phonetic symbol for the latter is ɭ, but the value of 'th' is so regular that a simple ɭ may be printed with the understanding that it is always to be made interdental. There is a tendency to use z for it in Pul, but this happens only very occasionally in Sonsorol. Similarly, Sonsorol ɹ is frequently replaced by w in Pul. The fricative ɭ becomes s in some types of speech. Sonsorol s tends to be a little palatalised; in Tobi it is replaced by the Palatal plosive ʃ (not heard in English, but resembling a very light ch, e.g. Son. saˈɣai, fish > Tobi caˈɣai; Son. fa:s, pandanus > Tobi vaːc. The unvoiced 'th' as in 'thick' (symbol θ) is heard quite often in conversation as a variant on ɭ in all dialects, especially at the beginning of a phrase or in an isolated word which commences with this sound. It does not need to be shown in spelling because it has no semantic value.

The symbol j is used with the value of y in English 'yes'. The two symbols x and y are the unvoiced and voiced velar fricatives - the former the ch heard in Scottish loch. The voiced y is very common, and although to some extent it seems to interchange with x, it may also stand by its own right in many words. The natives write a g for it, not distinguishing it from a hard g, but for x they have been taught to use the 'h' as in Spanish, because the Mission was Spanish. The γ is substituted in Tobi for the l of the other three islands, because the Tobi people can not pronounce the peculiar Sonsorol l. Thus li, spouse, becomes γi at Tobi; jālimat, person, becomes jaγimat, and so on. This is a
regular sound-interchange. The velar \( \gamma \) also replaced \( k \) at
times in Sonsorol itself: \( \text{fi'tekî} \), work, may be heard as
\( \text{fi'te}_\gamma(1) \) but not as \( \text{fitex}(1) \). The 'l' is very peculiar, and
it is characteristic of the Group (except Tobi). It is
shared with Ulithi. It is at once palatal, like the \( l1 \) in
continental Spanish, and velar. The Hamburg Expedition had
trouble with it, and while they sometimes write a plain 'l',
they almost as often write 'gl' - as did the present author
in the first stages of his work. But the natives regard the
consonant as a single sound, and not a combination of two.
The symbol \( \hat{1} \) suggested in the Table is not very appropriate,
because the sound is not that of English 'people' at all.
In general a plain \( l \) can be used in printing because the
sound has no competitor in the language, and it will be used
in this study. Phonetically the sound may be described as
a palatal \( l \) with simultaneous velar friction. The \( r \) is
slightly rolled at all times (not just flapped). The \( η \) is
the velar nasal of sing; \( ηg \) as in finger also occurs.

**Consonant Length**

A consonant may be lengthened exactly as a vowel
can, and this occurrence is noticeable in all the dialects.
It may be initial or medial, but not final. Initial
lengthening often becomes practically medial by the
combination of preceding morphemic elements with the word
bearing the initial lengthening, and probably as a matter of
history that is how initial lengthening arose. To the native,
that is to say, the consonant is really not initial but medial.
Thus \( '(m)\text{mawo} \), good, is usually heard in the form \( é\ m\\text{mawo} \),
he, she or it is good, or, e.g. \( 'xə \ m\text{mawo} \), you are good.
The following are examples of consonant lengthening:

\( '(m)\text{meri} \), to laugh, as against \( m\text{e:ri} \), clew line of sail.
\( '(m)\text{ma} \), a boil; \( '(m)\text{məni} \), remember (but reduplicated
as 'meŋi-meni).
(k)k¹'a, to carry, as in 'i-kk¹'a, I carry).

Medial lengthening is seen in:
minna, (that, (near you)), also heard as menna and
sometimes even mena, in each case with a very close
e, apparently depending on degrees of emphasis, and
coming under rules of sentence phonemics; 'xammat,
to bale a canoe; 'xammo-mue, to close a door; 'pannu,
a coconut leaf; Pan'nu, the Palau Islands.

In such words lengthening is usually easy to
hear, but in very quick speech it may sometimes be overridden.
The above lists are, of course, far from exhaustive.

**LOAN WORDS**

In the vocabulary will be found quite a number of
foreign loanwords. The interesting point about them is,
that whereas in Palau such words are almost all Spanish, German
or Japanese, in the Sonsorol Group they are nearly all English.
Where, in Palau, the Malay word **bras** is heard for 'rice', in
Sonsorol the English **rais** is heard. The verb 'sing' and the
noun 'singing' were given as **sinen¹**. The natives insisted
that this is a real Sonsorol word - which is extremely hard
to believe. Amongst such English loanwords from English,
whose history is entirely unknown, will be found, e.g. katem
(photonically k-təm), 'cut em', for 'knife' (though there are
native words also); wasi or wasu³ for 'wash', 'sukyerkein for
'sugarcane'. For the last, Palau has an Indonesian root.
Some objects not found in Sonsorol but imported from Palau,
have modified Palau names, e.g. bu:, betel nut. The word for
"spirit", "ghost" is also Palau: 'jaroddû, Palau ya'lid,
Indonesian (h)antu. As Indonesian n become l in Palau but
not in Sonsorol, this is clearly a direct loanword from Palau.
Presumably this betokens the importing of certain religious ideas from Palau, for there is also a Sonsorol word 'toutubë'.