Phonology and Dictionary of Yavapai

By

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DISSERTATION

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YAVAPAI PHONOLOGY AND DICTIONARY

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by

Alan Shaterian
DEDICATION

For Jeanie
This work will preserve the fundamental facts about
the Yavapai language, the most evanescent of the Pai group
of Yuman languages, a linguistic family which in its vari­
exty of members and geographic distribution is analagous to
the Germanic family as of five centuries ago. The dis­
sertation explores the relationship between the pattern of
speech sounds and the shape of words in Yavapai. It de­
scribes the phonology, morphology, and a part of the lex­
icon in a format which is accessible to linguists of varied
theoretical backgrounds.

It is the speech of Chief Grace Jimulla Mitchell
(1903-1976), a speaker of the Prescott subdialect of North­
eastern Yavapai, that forms the basis of the description.

The research necessary for this undertaking was spon­
sored in part by the Survey of California and Other Indian
Languages at the University of California at Berkeley.

The Introduction surveys the field of Yavapai and Pai
studies and places them within the deeper perspective of
Yuman research. Chapter One discusses the Pai languages and elucidates the dialectal differences in Northeastern Yavapai, Tolkapaya (Western Yavapai), and Southeastern Yavapai on the one hand; and the broader linguistic differences in Yavapai, Havasupai-Hualapai, and Paipai on the other. The principal problems of the phonology, stemming mainly from the accentual system, are discussed in Chapter Two. Chapter Three describes the inflectional and derivational morphology and conducts an examination of the difference between the root and the stem. This chapter also proposes an "archisynaestheme" as a descriptive device within the derivational morphology. Solutions to the problems described in Chapter Two are presented in Chapter Four, which proposes a rule of syllabic potential, the General Syllabicity Rule, and demonstrates that this rule can account for the major phenomena of Yavapai phonology.

The Yavapai-English and English-Yavapai dictionaries are designed for both synchronic and diachronic application. The several thousand lexical items are entered in their citation forms. The Yavapai entries are arranged according to a two-way articulatory progression of the systematic segmental phonemes: /p, pʰ, t, tʰ, č, čʰ, kʰ, k, kʰw, q, qʷ, ¿, i, e, a, o, u, β, θ, s, (š), h, hw, m, n, ṅ, l, r, (ʌ), y, w/. Both dictionaries mark the Yavapai suprasegmental phonemes as well: two degrees of stress, three degrees of vowel length, two pitch accents, and syllable boundary.
ACKNOWLEDGMENTS

I could not have written this dissertation without the help and support of many people who have contributed to my life and to the development of this work on Yavapai. The list of their names must of necessity be incomplete if the acknowledgments are not to find themselves relegated to a third appendix.

I am very grateful to all the Indians who have welcomed me and worked with me. On my first trip to Arizona the late Warren Gazzam grasped at once what it was that I needed and took pains to collaborate with me as long as he was able to in an effort to preserve his language for future generations. I will long remember his hospitality and dedication. The late Grace Mitchell, Msi Ktnyi'va, chief of the Prescott Yavapais, was my primary linguistic consultant and provided the greatest part of the data in these pages. This work is to a large extent her legacy, the fulfillment of a pledge to let her language and her lore see the light of day. Other Yavapais and Pai language speakers have helped in many ways, and I would like to show my continuing appreciation for the contributions of Flora Evans, Molly Starr Fasthorse, Patricia McGee, Edwin Margo, Lucy Miller, Don Mitchell, the late Rufino Ochurte,
Darlene Ogo, the late Mary Sine, and Clara and Effie Starr. A special thanks goes to Violet Mitchell.

Over the past twenty years I have received valuable guidance from a number of linguists, including Robert Austerlitz, Madison Beeler, Mary Haas, the late Haakon Hamre, Yakov Malkiel, and Jesse Sawyer. Many Yumanist friends have steadfastly encouraged me, and I would like to single out Lynn Gordon, Heather Hardy, and Martha Kendall. Pamela Munro deserves much of the credit for bringing countless boxes of notes into a more conventional form: it was she, a dear friend and severe critic, who gently but firmly shoved me towards the typewriter on more than one occasion. I am especially grateful to my dissertation committee, consisting of Ronelle Alexander, Wallace Chafe, Margaret Langdon, and Leanne Hinton. Ronelle Alexander came to this dissertation rather late in the game, but has made a significant contribution to its intelligibility, rendering it comprehensible to a broad range of linguists, not just to those in my own narrow field. Wallace Chafe, the only member of my committee from whom I have taken courses, has shaped much of my thinking about language and has been particularly influential in the way that I approach sound and meaning. It was Margaret Langdon, who, together with James Crawford, first aroused my interest in Yuman and Yavapai. She is the one person who has been directly involved in this project throughout its long gestation. Her high standards have inspired
great awe and frenzied action. Finally, Leanne Hinton, with her low-keyed fervor, has managed to drag me through the past year, ever since assuming the great responsibility of chairing my dissertation committee. Her guidance, scholarship, and courage have won my deep respect and sincere admiration.

The trip to the Paipai village of Santa Catarina was made possible through the assistance of Ralph Michaelsen, Dick Langdon, and Terry Kaufmann. Bertha Marston has provided both assistance and warm friendship for many years, and Trudy Bowen, Eileen Odegaard, and LaRue Seegmiller have acted far beyond the call of duty in smoothing the way through administrative snags. David Lemon was responsible for the finely crafted maps, and Arax Kizirian has typed this dissertation over and over. The fact that she was there waiting for more copy was sometimes the only reason that there was more copy. Šad šnorhagalutyun.

I would like in addition to thank my family -- my mother, my father, my sister Anahit, my stepfather Arnold Aargenius Rasmussen, and my parents-in-law Donald and Sylvia McLaughlin -- for their encouragement and support. There are also many friends whose contributions are keenly felt. Michael Green, Sandra Shamis, and Sigvor Hamre Thornton were of great help through their not always welcome questions about the work in progress. Karl Zimmer was especially relentless in wondering when the end would be in sight, and I am very glad that he kept me focused.
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Last but not least, my wife Jeanie provided the perfect atmosphere in which to work. Without her presence in my life during the last seven years, none of this, none of the happiness that I know today would be conceivable. It is to her that I dedicate this dissertation.

Even as I close this section, I can think of many more people whose love and understanding sustained me in dark times. They also helped bring me here, and they are not forgotten.
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0.10 The Yavapai Language and Yavapai Dialects

The name Yavapai is used throughout this work to refer to one language divided into three major dialects called Northeastern Yavapai, Western Yavapai or Tolkapaya, and Southeastern Yavapai. For the sake of clarity I am using the name Northeastern Yavapai (abbreviated NEY), Tolkapaya, and Southeastern Yavapai (abbreviated SEY) when referring to a characteristic of one of these dialects and the name Yavapai only when I am referring to a characteristic of the language. Subdialects are found within Northeastern Yavapai, notably the Prescott subdialect and subdialects of the Verde Valley.

My principal Yavapai consultant was Grace Mitchell, who spoke the Prescott dialect of Northeastern Yavapai. This dissertation discusses all three dialects and the subdialects of NEY. Two linguists, Martha Kendall and Heather Hardy, have done extensive work on Yavapai. Kendall has worked primarily with a Verde Valley subdialect of NEY. Hardy has worked exclusively with Tolkapaya. I have collected wordlists of SEY, but no one has ever investigated this dialect adequately.
0.20 Early Investigations

In the nineteenth and early twentieth centuries a number of people collected wordlists and vocabularies of Yavapai. I have made use of the collections of Albert S. Gatschett and those by William F. Corbusier. (See entries in the Bibliography under these and other names listed below.) In the early part of this century the most notable recorder of Yavapai words was the ethnographer Edward Winslow Gifford. Although the transcriptions made by these investigators do not record the more "exotic" distinctions (e.g. three vowel lengths, pitch accent, etc.), they do lend themselves to interpretation and can serve to measure the progress of sound change and to probe other linguistic phenomena.

0.30 Recent Investigations

I first went into the field in 1965. (An account of my work since then will follow this brief survey of the contributions of others to Yavapai studies). William Madigan, a student at Indiana University in Bloomington, was in Arizona in the late 1950s and early 1960s and collected wordlists, simple sentences, and texts. He worked primarily with the Verde Valley NEY. Madigan did not continue his studies in Yavapai and gave his fieldnotes to Martha Kendall, who gave them to me in 1976. James Crawford, as a student in linguistics at the University of California at Berkeley, in 1962 collected a short wordlist
of what was thought to be SEY. Martha B. Kendall, as a graduate student from Indiana University, Bloomington, went to Arizona in 1968 and worked in the Verde Valley on a subdialect of NEY (chiefly that of Harold Sine), which is in some minor respects different from the Prescott subdialect. Kendall, whose area of concentration was syntax, wrote a doctoral dissertation in 1972, which has become the first published monograph on Yavapai. She has published texts and several articles on morpho-syntax drawn from her fieldwork from 1968 to 1978.

0.40 The Word "Yavapai"

Kendall has called Northeastern Yavapai Yavpe or Yavape, based on the native form /yâbʔpe/ 'a Northeastern Yavapai (person).' The word Yavapai is based on the plural of this form /yâbʔpâya/. The term "Yavapai" has been used since the time of early white contact for all three groups. The native term for Western Yavapai is /tôlkʔpâya/. The spelling Tolkapaya has come into English and is used in the linguistic literature. The native word for Southeastern Yavapai is /kwɛʔkʔpâya/ (literally: the southern people). There is no English spelling for this form. Throughout this study I am using only Tolkapaya as a designation derived from a native form. I will avoid
Yavpe or Yavape for NEY since these spellings are so close to Yavapai, the designation I use for the language made up of all three dialects.

0.50 The UCLA Group

In 1970 I learned from Grace Mitchell that there was a Tolkapaya speaker living in Los Angeles, Molly Starr Fasthorse. I contacted her in early 1971 and arranged for her to work with Sandra Chung, then a student visiting UCSD from MIT. As a result of this Molly Fasthorse came to UCLA to work as a consultant in a series of field-methods courses given by Pamela Munro. Munro and many of her students (Glover, Gordon, Hardy, Yamada) have written articles and presented papers on Tolkapaya. Heather Hardy has written a distinguished dissertation on Tolkapaya morphosyntax (1980). The UCLA group has made many contributions to the field and given Tolkapaya a prominent place in the literature.

0.60 Survey of Shaterian Fieldwork (1965-1980)

In the summer of 1965 Mary R. Haas, as director of the Survey of California and Other Indian Languages, sent me into the field to investigate Yavapai. At that time none of the dialects had been systematically studied. I spent six weeks in Arizona working mainly with Warren Gazzam (1882-1967), a speaker of Tolkapaya. I also had the opportunity to get wordlists from speakers of other Yavapai
dialects, notably from Grace Mitchell, and from speakers of Havasupai and Hualpai. When I returned to Arizona in 1966 for an extended stay of six months, I could not continue work with Gazzam, because he had had a stroke. I began to work with Grace Mitchell (1903-1976) and at that time transferred my attention to the Prescott dialect of NEY. My first publications on Yavapai appeared in 1976: "Yavapai [+sonorant] Segments" and "No more schwa for Yavapai." However, my views on Yavapai phonology and related areas were well-known before that because many unpublished works of mine had been in circulation and discussed among Yumanists since 1965.¹

This dissertation represents the first comprehensive phonology and dictionary of Yavapai and is the result of many revisions both in form and content since 1965.

0.70 Pai Languages

No survey of my work could be complete without mentioning the contributions of linguists and native speakers within the Pai languages and those within Yuman as a whole. Of the other Pai languages, Havasupai and Hualapai have received more attention than Yavapai, and Paipai has received less.

0.71 Havasupai

The best work on Havasupai, for comprehensiveness and comprehensibility, is Leanne Hinton's dissertation.² Two
other dissertations have also appeared, one on the phonology and the morphology by Seiden and one on syntax by Kozlowski.

0.72 Hualapai (Walapai)

Hualapai has received more attention than any other Pai language. Both native and non-native linguists have studied the language and have published a variety of material, the best and most comprehensive of which is the Hualapai Reference Grammar by Watahomigie, Bender, Yamamoto, et al. See also the writings of Werner Winter, James E. Redden, and Akira Y. Yamamoto.

0.73 Paipai

Judith Joël's dissertation³ and articles on Paipai are among the very scant material available on that language. Terrence Kaufman and I collected a 1000-word vocabulary in 1970, and Mauricio Mixco has collected and analyzed texts.

0.80 Other Yuman Languages

I consider Margaret Langdon the single most important contributor to Yuman, (see the bibliography for a list of her works). Beyond these published materials, I must mention Langdon's contribution to the general tone of Yuman studies, in expecting from others and maintaining for herself a very high standard for almost two decades. Her organization (together with Shirley Silver) of the First
Conference on Hokan Languages and her work in organizing subsequent conferences have forged an enjoyable scholarly cohesion among Yumanists. A. M. Halpern's *Yuma*, which was published in 1946, is the first monograph on a Yuman language. It has had a salutary influence on all subsequent work on Yuman languages. There have been many other linguists in Yuman over the past two decades, too numerous to mention here. There are two, however, that I would like to single out because of the influence they have had on my work: James Crawford and Pamela Munro. It was James Crawford together with Margaret Langdon who first suggested that I work on a Yuman language. At that time, 1963, they had themselves only begun to work on Cocopa and Diegueño respectively. Pamela Munro's contribution to Yavapai studies was discussed above. I must mention as well her first area of interest within Yuman, Mojave, and refer the reader to the Bibliography.
NOTES TO THE INTRODUCTION

1. Among my unpublished material and papers presented that have been in circulation and use by other Yumanists are:

1966a "Proto-Northern Yuman and Paipai so far"
1966b "The Phonology of Yavapai I"
1971 "Yavapai Phonology"
1973 "English-Yavapai Dictionary"
1974 "English-Paipai Vocabulary" with Terrence Kaufman.
1975 Untitled work on Yavapai phonology and morphology with lexicon.
1976 "Archaic Periphery versus Migration: Resolution of a Controversy Regarding the Presence of the Paipai in Northern Lower California"
1970 "Aspects of Yavapai Vocalism"
1979 "Yavapai Vocalic Affixes"
1980 "Yavapai Consonantal Affixes"
1981 "Sound Symbolism in Pai"
1982 "Proto-Yuman Consonantism"
1983 "Proto-Pai"

CHAPTER ONE

THE YAVAPAI PEOPLE AND THE YAVAPAI LANGUAGE

1.10 Geographic Distribution

The early distribution of the Yavapais was unique compared with that of their Yuman neighbors (see Figure 1). Their 20,000 square mile territory, approximately 200 miles east to west and 100 miles north to south, did not confine them "to a single ecological area" but spread them "over a wide variety of territory from the low country at the confluence of the Gila and the Colorado to the lofty Bradshaw and Mazatzal mountains in Central Arizona, altitudinally from elevations of about 2000 feet to 7000 and 8000 feet, from blistering desert to shady mountain streams, from lower Austral life zone to Canadian life zone" (Gifford 1926:247).¹

1.11 Ethnographic Distribution

Within this vast territory the Yavapais were divided into three groups, which Gifford identifies as (1) Northeastern, (2) Western, and (3) Southeastern (1932:177-178). He describes the geographical distribution of these groups as follows (see Figure 1):

¹ Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
The [Southeastern Yavapai]... lived in mountains between the Sierra Ancha and the Mazatzal Range to the north, and Dripping Springs and the Mescal Mountains in the southeast. The [Northeastern Yavapai] occupied the area from Oak Creek Canyon to the Upper Verde Valley as far as the present city of Prescott. The Western Yavapai ranged from the western slopes of the Bradshaw Mountains to Castle Dome and the Colorado River near La Paz. (Gifford 1932:177-178)

1.12 Population

The precise number of Yavapais living today is difficult to obtain. It is even more difficult to know the number of people who still speak the language very well. There are those who have left the reservations (Camp Verde, Clarkdale, Fort McDowell, Middle Verde, Yavapai-Prescott) where Yavapais are most likely to be found. Wares (1968, p. 13) quotes from the Bureau of Indian Affairs the number of Yavapais on some of these reservations: Fort McDowell (near Phoenix) 315; Camp Verde (near Cottonwood) 206; Yavapai-Prescott 73. At the time of this writing there are probably more Yavapais than Wares' 1963 figure of 574; for example, the Yavapai-Prescott Reservation had 109 tribal members at the close of 1983.² There are a few

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Yavapais living at the San Carlos Indian Reservation, some at the Colorado Indian Reservation, and many Yavapais are to be found living near but not on an Indian reservation. It must be borne in mind that these figures say nothing about the number of speakers of the language (see below).

1.20 Linguistic Distribution

Yavapai, both as an ethnic and a linguistic designation, is tripartite. The three categories a) in English (after Gifford), b) in English (in more the recent literature), c) in Yavapai are:

1a. NEY, b. Yav'pe, c. /yàβ?pe', yàβ?páya/3
2a. WY, b. Tolkapaya, c. /tôk?páya/
3a.=b. SEY, c. /kwè:βk?páya/4

(Yavapais, as a group or "tribe" have been mistakenly known as well as Mohave-Apache and Yuma-Apache (Gifford, 1936, p. 249)).

Even today Yavapais retain the three-way distinction among themselves, although intermarriage in this century within the three groups and outside of these entirely has done much to obscure an individual's ancestry in this respect. Linguistically, on the other hand, a Yavapai can still readily identify which group affiliation his language has. It is still possible to identify sub-groups or sub-dialects. Investigations over the past 15 years enable me to identify several varieties of Northeastern Yavapai, but only
one each for Western and Southeastern Yavapai. The distribution of the groups and sub-groups which obtained at the time of Gifford's ethnographies is substantially the same, although reduced and somewhat truncated.

1.21 Neighboring Groups

Gifford states that the Yavapai groups were nomadic, each group wandering within prescribed areas, although each was friendly enough with the others to allow visiting from area to area. Uninhabited lands separated the Yavapais from their hostile neighbors to the north and to the south: the Havasupais and Hualapais; and the Pimas and Maricopas respectively (see Figure 2).

1.30 Early Classification

Each of the three groups was comprised of bands. The divisions and sub-divisions of Northeastern Yavapai and Western Yavapai (Tolkapaya) are somewhat confusing. Gifford, writing 50 years ago, had difficulty determining the groupings. He lists two possibilities, one in 1932, the other in 1936. The latter he considered a revision of the earlier classification. By examining these and by including as well the results of the most recent investigations (1965-1980), I can present a more comprehensible picture.
1.31 Northeastern Yavapai

"I. Northeastern Yavapai comprised six bands (1932):

(1) Wipukyipai /wl·púk?páya/ or Oak Creek Canyon band, whose name the informant constantly applied to the whole Northeastern Yavapai;
(2) Matkiwawipa /matktá:páya/ or upper Verde Valley people;
(3) Wikutepa /wl·kšété·páya/ or the people of the Prescott region;
(4) Walkeyanyanhepa /hwá·lkyáŋyáŋ?páya/ (people of the pine tree country) or Jerome tableland people;
(5) Wikenichepa /wl·kñač?páya/ or Black mountain people or people of the Crown King region;
(6) Matkitotwapa /matktótá:páya/ or people of the southern part of the mountain ridge upon which Jerome is situated."

(1932:177-178)

II. Subgroups of Northeastern Yavapai (1936):

Yavepe (proper) /yáβ·pé/

"(1) Wipukyip or Wipukupa /wl·púk?páya/
(2) Matkitwawipa /matktá:páya/, Matidipa /matír?páya/, Matkitkavavepa /matktá:páya/, or Matkoulvapa /matkhulβ?páya/
(3) Walkeyanyanyepa /hwá·lkyáŋyáŋ?páya/
Mat-haupapaya /məθáːβkʔpáya/

(1) Wikutepa /wì·kše·ʔpáya/
(2) Wikenichapa or Wikanadjapa /wì·kʔatóʔpáya/

It was also the custom to refer to a person by place of birth or residence."

(1936:249-250)

1.32 Western Yavapai (= Tolkapaya)

Western Yavapai (1932) Tolkepaya /tòlkʔpáya/
"... comprised an eastern band

(1) Wiltaikapaya /wìlʔtá·ʔykʔpáya/ and a western band
(2) Hakehelapa /ʔhákhé·lʔpáya/"

(1932:178)

Western Yavapai (1936)
"They had three bands, but no clans

(1) Hakupakapa /ʔhákpákʔpáya/ or Inyokapa
/h.nòqʔpáya/
(2) Hakehelapa /ʔhákhé·lʔpáya/ or Wiltaikapaya
/wìlʔtá·ʔykʔpáya/ (the two bands of 1932 proved to be the same).
(3) Haka-whatapa /ʔhákʔhwaʔtʔpáya/ or Matakwaraapa
/mátʔqʷárʔpáya/"

(1932:249)
1.33 Southeastern Yavapai

Southeastern Yavapai (1932 only): "Keweyipaya
/kwè:βk?páya/

These two bands (bachacha) /pàčá:ča/ alone comprised the Southeastern Yavapai:

(1) Wikdjasapa /wí·kšás?páya/
(2) Walkamepa" /hwá·lkámβ?páya/\(^5\)

(1932:177)

1.40 Yavapai Dialects of Today

All speakers of Northeastern Yavapai today call themselves /yàβ?páya/; they do, however, recognize two subgroups: (1) /wí·kštē·páya/, the Yavapai-Prescott tribe on the reservation adjacent to the city of Prescott: the 'great-mountain (i.e. Granite Mountain) people' and (2) /wí·púk?páya/, the Verde Valley Yavapais on three reservations (Clarkdale, Camp Verde, and Middle Verde): the 'foot of the mountain (Red Buttes) people.' These designations are today more geographic than linguistic. I have noticed marked subdialectal or idiolectal differences, the most striking of which is the incomplete spread of a spirant fronting rule.\(^6\) I assume that the subdialectic differences have their origin in the six-band distribution described by Gifford. Information of this kind may be irretrievable. It has always seemed most prudent to identify the Yavapai speaker within each of the
three groups. Using names of Yavapai speakers rather than
the names of the bands of which Gifford spoke yields a more
operational notion of Yavapai today. Between 1965 and
1980 my fieldtrips to Arizona covered in all 12 months' time. The classification below is based on material which
these trips brought to light:

1.41 Yavapai Linguistic Consultants

(1) Northeastern Yavapai: /yàp'pè/ (pl. /yàp'páya/)
   (a) Prescott Yavapai: /wì·kòtò·páya/
      Grace Mitchell (and later Lucy Miller)
   (b) Verde Valley Yavapai: /wì·púk·páya/
      i. Grace Nelson, Mary Sine (and later Clara
         Starr)
      ii. Don Mitchell

(2) Western Yavapai: /tòlk·páya/ (also /tùlk·páya/)
   Warren Gazzam (and later Molly Starr Fasthorse)

(3) Southeastern Yavapai: /kwè·?k·páya/
   Flora Evans, Edwin Margo.

1.50 Genetic Classification Within Yuman

The Havasupais /hakhàpsú·?páya/ and the Hualapais
/hwà·l?páya/, living to the north of the ancestral Yavapai
homeland, speak a language (or two languages) most closely
related to Yavapai. The three languages (Havasupai, Hualapai=
Walapai, and Yavapai) have been traditionally grouped together as a branch of the Yuman family, a member in turn of the Hokan Stock (See Figure 1). As a subgroup of the Yuman family they have been known as Northern Yuman, Northwestern Yuman, Upland Yuman, Northern Pai, or simply Pai. Some 600 miles to the southwest of the Yavapais, across the international border, live the Paipais /pà·pāya/, another Yuman group, whose language until 1975 remained problematic with respect to classification. A brief history of the problem and its resolution is outlined below.

1.51 Paipai

Both Kroeber (1947:41) and Gifford (1933:262) noted the obvious resemblance of Paipai to Upland Yuman (Havasupai, Hualapai, and Yavapai taken as a unit); that is, Paipai and Upland Yuman are much more similar to each other than to any other group within the Yuman family. Other investigators made this observation at later dates (Winter, 1957; Joël, 1964). All agreed that Paipai and Upland Yuman showed conspicuous phonological and lexical similarities. There emerged, however, two explanations or theories to account for the similarities. Some held that the synchronic distribution of similarities represented an archaic linguistic and geographic periphery of the Yuman family and that languages in between represented a more innovative nucleus. Others believed that a relatively recent migration was the only explanation. Few linguists had ever heard both Paipai
and Upland Yuman. There was no contact between the two peoples; each had only an inkling of the other's existence. It was imperative to resolve the matter in a direct way.

1.52 Resolution of the Paipai Problem

In July of 1975 fourteen people from the United States (among them three speakers of Yavapai, anthropologists, ethnographers, and linguists) met at the Paipai village of Santa Catarina, Baja California. The results of one day's stay established a partial reclassification of Yuman languages and brought to the light of day other pertinent information.

The Yavapais (Grace and Don Mitchell, Lucy Miller) and the Paipais communicated in their respective dialects (the term "languages" could be used now only geopolitically) freely enough to indicate that there exists no language barrier. In fact, Langdon remarked that there is more dialect variation within Diegueño than she was able to observe between Paipai and Yavapai. The implication is that there are fewer differences among the Pai "languages" than among the Diegueño "dialects."

Yavapais, for the first time, are now willing to relate the details of the migration. They had been reluctant to recall this information because they believed the ancestors of the Paipais, who had been banished by their ancestors, had perished. For
details of the controversy and resolution see Shaterian (1976).

1.53 **New Classification**

Since 1975 the term "Pai languages" has been used for Havasupai, Hualapai, Paipai, and Yavapai. If one examines the Pai languages solely on the basis of the phonology and lexicon, one can say that they all share a single underlying representation for almost every item in the lexicon. (This remark is subject to several qualifications, of course: (1) one does not know every item in the lexicon; (2) loanwords from English, Spanish, and other languages have replaced or displaced some lexical items; (3) there have certainly been independent developments within each language and dialect; (4) Paipais face acculturation in Mexico, Yavapais in the United States; (5) diffusion in general, both linguistic and cultural, have played a role.) The differences between each group and among the dialects within the group can be accounted for by phonological rules, when cognate forms exist.

1.54 **Population of Pai Speakers**

There are approximately 200 speakers of Paipai. Certainly there is dialectal variation within the language. Table 1 also does not reflect the fact that, although Havasupai and Hualapai also have several hundred speakers
each, Yavapai is not in so fortunate a state: Northeastern Yavapai could have as many as 50 speakers; Western Yavapai may have only one; Southeastern Yavapai probably has only two.
<table>
<thead>
<tr>
<th>Table 1: Pai Languages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Havasupai-Hualapai</strong></td>
</tr>
<tr>
<td>1. Havasupai: /hakhəsú·páya/</td>
</tr>
<tr>
<td>2. Hualapai=Walapai: /hwə·lápáya/</td>
</tr>
<tr>
<td><strong>II. Yavapai: /yáʔpáya/</strong></td>
</tr>
<tr>
<td>1. Northeastern Yavapai: /yáʔpé/</td>
</tr>
<tr>
<td>a. Prescott Yavapai: /wí·kšté·páya/</td>
</tr>
<tr>
<td>b. Verde Valley Yavapai: /wí·púk·páya/</td>
</tr>
<tr>
<td>2. Western Yavapai: /tl̓ok·páya/</td>
</tr>
<tr>
<td>3. Southeastern Yavapai: /kwə·b̥k·páya/</td>
</tr>
<tr>
<td><strong>III. Paipai: /páʔpáya/</strong></td>
</tr>
</tbody>
</table>
NOTES TO CHAPTER ONE

1. Gifford gives an excellent account of the Yavapais in "The Southeastern Yavapai" and "The Northeastern and Western Yavapai." The only shortcoming of these is the faulty and sometimes uninterpretable transcription of Yavapai words. Gifford had impaired hearing (Grace Mitchell, p.c.). His "Northeastern and Western Yavapai Myths" also contains much information that is no longer obtainable (see Bibliography).

2. Violet Mitchell has written (to appear: p. 142) that there are only 13 fluent Yavapai speakers at the Yavapai Prescott Reservation.

3. Transcriptions of Yavapai forms, when they appear within an English text, are set into slashes. This notational device also shows that the form is phonemic (or systematic phonetic).

4. The suffix /-ʔpáya/ 'dwellers; people of X' appears in the names of each of these groups. The singular is /-ʔpe/. The verbal root is /pe/ 'be alive; bear fruit,' which also appears in /ʔpá:/ sg. /ʔpá:ča/ pl. 'person; Indian.' This noun may also appear as second element in some compound ethnic names; for example, /kʷi·ʔpá:/ 'a
Cocopa (lit. cloud person)' and /mɾiːkʰpʰə:/ 'a Maricopa (lit. bean person)' (Wares 1968:11ff).

5. Grace Mitchell was unable to recognize these forms, although she was able to provide an interpretation, which, of course, may be a folk etymology.

6. The Spirant Fronting Rule, which I discuss in a paper "Proto-Pai" in Proceedings of the 1983 Hokan-Penutian Workshop (to appear), fronts Proto-Yuman *s and *s to Pai /θ/ and /s/ respectively. This is an accepted assumption.

7. Of this group Grace Mitchell, Warren Gazzam, Grace Nelson, and Mary Sine are no longer living.

8. Fr. Francisco Garcés encountered the Paipai in 1776 in their present location (Gifford 1928:340).
CHAPTER TWO

THE SPEECH SOUNDS IN YAVAPAI

2.00 Introduction

This chapter contains an articulatory description of phonetic segments in Yavapai and the role they play in its phonology. I am concerned here with the systematic phonetic segments and their resolution into systematic phonemic segments at a more abstract level of analysis. The data presented here are meant to lay the foundation for Chapter Four, which deals specifically with phonology. Yavapai suprasegmentals — the syllable, stress, pitch, intonation, and considerations of rhythm — are both treated as one unit (2.73) both at the end of this chapter and are alluded to throughout the chapter.

2.01 ?wi·k8të·páya

It is the speech of Grace Mitchell (1903-1976) which forms the basis of this phonology; that is, it is her idiolect of the Prescott subdialect of the Northeastern dialect of Yavapai that is used as the starting point in the detailed articulatory descriptions. This is the form of Yavapai known as /?wi·k8të·páya/ 'great-mountain-Pai,'
the variety of Yavapai spoken around Granite Mountain near Prescott (see Chapter One, Figure 2 and Table 1).

2.02 Pronunciation Styles

J. Harris (1969:7) proposes a hierarchy of 'styles' of pronunciation for Spanish, which I wish to adopt for Yavapai:

Largo: very slow, deliberate, overprecise; typical of, for example, trying to communicate with a foreigner or correcting a misunderstanding over a bad telephone connection.

Andante: moderately slow, careful, but natural; typical of, for example, delivering a lecture or teaching a class in a large hall without electronic amplification.

Allegretto: moderately fast, casual, colloquial. In many situations one might easily alternate between Andante and Allegretto in mid-discourse or even in mid-sentence.

Presto: very fast, completely unguarded.

This analysis of Yavapai refers mainly to the styles Andante and Allegretto. On occasion I may refer to Largo and Presto. In order to make Harris's specification more appropriate to this study, I will apply the following amendments to each style:
Largo: used in citation and elicitation.

Andante: used for recitation; it appears in narrations, orations, pronouncements; highly stylized.

Allegretto: definitely colloquial.

Presto: excited.

