# SIL-Mexico Branch Electronic Working Papers \#008: The nineteenth century Seri word lists: comparison and analysis 

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## Version note

This version presents the basic introduction and all of the data found in Ramírez (1861), Tenochio (1852), Tenochio (n.d), and Tenochio (1860), most of Peñafiel's data that is accessible, plus a smattering of data from the other collectors, including the much more extensive wordlist of Pinart (1879). Later versions will add the data from the other sources. Discussion of the data is limited here primarily to the ones that have been fully incorporated into the comparative list.

## 1 Introduction ${ }^{1}$

The Seri language has been spoken along the coast of northwestern Mexico since prehistoric times (Bowen 1976, Bowen 1983) without any documentation being made of it until relatively recently. In the second half of the nineteenth century, several lists of Seri words were made. These represent the earliest known, accessible documentation of the language. (Although the Jesuit priest Adamo Gilg interacted with the Seris for some eighteen years during the last part of the seventeenth century, the book about the language that he reports as having written (DiPeso \& Matson 1965:48) has not been found.) ${ }^{2}$

There was actually a slight flurry of activity to document the language during the second half of the nineteenth century because a few people were interested in its relationship to other languages and were intrigued by the very different culture of the people who spoke it. ${ }^{3}$ Two agencies were especially involved: the Sociedad Mexicana de Geografia y Estadistica and the Bureau of American Ethnology. Seven word lists were collected during the nineteenth century. One is too short to make any real contribution and has been generally ignored (see section 2.1 ). The other six are of varying length and quality. Two of the seven were taken down by English speakers (through Spanish interpreters), four by Spanish speakers, and one by a French speaker who was also conversant in Spanish. It is believed that a few of the lists were obtained from the same Seri man, Kolusio, who was living in a Seri community that was more accessible than the communities where the majority

[^0]of Seris lived. ${ }^{4}$ McGee's (1989) monograph includes many details about the acquisition of the vocabularies that preceded his own, which was the last of the century. Bancroft (1886:704) expressed his sentiments (shared by other people of that period as well) as follows: "Few of the words [of the "Ceri" language] are known, and the excuse given by travelers for not taking vocabularies is, that it was too difficult to catch the sound. It is represented as extremely harsh and guttural in its pronunciation and well suited to the people who speak it, who are described as wild and fierce."

These nineteenth century lists were followed in the twentieth century by brief forays at data collection, including Kroeber (1931), until Edward Moser and Mary Moser began a project that spanned several decades, resulting in the publication of E. Moser \& M. Moser (1961), and M. Moser \& Marlett (2001, 2005), among many other types of documentation of the language and culture. ${ }^{5}$

As a result of having these lists of words from the nineteenth century, we are given a small window through which to look at the Seri language as it was spoken in a former time. With these data we can make some fairly good hypotheses about the phonetics of the language in the nineteenth century, as well as make a few observations about other changes between then and now.

In section2 I present general information about each of the word lists. In sections3-9 I present various things that we can learn from them, including about the phonological system, phonetics, morphology, syntax, and even the semantics of the Seri language in the nineteenth century. The data themselves are presented in appendix A and are organized in "chapters" in the style used in the Intercontinental Dictionary Series (see M. Moser \& Marlett 2001, for example). The presentation also includes the modern Seri phonemic forms, based largely on M. Moser \& Marlett (2005). More details about the actual presentation of the data are given at the beginning of appendix A.

In all of this discussion I am assuming that the language that is documented in these word lists was not radically different from the language spoken today. I use the phonetics, phonology, morphology and syntax of modern Seri as the point of departure when looking at these lists. Some differences between modern Seri and nineteenth century Seri are evident. Some of these differences are easily understandable as a result of internal reconstruction that has already been done. Some differences that are evident, based on these wordlists, are not understandable, however, except as indicating that the language lost particular lexemes during the interval. In this regard, see especially the difficulties with the plural personal pronouns, (72) and (74) in appendix A.

## 2 Details about the word lists

This section provides background information about the seven word lists taken down and either published or archived in the nineteenth century. The lists are discussed in chronological order.

[^1]
### 2.1 The Ramírez \& Lavandera list (1850)

Sometime in 1850 a man named José F. Ramírez, ${ }^{6}$ who was secretary of the Sociedad Mexicana de Geografía y Estadística, asked D. Diego Lavandera to acquire some Seri words in order to investigate a "common belief (creencia común)" (Ramírez 1861:148), which Ramírez doubted, that the Seri tribe spoke Arabic and could understand a Moor (moro) at first meeting. This belief had been communicated to Ramírez by the same D. Diego Lavandera, who was apparently a bishop (the D. referring to diocesano) somewhere in the north of the country, perhaps in Sonora. Eleven words were obtained from some sources conveniently at hand to Ramírez, in three dialects of Arabic: Arabic of Yemen, Arabic "of Kahim", ${ }^{7}$ and literary Arabic. Perhaps it was a limitation of the sources that accounts for the very unusual collection of words that were elicited and then compared. The results were included in a letter, written December 20, 1850, in Durango, to some other clergyman (referred to only as V.S. (Vuestra Santidad, "Your Holiness"), presumably higher in rank than Lavandera, and that letter was submitted in early 1851 to the Sociedad Mexicana de Geografia y Estadística for publication in its Boletín. The work was reviewed and approved for publication in January 1851 (see the review (dictamen) that follows the article), but (for reasons not indicated anywhere, to the best of my knowledge) the letter, the data, and the review itself were not published until 1861, as Ramírez (1861). McGee (1989:96) cited the Ramírez article, but the eleven words were not reproduced in his volume, nor in the section on lexicology written by J. N. B. Hewitt (of the Smithsonian's Bureau of Ethnology), who may not have had access to the list. Hernández (1904) also does not include the list, considering it basically irrelevant given the much more extensive data that was obtained in later years (p. 237), but on this point (as on many others in his work) it appears that he was copying McGee (1989:296) who points out that "this pioneer vocabulary [of $1850 / 1861$ ] is superseded by those of later date." ${ }^{8}$

Bancroft (1886:705) presents a list of eleven words (with English glosses) in his discussion of the "Ceri" language without explicitly indicating their source. Given the fact that Bancroft mentions the Ramírez (1861) article, however, and lists exactly eleven words, one supposes that they are the same, and this supposition is confirmed by a reference to this fact in McGee (1989:104). In December 2009 I was able to see the original Ramírez article in the archive of the Sociedad Mexicana de Geografia y Estadística in Mexico City. The data are listed in (1) separately from the other data since for the most part they show virtually no similarity whatsoever to modern Seri, unlike the data in the other word lists. They are listed here in the order that Ramírez presented them. ${ }^{9}$

$$
\begin{array}{lll}
\text { a. } & \text { jipe } & \text { 'better' (mejor) }  \tag{1}\\
\text { b. } & \text { tanjajipe } & \text { 'good' (bueno) }
\end{array}
$$

[^2]| c. | cai | 'horse' (caballo) |
| :--- | :--- | :--- |
| d. | migenman | 'room (chamber)' (cámara) |
| e. | amen | 'more' (más) |
| f. | tungurá | 'less' (menos) |
| g. | jinás | 'little' (poco) |
| h. | jidja | 'woman' (mujer) |
| i. | jiciri | 'population' (población) |
| j. | junin | 'milk' (leche) |
| k. | amat | 'wine' (vino) |

Of these words, only the first is undoubtedly a Seri lexical item, corresponding to $/ \chi$ iipe/ (RL.EMPH-good); see (2), ((=251) in appendix A). ${ }^{10}$
(2) B 'good' (125) : k î p i
16.710 'good' (SBJ.NMLZ-good) $\quad \mathrm{k}$ 'ii p $\varepsilon$ qu ii $\mathbf{p}$ e

B 'bad' (126) : h o_ m îi p
16.710 'it is not good' (RL.EMPH-NEG-good) : $\chi$ o m 'ii p $\varepsilon$
$\mathbf{x} \mathbf{o}$ m ii pe
The second one may be related to it, but the modifier is unknown (and it is odd that the word for 'good' is more complex than the word for 'better' while at the same time sharing a root with it).

The third is a Spanish loanword, and indeed this does exist as such (almost) in modern Seri; see (3) $((=80))$ in appendix A).
(3) Pt 'caballo' (8) : k a v a i
3.410 'horse' : k 'a a j
c a a $\mathbf{y}$
The last one looks like the word for 'fermented beverage', /Ramaa $/$ /, except that the last consonant is wrong (and not even close). The others are simply bizarre as Seri words. ${ }^{11}$ It seems that these data were rightly disregarded by later researchers, and it remains a puzzle as to what they really represent. But they served Ramírez's purpose (or so he thought) of removing all doubt that Seri is not a dialect of Arabic.

### 2.2 The Bartlett list (1852)

United States Boundary Commissioner John R. Bartlett made a list of approximately 170 words in early 1852 during a brief visit to northwestern Mexico (Bartlett 1854, McGee 1989:96ff). According to Bartlett's memoirs (Bartlett 1854:vol. 1, p. 464), the list was obtained in a single three-hour session that the governor of the state of Sonora helped arrange. A young man named Kolusio was the one who provided the data and Bartlett was assisted in the elicitation by "several

[^3]young Mexican gentlemen of education" (p. 464). Curiously, however, the only word for 'my son' that Barlett records is the term that is only used by women (meaning literally 'the one with whom I was pregnant'). See (4) $((=59)$ in appendix A). It is not clear how this anomaly is to be explained.
(4) B 'my son' (10) : i_ k e t
2.410 'my child (of woman)' : ? 'ii k $\varepsilon$ t \# k t 'a m (1POSS-OBJ.NMLZ-pregnant.with male)

## h ii quet \# ctam

Bartlett does not include the list in his otherwise extensive and detailed memoirs, however. The list was archived in the Bureau of American Ethnology (Tenochio 1852), and is now part of the National Anthropological Archive, housed at the Smithsonian. Gatschet (1886) includes some of his data on page 122. Hewitt (1898:299-344) partially reproduces Bartlett's data in his comparative lexicology, which Hernández (1904) presents as well. In 2009 I obtained a photocopy of the Bartlett data from the Smithsonian; which were hand copied by George Gibbs as part of the archiving process (according to the archival information provided by the Smithsonian). In appendix A I present all of the data from Tenochio (1852) and Tenochio (n.d) (the latter only in relating to the numbers, some of which also appear in Tenochio 1852).

It is interesting to note that Bartlett provides the first documented recording of the Seri word for themselves. For the word /komkaak/ [koך'kaak] 'Seri people' he wrote komkak; see (5) ( $(=54)$ in appendix A).
(5) B 'Indians, people' (14) : k o m_ k a k

Pt 'la gente' (1) : k o m k a k
L 'gente' (24) : c o m c á ckg
Mc 'name of tribe' : $\mathrm{k} \mathrm{u}{ }^{\mathrm{n}-} \mathrm{k}$ a $\mathrm{k}^{\prime}$
2.2xxa 'Seri people' (Seri.person-PL) : k o m k 'aa k
c om c aac

### 2.3 The Tenochio list (1860)

A man named D. A. Tenochio (about whom I do not know more) obtained a list of approximately ninety words sometime around 1860, probably from the same man Kolusio mentioned above in section2.2, and sent it to the Sociedad Mexicana de Geografía y Estadistica. Apparently this list was not published in their bulletin (unlike the Lavandera \& Ramírez list) but it was used by the well-known Mexican historian and linguist Francisco Pimentel in his classification of the Seri language. Some of the words (but apparently not all) were included in Pimentel's volumes published in 1862, 1865 (first edition, two volumes) and Pimentel (1875) (second edition), according to McGee (1989:102). Hewitt copied the list from somewhere and archived it in 1899 in the Smithsonian on four legal-size pages). He organized the list in (approximate) alphabetical order by the English glosses; no indication is made of who translated the Spanish glosses into English. Some of the Spanish glosses contain errors that are not understood, such as the use of 'secondo' rather than 'segundo'. I assume these were introduced by Hewitt. Hewitt (1898) partially reproduces Tenochio's data in his comparative lexicology. Hernández (1904:258-260) includes Hewitt's archived list
exactly in his volume (following the same English alphabetical order), except that most of the errors in the Spanish are eliminated. ${ }^{12}$

### 2.4 The Pinart list (1879)

The well-known French explorer and philologist Alphonse Pinart made yet another list (about 600 words and some phrases) in 1879 , almost certainly using the same Kolusio as his source of data since access to other speakers was prevented by an outbreak of hostilities at that time (McGee 1989:106ff). A copy of the data were filed with the Bureau of American Ethnology (see Pinart 1879), but not published. However, they were used by Swiss-born linguist Albert Gatschet in his comparison of Seri and the Yuman languages (Gatschet 1883, Gatschet 1886) and some data appear in Hewitt (1898). Twelve pages of data from Pinart are included in Hernández (1904). ${ }^{13}$ Hernández also includes one page of queries (written in French) from Gatschet regarding the problems Gatschet was having in interpreting Pinart's handwriting and the symbols. The words are given there with English as well as Spanish glosses. According to a note filed with the data, the translations (into English, one presumes) were made by J. N. B. Hewitt. These are not always straightforward translations of each other. For example, the Seri word taheXkue (as transcribed in Pinart) is glossed as 'isla' in Spanish and as 'Tiburon Island' in English. The latter happens to be more accurate since this is the name generally used today to refer to Isla de Tiburón (or Isla Tiburón) which is a central landmark in the Seri traditional area of residence, as well as to a particular camp on that island (M. Moser \& Marlett 2005:566). It is a name rather than a common noun.

Since Pinart's vocabulary was filed with the Bureau of American Ethnology, it also eventually became part of the National Anthropological Archive (now in the Smithsonian). The present paper draws its data from a copy of that archived list and presents only the Spanish glosses.

It is interesting to note here that Pinart provides the first documented recording of the singular Seri word for 'Seri person'/kmiike/ ['kw̃iñke]; Pinart recorded it as kmike; see (6) (which (=53) in appendix A). It is glossed in his list as 'Seri' in Spanish and 'Seri (person), (people)' in Hewitt's translation. (The translation 'people' is inaccurate.)
(6) Pt 'Seri' (1) : k m i k e

L 'indio' (23) : cog m i ckg
2.2xx 'Seri person' : k m 'ii k $\varepsilon$
c miique

### 2.5 The Peñafiel list (1885)

One section (pp. 265-269) in Hernández (1904) is followed by the name of Dr. Antonio Peñafiel, who was the Director General de Estadistica of Mexico (Hernández 1904:237). The date 1885 precedes Peñafiel's name in the sentence "It is a copy of what they submitted from Hermosillo on November 16, 1885, to the Dirección General de Estadística de México" (my translation - SM). ${ }^{14}$ These few pages contain data that are not found in other lists, including some phrases, the Lord's

[^4]Prayer (not readily understood today, if at all) and what are supposed to be the conjugation of the verb meaning 'be' (complete with the "pretérito pluscumperfecto") and the declensions of nouns and pronouns. ${ }^{15}$ Attempts to elicit data of this sort are usually unsuccessful since one does not know enough about the language early in one's contact in order to know what to elicit and how to elicit it. These data strongly confirm this generalization. Nevertheless, out of the pool of mysterious data, a few items may be understandable. ${ }^{16}$ Nevertheless, Hernández does not describe this list in the introductory remarks to his collection (pp. 237-239), which is rather puzzling. McGee (1989) also does not make reference to any linguistic work by Peñafiel. The present paper draws only on the data available in Hernández (1904).

### 2.6 The Loustaunau list (1887 or 1885?)

Joaquín Loustaunau, who later became a Sonora state congressman, made a list of about 250 words for the Dirección General de Estadística de México. He obtained these data from the same Kolusio mentioned above, according to Hernández (1904:237). The section in Hernández (1904:261-264) indicates that they were obtained on 10 May 1887, although the introduction to the word lists later in the book (Hernández 1904:237) says that they were obtained in 1885. The discrepancy in the date is not mentioned nor explained. Dr. Peñafiel apparently copied Loustaunau's list from the archives and made the data available to Hernández. These data were not included in McGee (1989), which is surprising since McGee otherwise was very careful to discuss all possible sources of information. The data included in the present paper are taken from Hernández (1904:261-264), who fortunately included them in his work.