2.03 Bases of Articulation: Crooked-mouth vs. Normal

Yavapai is articulated with a tenser musculature than English. The configuration of the mouth and of the muscles controlling its movements can be said to be "normal" with respect to crooked-mouth articulation which is a second basis of articulation or perhaps simply a parameter superimposed on the normal or unmarked basis of articulation. In crooked-mouth articulation the mouth is used to indicate a direction away from the speaker. It is a gesture and properly an aspect of non-verbal behavior. There is, however, an area of overlap with phonology in that the mouth, more specifically the lips, are being used to point. This is done by pursing the lips to either side or by drawing down one corner of the mouth and pointing. The head is not moved, nor is speech interrupted. Articulation proceeds with an inevitable distortion of normal speech because of the extension of the vocal tract.

The phenomenon of crooked-mouth articulation will not be characterized in formal terms; nor will any of the speech sounds which occur as a consequence of it be

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described. It is assumed that the speech sounds under discussion are those produced when all the organs of speech are engaged in normal or unmarked articulation.

2.04 Initiations

Initiation is pulmonic egressive for all speech sounds. The occurrence of sounds, which are sometimes classified as either vocal behavior (in some languages) or distinctive (in others) -- pulmonic ingressive or those based on other initiations (e.g. glottalic or velaric) -- has not been observed.

2.05 Hypocorism

There are speech sounds, however, that occur in Yavapai which fall outside of the larger sound pattern: sounds that form part of a subsystem used for hypocorism and baby-talk. Pronunciations from this subsystem are found in normal or unmarked speech. The most easily recognized instances of this is the occurrence of [§] and [Â] and the nasalization of vowels; [ä] for example.

2.10 Note on Exposition of Analysis

In order that the reader may follow the development of the ideas which led to the particular phonemicization or systematic phonemic and phonetic representations, it is necessary to present tentative conclusions and classifications in this chapter (which are revised in Chapter
Pour). For example, /ʔ, h, hw/ are considered respectively a
glottal stop, a glottal fricative, and a rounded glottal
fricative phonetically but are treated as glides phonologi-

cally (See Tables 2-5, pp. 24-26).

2.11 Syllabicity

The syllable is to be viewed in three different
lights. At the systematic phonetic level the language is
phonotactically made up of C+V- or C+I- sequences. Morpho-
phonemically most lexical items — roots and stems — have only
one vowel, which appears stressed on the surface, and may
have clusters of several consonants. Between the input to
and the output of the phonological rules, the form acquires
syllabicity. How syllabicity is interpreted is seen in
4.30.

2.12 Redundant Transcriptions

A complete or even a completely satisfactory analysis
of the prosodic features of Yavapai may no longer be pos-
sible because of the moribund state of the language and
the degree of free variation occurring even at the
idiolectal level. It seems, therefore, wiser to over-
specify, suprasegmentally at least, the forms cited in
examples and the forms presented in the dictionary as well.
A fuller discussion of this appears in 2.70 and 5.00.
2.20 Note on Plosives and Affricates

The unaspirated plosives /p, kʰ, k, kw/ and the affricate /č/ appear postvocally as lenis or partially voiced in Allegretto and optionally so in Andante: [ɓ, ɗ̆'v, ɗ̆', ɗ̆w, ɗ̆] (ɗ̆). The aspirated plosives and affricate have fortis articulation: /ph, th, kʰ, kʰw, čʰ/, as does /t/. /q/ and /qʰ/ are weakened to spirants (see the next section).

2.21 Backvelar Spirantization

The back-velar (uvular) stops /q, qʰ/ may be spirantized intervocally in Allegretto and Presto: [χ, χʰ] (See Examples 2.21a,b.). /q/ appears spirantized and voiced in Allegretto and Presto: [ʁ] in a single form (See Example 2.21c).

Examples 2.21a-c

(a) /qaqa*qa/ [qaqa*χa] 'Hohokam ghosts'
(b) /'čkmtu* tů * qw̪̃aθa kâča/ 'cantaloupe'
   /'čkmtu* [tɔ χ̃w̪̃aθa] kâča/
(c) /qȳṭi/ [ȳṭi] 'really, very much'

2.22 Articulatory Descriptions of Plosives and Affricates

The plosives and the affricates in occurrences not affected by lenition, fortitititon, spirantization, or voicing are described as follows: 

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TABLE 2

Yavapai Systematic Phonetic Consonantal Segments

<table>
<thead>
<tr>
<th>Category</th>
<th>a. voiced</th>
<th>b. voiceless</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV. Liquids</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. voiced</td>
<td>-£ £</td>
<td>£</td>
</tr>
<tr>
<td>b. voiceless</td>
<td>-â¬ â¬</td>
<td></td>
</tr>
<tr>
<td>III. Nasals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. voiced</td>
<td>£&lt;£</td>
<td>£&lt;£</td>
</tr>
<tr>
<td>b. voiceless</td>
<td>£&lt;£</td>
<td>£&lt;£</td>
</tr>
<tr>
<td>IV. Fricatives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. labialized</td>
<td>£&lt;£</td>
<td>£&lt;£</td>
</tr>
<tr>
<td>b. voiceless</td>
<td>£&lt;£</td>
<td>£&lt;£</td>
</tr>
<tr>
<td>c. voiced</td>
<td>£&lt;£</td>
<td>£&lt;£</td>
</tr>
<tr>
<td>IV. Stops and Affricates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. labialized-aspirated</td>
<td>£&lt;£</td>
<td>£&lt;£</td>
</tr>
<tr>
<td>b. labialized</td>
<td>£&lt;£</td>
<td>£&lt;£</td>
</tr>
<tr>
<td>c. aspirated</td>
<td>£&lt;£</td>
<td>£&lt;£</td>
</tr>
<tr>
<td>d. fortis</td>
<td>£&lt;£</td>
<td>£&lt;£</td>
</tr>
<tr>
<td>e. lenis</td>
<td>£&lt;£</td>
<td>£&lt;£</td>
</tr>
</tbody>
</table>

1. bilabial
2. (inter)dental
3. alveolar
4. palatoalveolar
5. palatalized
6. velar
7. back-velar
8. glottal

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TABLE 3

Yavapai Systematic Phonetic Vocalic Segments

<table>
<thead>
<tr>
<th></th>
<th>front</th>
<th>central</th>
<th>back</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. high</strong></td>
<td><code>i</code></td>
<td><code>i</code></td>
<td><code>u</code></td>
</tr>
<tr>
<td></td>
<td><code>i</code></td>
<td><code>i</code></td>
<td><code>u</code></td>
</tr>
<tr>
<td><strong>2. mid</strong></td>
<td><code>e</code></td>
<td><code>o</code></td>
<td><code>o</code></td>
</tr>
<tr>
<td></td>
<td><code>e</code></td>
<td><code>e</code></td>
<td><code>o</code></td>
</tr>
<tr>
<td><strong>3. low</strong></td>
<td><code>a</code></td>
<td><code>a</code></td>
<td><code>a</code></td>
</tr>
</tbody>
</table>

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TABLE 4

Yavapai Suprasegmentals

I. Vowel Length:
1. one mora /a/ short
2. two morae /a'/ medium
3. three morae /a:/ long

II. Pitch and Stress:
1. Primary /ã/ high, /å/ falling,
   /ã/ variable, /å/ uncertain
2. Secondary /å/ no pitch distinction
3. Tertiary /a/ no pitch distinction

III. Nasalization:
/ã/

IV. Syllable Boundary:
/Σ.Σ/
TABLE 5

Yavapai Systematic Phonemic Segments

<table>
<thead>
<tr>
<th>I. Stops/Af-</th>
<th>p  t  č kᵣ  k  kᵢ  q  qᵢ</th>
</tr>
</thead>
<tbody>
<tr>
<td>fricatives</td>
<td>pʰ  tʰ  čʰ  kʰ  kʰᵢ</td>
</tr>
<tr>
<td>II. Fricatives</td>
<td>β  θ  s  (§)</td>
</tr>
<tr>
<td>III. Nasals</td>
<td>m  n  n</td>
</tr>
<tr>
<td>IV. Liquids</td>
<td>l  r  (ʌ)</td>
</tr>
<tr>
<td>V. Glides</td>
<td>y  w  ?</td>
</tr>
<tr>
<td></td>
<td>h  hᵢ</td>
</tr>
<tr>
<td>VI. Vowels</td>
<td>i  u  e  o  a</td>
</tr>
</tbody>
</table>

1. bilabial
2. (inter)dental
3. (palato)alveolar
4. palatal(ized)
5. velar/low
6. labialized
7. back-velar
8. labialized back-velar
2.221 /p/: voiceless bilabial stop: [p]. (See Examples 2.221a-j).

Examples 2.221a-j

(a) /pi/ 'die; he is dead'
(b) /pé/ 'carry on head'
(c) /pá/ 'stick' v.
(d) /spó/ 'know'
(e) /pú/ 'put away'
(f) /qAēpi/ 'bad₁'
   /qAēβi/ 'bad₂'
(g) /lī·pi/ 'soupy'
(h) /čōpi/ 'eat something mushy'
(i) /pá·pa/ 'potato' (Spanish papa)
(j) /θrāpi/ 'five'

2.222 /ph/: voiceless bilabial aspirated stop: [pʰ]
(See Example 2.222a).

Example 2.222a,b

(a) /yāphI/ 'chin, jaw'
(b) /'pʰálka/ 'ironwood tree'

2.223 /t/: voiceless apicodental stop: [t] (See Examples 2.223a-e).
Examples 2.223a–e

(a) /títi/  'rip, tear'
(b) /'té/  'many, lots of'
(c) /tá·/  'grind'
(d) /tó·/  'sated'
(e) /tú/  'burn' v.t.

2.224 /tʰ/: voiceless apicodental aspirated stop: [tʰ].

Examples 2.224a,b

(a) /'thá/  'reed, cane'
(b) /'mtʰá·bk/  'north'

2.225 /ɬ/: voiceless apico-alveolar, affricated stop, more precisely [tʃ].

Examples 2.225a–e

(a) /ʃI·/  'lay, put'
(b) /ʃE·/  'put away'
(c) /ʃá·/  'pour'
(d) /ʃúrka/  'walnut'
(e) /ʃó/  'set down'

2.226 /ɬʰ/: voiceless aspirated apico-alveolar, affricated stop:
Examples 2.226a,b

(a) /ćʰura/  'year'
(b) /ćʰá·ri/  'winter'

2.227 Note on the Affricates: /ć/ and /ćʰ/ pattern as plain stops and should always be assumed included in any general discussion of plosives.

2.228 /kv/: voiceless palatalized, velar stop: [kv], varying with a voiceless palatal stop: [c].

Examples 2.228a-d

(a) /ćkvá·r/  'push'
(b) /kvá·r/  'shoot'
(c) /ćkvó/  'bite'
(d) /kvá·li/  'long'

2.30 Note on the Velar Stops

For /k, kʰ, kʷ, kʰw/ the point of occlusion between the articulator and the point of articulation is determined by the vocalic environment and moves along the continuum [k'...k'...k...k'...k''] in a predictable manner. The phenomenon is so common in natural languages that this analysis will not take the positional allophony of /k, kʰ, kʷ, kʰw/ into account.

2.301 /k/: voiceless velar stop: [k].
Examples 2.301a-e

(a) /kïna/  'great-grandchild'
(b) /kêla/  'younger sibling'
(c) /čkâβa/  'cousin: mother's brother's or father's sister's son'
(d) /i·kô/  'carry in hand'
(e) /'kûla/  'jackrabbit'

2.302 /kh/: voiceless velar aspirated stop: [kh].

Examples 2.302a-d

(a) /pâ·khâya/  'Indian from another group'
(b) /yûri sâkâβï/  'button' (See Punctilation 2.915)
(c) /'khô·/  'daughter's child'
(d) /tkhô·/  'stomach'

2.303 /kw/: voiceless labiovelar stop: [kw].

Examples 2.303a-c

(a) /kwâ·/  'weave'
(b) /'kwê·/  'something'
(c) /kwâ/  'horn'

2.304 /khv/: voiceless labiovelar aspirated stop: [khv].

Example 2.304

/ţkhvâ/  'metal; knife'
2.310 /q/: voiceless backvelar or uvular stop: [q].

Examples 2.310a-c

(a) /qìrqi/i/ 'rub something hard'
(b) /βqèqèʔi/ 'it is sticky'
(c) /ʔqāta/ 'sunflower'

2.311 /qw/: voiceless labio-backvelar or uvular stop: [qw].

Examples 2.311a,b

(a) /mqwîθ/ 'flying squirrel'
(b) /nqwå/ 'crane'

2.320 /ʔ/: the glottal stop: [ʔ] (2.320a-e). In Presto the initial sequence /ʔw.../ before a vowel produces a labialized glottal stop: [ʔw] (2.320f).

Examples 2.320a-f

(a) /ʔèʔ/ 'yes'
[ʔèʔ]
(b) /ʔiʔ/ 'stop!'
[ʔiʔ]
(c) /tʔ ámba/ 'closed'
[tʔ ámba]
(d) /čqnʔনι/ 'fold once'
[čqınʔনι]
(e) /mpù·klʔüt/ 'tarantula'  
[mpù·klʔüt]

(f) /wí·wiykm/ 'I have money'  
[wí wiykm]

2.40 Note on Coarticulation

The coarticulated consonants /kv, kw, khw, qw, hw/ cannot be treated as the consonant clusters /ky, kw, khw, qw, hw/ since the latter contrast with the former in all speech styles except Presto (see Shaterian 1976a).

Examples 2.40a-e

(a) /kyá·ya/ 'gray hair'  
[kyá·ya]

(b) /kwí/ 'dove'  
[kwí]

(c) /khwáta/ 'the red one'  
[khwáta]

(d) /qwáwa/ 'hair; scalp'  
[qwáwa]

(e) /hwâki/ 'two'  
[hwâki]

2.41 Note on Aspiration

In Yavapai one must distinguish between preaspiration and postaspiration. A preaspirated voiced consonant is devoiced in Allegretto and
Presto; that is, the phonemic sequence /h/ + Nasal, Liquid, or /β/ without syllable boundary ./ between the two, is pronounced as such a sequence only in Largo and Andante:

Examples 2.41a-g

(a) /'hmdl/ 'sack; bag'

(b) /hnú/ 'scoop out'

(c) /hɔmí/ 'do exercise'

(d) /hlI/ 'milk' v.

(e) /hrókβí/ 'crooked'

(f) /néhβí/ 'commit suicide'

(g) /nö'hβí/ 'gambling'

One sees quite clearly, from comparative evidence, that the aspirated stops, /pʰ, tʰ, ʂʰ, kʰ, kʰw/, arose from "true" clusters, without syllable boundaries (See 2.90). They contrast with "apparent" clusters, those containing syllable boundaries.
2.411 Epiphenomena: Postaspiration of stops is an epiphenomenon. It occurs after the historical metathesis of the sequence /h/ + Stop, which is interpreted as pre-aspiration. Metathesis and spontaneous aspiration do not occur in the same forms in all dialects. See Chapter Four.

2.50 Articulatory Description of the Fricatives

Articulatory description of the fricatives and their allophones:

2.501 /β/: voiced bilabial slit fricative: [β].
Before /θ/ the point of articulation is labiodental: [v].
In all styles but Largo, /β/ preceded by /h/ is devoiced and realized as /ə/ (See 2.41 f,g).

Examples 2.501a-e

(a) /βá'/ 'arrive'
(b) /βó'/ 'walk'
(c) /βtöttók/ 'collapsed'
(d) /çókók/ 'cup (ears)'
(e) /β'ó·ó/ 'become visible'

2.502 /θ/: voiceless postdental fricative: [θ].
Intervocally in Allegretto /θ/ is weakened to [h], specifically [h].

Examples 2.502a-g

(a) /θó'/ 'drink'
(b) /θó/ 'billowing'
(c) /qθaq/ 'burden basket'
(d) /θó·'/ 'eat meat'
(e) /ktθükβa/ 'curved'
(f) /hnapangóó·ča/ 'beaver-eaters' (obsolete term for [hnapangóó·ča] 'white men')
(g) /kθañ/ 'dog'
[ktiča] (See 4.803)

2.503 /s/: voiceless apico-alveolar groove fricative: [s].
Examples 2.503a-e

(a) /sí/ 'read'
(b) /sé/ 'be fatty'
(c) /sá/ 'sting' v.
(d) /qšóga/ 'mole (on skin)'
(e) /sūri/ 'spot, espy'

2.504 /ś/: voiceless palato-alveolar fricative: [š].
/s/ occupies a marginal status in the language.
In hypocoristic language both /θ/ and /s/ are neutralized as /š/.

Examples 2.504a-f

(a) */msé'/ ~ /mšé'/ '(one) fears'
(b) */msáyi/ ~ /mšáyi/ '(they) fear'
(c) */msé·bi/ ~ /mšé·bi/ 'fearsome'
(d) /sáhi/ ~ /šáhi/ 'stink'
(e) /θáwa/ ~ /šáwa/ 'offspring' sg.
(f) /θá:wa/ ~ /šá:wa/ 'offspring' pl.

2.505 /h/: voiceless laryngeal fricative: [h].

Examples 2.505a-e

(a) /hĩni/ 'move (aside)'
(b) /þhē/ 'tail; dress'
(c) /hâmi/ 'look over there'
(d) /hɔlhɔli/ 'flow downward'
(e) /hǔ:/ 'nose; head'

2.506 /hw/: voiceless labialized laryngeal fricative: [hɯ]; or voiceless labiovelar glide: [m].

Examples 2.506a-c

(a) /hɯʃ/ 'smell' v.t. [ʃi]
(b) /hɯd/ 'fighting, war' [d]
(c) /slhɯo/ 'nail; claw; hoof' [silamо]

2.510 Note on Glides: /?, h, hɯ/ pattern like the semivowels /y/ and /w/. These five segments will be treated as glides in the phonology. The classification follows Chomsky and Halle (1968:303), whose analysis provides compelling motivation for Yavapai (See Chapter Four).

2.511 Note on [h]: An additional h occurs in Yavapai at the phonetic level. Autonomous phonemics would classify it as an instance of /h/ exemplified in 2.505. It is not a systematic phoneme, however. It is created ex nihilo by phonological rule before a vowel in initial position, insuring that on the systematic phonetic level no word can begin with a vowel (See Chapter Three).
Examples 2.51a-d

(a) */imá/  'dances'  [himá]
(b) */ikó/  'carries in the hand'  [hiko]
(c) */ok'á/  'feels like' (modal)  [hok'á]
(d) */o'áli/  'draws out'  [ho'áli]

2.52 Nasals

Articulatory description of the nasal stops and their allophones.

2.521 */m/: voiced bilabial nasal stop: [m].

Examples 2.521a-e

(a) */mí/  'foot'
(b) */mēra/  'slender'
(c) */mā/  'ripe; well-done'
(d) */mōra/  'father's mother'
(e) */mūni/  'cold'

2.522 */n/: voiced apicodental to interdental nasal stop: [n].
Examples 2.522a-e

(a) /nɪ.sa/ 'spider'
(b) /nē./ 'scoop up'
(c) /nâli/ 'fall; descend'
(d) /nô./ 'heavy'
(e) /nû.ta/ 'mother's brother's daughter' (man speaking)

2.523 /n/: voiced palatal nasal stop: [ŋ].

Examples 2.523a-e

(a) /nî.ni/ 'copulate'
(b) /nê/ 'hunt'
(c) /ŋâŋ/ 'me' (disjunctive)
(d) /nû.o/ 'that one' (deictic)
(e) /nô/ 'quiet! wait!' (interjection)

2.53 Liquids

Articulatory description of the liquids and their allophones.

2.531 /l/: apicodental lateral liquid: [ɭ]. The body of the tongue is in the high front position, giving /l/ and i- or e-coloration.

Examples 2.531a-e

(a) /sliː/ 'fry'
(b) /lē.kô/ 'stick out the tongue'
2.532 /r/: voiced alveolar trill to tap: [r...r]. In Largo and Andante /r/ is a trill more often than a tap. The faster the Style the shorter the duration of /r/, moving it along a continuum from trill to tap.

Examples 2.532a-e

(a) /mrí·ka/ 'bean'
(b) /rë·/ 'play'
(c) /råbì/ 'hurt' v.i.
(d) /rò·pi/ 'go down (sun)'
(e) /rùbì/ 'dry'

2.533 /ʌ/: voiced palatal lateral liquid: [ʌ] or an apicodental to apico-alveolar palatalized lateral liquid: [lʌ]. Like /ʃ/ (2.504) the /ʌ/ occupies a marginal status in the Yavapai sound pattern. It occurs in only one root /qʌé·/ 'to find unpleasant, dislike' and its derivations. It is assumed to be related through phonaesthesia to /ʔlá:yi/ 'bad; no good' and to the interjection /ʔlá/ 'ugh!' See discussion of sound symbolism in Chapter Three.

Examples 2.533a-e

(a) /qʌé·/ 'dislike' sg.
(b) /qʌÁ·yi/ 'dislike' pl.
2.534 Devoicing of Nasals and Liquids: The nasals and liquids are devoiced after an /h/ in the same syllable (See Examples 2.41a-g). The liquids are devoiced in Allegretto and Presto in word-final position.

Examples 2.534a,b

(a) /hiθül/ 'cheeks'
    [hɪθʊɻ]
(b) /kθær/ 'dog'
    [kʰɑɻɻ] (See 4.803)

2.54 Semivowels

Articulatory description of the semivowels (glides) and their allophony.

2.541 /y/: voiced unrounded palatal glide: [y].

Examples 2.541a-e

(a) /yɪrki/ 'hatch'
(b) /qryē:/ 'clear'
(c) /yā/ 'mouth'
(d) /yõqi/ 'vomit'
(e) /yā׳si/ 'cool, comfortable'
2.542 /w/: voiced rounded velar glide: [w].

Examples 2.542a-e

(a) /wɪ/  'do, make'
(b) /wé/  'vagina'
(c) /wá/  'sit'
(d) /misión/  'set, put down'
(e) /pčłqwusmI/  'gulp'

2.543 Note on Glides II: Redden (1966, p. 7ff.) discusses the inadvisability of analyzing occurrences of [y] and [w] as "allophones of /i/ and /u/ respectively in the environment before another vowel." His remarks, the thrust of which is an argument against enormous complexity, are well-taken. Following affixation y and w may occur as intrusive semivowels between vowels. One recalls that this is true of h as well (2.511). Chapter Four deals with the phonological status of /y/ and /w/ and of /ʔ, h, hw/ and treats them as glides at the systematic phonemic level.

2.60 Vowels

The most difficult aspect of Yuman phonological subsystems is generally acknowledged to be the vocalism. It is also widely accepted among Yumanists that Yuman languages have considerably more free variation, on all levels of the grammar, than do most other languages. In the phonology of Yavapai this is indeed the impression one forms.
This work is an attempt to show that symmetry and predictability underlie the chaotic surface manifestations. There continue to be, however, many reasons that the phonetic output shows variability.

2.601 Optionality: I can write, for example, many phonological rules that can apply to an underlying string, but not obligatorily, so that much of the elaborate formalism I can propose for the language is optional.

2.602 First Approximation: It may be the case that any statement about Yavapai vocalism will remain at the "first approximation" stage because of (1) the optionality of many phonological rules, (2) system instability in a moribund language. A symmetrical system can be perceived, but it is also clear that it is changing rapidly.

2.70 Length

Yavapai has three distinctive vowel lengths, written /a/, /a:/, and /a:/ cooccurring with primary and secondary stress. In addition, a vowel of any length, i.e. regardless of its specification with respect to length in the lexicon, may occur overlong as an emphatic device.
Examples 2.70a–v

(a) /ʔi/  'I say'
   /ʔi:/  'wood'

(b) /kʰiːla/  'rough sides'
   /kʰiːla/  'canyon'
   /ʔiːli/  'steep'
   /ʔiːla/  'thread' (Spanish hilo)
   /ʔiːla/  'worm'
   /ʔiːla/  'worms'

(c) /nwiɾĉi/  'cook' v. pl.
    /nwiɾri/  'cook' v. sg.

(d) /ʔpiri/  'hard'
    /ʔpiri/  'strengthen'
    /ʔpiri/  'strengthen' (emphatic)

(e) /ʔe/  'deep'
    /ʔe:/  'I give'

(f) /wɛ/  'vagina'
    /wɛ:/  'mouse'

(g) /kɛla/  'younger sibling'
    /kɛːla/  'younger siblings'

(h) /hmá/  'let's go!'
    /hmá:/  'testicles'
    /ʔhmá/  'quail'
    /ʔhmáː/  'gourd'
    /ʔhã/  'water'
    /ʔhãː/  'cottonwood'
/ʔhā:/ 'bitter; spicy'

(j) /čàčkāʔl/ 'squirited on'
/čàčkā·či/ 'sprinkle'

(k) /čmā·li/ 'rake' v.
/čmā·li/ 'rake' n.

(l) /čyāłβi/ 'painted'
/čyā·łbi/ 'face paint'

(m) /ʔnāʔ/ 'me' (disjunctive)
/ʔnā/ 'road'
/ʔnā·/ 'sun'
/ʔnāː/ 'black'

(n) /ʔkʰō/ 'piñon'
/ʔkʰō·/ 'daughter's child'

(o) /kóla/ 'mother's mother'
/kó·la/ 'mother's mothers'

(p) /mpū·/ 'father's father'
/θmpūː/ 'bee'

(q) /hiθūl/ 'cheeks'
/hθū·li/ 'slow'
/θū·łbi/ 'lame'

(r) /tpūli/ 'wetten'
/impū·la/ 'forehead'
/kmpū·ła/ 'humpback'

(s) /čyūti/ 'rub straight'
/ččyū·ti/ 'rub straight' pl. obj.

(t) /skü·la/ 'beads'
/skü·la/ 'bead'
2.71 Pitch

Yavapai has two distinctive pitch accents cooccurring with primary stress only (see 2.73). Pitch 1 is high, Pitch 2 falling (see 2.70a-v).

2.72 Stress

Three levels of stress — primary, secondary, and tertiary — are distinctive at the systematic phonetic level; however, primary stress is ultimately predictable at the level of lexical representation.

Examples 2.72a-d

(a) /pëlmēl３l/ 'lick one's lips or chops'
(b) /ˈhà·pú:čd/ 'cotton spring'
(c) /ˈðhˈayēǎlʔo/ 'smoke hole'
(d) /ˈðhˈayya/ 'smoke'
 /ˈoʔáli/ 'I draw out'

2.73 Interaction of Length, Pitch, and Stress

Pitch can be distinguished only when it occurs with primary stress. With secondary and tertiary stress the pitch distinction is neutralized to a mid tone. It becomes
absorbed by sentence stress and intonation. The three-length distinction is reduced to a two-length distinction with secondary and tertiary stress (see 2.70a-v).

2.74 Realization of Pitch 1 and Pitch 2

Pitch 1 is always realized as a high level pitch, regardless of vowel length. Pitch 2 is realized as a falling pitch. The falling pitch is most noticeable on vowels of Length 3 and least noticeable on those of Length 1, where the fall is of short duration.

2.75 Stress Assignment

Although the system of transcription used in this work overwrites the suprasegmentals (see 2.12), primary stress is predictable at the systematic phonemic level. It is automatically assigned to the vowel of the last syllable in the stem or root, where root and stem are the same (see Chapter Three). In compounds, primary stress is assigned to the last stem or root. If the compound consists of only two stems (with or without the addition of affixes), secondary stress is assigned to the first stem (See 2.72a-d). It is, however, not predictable on suffixes (see Chapter Three).

2.76 Function and Analysis of Pitch

Pitch, Stress, and Length -- interrelated phenomena -- play significant roles in both the inflectional and
the derivational morphology and are discussed in Chapter Three. Nevertheless, problems remain at the word level.

After examining a large corpus of data containing forms in which both pitch and length were carefully marked, Langdon (p.c., 1972) suggested that pitch is "more phrasal than anything else" and "that there is no meaningful difference between" Pitch 1 and Pitch 2. Differences in pitch in elicitation forms result from the fact that the speaker perceives the forms as occurring in isolation or as part of a larger phrase affected by sentence intonation.

Langdon's suggestion is compelling: it accounts for a significant portion of the data and is intuitively appealing. The pattern she describes seems to be the emerging or dominant one. The exceptions to the pattern could be the result of free variation.

2.77 Recalcitrant Data

The minimal pairs in the example set listed below, nevertheless, remain distinct in the speech of many Yavapais. Members of the first two groups are derivationally related. It seems possible to consider here one or both of the following explanations to account for these forms: (1) They are vestiges of phonological distinctions such as those of length or voicing, or the presence of a final consonant or an additional syllable. (2) In an older system, pitch was used as
a derivational morpheme to move from a concrete to a metaphorical meaning or to move from one form class to another.

Examples 2.77a-c

(a) /'wā/ 'I am sitting'
    /'wâ/ 'dwelling'
(b) /hnū/ 'be ungrateful'
    /hnû/ 'scoop out'
(c) /kwā/ 'horn'
    /kwâ/ 'Indian spinach'

2.78 Transcribing Length, Pitch, and Stress

The Yavapai-English and English-Yavapai dictionaries included in this work reflect the fact that the analysis of the suprasegmentals is incomplete. At this writing I must still include more phonetic detail than may ultimately be necessary. I transcribe the forms to show instances of free variation. In cases affecting vowels, lengths of one or more additional morae are included in parentheses. Vowels marked by a falling-rising accent /\/ vacillate between Pitch 1 and Pitch 2: In those cases where the accuracy of the recording with respect to pitch is in doubt, I have recorded only primary stress (see 2.70a-v).
2.80 The Underlying Vowel System

Yavapai has five distinctive vowels: /i, e, a, o, u/. Alternations and other phonological phenomena provide clues about the origin of /e/ and /o/. There is, however, not enough motivation for reducing the underlying vowel system to /i, a, u/ despite the alternation between /e/ and /ay/, /o/ and /aw/ (and /i/ and /uy/) which is shown below.

Examples 2.80a-h

(a) /kmyë/ 'moan'
/kmyä·ya/ 'the moaner'
(b) /tyë/ 'tell a lie' sg. subj.
/tyäyi/ 'tell a lie' pl. subj.
(c) /topë/ 'help' sg. subj.
/topäyi/ 'help' pl. subj.
(d) /nô/ 'heavy'
/kβnäwi/ 'carry heavy objects in arms'
(e) /yó:/ 'be located' sg. subj.
/yä:wi/ 'be located' pl. subj.
(f) /kβö/ 'rain'
/kβäwa/ 'rain' (absolutive)
(g) /pqI/ 'woman'
/pqü·ya/ 'women'
(h) /θblǐ/  
/θblû*yi/  
'hole'  
'having holes'

2.81 Other Sources of /e/ and /o/

Some occurrences of /e/ are derived phonologically from an underlying /a/ in a palatal environment.

Examples 2.81a,b

(a) /yâč/  
[yâč] ~ [yɛč]  
'seed'

(b) /myâla/  
[muyâla] ~ [muyɛla]  
'bread'

In unstressed or reduced-stress positions (the latter arise from constraints imposed by sentence stress and intonation), /i/ and /u/ are lowered in Allegretto and Presto to [e] and [o]:

Examples 2.81c,d

(c) /θqîhmāŋ/  
[θqɛŋ̩]  
'little girl'

(d) /tû· q*âəa/  
[tɔχ*âŋ]  
'quite yellow'

Spontaneous alternations are found between /u/ and /o/ before liquids.
2.811 There are also many forms in Yavapai which contain /e/ or /o/ which cannot be accounted for on the basis of any of the above explanations. The proposal of five phonemic vowels is the only one that can be justified on the basis of the synchronic facts.

2.90 Schwa

At the systematic phonemic level Yavapai morphemes have representations which are rich in consonant clusters but poor in vowels. Many consonants may be strung together, with few restrictions on cooccurrence, forming underlying clusters:

Examples 2.90a-e

(a) /mmâni/ 'get me up!'
(b) /tmâmî/ 'capsize'
(c) /tmhvîrî/ 'loincloth'
(d) /pçlwâqki/ 'come out'
(e) /çpnpî/ 'carry many objects'

Examples 2.81e-g

(e) /mûl/ ~ /mól/ 'name'
(f) /sûlsûli/ ~ /sûlsûli/ 'clear, transparent'
(g) /mû·ri/ ~ /mû·ri/ 'knead'

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(e) /çpnpî/ 'carry many objects'
On the systematic phonetic level the situation is much the opposite; the language is rich in vowels and other [+sylabic] segments but very poor in consonant clusters:

Examples 2.90a₁–e₁

(a₁) [ʔamomāŋ]
(b₁) [təməʔamβ₁]
(c₁) [timə̞.flush]
(d₁) [βiʔelwa.ŋkt]
(e₁) [ʃuβəŋupəβ₁]

The vowels and other [+syllabic] segments introduced by phonological rules are inorganic; they carry no meaning and are present only to facilitate the articulation of consonant clusters. The syllabic segments introduced are also unstable and can appear with differing qualities in different occurrences of the same morpheme. They may be absent, appear as [ə], or add syllabicity to a nasal or liquid.

2.91 The Inorganic Vowel

The quality of the inorganic vowel depends on its position with respect to the stressed segments of the morpheme; that is, segments which are introduced behave differently according to whether they are inserted pretonically or posttonically.
2.911 Pretonic vs. Posttonic: Vowels introduced post-tonically present a far simpler picture than those introduced pretonically. In the former case, one may state that the vowel inserted between each posttonic consonant is schwa. In Andante and Largo such vowels are realized as schwas. In Allegretto and Presto the schwa disappears before nasals and liquids, making these syllabic.

2.912 Simplex vs. Complex Environment: Pretonically the situation is complicated; a number of different phonetic outputs is possible. If the consonantal environment is simplex (i.e. ?V?), the vowel introduced is an "echo" of the following stressed vowel in the stem:

Examples 2.912a-e

(a) /'i/ 'I say'

(b) /'d/ 'deep'

(c) /'d/ 'saguaro (cactus)'

(d) /'a/ 'fire'

(e) /'u/ 'I see'

If the consonantal environment is complex (see 2.90a-e), the vowel introduced will be modified by that environment.
A vowel in a simplex environment in Andante and Largo may behave as though it were in a complex one, although the converse is not true. In Allegretto the vowels introduced lose much of their distinctive quality and are reduced to schwa. In Presto they may disappear altogether. Here sentence-stress and rhythm play a large role.

2.913 Free Variation: If one can accept the notion of free variation built into the phonological component, the above sketch of inorganic vowels or vocalic segments in Yavapai and related dialects and/or languages is satisfactory. See however, Chapter Four.

2.914 Ambiguous Vowels: Another difficulty is determining which pretonic vowels are inorganic. Posttonically this is not a problem because organic vowels in this position are always articulated clearly in Andante and Largo. Pretonically an inorganic vowel may have at least three different representations: (1) root-copying vowel, (2) vowel modified by immediate environment, or (3) schwa. Of course, any organic vowel appearing before the root or stem can also be reduced to schwa. The difficulty lies in determining the origin of the pretonic vowel. Is it part of the lexicon or has it been introduced later in the derivation by phonological rules? Three possibilities must be considered: (1) the pretonic vowel has been introduced by one of the phonological rules which insert vocalic segments between consonants; that is, the specific
rule(s) involved can be made explicit; (2) the pretonic vowel comes directly from the lexicon since its shape with respect to consonantal environment cannot otherwise be explained; and (3) the pretonic vowel could be the result of phonological rules having operated on a consonant cluster or it could be present before the operation of any phonological rules -- a combination of (1) and (2).

2.915 Punctilating Convention: A notational device which can capture the ambiguity of case (3) above must be sought. Throughout this work the "suspect" vowels are punctilated.

Examples 2.915a-c

(a) /kapamka/ 'grasshopper'
(b) /ačhůrm/ 'in winter'
(c) /hičǐ·la/ 'nit'

In Example 2.915c the [i] of the first syllable could have been inserted by phonological rule. Its shape could be explained by a rule which copies the stressed vowel of the stem, [i·] or by one which takes into account the nature of the consonant preceding the stressed vowel, [č]. In either case, I would expect to find a high front vowel. On the other hand, I know that /hi(·)¬/ is a prefix. Since the root /+čǐ·l+ means only 'to fall asleep (an arm, leg),' I cannot readily etymologize the form /hi+čǐ·l+a/, nor do I know other forms containing
To resolve the ambiguity 'nit' is written /χɪ.ɪəl/, the punctilated vowel is shown to be one of uncertain origin.

2.92 An Integrated Theory

In Chapter Four the question of schwa is taken up again. A new solution, which incorporates many other aspects of the phonology as well, is proposed. Before examining an integrated theory of Yavapai phonology, it is necessary to make an excursus into the morphology -- both inflectional and derivational -- in order that the composition of a word be understood.
NOTES TO CHAPTER TWO

1. Hypocoristic forms involving [s] and [ʃ] (also written [ʌ]) are discussed in Chapter Three.

2. Yavapai phonotactics are discussed at the beginning of Chapter Three. The distribution of the segments and restriction on cooccurrence, as well as other facts relating to canonical shape, are treated in "Inflectional and Derivational Morphology."

3. The prefix /hi(•)-/ probably contains as its initial segment the h discussed on page 37 (5.111). There is only indirect evidence that this is so: forms for 'my nit, your nit,' and the like were never elicited; therefore, I do not wish to write /i(•)-/, especially so since the i itself may be an epenthetic vowel.
CHAPTER THREE

INFLECTIONAL AND DERIVATIONAL MORPHOLOGY

3.00 Introduction

Chapter Two presented the phonological facts of Yavapai and discussed the areas that have continued to be problematic. Chapter Four reexamines the phonology and attempts to bring solutions to the problems. While Chapter Two makes a prosaic statement of the phenomena, Chapter Four restates the phenomena within a more theoretical framework and seeks to explain the data. The approach is two-pronged: Chapter Two presents a taxonomy; Chapter Four presents a theoretically oriented accounting.

3.01 Chapter Three

Chapter Three is intended to have the same two-pronged purpose: factual and theoretical, although its scope is less ambitious than that of Chapters Two and Four, which deal with the phonology, the focus of this dissertation. Chapter Three presents the morphology in the form of a sketch. It organizes the elements of word formation along lines which it does not seek to justify at every step. The terminology is that which has been developed the past two decades among Yumanists in general and Pai specialists
in particular. In considering terminology and organization of the morphology, two recent works have figured in the writer's own presentation: "A Thumbnail Sketch of Havasupai Grammar," found in Hinton (1977) and the entirety of the description of Tolkapaya found in Hardy (1979). In following the line of development of terminology from that summarized and elaborated by Hinton to that used by Hardy and finally to that used in the current outline, the reader can identify clearly the morphological entities discussed and use the material to study the difference between Northeastern Yavapai and Western Yavapai, hereafter called simply NEY and Tolkapaya. Chapter Three has had as its stated goal a better understanding of the phonology of Yavapai and of the Yavapai-English and English-Yavapai dictionaries of Part II. Each lexical item found in the dictionary appears in a citation form from which can be derived the other inflected forms.

3.02 From Meaning to Sound in Yavapai

Although it is necessary in describing a language to present areas of the language -- the phonetics, the phonology, the morphosyntax, and so forth -- in a piece-meal, atomistic fashion, one should have a notion of how the language works as a whole. In presenting the various areas of the language, it is impossible to take time at every step in an explanation and relate each
development to the overall hypothesis about how the language operates. Nevertheless, there are certain notions in these theoretical areas which, if outlined, would allow the reader to know the general thrust of the thinking behind the presentation; and would also allow me to proceed with the description of the data without having to allude to the obvious similarity of certain affixes or to the implication of a particular datum.

3.03 Overall View

The following outline is meant neither as a diachronic nor a synchronic statement. Nor are there necessarily any psychological claims being made for the model. The description seeks to make the grammar of Yavapai comprehensible.

3.04 Level II Representation

It is necessary to conceive of two levels of abstraction: that of the root and that of the stem. A stem is a morpheme or a combination of morphemes that can take verbal or nominal inflectional affixes, that is, it has undergone derivational affixation which has changed it from a root to a stem. The stem has a more or less well-defined meaning. The affixes that are attached to the stems at this second level of
representation also have fairly well-defined meanings and specific positions which they occupy with respect to the stems. This level of abstraction, consisting of traditional concepts of stem and affix, will be called Level II Representation. It is approximately the same as classical morphophonemics or systematic phonemic representation.

3.05 Level I Representation

At Level I I propose that one has in Yavapai roots and affixes. Neither the root nor the affix necessarily has the identical meaning which is retained at Level II. Meaning at Level I is more abstract than that at Level II. At Level II stems are either verbal or nominal; at Level I roots are neither. Both roots and affixes have a more iconic meaning.

3.06 Example of Level I Representation

Consider the root hwaL (roots and pre-affixes are italicized), which is neither verb nor noun. Its meaning can be described as 'a claw-like scooping motion into or within a area.' The L represents the potentially sound-symbolic, liquid termination of the root. It is an "archisynaestheme," having a realization at Level II, as two stems: /hwal-/ 'dig out (for planting)'; and /hwar-/ 'scoop out (e.g. the interior of a log).'. The realization with /l/ represents the larger movement, with /r/ the smaller. (see 3.801) The stems can take among others
the affixes /m-/ 'second-person prefix' and /-i/ 'absolu-
tive' (called 'declarative' or 'absolutive' by Hardy. See
below). Primary stress has been assigned to the root;
/-i/ is inherently unstressed (see below). The resulting
forms /mhwali/ 'dig!' and /mhwari/ 'hollow it out!' are
both imperatives, which will undergo further phonological
rules giving an eventual systematic phonetic output.

3.07 Homonymy vs. Polysemy

One could also look more carefully at the affixes
/m-/ and /-i/. Highly abstract meanings have been pro-
posed for them and other affixes; that is, polysemy has
been favored over homonymy. The reverse proposal has
been made as well. I do not seek to provide answers to
these questions; I do, however, compartmentalize the
problems by maintaining Levels I and II. In other words
at Level II one is clearly dealing with homonymy; that
is, one has the same phonological shape for many affixes
which are semantically distinct at Level II. At Level I,
on the other hand, one may be dealing with polysemy in
many instances, but probably not in all.
3.10 Word Stress

It is useful to recall at this point that the present analysis recognizes three degrees of phonetic stress: primary, secondary, and tertiary (or unstressed). At the systematic phonemic level, primary stress is predictable, assigned to the root vowel of each morpheme. Some affixes are inherently stressed, and some are inherently unstressed. Inherently stressed affixes carry secondary stress; inherently unstressed affixes carry ipso facto tertiary stress. Compound nouns, which consist of at least two stems carrying primary stress, undergo a rule which reduces the first primary stress to secondary stress.

3.101 Predictability of Stress: Since some affixes are stressed (secondary stress) and other affixes are unstressed (tertiary stress), and since there are no criteria for determining which affixes are stressed and which are not; it follows that it is only the distinction between secondary and tertiary stress which is unpredictable. Primary stress is completely predictable (it is on the vowel of the root). This dissertation, however, always indicates primary stress by default. One recalls that Pitch 1 is written /ã/; Pitch 2: /å/; Variable Pitch: /Ä/; and Indeterminate Pitch: /å/ (see Table 4, page 25). Since the pitch distinction is maintained only on vowels with primary stress, I automatically indicate primary stress when I write pitch.
3.102 **Form Classes:** There are only two form classes in Yavapai: verbal and nominal.

3.103 **Root and Stem:** The root is subject to but does not always undergo the structural modification -- derivational affixation, sound symbolism, suprasegmental shifts -- which converts it to either a verbal or a nominal stem. Consider, for example, the root *wa* 'being at rest; sitting; dwelling (singular subject).' This very productive root enters into many compound verbs and nouns. As a simplex verb or simplex noun, however, it is found with the meanings 'sit' and 'dwelling' respectively. The modifications it undergoes to become either a verbal or a nominal stem are, in this case, not many:

3.103a **Stress Assignment Rule:** Primary stress is assigned to the root vowel: *wá*
3.103b **Pitch Assignment Rule:** Pitch 1 is assigned to verbal stems; Pitch 2 to nominal stems: wa 'sit' and wâ 'dwelling.'

3.103c **Noun Marker Prefixation Rule:** /?-/ is prefixed to the root wâ.

3.103d **Root to Stem Conversion Rule:** If these forms modified to this point are to undergo no further derivational affixation or compounding, they may become stems: /wâ/ and /wâ/, verbal and nominal respectively. As the notational devices indicate, the abstract root wa, later wâ, has become the morphophonemic or systematic phonemic verbal and nominal stems /wâ/ and /wâ/.

3.104 **Type A Stems:** The verbal stem /wâ/ ends in a stressed vowel. As such it is classified as Type A. A Type A simplex verb (see below) can occur alone as an utterance, at least in elicitation form. It is generally glossed as 'to sit,' 'sit,' or 's/he sits,' although this is somewhat misleading, since /wâ/ is not marked for aspect or tense. It is that form of the verb which becomes the imperative (singular) after prefixation of /m-/ 'second person': /mwâ/ 'sit down!' /wâ/ might better be glossed as 'for one to sit down' or something more in that vein. For convenience the citation forms of verbs will be
glossed by the infinitive form (without to) in English, i.e. 'sit.'

/"wâ/, a Type A Simplex Noun, is the citation form of 'dwelling, house.' The noun is in the absolutive.

3.105 Type B Stems: The root ha: 'look' must appear with one of the derivational suffixes -k or -m, directional verb suffixes. After the application of the rules cited in 3.103a,b, and d, the verbal stems */hâ:k/ 'look over this way (toward speaker)' and */hâ:m/ 'look over that way (away from speaker)' are derived. These are not citation forms. They cannot occur in elicitation. All Type B stem verbs require the ending /-i/, an ending with no greater assignable meaning than the zero ending of /wâ/ above. Thus the forms can occur as /hâ:ki/ and /hâ:mi/. Prefixation of /m-/ 'second person' will produce the imperative forms (singular) of these verbs, as was the case for /wâ/:

a. /mhâ:mi/ 'look away!

b. /mhâ:ki/ 'look this way!

Hardy (1979 calls this the "absolutive, short form of (the) verb" or a "declarative" mood, and I will follow her usage.
3.106 **Type B Stem Nouns**: A nominal stem which ends in a consonant and **cannot appear** as a citation form **without** the addition of an obligatory vocalic suffix belongs to this group (see below). The neutral vocalic suffix in such cases is /-a/, the absolutive. A noun of Type B may also occur with one of two nominalizing suffixes: /-i/ 'artifact' or /-ô-/ 'location.' (see below.)

3.107 **Type C Stem Noun**: A nominal stem which ends in a consonant and **can appear** as a citation form **without** the addition of an obligatory vocalic suffix belongs to Type C. There seems to be no semantic or phonological conditioning that determines which nouns fall into this category. Consider the examples below which illustrate the three Types of nominal stems:

**Examples 3.107**

**Type A:** /nqʷá:/ 'crane'
/kθʔeː:/ 'a drink made from berries'
/nmi/ 'cat'

**Type B:** /kʔóya/ 'crown of head'
/ʔú:ʔa/ 'tobacco'
/skʷála/ 'large hawk'

**Type C:** /hʔél/ 'louse'
/ʔβák/ 'awl'
/mqʷíθ/ 'flying squirrel'
Type C nouns may also appear as Type B nouns in other dialects; for example, Tolkapaya 'awl' is /βāka/. One finds examples of Type C nouns being used as Type B, but a Type B noun cannot lose its /-a/ to become a Type C at the whim of the speaker. At any rate the conditioning factor for membership in B or C is elusive, although the majority of its nouns are of either Type A or B.

3.20 The Verbal Stem

In surveying verbs in Yavapai, one finds two recurrent types of stems: 1) Simplex and 2) Complex. The classification is based on the phonological structure of the stems, not on covert categories. The discussion will include as well a brief description of the auxiliary verbs.

3.201 The Simplex Verbal Stem: To this category belong the verbal stems with or without derivational prefixes. The last pretonic consonant cannot be analyzed further synchronically. The posttonic consonant(s) may or may not be analyzable. The examples given below show the absolutive suffix automatically attached whenever the stem ends in a consonant (the second person forms, both singular and plural, are imperatives as well as "ordinary" second person):
Examples 3.20la-g

(a) Stem: /ma:/ 'eat (soft things)'

1 /'ma:/ /'ma:ci/
2 /mma:/ /mma:ci/
3 /ma:/ /ma:ci/

   singular   plural

(b) Stem: /små:/ 'sleep'

1 /'små:/ /'små:či/
2 /msmå:/ /msmå:či/
3 /små:/ /små:či/

   singular   plural

(c) Stem: /kwā'wi- 'speak'

1 /'kwā'wi/ /'kwā'wiči/
2 /mkwā'wi/ /mkwā'wiči/
3 /kwā'wi/ /kwā'wiči/

   singular   plural

(d) Stem: /'e' 'give'

1 /'e' ' ' /'e' 'či/
2 /m'e' ' /m'e' 'či/
3 /'e' ' /'e' 'či/

   singular   plural
(e) Root: *smá: ‘sleep’
   Stem: /tsmā·či/ ‘dream’

1 /t*smā·či/ /t*smā·čči/  
2 /mt*smā·či/ /mt*smā·čči/  
3 /ts*smā·či/ /ts*smā·čči/  
   singular   plural

The above examples contain the following affixes:

(f) Derivational
   /t-/ causative
   /-č/ iterative

(g) Inflectional
   /?-/ first-person subject
   /m-/ second-person subject
   (/b-/ third-person subject)
   /-č/ plural subject
   /-i/ absolutive

3.202 Simplex Verbal Stem with Vocalic Prefix: To this category belong the verbal stems with the vocalic derivational prefixes /i(*)-/ and /u-/. These prefixes involve the h created ex nihilo by phonological rules. To show this operation, examples are given in both a systematic phonemic and a systematic phonetic transcription.
Examples 3.202a,b

(a) Stem: /i·pār-/ 'learn'

1 /'i·pāri/ /'i·pārči/
2 /mi·pāri/ /mi·pārči/
3 /i·pāri/ /i·pārči/

singular plural

1 [?i·pāri] [?i·pārči]
2 [mi·pāri] [mi·pārči]
3 [hi·pāri] [hi·pārči]

(b) Stem: /u·āl-/ 'take out'

1 /'u·āli/ /'u·ālči/
2 /mu·āli/ /mu·ālči/
3 /u·āli/ /u·ālči/

singular plural

1 [?ō·āli] [?ō·ālči]
2 [mō·āli] [mō·ālči]
3 [ho·āli] [ho·ālči]

3.203 Punctilation: The convention of punctilating segments which are either suspected of being inorganic or known to be inorganic is used throughout this work (see 2.915). I claim no theoretical status for punctilation; it is only a notational device. Its continued use is for the sake of consistency. Most transcriptions in this analysis are systematic phonemic, tending occasionally
toward more abstraction to the classical morphophonemic or
toward more concreteness to the classical phonemic. If I
invoked biuniqueness, I would have to write h in both the
more abstract and the more concrete transcription. One
can write h and still point to its marginal status by
punctilating it. A revised writing of the third-person
examples from above can now be introduced:

Examples 3.203a,b

(a) Stem: /i·pār-/  'learn'
    /hi·pāri/  'he learns'
(b) Stem: /uʔāl-/  'take out'
    /huʔāli/  'he takes out'

(Yavapai has no gender distinction. I use 'he' in glosses
merely for convenience.)

3.204 Complex Verbal Stem: Verbs in this category
consist of two parts: the stem carrying primary stress
preceded by a class of bound morphemes which could be con-
sidered a special set of prefixes consisting of incor-
porated roots. The prefixes carry secondary stress and
never take personal prefixes. The personal prefixes are
infixed before the stem.
Examples 3.204a,b

(a) Stem: /yà...?éβ-/'understand'
1 /yà??éβi/ /yà??éβči/
2 /yàm?éβi/ /yàm?éβči/
3 /yà?éβi/ /yà?éβči/
singular plural

(b) Stem: /wà...fí·β-/'think'
1 /wà?fí·βi/ /wà?fí·βči/
2 /wàmsí·βi/ /wàmsí·βči/
3 /wàsí·βi/ /wàsí·βči/
singular plural

3.205 Unspecified Object Marking with Complex Verbal

Stem: Verbs in this subcategory all require an object complement. In the absence of a named object, the complement is either /kwe·-/ or /?č-/. Personal prefixes, as in all complex verbal stems, are infixed before the stem carrying primary stress.

Examples 3.205a-c

(a) Stem: /kwè·...oô·/'eat something (hard)'
/kwè·oô·/ /kwè·oô·či/
/kwè·môô·/ /kwè·môô·či/
/kwè·oô·/ /kwè·oô·či/
singular plural
(b) Stem: /'č...čá·m-/ 'make a mistake'
1 /'č?čá:mi/ /'č?čá:mči/
2 /'čmčá:mi/ /'čmčá:mči/
3 /'ččá:mi/ /'ččá:mči/
singular      plural

(c) Stem: /'č...rāβ-/ 'be sick'
1 /'č?rāβi/ /'č?rāβči/
2 /'čmrāβi/ /'čmrāβči/
3 /'črāβi/ /'črāβči/
singular      plural

3.206 Augmented Verbal Stems: A number of verbs, both simplex and complex, require a vocalic augment in [a]. In simplex verbs the augment supports the personal prefixes; in complex verbs the augment precedes the bound morpheme which precedes in turn the personal prefixes.

Examples 3.206a–d

(a) Stem: /-pē·m-/ 'go away (dual); be all gone'
1 /'apē:mi/
2 /mapē:mi/
2 /pē:mi/

(b) Stem: /-ʔum-/ 'no; not (negative verb)'
1 /ʔaʔumi/
2 /maʔumi/
3 /ʔumi/

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(c) Stem: /-/r...ʔú.y-/ 'be proud'
1 /ʔarʔú.yi/ /ʔarʔú.yči/
2 /marʔú.yi/ /marʔú.yči/
3 /rʔú.yi/ /rʔú.yči/

Compare the following verb, with a similar initial shape, which behaves, however, like an unaugmented complex verbal stem:

(d) Stem: /ʔar...yé./ 'be thankful'
1 /ʔarʔyé.km/ /ʔarʔyá.ykm/
2 /ʔarmyé.km/ /ʔarmyá.ykm/
3 /ʔaryé.km/ /ʔaryá.ykm/

3.207 Quality of the Augment Vowel: The /a/ which serves as a vocalic augment is definitely not identical with the so-called schwa. Gemination and cloning are not present in conjunction with the augment-a. Neither is the [a] unstable.

3.208 Note on Transcription: I am writing the auxiliary verbs with primary stress, although in sentences or phrases the auxiliaries have stress reduced to secondary.
3.210 The Auxiliary Verbs: Hardy (1979) proposes four classes of auxiliary verbs for Tolkapaya. NEY auxiliary verbs lend themselves to the same classification, although there is some difference in detail. To the extent that these differences are known, they will be discussed. This section is not an exhaustive excursus into auxiliary phrases in Yavapai, merely an outline to show the great agreement between the two dialects and to point out what appear for the present, at least, to be some differences.

3.2101 Table 1 illustrates the four classes of auxiliary verbs in NEY and uses Hardy's Tolkapaya definitions and terminology but my transcriptions. A selection from among them will be exemplified.

3.211 The Locational Auxiliary /ukwá/:

Example 3.211

Stem: /smá:/ 'sleep'

1sg /ʔsmáːhk ukwá/ 'I feel sleepy'
2sg /msmáːhk mukwá/ 'you (sg) feel sleepy'
3sg /smáːhk ḥukwá/ 'he feels sleepy'
1pl /ʔsmáːcəhk ukwá/ 'we feel sleepy'
2pl /msmáːcəhk mukwá/ 'you (pl) feel sleepy'
3pl /smáːcəhk ḥukwá/ 'they feel sleepy'
TABLE 6

Northeastern Yavapai Classes of Auxiliary Verbs

Class I: Locational Auxiliaries:
1. `/ukwā/  'feel, sense'
2. `/nū-/, 'incompletive'
   `/unū-/
3. `/wār-/  'additional'

Class II: Existential Auxiliaries:
   A: Behavioral:
1. `/yú(*)/  'be'
2. `/wí(*)/  'do'
3. `/í(*)/  'say'
   B: Cognitive:
4. `/yí(*)/  'think'

Class III: Modal Auxiliaries:
1. `/yí·te·/  'contrary to expectation'
2. `/lwī/  'should'
   (/li(*)/) Verde Valley Yavapai)
3. `/hí:/  'purposive/obligatory'
   `/yí:/

Class IV: Adverbial Auxiliaries:
1. `/mā:t-/  'apparently'
2. `/?-um-/  'negative verb'
3.212 The Locational Auxiliary /(u-)nu·/ 'in the process of doing something; about to be doing something':

This auxiliary occurs either with or without the prefix /u-/ in Prescott NEY. The auxiliary phrases with /unu·/ have the same syntactic properties as those described by Hardy for Tolkapaya; that is, the first verb has final /-k/, 'same subject marker,' preceded by the 'irrealis marker,' /-h/ on main verbs but not on the behavioral auxiliaries /yú/ 'be', /wi/ 'do', and /ʔi/ 'say' (see 3.214).

Example 3.212a

(a) Stem: /yá·m-/ 'go away'

1sg /yá·mahk /unu·/ 'I'm leaving'
2sg /myá·mahk munú·/ 'you're leaving'
3rd /yá·mahk hunú·/ 'he is leaving'
1pl /yá·mcəhk /unu·/ 'we're leaving'
2pl /myá·mcəhkus munú·/ 'you're leaving'
3pl /yá·mcəhkus hunú·/ 'they're leaving'

Examples 3.212b,c,d

(b) Stem: /yú/ 'be' 'is that what he's doing?'

/puβ yúk hunú·?/ (e.g. being afraid)

(c) Stem: /wi/ 'do' 'is that what he's doing?'

/puβ wík hunú·?/ (e.g. eating)

(d) Stem: /ʔi/ 'say' 'is that what he's doing?'

/puβ ʔík hunú·?/ (e.g. telling something)
Example 3.212e

(e) Stem: /yá·m-/

1sg /yá·ma(h) ?nú/ 'I'm going to leave'
2sg /myá·ma(h) mnú/ 'you're going to leave'
3sg /yá·ma(h) nú/ 'he is going to leave'
1pl /yá·mča(h) ?nú/ 'we're going to leave'
2pl /myá·mča(h) mnú/ 'you're going to leave'
3pl /yá·mča(h) nú/ 'they're going to leave'

(The transcription tries to reflect the fact that /-h/ is audible here only in the most careful speech.)

The difference in the forms having the same-subject marker on the main verbs, 3.213a, and those without the /-k/, 3.213b, seems to be the same difference found in Tolkapaya between those with /-h/ and those without /-h/, although I cannot characterize the difference.

3.213 The Locational Auxiliary /wár-/: The auxiliary means 'additional, in addition to.' In Yavapai it occurs with the recursive morpheme /-ña/ alone or followed by the second recursive morpheme /-i-/ (Tolkapaya -ee), glossed 'too' and 'again' respectively.
Examples 3.213a,b

(a) /ʔwíː nʔeːŋok ʔwára(h) ʔ núːkm/
'I am going to give him the money for you'
#ʔ-wíː n-ʔeː-ŋ-o-k ʔ-wá-r-ʔ ʔ-núː-km#
NM-money l/2-give-too-APP-SS 1-ADD-IR 1-INC-IC
NM = noun marker
l/2 = first-person subject with second-person object
APP = applicative-benefactive
IR = irrealis
IC = imperfective contracted auxiliary phrase

(b) /túː mčryŋnik mwáreʔ/
'are you (sg) just teasing me again?'
#túː m-čr-yŋ-n-i-k m-wá-r-ʔ#
PART 2-tease-too-again-SS 2-ADD-Q2
PART = particle
Q2 = interrogative on Type 2 stem

3.214 The Behavioral Auxiliaries /ʔi(·)/ 'say', /yú(·)/ 'be', /wi(·)/ 'do': These occur as existential auxiliaries in NEY, although not with the same meaning they have in Tolkapaya. In NEY they are rather unusual, highly marked sentences:
Examples 3.214a-c

(a) /k naï·β-/ 'tell' + /ʔI/
   /ʔk naï·βk ʔʔím/ 'I am the one telling'
   /ʔk naï·βk ʔʔin/ 'I am the one who told'

(b) /smá·/ 'sleep' + /yū/
   /ʔsmá·k ʔyum/ 'I am the one sleeping'
   /ʔsmá·k ʔyuŋ/ 'I am the one who slept'

(c) /mã:/ 'eat (soft things)' + /wI/
   /ʔmã:k ʔwím/ 'I am the one who eats'
   /ʔmã:k ʔwíŋ/ 'I am the one who ate'
   /-k/ 'same-subject marker'
   /-m/ 'imperfective'
   /-n/ 'perfective'

In Tolkapaya these forms have the far more common glosses:

(a) 'I am/was telling'
   'I told'

(b) 'I am/was sleeping'
   'I slept'

(c) 'I am/was eating'
   'I ate'

3.215 The Contracted Auxiliary Phrases: NEY contracts the verbal phrases in order to have the illocutionary force of sentences like:
3.214a 'I am/was telling'
'I told,' etc.

It is the third-person singular of the contracted forms
and the third-person singular absolutes that are the
most frequently heard as citation forms of the verbs in NEY.

Examples 3.215a–c

(a) Stem: /kná·β-/ 'tell'
/kná·βkm/ 'he is/was telling'
/kná·βkŋ/ 'he told'
(b) Stem: /smá:/ 'sleep'
/smá:km/ 'he is/was sleeping'
/smá:kŋ/ 'he slept'
(c) Stem: /mā:/ 'eat (soft things)'
/mā:km/ 'he is/was eating'
/mā:kŋ/ 'he ate'

3.216 The Reduplicatable Verbal Stem with */ʔi(·)/: To
this special type of auxiliary phrase belong reduplicated
stems as well as potentially reduplicable stems. The
behavioral auxiliary in such phrases might better be
glossed as English 'go' as in 'the cow goes moo'
/qwáktč mǔʔi/ or 'the old man coughs = the old man goes
"cough, cough"' /βlheʔč βkèhkēʔi/. Another use is seen
in 'the earth quakes' /mātē β̣īn̄īl/, which might be seen as 'the earth goes "?īn̄īn"' if it were referring to the noise; but it is the quaking the sentence talks about. A better translation might be 'the earth manifests itself in quaking.' /?i(·)/ will be glossed 'say' throughout this work, but it might be more accurate to call it as "manifestative" verb, especially when it is used in "expressive 'say' constructions" as Langdon called them (1977b).

Examples 3.216a-c

(a) Stem: /qlā·/ 'croak'
1 /βqlā·?i/
2 /βqlā·mi/
3 /βqlā·?i/

(b) Reduplicated Stem: /qlā·/ 'scream'
1 /βqlā·qla·?i/
2 /βqlā·qla·mi/
3 /βqlā·qla·?i/

(c) Stem: /māč/ 'wink'
1 /βmāč?i/
2 /βmāčmi/
3 /βmāč?i/

(d) Reduplicated Stem: /māč/ 'blink'
1 /βmāčmāč?i/
2 /βmāčmāčmi/
3 /βmāčmāč?i/

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Reduplication is treated in more detail in the derivational morphology (3.812).