### 2.7 The McGee list (1894)

In November of 1898 W. J. McGee published a word list, collected by himself in 1894 from a man he identified as Maschem, as part of his report for the Bureau of American Ethnology (McGee 1989). ${ }^{17}$ The list does not actually appear in that monograph, however. According to Hewitt (1898:299), a linguist working with the Smithsonian who wrote the "Comparative Lexicology" part of the 1898 report, the vocabulary was "entered in Powell's Introduction to the Study of Indian Languages, second edition, in November 1894," presumably referring to Powell (1894), but I have

[^5]not been able to verify this yet. McGee's transcriptions appear to be the most unreliable of those made during the century (despite the positive evaluation by Hernández 1904:237), although his data are also copious. I utilized the copy of it that appears in Hernández (1904:240-245).

## 3 Phonology and general transcription issues

The symbols most commonly used in the nineteenth century word lists for the phonemes of Seri (using the modern ones as points of reference) are shown in Table 1. It can be seen from the inconsistencies that some sounds were particularly problematic for the transcribers.

Among the obstruent stops, the labialized velar stop $/ \mathrm{k}^{\mathrm{w}} /$, which in modern Seri (and evidently in the nineteenth century as well) may occur in syllable codas as well as onsets, caused some problems. The stops $/ \mathrm{p} /$, /t/, and $/ \mathrm{k} /$ did not present difficulties (although Loustaunau transcribed $/ \mathrm{k} /$ in a variety of ways).

The fricatives all caused problems, it seems. The voiceless lateral fricative / $\ddagger$ / - a relatively uncommon sound in the languages of the world - was the most difficult. Each transcriber dealt with it in one or more various creative ways, not necessarily consistently. See the words for 'red' (241), 'blue/green' (242), and 'yellow' (244), for example. The distinction between the velar fricative $/ \mathrm{x} /$ and the uvular fricative $/ \chi /$ was also problematic, as were the labialized versions of these. The voiceless palatoalveolar fricative $/ \int /$ presented a challenge. It was represented as $s$ rather more frequently than one might expect. (It may be that some of the problems are only typographical. One notices that the typeset versions of the lists that appear in Hernández (1904) omit certain diacritics that appear in the known archived lists; thus reliance on Hernández (1904) for data automatically means a higher degree of uncertainty about the accuracy of the data.

Pinart sometimes transcribed the glottal stop as $h$ (perhaps), but most people usually omitted it entirely. See the word (9) for 'earth' for an example of glottal stop in word-initial position. Glottal stop is contrastive with the lack of glottal stop in this position, but it is not easy to hear. (A salient context is simply comparing first person possessor /Ri-/ with third person possessor /i-/, for possessed nominals other than kinship terms. Sometimes Pinart wrote an initial $h$ in words that do not have a glottal stop in modern Seri, which suggests that a strong conclusion cannot be drawn about that part of his transcription.

Glottal stop is quite easy to hear in intervocalic position, and transcribers sometimes did write something (an $h$ ) for words that had a glottal stop in intervocalic position. See the words for 'plant, tree' (25) and 'yes' (254), but compare also 'no' (255).

Glottal stop in final position, as in the word for 'sun' (29) , is also easy to hear, but it is given a considerable range of transcriptions in the different lists.

The Seri vowel system is phonetically assymmetrical, although phonologically symmetrical (Marlett 1981:2). It does not have a vowel /u/ although the /o/functions as if it were high like $/ \mathrm{i} /$, and is very occasionally - but not commonly - heard as closer to [u]. There are relatively few instances of $u$ written in the nineteenth century word lists. This suggests that the pronunciation of the vowel /o/ was similar to the modern pronunciation. It is unclear why sometime the vowels are very different between the nineteenth century lists and modern Seri. See (165), (166), and (263) for example.

The symbols $v$ and $b$ occur with some frequency in the different lists, which is interesting since nothing like these sounds (nor [w]) occurs in modern Seri. In some cases it may be that the $v$
represents some kind of transitional sound between a round vowel and another vowel. But the presence of $v$ word initially in a word such as for 'star' (31), a $b$ intervocalically in a word such as for 'antelope jackrabbit' (87), and a $b$ word finally in a word such as the one for 'air, wind' (35) are inexplicable unless there was something else there historically that has now been lost. One of the words in which $v$ and $b$ appear is (32), which happens to contain a root that begins with an empty consonant, according to the analysis presented in Stemberger \& Marlett (1983).

The correspondences between phonemes and transcriptions presented in Table 1 ignore the occasional acute accent next to a consonant or over a vowel in transcriptions since it has no clear interpretation. Double consonants are also ignored (see section 4.1), as are double vowels.

## Table 1: Phoneme-transcription correspondences

| Modern | B | T | Pt | Pf | L | Mc |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Phoneme | (Bartlett) | (Tenochio) | (Pinart) | (Peñafiel) | (Loustaunau) | (McGee) |


| Stops |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| /p/ | p (96) | p (34) | p (36) | p (77) | p (41) | $\begin{aligned} & \mathrm{p}(36), \mathrm{fp} \\ & (23) \end{aligned}$ |
| /t/ | $\begin{aligned} & \text { t (108), t'h } \\ & \text { (188) } \end{aligned}$ | t (9) | t (9) | t (10) | t (14) | t (9) |
| /k/ | $\begin{aligned} & \text { c }(267), \text { k } \\ & (34), \text { ck }(21), \\ & \text { ch }(17) \end{aligned}$ | $\begin{aligned} & \text { k (34), c } \\ & \text { (64) } \end{aligned}$ | k (39) | $\begin{aligned} & \text { c (10), k } \\ & (171) \end{aligned}$ | $\begin{aligned} & \text { c (44), ck } \\ & \text { (41), ckg } \\ & \text { (53), qu (49) } \end{aligned}$ | $\begin{aligned} & \text { k (39), kh } \\ & \text { (33), qu } \\ & \text { (37), gh } \end{aligned}$ |

$/ \mathrm{k}^{\mathrm{w}} / \quad$ qu (191), qhu uk (48), cu kue (22) kué (47)
(190), ghu (190)
(201), que
(133), cu (262)

Fricatives

| $/ \Phi /^{18}$ | f (116) | f (172) | f (116) |  |  | f (38) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| /s/ | $s$ (24) | $\begin{aligned} & s(50), \mathrm{z} \\ & (244), \mathrm{x} \\ & (152) \end{aligned}$ | s (50) | s (27) | s (50) | s, sh (27) |
| /4/ | $\begin{aligned} & l(52), \text { hl } \\ & (110), \text { tl (31), } \\ & \text { yl (121), s } \\ & (122), \text { lch } \\ & (163), \text { chtl } \\ & \text { (193), chl } \\ & \text { (195), sl } \end{aligned}$ | $\begin{aligned} & 1 \text { (193), sk } \\ & \text { (191), slh } \\ & \text { (242), xl } \\ & \text { (39), hl } \\ & \text { (34), ls } \\ & \text { (121) } \end{aligned}$ | $\begin{aligned} & 1(40), 11 \\ & \text { (18), Xl } \\ & (118), \\ & 1 X^{\prime}(121) \end{aligned}$ | $\operatorname{tlg}(176)$ | 1 (244) | $\begin{aligned} & \text { ltt (39), } \\ & \text { lqt (244) } \end{aligned}$ |

[^6]| Modern <br> Phoneme | B <br> (Bartlett) | $\mathbf{T}$ <br> (Tenochio) | Pt <br> (Pinart) | Pf <br> (Peñafiel) | L <br> (Loustaunau) | Mc <br> (McGee) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { (202), lcht } \\ & (240) \end{aligned}$ |  |  |  |  |  |
| / $/ 1$ | schr (29), sch (81), sr (51), s (30), sh (94), hr (52), rch (127), sc (204), hsch (208), sy (234), rr (263) | $\begin{aligned} & \text { r (29), s } \\ & \text { (184), sr } \\ & (189), \mathrm{z} \\ & (94) \end{aligned}$ | s (29) | sh (29) | s (29) | sh (31), s <br> (29), ssch (30) |
| /x/ | $\begin{aligned} & \text { h (31), k, X, } \\ & \text { ch (14), kl } \\ & (33), \text { lch }(65), \\ & \text { chl (105), l } \\ & (152) \end{aligned}$ | $\begin{aligned} & \text { j (49), jh } \\ & \text { (31), ks } \\ & \text { (167), jl } \\ & \text { (185), jhj } \\ & (145) \end{aligned}$ | $\begin{aligned} & \mathrm{X}^{\prime}(12), \\ & \mathrm{kx} \\ & (184), \mathrm{lX} \\ & (24), \mathrm{Xi} \\ & (33) \end{aligned}$ | j (31) | gglesi (33), <br> gg (24), glh <br> (31) | $\begin{aligned} & \text { k (31), kh } \\ & (33), \mathrm{X} \\ & (184), \mathrm{lk} \\ & (23) \end{aligned}$ |
| $/ \mathrm{x}^{\mathrm{w}}$ / | ho (47), qua (32) | $\operatorname{ch}(190)$ | Xo (32), <br> Xŭ (47) | $\begin{aligned} & \text { oj (256), } \\ & \text { j (47) }{ }^{19} \end{aligned}$ | geg (32), | ukh (32) |
| /X/ | ch (19), chk (85), h (20), sh (21), k, chh (132), rch (170), kh (179), hr (186) | hj (19), jtk (186) | X (19) | $\begin{aligned} & \text { ck (30), j } \\ & (19), \mathrm{jg} \\ & (132), \mathrm{g} \\ & (135) \end{aligned}$ | $\begin{aligned} & g(42), \text { gg } \\ & \text { (19), ck (30) } \end{aligned}$ | $\begin{aligned} & \text { chh (42), } \\ & \text { hk (19), r } \\ & (37), \mathrm{k} \\ & (20) \end{aligned}$ |
| / $\mathrm{X}^{\mathrm{w}}$ / | hu (188) | j (187) |  |  |  |  |
| Sonorant consonants |  |  |  |  |  |  |
| /m/ | $\begin{aligned} & \mathrm{m}(28), \mathrm{n} \\ & (184) \end{aligned}$ | m (28) | m (28) | m (28) | m (28) | $\begin{aligned} & \mathrm{m}(28), \mathrm{n} \\ & (184) \end{aligned}$ |
| $\begin{aligned} & / \mathrm{m} / \text { after } \\ & / \mathrm{k} / \end{aligned}$ | m (49) | m (49) | m (49) | m (49) | m (49) | m (49) |
| $\begin{aligned} & / \mathrm{m} / \text { before } \\ & \text { /k/ } \end{aligned}$ | m (54) |  | m (54) | m (78) | m (54) | ${ }^{\mathrm{n}}$ (54) |
| /n/ | n (107) | $\begin{aligned} & \mathrm{n}(117), \mathrm{m} \\ & (167) \end{aligned}$ | n (33) |  | n (33) | n |
| /j/ | y (120) | $\begin{aligned} & \text { y, ll (111), } \\ & \text { i (64) } \end{aligned}$ |  |  |  |  |

[^7]| Modern <br> Phoneme | B <br> (Bartlett) | $\mathbf{T}$ <br> (Tenochio) | Pt <br> (Pinart) | Pf <br> (Peñafiel) | L <br> (Loustaunau) | Mc <br> (McGee) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| /R/ (initial) | $\varnothing$ | $\varnothing$ | h (118) | $\varnothing$ (44) | $\square$ | $\varnothing$, k (19) |
| $\begin{aligned} & / \text { /intervocalic) } \\ & \text { (int } \end{aligned}$ | $\varnothing$ | $\varnothing$ | h | $\varnothing(136)$ |  |  |
| /R/ <br> (final) | $\varnothing$ (29) | $\varnothing$ | $\varnothing$ (29) | j (29) | ck (29) | k (29) |
| Vowels |  |  |  |  |  |  |
| /a/ | a (14) | a (9), ah (27) | a (14) | a (9) | a (14) | a (39), û <br> (9), ah <br> (36) |
| /ع/ | e (20) | e (154) | e (20) | e (28) | e (154) | a (20), ah <br> (20), û <br> (11), â <br> (28), êah <br> (29) |
| /i/ | i (28) | i (28) | $\begin{aligned} & \text { i (28), e } \\ & \text { (81) } \end{aligned}$ | i (28) | i (28) | ê (28) |
| /o/ | o (24) | $\begin{aligned} & \text { o, oa } \\ & (141), \text { u } \\ & (56) \end{aligned}$ | $\begin{aligned} & \text { o (24), u } \\ & (185) \end{aligned}$ | o (10) |  | $\begin{aligned} & \mathrm{o}(39), \mathrm{u} \\ & (184) \end{aligned}$ |

Vowel
length

## 4 Phonetic facts

### 4.1 Consonant strengthening and vowel lengthening

A salient phonetic effect of stress in Seri appears on the consonant and vowel that follow the stressed vowel if the (unstressed) consonant and vowel are not in a suffix (Marlett 1981:3-6, electronic version; Marlett, Moreno \& Herrera 2005:119). The consonant is strengthened in its articulation - perceived as length in many cases - making it especially strong if the stressed vowel is short. Thus the sequence 'VCV is phonetically typically ['VC:V:]. (The stressed vowel may be short or long.) As shown here, a vowel that follows such a consonant is also lengthened.

It seems clear that some of the nineteenth century transcribers heard the consonant length, although (not surprisingly) none of them wrote it absolutely consistently. They often wrote consonants in this position with double consonants or something analogous. One example of many that demonstrate their awareness of the phonetic length is the word for 'star', (31). This word is ['af:o'x] in a narrow phonetic transcription today. Double consonants also appear intervocalically in 'sea' (20), 'sky' (28), 'moon' (30); and before a consonant in 'earth' (9).

Most data from Bartlett do not show any clear evidence of this consonant lengthening. Two examples may be 'darkness' (34) and 'white-winged dove' (84).

### 4.2 Nasal assimilation to point of articulation

The consonant /m/ assimilates to the point of articulation of an immediately following consonant when the nasal occurs in an unstressed syllable, unlike /n/ (Marlett 1981:8-9, electronic version; Marlett, Moreno \& Herrera 2005:120). This phonetic process was evidently not in play yet in the nineteenth century, except perhaps by the very end (as illustrated by McGee's data, although nothing about McGee's data is certain). This is illustrated by the word for 'Seri people' (54) in appendix A.

The word for 'old woman' (66) is a bit anomalous since it might be expected to have an $m$ in the lists, but appears with $n$ in the two lists in which it does appear. (It transparently has the etymology /kmaam kaii/ 'woman mature'.)

### 4.3 Nasal velarization

The consonant $/ \mathrm{m} /$ also assimilates to an immediately preceding velar stop, unlike $/ \mathrm{n} /$ (Marlett 1981:8, electronic version, Marlett, Moreno \& Herrera 2005:120), producing a nasalized labial-velar approximant. This phonetic process was not operating in the nineteenth century. (We know from E. Moser \& M. Moser (1965:56) that it was still somewhat optional in the mid twentieth century.) Evidence that the process was not heard clearly in the nineteenth century is found in the data for 'yellow' (244) and 'woman' (49), among others. Hints that something was happening, however, is seen in Bartlett's rendition of $/ \mathrm{km} /$ as $k o \_m$ in the word for 'old man' (65), and Loustaunau's rendition of $/ \mathrm{km} /$ as $\operatorname{cogm}$ in the word for 'Seri person' (53).

### 4.4 Occasional open transition

Certain consonant clusters in modern Seri occasionally have a slight amount of open transition between the consonants, although it is so slight that descriptions have generally ignored it. The same may perhaps be detected in the word lists, as in Bartlett's version of 'thunder' (33). See also the various transcriptions for $/ \mathrm{k} /$ when it precedes $/ \mathrm{t} /$ in the word for 'man' (48), $/ \mathrm{m} /$ in the words for 'woman' (49), 'yellow' (244), 'warm' (245), and $/ \int /$ in the word for 'four' (187).

### 4.5 Transitional consonants

When a sonorant consonant precedes a heterorganic obstruent, the transcribers sometimes perceived what is understood today as a transitional stop. Tenochio transcribed $/ \mathrm{mt} /$ as mpt in the case of 'soil' (9) in appendix A. In the same example, Bartlett wrote an apostrophe after the $m$. It is possible that he was indicating something about the transition.

### 4.6 Release of consonants in final position

E. Moser \& M. Moser (1965:53) document the different ways in which stop consonants may be released in phrase-final position. It may be that Tenochio was signaling an open or aspirated release in his transcription of final $/ \mathrm{t} /$ as $t e$ in the case of 'earth' (9). The final "e" that Bartlett writes for 'water' (19) may also be the same, although in modern Seri a final fricative does not have this type of phonetic release.