3.217 The Cognitive Auxiliary /yí(·)/: Only one usage of this will be cited, the occurrence of this existential auxiliary in a complex verb within an auxiliary phrase. Fuller discussion of /yí(·)/ appears in the next section (3.218).

Example 3.217

Stems: /kwè·...-th·...wał...-yI·/ 'want to eat something (hard)'

1sg /kwè·'th·hk wał'yI·/ 'I want to eat'
2sg /kwè·'mth·hk wałm(y)I·/ 'you (sg) want to eat'
3sg /kwè·'th·hk wałyI·/ 'one wants to eat'
1pl /kwè·'th·c̱h·hk wał'yI·/ 'we want to eat'
2pl /kwè·'mth·c̱h·hk wałm(y)I·/ 'you (pl) want to eat'
3pl /kwè·'th·c̱h·hk wałyI·/ 'they want to eat'

3.218 The Modal Auxiliary /yí'te·/: Although this verb is multimorphemic and is not marked for person, it functions as an auxiliary meaning 'contrary to expectation,' and belongs to the clause it follows (Hardy 1979:291).
Examples 3.218a-d

(a) /?yá·ma(h) ?nú· yí·tè· mārmārm yū·ha/
'I intend to go, but it will be later'
#?·yá·m-h ?-nú· yí·tè· mārmārm yū·h-a#
1-go-IR 1-INC MOD later-DS be-IR-ASSR

(b) /?kná·βo yí·t yūh/
'I tried to tell her, but didn't!'
#?·kná·β-o yí·t yū-h#
1-tell-APP MOD be-IR#

A /-te·/ appearing on other verbs may be the same morpheme.

(c) /mpītè·?/
'why don't you drop dead?!'
#m-pī-tè·-?#
2-die-MOD(?)

(d) /?ná? m?ē:ŋatè·/
'give me some, too!'
?ná-? m-?ē:ŋ-a-ŋatè·#
1P-DISJ 2-give-too-IR-MOD(?)

3.219 The Modal Auxiliary /lwí(·)/: This is found in NEY of the Verde Valley as /li(·)/. In Prescott NEY, however, the morpheme, meaning 'should, ought to' has the same shape as that in Tolkapaya.
Example 3.219

/kθyέ: ?ū·h ?lwi·a ?yú·ma/
'I really ought to see a doctor'
#kθyέ: ?-ū-· -h ?-lwi·-a ?-yú·-ma#

doctor 2-see-IR 2-MOD-ASSR 1-be-ASSR

3.220 The Modal Auxiliaries /hí·/ and /yí·/: These are glossed as 'purposive/obligational' in Tolkapaya. They occur with relatively high frequency in Yavapai and pose many problems. It is difficult even to disentangle the many forms that resemble each other closely in both form and meaning diachronically. Synchronically grammaticization of related (?) forms like /yí·tè·/ and /wàl...yí·/ (see above) compound the difficulty.

Examples 3.220a–d

(a) /pà·tkwī·la(h) hí·km/
'he intends to win'
#pà·-tkwī·l-h hí·-km#
PLo-win=over-IR MOD-IC
PLo = plural object prefix
(b) /m País ma(h) myí·km/
'you are to return'
#m- País·-m-h m- yí·-km#
2-walk-DIR-IR 2-MOD-IC
The examples above show a rather clear distinction between the two auxiliaries; however, this unambiguous circumstance is exceptional. Most examples show the entanglements alluded to before:

(c) /nú l ʔyá·ma(h) ʔí·km/ alternates freely with
/nú l ʔyá·ma(h) ʔýí·km/
'I want to leave here'
#nú-1 ʔ-yá·m-h ʔ-X-km#
DEM-LOC 1-go-IR 1-X-IC

(d) /ʔhá mθí:(h) mí·kθó·/
'...when you want to drink water'
#ʔ-há m-θí:-h m-í·-kθó·#
NM-water 2-drink-IR 2-X-when

/X/ is written to show that it is unclear which of the two modal auxiliaries is occurring in the example.

3.2201 Kendall (1976:34) proposes another two kinds of /i/s (her transcription), which she glosses 'inchoative' and 'purposive.' Examples of each are given in my transcriptions:
Examples 3.2201a,b

(a) /æ·mča(h) ?i·kŋ/

'he started out wandering'

#æ·mč-h ?i·-kŋ/

wander-IR X-PI

PC = perfective contrated auxiliary phrase

(b) /nmíŋu ?yō:k ?wē· kmwā:ča(h) ?i·ka/

'I got that cat to kill mice'

#nmí-ŋu ?-yō:-k ?-wē· kmwā:č-h ?i·-ka#

cat-DEM 1-get-SS NM-mouse kill(many)-IR X-ASSR

3.2202 There are other occurrences of i's throughout Yavapai. Consider, for example, the auxiliary verb /?i·β-/

'pretend', in which Hardy (1979:167ff) sees a relationship to /?i·/ (and I agree with her). There is the prefix /i(·)-/ and the absolutive or "manifestative" /-i/, and this does not complete a list of i's occurring in Yavapai as morphemes. Nor is a claim being made that the instances of i that have been singled out are ultimately related. There is a commonality in shape and meaning (or perhaps vagueness of meaning) which these i's and the i's to be discussed in the next section share.

3.221 Speculations on /?i·/, /i·/, /hi·/, and /yí·/:

It may be the case that no amount of further investigation will reveal more about these forms. There are some
phonological considerations that could form the basis for future investigations, both pan-Pai and pan-Yuman.

It has been observed that the verb 'say' exhibits an unexpected phonological (?) change in the second person:

Example 3.221a

(a) Stem: /ʔí(·)/  'say'
   1sg /ʔʔí·/
   2sg /mí·/
   3sg /ʔí·/

One could expect */mʔí·/ with the meaning 'you say.' Mixco (1972) makes the same observation in Kiliwa and suggests a phonological rule suppressing ? after m in this verb. This may seem rather ad hoc at first glance, but experience with NEY shows this can happen with /hí·/ and /yí·/; they both are realized as /mí·/ or /míː/ (Vowel length here is not presumed to play a role. Because of sentence stress and intonation, one would expect vowel-length variation in these forms.) There is stylistic variation between /myí·/ and /mí·/, in Andante and Allegretto respectively. One never finds, however, an variation between /mí·/ and */mhi·/. In 3.220c ones see free variation between /ʔí·/ and /ʔyí·/ (This speculation rests on the assumption of partial homonymy.)
Let us assume that there are three distinct verbs at Level II: /ʃi/ 'say'; /i-/ 'mean'; /vi/ 'think'. 'Think' is an ambiguous gloss in English. /wà...sIβ-/ is also glossed 'think.' The latter, however, is 'think' in the sense of using one's mind; the former /vi/ is 'think' in the sense of expressing an opinion. Within the Germanic languages English, German, and Norwegian (Danish and Swedish and others as well), there is a similar confusion for a speaker of one of these learning one or two of the others. The etymologically identical forms Eng. mean, Ger. meinen, Nor. me(i)ne (a borrowing from German) all have diverging and overlapping meanings. Most of these can be found within the various definitions of mean in English alone. The notions of intention and significance, both prosaic and philosophic, are included in English meaning. German Meinung will include opinion with intention, but exclude significance in the sense of definition. Norwegian me(i)ning leans (for this speaker) more toward intention in the sense of having something in mind. German and Norwegian use the verb as 'say' or 'think' in the sense of "Well, what do you say about that?" or "Well, what do you
think about that?" German meinen and Norwegian me(i)ne are also common quotatives, corresponding to English "... he said." or "... he replied." There is much more that could be said along these lines, but the point to be made is that it is quite easy to see how these three verbal stems might well have (had) one root, at least from a semantic point of view.

3.2212 From a phonological point of view one can imagine several different ways in which the current state came about: It will be recalled how simplex verbs (and nouns) having the initial prefix /i(*)-/ add personal prefixes:

Examples 3.2212a-c

(a) Stem: /ihá·n-/  'tame'

1sg /ʔihá·ni/
2sg /mihá·ni/
3sg /hihá·ni/

One possibility is that the original verb, at Level I, was ʔi. The stem at Level II, /ʔi·/, would have been conjugated:
(b) 1st /ʔʔi·/
    2sg /ʔʔi·/
    3sg /ʔʔi·/

If the original verb, at Level I, were i·, the stem /i·/, would have been conjugated:

(c) 1st /ʔʔi·/
    2sg /ʔʔi·/
    3sg /ʔʔi·/

The aspirate onglide of the third-person in found in Yavapai only (NEY, Tolkapaya, and SEY). Northern Pai (Havasupai and Hualapai) have a palatal onglide, [y]. Paipai has both possibilities, although whether this is free variation or dialect admixture is unknown. I suggest, however, that dialect admixture played a role in the developments under discussion; namely, Havasupai and Hualapai treats a stem /ʔʔi·/ as:

(d) 1sg /ʔʔi·/
    2sg /ʔʔi·/
    3sg /ʔʔi·/

3.2213 Yet another development would have yielded a confusion: Supposing that the original stem /ʔʔi·/ were prefixed with /i-/, giving both:
Example 3.2212b

(b) (repeated)

1sg /ppi'·/ = [pi'·]
2sg /mi'·/ = [mi'·]
3sg /pi'·/

and:

Example 3.2213a

(a) 1st /pi'·/ = [pi'·]
2sg /mi'·/ = [mi'·]
3sg /hi'·/ (Central: NEY, SEY, WY; and Paipai)
3sg /yi'·/ (Northern: Ha, Hu; and Paipai)

It ought to be borne in mind throughout this discussion that verbs such as these are used more often as auxiliaries rather than main verbs; that is, their phonological integrity was eroded by rhythm, stress timing, sentence stress, and intonation.

3.2214 The foregoing speculation was meant to suggest several of the possible routes which might have lead to the confusion today. It is an interesting problem from both a synchronic and diachronic standpoint on the one hand and from a phonological and semantic standpoint on the other hand.
3.222 The Adverbial Auxiliary \( /\text{maːt-}/ \) 'apparently':

Example 3.222

\[ /\text{θo}\text{ñ}\text{c} \ y\text{ū} \ h \ \text{maːt-km}/ \]

'it appears he will be the one'

\[ #\text{n}-\text{θo}\text{ñ}\text{c} \ y\text{ū}-h \ \text{maːt-km}/ \]

DEM-DEM-SUBJ be-IR ADV-IC

3.223 The Negative Adverbial Auxiliary \( /\text{ʔum-}/ \): As a main verb \( /\text{ʔum-}/ \) means 'be not.' It is as a third-person singular verb with infinitival suffixation, i.e. \( /\text{ʔum}/ \), the equivalent of English no. It is also a stem which requires a-augment before the first and second person prefixes.

Examples 3.223a,b

(a) \( /\text{ʔaʔumčahk} \ \text{nú} \cdot \text{ma}/ \)

'we cannot do it'

\[ #\text{ʔaʔum-č-h-k} \ \text{nú} \cdot \text{ma}/ \]

1-AUG-NEG-PL-IR-SS 1-INC-ASSR

(b) \( /\text{ʔná hašsú} \cdot \text{på:βč} \ y\text{ū} \ h \ \text{ʔaʔum}/ \)

'I am not a Havasupai'

\[ #\text{ʔná hašsú} \cdot \text{på:β-č} \ y\text{ū}-h \ \text{ʔaʔum}-i/ \]

lp Havasupai-DEM-SUBJ be-IR 1-AUG-NEG-INF

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3.224 Additional Adverbial Auxiliaries: Hardy (1979) lists two auxiliaries in Tolkapaya which have not been discovered in NEY, at least as auxiliaries: (hu)puk and chat, meaning 'first' and 'almost.' NEY uses the simplex verbal stem /-i·ʔō/ for 'first,' although the noun stem /pūk/ does mean 'bottom, foot of; foundation. In SEY /yū·ʔčāti/ is 'almost,' however, NEY has /rī·pā/.

3.30 Pluralization

3.301 Number: Yavapai generally operates with only two numbers: singular and plural. Some verbs, through suppletion, show a distinction between singular, dual, and plural subjects; or between singular and plural objects:

Examples 3.301a-e

(a) 'go away, leave'

/yā·m-/ singular subject stem
/-pē·m-/ dual subject stem
/yā·mē-/ plural subject stem

(b) 'kill'

/nēh-/ singular object stem
/kmwa:č-/ plural object stem

Pronouns can be inflected for singular, paucal plural, and multiple plural:
3.302 Verbal and Nominal Pluralization: While a number distinction, usually just singular and plural, is an integral component of the verb stem, the noun stem, including demonstratives, is different with respect to plural. 1) A great number of nouns show no formal distinction between singular and plural. 2) Other nouns have distinctions between singular and plural in the same variety of ways that verbs have (see below). (There is, however, the suggestion that these are deverbalized nouns (Langdon 1977).) 3) Many nouns and demonstratives which have a formal distinction between singular and plural often are
not inflected for plural, allowing the verb in the sentence to take this function.

3.303 Variety of Plural Formation: Section 3.40

Affixation lists the affixes and processes by which a stem is inflected for singular and plural distinctions. Table 7 is a summary of plural formations. Their exemplification is found in 3.40.

<table>
<thead>
<tr>
<th>TABLE 7</th>
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</table>

**Pluralization**

1. Ablaut  
   a. /ě(:)/ ~ /á(:)y/  
   b. /ö(:)/ ~ /á(:)w/  
   c. /ň(:)/ ~ /ú(:)y/

2. Prefixation and Suffixation  
   a. /t-/  
   b. /č-/, /-č/  
   c. /n-/

3. Length Shift (affecting vowel only)

4. Reduplication (discussed more fully in 3.80)

5. Suppletion (indicated in the dictionaries)
3.40 Nominal Stems

There are two kinds of nominal stems in Yavapai: noun stems and demonstrative stems. Demonstrative stems are in turn divided into pronouns and determiners. The demonstrative system requires prefixes and affixes, used as deictics, which further define the stems.

3.401 Dictionary Entries: Noun or verb stems and demonstrative stems are rarely listed in the dictionary as stems. The dictionary entry is usually a citation form, for nouns and demonstratives the absolutive form. Derived nouns are also entered in the absolutive; that is, if the derived noun stem ends in a vowel (Type A Stem), it is entered as is; if the derived noun stem ends in a consonant (Type B Stem), the absolutive ending /-a/ is added, in so far as this is possible.

3.402 Nominal Inflection: Nouns and demonstratives are inflected for case, degree of definiteness, number, and possession. Examples of nominal inflection are found in the following section, Affixation.

3.50 Affixation

3.501 Introduction: Prefixes and suffixes are presented in an articulatory order summarized below. The presentation lists, exemplifies, and occasionally discusses each affix without regard for its position with
respect to the stem or for its classification as either an inflectional or a derivational affix. Information of this kind is included in the description of each affix.

3.502 Processes Besides Affixation: Inflectional and derivational processes in addition to prefixation or suffixation -- ablaut, length shift, pitch shift, reduplication, suppletion -- are either discussed together with the specific affixes involved or are discussed in 3.80.

3.503 Order of Presentation of the Affixes: Most Yavapai affixes are monosegmental and these will be listed first, followed by the multisegmental morphemes. Both sets, monosegmental and multisegmental, will follow the order below. The list is for orientation only and says nothing about frequency of occurrence, homophony, or restrictions.

1. (/p/)  6. /β/  10. /m/  15. /y/  17. /i/
2. /t/  7. /θ/  11. /n/  16. /w/  18. /e/
3. /s/  8. /s/  12. /p/  19. /a/
4. /k/  9. /h/  13. /l/  20. /o/
5. /w/  14. /r/  21. /u/

3.510 /p-/ 'synaesthetic alternate of /-β/': (See 3.565).
3.521 /t-/ 'plural' (not productive)

Example 3.521

/nčá-/ 'first cousin'
/tnčá·ča/ (plural)

3.522 /t-/ 'iterative':

Example 3.522

/čqnöni/ 'fold once'
/čtqnö·ni/ 'fold repeatedly'

3.523 /t-/ 'causative':

Examples 3.523a,b

(a) /púli/ 'be wet'
/tpúli/ 'wetten'
(b) /ú:βči/ 'they are seen'
/tú:βči/ 'they show'

3.524 /-t/ 'temporal coordinator':

(See Example 3.524 next page)
Example 3.524

/ʔūːtm yāːmkm/
'while one was looking, the other went away'
#ʔūː-t-m yāːm-km#
see-TMP-DS go=away-IC
DS = different subject follows
IC = imperfective contracted auxiliary phrase

3.531 /-č-/ 'plural (on noun)';

Examples 3.531a,b

(a) /hume/ 'son (man speaking)'
/hučma·ya/ (plural)
(b) /qmwirma/ 'old woman'
/qčmwi·rma/ (plural)

3.532 /-č-/ 'iterative';

Example 3.532

/čyuṭi/ 'rub'
/ččyuṭi/ 'rub repeatedly'

3.533 /-č-/ 'causative';

Examples 3.533a,b

(a) /náli/ 'fall'
/čná·li/ 'drop'
(b) /yá·mi/ 'go away'
    /çyá·mi/ 'send away'

3.534 /-č/ 'plural (on verb)'

Examples 3.534a,b

(a) /pá:/ 'person; Indian'
    /pá:ča/ (plural)
(b) /swá·ri/ 'one sings'
    /swá:roči/ 'they sing'

3.533 /-č/ 'iterative':

Example 3.535

/pá·mi/ 'pass'
/wà·amči/ 'visit frequently'

3.536 /-č/ 'subject case':

Example 3.536

/čkmtü·βč qč'o1km/
'the watermelon is round'
#č=kmtü·β-č qč'o1-km#
watermelon-DEM-SUBJ round-IC
DEM = demonstrative

3.541 /k-/ 'relativizer; agentive':

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Examples 3.541a,b

(a) /myála/ 'bread'
/kmyá·la/ 'baker'
(b) /yà...på·β-/ 'be responsible'
/yà·kpå·βa/ 'the one responsible'

3.542 /-k/ 'same subject':

Examples 3.542a,b

(a) /ʔūːtk kwá·wkm/
'while he looked, he spoke'
#ʔūː-t-k kwá·w-km#
see-TMP-SS talk-IC

Compare:

(b) /ʔūːtm kwá·wkm/
'while he looked, he (someone else) spoke'
#ʔūː-t-m kwá·w-km#
see-TMP-DS talk-IC

TC = temporal coordinator
SS = same subject
DS = different subject
IC = imperfective contracted auxiliary phrase

3.543 /-k/ 'locative case':

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Example 3.543

/wi·kβtē·pukahk/
[at the foot of Granite Mountain]

3.544 /-k/ 'directional':

Examples 3.544a,b

(a) /tålki/ 'throw (toward speaker)'
/baŋtálki/ 'throw it this way!'

Compare:

(b) /tāhmi/ 'throw (away from speaker)'

3.551 /-ʔ-/ 'noun marker' (found on monosyllabic nominal stems, lost in compounding):

Examples 3.551a,b

(a) /ʔi·/ 'wood'
/ʔi·shyārβa/ 'table'

(b) /ʔwâ/ 'dwelling'
/wâmpûŋβa/ 'wickiup'

3.552 /-ʔ-/ 'first-person (on verb or noun)':
Examples 3.552a, b

(a) Stem: /βyám-/ 'run'
    /'^βyámkm/ 'I am running'

(b) Stem: /yá/ 'mouth'
    /'^yá/ 'my mouth'

3.553 /-ʔ/ 'disjunctive (on demonstratives)'

Examples 3.553a,b

(a) /'^nâʔ/ 'me!

(b) /βyâʔ/ 'this one'

3.554 /-ʔ/ 'interrogative/vocative'

Examples 3.554a,b

(a) /βkaʔ mʔuʔ:/
    'who(m) do you see?'
#β-kaʔ m-ʔuʔ:-ʔ#
#DEM-WH-DSJ 2-see-QA#
DEM = demonstrative
WH = wh-word
DSJ = disjunctive
2 = second person
QA = Type A Stem interrogative

(b) Stem: /kól-/ 'mother's mother'
    /kólâ/ (absolutive)
    /kólàʔ/ (vocative)
3.561 /β-/ 'inchoative/punctual':

Examples 3.561a,b

(a) /mátč βʔːɁ:βʔl/
'twilight = the ground becomes visible'
#mát-č βʔːɁ:-βʔl#
ground-SUBJ PCT-see-MP-'say'
MP = (medio)passive

(b) /βhiˑpåˑʔim/
'it begins to get dark'
#β-hiˑpåˑʔi-m#
PCT-night-'say'-IMP

3.562 /β-/ 'demonstrative':

Example 3.562

/βkáč yùˑ/
'who is it?'
#β-ká-č yù#
DEM-WH-SUBJ be

3.563 /-β/ 'demonstrative':
Example 3.563

/wiːŋɛ nḷàp-km/
'a rock hit me'
#wiː-ŋɛ n-ḷàp-km#
rock-DEM-SUBJ 2o-hit-IC
2o = second-person object with third-person subject

3.564 /-p/ 'stative; attributive'

Example 3.564

/kwâːpi/
'horned'
#kwâː-p-i#
horn-ST-ABS
ABS = absolutive

3.565 /-p/ '(medio)passive':

Example 3.565

'/ʔpâːŋɛ ᵁcrâŋ spôŋk̪m/
'it is apparent that the man is sick'
#ʔ-pâː-p-ŋɛ ᵁcrâŋ-k spô-ŋ-IC#
NM-man-DEM-SUBJ COM=hurt-SS know-MP-IC
COM = dummy complement
NM = noun marker
3.571 /-θ/ 'temporal coordinator':

Examples 3.571a,b

(a) /ʔʊːθm nθá1 βqɪːnč wəm yɒ·k/
'seeing that the woman was in there, he took her'
#ʔʊː-θ-m n-θá-1 βqɪː-n-č wə-m yɒ·-k#
see-TMP-DS DEM-DEM-LOC woman-DEM-SUBJ sit-DS
take-SS

(b) /nβlwiːθah ?nú·km/
'I will have finished'
#n-βlwiː-θ-h ?-nú·-km#
PRF-finish-TMP-IR INC-IC
PRF = perfectivizer
IR = irrealis
IC = imperfective constructed auxiliary phrase

3.572 /-θ/ 'demonstrative':

Examples 3.572a,b

(a) /kwɛ·θ kάβ mwɨ·/
'what are you doing'
#kwɛ·-θ kά-β m-wɨ·#
thing-DEM WH-DEM 2-do
(b) /mâč mʔsitək/  
'you are the only one'
#mâ:-č mʔsit-ə-k#  
2P-SUBJ 2-one-DEM-SS  
2P = second-person pronoun

3.580 /s-/ 'causative: move together or apart laterally':

Examples 3.580a-c

(a) Stem: /ʔam-/ 'move, pass'
/tʔami/ 'cover, patch'
/sʔami/ 'close (a door)'

(b) Stem: /hkə'/ 'other, opposite, different'
/shkə'βa/ 'bridge'

(c) Stem: /qaw-/ 'break' v.i.
/sqäwa/ 'egg'

3.591 /-h/ 'demonstrative':

Examples 3.591a,b

(a) /hlâh twâyi wâkm/  
'the moon is far away'
#hlâ-h twây-e wâ-km#  
moon-DEM far-TSLOC sit-IC
(b) /ʔsāːhč nēhk /
'the eagle killed (her)'
#ʔ-sāː-h-č nēh-k #
NM-eagle-DEM-SUBJ kill-PC
PC = perfective constructed auxiliary phrase

3.592 /-h/ 'irrealis':

Examples 3.592a,b

(a) /ʔnāčʔ knā·βāhk ʔnū·k ʔyūm/
'I am the one who is going to tell'
#ʔ-nā-čʔ knā·β-h-k ʔ-nū·k ʔ-yū-m#
1P-SUBJ 1-tell-IR-SS 1-INC-SS 1-be-IMP

(b) /kwē·mθō·hāʔ/
'do you want something to eat?'
#kwē·-mθō·-h-a-ʔ#
thing-2-eat-IR-INC-QB
INC = increment
QB = Type B Stem interrogative
3.5101 /m-/ 'second person':

Examples 3.5101a-c

(a) /ʔənáʔ mhwákk ?apē·ma(h)ʔ ndʔʔ/ 'are you going with me?'
#ʔənáʔ m-hwák-kʔ-a-pē·m-hʔ-ndʔʔ#
1P-DISJ 2-two-SS 1-AUG-go=dual-IR 1-INC-QA

(b) /ʔədáč mʔē·kŋ/ 'he gave me'
#ʔə-dá-č m-ʔē·-kŋ#
DEM-DEM-SUBJ 2-give-PC

(c) /mi·tâtn râbèʔ/ 'does your backbone hurt?'
#m-i·tât-ŋ râb-èʔ#
2-backbone-DEM hurt-QB

3.5102 /m-/ 'cylindrical':

Examples 3.5102a-e

(a) /mpára/ 'leg'
(b) /mlqǐ/ 'neck'
(c) /myār/ 'penis'
(d) /mltāt/ 'barrel cactus'
(e) /(?b)mhlū/ ~ /ʔmlhū/ 'pipe'

3.5103 /-m/ 'temporal locative':
Example 3.5103

/myũla kwāl.skwi skwi māiĉi/
'Christmas=candycane-eating time'
#myũl-a kwāl-skwi skwi mā-i-ĉ-i#
sugar-ABS red-spirals eat-PL-PL-ABS

3.5104 /-m/ 'instrumental':

Example 3.5104

/?nā:βm pil-i/
'one is burnt by the sun'
#?-nā:-β-m pil-i#
NM-sun-DEM-INS burn-ABS

3.5105 /-m/ 'comitative':

Example 3.5105

/pā·hmī:βm ?hwāki/
'we are two men'
#pā·hmī:-β-m ?-hwāk-i#
man-DEM-COMIT l-two-ABS

3.5106 /-m/ 'imperfective aspect':

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Example 3.5106

"?náʔ yąʔpēʔč yúm/
'I am a Yavapai'
#?-náʔ yąʔpēʔ-č yú-m#
1P-DISJ Yavapai-DEM-SUBJ 1-be-IMP

3.5107 /-m/ 'directional':

Examples 3.5107a,b

(a) /ʔsmédia/
'I stay overnight (literally: I sleep away)'
#ʔ-smédia-m-i#
l-sleep-DIR-ABS

(b) /čywümə/
'drive away'
#č-ćywümə-m-i#
CAUS-come-DIR-ABS

3.5108 /-m/ '(medio)passive/stative' (suspected identity with /-β/):

Examples 3.5108a,b

(a) /yùràςâmma /
'button' (compound noun)
#yùràςâmma-č-ʔ-β-ʔ#
enter-ART+CAUS-move-MP-ART
ART = artifact

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(b)  /wà·si:pëmma/
'drunkard ("crazied")' (compound noun):
#wà·sI·pëm·a#
mind+go=dual-ST-ABS

3.5109 /-m/ 'different subject':
Examples 3.5109a,b

(a)  /ʔkwâ·wm hñú·km/
'I'm speaking, and he's offended'
#ʔ-kwâ·w·m hñú·km#
l-speak-DS offended-IC

(b)  /lâ·wm ʔ-ʔú:km/
'I see many (literally: there are many I see)'
#lâ·w·m ʔ-ʔú:-km#
many-DS l-see-IC

3.5110 /n-/ 'diminutive' (see Sound Symbolism 3.80)

3.5111 /n-/ 'plural subject' (limited to this example):
Example 3.5111

/ðâ·/ 'arrive (sg. subj.)'
/nðâ·/ 'arrive' (pl. subj.)'

3.5112 /n-/ 'ascending generation in kinship system':
Examples 3.5112a,b

(a) /pí/ 'nephew or niece (child of father's older sister)'
  /npí/ 'aunt (father's older sister)'

(b) /ʔkʰó/ 'daughter's child'
  /nkó/ 'great-grandmother; great-aunt'

3.5113 /-n/ 'demonstrative' (suspected identity with /-ʔ/):

Examples 3.5113a,b

(a) /ʔhā·n qnū·km/ 'the water is muddy'
  #ʔ-hā-·n qnū-·km#
  NM-water-DEM muddy-IC

(b) /ʔɔnč qwāti/ 'the fire is burning'
  #ʔ-ɔn-č qwāt-i#
  NM-fire-DEM-SUBJ burn-ABS

3.5121 /n-/ 'possessive':

Examples 3.5121a,b

(a) /nāʔmāta/ 'my land'
  #nāʔ+māt-a# (compound)
  1P-DISJ POS-land-ABS

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(b) /yənhāya/
'saliva (literally: mouth-its-liquid)'
#yā-n-hā-y-a#
mouth-POS-water-DER-ABS
DER = derivational suffix (See /-y/)

3.5122 /n-/ 'temporal subordinator'

Example 3.5122

/nyē·kkkθd-/  
'tomorrow (literally: when it dawns)'
#n-yē·k-k-k-θ-d-#  
TSUB-dawn-SS-REL-CON-TEMP  
CON = contrastive modal

3.5123 /n-/ 'third-person subject with first-person object':

Example 3.5123

/wiːβč nɑpkm/  
'a rock hit me'
#wiː-β-č n-ɑp-km#  
rock-DEM-SUBJ 3/1-hit-IC

3.5124 /n-/ 'first-person subject with second-person object':

Example 3.5124

/wiːβč nɑpkm/  
'a rock hit me'
#wiː-β-č n-ɑp-km#  
rock-DEM-SUBJ 3/1-hit-IC
Example 3.5124

/ŋ?ulik ?wârm ?hánkm/
'I am glad to see you again'
#ŋ-?ú:-y-k ?-wâr-m ?hán-km#
1/2-see-again-SS 1-ADD-IMP good-IC

3.5125 /-n/ 'demonstrative':

Examples 3.5125a,b

(a) /môtãn kâβ ?i?/
'what did your father say?'
#m-čtã-n kâβ ?i-?
2-father-DEM WH-DEM say-QA

(b) /mlqîn. mâthây. yâ·m?ô·/
'trachea (literally: where the air goes away into the neck)'
#mlqí-ŋ+ mâthây+yâ·m?-ô·#
neck-DEM+wind+go away-NOM
NOM = nominalizer

3.5126 /-n/ 'perfective':

Examples 3.5126a,b

(a) /?čkê·k ?wîn/
'I'm the one who pushed it'
#?-čkê·-k ?-wî-ŋ#
1-push-SS 1-do-PERF
(b) /¿čk̡̂-kŋ/ 
'I pushed'
#/¿-čk̡̂-kŋ#
1-push-PC
PC = perfective contracted auxiliary phrase

3.5127 /-ŋ/ 'too':

Examples 3.5127a,b

(a) /ŋnúč swā·rŋ k wārèʔ/
'is he singing, too'
#/ŋ-nú-č swā·r-ŋ-k wār-èʔ#
DEM-DEM-SUBJ sing-too-SS ADD-QB

(b) /¿yā·mŋlk wāra(h) ? nú·km/
'I'm going, too'
#/¿-yā·m-ŋ-l-k wār-h ?-nú·-km#
1-go away-too-REC-SS ADD-IR 1-INC-IC

3.5131 /-l/ 'inner locative':

Examples 3.5131a,b

(a) /¿sāll ?i·kðkm/
'I carry it in my hand'
#/¿-sāl-l ?-i·kð-km#
1-hand-LOC 1-carry-IC

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(b) /ˈwɑːβl/ ˈwɑ/
'I am (sitting) in the house'
#ˈwɑː-β-l ˈwɑ# 
NM-house-DEM-LOC 1-sit

3.5140 /-r/ 'plural' (limited to examples given):

Examples 3.5140a,b

(a) /hiˈtɑn/ 'daughter; girl'
    /hiˈtɑ:raʊo/
    'for the girls'
    #hiˈtɑ-r-a-ŋ-o#
    girl-PL-AUG(?)-DEM-APP

(b) /hmē/ 'boy (sg.)'
    /hmɑ:ra/ (plural)
also: /homēˈcao/

3.5150 /y/ is an affix only in so far as it alternates morphophonemically with /i/ See 3.518.

3.5160 /w/ appears to be an intrusive glide between /i/ and /o/, although it seems to have become grammaticized. See 3.5203 and 3.5204. See also Hardy (1979:27ff).

3.5171 /i(·)-/ 'derivational prefix' (meaning uncertain): This is a common prefix occurring on both verbs and nouns. It usually occurs on transitive verbs and has a meaning that is
causative. It also occurs on many body parts. The examples below are selected to illustrate these remarks. There are, however, many forms more difficult to explain. Some of them will be listed as well:

Examples 3.517a-i

(a) /i·hā·ni/ 'repair; tame'
    /ʔhāni/ 'good, perfect'
(b) /i·kó/ 'carry in the hand'
    /kβkó/ 'block; cup (the ears)'
(c) /i·pári/ 'learn'
    /pári/ 'sharp; intelligent'
(d) /i·puk/ 'neck'
    /puk/ 'bottom; foot (of a mountain)'
(e) /i·tát/ 'back; spine'
    /tát/ 'thorn'
(f) /yú(·)/ 'eye'
    /ʔu:/ 'see'
(g) /i·pō/ 'be first; be in front'
/pō/ 'walk'
(h) /i·waŋa/ 'heart'
/wa/ 'sit; dwell'
(i) /i·má/ 'dance'
/má/ (?) 'be ripe, be ready'

3.5172 /-i/ 'denominalizer' (see 4.50 for analysis):

Examples 3.5172a-c

(a) /ɲhāyi/ 'be like liquid'
#ɲ-hā-i-i#
DEM-water-DEN-ABS
(b) /ʔkwi·yi/ 'cloudy'
#ʔ-kwi-i-i#
NM-cloud-DEN-ABS
(c) /(_:ruyi/ 'hot'
/rūβi/ 'dry'

This presupposes an unattested *rū undergoing two derivational processes:

(c') /(_:ruyi/  
#(_:rū-i-i#  
(_:dry/hot-DEN-ABS
(c") /rūβi/
#rū-β-i#
 dry-hot-ST-ABS
3.5173 /-l/ 'recursive':

Examples 3.5173a,b

(a) /mîyl/  
'say it again!'  
#m-í-l#  
2-say-REC

(b) /ðəç yā·miyè#/  
'Is he gone, too?'  
#n-θa-č yā·m-í-è#  
DEM-DEM-SUBJ go away-REC-QB

3.5174 /-i/ 'absolutive'

Examples 3.5174a,b

(a) /'pash 'sp5h 'a'umi/  
'I do not know the man'  
#?-pá:-h ?-spō-h ?a?-?ūm-i#  
NM-person-DEM 1-know-IR 1-AUG-NEG-ABS

(b) /mŋãokči/  
'shut up (pl.)!'  
#m-ŋãok-č-i#  
2-shut up-PL-ABS

3.5175 /-i/ 'artifact' (often [-e] after [...y-]):
Examples 3.5175a,b

(a) /ʔkʰwá.yúyi/
'eyeglasses'
#ʔ-kʰwá+yú-i-i#
NM-glass/metal-eye-PL-ART

(b) /ʔkwé'.trúyí/
#ʔ-kwé'+t-rú-i-β-i#
NM-thing+CAUS-dry/hot-DEN-ST-ART

3.5176 /-i/ 'plural':

Examples 3.5176a-c

(a) /ʔyā's ʔ6·iči kwā·hm/
'Thanksgiving (literally: turkey eating time)'
#:ʔ-yā's ʔ6·-i-č-i k-wā··h-m#
NM-turkey eat-PL-PL-ABS REL-sit-DEM-TLOC

(b) /ʔkʰòi.khö·rβa/
'piñon hills (Pln.: Prescott Heights)'
#:ʔ-kʰö-i+k-hö·r-β-a#
NM-piñon-PL-REL-hills-ST-ABS

(c) /pà·pī tū·iči/
'they cremate (the) corpse'
#pà·-pī tū·-i-č-i#
HA-die burn-PL-PL-ABS
3.5181 /-e?/ 'interrogative' (on Type B Stems):

Examples 3.5181a,b

(a) /ʔyā·mčè?/
'are we going?'
#ʔ-yā·m-č-è?#
1-go away-PL-QB

(b) /kàkyūč̪a mhnā:qè?/
'which one did you want?'
#ká-k-yū-č̪-a m-hnā:q-è?#
WH-REL-be-NOM-DEM-ABS 2-want-QB

3.5182 /-è?/ 'vocative' (on Type B Stems):

Examples 3.5182a,b

(a) /ʔawè?, cf. /ʔawa/ 'grandson' (ABS)
'grandson (man speaking)!
#ʔaw-è?#
grandson-VOC

(b) /k̕msâβè?/
'Kemo Sabe!' (literally: 'white things,' not
'thirty man')
#k-̕msâβ-è?#
REL-white-VOC

3.5183 /-è/ 'spatiotemporal locative' (occurs often
preceded by /ʔ-?/ or /h-/:)

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Examples 3.5183a-e

(a) /mí:βkʔè/  
'after'  
#mí:βk-ʔè#  
after-STLOC

(b) /púka(h)lè/  
'at the bottom'  
#púk-h-lè#  
bottom-DEM-ILOC-STLOC

(c) /qʔqw^r-hè/  
'outside'  
#qʔqw^r-hè#  
REL-wilderness-STLOC

(d) /måt.khõrβa çá·hè/  
'the top of the hill'  
#måt+k-hõr-β-a çá·-hè#  
land+REL-hill-ST-ABS top-STLOC

(e) /βʔõmè/  
'end, edge'  
/βʔõmi/  
'last'

3.5190 /-a/ appears mostly in combination with other suffixes and is considered an increment, lending the suffix to which it is attached more assertive illocutionary force. Related to
this kind of assertion is the a-augment on some verbs, it is assumed.

/-a/ also occurs in a number of forms where it is either quite clearly in some cases, and at least arguably in other cases, an allo-morph of either the 'irrealis' /-h/ or the 'demonstrative' /-h/, the latter itself being in a synaesthetic or at least stylistic alter-nation with /θ/.

The occurrences of /-a/ as an increment are treated in 3.60; occurrences as an augment have been exemplified in passing; and occurrences as a morphophonemic variant of /h/ are treated under /h/, 3.59.

/-a/ is the absolutive suffix found on nouns of Type B Stems. It has been exempli-fied throughout this work. /-a/ as an absol­utive may also be derived from an underlying or earlier demonstrative /h/ or /θ/.

3.520 /o/ is found to vary freely with /u/ when it occurs with primary stress in the environment before a liquid and sometimes even before a nasal. Conditions of sentence stress also lower unstressed /u/ to /o/ (which happens also with /i/, lowering it to /e/). See Chapter
Two). For alternations between /o/ and /aw/, /i/ and /uy/, and /e/ and /aw/ see 3.72 Ablaut.

3.5201 /o-/ 'inchoative': See /u-/.

3.5202 /o-/ 'demonstrative': See /-u/.

3.5203 /-ð/ 'applicative':

Examples 3.5203a-d

(a) /ɔ̃smałkβa ɔ̃rúyðòkm/
'I pierce(d) my ear'
#/ɔ̃-smałk-β-a ɔ̃-rúy-ð-òkm#
1-ear-DEM-ABS 1-pierce-APP-IC

(b) /kwâ.w ɔ̃ìwòk/
'I am teaching him to speak'
#/kwâ.w ɔ̃-ì-(w)ð-k#
speak 1-say-(?)APP-SS

(c) /ɔ̃hát nhnóyò/
'shoe a horse'
#/ɔ̃-hát nhnò-i-ð#
NM-horse shoe-DEN-APP

(d) /ɔ̃khwâmìwò/
'rock music' (literally: makes instrument cry)
#/ɔ̃khwà+mı-(w)ð#
NM-instrument cry-(?)APP

(Epenthetic w's, glossed as "(?)," are discussed in 4.50)
3.5204 /-o/ 'perfect/evidential':

Examples 3.5204a-c

(a) /tī·b k yûokm/
'she's pregnant for sure'
#tī·β-k yū-o-km#
pregnant-SS be-P/E-IC

(b) /nmi·βč ṛwē:h nēhk wiwokm/
'the cat did kill the mouse'
#nmi·-β-č. ṛ-wēː-h nēh-k wī-(w)o-km#
cat-DEM-SUBJ NM-mouse-DEM kill-SS do-(?)P/E-IC

(c) /?čolī: qyātok wiwokm/
'he drank too much (but he did not realize it)'
#?č-olī: qyāt-o-k wī-(w)o-km#
COM-drink much-RES-SS do-(?)P/E-IC

3.5205 /-o/ 'resultative'

Examples 3.5205a,b

(a) /yâb·pē·βč ṛhāno qyātk kʔū· pūβkm/
'the Yavapai weaves very beautiful baskets'
#yâb·pē·-β-č ṛhān-o qyāt-k kʔū· pūβ-km#
Yavapai-DEM-SUBJ beautiful-RES much-SS basket
weave-IC
(b) /nâ:bm ŋmâ: qyâto/
'I ate too much today'
#nâ:-m ŋmâ: qyât-o#
sun-DEM-TLOC COM-l-eat much-RES
/ŋm-ô/ and /ŋmâ:/ are complex verbs.

3.5206 /-ô:/ 'locational nominalizer':

Examples 3.5206a,b

(a) /nâ·rômô/
'west'
#nâ+rômô#
sun+come=down-LNOM
(b) /myâ·tyômô/
'horizon' (literally: where the sky is made to come to)
#myâ·+t-ômô#
sky+CAUS-come-ST-LNOM

3.5207 /-ô(ŋ)/, /-ô:/ 'vocative (unseen addressee)':

Examples 3.5207a,b

(a) /kôlô/
'grandmother!' (literally: mother's mother)
/kôla/
(absolutive)
(b) /mχ̣ṃḳː/:/

'hello'

#m-há-m-k-ö:#

2-look-DIR-SS-VOC

/mḥṃka/ is the usual form.

3.5211 /u-/ 'derivational prefix' (meaning uncertain):

Examples 3.5211a-c

(a) /uʔáːl-/ 'take out, remove'

/ʔáːl-/ 'rise, come out'

/ʔáːl/ 'swell, be swollen'

(b) /unúː/ 'incompletive' locational auxiliary (not well exemplified in 3.213 and contrasting with

/núː/:

(c) /uné/ 'father-in-law'

/náʔné/ 'my daughter-in-law'

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3.5212 /-u/ 'demonstrative':

Examples 3.5313a,b

(a) /hmánu /h&0pu·yöh ?nú·km/
'I am going to wash the baby'
#hmánu -h-0pu·yö-h ?-nú·-km#
baby-DEM NM-water-l-wash-APP-IR l-INC-IC
/'hà...0pu·yi/ is a complex verb.

(b) /(?)kwê·nu/~//(?)kwê·no/
'some thing, the thing'
#(?-)kwê·-n-u#
(NM)-thing-DEM-DEM

3.60 Multisegmental Prefixes and Suffixes

3.601 Introduction: The prefixes and suffixes presented, exemplified and discussed in the foregoing section are monosegmental. Those which follow consist of at least two segments, most of which may be broken down and be shown to consist of two morphemes. In some cases the segmentation into constituents may be an obvious one (at least to a Yumanist). Sometimes more than one analysis is possible.

3.602 Order of the Multisegmental Affixes: This list, like the list in 3.503 Order of the (Monosegmental) Affixes, is for orientation only. It differs, however, in that each affix listed functions monomorphemically, which is hardly
the case with monosegmental affixes, most of which are homophones.

1. /-pè'/ 'interrogative conjunction'
2. /pa(•)-/ 'plural object' (on transitive verbs)
3. /-tè'/ 'exhortative'
4. /-čè/- 'multiple plural'
5. /-ka/ 'emphatic' (?) 'increment' (?)
6. /-kθ̂d'/: 'conditional'
7. /-km/ 'contracted imperfective auxiliary phrase'
8. /-kΠ/ 'contracted perfective auxiliary phrase'
9. /?...m-/ 'second-person subject with first-
   person object' (on transitive verbs)
10. /-ha/ 'emphatic irrealis' (?) 'increment' (?)
11. /-mè'/ 'conjunction' (?) 'increment' (?)
12. /-ma/ 'assertive'
13. /-mό'/ 'dubitative'
14. /-ra(β)/ 'intensifier'
15. /-wèʔ/ 'past question'
3.611 /-pè·/ 'interrogative conjunction':

Examples 3.611a,b

(a) /?yā·mk ?yûβàpè·/
'and how would it be if I went?'
#?yā·m-k ?-yû-β-à-pè·#
1-go=away-SS ?-be-DEM-IR-QCON

(b) /nà?čči·βčpè·/
'and what about my mother (ellipticized: where
is she? or what did she do?)
#nà-?-čči·-β-č-pè·#
1-lP-mother-DEM-SUBJ-QCON

3.612 /pa(*)-/ 'plural object' (on transitive verbs):

Examples 3.612a,b

(a) /má·č pa·mswá:rčom ?ē·βč(a)h/
'you (pl.) sing for them; they'll hear it'
#má-?-č pa·-m-swá:r-č-o-m ?ē·β-č-h#
2P-SUBJ PLo-2-sing-PL-APP-DS hear-PL-IR

(b) /nθáč n?ē·km/
'he gives it to me'
/nθác pa·n?ē·km/
'he gives it to us'
3.613 /-tè·/ 'exhortative':

Examples 3.613a,b

(a) /mπÎ-tè·-ʔ/

'why don't you drop dead?'
#m-πÎ-tè-ʔ#
2-die-EXH-QB

(b) /mʔè·-næ-ʔtè·/

'give me some, too!'
#m-ʔè-ʔ-ar-æ-ʔtè·/
2-give-REP-AUG(?)-EXH

3.614 /-ç§-/ 'multiple plural'

3.615 /-ka/ 'incremented same-subject marker' (?):

Examples 3.615a,b

(a) /mï·wá·y1 mnhmè·rβ·ka/

'be kind in your heart!'
#m-ï·wá·y1 m-nhmè·rβ·ka#
2-heart-LOC 2-kind-SSa

(b) /mnhmè·rβ·k mspôβ·ka/

'be kind and mindful!'
#m-nhmè·rβ·k m-spô·β·ka#
2-kind-SS 2 mindful-SSa
3.616 /-kθb/ 'conditional' (discussed in 3.5122)

3.617 /-km/ 'imperfective contracted auxiliary phrase'

3.618 /-kn/ 'perfective contracted auxiliary phrase'

(Both /-km/ and /-kn/ are discussed in 3.5215.)

3.619 /'...m-/ 'second-person subject with first-person object' (on transitive verbs); discontinuous morpheme with plural object marker /pa•-/  

Examples 3.619a,b

(a) /máčβč ṡmʔē•čkŋ/  
'you (pl.) gave it to us'  
#má-čβ-č ṡm-ʔē•-č-kŋ#  
2P-MPL-SUBJ 2/1-give-PL-PC

(b) /máčβč ṡpa•mʔē•čkŋ/  
#má-čβ-č ṡ-pa•-m-ʔē•-č-kŋ#  
2P-MPL-SUBJ 2/PLo/1-give-PL-PC
3.6110 /-ha/ 'incremented irrealis marker' (?)
When either /-h/ or /-ha/ 'irrealis'
appears before a pause, the verb
expresses futurity:

Example 3.6110

/pšāha/
'I will sting you'
#p-sā-ha#
1/2-sting-IR

3.6111 /-mè•/ 'conjunction after clause-final /-m/' (?)
'incremented clause-final /-m/' (?)

Examples 3.6111a,b

(a) /pāč k?ū• -pūšk ?l-wīla ?kūlk mirmīra yūčmè•/
'we make baskets out of long, straight branches'
#pā-č k?ū• -pūš-k ?l-wīla ?kūl-k mirmīr-a
yū-č-mè•#
1P-SUBJ basket 1-weave branch long-SS straight-
ABS be-PL-mCON

(b) /maʔūmmè•/
'and don't (do that either)!'
#m-aʔūm-mè•#
2-AUG-NEG-mCON

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3.6112 /-ma/ 'assertive on clause-final /-m/':

Examples 3.6112a,b

(a) /'iː·ma/
'I declare'
#ʔ-ʔi·-ma#
1-say-ASSR

(b) /maʔūma(h) mnú·ma/
'you cannot'
#m-ʔū·m-h m-nú·-ma#
2-AUG-NEG-IR 2-INC-ASSR

3.6113 /-mó'/ 'dubitative':

Examples 3.6113a,b

(a) /myā·mč ʔhāna ḥi·mó/  
'I hope you have a good trip' (literally: that your going may be good)
#m-ʔyā·m-č ʔhān-a f·-mó#  
2-go=away-SUBJ good-ABS X-DUB

(b) /má·m ʔhwākk ʔapē·ma(h) yí·mó/
'maybe the two of us are going'
#má·-m ʔ-hwāk-k ʔ-a-pē·m-h yí·-mó#  
2P-ASSO 1-two-SS 1-AUG-go=dual-IR COG-DUB
(literally: 'I am two with you; we are going')
3.6114 /-ra(β)/ 'intensifier':

Example 3.6114

/qâ·ra/ ~ /qâ·râβa/
'disgusting!' (considered a strong oath)
#qâ·-ra# #qâ·-râ·β-a#
bad-INT bad-INT-ST-ABS

3.6115 /-wè?/ 'past question':

Examples 3.6115a,b

(a) /³hānok wîwè?/
'did he do it well?'
#³hān-o-k wî-wè?#
good-TEM-SS do-QP

(b) /kâβyú myûk mthò·towè?/
'why did you hide her from me?'
#kâ-β yú m-yû-k m-thò·t-o-wè?#
WH-DEM be 2-be-SS 2-hide-APP-QP

3.70 Quantitative and Qualitative Vowel Alternations

Shifts in vowel length and pitch and in vowel quality take place as both inflectional and derivational processes. Pitch shift is restricted to derivations. Length shifts, which affect only vowels, and ablaut are used to distinguish number in verbs and nouns. See 3.302: Verbal and Nominal Pluralization.
3.71 Pitch Shift

Pitch accent in Yavapai is the least understood area of the morphophonemics. The reasons have been outlined in Chapter Two. These may be reviewed and summarized at this point. There are so few speakers of any dialect of Yavapai left that it is impossible to record pitch from one speaker to another with any consistency. Speakers themselves show considerable variation. The linguist is prone to error in recording the pitch, both because of inherent difficulties and because the speaker has difficulty producing elicitation forms, i.e. producing utterances without imagining them in some sentential context. Since Yavapai is a stress-timed language, rhythm and sentence stress make it difficult to elicit a form out of context. When one then takes the effects of intonation into account, one can understand why such an incoherent picture of pitch emerges. Nevertheless, there are some rather clear-cut examples of how pitch operates within the derivational morphology and interacts with length as well.

3.711 Suprasegmental Adjustments in Derivation: The root yal has the gestural meaning 'circular motion on a plane.' The addition of the prefix /č-/ (interpreted here as 'causative,' although 'iterative' is also possible) combines with the synaesthetic choice of /l/, indicating the larger of a potential pair, to produce the simplex verbal stem /čyál-/. (Stress but not pitch may be assigned
to the root at this point.) The stem now means 'paint.'
To this can be added the suffix /-β/ 'stative,' giving
/ćyálβ-/ 'be painted.' The stems now derived surface as:

(a) /ćyālī/ 'paint (transitive verb)'
(b) /ćyâlβi/ 'be painted (stative verb)'

The 'absolutive' /-i/ must be added since both are Type B
Stems. The transcription also reflects the different
pitches on the forms: Pitch 1 on /ćyālī/, Pitch 2 on
/ćyâlβi/. The stative stem /ćyâlβ-/ can be further modified
with the addition of /-i/ 'artifactive,' (homophonous with
the 'infinitival' /-i/ in Prescott Yavapai, /-e/- in
Tolkapaya). The resulting form is /ćyâlβi/ 'face paint.'
Immediately apparent is the length shift from one mora to
two.

3.712 The preceding example, together with the example
using the root wa (3.103), presents an interesting account
of the interaction of length and pitch. Unfortunately,
this portion of the phonology does not display the con­
sistency I need in order to make definitive statements and
to propose rules. It is possible that more research could
be conducted along these lines, perhaps by native-speaker
linguists. It may be enough to say now that after I
have excluded all the interference posed by rhythm, timing,
sentence stress, and intonation, I am still convinced that
pitch is distinctive.
3.72 Ablaut

Alternations occur between /i/, /e/, and /o/ and /u(*)y/, /â(*)y/, and /â(*)w/ respectively. The alternation /e/ ~ /â(*)y/ is common. Less common are the alternations /i/ ~ /u(*)y/ and /o/ ~ /â(*)w/.

Examples 3.721a-d

(a) /pî/ 'die, be dead' (sg.)
    /pâ·yi/ (plural)
(b) /βgî/ 'woman' (sg.)
    /βgû·ya/ (plural)
(c) /θβlî/ 'make a (larger) hole'
    /θβlû·yi/ 'having (larger) holes'
(d) /θβrî/ 'make a (smaller) hole'
    /θβrû·yi/ 'having (smaller) holes'

Examples 3.722a-c

(a) /čó·βi/ 'fight' (sg.)
    /čá·wβi/ (plural)
(b) /nô·/ 'be heavy'
    /kβnâwi/ 'carry heavy objects in arm(s)'
(c) /kîβô/ 'rain'
    /kîβâwi/ 'be rainy'
Examples 3.723a-c

(a) /pê·/ 'bear fruit; be born (sg.)'
    /páyi/ (plural)
(b) /βté/ 'big, large (sg.)'
    /βtä·yi/ (plural)
(c) /qê·(·)/ 'sticky; dusty (sg.)'
    /qäyi/ (plural)

Section 3.741 exemplifies the interaction between ablaut and length shift.

3.73 Length Shift (See Hardy 1979b)

Vowel-length distinction can be reconstructed for Proto-Yuman. Yavapai has three distinctive vowel lengths, although whether this is at a systematic phonetic level (in older terms "classical phonemic") or at a higher level is more a matter of linguistic levels than of phonetic reality. In order to transcribe and utter Yavapai to a native speaker's satisfaction, one must use three distinctive vowel lengths. Length shift is found in both the derivational and inflectional morphology. Usually a short vowel becomes longer corresponding to increasing morphological complexity (i.e. singular to plural, derivational affixation). A long vowel (Length 2) tends to remain long, although it may be lengthened (Length 3) by derivational affixation or shortened (Length 1) by inflectional affixation. Unfortunately,
specific rules cannot be proposed, although a variety of patterns emerge.

3.74 **Examples of Pluralization**

Plural formation by means of prefixation, suffixation, and ablaut have already been discussed and exemplified. Plural formation by suppletion is noted in the dictionaries. The following examples are presented to illustrate the variety and complexity pluralizations offer. These examples do not exhaust the possibilities; they merely present a random sampling of plural formations not already specifically covered in the preceding sections.

3.741 Length Shift:

**Examples 3.741a-i**

(a) /wĩsa/ 'mother's older sister'
    /wĩ•sa/ (plural object)
(b) /kĩŋa/ 'great-grandchild'
    /kĩ•ŋa/ (plural object)
(c) /'siti/ 'one'
    /'sɪ•ti/ 'few'
(d) /kʷe̞ra/ 'mother's older brother'
    /kʷe̞•ra/ (plural object)
(e) /kêla/ 'younger sibling'
    /kê•la/ (plural object)
(f) /wâka/ 'older sibling'
    /wâ·ka/ (plural object)
(g) /ʔâwa/ 'mother's parents to Ego'
    /ʔâ·wa/ (plural object)
(h) /pà·táya/ 'old person'
    /pà·tá·ya/ (plural)
(i) /qwâw.khwâta/ 'Zuñi; Ute' (literally: redhead)
    /qwaw+k-hwâta# hair+REL-red-ABS
    /qwâw.khwâ·ta/ (plural)

3.742 Quantitative and Qualitative Alternations Combined with Affixation:

Examples 3.742a-1

(a) /tkâpi/ 'gather'
    /ttkä·pi/ (plural subject)
(b) /sklpû·yi/ 'hug'
    /tsklpû·yi/ 'hug each other'
(c) /tnâkbi/ 'meadow-like'
    /ttnä:nkbi/ (plural)
(d) /kčâqi 'drip'
    /kččâ·qi/ (plural subject)
(e) /čkyâti/ 'cut'
    /ččkyâ·ti/ (plural object)
(f) /čěū·li/ 'wash'
    /ččěū·li/ (plural object)
3.80 **Sound Symbolism**

3.801 **Introduction:** Langdon (1972:169) states that "[a]ny new information available for Proto-Yuman is of direct relevance for problems of Proto-Hokan reconstruction. It is therefore pertinent to ask whether there is evidence that symbolic consonantal ablaut can be reconstructed for Proto-Hokan." This section attempts to present data deemed to be "of direct relevance for problems of" Proto-Pai reconstruction, and, it is hoped, for those problems of Proto-Yuman and eventually for Proto-Hokan reconstruction as well. The matter at hand is to make "new information available" and to review

(g) /čyūti/ 'rub'

/hcγyū:ti/ (plural object)

(h) /mā:/ 'eat (soft things)'

/māči/ (plural subject)

(i) /swá′ri/ 'sing'

/swá′rči/ (plural subject)

(j) /tβhke′βi/ 'exchange, swap'

/tthkā′yβi/ (plural subject)

(k) /?ār yē′km/ 'I thank you'

/?ār yā′ykm/ 'we thank you'

(l) /?e′yǐ:/ 'I love' (from ?e′...yǐ:)

/?e′čyǐ′čβi/ 'we love each other'

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as well what is already known about sound symbolism in Yavapai.

3.802 Overt and Covert Sound Symbolism: Yavapai sound symbolism can be of two orders: overt and covert. The former reflects properties of external reality, mediating directly between form and meaning. The latter uses the aesthetic properties of sounds, an internal reality, of a particular language. Covert sound symbolism is a closed system and only partially, if at all, interpretable to someone not knowing the language. Overt sound symbolism, on the other hand, is readily interpretable to a non-speaker, even if the language uses sounds not found in the phonological inventory of that non-speaker. Overt sound symbolism is open-ended and could be extended to include phenomena normally considered non-verbal or vocal behavior. More narrowly, overt sound symbolism, as it relates to Yavapai, is onomatopoeia or sound echoism; covert sound symbolism in Yavapai is synaesthesia or phonaesthesia. A few examples from each category illustrate the dichotomy:

Examples 3.802a,b

(a) Overt Sound Symbolism:
1. /θirkθirka/ 'cricket'
2. /mʊːl/ 'moo v.'
3. /βʊːβʊːlɪk/ 'thunder v.'
(b) Covert Sound Symbolism:

1. /qAe′pi/ 'bad'
   /qAe′βi/ 'worse'
2. /nmsáβi/ 'white'
   /nmsáβi/ 'grey'
3. /kίči/ 'tiny'
   /qéči/ 'small'
4. /mkwáni/ 'pound'
   /mqwáni/ 'pulverize'
5. /húáli/ 'dig out'
   /húári/ 'scoop out'
6. /?ná/ 'ouch'
   /?rá/ 'ow'
   /?lá/ 'ugh'
7. /kvwáθi/ 'brown'
   /qvwáθi/ 'yellow'
   /qvw[gi]/ 'yellow' (W. Gazzam)
8. /kl?úlki/ 'ridges'
   /qr?úrqí/ 'furrows'
9. /kwáki/ 'opens'
   /qwáqi/ 'shatters'

3.803 Reduplication: Reduplication is by no means limited to overt sound symbolism. Reduplicands may come from either category. Occasionally it is difficult to decide whether one is dealing with overt or covert sound symbolism. (See Munro 1979a.)
Examples 3.803a-c

(a) Onomatopoeia:
  /hâ:hâ:/ 'whinny'

(b) Synaesthesia:
  /hù:q'uòq'ëa/ 'bird'

(c) Overlap:
  /sèhsèh/ 'sigh'
  /òëhòëh/ 'breathe'

3.804 Reduplicands: The following list of reduplicands is presented to give the reader an idea of the semantic range of reduplication. For the sake of simplicity the reduplicands are listed as either stems or roots. The glosses either capture the meaning quite well or can only approximate the meaning. A gloss preceded by ... indicates that the reduplicand appears in the word following ..., but it is not clear what meaning can be assigned to the reduplicand itself.

3.804 List of Reduplicands

1. /páq/ 'crack'
2. /póq/ 'slender'
3. tiL 'disk'
4. /táps/ 'rattle'
5. /táθ/ 'tick'
6. /tóc/ 'drop'
7. /tsí·/ 'squeal'
<table>
<thead>
<tr>
<th></th>
<th>Phoneme</th>
<th>Meaning</th>
</tr>
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<tbody>
<tr>
<td>8.</td>
<td>/čąq/</td>
<td>'drip'</td>
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<tr>
<td>9.</td>
<td>/čąl/</td>
<td>'...boulder'</td>
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<td>10.</td>
<td>/ččér/</td>
<td>'pierce'</td>
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<td>11.</td>
<td>/člá̯/</td>
<td>'lightning'</td>
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<td>12.</td>
<td>/kíč/</td>
<td>'little'</td>
</tr>
<tr>
<td>13.</td>
<td>/kčh/</td>
<td>'cough'</td>
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<tr>
<td>14.</td>
<td>/ká(r)/</td>
<td>'cockadoodledoo'</td>
</tr>
<tr>
<td>15.</td>
<td>/ká'rk/</td>
<td>'rock back and forth'</td>
</tr>
<tr>
<td>16.</td>
<td>Kop</td>
<td>'beat; cave in'</td>
</tr>
<tr>
<td>17.</td>
<td>koL</td>
<td>'rocks; dice'</td>
</tr>
<tr>
<td>18.</td>
<td>/ksí/</td>
<td>'point'</td>
</tr>
<tr>
<td>19.</td>
<td>/kúř/</td>
<td>'spin'</td>
</tr>
<tr>
<td>20.</td>
<td>Kwa*Ḳ</td>
<td>'open slowly; gallop; busted up'</td>
</tr>
<tr>
<td>21.</td>
<td>/kú̯á̯m/</td>
<td>'...cotton'</td>
</tr>
<tr>
<td>22.</td>
<td>/(h)qís/</td>
<td>'rub hard'</td>
</tr>
<tr>
<td>23.</td>
<td>/qír/</td>
<td>'giggle'</td>
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<tr>
<td>24.</td>
<td>/qě̯/</td>
<td>'sticky'</td>
</tr>
<tr>
<td>25.</td>
<td>/qá̯h/</td>
<td>'crack'</td>
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<tr>
<td>26.</td>
<td>/qá̯w/</td>
<td>'fox bark'</td>
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<tr>
<td>27.</td>
<td>/qóč/</td>
<td>'tickle'</td>
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<tr>
<td>28.</td>
<td>/qlá̯/</td>
<td>'scream'</td>
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<tr>
<td>29.</td>
<td>/qwó̯/</td>
<td>'stirred up'</td>
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<tr>
<td>30.</td>
<td>/qú̯íθ/</td>
<td>'point'</td>
</tr>
<tr>
<td>31.</td>
<td>/qú̯ír/</td>
<td>'point'</td>
</tr>
<tr>
<td>32.</td>
<td>/ʔín/</td>
<td>'quake'</td>
</tr>
<tr>
<td>33.</td>
<td>/ʔír/</td>
<td>'...butte'</td>
</tr>
<tr>
<td>34.</td>
<td>/ʔú̯̬·(w)/</td>
<td>'howl'</td>
</tr>
</tbody>
</table>
35. /bó(h)/  'bark'
36. /wó(h)/  'bark'
37. /θírk/  '...cricket'
38. /θíw/  '...javelina'
39. /θuL/  'itch'
40. /Seh/  'sigh; breathe'
41. /seL/  'stick up'
42. /súl/  'transparent'
43. /sól/  'transparent'
44. /skwí/  '...candycane'
45. /híč/  'stacked'
46. /hér/  'slide down'
47. /há/  'pant'
48. /hâː/  'whinny'
49. /hán/  'massage'
50. /hár/  'work'
51. /hól/  'flow'
52. /hór/  'top'
53. /hû'/  'hoot'
54. /hûn/  '...level ground'
55. /hwír/  'ripple'
56. /mín/  '...hummingbird'
57. /mír/  'straight'
58. /máč/  'blink'
59. /már/  'rub in circles'
60. /móːr/  'trot'
61. /níː/  'exclamation of fear'
62. /nóm/ '...countless'
63. LiB 'flutter; quiver; wag'
64. Lap 'flat'
65. /lúw/ 'many'
66. /ló·h/ 'snore'
67. /lúl/ '...flute'
68. /ríp/
69. /ríθ/ '...freckles'
70. /ráp/ 'hurt'
71. /rúy/ 'small path'
72. /yáŋ/ 'very round'
73. yaL 'circular'
74. /yúk/ 'oblong'
75. /yús/ 'cool'
76. wiL 'shake'
77. /wó·/ 'bark'
78. /wóq/ 'growl'

3.81 Synaesthetic Alternations

The examples sets number 1 through 9 (3.802b) illustrate eight synaesthetic alternations among the phonological rules of Chapter Four, which have been arranged in the following manner:
1. Synaesthetic Alternation: /p/ and /β/
2. Synaesthetic Alternation: /k, kʷ/ and /q, qʷ/
3. Synaesthetic Alternation: /θ/ and /s/
4. Synaesthetic Alternation: /θ, s/ and /š/
5. Synaesthetic Alternation: /n/, /l/, and /r/
6. Synaesthetic Alternation: /l/ and /ɾ/
7. Synaesthetic Alternation: /l/ and /ʌ/
8. Synaesthetic Alternation: Nasalization

The alternations affect almost exclusively the consonants. Nasalization affects only the vowels. Vocalic synaesthetic alternation is a far less productive process in the more transparent areas of the lexicon. The deeper and less transparent areas of the lexicon show traces of vocalic synaesthetic alternations. (See 3.824).