### 4.7 Rounding assimilation

The labialization on a consonant spreads phonetically to an immediately following dorsal consonant (Marlett 1981:7, electronic version). This process is evident in the nineteenth century data. See 'firewood' (47), which is / Zakex ${ }^{w} k /\left[3 a^{\prime} k c o ̆ x^{w} k^{w}\right]$ in modern Seri. The lip rounding is perceived most notably as postvocalic pre-labialization (notice the [ $\breve{0}]$ before the [ $\left.\mathrm{x}^{\mathrm{w}}\right]$ ) and as labialization on the final $/ \mathrm{k} /$ that has become rounded because of the $/ \mathrm{x}^{\mathrm{w}} /$.

## 5 Phonological facts

### 5.1 Syncope

Noun and verb roots in Seri display the loss of an unstressed vowel in certain contexts that are not phonologically determined (Marlett 1981:90-91, electronic version). (See the singular versus plural forms of 'arm/foreleg' (121) and 'star' (31), for example.) There is some evidence from the word lists that some words still had the unstressed vowel in the nineteenth century. This fact may be relevant for the internal reconstruction of Seri for the purposes of comparison with other languages. See, for example, 'neck' (120), 'firewood' (47), 'bow' (267), 'forehead' (112), 'chin' (113), 'rattlesnake' (100), and perhaps the plural form of 'man, male' (48).

### 5.2 Coalescence

It is apparent that some instances of $/ \varepsilon /$ in modern Seri are the result of a fusion of a cluster /ai/, although there are still many synchronic instances of /ai/. With this background in mind, it is interesting to note that the modern word for 'settlement' /'? $\varepsilon \int$ itim/ (263) was transcribed by Bartlett as $a_{-} i r_{-}$ritom. Such a fact may be relevant for comparative linguistic purposes.

## 6 Morphological facts

Subject nominalized forms using the prefix $/ \mathrm{k}-/$ are found in various places in the lists (as in (244) 'yellow'), and a few instances of object nominalized forms using the prefix /o-/ are also found (as in (64) 'sibling').

## 7 Syntactic facts

### 7.1 Relative clauses

Nouns are modified by deverbal nouns as part of head-internal relative clauses, as in modern Seri (Marlett 2005). (This means that in most cases the deverbal noun follows the head noun.) See the modifier 'big' in (14), and the modifier clause in the expression for 'west wind' (37). Other examples are found in McGee's $k$ tumm gehk pa for 'good man', which is presumably a transcription of /ktam kiipe/ (man SBJ.NMLZ-good), and Pinart's transcription of 'picacho' (14): hast kita for /?ast kita/ (hill SBJ.NMLZ-sharp).

However, Peñafiel records three simple noun phrases that are anomalous in that the word order is not attested in modern Seri. For 'hombre feo' ('ugly man') he has kimipla cjtam (see 'bad' (252) and 'man' (48)). ${ }^{20}$ For 'mujer bonita' ('pretty woman') he has kemishkij kmam (see 'good-looking' (253) and 'woman' (49)). ${ }^{21}$ And for 'casa alta' ('tall house') he has cotlge aco (see 'above, up, high' (176) and 'house' (147)). The latter is especially odd since the word koła is an adverb that is never used to modify a noun in modern Seri.

### 7.2 Possessor-Possessum

Possessors precede possessed nouns, as in modern Seri. See the expressions for 'ice' (water's freezing) (42), 'bone' (thing's bone) (109), 'feather' (bird's feather) (129), and 'egg' (bird's egg) (144), for example. The last three of these also illustrate the still common preference to not use just the possessed noun by itself, but rather to have a possessor with it ('thing', 'bird') when it is mentioned out of context.

### 7.3 Determiner follows noun

Peñafiel's transcription of the Lord's Prayer, which on the whole is not very understandable, contains some interesting information. One gleanable fact is that the determiners had evolved (see M. Moser \& Marlett 1994), and follow the nouns with which they are construed. Furthermore the use of the choice of determiner that relates to the shape or position of the item is attested. See the phrase amte com /?ant kom/ (earth the.HZ) (p. 268).

### 7.4 Infinitival construction

Infinitives are used in very limited contexts in modern Seri. One of these is in the complement of the verb 'want', with coreference between the subjects. This is attested in Peñafiel (p. 268): icaticpam emtamsho '¿Quieres trabajar?', /ikatikpan intamfo/ (INF.INTR-work 2SG.SBJ-RL-want) 'Do you want to work?'.

## 8 Lexical facts

### 8.1 Compound nouns

The following compound nouns already existed in the nineteenth century: 'mud' (11), which is formed from /Rant/ 'earth' (9) and /Raaijx/ 'what is ground up' (a passive deverbal noun based on an irregular verb).

The lexicalization for 'ice' also existed; see (42).

[^8]
### 8.2 Compound determiners

Compound determiners also existed. They are transparently formed from a locative element followed by an article (itself transparently a reduction of a deverbal noun formed on a positional verb); see M. Moser \& Marlett (1994). Examples are seen in (77), (78), (79), and (219).

### 8.3 Archaisms

The term that appears in Bartlett's list for 'tortoise', see (103), is today considered archaic (see M. Moser \& Marlett 2005). It has been replaced by a new lexicalized phrase. Such replacement has happened in other cases due to an avoidance taboo that results after a death of a person who had a nickname that used the original term (see Marlett 2008).

Some other instances of lexical differences are worth noting, but no enlightening comments can be made at this time. See the differences for 'flesh' (106), for example.

### 8.4 Lexicalized expressions and idioms

A few items attest to the same processes used today for expanding the lexicon by creating expressions to describe new items, such as 'axe' (165) ('what wood is chopped with').

Idioms that are exactly the same as those used in modern Seri for 'tired' (135), 'happy' (247) and 'angry' (249) are attested.

## 9 Semantic facts

## 9.1 'earth' and 'soil'

Modern Seri distinguishes between /Rant/ 'earth, land, year' (which also occurs in many expressions) and /Ramt/ 'soil' (which is restricted in usage). The evidence from the word lists suggests that this distinction is relatively recent and that the form /Ramt/ is the origin of both. See (9), (142), (175), and (177).

## 9.2 'sun' and 'day, 'moon' and month', 'land' and 'year'

Three words for physical objects have important semantic extensions to lengths of time in Seri (as in other languages): /Rant/ 'earth' (9) also means 'year', / Jaa?/ 'sun' (29) also means 'day', and /iifa $\chi /$ 'moon' (30) also means 'month' (M. Moser \& Marlett 2005).

The semantic extension of the word for 'earth' is evidenced in the word lists (using the form with $/ \mathrm{m} /$ ). This indicates, unsurprisingly, that the semantic extension to 'year' existed before the phonetic change of $/ \mathrm{m} /$ to $/ \mathrm{n} /$, and that the modern use of $/$ ?amt/ without the meaning 'year' must be explained.

The semantic extension of the word for 'sun' is seen in Tenochio's and Peñafiel's entries for (29).

## 9.3 'husband' and 'wife'

The terms that appear for 'husband' (55) and 'wife' (56) in at least the earlier lists are interesting in that they are recorded as forms used by "the giants" in M. Moser \& Marlett (2005). The straightforward interpretation of these data is that the terms became archaic for some reason during the past century and the archaic forms were attributed to the giants, since they probably occur in oral narratives about the giants.

## Appendix A: Data

The data are organized below following the presentation in the Intercontinental Dictionary Series $\underline{\text { http://lingweb.eva.mpg.de/ids/ (Mary Ritchie Key, founding editor; and see M. Moser \& Marlett }}$ 2001, for example), which in turn follows a thematic organization and a particular numbering system (Buck 1987). When a lexical item is not assigned a number in Buck (1987) (which deals with Indo-European languages), the item is placed in the appropriate "chapter", and given the extension "x" or "xx", as appropriate, depending on how specific the preceding number can be.

Each line representing a nineteenth century word list attempts to represent the original transcription as accurately as possible although original uppercase letters at the beginning of words have been replaced with lowercase letters. Consider examples (8) and (7) to illustrate. They consists of a usual maximum of eight lines for a single entry (unless there is a complication of some sort, such as an additional form). The last two lines represent modern Seri as documented in M. Moser \& Marlett (2005). The numbers 1.510 and 1.440 are the numbers of the items in the IDS, and the glosses there are appropriate for the word in modern Seri (but may not give all of the facts that a dictionary would give, of course). The line on which the IDS number appears is given in phonetic transcription (explained in more detail below). The line immediately below it is the word written in the community-based spelling system that is actually used in M. Moser \& Marlett (2005). The other six lines (maximum) represent the nineteenth century word lists. They are labeled with letters for identification: B for Bartlett, T for Tenochio, Pt for Pinart, Pf for Peñafiel, L for Loustaunau, Mc for McGee. The line for Bartlett includes the number in his list (except when the datum comes from Tenochio (n.d), which has no ennumeration). The lines for Tenochio and Pinart include the page number on which the word appears in the Smithsonian copy. The line for Peñafiel includes the page number of the item as it appears in Hernández (1904), and that for Loustaunau includes the number of the item as it appears in that same publication.

| (7) | B | 'stone' (82) | a s | t |
| :---: | :---: | :---: | :---: | :---: |
|  | Pt | 'piedra' (4) | h a s | t |
|  | Pf | 'piedra' (265) | a s | t |
|  | L | 'piedra, roca' (70) | a ss | t |
|  | Mc | 'rock' | a sh | t |
|  | 1.440 | 'stone, rock' | ? 'a s | t |
|  |  |  | has | t |
|  | T | 'peña, piedra' (3) | ah s | te kakoj |
|  | 1.440a | (stone SBJNMLZ-big) 'large stone, rock' | ? ${ }^{\text {a }}$ s | t \# k'aakox |
|  |  |  | h a s | t \# caacoj |



The glosses included for each line identified by a letter (B, Pt, Pf, L, Mc) are based on the sources, with the limitations of using second- or third-hand sources when necessary. If it seems clear that the source gloss was in Spanish (as in the case of T, Pt, and Pf), that is the gloss presented; translations of the Spanish glosses that Hewitt or others made in the process of archiving the data are not included. Of course, the problems of second- and third-hand sources are not limited to the glosses. It is clear, for example, that the publication of exotic, handwritten data in a typeset book results in errors. When these are very obvious, I have made a correction and added an explanatory footnote. For example, as Gatschet noticed himself regarding Pinart's transcription (Hernández 1904:256?), it was hard to know whether Pinart was writing " n " or " v " in some cases, and in fact it is obvious that the typesetter made the wrong choice. There is no sense in comparing a typographical error with real data, and so those errors are not repeated in the present paper. Other possible errors, however, cannot be undone since the original manuscripts are not available.

When two or more letters appear in a single cell, the claim is usually being made that the letters do not correspond to more than one sound in the modern phonemic transcription. In example (8), the $m m$ in $\mathrm{T}, \mathrm{Pt}, \mathrm{L}$ and Mc , and the nm in L are claimed to really just be variant transcriptions of the simple $/ \mathrm{m} /$ in modern Seri, although it is possible that some of these are indicating a phonetic strengthening of that consonant (see section4.1).

A blank in a cell indicates that no symbol was used to represent one of the sounds. In example (8) the initial glottal stop of this word was not transcribed by any of the list-takers except Pinart (if that is what the $h$ is meant to indicate).

All of the correspondences that are lined up are only approximations. Some arbitrary decisions had to be made in order to make the comparisons possible at all.

Word breaks, if they were used in the nineteenth century word lists, are not represented. But in the modern Seri, known word breaks are indicated with cross-hatch (\#).

The modern transcription may give more information about the morphological composition of the word. It is a phonemic transcription - or a broad transcription, to use the terminology of the International Phonetic Association (International Phonetic Association 1999); and it generally uses the conventions of that organization. Word stress is indicated by a raised vertical stroke immediately before the first vowel of the syllable, however, rather than before the first consonant of the syllable, as in the IPA tradition, since this convention works much better in these tables. A subscripted vertical stroke is used in the transcription of some phrases to indicate secondary stress that occurs when primary stress is weakened slightly in the non-final words. Other details of the phonetics of Seri that are relevant to the data are presented in section4.

The final line, after the modern transcription and presented in boldface, is the word as it is written in the community-based spelling system that was standardized in the publication of the dictionary (M. Moser \& Marlett 2005).

## A. 1 Chapter 1: The physical world in its larger aspects

(9) B 'earth, land' (75) : a m' t

T 'tierra' (1) ${ }^{22}$ : a mp t e
Pt 'la tierra' (4) : h a m t
Pf 'año' (265) : a m t
Pf 'tierra' (268) : a m te
L 'tierra' (89) : a m t
Mc 'ground' : $\hat{\mathrm{u}} \mathrm{mm} \mathrm{t}$
1.212 'soil' : ? 'a m t
hamet
1.210 'earth' : ? 'a n t
hant
(10) Pf 'monte' : e c o t
1.21x 'countryside' : ? 'عє k o t
h ee cot
(11) Mc 'mud' : û nt û sh k
1.214 'mud' : ? a n t 'ææ $\int$ x
hant ee $\mathbf{z} \mathbf{j}^{24}$
(12) Pt 'arena' (4) : h ii k X'
1.215 'fine sand' : 'ii k x
ii $\mathbf{c} \mathbf{j}$
(13) Pt 'arenal' (4) : h ii k X a n
$\begin{array}{ll}\text { 1.21x 'sandy area' : } & \text { ii } k \times \# \text { 'a } n \\ & \text { ii } \mathbf{c} \mathbf{j} \text { \# á }\end{array}$

[^9](14)
Pt 'cerro' (4) : h a s t
L 'cerro, montaña' (95) : a ss t
1.220 'hill' $=1.440$, 'stone' : ? 'a s t
$h a s t$
B 'hill, mountain' (80) : a s t_ k a_k o ch
(stone SBJNMLZ-big) ${ }^{25} \quad$ : $?$ 'a s $\mathrm{t} \# \mathrm{k}$ 'aa k o x
------


(15) B 'valley' (79) : ka_vilch_k'milcht ${ }^{27}$ 1.240 'valley' :
(16) Pf 'monte' (265): e c o t ${ }^{28}$ 1.24x 'desert area' : ${ }^{\text {' }} \varepsilon \varepsilon \mathrm{k}$ o t h ee cot
(17) B 'island' (81) : h e_p e i_ p a ch
1.25x (sea 3POSS-back) ${ }^{29}: \chi{ }_{1} \varepsilon \mathrm{p} \varepsilon \#^{\prime} \mathrm{i} \mathrm{p}$ a k
$\mathbf{x} \mathbf{e} \mathbf{p} \mathbf{e} \mathbf{\#} \mathbf{p} \mathbf{a} \mathbf{c}$
(18) Pt 'costa' (5) : X' e pp e i t e 11
1.270 'shore' (sea 3POSS-edge) : $\chi$, $\varepsilon$ p $\varepsilon$ \# i t ' $\varepsilon \varepsilon \ddagger$
x e p e\#it ee l

[^10](19) B 'water' (73) : a che

T 'agua' (4) : a hj
Pt 'agua' (4) : a X'
Pf 'agua' (265) : a j
L 'agua' (87) : a gg
Mc 'water' : k a hk
1.310 'fresh water' (ABS-liquid) : ? 'a $\chi$
h a $x$
(20) B 'sea' (76) : h é $p_{-}$e

Pt 'mar' (5) : X' e pp e
L 'mar' (90) : j ee p é
Mc 'water (sea)' : k a pp ah
1.320 'sea' $\quad: \begin{array}{lllll}\chi & \text { ' } & \mathrm{p} & \varepsilon \\ & \mathbf{x} & \mathbf{e} & \mathbf{p} & \mathbf{e}\end{array}$
(21) B 'lake' (78) a sh_ $k$ a ck_ i_ t o n
1.330 'lake' (fresh.water : ? a $\chi$ \# k 'a k t i m SBJ.NMLZ-be.cut) ${ }^{30}$
(22) Pt 'médano' (4) ${ }^{31}$ : k i p kŭ e e
1.34x 'dune': $\quad$, ant $\# \mathrm{k}$ 'i p k ${ }^{\text {w }}$ hant \# qu i p cö
(23) Mc 'wave' : o fp a t lk
1.350 'wave' : ? 'oo p a t x $h$ oo pat $\mathbf{j}$
(24) B 'river' (77) : a_s o ch

Pt 'río' (4) : h a ss o 1X
L 'río' (91) : a ss o gg
1.360 'river' : ? 'a s o x

$$
\text { hads } \mathbf{l}
$$

[^11]| B | 'tree' (85) |  |  | e_a_omt_kit_e ${ }^{32}$ |
| :---: | :---: | :---: | :---: | :---: |
| T | 'árbol' (4) | e h e |  |  |
| Pt | 'palo' (6) | e he |  |  |
| L | 'árbol' (103) | e h e | amtüpp ${ }^{33}$ |  |
| 1.420 | 'plant, tree' | $?^{\text {' } ~} \mathrm{P}$ ¢ $\varepsilon$ |  |  |
|  |  | hehe |  |  |

(26) $\mathbf{1 . 4 3 0}$ 'wood' = 'tree' 1.420 (154) :
(27) B 'stone' (82) : a s t

Pt 'piedra' (4) : h a s t
Pf 'piedra' : a s t
L 'piedra, roca' (70) : a ss t
Mc 'rock' : a sh t
1.440 'stone, rock' : ? 'a s t
$h$ a $s$
T 'peña, piedra' (3) : ah s te kakoj ${ }^{34}$
1.440a (stone SBJ.NMLZ-big) 'large stone, rock' : ? a s t \# k'aakox
h a s t \# caacoj
(28) B 'sky' (52) : a_m í_ m e

T 'cielo' (2) : a mm i m e
Pt 'cielo' (5) : a m i mm e
Pf 'cielo' : a m i m é
L 'cielo' (69) : a mm i nm eé
Mc 'sky' : a m ê m'm â
1.510 'sky' : 3 a m 'ii m $\varepsilon$
hamein me
(29) B 'sun' (53) : schr a

T 'sol, día' (3) : r a hj ~ t a hj
Pt 'sol' (5) : $\hat{\mathrm{s}}$ aa
Pf 'sol; día' $(265)^{35}$ : sh a j
L 'sol' (70) : i s aa ck
Mc 'sun' : s êah $k$
1.520 'sun ${ }^{136}: \int$ 'aa ?