3.82 Classification of Alternations

A three-way classification of the major synaesthetic alternations is possible. The first criterion for classification is in phonostylistics.

3.821 Phonostylistics: One needs to distinguish at least two styles in Yavapai when discussing synaesthesia: unmarked, i.e. "normal," unaffected speech; and marked: "abnormal," hyporicistic speech, under which one includes the nursery forms of baby talk. It is the latter phonostylistic category which will be examined first.
Hypocorism: Terms of endearment, nicknames, nursery words of baby talk, and other kinds of phonostyles which bring into the phonology new phones or make new use of those already on hand will be referred to as hypocorism. No systematic study of hypocorisms in Yavapai has ever been undertaken. I note their existence because of the encroachments they have made into the unmarked, "normal" lexicon.

The Hypocoristic [š]: The most pervasive hypocoristic phone found in the unmarked lexicon is [š], a voiceless, palatoalveolar slit spirant. It occurs in synaesthetic alternation with both /θ/ and /s/:

Examples 3.8211a-c

(a) /θáwa/ 'offspring'
   /šáwa/  
(b) /sāhi/ 'stink'
   /šāhi/  
(c) */msē/ 'fear'
   /mšē/  

/θáwa/ and /šáwa/ occur with equal frequency. Yavapais claim that a /šáwa/ is smaller than a /θáwa/ or that the former is reserved for the offspring of animals and the
latter for the offspring of humans. These explanations have never been consistent. /šāhi/ is far more common than /sāhi/. Yavapai usually "correct" themselves and offer /sāhi/, but the first form they cite is /šāhi/. In the case of /mšē:/ one never hears an unmarked variant, which would be */msē:/*. One explanation for this is that /mšē:/ may not be a hypocorism at all. The form in Paipai is /mşyē:/, and cognates in other, non-Pai languages suggest the Proto-Yuman form was *mşya:y. One could account for /mšē:/ by postulating a rule: sy + ŋ / _ e. The restricted environment accounts for forms like:

Example 3.82111d

(d) /syāmi/ 'recede (e.g. water)'
/syōmi/ 'pull' (in free variation)

Personal names offer another source for hypocorism. The /šl.hmī/, phonetically [šlmi] is from unmarked /msl.hmī/. (/msī/ 'woman' + /hmī/ 'energetic').

3.82112 Nasalization: One finds nasalized vowels throughout the marked style:

Examples 3.82112a-c

(a) Onomatopoeia:
/hā·hā/ 'pant' vs. /hā·hā/ 'whinny'
(b) Synaesthesia:

/šāwa/ 'offspring (sg.)' vs. /šā:wa/ 'offspring (pl.)'

(c) Interjections:

/nī́.nī́/ or /nī́.nī́/ (exclamation of fear)

(d) Sporadic Occurrence:

/mhwa:/ 'badger' or /mhwa:/ (free variation)

3.82113 /n/, /r/, /l/ Gradient Alternation: A third kind of hypocoristic alternation involves the interjections.

Examples 3.82113a-c

(a) /ʔná/ 'ouch'
(b) /ʔrá/ 'ow'
(c) /ʔlá/ 'ugh'

The continuum /n...r...l/ is a gradient synaesthetic alternation representing increasing degrees of unpleasantness or distastefulness expressed by interjections. The roots ra and la underlying the interjections are found in the stems /rā.bi/ 'hurt' and /lá.yi/ 'be bad.' I cannot find forms derived from a root na, meaning the least unpleasant of the set. I speculate that the n is relatable to that of /n-/ 'plural affix,' or even to nasalization, if n had been infixed, causing nasalization.
3.8214 Hypocoristic /l/, /\_/ Alternation: This alternation is related to the gradient alternation /n ~ r ~ l/ above and occurs in only one stem, /q\i\_e\_/ 'dislike,' and related forms (See below).

3.822 Progression of Alternations: There are three arrangements of synaesthetic alternations:

3.8221 Paired Alternations
   a. /p/ and /\_/ 
   b. /k/ and /q/ 
   c. /k\_w/ and /q\_w/ 
   d. /θ/ and /s/ 
   e. /l/ and /r/ 
   f. /l/ and /\_/ 

3.8222 Tandem Alternations
   a. /k\_w...θ/ and /q\_w...s/ 
   b. /k...l/ and /q...r/ 
   c. /k\_w...k/ and /q\_w...q/ 

3.8223 Gradient Alternations
   a. /n/ and /r/ and /l/ 
   b. /ki/, /ke/, /ka/, /qa/, /qe/
3.823 Productivity of Alternations: Some of the synaesthetic alternation listed in 3.81 are much more productive than others, or at least it seems so since the sound-symbolic sets they produce are more semantically transparent. Those alternations which are the most productive are ranked below in a rather impressionistic way for the more productive sets. The least productive sets are usually represented by single examples.

3.8231 /l/ and /r/
2 /k/ and /q/
3 /kw/ and /qw/
4 /kw...k/ and /qw...q/
5 /k...l/ and /q...r/
6 /θ/ and /s/
7 /n/ and /r/ and /l/
8 /l/ and /\/
9 /p/ and /β/
10 /ki/, /ke/, /ka/, /qa/, /qe/
11 /kw...θ/ and /qw...s/

3.824 Meaning of the Synaesthetic Alternations: Most alternations deal with relative size or relative intensity, which may be an objective or subjective evaluation of an event; for example, /hváli/ 'dig out' involves larger physical motions than /hvári/ 'hollow out.' /mkvání/ 'pound' could be said to involve less intensity of motion than /mqvání/ 'pulverize.' /kvâki/ 'open' has less
intensity than /q'âqi/ 'shatter.' The 'furrows' described by /qr'ârqî/ are of smaller dimensions than the 'ridges' described by /kl'ûlki/. /'nå/, /?râ/, and /?lâ/ relate an ascending scale of both size and intensity. /kíči/ is smaller than /qéči/, which in turn is smaller than /qači/. Of more metaphorical meaning, requiring greater subjectivity, is the distinction between /nmsâbi/ 'white' and /nmsâbi/ 'grey' or /kwâθi/ 'brown' and /qvâθi/ 'yellow.' /qâ-e·pi/ 'bad' is not as "bad" as /qâ-e·θi/, but only when one sees nouns from the same stem, does one begin to have an idea of the difference; i.e. /qâ-e·pa/ is 'something rotten,' while /qâ-e·θa/ is used for a 'real slob.'

3.8241 Discussion of /qâ-e·p-/: For a number of reasons /qâ-e·p-/ 'bad (in some way)' is the most interesting stem in the language. It is derived from /qaâ·e/ 'dislike.' The /p/ is the alternate of /θ/, which is identified with /-θ/ '(medio)passive.' The derivation is clear this far: 'disliked, dislikable.' The /â/ is a subjective/metaphorical distortion of la 'bad'; the /q/ could be understood to be a /k-/i, perhaps the 'relative,' perhaps another derivational /k-/. The presence of /θ·i/ is easy to understand when one knows the ablauted plural /qâ·yθi/. It remains to state that /p/ is rarely found posttonically.
within a stem (the few exceptions seem to be nursery forms: /pā:pi/ 'carry (a person) on the back, and /čūpi/ 'eat something mushy'); and that this is the only occurrence in Yavapai of /ʌ/, which is the reason for marginal status of /ʌ/, a reason related to that for the marginal status of /ə/; that is, both are produced or come about synaesthetically.

3.825 Augmentative and Diminutive: The discussion of synaesthesia in Yavapai can be more productively confined to an analysis of those morphemes which seem to be members of the most productive sets: /k/ and /q/, /kʷ/ and /qʷ/, /s/ and /θ/, and /l/ and /r/. The shift from one alternate to the other can be characterized as 'augmentative-diminutive,' and that the first member of each set denotes the larger, more usual, more stable member of the stem-sets in which it appears.

3.83 Archisynaestheme

In order to characterize the meaning of a Yavapai word that contains one or more of the synaesthetic segments or suprasegments (i.e. nasalization), one has to be able to write the root in a neutral manner which, at the same time, suggests that the root can undergo synaesthesia; that is, one would like to show that at Level I, the root has a single representation. Such a representation could best
be called an archisynaestheme or archiphonaestheme. The former is somewhat more accurate, although both might be used for different entities if one were to elaborate this strictly notational device. One can now write the examples sets 1-9 in 3.802b as:

Examples 3.83a-i

a. KLVe'B
b. pmSaB
c. Kič
d. mKwen
e. hwaL
f. ?Da
g. ?kwaS
h. KL?uLK
i. KwaK

This was the notational device followed in listing the reduplicands in 3.804.

3.831 Archisynaesthetic Symbols: The choice of symbols had to be careful enough to be able to include the unmarked as well as the marked synaesthemes. Some of the choices were obvious ones considering phonological markedness; i.e. the unmarked member of pair was used: K, Kw, S, L. B was chosen over P, because /p/ is rare and its counterpart is voiced. D was needed for the triplet, not only because it is neutral, but also because N is used for
nasalization. The status of the marked, hypocoristic /ς/ and /ά/ can be captured by SY and LY. Other forms appearing in this section can now be written in this shorthand:

Examples 3.831a-i

(a) R:Seh /sèhsèh/ 'sigh'
    /θèθèh/ 'breathe'
    R = reduplication
(b) SYaw /θáwa/ 'offspring'
    /šáwa/ (hypocoristic)
(c) SYah /såhi/ 'stink'
    /šåhi/ (hypocoristic)
(d) mSYe· /msé·/ 'fear'
(e) R:ha· /há·há·/ 'pant'
(f) R:Nha· /há·há·/ 'whinny'
(g) SYNa:w /šå:wa/ 'offspring (pl.)'
(h) mh'Na: /mh'å:/ 'badger'
(i) R:nNi· /nǐ·nǐ·/ (exclamation of fear)

3.832 Synaesthetic Derivations: The archisynaestheme is not only a convenient shorthand for representing stems which are linked synaesthetically. One can also use the archisynaestheme as a device for uncovering derivations that are not as transparent as most.
Examples 3.832a-d

(a) /púr/  'hat'
    /impú·la/  'forehead'

The forms of 3.832a may not appear related unless one is aware of the synaesthetic alternation /l/ and /r/ and length shift as derivational processes. The archisyneastheme is puL.

(b) /kapámka/  'grasshopper'
    /qa(m)páŋqa/  'bat (animal)'

The form for 'grasshopper' may be onomatopoetic in origin, but the one for 'bat' is related to it synaesthetically.

(c) /hē·li/  'flow (as a river)'
    /hōlhōl/  'flowing (as a waterfall)'
    /hērhēr/  'slide down'

An archisyneastheme hVL relating to the movement of liquids might underlie the forms of 2.832c.

(d) /skwI/  'stand up v.t.'
    /čskwÍli/  'sew' (SEY)
    /skwÍ·ni/  'turn off (an appliance)'

I can see the relatedness of the above forms by means of skwí-D, from which I can detach the prefix, leaving kwi, which looks like /kwí/ 'weave.' Example set 2.832e lists these and other possibilities.
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(e) /kwi/ 'weave'
/kwi/ 'squeeze, wring out'
/kwi/ 'wrinkled'
/kwi/ 'soften (buckskin)'
/smkwi/ 'stirred around (like gruel)'
/kwi/ 'coiled'

3.8321 The above list continues. There are, however, inherent pitfalls: forms with the same potential synaestheme that do not seem to enter into a sound-symbolic relationship. For example, /kwi/ 'cloud' might be seen as 'spinning, whirling,' but the puL underlying 'hat' and 'forehead' bear no obvious semantic resemblance to /puli/ 'be wet.'

3.834 The Derivational Family of 'hand': /sål/ 'hand; arm' is a Yavapai morpheme which recurs in the lexicon in many guises. As the quasi-classifier /sl-/ and as the first root /sål-/ in compounds relating to body parts it is quite common and bears no relationship to synaesthesia.

Examples 3.834a,b

(a) 1. /slpū/ 'armpit'
2. /slmāka/ 'shoulder blade'
3. /sālqčēća/ 'little finger' (sg.)
4. /sālkčēća/ 'little finger' (pl.)
5. /sālshwō/ 'fingernail' (classifier and root)
To write /sâl/ in the archisynaesthemes SVL would be motivated by the examples below:

(b) 1. /kʰwâmsâr̥a/  'fork'
    2. /mlêksâ·r̥a/  'toe'
    3. /kə̱r̥/  'dog; archaic: 'coyote'
       ("lefty")
    4. /sâlκθá:rò:/  'left hand'
    5. /kw̩e·mθa:r̥ʔi̱ča/  'net'
    6. /θr̥pi/  'five'
    7. /hâlθu·yi/  'nine'
    8. /sê·lβi/  'stick up like fingers'
    9. /ksêlsêli/  '...(cock's)comb'
   10. /pûrksê·lβa/  'war bonnet'
   11. /pûrksér̥ba/  'Indianhead penny'

3.8341 Although no other root has been found as productive as 'hand' (and the 'hand' forms are not exhausted), it can be presumed that there are many other such derivational families, many of which can be discovered by examining sound symbolism in general and synaesthesia in particular.
3.90 Conclusion

Chapter Three has presented the data of Yavapai morphology -- inflectional and derivational -- without very many speculative digressions. The presentation of so many homophonous morphemes with related meaning was deliberately obtuse. There is a relationship between the affixes and synaesthesia, and it was not fortuitous that 'hand' was used as the example of a particularly productive derivational family. One must now take a closer look at Yavapai phonology, this time a more disciplined look, a look tempered by the broad outlines of a theory of phonology.
NOTES TO CHAPTER THREE

1. /wàl...yî/ is a complex verbal stem. When it occurs in an auxiliary phrase, the 'same-subject marker' /-k/ preceding the /wàl...yî/ produces a labiovelar stop in this position. Because of sentence stress, it is impossible to hear any break between the [k] and the [w]. /ʔsmá:hk wàlʔyî/ occurs as:
   [ʔɕ.sm.ma:h.kwàl.ʔy.i]
(Three levels of sentence stress are: ['] primary, ['] secondary, and ["] tertiary. [ɕ] and [h] are syllabic. This circumstance led me initially to analyze auxiliary phrases of this type as /kwàl...yî/)

2. The transcriptions reflect the fact that the /y/ is the second-person forms is unstable, leading to confusion with 'say.'
4.00 Introduction

The preceding three chapters have served as prelude to Chapter Four, in which the thesis of this dissertation is presented; namely, that the major features of Yavapai phonology can be characterized as epiphenomena proceeding directly (or indirectly) from what I call the General Syllabicity Rule (GSR). There are very few aspects of Yavapai phonology which are not affected by the GSR. Evidence that the GSR is a pan-Yuman phenomenon, rather than one restricted only to Pai, can be found in my own field data and can be inferred from the phonologies of other Yuman languages. The details of realization may differ from one Yuman language to another, but the differences are never so marked as to obscure the fact that the General Syllabicity Rule is the hub of the phonological component in Yavapai.

4.01 Major and Minor Problems in Yavapai Phonology

The problem of the unstressed vowels in Yuman is central to this work, and for this reason it is necessary to survey the thinking of Yumanists with respect to this
question. The phonological statements in Chapter Two regarding the problem of unstressed vowels conform for the most part to those made by all Yumanists. This includes as well all my own statements since the time of my first paper on Yavapai phonology in 1966. In Chapter Two I presented my traditional solution to this problem within the vocalism in order to address my attention to other "minor" problems within a more familiar framework. I consider the General Syllabicity Rule, as a solution to the "major" problems of the unstressed vowels, to be the primary contribution this dissertation makes to the field of Yavapai (and Yuman) phonology. I also feel that my proposals in Chapter Two about widespread phenomena (like the effects of /h/, e.g. vocalic realization of /h/, preaspiration, postaspiration, sonorant devoicing, etc.) and about minor problems as well to be important enough to warrant an exposition uncomplicated by the simultaneous introduction of the GSR.

4.02 Phonological Analyses by Kendall and by Hardy

In their dissertations\(^1\) and in other publications, Martha B. Kendall and Heather K. Hardy make use of systems of transcription based on analyses which are different from my own and from each other. I would like to describe the basic differences. To do this in a simple fashion, I will refer to them together since I find them essentially
identical in theory, whereas in actual application, I find Hardy's transcriptions more in accord with my own.

4.021 Postaspiration: In Chapter Two I recognize a series of postaspirated stops and a postaspirated affricate as systematic phonemes: /pʰ, tʰ, čʰ, kʰ, kʰw/. Kendall and Hardy do not recognize these as phonemic, but rather treat them as clusters of a consonant plus h. While this is certainly a possible interpretation, I prefer to reserve the C+h-transcription for true clusters and not for truly aspirated consonants.

4.022 Palatalization and Labialization: In the same vein I write the labialized and palatalized segments /hʷ, kʷ, kʰw, kᵽ/ as systematic phonemes. Kendall and Hardy write these without superscripts. Although both recognize that they are distinct from true C+w- and C+y-clusters, only Hardy is consistent in writing the distinction.

4.023 Vowel Length: Judith Joël and I are the only Yumanists to distinguish three distinctive vowel lengths. Kendall and Hardy distinguish only two for Yavapai. I have not been able to analyze any one of the three lengths as an allophonic variant, nor was Joël. Furthermore, I have found that I cannot pronounce Yavapai to a critical native speaker's satisfaction without using three vowel lengths.
4.024 **Pitch:** Mauricio Mixco\(^3\) and I are the only Yumanists to write distinctive pitch. Mixco distinguishes three for Kiliwa, while I distinguish two for Yavapai: high and high-falling. At a recent meeting\(^4\) I suggested that the problem of pitch and lengths seems to be containable within Pai.

4.025 **Stress:** Kendall and Hardy do not write stress. Primary stress falls on the final syllable of the stem, and one need not write it; however, secondary stress, which occurs predictably on the first member of a compound, is wholly unpredictable on suffixes and must be written. Since I write secondary stress, I mark primary stress as well in order to distinguish primary-stressed vowels from unstressed ones. Because the pitch accent is distinctive only in vowels with primary stress, I redundantly locate primary stress by indicating pitch.

4.03 **Summary**

My transcription and analysis of Yavapai differ from those of Kendall and Hardy in two respects: First, I recognize a series of postaspirated stops and a postaspirated affricate, second, a three-way vowel-length distinction, third, the necessity for writing both stress and pitch. The remaining differences in our three transcription systems result from our selection of symbols and are superficial.
4.04 Treatments of the Unstressed Vowel

I do not wish to discuss at great length the solutions to the problem of unstressed vowels proposed by other Yumanists. To avoid this, I present a view of the problem in Chapter Two which is generally consistent with the view held by other Yumanists during the 1960s and 1970s, although I wish to point out that Halpern's monumental treatment of Yuma (1946) precedes by two decades the great spate of writings in 1966 which ushered in the Yumanist era in American Indian linguistics. These are, in approximate order of their appearance (see the bibliography for titles and further information):

1946: Halpern for Yuma.
1963: Seidan for Havasupai.
     b. Joël for Paipai.
     c. Langdon for Diegueño.
     d. Redden for Hualapai (Walapai).
     e. Shaterian for Yavapai (ms.)
     f. Winter for Hualapai (Walapai).
     b. Shaterian for Yavapai (ms.)
     b. Kozlowski for Havasupai.
1974: Munro for Mojave.
1979: Hardy for Tolkapaya (Western Yavapai).

4.041 There have been other workers in Yavapai, notably Robert Madigan (1963), Sandra Chung (1974), and students of Langdon and of Munro. The transcription systems these investigators have used does not differ markedly from those of Kendall and Hardy. In the past decade there have also arisen numerous practical orthographies, which I will not discuss since they are not designed to take the problem of unstressed vowels into account.

4.042 Previous approaches to the problem of unstressed vowels may be characterized, for the sake of generalization, into three groups with an intersecting axis representing the changes in phonological theory over the past 40 years:

a. Group 1: The unstressed vowels are treated as occurrences of the phoneme or quasiphoneme schwa. Each occurrence is consistently recorded, according to the biuniqueness principle. For notational purposes, syllabic segments are interpreted as schwa + segment.

b. Group 2: Schwa is not used at all at the (systematic) phonemic level. Complex rules are required to insert schwa at the phonetic level.
c. Group 3: Unstressed vowels which have a stable quality are written as occurrences of one of the five phonemic vowels or of schwa.

4.043 One might even propose a Group 4 for an approach which does not operate with a clear recognition of the problem and uses notational devices taken from all three of the above.

4.044 It is difficult to survey the previous treatments of the unstressed vowels and to state that any Yumanist followed one approach or the other consistently over any length of time. This is why I claim that the approach to the problem which I present in Chapter Two is not inconsistent with any of those presented in the past, but is, as will be seen below, one which can be replaced by an approach which draws on far more dynamic phonological perspectives with far more explanatory power.

4.05 History of the General Syllabicity Rule

In 1970, at the occasion of the First Conference on Hokan Languages, I was still using schwa as a notational device, although I had rejected it as a classical phoneme or as a systematic phoneme. Between that time and late
1971, when I submitted the first draft of this dissertation (entitled Yavapai Phonology), there evolved the idea that ultimately led to the GSR in its current formulation. In 1975 I presented "No more schwa for Yavapai" at the First Yuman Languages Workshop. It was here that I discussed the rudimentary steps which have led to the integrated theory of unstressed vowels presented here. In the years since that time, it has become clear to me how other phenomena within Yavapai (and Yuman) phonology can be seen as part of the GSR and need not be regarded as atomistic entities.
4.10 The Yavapai Canon

Yavapai phonotactics must always be discussed on two levels, the systematic phonetic and the systematic phonemic. The underlying representations of a Yavapai word are poor in syllabic or vocalic segments. Through the application of phonological rules, more syllabic or vocalic segments are added to the word, giving, in the case of almost every polysyllabic form, the surface representation of that word a different shape from its underlying one. The most complex and theoretically interesting aspect of Yavapai phonology is the process which converts the paucal-syllabic morphophonemic representation of a word into its multisyllabic phonetic output.

4.101 My initial discussion of the canonical shapes of Yavapai words will be limited to those found at the systematic phonemic level. Gradually, during the ensuing discussion about syllabic complexity, cloning, and gemination, a coherent picture of the canonical shapes at the systematic phonetic level will emerge.

4.11 Phonotactics

If one allows C to represent any consonant, including a glide, and V to represent any primary-stressed vowel regardless of length or pitch in words at the systematic phonemic (and not phonetic) level, one sees the following most common patterns:
These canonical patterns exclude nominal compounds and complex verbs. There are, therefore, virtually no pretonic vowels. Pretonic vowels come from either compound initial elements, vocalic prefixes, or the a-augment. They present no special problem within this discussion. For the sake of simplicity, however, they will be excluded from the discussion for the time being.

4.11 The following is a list of free forms of the canonical shape CV:

1a. /pi/ 'die'
    b. /pe/ 'carry on the head'
    c. /pa/ 'stick' v.t.
    d. --
    e. /pu/ 'put away'

2a. --
    b. --
    c. /ta/ 'grind'
    d. /to/ 'sated'
3a. /tû/ 'burn' v.t.; 'pound'
b. /čî./ 'lay, put'
c. /čé./ 'put away' (SEY)
d. /čá./ 'pour'
e. /čô/ 'set down'

4a. --
b. --
c. /kva'/ 'shout'
d. --
e. --

5a. --
b. --
c. /ká/ 'what? how?'
d. --
e. --

6a. /kwí·/ 'weave'
b. --
c. /kwâ/ 'Indian spinach'
d. --
e. --

7a. --
b. /qê/ 'dirty, sticky'
c. --
d. --
e. --
8a. -- 
b. -- 
c. -- 
d. -- 
e. -- 
9a. /ʔi/ 'say'  
b. /ʔe/ 'give'  
c. /ʔa/ 'hush!' (interjection)  
d. --  
e. /ʔu/ 'see'  
10a. --  
b. --  
c. /ʔá/ 'arrive'  
d. /ʔó/ 'walk'  
e. --  
11a. /ʔi/ 'drink'  
b. /ʔé/ 'blown by wind'  
c. --  
d. /ʔó/ 'eat meat'  
e. --  
12a. /sí/ 'count; read'  
b. /sé/ 'fatty'  
c. /sá/ 'sting'  
d. --  
e. --  
13a. --  
b. --
c. --
d. --
e. /hū:/ 'nose'

14a. /hwi/ 'smell' v.t.
   b. --
   c. --
   d. --
   e. --

15a. /mî/ 'foot'
   b. --
   c. /mā'/ 'ripe, well-done'
   d. --
   e. --

16a. --
   b. /nē'/ 'scoop up'
   c. --
   d. /nō'/ 'heavy'
   e. /nū(·)/ 'going to, etc.' (auxiliary)

17a. /nI·/ 'an in-law'
   b. /nē/ 'hunt'
   c. --
   d. /nō/ 'quiet!' (interjection)
   e. /nū/ 'this'

18a. --
   b. --
   c. --
   d. --
4.12 Examples of CVCV

The example sets 4.12 to 4.17 may contain derivational affixes but no inflectional affixes except the absolutive suffixes /-i/ and /-a/:

1. /p'api/  'carry on back'
2. /q'amdi/  'burn' v.i.
3. /y'amdi/  'harvest'
4. /CVk'V
5. /poki/  'come back'
6. /CVk'V
7. /peqii/  'hit'
8. *CVqwV
9. *CVwV
10. /pĪ.βi/ 'medication'
11. /qāθi/ 'shout'
12. /yū·si/ 'cool'
13. /pēhi/ 'cast a spell'
14. *CVh+wV
15. /pēmi/ 'stand against' v.t.
16. /q'wini/ 'lukewarm'
17. /tīni/ 'thick'
18. /pili/ 'burnt'
19. /sūri/ 'spot, catch sight of'
20. /pū·yi/ 'die' pl. subj.
21. /qāqi/ 'break in two'

4.13 Examples of CCV(C(C)V)

1a. /thir/ 'hard; strong'
b. /spē/ 'lean against'
c. /θpā·/ 'freeze'
d. /npō·/ 'father's father'
e. /θpu/ 'insert' v.
2a. /stī:ti/ 'cut; plow'
b. /ʔte/ 'many; old, grown up'
c. /θtāɾsi/ 'snap shut'
d. /θtōtʰi/ 'collapse'
e. /hi·pā:k sīθtū·yi/ 'midnight'

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3a. /kči/ 'step v.'
b. /βčé/ 'daughter' (man speaking)
c. /nčā/ 'first cousin'
d. /sčō/ 'pluck'
e. /sčūlβi/ 'stick into'

4a. --
b. /čkvé/ 'push'
c. /tkvátí/ 'cut with an ax'
d. /čkvó/ 'bite'
e. /tkvúli/ 'long'

5a. /tki/ 'add'
b. /βkéʔ/ 'where?; NEG'
c. /skāri/ 'glide'
d. /βkóβi/ 'fence' n.'
e. /kkū/ 'bird species'

6a. /θkwì/ 'squeeze, wring out'
b. /θkwé/ 'something'
c. /θkwáβi/ 'wide'
d. --
e. --

7a. /'qí·ra/ 'ditch; furrow'
b. /βqèqèʔi/ 'sticky'
c. /sqāwa/ 'egg'
d. /qqór/ 'fox'
e. --

8a. /mqwîθ/ 'flying squirrel'
b. --
| c. /ʔqʷáːka/ | 'cow' |
| d. -- | |
| e. -- | |
| 9a. /kʔiːla/ | 'canyon' |
| b. /ʔeːl/ | 'louse' |
| c. /sʔámi/ | 'close (door)' |
| d. /tʔóli/ | 'boil' |
| e. /mʔül/ | 'antelope' |
| 10a. -- | |
| b. /(n)βêʔ/ | 'over there' |
| c. /sβâlβò/ | 'joint' |
| d. /sβò/ | 'wait for' |
| e. /yəɬ ʔβůːra/ | 'burro' |
| 11a. /nθǐː/ | 'mother's older sister' |
| b. /βθèː/ | 'breathe' |
| c. /tθâmi/ | 'spotless' |
| d. /θûːli/ | 'wash' |
| e. /βθð·rʔi/ | 'cave in' |
| 12a. /msîwi/ | 'smell (like blood)' |
| b. /ʔsè/ | 'shadow' |
| /msē·/ | 'fear' |
| c. /qsâmta/ | 'mushroom' |
| d. /qsóβa/ | 'mole (on skin)' |
| e. /βsú/ | 'bile' |
| 13a. /θiʔi/ | 'move' v.t. |
| b. /θhê/ | 'tail; dress' |
| c. /shá/ | 'hang' v.t. |
14a. /khwiwa/ 'skunk'
b. --
c. /mhwi:/ 'badger'
d. /phwō·bi/ 'bristle' v.
e. --

15a. /hmī/ 'tall; ambitious'
b. /smē·/ 'lose'
c. /hmāt/ 'container'
d. /qmō:sa/ 'mistletoe'
e. /hmúki/ 'three'

16a. /knī·li/ 'stirrups'
b. --
c. /mnāt/ 'yucca'
d. --
e. /mnúna/ 'belly'

17a. /kn̥ī·ya/ 'mother-in-law'
b. /mṇē/ 'fine, perfect; tasty'
c. /knāna/ 'slight rise in land'
d. /hṇōmi/ 'exercise' v.
e. /nưʔ/ 'that one'

18a. /hlī/ 'milk' v.
b. /slē/ 'paperflower'
c. /hlā/ 'moon'
d. /hlō/ 'cottontail'
e. /mlūθa/ 'measles'
19a. /θrÌ/ 'doubt; think'
b. /hréða/ 'cliff; brim'
c. /θrāpi/ 'five'
d. /hrēkβi/ 'hooked'
e. /trūβi/ 'dry' v.t.