[^12]| (30) | B | 'moon' (54) | i_ s | a |
| :---: | :---: | :---: | :---: | :---: |
|  | Pt | 'luna' (5) | i $\hat{s} \hat{S}$ | a X |
|  | Pf | 'luna' (265) | i sh | a $\mathrm{j}^{3}$ |
|  | L | 'luna' (71) | i ss | aa |
|  | Mc | 'moon' | e ssch | a h |
|  | 1.530 | 'moon' ${ }^{38}$ | 'ii $\int$ | a |
|  |  |  | ii z | a |

(31) B 'star' (55) : v a_s o h

T 'estrella' (3) : b a ss o jh
Pf 'estrella' (265) : v a sh ó j
L 'estrella' (72) : va ss o glh
Mc 'stars' : a shsh o k
1.540 'star' : $\quad \begin{aligned} & \text { 'a } \int \\ & \quad \text { a } \\ & \text { o }\end{aligned}$

| Pt | 'estrella' (5) | v a s | fl k |
| :---: | :---: | :---: | :---: |
| 1.540a | 'star-PL' | 'a $\int$ | k |
|  |  |  |  |

(32) B 'lightning' (68) : i_v á m_ qua
T 'rayo' (2) : ajojkom

Pt 'relámpagos' (6) : iv a mo
Pf 'rayo
haXoX'kum
L 'relámpago' (83) : ib a m geg
Mc 'lightning' : i a m ukh
1.550 '(sheet) lightning' : e 'a m xw
e a m jö

(33) B 'thunder' (67) : i n ekl

T 'trueno' (4) : yug
Pt 'trueno' (6) : h i n- Xl
L 'trueno' (82) : ii n gglesi
1.560 'thunder' (3POSS-PON-thunder) : ii $n \mathrm{x}$
ii $\mathbf{n} \mathbf{j}$
Mc 'thunder' : kh o n'i kh
1.560 'thunder' (SBJNMLZ-thunder) : k 'a n x
c an j

[^13](34) B 'darkness' (59) : k e_ k u p_p ói l

1.62x 'dark' (SBJNMLZ-dark) : $k$ i k 'o p o $\ddagger$ $\begin{array}{lllllll}q u & i & c & o & p & o & 1\end{array}$
$\begin{array}{llllllllll}\text { T } & \text { 'oscuridad' (1) } & : & j & \text { i } & \text { k } & \text { o } & \text { p } & \text { o } & \text { hl } \\ \mathbf{1 . 6 2 x} & \text { 'it is dark!' (RL.EMPH-dark) } & : & \chi & \text { i } & \text { k } & \text { ol } & \text { p } & \text { o } & \ddagger \\ & & \mathbf{x} & \text { i } & \text { c } & \text { o } & \text { p } & \text { o } & \mathbf{l}^{40}\end{array}$
(35) $\mathrm{B} \quad$ 'wind' (66) $\quad$ â v e

Pt 'wind' (6) : a vb̌ ĭ (avü)
L 'viento' (81) :
Mc 'wind' : a' e
1.710, 1720 'air, wind' : ? 'a i
h a i
(36) Pt 'viento de norte' (6) : a vБ̆ít a pp a ~avü tappa

Mc 'wind (north)' : a i ah' p a
1.72x 'northwest wind' (wind-true) : ? a i t 'aa p a
$h$ a i aa $p$ a
(37) Pt 'viento de poniente' (6) : avธ̆i Xeppe immak makke $\sim$ avü

Mc 'wind (west)' : ai rêpê mâ qu'i
1.72x 'west wind' (wind sea : ?'ai $\quad$ 'عpe 'imak k'iix

3POSS-middle
SBJNMLZ-sit)

```
hai # xepe # imac # quiij
```

(38) Mc 'whirlwind' : k w a f t
1.72x 'whirlwind' : k o 'aa $\Phi$ t
c $\mathbf{o}$ aa $\mathbf{f}$
(39) T 'nube' (1) : o k a xl a

Mc 'cloud' : o k a ltt a
1.730 'cloud' (not 'thundercloud') : ? 'oo k a $\ddagger$ a h oo c a la
(40) Pt 'neblina' (6) : X e 1 e m a hoo Mc 'fog' : kûthla
1.740 'fog' : $\chi$ ' $\varepsilon \varepsilon \not$ \& $\varepsilon$ $x$ ee le

[^14]| B | 'rain' (69) | i_ p' k |
| :---: | :---: | :---: |
| T | 'lluvia' (3) | i p k a |
| Pt | 'lluvia' (5) | h i p k a |
| L | 'lluvia' (84) | po ck |
| 1.750 | 'rain' (3POSS-PON-rain) | 'i p k |
|  |  | 1 P |
| Mc | 'rain' | kh o p' k |
| 1.750 | 'rain' (SBJ.NMLZ-rain) | k 'a p k |
|  |  | $\mathbf{c} \mathbf{a} \quad \mathbf{p} \quad \mathbf{c}$ |
|  | 'está lloviendo' (5) | X oo p k a |
| $\begin{array}{lllll} \mathbf{x} & \mathbf{o o} & \mathbf{p} & \mathbf{c} & \mathbf{a} \end{array}$ |  |  |
|  |  |  |

(42) B 'hail' (71) : a ch_ hi_h a p s_sh a m_ t' k o t ${ }^{42}$

B 'snow' (70) : a ch_ hi hap s
Pt 'hielo' (6) : a X e X a p $\hat{\mathrm{s}}$
L 'hielo' (88) : a g i j a pp s
Mc 'frost' : a chh' he hap s
1.770 'ice' (water : ? a $\chi$ i $\chi$ 'a p $\int$

3POSS-PON-freeze)
$\begin{array}{lllllll}h & \mathbf{a} & \mathbf{x} & \# & \mathbf{i} & \mathbf{x} & \mathbf{a}\end{array} \mathbf{p} \quad \mathbf{z}$
(43) Mc 'hail' : k ah t ~ huht
1.77x 'hail'
: $\chi$ 'a t
$\mathbf{x}$ a
Pt 'está cayendo granizo' (6) : X a t \# X o p k a
1.77x 'hail is precipitating' (hail RL.EMPH-rain) : $\chi$ 'a t $\chi$ 'oo p k a
x a $\mathbf{t}$ \# $\mathbf{x}$ oo pea
(44) B 'light' (58)
: a_m a k
T 'fuego, lumbre' (1) : a m a k
Pf 'lumbre' (265) : a m á c
L 'fuego'(86) : a m a cc
1.810 'fire' : ? a m 'a k
hamá $\mathbf{c}$
--
B 'fire' (72) : a_m_ a k i_ n o ch
1.820 'flame' (fire 3POSS-PON-burn) : ? a m a k \# 'ii n o x
hamác $\mathbf{~ m ~ i i ~ n o ~ j ~}$
(45) Pt 'humo' (12) : a m k a X a t
1.830 'smoke' : ? a m k 'aa $\chi$ a t
hameaa $x$ a t

[^15]
(47) B 'wood' (86) : a_ k á_ ho ke Pt 'leña' (6) : a k a XXŭ kŭă Pf 'leña' (265) : a $k$ ai $j$ kué 1.880 'firewood' : ? a $\mathrm{k}{ }^{1} \varepsilon \mathrm{x}^{\mathrm{w}} \mathrm{k}^{43}$ haque jö c

Not discussed here (for lack of obvious things to say on my part, although occasionally there is something small that could be noted):

L antcomisscle 'valle' ('valley')
L jaügcoch 'isla' ('island')
Mc stûk
L agitoó
T kokabate
Mc ûn te sehk kûm
'foam'

Mc kso kun'nohk a 'morning star'
Mc ah i kû kho ig khuk 'storm'
Mc tum ukmp tûm ukmp 'rainbow'
Mc ai û nê muth kpa 'wind (east)'
Mc khuh ná i 'wind (south)'
L jpss 'nieve'('snow')
Mc a mem'a kûmûn kwet na 'horizon'
Mc es schahk kûm bäth ek a 'full moon'
Mc a sko kêl volk'a 'meteor'
Mc akh pau ak es schat 'image reflected in the water'

[^16]
## A. 2 Chapter 2: Mankind: Sex, age, family Relationship

(48)

| B | 'man' (1) | e k_e_ t a m |
| :---: | :---: | :---: |
| T | 'hombre' (2) | t a m |
| Pt | 'hombre' (1) | $\mathrm{k} \quad \mathrm{ta}$ m |
| Pf | 'hombre' (265) | cj t a m |
| L | 'hombre' (4) | queg t á m |
| Mc | 'man' | kû t û m |
| 2.210 | 'man, male' | $\mathrm{k} \quad \mathrm{t}$ 'a m |
|  |  | t a m |
| T | 'hombres' (2) | (k) t a m uk |
| 2.210a | 'men' (man-PL) | $\mathrm{k} \quad \mathrm{t} \mathrm{a}^{\text {m }} \mathrm{k}^{\mathrm{w}}$ |
|  |  | t a m cö |

(49) B 'woman' (2) : e k_e_ ma m

T 'mujer' (4) : k m a m
Pt 'mujer' (1) : k m a m
Pf 'mujer' (265) : k m a m
L 'mujer' (5) : queg man
Mc 'woman' : $\mathrm{k} \quad \mathrm{m}$ a mm
2.220 'woman, female' : $\mathrm{k} \quad \mathrm{m}$ 'aa m c maa m
T 'mujeres' (4): : ka m u- j i- k ~ ka-myki-j
2.220 'women' (woman-PL) : k m a x 'ii k

(50) B 'boy' (3), 'young' (24) : s î̀ p

T 'muchacho' (1) : s i p ~ psip
Pt 'muchacho' (2) : s e p
L 'muchacho' (6) : s i pp
Mc 'young man' : s é p i ah
2.251 'young man' : s 'ii p
s ii p
$\begin{array}{lllllllll}\text { T } & \text { 'muchachos' (2) } & \text { : } & \text { ps } & \text { i } & \text { p } & \text { i } & 1- & \text { k-j } \\ \mathbf{2 . 2 5 1} & \text { 'young men' (young.man-PL) }) & \text { : } & \text { s } & \text { 'ii } & \text { p } & \text { i } & \text { i } & \text { k } \\ & & \text { s } & \text { ii } & \text { p } & \text { i } & 1 & \text { c }\end{array}$
(51) B 'girl' (4) : sr a k_ a m

Pt 'muchacha' (2); 'soltera' (2) : $\hat{\mathbf{s}}$ a k a m
2.261 'young woman' : $\int$ a $k$ 'aa m
z ac aa m
(52) B 'infant' (5) : h'r a ch t_ k i_ s i l
2.280 'infant, baby' (thing? : $\int$, a $\chi$ t $\# \mathrm{k}$ i s 'ii $\ddagger$

SBJ.NMLZ-small.(modified))

$$
\begin{array}{llllllll}
\mathrm{z} & \mathrm{a} & \mathrm{x} & \mathrm{t} & \# & \text { qu } \mathbf{i} & \mathrm{s} & \mathrm{ii}
\end{array}
$$

(53) Pt 'Seri' (1) : $\mathrm{k} \quad \mathrm{m}$ i k e

L 'indio' (23) : cog m i ckg
2.2xx 'Seri person' : k m 'ii k $\varepsilon$

## c miique

| (54) | B | 'Indians, people' (14) | k o m_k a k |
| :---: | :---: | :---: | :---: |
|  | Pt | 'la gente' (1) | k o m k a k |
|  | L | 'gente' (24) | c o m c á ckg |
|  | Mc | 'name of tribe' | $\mathrm{k} \mathrm{u}{ }^{\mathrm{n}}$ - $\mathrm{ka} \mathrm{k}^{\prime}$ |
|  | 2.2xxa | 'Seri people' (Seri.person-PL) | k o m k 'aa k |

(55) B 'my husband' (8) : i_ k a m

Pt 'mi marido' (1) : h i k a m
2.310 'my husband' (giant's term) (1POSS-husband) : ? i k 'aa m
h i c aa m
(56) B 'my wife' (9)

T 'marido' [sic] (2) ${ }^{44} \quad$ i k u m
Pt 'mi mujer' (1) : h i kk a m
2.320 'my wife' (giant's term) (1POSS-wife) : ? 'i k o m

$$
\text { h i c } \quad \text { o m }
$$

(57) B 'my father' (6) : îv e

T 'padre' (1) : ib ~ip
Pt 'mi padre' (1) : h iv
2.350 'my father (of male)' (1POSS-father.ME) : ? 'i i
h i i
(58) B 'my mother' (7) : í t a

Pt 'mi madre' (1) $\quad: \mathrm{h}$ i tt a n
2.360 'my mother' (1POSS-mother) : ? 'i t a

$$
h \text { it a }
$$

[^17]| B | 'my son' (10) | i_ k et |
| :---: | :---: | :---: |
| 2.410 | 'my child (of woman)' (1POSS-OBJ.NMLZ-pregnant.with male) | ? 'ii k ع t \# k t 'a m |
|  |  | h ii quet \# ctam |

(60) T 'hijo' (3) : i s a k

Pt '(mi) hijo' (1) : i s aa k
2.410 'my son (of man)' (1POSS-Son.ME) : ? i s 'aa k
$h i s$ aa $c$
(61) B 'my daughter' (11) : i_ k e t_ hr á_ k a m
2.420 'my daughter (of woman)' : ? 'ii k $\varepsilon$ t \# d a k 'aa m (1POSS-OBJ.NMLZ-pregnant.with young.woman) ${ }^{45}$

(62) B 'my brother' (12)

$$
: \quad i_{-} \text {mi_ a } k
$$

Pt 'mi hermano mayor' (1) : i mi a k
2.444 'my older brother (of woman)' (archaic) : ? i m 'aa k (1POSS-older.brother.FE)
(63) B 'my sister' (13)
: $\quad$ i_k o_ m i
Pt 'mi hermana menor' (1) : h i k o mm i
2.455 'my younger sister (of man)' : ? i k 'oo m $\varepsilon$ (1POSS-younger.sister.ME)

(64) T 'hermano' (1) : o i a c hj
2.4xx 'his/her sibling' : o j 'a k x
(3POSS-OBJ.NMLZ-call.sibling)

$$
0 \text { y a } c j
$$

(65) B 'old' (123) : i_ ko_ m á_ k o lch

T 'viejo' (3) : k mak o j
2.461 'old man' : $\mathrm{k} \quad \mathrm{m}$ 'aa k o x

(66) T 'vieja' (3) : k o n k a bre
2.471 'old woman' : k o m k 'a ii
come a ii

[^18]| (67) | T 'tió' (4) |  |  |
| :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \mathrm{Pt} \\ & \mathbf{2 . 5 1 1} \end{aligned}$ | 'hermano de mi padre' (1) |  |
|  |  | 'my uncle (1POSS-mo | other's brother)' (infred er's.brother) |
| (68) | B | 'I' (133) | i_ve |
|  | T | 'yo' (2) | ibe |
|  | Pt | 'yo' (13) | ivve $\sim$ ove ${ }^{46}$ |
|  | Pf | 'yo' (266) | ivé |
|  | 2.910 | 'I' | ${ }^{\text {P }}$ ' $\varepsilon$ |
|  |  |  | h e |


| (69) | Pf | 'mío, mía' (266) |  | i $11 \mathrm{a}^{47} \sim$ yá |
| :---: | :---: | :---: | :---: | :---: |
|  | T | 'mío' (3) |  |  |

    2.910a 'mine; what I own' (1POSS-OBJ.NMLZ-own) : i ? j 'aa
    i h y aa
    (70) B 'thou' (134) : m e
Pt 'tú' (13) : m e
Pf 'tú' (266) : m e
2.920 'you' : m ' $\varepsilon$
me
(71) Pf 'tuyo, tuya' (266) : m i áa
2.920a 'yours; what you own' (2POSS-OBJ.NMLZ-own) : in j 'aa
(72) B 'we' (136) : o'_v e
Pt 'nosotros' (13) : ov e
Pf 'nosotros' (266) : ov é
2.940 'we ${ }^{\prime 49}$

[^19](73)
Pf 'nosotros (GEN)' (266) : o ll a t
2.940a 'ours, what we own' (1POSS-OBJ.NMLZ-own-PL) : ? o j 'aa t hoy aa t
(74) B 'ye' (137) : m o_v e

Pt 'vosotros' (13) : m ovv e
Pf 'vosotros' (266) : m ov é
2.950 'you (plural) ${ }^{50}$ :
(75) B 'they' (138) : m o_v e ${ }^{51}$

Pf 'ellos' (266) : ov é
2.960 'they ${ }^{152}$
(76) Pf 'él' (265) ${ }^{53}$ : t i j
2.9xx 'that one' (pronoun) : t 'ii $\chi$
tii $\mathbf{x}$
(77) B 'this' (139) : i p_ k é

Pf 'este, esta, esto' (266) : i p k i
2.9xx 'this (proximal, flexible)' : ? i p k i $?^{54}$
hip qui h
(78) B 'he' (135) : i m_ k

B 'that' (140) : i m_ k e
Pt 'él' (13) : i m k i
Pf 'aquel' (266) : i m k i
2.9xx 'that (distal, flexible)' : ? i m k i $?^{55}$
him qui h
------
T 'aquel' (4) : i t a m
(79) Pt 'ellos' (13) : i m k ov e

Pf 'aquellos' (266) :
imkitaj
2.9xx 'those (distal)' : ? i m k o $\mathrm{i}^{56}$
himeo i

[^20]Not discussed here:
Mc kaoka 'twins'
Mc kmamm am û kúk 'widower'
Mc se o kû men ya 'a silent person'

Mc $k$ eem ata
T ijae
'spouse or married'
'tío' (4)

## A. 3 Chapter 3: Animals

(80) Pt 'caballo' (8) : k a v a i 3.410 'horse' : k 'a a j
c a a $\mathbf{y}$
(81) B 'bird' (103) : sch ai k

Pt 'pájaro' (10) : $\hat{\mathrm{s}}$ e k
3.581 'bird' : $\int$ 'ii k
(82) B 'duck' (107) : a_ h a n_ o _ hr âi k 3.5xx (fresh.water 3POSS-in bird) : ? a $\chi$ \# a n o \# $\int$ 'ii $\mathrm{k}^{57}$ hax \# an o $\mathbf{n}$ z ii c
(83) T 'pavo común' (4) : t oo b o
3.5xx 'turkey' (Meleagris gallopavo) : t 'oo
t 00
(84) B 'pigeon' (108) : k o_ y ó ch_k o
3.594 'white-winged dove' (Zenaida asiatica) : k o j 'o k o
c $\mathbf{o}$ y $\mathbf{o}$ c $\quad \mathbf{o}$
(85) B 'dog' (92) : a chk s

Pt 'perro' (8) : a X' $\hat{\mathrm{s}}$
3.610 'dog' (ABS-pet) : $? ~$ 'a $\chi$
h a $x$ z
(86) Pt 'conejo' (9) : v a p X a
3.614 'cottontail rabbit' (Sylvilagus sp.) : ? 'a p $\chi$ a
ha $\mathbf{p} \mathbf{x}$ a

[^21](87) T 'liebre' (2) : e b e

Pt 'liebre' (9) : h e vv e
3.61x 'antelope jackrabbit' (Lepus alleni) : $?^{\prime} \varepsilon \quad \varepsilon$ hee
(88) B 'fish' (109) : sch e ch_ k a m

Pt 'pescado' (10) : $\hat{\mathrm{s}}$ e X k a m
3.650 'fish' : $\int$ i $\chi$ k 'a m
$\mathbf{z} \mathbf{i}$ c á m
(89) Pt 'almeja' (10) : a X'X'ŭŭ $\mathbb{I l}$
3.66x 'multicolored clam' (Protothaca grata) : ? 'a $\chi^{\mathrm{w}} \ddagger$ h a xö l
(90) Pt 'langosta' (10) : p t k a m
3.66x 'Cortez spiny lobster' (Panulirus inflatus) : p t k 'a m n ptcamn
(91) Pt 'tonina' (10) : t a k X
3.662 'Pacific bottlenosed dolphin' (Tursiops truncatus) : t 'a k x t a c j
(92) Pt 'ballena' (10) : a kk i m
3.663 'whale' (archaic) : ? 'a k i m
h a qu i m
(93) T 'coyote' (1) : b oo t

Pt 'coyote' (8) : v oo tth
3.71x 'coyote' (Canis latrans) : 'oo t

00 t
(94) B 'wolf' (95) : h a_ sh o_ k é vlch ${ }^{58}$

T 'león' (2) : m a z o jl
3.72x 'mountain lion' (Puma concolor) : $\chi$ 'a $\int 0 \mathrm{x}$
$\mathbf{x}$ a $\quad \mathbf{z} \quad \mathbf{o} \quad \mathbf{j}$
(95) T 'tigre' (4) : yspohi
3.72x 'tiger' :
(96) B 'deer' (96) : e_ p ē m
3.750 'white-tailed deer' (Odocoileus virginianus) : $?^{\prime}$ ' p e m
hepem

[^22](97) B 'fly' (100) : h l o_ m o lch
3.830 'house fly' (Musca domestica) : $\chi \mathrm{k}$ 'oo m o x $\mathbf{x} \mathbf{c} \mathbf{0 0} \mathbf{m} \mathbf{o} \mathbf{j}$
(98) B 'mosquito' (101) : ko_ship_ka ${ }^{59}$
3.832 'mosquito' (Culicidae) : k o $\int \mathrm{am} \ddagger \mathrm{k}$ a m 'aa $\mathrm{k}^{\mathrm{w}} \ddagger$
cozamlcamaacöl'
(99) B 'snake' (102)
: k o_ vé_ m a ch
T 'culebra' (3) : k ab i maj~ kabimay
3.85x 'coachwhip, whipsnake' (Masticophis : k 'o ii m a x spp.)
$$
\mathbf{c} \mathbf{o} \quad \mathrm{ii} \quad \mathrm{~m} a \mathrm{j}
$$
(100) Pt 'víbora' (10) : k o k a $\hat{\text { ŝs }} \mathrm{i} \mathrm{n}$
3.85x 'rattlesnake' : k o k 'a $\int \mathrm{n}$ i
c occact $\mathbf{n} \mathbf{i}$
(101) Pt 'escorpión' (9) : p a $\hat{\mathrm{s}} \mathrm{a}$
3.85x 'Gila monster' (Heloderma suspectum) : p 'aa $\int \mathrm{a}$ paaza
(102) Pt 'sapo' (9) : vota k
3.95x 'toad' : o t 'a k
otá c
(103) B 'tortoise' (99) : 'h_' t a_ m ó s n

Pt 'tortuga' (9) : X t a m o s든 n
3.980 'desert tortoise' (Gopherus agassizii) : $\begin{array}{lllllllll}\chi & \mathrm{t} & \mathrm{a} & \mathrm{m} & \text { 'oo } & \mathrm{s} & \mathrm{n} & \mathrm{i}^{60} \\ & \mathbf{x} & \mathbf{t} & \mathbf{a} & \mathbf{m} & \mathbf{o o} & \mathbf{s} & \mathbf{n} & \mathbf{i}\end{array}$
(104) Pt 'galápago' (9) : m o sㅡㅡㄴ n
3.98x 'black sea turtle' (Chelonia mydas) : m 'oo s n i
$m$ oo $\mathbf{s}$ i

## A. 4 Chapter 4: Parts of the body; Bodily functions and conditions ${ }^{61}$

(105) B 'my body' (31) : i'_ s o ch'l
4.110 'my body' (1 POSS-body) : ? 'i s o x
hisoj

[^23](106) B 'flesh' (91) :
4.130 'his/her/its flesh' (3POSS-flesh) : i p $\chi$ 'a s i
ipxasi
(107) B 'my hair' (16) : i_n a
4.144 'my body hair' (1POSS-body.hair/fur/feather) : ? 'i n a
h i n a
(108) B 'blood' (37) : a v t

Pt 'sangre' (4) : a ${ }^{\text {va }} \mathrm{t}$
4.150 'blood' (ABS-blood) : ? 'aa i t
(109) B 'bone' (35) : hr e_h i t a ck
4.160 'thing's bone' (thing 3POSS-bone) : $\int$,ii $\chi$ \# 'i t a k

(110) B 'my head' (15) : i_ hl i t
4.200 'my head' (1POSS-head/hair.on.head) : ? i $\ddagger$ 'it hilí t
(111) B 'my face' (17)
4.204 'my face' (1POSS-face) : i $\quad$ j $\quad$ ' $\varepsilon \varepsilon n$ i h y ee n
------
T 'cara' (1) : $\quad 11 \mathrm{e} n$
4.204 'his/her/its face' (3POSS-face) : j ' $\varepsilon \varepsilon$ n $y$ ee $n$
(112) B 'my forehead' (18) : i_ p é n
4.205 'my forehead' (1POSS-forehead) : ? 'ii p n i h ii $p \quad n$ i
(113) B 'my beard' (25) : i_ t a m ó ck_ e n
4.209 'my chin' (1POSS-chin) : $?$ i t a m 'o k n i hitamocni

[^24]

[^25](119) B 'my teeth' (24)
: $\quad$ in t a st
Pt 'dientes' (2)
: hit a st
4.270 'my tooth/teeth' (1POSS-tooth/teeth)
: 3 i t 'aa st h it aa st

4.270 'his/her/its tooth/teeth' (3POSS-tooth/teeth) : $\begin{array}{llll} & \text { i } & \text { 'aa } s t \\ & \text { i } & \text { t aa } & \text { s t }\end{array}$
(120) B 'my neck' (26) : y 'a p e
4.280 'my neck' (1POSS-neck) : i ? j 'aa p
i h y aa $p$
(121) B 'my arm' (27)

$$
: \quad \text { i_n o yl }
$$

Pt 'brazo' (3) : i nn o lX'
4.310 'my arm' (1POSS-arm/foreleg)
$: \quad ?^{\prime} \mathrm{i} n$ o $\ddagger$ hin oll
------
T 'brazo' (1) : in ls
4.310 'his/her arms, its forelegs' (3POSS-arm/foreleg-PL) : 'i n $\quad$ i in l
(122) B 'my hand' (28) : i_ n o s_ i s_ kersk
4.331 'my palm' (1POSS-palm 3-front) : ? i n o $\ddagger$ \# 'ii $\int \mathrm{k}$ hinol \# ii z c
(123) B 'my fingers' (29) : i_ n o s_ sh a ck
4.340 'my little finger' (1POSS-little.finger) : ? i n o \& \# s 'aa k hinol \# z aa c
(124) B

---
4.344, 4.345'my nail' (1POSS-nail/claw) : ? i n 'oo s x h in n oo $\quad \mathbf{s} \mathbf{j}$
(125) B 'my leg' (32) : i_ t a h o m
4.351 'my thigh' (1POSS-thigh) : ? i t 'aa $\chi$ i m
h i t aa $x$ i m
 it ora
(127) B 'my heart' (36) : i_ m o rch

Pt 'corazón (3) : h i mm o s
4.351 'my heart' (1POSS-heart) : ? 'i m o $\int$
h i m or
(128) B 'wings' (106) : i_ s é_ k a

Pt 'alas' (10) : i ss e 1 k a
4.392 'its wings' (3POSS-wing/branch-PL) : 'ii s $\varepsilon \not \ddagger \mathrm{k}$ a
ii selca
(129) B 'feather' (105) : hr e_ k i n a

Pt 'plumas' (10) : i nn a
4.393 'bird's feather' (bird : $\int$, ii k \# 'i n a

3POSS-body.hair/fur/feather)

$$
\text { z ii } \mathbf{c} \# \text { i } \quad \text { n } \mathbf{a}
$$

(130) B 'to sleep' (171) : i_ k îi m

Pf 'dormir' (269) : i k i m
4.610 (INF.INTR-sleep) : i k 'ii m i qu ii m
------
T 'dormir' (3) : p s i m
4.610 (1SG.SBJ.INTR-IRR-sleep) : i ? p s 'ii m
ihpsiim
(131) B 'alive' (129) : e_ k â m
4.740 'its life' (3POSS-PON-alive) : i k 'a m
i cam
4.740 (SBJ.NMLZ-alive) : $\mathrm{k} \mathrm{k} \mathrm{'a} \mathrm{~m}$
c c a m

[^26](132) B 'dead' (130) : k o_ ch_h e
4.750 (SBJ.NMLZ-die/dead) ${ }^{66}$ : k 'oo $\chi$ i
c 00 x $\mathbf{i}$
------
Pf 'morir' (269) : i k o jg í
4.750 (INF.INTR-die/dead) : i k 'oo $\chi$ i i c oo $\quad$ x
(133) B 'to kill' (175) : i_ k o_v i_ que

Pf 'matar' (269) : i c ov i cuí
4.760 (INF.INTR-DTR-kill) : i k 'o i kw
i cocco
(134) B 'strong' (122) : k a_ vo_ h á ch
4.810 'strong' (SBJ.NMLZ-strong) : k 'aa $\mathrm{i} \chi$ a x
$\mathbf{c}$ aa $\mathbf{i} \quad \mathbf{x} \mathbf{j}$
(135) Pf '¡Estás cansado?' (268) m i cojotogiat
4.910a 'Are you tired?' (2POSS-limb-PL : m 'ii ? x o x \# t 'oo $\chi$ j a t

RL-die-PL)


## A. 5 Chapter 5: Food and drink; Cooking and utensils

(136) B 'to eat' (166) : i_ k o_ é t

Pf 'comer' (269) : i c o i t
5.110 'to eat' (INF-DTR-eat) : i 'k oo 3 i t
i coohit
(137) B 'to drink' (167) : i_ k o_ s i
5.130 'to drink' (INF-DTR-drink) : i 'k oo s i
iccosi
(138) B 'kettle' (43) : hre_he_pá_son_ich ${ }^{67}$
5.270 'kettle' :
(139) B 'knife' (47) : b é_ n o
5.380 'knife' : ‘ع $\mathrm{n} \mathrm{i} \mathrm{m}{ }^{68}$
ee n i m
(140) T 'pan'(1) : a t a sk a i
5.51x 'tortilla' : ? a t a s k a r
hatascar

[^27]
(142) B 'salt' (83) : a m_ t i p t
5.810 'salt' : ? a $n$ t 'i p
han tí p
(143) T 'pimiento (chile)' (3) : k o k e b
5.821 'chile pepper' : k o k ' $\varepsilon$ c o qu é
(144) B 'egg' (104) : sch e_k âi p ch 5.970 'egg' (bird 3POSS-egg) : $\int$ 'ii k \# 'ii p $\chi$ z ii $\mathbf{c}$ \# ii $\mathbf{p} \mathbf{x}$

## A. 6 Chapter 6: Clothing; Personal adornment and care

(145)
T 'algodón' (1) : m o jhj
6.240 'cotton' : m 'oo x
moo j

6.510 'shoe(s)' (ABS-shoe) : ? a t aa m t
h a t aa m t

## A. 7 Chapter 7: Dwelling, house, furniture

(147)
$\begin{array}{lllll}\text { B } & \text { 'house' (42) : } & \text { á_ } & \text { k i } \\ \text { Pf } & \text { 'casa' (264) } & \text { : } & \text { a } & \text { c }\end{array}$
7.120 'house' : ? 'aa k o
h aa co

## A. 8 Chapter 8: Agriculture, vegetation

```
(148) Pt 'trigo' (8) : k a \(\hat{\mathrm{s}} \mathrm{t}\) a \(\hat{\mathrm{s}}\)
    8.430 'trigo' : k 'a \(\int \mathrm{t}\) a \(\int\)
        c a z taz
(149) T 'maíz' (1) : b a p u t e
    8.470 'corn' : ? 'a p \(\chi^{\text {w }} \ddagger\)
    h a \(\mathbf{p}\) xö l
```