20a. --
b. /qΔē*/ 'dislike'
c. --
d. --
e. --

21a. --
b. /tyé·mi/ 'desert' v.
c. /βyá/ 'this'
d. /čyô·/ 'set, put down'
e. /βyû·li/ 'mix' v.

22a. /kwí/ 'dove'
b. /mwé/ 'warm'
c. /kwá·/ 'cicada'
d. /cwô·/ 'set, put down'
e. --

4.14 Examples of CCCV(C(C)V

1. /čkpā·i/ 'climb'
2. /mtāq/ 'brittlebrush'
3. /tphčû·ni/ 'arc-shaped'
4. /βkva·yβi/ 'crack (egg)' v.i.
5. /kθkéŋa/  'glass'
6. /čmWIla/  'yellow palo verde'
7. /mlqi/  'neck'
8. /mtq\'I\'sa/  'plant species'
9. /kθ\'e:/  'drink made from berries'
10. /βqβo\'i/  'growl'
11. /ktθūkβa/  'curved'
12. /tqsi/  'prairie dog'
13. /\'mhú(\'l)/  'ashes'
14. /(sàl)s1h\'w̃/  'claw, nail'
15. /čsmāyβa/  'cousin'
16. /kβnāwi/  'carry heavy objects'
17. /ktŋī.βa/  'quiet; graceful'
18. /θβl̪i/  'hole'
19. /βθr̪i.θi/  'jump in surprise'
20. /qryē:/  'clear'
21. /čmwâ.θa/  'spleen'

4.15 Examples of CCCCVC(C(C)V)

1. /sklpůyi/  'hug'
2. *CCCTV
3. /čkčĮčβa/  'thief'
4. *CCCKV
5. /kkβkő.βi/  'shield' n.
6. *CCCKV
7. *CCCGV

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8. *CCCqyw'v
9. /skn>yöka/ 'elbow'
10. /slhpö'/ 'claw'
11. *CCCşw'
12. *CCCsV'
13. /?êkhè:ğê-/ 'store'
14. *CCChw'v
15. *CCCm',
16. /?êpnaami/ 'needle'
17. /?êkpê/ 'hunter'
18. /?êbpî'yi/ 'ruler'
19. *CCCrw'
20. /?êkyûki/ 'ancient'
21. /sqmwi'ra/ 'ankle'

4.16 Example of CCCCCV(C(C)V)

1. /tsklpû'yi/ 'hug each other'
2. /?êkmtû/ 'watermelon'
3. *CCCCşw'
4. *CCCCkwy'
5. *CCCCkw'
6. *CCCCkw'y'
7. *CCCCqw'
8. *CCCCqwy'
9. /çtqn>öni/ 'fold repeatedly'
10. *CCCCçw'v
11. *CCCCEV
12. *CCCCsV
13. *CCCChV
14. *CCCChwV
15. *CCCCmV
16. *CCCCnV
17. *CCCCnV
18. *CCCClV
19. *CCCCrV
20. *CCCClV
21. */čknwi'ra/ 'cook' n.

4.17 Examples of ...VC

1. *...Vp
2. */tāt/ 'thorn'
3. */klāč/ 'hail'
4. *...Vkv
5. */hipúk/ 'neck'
6. *...Vkw
7. */kθåq/ 'burden basket'
8. *...Vqw
9. */nåʔ/ 'I/me' (disjunctive)
10. */håmsʔβ/ 'bulrushes'
11. */mqwaʔ/ 'flying squirrel'
12. */yå's/ 'turkey'
13. *...Vh
14. *...Vh_w
15. /tlkw mâm/ "horned toad"
16. /kôblî:n/ 'oven'
17. /hmâ:n/ 'baby'
18. /quipul/ 'lantern'
19. /kôár/ 'dog'
20. *...Vy
21. *...Vw

4.18 Phonotactic Restrictions

The preceding lists, and the charts which follow (Tables 1 and 2) show not only the degree of complexity of the Yavapai word at the systematic phonemic level but also reveal the restrictions on the occurrence and cooccurrence of the consonants. In some cases the gap may be only fortuitous; however, those restrictions which are not felt to be the result of chance can be summarized in a few statements.

4.181 A Note on Coarticulated Consonants: The consonants /kV, k_w, qV, hV/ are coarticulated and limited in distribution. /p/ is not a coarticulated consonant; it is a nasal stop and not a nasalized stop; and as such it does not share the same restrictions as the coarticulated consonants.
4.19 Statements of Restrictions

4.191 All 21 consonants can appear in absolute pretonic position before any of the five vowels. The coarticulated consonants show restrictions related to their palatal or labial coarticulation; that is, they do not occur before front or back vowels respectively. The absence of */βi/* may not be fortuitous. This is discussed below (see Table 6).

4.192 In clusters of two or more pretonic consonants, the restrictions are more severe. See Table 7. For the consonant immediately preceding the stressed vowel, that is, in absolute pretonic position, the restrictions are those that obtained for 4.191. Excluded from the penultimate, the antepenultimate and so on are the coarticulated consonants /kV, kW, qW, hW/; the glides /y, w/; to a large degree the liquids /r, l/; and /p/ completely. I consider the remaining gaps to be fortuitous. The occurrences, cooccurrences, and restrictions are exemplified in the examples sets 4.11 through 4.16.

4.193 Example set 4.17 displays the restrictions in final position on the single occurrence of a consonant. The coarticulated consonants, the glides (except /?/), and /p/ are excluded.
TABLE 7

<table>
<thead>
<tr>
<th>Cooccurrence Restrictions: CV</th>
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<tbody>
<tr>
<td>p</td>
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<td>č</td>
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<tr>
<td>k</td>
</tr>
<tr>
<td>k′</td>
</tr>
</tbody>
</table>
4.194 Other cooccurrence restrictions on posttonic consonants have been inadequately explored. It is the pretonic consonant clusters which will occupy our attention in the following section.

4.20 Syllabicity

Among Yumanists schwa has been used (1) as a shorthand notation for an epenthetic vowel of indeterminate quality and (2) as a symbol used in transcribing vocalic nasals or liquids. I have demonstrated (Shaterian 1976a,b) that syllabicity can occur with all [+sonorant] segments: /m, n, n, l, r, (ʌ), y, ?, h, h̥, w/. Syllabicity occurs also as a feature of any consonant as well; that is, all consonants in Yavapai may have a syllabic representation at the systematic phonetic level. The spirants /β, θ, s, (š)/, nasals, liquids, and glides become syllabic themselves; while the remaining consonants, the stops and the affricate /p, t, č, k̥v, k, kw, q, qw/, have syllabic representations through epenthesis; i.e. by the insertion of a vowel, the cover symbol for which is schwa.

4.201 A Note on the Aspirated Stops and the Affricate /pʰ, tʰ, čʰ, kʰ, kʰw/ are not present at the most abstract level of phonological or lexical representation. They are, however, present at the systematic phonetic and/or classical phonemic level. These postaspirated segments are
derived by phonological rules by processes under discussion in these pages. Their phonogenesis is described below.

4.21 Hierarchy of Syllabicity

Within Yavapai one finds segments which, in isolation, are always syllabic (the vowels) and those which are usually not considered syllabic (the stops). In between are those segments which are not normally syllabic but which are capable of sustaining a syllabic peak (the spirants, nasals, liquids, and glides). The affricate /č/ has properties of both the stops and the spirants. A tripartite classification of segments with respect to their syllabicity may be made as follows:

1. [+syllabic]: /i, e, a, o, u/.
2. [asyllabic]: /β, θ, s, (š), m, n, p, l, r, (ʌ), y, ?, h, hʷ, w/ and sometimes /č/.
3. [-syllabic]: /p, t, kʰ, k, kʷ, q, qʷ/ and sometimes /č/.

4.22 The Proliferation of Syllabicity

The use of schwa as a cover symbol for syllabicity represents the proliferation of more syllabic segments in the language at the surface than would be indicated by the underlying morphological material entering the phonological rules. There are two reasons for the increase in
syllabicity: (1) ease of articulation and (2) the tendency
toward the avoidance of a monosyllable, despite the counter­
examples of 4.11.6

4.221 Ease of Articulation: It is clear from the
examples sets 4.12 through 4.16 that most of the clusters
of from two to five consonants preceding the stressed vowel
cannot be articulated without a syllabic peak, which links
the consonants. Yavapai does have true, pretonic clusters
at the phonetic level, all involving the spirants /θ/ and
/s/ as first members or /h/ occurring either before or
after another consonant (see below).

4.222 Avoidance of a Monosyllable: The examples in
4.11 are an almost exhaustive list of elicitable monosyl­
lables in Yavapai. They all come from one of three cate­
gories: (1) verbs, (2) body parts, or (3) interjections.
One dismisses interjections on the grounds that they are
"abnormal," that they can be of a variety of shapes, and
that they can also occur with nasalization, which is not
a normal speech sound. The first two categories, however,
are significant in that they may not take the prefix /ʔ-/;
gratuitously (explained below: 4.223); that is, /ʔ-/ on
verbs signifies the first person subject with third
person object and first person object with third person
subject; on nouns, specifically on body parts, it indicates
first-person inalienable possession. There is, therefore,
a semantic constraint requiring that these CV-sequences
remain monosyllables.

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4.223 The Creation of Inorganic Clusters: It may be seen from the examples 4.11 through 4.16 that the most unusual canonical shape of a word in Yavapai at the systematic phonetic level is CV, i.e. a consonant-vowel monosyllable. CV is a common sequence for a root (i.e. a morpheme at the systematic phonemic level); however, as a nominal stem which is not a body part, it is normally inflected, and either prefixation or suffixation prevents its becoming a surface monosyllable. Noun roots of the shape CV require the prefix /ʔ-/ , which was called in Chapter Three a 'noun marker.' It is an obligatory prefix and has been classified as derivational. It is equally probable that it functions largely as a phonotactic requirement. One recalls that the 'noun marker' is removed when the CV(CV) structures enter into a compound:

Examples 4.223(1)-(8)

(1) /ʔpä:/ 'person'
   /pä·qyäta/ 'rich person'
(2) /ʔkwé:/ 'something'
   /kwé·päya/ 'fruits, nuts'
(3) /ʔsá/ 'eagle'
   /sàwála/ 'eagle feather'
(4) /ʔiː/: 'wood'
   /ʔi·wài:/ 'wooden chair'
(5) /ʔhà/ 'water'
   /hàh· álβa/ 'well n.'
4.2231 If one accepts that the so-called noun marker is largely a phonotactic constraint, one sees that there is a strong tendency in Yavapai to avoid phonetic monosyllables. This recalls the obligatory suffixation of the Type B stems -- /-i/ on verbs and /-a/ on nouns -- to which the name 'absolutive' was given (3.103). It appears that these obligatory endings /-i/ and /-a/ have no substantive meaning, since Type A stems (i.e., those ending in a stressed vowel) do not require them.

4.2232 The clusters achieved by the prefixation of /?/- are found as the first member of the examples (1) through (8) in 4.223. They are transcribed phonemically and are not intended to be pronounceable. They must be disyllabic, one assumes, both to ease articulation and to conform to phonotactic constraints. The addition of a glottal stop (or glottal onglide) might be seen as the purest instance of Yavapai
avoidance of the monosyllable (except where semantic constraints intervene), even if this requires introducing a segment, a glottal pulse, in order to achieve an extra syllable. One is reminded of the "bootstrap hypothesis" in quantum physics; that is, when Yavapai must produce an extra syllable, it does so by creating it out the most fundamental unit of phonation, the glottal stop.

4.24 The Pronunciation of the Inorganic Clusters

There are three ways in which consonants achieve syllabic (cf. 4.20):

1. Vocalization: glide to homorganic vowel:
   a. /y/ to /i/
   b. /ə/ to /a/
   c. /h/ to /a/
   d. /hw/ to /a/
   e. /w/ to /u/

2. Syllabication: spirants, nasals, and liquids to syllabic spirants, nasals, and liquids:
   a. /β, θ, s, (§)/ to /β, θ, s, (§)/
   b. /m, n, r/ to /m, n, r/
   c. /l, r, (ʌ)/ to /l, r, (ʌ)/
3. Epenthesis: stop augmented by schwa:
   a. /p, t, k\v, k, k\w, q, q\w/ to /æp, æt, æk\v, æk, æk\w, æq, æq\w/
   c. /\v/ to /t\v/ or /t\v/  

4.241 Below I have listed forms showing the way I transcribed unstressed vowels using the schwa notation and not mapping in the phonetic details of the realization of the schwas:

Examples 4.241(1)-(8)

   (1) /'p\v:/  'person'
       [ʔ\v\p\v:]  
   (2) /'k\v\v:/  'something'
       [ʔ\v\k\v\v:]  
   (3) /'s\v:/  'eagle'
       [ʔ\v\s\v:]  
   (4) /'\v\v:/  'wood'
       [ʔ\v\\v:]  
   (5) /'h\v:/  'water'
       [ʔ\v\h\v:]  
   (6) /'w\v:/  'rock'
       [ʔ\v\w\v:]  
   (7) /'n\v:/  'road'
       [ʔ\v\n\v:]  
   (8) /'r\v:/  'it hurt!'  
       [ʔ\v\r\v:]
4.242 Many transcriptions have gone beyond these and have mapped in more phonetic detail; that is, they described the "phonetic realization of schwa." This was easy to do for examples (4)-(6) because there is little variation; that is, the vowel is a schwa in Allegretto, but in Andante one can hear the vowel articulated in greater detail. Compare the following:

Examples 4.242(4)-(6)

(4) [ʔɪʔɪ:] 'wood'
(5) [ʔʌhʌ] 'water'
(6) [ʔwɛr] 'rock'

Since these forms could be transcribed to any recorder's satisfaction, it was assumed that the other "realizations of schwa" were equally easy to transcribe. (1)-(3) however, are quite difficult to transcribe, not only because of idiosyncratic variation but also because of a fundamental misunderstanding of what is really happening phonologically in examples (4)-(6).

4.25 Gemination

One way to describe what is happening in (4)-(6) is to state that the schwa, or a [+syllabic] segment, is introduced (in this instance to prop up the glottal stop) and then modified to have the quality of the stressed vowel of the following syllable. Closer examination, however, shows
that the one consonant (in these examples) which immediately precedes the stressed vowel is split and made geminate. Gemination plays a crucial role in syllabification. To understand it fully, one may conceive of gemination as taking place in a series of steps. The first step is the gemination of the consonant preceding the stressed vowel, creating a potential syllable — in this case, a syllable beginning with a glottal stop and ending in an unreleased [-syllable] segment whose twin or clone appears before the stressed vowel. The initial step, gemination by splitting, is shown below using the sample examples:

Examples 4.25(4)-(6)

(4) #??.ʔI:# 'wood'
(5) #ʔh.hâ# 'water'
(6) #ʔw.wI.# 'rock'

4.251 The second step is to introduce syllabicity into the potential syllable which has just been cloned by splitting and gemination. (3), (7), and (8) can be added at this time.
Examples 4.251(3)-(8)

(3) \#\text{s}.\text{s}\text{a}\# 'eagle'
(4) \#\text{w}.\text{i}:# 'wood'
(5) \#\text{h}.\text{h}\# 'water'
(6) \#\text{w}.\text{w}\text{i}.\# 'rock'
(7) \#\text{n}.\text{p}\# 'road'
(8) \#\text{r}.\text{r}\text{a}.\# 'it hurt!

4.252 The third step is to produce the systematic phonetic output by means of vocalization for the glides and syllabication for the spirants, nasals, and liquids:

Examples 2.252(3)-(8)

(3) [\text{s}.\text{s}]
(4) [\text{i}:.\text{i}]:
(5) [\text{a}.\text{h}\#]
(6) [\text{u}.\text{w}\text{i}.]
(7) [\text{n}.\text{n}\#
(8) [\text{r}.\text{r}\text{a}.

4.253 A Note on Transcription: If one compares the transcriptions (4)-(6) of 4.252 with (4)-(6) of 4.241 one can see how fundamentally different this approach is. The quality of the vowels in 4.252 (4)-(6) can be obscured to schwas, reflecting what happens in Allegretto. In 4.341 (4)-(6) one must speak of mapping-in more detail in order to transcribe the forms in Andante.
A Note on Gemination: The gemination in (3), (7), and (8) is clearly audible. In forms (4)-(6) the gemination is not audible because the cloned segment created by gemination has been vocalized. Forms of the type in (3), (7), and (8) are not easily identified as geminate clusters because of the location of the stress. Gemination in more familiar languages — Arabic, Aramaic, Finnish, Hungarian, Italian, Japanese, Norwegian, Swedish — occurs almost always post-tonically. In Yavapai gemination of the kind under discussion at the moment is wholly pre-tonic. It is also possible to hear vowels within the syllabic spirant, nasal, or liquid. Occasionally, for stylistic reasons, in song, for example (see Hinton 1977:77-95) true vowels are inserted, but this does not happen in normal spoken Yavapai. Because of tradition I have transcribed the examples under discussion in the dictionary without showing the gemination and the syllable boundary. Throughout this section, however, syllable boundary will be written for better visualization.

Examples 4.253(3)-(8)

(3) /ʔ.sá/ ~ /ʔsá/ 'eagle'
(4) /ʔ.ʔIː/ ~ /ʔʔIː/ 'wood'
(5) /ʔ.há/ ~ /ʔhá/ 'water'
(6) /ʔ.wIː/ ~ /ʔwIː/ 'rock'
(7) /ʔ.ʔa/ ~ /ʔʔa/ 'road'
(8) /ʔ.ráː/ ~ /ʔráː/ 'it hurt!'
4.26 Epenthesis

If one follows the steps with examples (1) /'pa:/ 'person' and /'kwe*/ 'something' one can see the similarity in the phonological derivation up to the point of the realization of syllabicity:

Examples 4.26(1),(2)

Input: (1) /'pa:/ (2) /'kwe*/
Step 1: #.'pa:# #.'kwe*#
Step 2: #.'p.l.pa:# #.'k.l.kwe*#
Step 3: *.'p.p:# *.'k.kwe*I

4.261 The starred forms in the derivations indicate that no property of these stops is potentially syllabic. When this occurs, one would expect a [+syllabic] segment to be introduced before the stop. One possible realization is the following:

(1) [ap l.p:] (2) [ak l.kwe*]

4.262 It might also be argued that in a case like this in which the created cluster contains a glide-stop sequence, that the glide assumes the syllabicity by means of vocalization. If this happened, the examples would be written as follows:

(1) ['ep l.p:] (2) ['ek l.kwe*]

One would have a less audible glottal onglide in the second instance instead of the more audible glottal stop of the
first instance. Spectrographic data and other evidence gathered by instrumentation are required to determine which is the actual realization. Although it is likely that one would find both. My acquaintance with Aramaic and German, where initial /ʔ/ is more audible before a stressed vowel than in English (where it is only a deletable onglide) initially after a pause (i.e. [ʔ]), suggests to the ear that the first transcriptions are the more accurate ones.

4.263 Directionality of Syllabic Realization: It is important to determine whether the syllabicity proceeds from left to right or from right to left. That is, in the newly created clusters, is it the clone or the initiator (i.e. the consonant initiating the gemination) to which syllabicity is assigned? In the above examples, we were able to study the problem in some detail. As more examples with clusters of greater complexity are examined the question will become more important.

4.30 The General Syllabicity Rule

The phenomena that have been discussed in 4.1 and 4.2 are interrelated. I have suggested that more syllabicity is required at the systematic phonetic level than at the systematic phonemic level and have stated that syllabicity is needed both to ease articulation and to meet a morpheme structure condition at the systematic phonetic level. Syllabicity may be required for other considerations such
as intonation, tempo, or rhythm. It is clear that Yavapai requires more syllability as its morphemes emerge from underlying representations to surface manifestations. The examples above have shown, by using simple instances, how additional syllability is achieved. The steps may be summarized using the CV-notation.

Examples 4.30(1)-(4)

Underlying form: /CCV/: a consonant cluster in pretonic position.

Coding: $\#c_1c_2$V#: identifying the two consonants as different.

1. Initiation: $\#c_1 . c_2$V#: initiator separates from consonant immediately preceding stressed vowel.

2. Splitting/Gemination/Cloning: $\#c_1 c_2 . c_2$V#: first $c_2$ is unreleased.\[11\]

3. Syllability designation: $\#c_1 c_2 . c_2$V#: first $c_2$ is [+syllabic].

4. Phonetic realization: $\#c_1 X . c_2$V#: $X$ shows that the final step cannot be illustrated diagrammatically, since this depends on the category of $c_2$: [+syllabic], [-syllabic], or [asyllabic].

4.30.1 The name General Syllability Rule suggests itself for this rule since its function is to generalize syllabic segments throughout the phonetic output.
The rule, henceforth abbreviated GSR, can be broken down into four main steps with three subsequent or detailing steps:

4.302 *Initiation*: The initial segment can be said to trigger the GSR by identifying and marking a potential syllable boundary between itself and the following consonant. It will be seen in the example sets which follow that in cases where the initiator fails to do this, the GSR does not apply to the sequence.

4.303 *Gemination*: One must assume that there is either a splitting or copying of the consonant following the initiator. This consonant is called the clone.

4.304 *Syllabicization*: This may occur simultaneously with Step 2: *Gemination*. The segment to the left of the syllable boundary and to the right of the initiator (i.e. the clone) becomes potentially [+syllabic]. It may be the case that the initiator becomes [+syllabic].

4.305 *Phonetic Realization*: The clone is realized in one of three ways depending on its articulatory classification: Glides are vocalized; spirants, nasals, and liquids are syllabified; and stops are given vocalic augmentation.
4.31 Examples

The Appendix lists 378 examples illustrating the application of GSR to a great variety of pretonic clusters. The examples are arranged along two lines: increasing pretonic consonantal complexity and the articulatory order established in this dissertation:

1. CpV...
2. CtV...
3. CØV...
4. CkÝV...
5. CkV...
6. Ck'wV...
7. CqV...
8. Cq'wV...
9. C?qV...
10. CØV...
11. CøV...
12. CsV...
13. ChV...
14. Ch'wV...
15. CmV...
16. CnV...
17. Cn'V...
18. ClV...
19. CrV...
20. CyV...
21. CwV...
4.311 An example in the Appendix will not show all six steps of a GSR application: namely

i. Underlying form: \( /\text{pā}/ \) 'person; Indian'

ii. Coding: \( #\text{1pā}:# \)

iii. Initiation: \( #\text{1pā}:# \)

iv. Gemination: \( #\text{1p2pā}:# \)

v. Syllabicization: \( #\text{1p2pā}:# \)

vi. Phonetic realization: \( [\text{pā}] \)

The examples show rather only steps i and ii, allowing the reader to fill in the intermediate steps, as in the following example:

\( /\text{pā}/ \) 'person; Indian'

\( #\text{p.pā}:# \)

\( [\text{p.pā}] \)

4.312 Exceptions: Some CCV-clusters preceding the stressed vowel display a distribution of syllabicity which is not mechanically predictable. The mechanism triggering gemination, which was said to be the presence of the initial consonant, can be suppressed to allow true clusters to emerge at the systematic phonetic level.

Examples 4.312(1),(2)

(1) /\text{kvā-}'ybi/ 'shatter v.i'

\( #\text{kvā}'y.bi# \)

(2) /\text{kwā-}'bi/ 'wide'

\( #\text{k.wā-}'bi# \)
Clusters of this type are restricted to the structures

\[ SK^{y}\acute{V} \quad \text{or} \quad SK^{w}\acute{V} \]

(This is interpreted as a /θ/ or /s/ before a palatalized or labialized velar or backvelar, that is, before /k\(\acute{v}\)/, /k\(\acute{w}\)/, or /q\(\acute{w}\)/.)

The true clusters of this shape show no variation. Gemination never occurs.

4.32 CCC\(\acute{v}\)-Clusters

A more complicated situation obtains for CCC\(\acute{v}\)-clusters. If one simply expands the GSR given in 4.30 to include the additional consonant, the predictable pattern, one would assume, will simply contain an extra syllable.

i. Underlying form: \[/CCC\(\acute{v}\).../\]

ii. Coding: \[#C_1C_2C_3\acute{v}...#\]

1. Initiation: \[#C_1.C_2.C_3\acute{v}...#\]

2. Gemination: \[#C_1C_2^\prime.C_2C_3^\prime.C_3\acute{v}...#\]

3. Syllabicization: \[#C_1^\prime.C_2^\prime.C_2C_3^\prime.C_3\acute{v}...#\]

4. Phonetic Realization: \[#C_1^\prime.X.C_2^\prime.X.C_3\acute{v}...#\]

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Examples 4.32(1), (2)

(1) i. /ktθūkβa/ 'curved'
   ii. #k₁t₂θ₃ūk₄β₅a# (coding unnecessary in real examples)

1. #k.t.θūk.βa#
2. #kt.tθ.ūk.βa#
3. #kt.tθ.ūk.βa#
4. [k t.tθ.ūk.βa]

(2) /θβlɪ/ 'hole'

1. #θ.β.lɪ#
2. #θβ.βl.ɪ#
3. #θβ.βl.ɪ#
4. [θβ.βl.ɪ]

4.321 The examples presented above of the CCCV'-
clusters are the most straightforward cases. The example
sets which follow show that many of these clusters achieve
syllabicity in a manner wholly predictable from the initial
formulation of the GSR. A examination of the clusters
which behave in this predictable manner reveals that they
all contain a stop, the affricate, or /β/ as the second or
central consonant of the CCC-cluster; that is, C₂ is one
of the following: /p, t, č, k, q, β/, the other stops
/kv, kw, qw/ having already been excluded since they occur
only in absolute pretonic position. It is noteworthy that
/β/ appears in this group; that is, that it patterns like
a stop and not like a spirant. 12
4.33 CCCV-Clusters with [asyllabic] C₂s

When C₂ is not [-syllabic] or /β/, but rather specified [asyllabic] -- /s, (ʃ), h, m, n, p, l, r, y, w/ (/hw/ and /ʌ/ having been excluded by morpheme structure conditions -- the result is one of two possibilities, illustrated using the CV-notation:

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<thead>
<tr>
<th>I. Expected Realization:</th>
<th>II. Alternate Realization:</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. ( /\text{CCC}V/ )</td>
<td>i. ( /\text{CCC}V/ )</td>
</tr>
<tr>
<td>ii. ( #C₁C₂C₃V# )</td>
<td>ii. ( #C₁C₂C₃V# )</td>
</tr>
<tr>
<td>1. ( #C₁C₂C₃V# )</td>
<td>1. ( #C₁C₂C₃V# )</td>
</tr>
<tr>
<td>2. ( #C₁C₂V.C₃C₄V# )</td>
<td>2. ( #C₁C₂V.C₃C₄V# )</td>
</tr>
<tr>
<td>3. ( #C₁C₂V.C₃C₄V# )</td>
<td>3. ( #C₁C₂V.C₃C₄V# )</td>
</tr>
<tr>
<td>4. ( #C₁X.C₂X.C₃V# )</td>
<td>4. ( #C₁X.C₃V# )</td>
</tr>
</tbody>
</table>

(X in the CV-notation is used to show that the ultimate syllabic realization of the cloned consonant is dependent on its specification with respect to the feature 'syllabic'.)

Examples 4.33(1)-(4)

<table>
<thead>
<tr>
<th>I. Expected Realization:</th>
<th>II. Alternate Realization:</th>
</tr>
</thead>
<tbody>
<tr>
<td>/mpâča/ 'brush, plant'</td>
<td>/mpâča/</td>
</tr>
<tr>
<td>1. ( #mpâča# )</td>
<td>( #mpâča# )</td>
</tr>
<tr>
<td>2. ( #mpâča# )</td>
<td>( #mpâča# )</td>
</tr>
<tr>
<td>3. ( #mpâča# )</td>
<td>( #mpâča# )</td>
</tr>
<tr>
<td>4. ( [mpâča] )</td>
<td>( [mpâča] )</td>
</tr>
</tbody>
</table>

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4.34 Exceptions to Alternate Realizations

There are forms which can have only one of the realizations of the type described and exemplified above. The reason for this is not known. For instance, the realization of /qmpáya/ 'brain(s)' is only [qm.pá.ya], never *[qm.mep.pá.ya].

4.35 /h/ as C2 in CCCV-Clusters

When the second member of the CCC-cluster is /h/ and the third member a stop or the affricate, two realizations are also possible:

I. First Realization: II. Second Realization:

\[/?hpá.lka/ 'ironwood'/?hpá.lka/\]

1. #?h.pá.l.ka# #?h.pá.l.ka#
2. #?h.pá.l.ka# #?h.hp̂.pá.l.ka#
3. #?h.pá.l.ka# #?h.hp̂.pá.l.ka
4. \([?a.pá.l.ka]^{13}\) #?a.p̂.pá.l.ka (??)

4.40 Aspiration in Yavapai

One usually understands by aspiration only that which can more narrowly be called postaspiration. It has been claimed in this work that the series of aspirated stops: /p̂, t̂, č̂, k̂, k̂w/ contrast minimally at the systematic phonetic or classical phonemic level with their plain or unaspirated congeners: /p, t, č, k, kw/ (Recall that /k̂v, q, q̂w/ never cooccur with aspiration.) There are very few
occurrences of aspirated stops in Yavapai. In each case they are preceded by /ʔ-/ and are of the shape: /ʔChV.../. The aspirated stop is pretonic.

4.41 Classification of Aspiration

Example sets in 4.35 show two realizations (called First and Second) for the underlying sequence CCCV, where C₁ is /ʔ-/ , C₂ is /h/, and C₃ is any of /p, t, č, k, kw/. The First Realization produces preaspiration of stops; the Second Realization produces postaspirated stops. If one refers to these phenomena as Preaspiration and Postaspiration respectively, a more accurate description of their role in Yavapai (rather than Pai or Yuman) phonology is achieved.

4.42 Preaspiration

This phenomenon is the more common in Yavapai. It has been remarked that /h/ devoices the fricative /β/, the nasal stops: /m, n, ř/, and the liquids: /l, r/. This can now be viewed within the framework of aspiration in general. Evidence from Preaspiration in Northeastern Yavapai is related directly, and in fact alternates with postaspiration in Tolkapaya, Havasupai, and Hualapai (see 4.752-4.755).

4.43 Postaspiration

The examples in 4.35 show two possible realizations for underlying ĚhCV...: preaspiration and postaspiration.
4.44 Sonorant Devoicing

I demonstrated in 1976 that the sequence /h/+sonorant without an intervening syllable boundary in Yavapai devoices the sonorant. The underlying sequences, shown to the left are realized on the surface, shown on the right, as:

1. /hm/ → [m]
2. /hn/ → [n]
3. /h/ → [ŋ]
4. /hl/ → [l]
5. /hr/ → [ɾ]

4.441 The phonetic transcriptions above are made in a shorthand notation. They are the kinds of transcriptions I have usually made to show that the /h/ devoices the following sonorant and is then deleted, as is shown by

1. /hmi/ → [mí] 'tall; ambitious, energetic'
2. /hná:qi/ → [ná:qi] 'want'
4. /hlí/ → [lí] 'milk' v.
5. /hreβa/ → [reβa] 'brim; cliff'

4.442 The transcriptions above can be revised to show how the General Syllabicity Rule incorporates sonorant devoicing. The revised transcriptions are

1. /hmí/ → [hmí]
2. /hná:qi/ → [hná:qi]
3. /hó:mi/ → [hó:mi]
4. /hlí/ → [hlí]
5. /hreβa/ → [hreβa]

(See Appendix 1, examples 162-164, 174, 184, 194-196, 207-209)
The first example is NEY (and SEY), the second is WY; that is, Tolkapaya is the dialect that produces the (post)aspirated stop from the underlying \(^hCV\ldots\)-sequence. NEY and SEY sometimes show a (post)aspirated stop or affricate with the same lexical incidence as WY. As a rule of thumb one may say that if a stop or the affricate is (post)-aspirated in NEY and SEY (the two appear to be identical in this respect), then the same stop is (post)aspirated in WY. The converse is not true, however, so that there are more occurrences of (post)aspirated stops in WY than in the two other dialects.