[^28](150) B 'grass' (89) : k o n_ é

Pt 'yacute' $(8)^{71}$ : k o n e
8.510 'grass' : k o n ' $\varepsilon \varepsilon$
c 0 n ee
(151) T 'yerba' (2) : a mp t y u bl
8.510 'grass' (land 3POSS-PON-green) : ? a n t \# j 'aa i $\ddagger$ han t \# y aa il
(152) B 'leaf' (87) : i s t l

T 'hoja' (2) : i x te 1
8.560 'leaf' (3POSS-leaf) : 'i s t x ist $\mathbf{j}$
(153) T 'flor' (2) : yutj ~iutj
8.570 'flower' (3POSS-PON-blossom) : j 'a p xö t y a $\mathbf{p}$ xö t
(154) (see (25))
8.600 'tree'
(155) Pt 'pino' (6) : h u kŭă
8.640 'pine' (loanword) : ? 'o k ${ }^{\text {w }}$ h o cö
(156) Pt 'torote' (6)
: X oo p
8.6xx 'elephant tree' (Bursera microphylla) : $\chi$ 'oo p $\mathbf{x} 00 \quad \mathbf{p}$
(157) Pt 'palo fierro' (6) ${ }^{72}$ k o m i tt e n
8.6xx 'ironwood (living)' (Olneya tesota) : k o m 'i t i n comitin

| Pt $\quad$ 'mezquite' (6) | $:$ | $h$ aa $s$ |
| :--- | :--- | :--- | :--- | :--- |
| 8.6xx 'western honey mesquite' (Prosopis glandulosa var. | $:$ | ? 'aa s |
| $\quad$ torreyana) |  |  |
|  |  | h aa $\mathbf{s}$ |

(159) T 'agave' (1) : a s o t

Pt 'maguey' (7) : h a ss oo t
8.6xx 'a maguey' (Agave chrysoglossa) : ? 'a s o t $h a s i t$

[^29](160) Pt 'sina' (7) a s a k a p kŭ 8.6xx 'sinita; old man cactus' (Lophocereus schottii) : ? a s a 3 k 'a p x ${ }^{\mathrm{w}}$ has ahcap jö
(161) B 'tobacco' (51) : a_ p ĩ s
8.680 'tobacco' : ? 'aa p i s
$h$ aa $p$ is
(162) B 'pipe' (50) : a_m a h i_ in_ p a c k_ k a ${ }^{73}$
8.691 'pipe' :
(163) B 'bark' (88) : i_ n a_ o lch
8.750 'bark' : i n 'aa i $\ddagger$
in aa il
(164) T 'calabaza' (2) : j a m ~ kam
8.93x 'a squash' (Cucurbita spp.) : $\chi$ 'a m
$\mathbf{x} \mathbf{a} \mathbf{m}$
A. 9 Chapter 9: Miscellaneous physical acts and those pertaining to arts and crafts, with some implements, materials, and products
(165) B 'axe' (46) : $e_{-} \quad e_{-} \quad p$ a_k ó_ t a m
 hehe\#ipacotim
(166) B 'iron' (84) : b é n_n o m
9.670 'iron' : ' $\varepsilon \varepsilon \mathrm{n} \quad \mathrm{i} \mathrm{m}^{75}$ ee $\mathbf{n} \mathbf{i} \mathbf{m}$
(167) T 'canasto' (1) a t e p i m
9.760 'Mexican basket with handles' : $\quad$ a t ' $\varepsilon \varepsilon$ p $\varepsilon$ n hatee pen

T 'canastos' (1) : a t e p i- k-s a
9.760 'Mexican baskets with handles' : 3 a t ' $\varepsilon \varepsilon$ p $\varepsilon$ x a hatee peja

[^30]
## A. 10 Chapter 10: Motion; Locomotion, transportation, navigation



```
(169) B 'to run' (168) : i_koch_horch \({ }^{76}\)
    10.460 'to run' (INF.INTR-run) : i k a p 'a \(\mathrm{n} \int \chi\)
        icapanzx
```

(170) B 'to go' (178) : i_ k a_ t a rch
10.470 'to go' (INF.INTR-go) ${ }^{77}$ : $\mathrm{i}^{-} \mathrm{k}$ 'a t a $\chi$
icatax
T 'ir' (2) : s i t a hj
10.470 's/he will go' (Ir.Id-go) : $\quad \mathrm{s}$ 'ii t a $\chi$
s ii $t$ a $x$
------
T 'ir' (2) : p s i t a hj
10.470a 'I will go': i ? p s 'ii t a $\chi$
(1SGSBJ.INTR-Ir.Id-go)
ihpsin $\mathbf{t} \mathbf{x}$
(171) B 'to come' (179) :
m'ke_ven $^{78}$
10.480 'Towards-INF.INTR-move' : m i k a
mica
------
Pf 'venir' (268) : m u k a
10.480 'the one who comes' : m 'o k a
(Toward-SBJ.NMLZ-move)
m 0 c a
(172) T 'venir' (1) : s i f $\sim$ siben
10.550 's/he will arrive'
s ii $\phi$ p
(Ir.Id-arrive)
: m i k a
$s$ ii f $p$
------
T 'venir' (1) : p s i f
10.550a 'I will arrive' : i h p s ii $\Phi$ p
(1SGSBJ.INTR-Ir.Id-arrive)
ihpsiifp

[^31](173) B 'canoe' (48) : i s_ sh a s_ c o m
10.8xx 'his/her reed balsa' (3POSS-reed.balsa) : i s k 'a m i s cá m
-----
10.8xx 'reed balsa' (ABS-reed.balsa) : ? a s k 'a m $h$ ascám

## A. 11 Chapter 11: Possession, property, and commerce

(174) B ${ }^{79}$ : hr e_h

Pf $\quad(269)^{80}:$ sh i j
11.180 'thing' : $\int_{\mathbf{z}}$ 'ii $\begin{gathered}\text { ii } \\ \mathbf{x}\end{gathered}$

## A. 12 Chapter 12: Spatial relations; Place, form, size ${ }^{81}$

(175) T 'abajo' (1) : a m t i k i
12.03x 'downwards' (land-3POSS-toward) : ? a n t 'ii k i $h$ a $n$ tii qui
(176) Pf 'alto' (265) : c o tlg e
12.080 'above, over, up, high' (adverb) : k o $\ddagger$ a
c 0 la
(177) B 'to sit' (176) : a m_ t i_ k i ch e
$\mathbf{1 2 . 1 3 0}$ 'to sit down' (land INF.INTR-sit) : ? 'a $n$ t \# i k 'ii x $h a n t \#$ i qu ii $j$
(178) B 'to stand' (177) : i_ k_ a f i t
$\mathbf{1 2 . 1 5 0}$ 'to stand' (INF.INTR-stand) : i k a $\Phi$ 'i t icafí t
(179) B 'near' (144) : i c kh

Pf 'cerca' (268) : h i k g
12.430 'near' (3POSS-near) : 'ii $\mathrm{k} \chi$ ii $\mathbf{c} \mathbf{x}$
(180) Pf 'aquí' (268) : i sh k a k 12.43x 'here' (PROX-LOC) : ? i $\int$ a k
h i z a c

[^32]| (181) | Pf | 'lejos' (268) | to j |
| :---: | :---: | :---: | :---: |
|  | 12.440 | 'far' | t 'oo $\chi$ |
|  |  |  | $t$ oo x |

(182) Pf 'allá' (268) : i m k a k
12.44x 'there' (DIST-LOC) : ? i m k a k ${ }^{82}$
himeac
(183) B 'great' (120) : k a_ k o lch
12.550 'big' (SBJ.NMLZ-big) : k 'aa k o x
c aa coj

## A. 13 Chapter 13: Quantity and number ${ }^{83}$



[^33]| (186) | B | 'three' (152) | p hr a_ |
| :---: | :---: | :---: | :---: |
|  | Pt | '3.' (13) | $\mathrm{p}^{\prime} \mathrm{X}$ a |
|  | 13.030 | 'three' (interjection) | p $\chi$ 'aa ? o |
|  |  |  | p $x$ aa h o |
|  | T | 'tres' (3) | k u p jtk u |
|  | Pt | '3.' (13) | k a p X a |
|  | Pf | 'tres' (268) | c a p j á |
|  | 13.030 | 'three' (SBJ.NMLZ-three) | $k$ 'a p $\quad$ ¢ a |
|  |  |  | $\mathbf{c} \mathbf{a} \mathbf{p} \quad \mathbf{x}$ a |




| (188) | B | 'five' (154) | hu a_ va_ t'h o m |
| :---: | :---: | :---: | :---: |
|  | Pt | '5.' (13) | ku a o t o m |
|  | 13.050 | 'five' (interjection) | $\chi^{\mathrm{w}}$ 'a i t om |
|  |  |  | xö a i tom |

    ------
    

[^34]
(191) B 'eight' (157) : p hr a_ qu e
Pt '8.' (13) : p' X a k Xu e
13.080 'eight' : p $\chi$ 'a $x^{w} k \quad i$ (interjection)
p $\mathbf{x}$ a jö qu i

| T | 'ocho' (1) | O Sr o j o s k u m |
| :---: | :---: | :---: |
| Pt | '8.' (13) | $\mathrm{k} \hat{\mathrm{s}}$ o X o l l ( a |
| Pf | 'eight' (268) | sh o j ou tl c a m |
| 13.080 | 'eight' <br> (SBJ.NMLZ-eight) | k $\int$ 'oo $\chi$ o $\ddagger$ k a m |
|  |  |  |

[^35]| (192) | B | 'nine' (158) | s o_ |  | h á n tl |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pt | '9.' (13) | s o |  | h a n the |  |
|  | 13.090 |  | k s 'oo | $\chi$ | ? a n ¢ |  |
|  |  |  | c s 00 | $\mathbf{x}$ | h a n l |  |
|  | Pt | '9.' (13) | k s ov | i | $\mathrm{k} \quad \mathrm{a}$ | n 1X' |
|  | Pf | 'nueve' (268) | s ov | i | c a | $\mathrm{n} \mathrm{tlj}{ }^{90}$ |
|  | 13.080 | 'nine' (? | k s oo | i | \# k ? 'a | n ¢ |
|  |  | SBJ.NMLZ.-ten) |  |  |  |  |
|  |  |  | c s 00 | i | \# c h a | $n 1$ |
|  | $\begin{aligned} & \mathrm{T} \\ & \mathbf{1 3 . 0 8 0} \end{aligned}$ | 'nueve' (3) | obb | e- | o a | $n 1^{91}$ |
|  |  | 'nine' (? | k s oo | i | \# $\chi$ o $?$ 'a | n ¢ |
|  |  | RL.EMPH-ten) |  |  |  |  |
|  |  |  | c s 00 | i | \# x o h a | $n 1$ |
| (193) | B | 'ten' (159) |  |  | $\mathrm{h} \mathrm{o}_{-} \mathrm{n}$ a | chtl |
|  | Pt | '10.' (13) |  | : | X o n a | 1X' |
|  | 13.100 | 'ten' (interjection) |  | : | $\chi$ 'o ? n a | $\pm$ |
|  |  |  |  |  | $\mathbf{x} 0 \mathrm{~h} \boldsymbol{n}$ a | 1 |
|  | ------ |  |  |  |  |  |
|  | Pt | '10.' (13) |  |  | $\mathrm{k} \quad \mathrm{a} \mathrm{n} 1 \mathrm{X}^{\prime}$ |  |
|  | Pf | 'diez' (268) |  |  | c a $\mathrm{n} \mathrm{tlj}{ }^{92}$ |  |
|  | 13.100 | 'ten' (SBJ.NMLZ-ten) |  | : | k ? 'a n ¢ |  |
|  |  |  |  |  | chanl |  |
|  | ------ | 'diez' (3) |  |  | t a n 1 | 93 |
|  | 13.100a | a 'there were ten' (DP | P.RL-ten) |  | t ? 'an n ¢ |  |
|  |  |  |  |  | than l |  |

(194) B 'eleven' (160) : $t^{\wedge}$ a $n_{-} \quad t \quad a_{-} s \quad o_{-} \quad q u \quad e^{94}$ Pf 'once' (268) : c a n tlj t a shsh o 13.101 'eleven' : t ? a n $\ddagger$ \# t a $\int \quad \mathrm{o} \# \mathrm{k}^{\mathrm{w}} \mathrm{k}$ 'ii ? t han l \# taczo $\mathbf{z}$ cö qu ii h

[^36](195) B 'twelve' (161) : t

Pf 'doce' (268) : c a n tlj ${ }^{96} \quad \mathrm{c} \quad \mathrm{k} j$
13.102 'twelve' : t ? a n $\ddagger$ \# t oo $\mathrm{k} \mathrm{x} \mathrm{\#} \mathrm{k} \mathrm{k}^{\mathrm{w}} \mathrm{k}$ ii ? thanl \# t oo c j \# cö qu ii h 'fourteen' : $\mathrm{t}^{\wedge}$ a n chl_ $\mathrm{t} \mathrm{a}_{-} \mathrm{p}$ hr $\mathrm{a}_{\mathrm{c}} \quad$ qu $\mathrm{e}^{97}$ [sic]
13.10x 'thirteen' : t ? , a n $\ddagger \quad \# \mathrm{t}$, a p $\chi$ a $\quad \# \mathrm{k}^{\mathrm{w}} \mathrm{k}$ ii ?
thanl \# taccce cöquii h
(197) B 'fifteen' : t ${ }^{\wedge}$ a $n$ chl_ hu a_ va_ t'h o m ${ }^{98}$
13.103 'fifteen' : t ? , a n $\ddagger$ \# t , aa i t o m \# kw ii ?

(198) B 'sixteen' : $\mathrm{t}^{\wedge}$ a n chl_ $\mathrm{i}_{-}$sch n a $\mathrm{p}_{-} \mathrm{k}^{\prime}$ sc o ch ${ }^{99}$
13.10x 'sixteen' : t ? a n $\mathrm{m}^{-}$\# i s n aa $\mathrm{p} \# \mathrm{t}$, a $\int \mathrm{o} \quad \mathrm{x} \# \mathrm{k}^{\mathrm{w}} \mathrm{k}$ ii ?

(199) B 'seventeen' : $t^{\wedge}$ a $n$ chl_ $t u m_{-} k$ a ch ghu e
13.10x 'seventeen' : t ? a n t \# tom ko x \# kw kii ?
thanl \# tomecoje cö qu ii h
(200) B 'eighteen' : $\mathrm{t}^{\wedge}$ a n chl_ $\mathrm{phr} \mathrm{a}_{-}$ghu $\mathrm{e}^{100}$
13.10x 'eighteen' : t ? a n $\ddagger$ \# t $\int$, oo $\chi$ o $\ddagger \mathrm{k}$ a m \# k $\mathrm{k}^{\mathrm{w}} \mathrm{k}$ ii ?

(201) B 'nineteen' : t^ a n chl_ s o_v i han tl_ ghu e 13.10x 'nineteen' : t ? a n $\ddagger$ \# k s oo i \# t ? , a n $\ddagger$ \# kw kii ? thanl \# c soo i \# thanl \# cö qu ii h

[^37]| (202) | B | 'twenty' (162) |
| ---: | :--- | :--- |
| T | 'veinte' (4) |  |
|  |  |  |
|  | Pt | '20.' (13) |
|  | $\mathbf{1 3 . 1 0 4}$ | 'twenty' (3POSS-PON-ten |
|  |  | SBJ.NMLZ-two) |

: e_ a n sl_ k o ch : $\operatorname{tanl}{ }^{101}$ joukl
(203) B 'thirty' (163) : e_ a n sl_ k a p_ k a

(204) B 'forty' : e_ a n sl_ sc o ch

(205) B 'fifty': e_ a n sl_ k o_ va_ t'h o m

$$
\begin{array}{llllllllllll}
\text { 13.1xx 'fifty': } & \mathrm{i} & ? & \text { a } & \mathrm{n} & \mathrm{p} & \text { \# k } & \text { oo } & \mathrm{i} & \mathrm{t} & \mathrm{o} & \mathrm{~m} \\
& \mathbf{i} & \mathbf{h} & \mathbf{a} & \mathrm{n} & \mathbf{l} & \text { \# } & \mathbf{c} & \mathbf{o o} & \mathbf{i} & \mathbf{t} & \mathbf{o}
\end{array}
$$

(206) B 'sixty' : e_ a n sl_ y' sch n a p_ k' sc o ch 13.1xx 'sixty' : i $?$, a n $\ddagger$ \# i s n aa $\mathrm{p} \# \mathrm{k}$ a $\int \mathrm{ox}$

(207) B 'seventy' : e_ a n sl_ $\quad$ u m_ k a ch ghu e 13.1xx 'seventy' : i ? a n d \# t o m k o x \# k ${ }^{\mathrm{w}} \mathrm{k}$ ii ?

(208) B 'eighty' : e_ a n sl_ hsch o_ h o lch_ k o m
13.1xx 'eighty' : i $?$, a n $\ddagger$ \# k $\int$ oo $\chi$ o $\ddagger \mathrm{k}$ a m

(209) B 'ninety' : e_ a n sl_ s o_v i_ $k$ a n tl 13.1xx 'ninety' : i ? a n $\ddagger$ \#k s oo i \# k ? a n $\ddagger$

(210) B 'one hundred' (164) : hi_ a n tl_ k a n tl

T 'ciento' : t a n l t a n los
Pf 'cien' (268) : i a n dl c a n dl
13.105 'one hundred' : i ? a n $\ddagger$ \# k ? 'a n $\ddagger$
inanl \#chanl

[^38](211) Pf 'mil' : i a n dl i andl c a n dl ${ }^{104}$ (268)
13.106 'one : i ? a n \& \# i ? a n $\ddagger$ \# k ? 'an $\ddagger$ thousand'

## ihanl\#ihanl\#chanl

(212) B 'all' (141) : $k$ ô ch

Pf 'todo' (269) : k ou j
13.140 'all' : k 'oo $\chi$
c 00 x
(213) B 'many, much' (142) : k a t_ h o

Pf (plural) (265), 'junto' (266) : c a t j ó
13.150 'SBJ.NMLZ-much/many' : k 'a t $\chi$ o
catix $\mathbf{o}$
(214) B 'small' (121) : k i p_ k'h a
13.170 'SBJ.NMLZ-few' : $k$ 'i p $\chi$ a qu i $\quad \mathbf{p} \quad \mathbf{x} \quad$ a

## A. 14 Chapter 14: Time

(215) B 'day' (56) : a m t i_f e v' r ${ }^{105}$
14.410 'day' :
(216) B 'night' (57) : i_ a_ m ô k

T 'noche' (3) : y a mor
Pf 'noche' (265) : i a mó k
14.420 'night' (3POSS-PON-be.night) : i ? 'a mok
i hamoc
(217) B 'morning' (60) : i_ t a p lch
14.440 'morning' : i t 'aa p $\ddagger$
(3POSS-PON-be.early.morning)
it aa pl
(218) B 'evening' (61) : a_n a_ y â ue t

Pf 'tarde' (265) : a no y a v t
14.451 'afternoon' (3POSS-in 3POSS-PON-set.sun) : a n o \# j 'aa i t
a no \# y aa $\mathbf{i}$ t

[^39](219) B 'to-day' (145) : a_poshk ${ }^{106}$
14.470 'today' (sun/day this.VT) : z 'aa ? \# ? 'i p k o p
z aa h \# hipeop
(220) B 'to-morrow' (147) : ampt_po_her ${ }^{107}$
14.480 'tomorrow' (land Ir.Dp-? : ? 'a n t \# p o $\Phi$ ii \# t a DS)
hant\#pofiota
(221) B 'yesterday' (146) : m o ch_h é m_m a
14.490 'yesterday' $: m$ o $\chi$ 'i m a
moxama
(222) Pf 'semana' (265) : i c a t o m e k
14.610 'week' : i k a t 'oo m $\varepsilon$ k
icatoomec
(223) Pf 'domingo' (265) : c a t o m i k
14.620 'Sunday' : i k a t 'oo m $\varepsilon \mathrm{k}$ icatoomec
(224) Pf 'lunes' (265) : eronas
14.630 'Monday' ${ }^{108}$
(225) Pf 'martes' (265) : e j a p col k
14.640 (3POSS-PON-spend.night : i $\chi$ 'aa $\mathrm{p} \# \mathrm{k}$ 'oo k x SBJ.NMLZ-two) ${ }^{109}$
$$
\mathbf{i} \mathbf{x} \text { aa } p \# \mathbf{c} \text { oo } \mathbf{c} \mathbf{j}
$$
(226) Pf 'miércoles' (265): i j a p c a p j á
14.650 (3POSS-PON-spend.night : i $\chi$ 'aa $\mathrm{p} \# \mathrm{k}$ 'a $\mathrm{p} \chi$ a SBJ.NMLZ-three) ${ }^{110}$
$\mathbf{i} \mathbf{x}$ aa $\mathbf{p} \#$ c a $\mathbf{p} \times \mathbf{x}$

[^40](227) Pf 'jueves' (265) : i j a p c s u k cri
14.660 (3POSS-PON-spend.night : i $\chi$ 'aa $\mathrm{p} \# \mathrm{k} \int$ 'oo $\chi^{\mathrm{w}} \mathrm{k}$ SBJ.NMLZ-four) ${ }^{111}$

## i x aa p \# c z oo xö c

(228) Pf 'viernes' (265) : k j a p co utom
14.670 (3POSS-PON-spend.night : i $\chi$ 'aa p \# k 'oo i t o m SBJ.NMLZ-five) ${ }^{112}$
i x aa p \# coo itom
(229) Pf 'sábado' (265) : sh a b a y o
14.680 'Saturday' : $\int$ a $a j$ o
z a a y o
(230) See 'moon' (30).
14.710 'month'
(231) See 'land' (9).
14.730 'year'
(232) B 'winter' (65) : i_ a p' l
14.740 'winter' (3POSS-PON-cold) i $?$ 'aa p $\ddagger$
i haa pl
(233) B 'spring' (62) : e_ sh a_k e t_ a_ m o ch ${ }^{113}$
14.750 'spring' :
(234) B 'summer' (63) : e_ k a s_y o m
14.760 'summer' : i k 'o $\int$ i m
(3POSS-PON-be.hot.weather)

$$
\begin{array}{lllllll}
\mathbf{i} & \mathbf{c} & \mathbf{0} & \mathbf{z} & \mathbf{i} & \mathbf{m}
\end{array}
$$

(235) B 'autumn' (64) : $\mathrm{i}^{\prime}$ p_ k e_ k i ${ }^{114}$
14.770 'autumn' :

## A. 15 Chapter 15: Sense perception ${ }^{115}$

(236) T 'oler' (3) : s ibb
15.21x 'to smell' (SBJ.NMLZ-TR-smell) : k s 'ii
c s ii

[^41](237) B 'silencio' (interjection) (268) : m a v
15.460a 'be quiet!' (IMP-quiet) : i ? m 'aa i
i h m aa i
------
15.460 'quiet, silent' (SBJ.NMLZ-quiet) : k m 'aa i
c maa i
(238) B 'to see' (173) : i_ke_hom ${ }^{116}$
15.510 'to see' (INF.TR-see) : i ? 'aa ? o
i h aa ho
(239) B 'white' (114) : k ô p ch t ${ }^{117}$
15.640 'white' (SBJ.NMLZ-white) : k 'oo $\chi \mathrm{p}$
c $\mathbf{o o} \mathbf{x} \mathbf{p}$
(240) B 'black' (115) : k o'_ p o lcht
15.650 'black' (SBJ.NMLZ-black) : k 'oo pod c oo poll
(241) B 'red' (116) : k e_vi lch

T 'colorado' (3) : k eb ls
15.660 'red' (SBJ.NMLZ-red) : k ? 'ع $\ddagger$
ch ee l
(242) B 'green' (119) : k o_v ì lch

T 'verde' (2) : k ob slh
15.670, 'blue/green' (SBJ.NMLZ-blue/green) : k 'oo i $\ddagger$
15.680
c 00 il
(243) B 'blue' (117) : v a lch_ k o_ p o lch
15.67x 'dark blue' : j , aa i $\ddagger \quad \# \mathrm{k}^{\mathrm{w}} \mathrm{k}$ 'oo po $\ddagger$
(3POSS-PON-blue/green
SBJ.NMLZ-black)
(244) B 'yellow' (118) : k' m á_ s o l

T 'amarillo' (4) : k m o z ol
L 'amarillo' (157) : co mm a ss o l
Mc 'yellow' : m a ss o lqt
15.590 'yellow' (SBJ.NMLZ-yellow) : k m 'a s o $\ddagger$


[^42]```
(245) B 'warm' (132) : ke_ m a cht 1
    15.850 'hot' (SBJ.NMLZ-hot) : \(k \quad \mathrm{~m}\) 'a t x
    c matid
(246) B 'cold' (131) : hyapl \({ }^{118}\)
    15.860 'cold' (SBJ.NMLZ-cold) : k 'aa p £
    c aa \(\mathbf{p l}\)
```

A. 16 Chapter 16: Emotion (with some physical expressions of emotion); Temperamental, moral, and aesthetic notions ${ }^{119}$


[^43]| (252) | B | 'ugly' (128) | m i p_ h'l a |
| :---: | :---: | :---: | :---: |
|  | Pf | 'ugly' (265) | ki m i p l a |
|  | 16.720 | 'bad' (SBJ.NMLZ-bad) | k m 'ii p ¢ |

16.720a 'it is bad' (RL.EMPH-bad) : $\chi$ o m 'ii p \& a $\mathbf{x} \mathbf{o} \quad \mathrm{m}$ ii p la
$\qquad$
Pf 'mal' (268) : i m i p la
16.720b (3POSS-PON-bad) : i m 'ii p $\ddagger$ a
i mii pla
(253) B 'handsome' (127) : k' m i s kl

Pf 'bonito' (265) : ke m i sh kij
16.81x 'good looking' : k m 'i $\int x$
(SBJ.NMLZ-good.looking)
c mizid
Pf 'bien' (268) : i m i sh kl ${ }^{122}$
16.81x '(3POSS-PON-good.looking) : i m i $\int \mathrm{x}^{\mathrm{x}}$

## A. 17 Chapter 17: Mind, thought


(256) Pf 'cuándo' (268) : sh i m oj k l
17.650 'when?' : $\int$ 'i m x ${ }^{\mathrm{w}} \mathrm{k}$
z í m jö c
(257) Pf 'dónde' (268) : a k i $\sim$ ackik
$\mathbf{1 7 . 6 6 0}$ 'where?' : ? 'a k i ${ }^{123}$
há qu i

[^44]

## A. 18 Chapter 18: Vocal utterance, speech; Music


(260) Pf 'ladrar' (269) : c ou cué
18.12x 'the one that barks' (SBJ.NMLZ-DTR-bark.at) : $k$ 'oo $\mathrm{k}^{\mathrm{w}}$
c 0 cö
(261) B 'to speak' (172) : i_ k a_ va_ t o ${ }^{125}$
18.210 'to speak' (INF.INTR-speak) : i k 'aa i torm i can itom
(262) P 'tu nombre' (278) : m i t a s i
18.280a 'your name' : m i t 'aa s i
(2POSS-name)
mitan $\mathbf{~ a n}$
 (3POSS-name? ?) ${ }^{126}$
it aa $s$ i \# i y a t \# cö i h ii p

## A. 19 Chapter 19: Territorial, social, and political divisions; Social relations

(263) B 'town, village' (38) : a_i r_r i t o m
19.160 'settlement' : ? ' $\varepsilon \int$ i t i m he z iticm
(264) B 'chief' (39) : k i_ éh_ eh
19.240 'chief, leader' (SBJNMLZ-have-stick) : k i $? ~ ' \varepsilon$ ? $\varepsilon$ qu i he he
(265) B 'warrior' (40)
h'tam_mu_ko_ka ${ }^{127}$
19.24x 'warrior'

[^45](266) B 'friend' (41) : e_a_ham_i_ko_ka_em_e ${ }^{128}$
19.510 'friend' :

## A. 20 Chapter 20: Warfare and hunting

(267) B 'bow' (44) : á_ c o n
20.240 'bow' : ? 'aa k n i
$h$ aa c i
(268) B 'arrow' (45) : a_h á_ s a
20.250 'arrow': $?$ a $\chi$ 'aa $\int$ a
$h$ a $x$ aa $z$ a

## A. 21 Chapter 21: Law

## A. 22 Chapter 22: Religion and beliefs

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[^46]Hernández, Fortunato. 1904. "Lengua seri o kunkáak." Las razas indígenas de Sonora y la guerra del Yaqui. 237-294. Mexico City: J. de Elizalde. http://cdigital.dgb.uanl.mx/la/1080013243/1080013243.html
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[^0]:    ${ }^{1}$ I thank H. Andrew Black for his helpful comments and suggestions as well as his general help on this paper. Abbreviations used are: $1=$ first person, $1 \mathrm{SG}=$ first person singular, $2=$ second person, $3=$ third person, $\mathrm{ABS}=$ absolutive, $\mathrm{DIST}=$ distal, $\mathrm{DP}=$ dependent, $\mathrm{DTR}=$ detransitivizer, $\mathrm{EMPH}=$ emphatic, $\mathrm{FE}=$ female ego (relating to kinship term $), \mathrm{FL}=$ flexible, $\mathrm{GEN}=$ genitive, $\mathrm{HZ}=$ horizontal, $\mathrm{IMP}=$ imperative, $\mathrm{INF}=$ infinitive, $\mathrm{INTR}=$ intransitive, $\mathrm{IO}=$ indirect object, $\mathrm{IRR}=$ irrealis, $\mathrm{LOC}=$ locative, $\mathrm{ME}=$ male ego (relating to kinship term), NEG = negation, negative, NMLZ $=$ nominalizer/nominalization, OBJ.NMLZ = object nominalizer, $\mathrm{PL}=$ plural, $\mathrm{PON}=$ proposition/oblique nominalizer, POSS $=$ possessive, $\mathrm{PROX}=$ proximal/proximate, $\mathrm{RL}=$ realis, $\mathrm{SBJ}=$ subject, $\mathrm{SBJ} . \mathrm{NMLZ}=$ subject nominalizer, $\mathrm{SG}=$ singular, $\mathrm{TR}=$ transitive, $\mathrm{vT}=$ vertical.
    ${ }^{2}$ Pfefferkorn (1949:81), writing in the second half of the eighteenth century, supposedly records one word of Seri, when he writes about some "very pretty, light green pebbles, called chiquiquite by the Seris." The genuineness of this word, presumably interpeted phonetically as [t]ikikite], has not been verified; it does not have the feel of a Seri word.
    ${ }^{3}$ The people and the language were referred to by variations on the name or spelling of Seri, including "Ceris" (Tenochio 1852) and "Ceri" (Bancroft 1886:704). The error of referring to the language as "kunkaak" appears in Hernández (1904:237) for the first time, to the best of my knowledge. Hernández confuses the self-designation for the ethnic group (/komkaak/) with the name that they use for their language (generally referred to as /kmiike iitom/). Since he does so in the section title ("Lengua seri o kunkaak"), it is not surprising that this has been repeated by later researchers.

[^1]:    ${ }^{4}$ A photograph of Kolusio is printed in McGee (2000:100). More details (somewhat confusing) about the background of this man appear in McGee (1989:97-98).
    ${ }^{5}$ I am indebted to Mary Moser for having made a photocopy of Hernández (1904) many years ago which, along with McGee (1989), a work that contains some interesting information along with the misinformation that it put into print, was an invaluable help in beginning to put together the information contained in this article.

[^2]:    ${ }^{6} \mathrm{He}$ is referred to as D. Fernando Ramírez in the review of his work that follows its publication in the Boletin, as described below.
    ${ }^{7}$ I do not know what dialect of Arabic this may refer to.
    ${ }^{8}$ Dr. Fortunato Hernández was a young medical doctor who took a special interest in the native cultures of the northwestern part of Mexico. He was also an honorary member of the Sociedad Mexicana de Geografia y Estadistica.
    ${ }^{9}$ I thank Professor Virgilio Adrián Arias Ramírez and his staff of the Sociedad Mexicana de Geografia y Estadistica for facilitating access to the archive so that the material could be seen and photographed. I thank Guillermo Santana for his kind help in taking the time to make the appointment and Dan Agee for his sharp eye in locating the misplaced material in the archive. It was very helpful to actually see the original article and the review (dictamen) that accompanied it so that both could be photographed and studied.

[^3]:    ${ }^{10}$ See section 3 for details about the symbols used in the modern phonological transcriptions. See the beginning of appendix A for explanation of the presentation of the data.
    ${ }^{11}$ These are all discussed a bit more in Marlett (2010), although there is not much more to say.

[^4]:    ${ }^{12}$ Tenochio's list reproduced by Hernández is available at [http://cdigital.dgb.uanl.mx/la/1080013243/1080013243_52.pdf].
    ${ }^{13}$ Pinart's list reproduced by Hernández is available at [http://cdigital.dgb.uanl.mx/la/1080013243/1080013243 50.pdf].
    ${ }^{14}$ Original: "Es copia del que remitieron de Hermosillo el 16 de Noviembre de 1885 á la Dirección General de Estadística de México."

[^5]:    ${ }^{15}$ I have no comment about the forms that he presents for what is purported to be the verb 'be', including ime, eme, pejoá, mejoá, ejoá, ajoacj, majoacj,joacj, em muy allá, amuj millá, amuj llá, amuj aikl, amj maijcl, yo acjl, ajoacjl, poacj momá, poá momá, mepoá momá, apoacjl momá, mapoacjl momá, poá momá, amoj majoacl, amoj sapej, etc. (p. 266). I also have no comment about his disjunctive conjunction) (?) 'ya' joá, his adversative conjunctions (?) 'aunque' apoamojiasij and 'más' mós (although the latter may be /mos/ 'also'), and his causal conjunction 'porque' shimoqueyá (which looks like it begins with the word for 'when' (256)). A few verbs are not included in the presentation of data below: 'soñar' icajonatla (compare the modern root for 'dream' /moofi/), 'esperar' aviv, 'apretar' cuacapis, and 'enseñar' cuicacovát.
    ${ }^{16}$ Peñafiel lists some pronouns (p. 266) with the preposition 'para' ('for') and simultaneously the case label 'Dat.', and the postposition hicpime appears. He also gives the form emiatl glossed as 'Abl.' 'conmigo' ('with me'). This are unrecognized today.
    ${ }^{17}$ This name could be [ma'Siim], a form of the verb 'pleasing, beautiful, handsome'. If it is this form, then the name would be written Maziim by the modern local conventions. Someone has suggested that the real word was Imaziim 'one who is not beautiful (or handsome)'. By known mechanisms of name-giving in the Seri culture, the latter may certainly be possible. The term may not even be applicable to the man himself because it could be a phrase that he used as a child. It is therefore not possible to give any significance to the name. This person has been identified as Francisco Astorga by someone discussing this question with Mary B. Moser (personal notes).

[^6]:    ${ }^{18}$ This is also known to be a labiodental in the speech of some speakers in modern Seri Marlett, Moreno \& Herrera (2005).

[^7]:    ${ }^{19}$ Note that this letter is followed by $k u$. See section 4.7.

[^8]:    ${ }^{20}$ The word for 'ugly' appears twice on page 265, but in one place a letter was replaced by a space.
    ${ }^{21}$ I do not believe that this adjective is very commonly used in modern Seri.

[^9]:    ${ }^{22}$ Tenochio also gives the word amtarsu for 'año', which I understand as modern / Rant tajo/ ('land/year one').
    ${ }^{23}$ The words for 'earth' and 'year' are related in modern Seri (see section 9.2 ) and so this lexeme is included here since Peñafiel did not record the word for 'land, earth' except in the Lord's Prayer.
    ${ }^{24}$ See section 8.1.

[^10]:    ${ }^{25}$ This is an interpretation of Bartlett's \#80. It is not the common way to express 'mountain' in modern Seri.
    ${ }^{26}$ The second part of this expression is unrecognized.
    ${ }^{27}$ This expression is unrecognized.
    ${ }^{28}$ Peñafiel uses this word to illustrate various supposed cases (p. 265): ecotki (singular nominative, also singular accusative), which I have no comment on other than that there is no case in modern Seri; ecot hicp (singular dative), which is presumably / Re\&kot iikp/ (desert.area 3POSS-near); ecot (singular vocative). For the plural of each of these, he adds catjó, which is obviously simply /kat o/ (SBJ.NMLZ-much/many), see (213).
    ${ }^{29}$ This is not a current expression for 'island'. Three expressions are listed in M. Moser \& Marlett (2005): 'land that is alone', 'land that is in the middle of the sea', and 'stone/mountain that is in the middle of the sea'.

[^11]:    ${ }^{30}$ This is not the common expression for 'lake' today (if there is one). The expression recorded in M. Moser \& Marlett (2005) is 'big (fresh) water'.
    ${ }^{31}$ The Smithsonian list has "medaño".

[^12]:    ${ }^{32}$ This expression is unrecognized, although it might be $/$ R $\varepsilon$ ? ?ant kiti/ (plant land SBJ.NMLZ-connected), an expression for a substantial tree or cactus M. Moser \& Marlett (2005:373).
    ${ }^{33} \mathrm{~L}$ also had ehé for 'wood' (1.430). This is the same lexeme as 1.420 in modern Seri.
    ${ }^{34} \mathrm{~T}$ also lists the form ahsteka, which must be /Rast/ plus something unrecognized, unless this was a copyist error.
    ${ }^{35}$ Peñafiel wrote the word for 'sun' with an acute accent and the word for 'day'without an accent.
    ${ }^{36}$ See also 'day' (215).

[^13]:    ${ }^{37} \mathrm{Pf}$ also gives isháj for 'mes' ('month') on the same page.
    ${ }^{38}$ The same word is used for 'month'.
    ${ }^{39}$ This expression is composed of two deverbal nouns.

[^14]:    ${ }^{40}$ Compare with (240).

[^15]:    ${ }^{41}$ The second word is unrecognized.
    ${ }^{42}$ This last word is unrecognized.

[^16]:    ${ }^{43}$ The labialization on $/ \mathrm{x}^{\mathrm{w}} /$ spreads to the $/ \mathrm{k} /$ such that the labialization is clearly heard phonetically on the $/ \mathrm{k} /$. See section 4.7.

[^17]:    ${ }^{44}$ The fact that the word is transcribed with "o" suggests that it belongs here rather than with item (55).

[^18]:    ${ }^{45}$ The first word is related to the predicate meaning 'be pregnant with'.

[^19]:    ${ }^{46}$ The form listed in the archived manuscript for 'yo' is actually $m e$, while that for 'tú' is actually ove, ivve. I assume, as did Hernández (1904:234), apparently, that these were inadvertently switched by Hewitt when he copied them. A further problem is that the typed manuscript seems to clearly have the form ove(as shown here), but Hewitt (1898:302) printed eve in its place; the latter is copied by Hernández (1904:234).
    ${ }^{47}$ The glottal stop is missing in this transcription, leaving it unclear. See note 48.
    ${ }^{48}$ The underlying form (in an abstract sense, in generative phonology) of the modern form is \{mi-Ø-jaa\}. The /i/ deletes before the $/ \mathrm{j} /$ (a typical deletion in the language, but not exceptionless), causing the need for an epenthetic vowel before the consonant cluster beginning with a nasal. The nasal consonant assimilates in place of articulation to the following consonant. If Peñafiel's data is understood as intending /mijaa/, then this suggests that the i-Deletion rule was not operating yet. This suggests that the form he recorded in (69) was meant to be /Rijaa/. If Peñafiel's data is understood as intending / mjaa/, then the i-Deletion rule was operating, but not the assimilation rule nor the epenthesis rule.
    ${ }^{49}$ In modern Seri this is the same as 2.910 (68). The terms recorded in the nineteenth century are unrecognized.

[^20]:    ${ }^{50}$ In modern Seri this is the same as 2.920 (70). The terms recorded in the nineteenth century are unrecognized.
    ${ }^{51}$ This form is identical to Bartlett's \#137 and may have been a copyist error.
    ${ }^{52}$ In modern Seri there is no common third person personal pronoun.
    ${ }^{53}$ Peñafiel gives this form as both nominative and accusative.
    ${ }^{54}$ This is a compound form; the second syllable is the same as the definite article for flexible things. See M. Moser \& Marlett (1994). It is possible, however, that the form intended was /Ripkix/, for seated things, which is much more commonly used.
    ${ }^{55}$ This is a compound form; the second syllable is the same as the definite article for flexible things (with extended uses as well). See M. Moser \& Marlett (1994). It is phonetically [?inki?].
    ${ }^{56}$ This is a compound form; the second syllable is the same as the common plural definite article. See M. Moser \& Marlett (1994). It is phonetically [?ipkoi].

[^21]:    ${ }^{57}$ This is an interpretation of Bartlett's \#107. This expression has not been recorded by anyone else, to the best of my knowledge.

[^22]:    ${ }^{58}$ The first part seems clear. The second part may be /kReq\&/ 'red' (see Bartlett's transcription of that word in (241).

[^23]:    ${ }^{59}$ This expression is unrecognized.
    ${ }^{60}$ This term is now considered archaic.
    ${ }^{61}$ The following item is not discussed: T obeke 'pelo' ('hair') (1).

[^24]:    ${ }^{62}$ This transcription does not suggest anything in modern Seri except for one of the words for 'cow' /Reعn/.

[^25]:    ${ }^{63}$ The form that Tenochio recorded may have been the one for 'my mouth', based on what he obtained for other possessed forms that he elicited.
    ${ }^{64}$ Pinart's gloss does not mention the possessor, but Hewitt's translation in the archived manuscript indicates first person singular possessor on this noun and others. It is not clear what prompted Hewitt to make this interpretation. Whether the interpretation is correct or not for body part nouns is unclear. It could have been third person possessor since the difference is only the absence (third person) or presence (first person) of the initial glottal stop. On kinship terms, the difference is more salient since the prefix for third person possessor on kinship terms is a- rather than i-.

[^26]:    ${ }^{65}$ This form is odd. It is obviously /inoł Jaak itoaa/, but /inoł Jaak/ means 'little finger' (and cannot mean 'toe').

[^27]:    ${ }^{66}$ This predicate is primarily used to describe animals in modern Seri.
    ${ }^{67}$ This expression is almost unrecognized, although it might be / Jii $\chi$ ipafnix/ 'thing in which it is stewed'.
    ${ }^{68}$ See 'iron' (166).

[^28]:    ${ }^{69}$ This is a loanword from a Uto-Aztecan language and is also considered archaic today.
    ${ }^{70}$ The manuscript seems to have in instead of $m$, but I believe this is a copyist error.

[^29]:    ${ }^{71}$ This word does not appear in any Spanish dictionary that I have consulted.
    ${ }^{72}$ This is 'palo hierro' in the archived list.

[^30]:    ${ }^{73}$ This is unrecognized.
    ${ }^{74}$ Literally, 'what wood is chopped with'.
    ${ }^{75}$ This is a loanword from Uto-Aztecan.

[^31]:    ${ }^{76}$ This word is unrecognized.
    ${ }^{77}$ This verb is not the antonym of 'come'.
    ${ }^{78}$ The modern correspondence of this form is uncertain.

[^32]:    ${ }^{79}$ This word occurs in the phrase for 'bone' (109).
    ${ }^{80}$ This word occurs in the phrase 'todo mal' from the Lord's Prayer.
    ${ }^{81}$ I have no comment about Peñafiel's form cocavt 'espeso' (265).

[^33]:    ${ }^{82}$ This is phonetically [?iŋkak].
    ${ }^{83}$ Except for the interjection numbers (used for counting), numbers are predicates of quantity and inflect like other verbs. The details of their structure are not discussed here. See Marlett \& M. Moser (1997).
    ${ }^{84}$ Hewitt (1898:303) changes the $c$ in this form to $X$, and the $\hat{s}$ in the form below to $s h$, with comment.
    ${ }^{85}$ The archived manuscript adds, correctly, that this form is used when one is counting sequentially ('cuando se cuenta seguido').

[^34]:    ${ }^{86}$ The actual form in Tenochio (1852) has "sc" rather than "sch" at the beginning, unlike in Tenochio (n.d). I assume that "sch" is the intended form.

[^35]:    ${ }^{87}$ The form in Tenochio (n.d) has "sc" rather than "sch" in the middle. I assume this is a copyist error.
    ${ }^{88}$ This form is preceded by suupkasroj in the archived list.
    ${ }^{89}$ The form in Tenochio (n.d) appears to have "ghu" rather than "qhu".

[^36]:    ${ }^{90}$ The source has " u " rather than " n "; I assume this is a copyist's interpretation error.
    ${ }^{91}$ The source has " u " rather than " n " in the archived manuscript; I assume this is a copyist's interpretation error.
    ${ }^{92}$ The source has "u" rather than "n"; I assume this is a copyist's interpretation error.
    ${ }^{93}$ The source clearly has taul in the archived manuscript; I assume this is a copyist's interpretation error.
    ${ }^{94}$ The form in Tenochio (n.d) has an acute accent over the " o ".

[^37]:    ${ }^{95}$ The form in Tenochio (n.d) has an acute accent over the "o".
    ${ }^{96}$ The source clearly has taul in the archived manuscript; I assume this is a copyist's interpretation error.
    ${ }^{97}$ The Numerals manuscript has the expression for 'thirteen' crossed out and for 'fourteen' it has this form, which actually means 'thirteen'.
    ${ }^{98}$ This expression is slightly simpler than the modern form; it appears to be deliberately simplified.
    ${ }^{99}$ This expression is slightly simpler than the modern form; it appears to be deliberately simplified.
    ${ }^{100}$ This expression is odd since it is a mixture of a non-interjection pattern (as with other numbers above 10) and the interjection (counting) word for 'eight'.

[^38]:    ${ }^{101}$ The source clearly has taulin the archived manuscript; I assume this is a copyist's interpretation error.
    ${ }^{102}$ The $k$ in the word $k a n l X^{\prime}$ here could be interpreted as the subject nominalizer k -, but that morpheme would be anomalous here since the expected form is the proposition/oblique nominalized form.
    ${ }^{103}$ The form presented in the archived manuscript is clearly taul, but I take this as a copyist's interpretation error.

[^39]:    ${ }^{104}$ Peñafiel also provides multiples of this (with various inconsistencies in transcription). He also gives the expression for 'three thousand five hundred': iandl iandl candl capjá iandl candl covtom.
    ${ }^{105}$ This expression is unrecognized.

[^40]:    ${ }^{106}$ This expression is unrecognized.
    ${ }^{107}$ This expression is unrecognized.
    ${ }^{108}$ There are no common Seri names for the days of the week other than Saturday and Sunday other than simple loanwords.
    ${ }^{109}$ This is an interpretation of the expression that Peñafiel recorded; it is not used in modern Seri for 'Tuesday'. (See note 108.) The word /i $\chi$ aap/ is commonly used as the plural for 'day'in modern Seri.
    ${ }^{110}$ This is an interpretation of the expression that Peñafiel recorded; it is not used in modern Seri for 'Wednesday'. (See note 108.)

[^41]:    ${ }^{111}$ This is an interpretation of the expression that Peñafiel recorded; it is not used in modern Seri for 'Thursday'. (See note 108.)
    ${ }^{112}$ This is an interpretation of the expression that Peñafiel recorded; it is not used in modern Seri for 'Friday'. (See note 108.)
    ${ }^{113}$ This expression is unrecognized, although the first part may be /iija $\chi$ / 'moon'.
    ${ }^{114}$ This expression is unrecognized, although the first part may be /ipka/ 'rain'.
    ${ }^{115}$ Not discussed here: T juakir, kuakir 'oír' ('to hear') (2).

[^42]:    ${ }^{116}$ This form, obviously intransitive by the shape of the prefix, does not clearly correspond to the modern word for 'see'.
    ${ }^{117}$ These data do not line up well with modern Seri.

[^43]:    ${ }^{118}$ This could be /jaap1/ (3POSS-PON-cold).
    ${ }^{119}$ The following entry is not discussed: T psiyzon 'reírse' ('to laugh') (2).
    ${ }^{120}$ This form is obviously inflected as an intransitive verb. Nothing quite like it is recognized in modern Seri.
    ${ }^{121}$ This verb never means 'love' in modern Seri.

[^44]:    ${ }^{122}$ The modern form for 'well' is /miijx/. Perhaps that is what Peñafiel meant to record. However, the fact that he had an initial /i/, and the juxtaposition of this form to 'mal' (252) on this list (to translate 'badly', suggests that perhaps he obtained a nominalization rather than an adverb.
    ${ }^{123}$ This word is a noun categorically and is most commonly followed by the locative article / Rak/.

[^45]:    ${ }^{124}$ This word is commonly followed by the question particle $/ \mathrm{ja} /$.
    ${ }^{125}$ It is not clear that this word corresponds to the modern form given.
    ${ }^{126}$ This needs to be investigated.
    ${ }^{127}$ Perhaps the first letter was meant to be a " k " rather than an " h ". That would make the first word / ktam/ 'man, male'. The remaining is unclear. There is a word, unrecorded in M. Moser \& Marlett (2005), that means 'valiant, brave': /koka/.

[^46]:    ${ }^{128}$ This expression is unrecognized.