4.45 Resemblances to Havasupai and Hualapai

In Havasupai and Hualapai the lexical incidence of postaspiration is greater than that for NEY and SEY but approximately the same as that for Tolkapaya (WY). Havasupai and Hualapai differ from all dialects of Yavapai in that postaspirated stops can appear in word-initial position, which is not the case for Yavapai, where an initial glottal stop is always required to trigger GSR. With respect to preaspiration, however, Havasupai, Hualapai, and Yavapai are in complete agreement.

4.46 Aspiration in Pai

Paipai, in contrast to Havasupai, Hualapai, and Yavapai, does not exhibit either pre- or postaspiration. Paipai /x/ and /xʷ/ have not been de velarized, as is assumed to have happened in the other Pai languages. There are no
restrictions on preaspiration in Havasupai, Hualapai, and Yavapai: /h/ preceding /β, m, n, p, l, r, (ʌ)/ which is realized as preaspiration does not take the position of the stressed syllable into account before it operates. Post-aspiration, on the other hand, is subject to many more restrictions depending on dialect or subdialect, namely:

1. Paipai shows no evidence of postaspiration.
2. Havasupai and Hualapai have a small number of forms occurring pretonically as aspirates. They may occur word-initially.
3. Yavapai:
   a. Western Yavapai (Tolkapaya) has a small number of high frequency forms occurring pretonically as aspirates. They may not occur word-initially.
   b. Northeastern and Southeastern Yavapai have a smaller number of high frequency forms occurring pretonically as aspirates.

4.50 Intrusive Glides

I have developed two notions here. One is that the glides /y; w; ʰ; h, hw/ (the last is phonetically [m]); the phone is analyzed /hʰ/ phonologically to capture its structural parallelism with the labiovelar and labiopostvelar /kʰ/ and /qʰ/) are morphophonemically identical to /i; u, [ə]; a, a/. The other is that the two sets of five phonemic (or quasiphonemic in the case of [ə]) are the syllabic and
nonsyllabic realizations of the same abstract entities. The consistent syllabic realizations (in deliberate speech) of /y, w, h, hw/ is i, u, a, a. The syllabic realization of schwa can be any of the five phonemic vowels /i, e, a, o, u/ (See 4.252:4).

4.501 It is often difficult to determine from synchronic evidence alone whether one is looking at an intrusive glide or at a derivational or inflectional morpheme. In the course of linguistic change, some morphemes arise in this way; that is, they are intrusive segments which are later lexicalized. Sometimes this is clearly the case of an intrusive glide; sometimes it is not quite so clear.

4.502 The noun /kwi/ and the stative verb /kwi·yi/ 'be cloudy' appear to be related by a straightforward derivational process: In both cases the root is kwi. The noun requires only the 'noun marker' /-/. The denominalized verb seems to require only the absolutive /-i/, so that at one stage in the derivation of the verb, we could imagine #kwi-i#; at a subsequent stage #kwi·ii#; and then #kwi·yi#. It appears that the absolutive /-i/ is geminated and then desyllabified in a way that is the opposite of the operation of the General Syllabicity Rule as we have observed it so far. The lengthening of the vowel yielding ultimately /kwi·yi/ is a low-level phonetic rule. There are no length contrasts in this environment.14
4.503 It is beyond the strictly synchronic ambitions of this work to speculate on the degree of abstraction which can be teased out of the language using reductionist motivations; nevertheless, I can see that the General Syllabicity Rule works in both directions and that I will one day be able to describe as intrusive glides many of the h-segments and ?-segments as well.

4.60 Vowel Lowering

I repeat here the Example 2.21b:

1. /ʃɛktuʔ tuʔ qwaʔa kâča/ 'cantaloupe'
   melon+INT+yellow+little
   /ʃɛktuʔ [tɔ ɔwâha] kâča/

and cite:

2. /pɔl-hmâʔ/ 'girl'
   woman+child
   [pɔl-hmâʔ]

The examples above illustrate Vowel Lowering in Allegretto of segments not under primary stress. It is the high vowels /i/ and /u/ that are affected and lowered to /e/ and /o/. The phenomenon is straightforward.

4.601 In word-final position in Allegretto /-i/, the absolutive, is lowered to /-e/ and merges with original artifactive /-e/. This seems to be the case based on comparative data.
4.70 **System Instabilities**

In Chapter Two I suggested that the problem of the unstressed vowels in Yavapai could never be understood unless the notion of free variation were built into the phonological component. In this chapter I have shown that the problem of the unstressed vowels can be treated successfully and elegantly within the framework of the GSR (General Syllabicity Rule). I have not been able to propose a comparably elegant solution, or indeed any solution at all to the problem or problems of vowel length and pitch accent, since there are no longer enough speakers of the language to allow me to perceive a coherent system. Without such information, generalizations about length and pitch must remain at the level of ad hoc speculation.

4.70.1 There are other areas in the phonology where free variation, either within an idiolect or from dialect to dialect, may be observed. Some of these may ultimately be trivial, as is, for example, the variation between /u/ and /o/ before liquids; others may be of importance for more far-reaching diachronic investigations. I have chosen to list and discuss all of these phenomena of free variation in an order which suggests something about the ranking I give them at this time. I do not wish to suggest, however, that any of these can be dismissed as unimportant.
4.71 Glide Variation

A verb meaning 'set down' or 'harden' (if these are the same) appears variously as:

1. /čo:/
2. /čyö:/
3. /čwo:/
4. /čhuö/

The verb 'bite' is usually (5) /čkvo/, but it is occasionally heard as /čkũo/. These cases involve stressed /o/ finally and /č/ initially.

4.72 Vowel Variation

There are some few examples of free alternation of /u/ and /o/ before liquids and nasals:

1. /mul/ ~ /möl/ 'name'
2. /můru/ ~ /móri/ 'knead'
3. /syúmi/ ~ /syómi/ 'pull'

Another two examples show an unconditioned variation between /i/ and /e/ and between /e/ and /a/:

4. /tkí/ ~ /tké/ 'add'
5. /smé/ ~ /smá/ 'lose',

(6) /sĩwa/ varies freely with /sũwa/ 'ripen' but also with /swá/. Since this example involves Stress Shift, it will be treated below.
4.721 Vowel Lowering in unstressed or weakly stressed syllables may account for the lexicalization of the /o/-variant of 'name' when incorporated into the verb 'be sad' (if this is cognate): \(^{16}\)

Example:

/mbl...yi.βi/  
/mbl?yi.βi/    'I am sad'  
/mblyi.βi/    'you (sg.) are sad'  
/mblyi.βi/    'one is sad'

4.73 Consonant Variation

4.731 A small number of instances of free variation occurs between /t/ and /θ/ in initial position, suggesting that the variation affects only a prefix. The more common form has the /θ/:

1. /θ?éli/ ~ /t?éli/    'sour, bitter, salty'
2. /θchéqa/ ~ /tchéqa/   'dress'

4.732 Consonant variation can also be observed between /β/ and /m/. In Largo /β/ has not yet assimilated to the preceding /m/:

Largo: /yùri.s'âmβi/    'button'
Allegretto: /yùri.s'âmμi/
4.74 Stress Shift

Under conditions not yet wholly clear, the placement of stress or the distribution of stress levels within a word varies between two syllables. When this occurs, it is not certain from a synchronic point of view, that either syllable can be said to carry the stress. Although Stress Shift is not widespread synchronically, it may account for the ablaut set /i/ ~ /ú(·)y/ and have other more strictly historical significance for Pai and Yuman. I will suggest below how this could be true.

4.74.1 The following examples make up a complete list of occurrences of Stress Shift:

1. /rīyi/ ~ /rīyē/ ~ /rē/ 'important'
2. /kēi:yi/ ~ /kēyē/ 'physician'
3. /l·kmi·yi/ ~ /l·kmyē/ 'ocotillo'
4. /mēyi/ ~ /myē/ 'bad spirit'
5. /kí·¿a/ ~ /kñä·/ 'younger cousins'
6. /swa/ ~ /swa/ ~ /swä/ 'not ready, not ripe'

4.74.2 If we use the notion of Stress Shift to probe the vocabulary, we find other forms that appear to be derivationally related, although they no longer show the free variation of the examples cited above:
1. /síli/  'roast, broil'
2. /slIː/  'fry'
3. /saʔrIyi/  'holy, sacred'
4. /rIyi/ ~ /ryē/ ~ /ryē/  'important'
5. /qryēː/  'clear'

4.75 Metathesis

Yuman languages commonly exhibit metathesized forms (see Langdon 1976d). Between Tolkapaya and NEY-SEY there are forms that show metathesis. Usually metathesis involves /h/, although metathesized sequences are not entirely limited in this way. Metathesis is examined here only because (1) it has bearing on the classification of the Pai languages; (2) it triggers aspiration and (3) sonorant devoicing; and (4) plays a role in syllabicity and other aspects of the phonology.

4.751 The single example of metathesis not involving /h/ is:

1. /haŋkrā·pa/  'butterfly' NEY-SEY
   /haŋkpā·ra/  'butterfly' WY

4.752 The following list of forms are metatheses involving /h/. The first of each set is from Grace Mitchell (Prescott NEY), the second from Warran Gazzam (WY or Tolkapaya):
1. /ß1hê/ : /phlé/ 'old man'
2. /ê³omhû/ : /ê³mhû/ 'pipe'
3. /klhô/ : /khlô/ 'boat'
4. /pà·hkâya/ : /pa·khâya/ 'stranger'
5. /thpâ·/ : /tpâ·/ 'fishhook cactus'
6. /ê³htä/ : /ê³tä/ 'reed, cane'
7. /thkô·/ : /tkhô·/ 'tripe'
8. /khtäta/ : /ktäta/ 'procupine'

4.753 Occasionally one finds aspiration in one dialect with no corresponding /h/ in the other:
1. /i·tât/ : /i·thât/ 'back, spine'
2. /ôipä/ : /ôphä/ 'split'

4.754 One example shows a contrast in NEY and between Ch and Chʰ:
1. /mâthâ·ßi/ : /mthâ·ßi/ 'north'

4.755 It must be borne in mind that there are occurrences of postaspirated stops and devoiced sonorants in all Yavapai dialects. Some of these may have arisen from metathesis. For others there is no internal evidence to suggest this:
1. /ê³hûra/ 'winter'
2. /ê³hu·ri/ 'year'
3. /ê³khô/ 'piñon'
4. /ê³khô/ 'daughter's child'
5. /ê³khwâ/ 'metal; knife'
6. /ʔhmâ/ 'quail'
7. /ʔhnâːla/ 'gourd rattle'
8. /ʔhnô/ 'shoe'
9. /hlô/ 'cottontail'
10. /hrûyi/ 'take off, doff'
11. /nôhû/ 'gamble'

4.80 Lenition

Lenition is a pan-Yuman phenomenon (see Langdon 1975a). There are three types of synchronic lenition or articulatory weakening in Yavapai:

1. Partial voicing of the nonaspirated or plain stops: /p, č, kv, k, kw, q, qw/. This excludes /t/, whose articulation is always fortis. The partial voicing is most prominent in posttonic environments of voiced segments.

2. Spirantization of /q/ and /qw/ in Allegretto, the realization being either voiced or voiceless: /u/ and /û/ or /x/ and /û/. (Historically *p underwent a similar spirantization.) If /q(û)/ undergoes more than allophonic spirantization, this will be seen as a change affecting the extreme points of articulation within the oral cavity.

3. Loss of point of articulation of the fricative /θ/: /h/, realized as [h] or [ʕ]. This is the most interesting lenition in that it brings with it lexical and historical problems.
4.801 Grace Mitchell and Warren Gazzam generally lenited /θ/ in Allegretto, when /θ/ occurred in the deictics /nθá-/ 'that' and /nθé-/ 'there.' That is, in connected discourse (never in citation form) they occur as /nhá-/ and /nhé-/, sometimes simply as /há-/ and /hé-/, that is, weakened to the extent that the prefix /n-/ is also lost. Occasionally I also observed a sporadic lenition of a pretonic /θ/ in other forms; for example, /kθá/- ~ /khár/ 'dog.'

4.802 In the speech of Mitchell and Gazzam the lenited forms (the forms with /h/ instead of /θ/) were semantically identical to the forms with /θ/. Mitchell refused to acknowledge that she used the lenited forms. When I played them back for her on tape, she invariably repeated the sentence with the non-lenited form, thereby restoring the /θ/. It seems from her behavior vis-à-vis /θ/ vs. /h/ that the lenition was highly stigmatized.

4.8021 Other Yavapai speakers, those a generation younger, do not view θ-lenition as stigmatized. They go so far as to assign differences in meaning between /nθá-/ and /nhá-/ and between /nθé-/ and /nhé-/, declaring the latter, the lenited form, to refer to the more remote deictically. In other words the allophonic alternation has been lexicalized. (See Gensler 1982) It is likely that a similar
lexicalization or grammaticization might have occurred in the verbal morphology, but this is beyond the scope of this study.

4.803 θ-lenition is of no great antiquity. It occurred after a similar lenition, which can be called x\(^{(w)}\)-lenition, during which *x and *x\(^{w}\) lost their velarization and became /h/ and /h\(^{w}\)/. This is quite clearly the case since the phonetic realization of the lenited deictics is [nɪfɪ\(^{a}\)ʰ] and [nɪfɪ\(^{e}\)ʰ]. If the /h/ were of any antiquity and not historically different from /θ/, then one would expect *[naxɪ\(^{a}\)ʰ] and *[naxɪ\(^{e}\)ʰ] as phonetic outputs. One would expect *[kaΧɪ\(^{a}\)ʰ] instead of [kθ�ɪ\(^{a}\)ʰ], a possible variation with inserted vowel of [kθ�ɪ\(^{a}\)ʰ].\(^{17}\)

4.90 Conclusion

I have shown that the operation of the General Syllabicity Rule can account for two of the four major areas of phonological interest in Yavapai -- the unstressed vowels, h-phenomena, vowel length, and pitch. The GSR accounts for the unstressed vowels and h-phenomena and treats them at the syllabic level rather than at the segmental level.

In this chapter I have also accounted for many minor areas of phonological interest. Yet there remains the problem of vowel length and pitch. While I feel confident that the problem -- and I believe it is only one problem --
will be resolved, I regret that I have been unable to make any significant contribution to the analysis of length and pitch at this writing. I hope to explore in future works the operation of a reverse GSR and its effect on glides, and many other problems in Yavapai phonology that I was not able to treat before I completed this work. They will have to wait.
NOTES TO CHAPTER FOUR


4. In making the selection for these and other example sets, I have preferred words containing short vowels. Words containing vowels of two or three morae in length are given as examples only if there is no appropriate word with a short vowel (that is, one of one mora).

5. The reader may expect here the form for 'fire.' This is not possible since 'fire' is /ʼpɛ/ and contains the initial glottal stop called a noun marker. The initial glottal stop is lost only when 'fire' appears in compounds.
6. The tendency to avoid the monosyllable has been carried even further in Havasupai and Hualapai by the addition of obligatory suffixes in citation forms.

7. Langdon (1970:23-24), in writing about Diegueño phonotactics, makes these two points quite clear; namely, that (1) there is "the obvious preference of the language for words of at least two syllables" and that (2) "the /ʔ-/ may be omitted under some circumstances in connected discourse... or compounds...." Her further suggestion "that the strongly stressed character of the language, demanding... a balancing of stressed and unstressed syllables... may contribute to the maintenance of a large number of forms with initial ʔ-e-" is equally true of Yavapai.

8. One must also not be too quick in dismissing occurrences of /ʔ-/ as phonotactic constraints; that is, one might make the statement that all occurrences of an initial /ʔ-/ before a noun of a CV-shape are predictable and that they are deleted (or never inserted) only in those instances where ambiguity would be created, i.e. where the /ʔ-/ would be interpreted as a first-person marker. Stative verbs, for example, may take an initial /ʔ-/, since they require a prefix /pà-/ 'human attribute' in order to be "personal" application. An example of this is /ʔk'vû·li/ 'long, tall,' which cannot refer to humans without the
prefixation of /pà-/ is 'tall (about humans)'. The /-/ has been deleted, since it would now create ambiguity: /pəkûl/ 'he is tall/she is tall' contrasts with /pàkû/ 'I am tall'. This would seem an excellent example of the appearance and disappearance of /-/ in initial position. There are, however, some occurrences of /-/ on verbs which cannot be explained by invoking deletion motivated by disambiguation. For example,

(1) /rû/i/ 'dry'
(2) /rûyi/ 'hot'

are assumed to have the same root ru 'hot'. The addition of the infinitival /-i/ preceded by its desyllabicized clone /y/ and the prefixation of /-/ all are required to produce /rûyi/. Suffixation of /-l/ 'mediopassive' and the automatic /-i/ produce /rûli/. Thus far all has proceeded predictably; however, the addition of the prefix /t-/ 'causative' to (1) and (2) produces:

(3) /trû/i/ 'dry v.t.'
(4) /trûyi/ 'heat v.t.'

One does not get *trûyi; that is, the /-/ is not deleted; yet no explanation in terms of what has been advanced so far is satisfactory; that is, there can be no phonotactic constraint to observe and no ambiguity to avoid.

9. /sâl/ 'hand, arm' seems to violate these constraints in two ways: it has no initial /-/, since this
would be interpreted as 'first person possessor.' It also has no absolutive /-a/. This may be related to the extra¬
ordinary semantic potential of /sål/ because of its phonaesthetic versatility, but it is unclear how.

10. Langdon (1970:19-20) remarks on gemination of consonants in Diegueño. This makes one feel it is a pan-
Yuman phenomenon, although in Diegueño it does not have the far-reaching effects that it has in Yavapai. Langdon states that gemination or "lengthening of consonants... seems to be restricted to very careful speech... rarely recorded in texts." This is true, of Yavapai, as well. It is the generalized syllabicity which the gemination leaves in its wake rather than the gemination itself which is of importance to Yavapai phonology.

11. It is actually only the cloned stops and the first components of the affricate that are unreleased:

\[
\begin{align*}
\text{p:} & \quad [\Sigma p^\text{\text{L}}.p^\text{\text{L}}] \\
\text{t:} & \quad [\Sigma t^\text{\text{L}}.t^\text{\text{L}}] \\
\text{č:} & \quad [\Sigma t^\text{\text{L}}.t^\text{\text{S}}^\text{\text{S}}] \\
\text{k\text{\text{R}}:} & \quad [\Sigma k^\text{\text{L}}.k^\text{\text{R}}^\text{\text{R}}] \\
\text{k:} & \quad [\Sigma k^\text{\text{L}}.k^\text{\text{S}}] \\
\text{k\text{\text{W}}:} & \quad [\Sigma k^\text{\text{L}}.k^\text{\text{W}}] \\
\text{q:} & \quad [\Sigma q^\text{\text{L}}.q^\text{\text{S}}] \\
\text{q\text{\text{W}}:} & \quad [\Sigma q^\text{\text{L}}.q^\text{\text{W}}]
\end{align*}
\]

13. The First Realization may also be written more narrowly [ʔaʰ.pʰal.ka] or [ʔa.hʰal.ka]; that is, the /h/ is ambisyllabic. In Allegretto it disappears altogether. In any case one can speak here of preaspiration. In the Second Realization the /h/ is clearly not ambisyllabic but fuses rather with the stop, producing a (post)aspirated stop: [ʔa.pʰal.ka].

14. Langdon (p.c.) believes that this is historically *kʰw:i:y-i and that the y is the same as in Yuma /xa·y/ 'wet' and others (see Halpern).

15. In Havasupai this word is /sme/ in the singular and /smay/ in the plural (Hinton, p.c.).

16. The apparent cognate in Havasupai is /wakmuk/, which varies freely with /wakmok/, has lost the ɬ but still retains the u/o-variation that seems to be otherwise confined to the position before sonorants (Hinton, p.c.).

17. Hinton (1979:3-38) discusses the alternation between /ʃ/ and /h/ in Mojave, as a possible indication of lenition of all fricatives excepts /β/.

18. Margaret Langdon continues to pursue this problem, if only indirectly, and continues to get closer to the solution as more data become available. In "Did Proto-Yuman
Have a Prefix *a:-?" (ms.), she presents some tantalizing correspondences sets showing the interrelatedness of length and pitch (and stress).
1. person, Indian  
   /ʔpə:/
   ʕʔ.pə:
   [ʔpəلى.pə:]

2. tired  
   /bpiː/
   b.p.iː
   [bəpلى.piː]

3. hard, strong  
   /θpíɾi/
   ʔθ.pí.ɾi#
   [θəpلى.piɾi]

4. strengthen  
   /θpíɾbiː/
   ʔθ.píɾ.bi#
   [θəpلى.piɾ.bi]

5. touch  
   /tpâθi/
   t.pâθi#
   [təpلى.pâθi]

6. hoe v.  
   /ʔpēqi/
   ʔpē.qi#
   [ʔpəلى.pē.qi]

7. insert v.  
   /ʔpú/
   ʔpú#
   [ʔpəلى.pú]

8. clover  
   /kpiɾlә/  
   k.piɾ.lә#
   [kəpلى.piɾ.lә]
9. freeze  
/θɑː/  
#θp.ɑ̃#  
[θɛp7.ɑ̃]

10. wink  
/θɑqɨi/  
#θp.pɑ̃.q.ɨ#  
[θɛp7.pɑq7.ɨ]

11. lean v.  
/spɛ/  
#s.pɛ#  
[spɛ]

12. know  
/spɔ/  
#sp.pɔ#  
[spɛ]

13. grinder  
/hpi/  
#hp.pi#  
[hɛp7.pi]

14. leg  
/mpɑɾa/  
#mp.på.ɾa#  
[mɛp7.på.ɾa]

15. father's older sister  
/npi/  
#np.pi·#  
[nɛp7.pi·]

16. father's father  
/npɔ·/  
#n.pɔ·#  
[nɛp7.pɔ·]
17. itch
   /ttmō/  
   #tt.tm.mō#  
   [tt̚tt.m̚m̚]  

18. spit v.
   /ctúhi/  
   #ct.túhi#  
   [t̚t̚t̚t̚.tú.hi]  

19. kick
   /ktōhi/  
   #kt.tōhi#  
   [k̚t̚t̚t̚.tō.hi]  

20. collapse
   /βtōtpi/  
   #βt.tōtpi#  
   [β̚t̚t̚.t̚t̚.p̚i]  

21. many; old, grown
   /ʔt̚e/  
   #ʔ.t̚e#  
   [ʔ̚t̚.t̚e]  

22. thorny
   /ʔt̚ətha/  
   #ʔ.t̚.ə.tha#  
   [ʔ̚t̚.t̚.ə.tha]  

23. snap shut
   /βt̚əps̚i/  
   #β.t̚əps̚i#  
   [β̚t̚.t̚əps̚]  

24. midnight
   /hi.p̚ək s̚ist̚t̚u.yi/  
   #hi.p̚ək s̚i.β.t̚u.yi#  
   [hi.p̚ək s̚i.β̚t̚.t̚u.yi]
25. cut, plow
   /stɪ:ti/
   #s.tɪ:.ti#
   [stɪ̃.ti:ti]

26. prickly pear cactus
   /hté/
   #ht.té#
   [høtɬ.té]
27. dress /tchéqβa/
   #tč.čéq.βa#
   [tšč.čéq.βa]

28. step on /tché.yi/
   #tč.čá.yi#
   [tšč.čá.yi]

29. step v. /kčI/
   #k.čI#
   [kščI]

30. fish /tché.βi/    #tšč.βi#
    [tšč.βi.]

31. kiss /bčI0...1/
    #bč.čI0.1#
    [bščI0.1]

32. daughter (man
    speaking) /βčé./
    #b.čé#
    [βščI]

33. squaw dress /θčéqβa/, /tchéqβa/
    #θč.čéq.βa#
    [θšč.čéq.βa]

34. sweep /sčI/
    #sč.čI#
    [sščI]
35. stick in
   /sčůlβi/
   #s.čůl.βi#
   [set].tšůl.βi]

36. pluck
   /sčó/
   #s.čó#
   [set].tšó]

37. Milky Way
   /hčä-/  
   #hč.čä-#
   [het].tšä-]

38. sneeze
   /hamčiθɔki/
   #ham.čiθ.ɔki#
   [ham.čiθ.ɔki]

39. hungry
   /mčá.yi/
   #mč.čá-.yi#
   [met].tšá-.yi]

40. first cousin
   /nčä-/  
   #n.čä-#
   [net].tšä-]
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>41. cut with an ax</td>
<td>/tKyáti/</td>
</tr>
<tr>
<td></td>
<td>#t.kyá.ti#</td>
</tr>
<tr>
<td></td>
<td>[tek'kyá.ti]</td>
</tr>
<tr>
<td>42. push</td>
<td>/čKyé./</td>
</tr>
<tr>
<td></td>
<td>#č.kyé.#</td>
</tr>
<tr>
<td></td>
<td>[tŠk'kyé.]</td>
</tr>
<tr>
<td>43. knife. ax</td>
<td>/čKyáti/</td>
</tr>
<tr>
<td></td>
<td>#č.kyá.ti#</td>
</tr>
<tr>
<td></td>
<td>[tŠk'kyá.ti]</td>
</tr>
<tr>
<td>44. bite</td>
<td>/čKyô/</td>
</tr>
<tr>
<td></td>
<td>#č.kyô#</td>
</tr>
<tr>
<td></td>
<td>[tŠk'kyô]</td>
</tr>
<tr>
<td>45. long</td>
<td>/?Kyú-li/</td>
</tr>
<tr>
<td></td>
<td>#?k.kyú-.li#</td>
</tr>
<tr>
<td></td>
<td>[?ek'kyú-.li]</td>
</tr>
<tr>
<td>46. the whole body</td>
<td>/má:t hıθkvëtk/</td>
</tr>
<tr>
<td></td>
<td>#má:t hıθ.kvë.tk#</td>
</tr>
<tr>
<td></td>
<td>[má:t hıθ.kvë.tk]</td>
</tr>
<tr>
<td>47. shatter v.i.</td>
<td>/θKyä.ybi/</td>
</tr>
<tr>
<td></td>
<td>#θkya'.yb#</td>
</tr>
<tr>
<td></td>
<td>[θkya'.yb]</td>
</tr>
<tr>
<td>48. breastbone</td>
<td>/skYäta/</td>
</tr>
<tr>
<td></td>
<td>#sk.kyä.ta#</td>
</tr>
<tr>
<td></td>
<td>[sek'kyä.ta]</td>
</tr>
</tbody>
</table>
49. step into

/mk syslog

#mk syslog

[msk1 syslog]
50. add  /tkí/  
    #t.kí#
    [tɔk⁷.kí]

51. split /tká·βi/  
    #tk.ká·βi#
    [tɔk⁷.ká·.βi]

52. wide  /čká·mi/  
    #čk.ká·mi#
    [tʃk⁷.ká·.mi]

53. slippery  /k̡ǐsli/  
    #k̡.kìs.ki#
    [kək⁷.kìs.ki]

54. bird species  /kku·/  
    #k.ku·#
    [kək⁷.ku·]

55. jackrabbit  /ʔkúla/  
    #ʔk.kú.la#
    [ʔək⁷.kú.la]

56. where?; NEG /βkéʔ/  
    #β.kéʔ#
    [βək⁷.kéʔ]

57. who(m)?  /βkáʔ/  
    #βk.káʔ#
    [βək⁷.káʔ]
58. fence n. /βkóβi/
   #β.kó.βi#
   [βək̚l.κό.βι]

59. bridel /yàskãβi/
   #yà.sk.kã.βi#
   [yà.σek̚l.kã.βι]

60. glide v. /skâri/
   #sk.kâ.ri#
   [sekl.kâ.ri]

61. great-grandmother;
    great-aunt /nkó/
    #nk.kó#
    [nək̚l.kó]

62. other, different /hké/
    #hk.ké#
    [hək̚l.ké]
<p>| | |</p>
<table>
<thead>
<tr>
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<th></th>
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</thead>
<tbody>
<tr>
<td>63.</td>
<td><strong>win</strong></td>
</tr>
<tr>
<td>64.</td>
<td><strong>lung(s)</strong></td>
</tr>
<tr>
<td>65.</td>
<td><strong>cloud</strong></td>
</tr>
<tr>
<td>66.</td>
<td><strong>something</strong></td>
</tr>
<tr>
<td>67.</td>
<td><strong>gallop</strong></td>
</tr>
<tr>
<td>68.</td>
<td><strong>squeeze, wring out</strong></td>
</tr>
<tr>
<td>69.</td>
<td><strong>wide</strong></td>
</tr>
<tr>
<td>70.</td>
<td><strong>shell, peel</strong></td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 63.  | /tkw:i:li/  
#tk.kw:i:li#  
[tak].kw:.li] |
| 64.  | /čkwál/  
#čk.kw ál#  
[tək].kw ál] |
| 65.  | /ʔkwᵊ/  
#ʔk.kw i#  
[ʔek].kw i] |
| 66.  | /ʔkwè·/  
#ʔ.kwè·#  
[ʔek].kw è·], ['ek].kw è·] |
| 67.  | /βkwa·kβakwa:kβapi/  
#βk.kw a·k.βk.kw a:k.βa.ʔi#  
[βek].kw a·k.βek].kw a:k.βa.ʔi] |
| 68.  | /θkwɪ·/  
#θk.ɪ#  
[θk].kw i] |
| 69.  | /θkwá·bi/  
#θk.wa·.bi#  
[θk].kw a·.bi] |
| 70.  | /skwá·ni/  
#sk.kw a·.ni#  
[sək].kw a·.ni] |
71. rolled up

/mkwirβi/

#mk.kwir.βi#

[mk irritation]
72. leak v. /kqāqi/
   #kq.qāqi#
   [koq].qā.qi]
73. fox /qq̣or/
   #q.q̣or#
   [q̣eq].q̣or]
74. ditch, furrow /q̣i:ra/
   #q̣i:ra#
   [q̣eq].q̣i:ra]
75. sunflower /q̣ata/
   #q̣q̣a.taq̣a#
   [q̣eq].q̣a.ta]
76. sticky /βq̣eq̣o:i/
   #β.q̣e.q̣e.q̣o:i#
   [βq̣eq].q̣e.q̣e.q̣o:i]
77. stab /βq̣ami/
   #βq̣q̣a.mi#
   [βeq].q̣a.mi]
78. shove /sq̣ami/
   #sq̣q̣a.mi#
   [sq̣eq].q̣a.mi]
79. egg /sq̣a:wa/
   #s.q̣a:wa#
   [sq̣eq].q̣a:wa]
80. rub back and forth (violin) /hqīsqī'sī/

#hq.qls.qī.sī#

[hqql.qls.qi.s.i]
<table>
<thead>
<tr>
<th></th>
<th>Word</th>
<th>Pronunciation</th>
<th>Transcription</th>
</tr>
</thead>
<tbody>
<tr>
<td>81.</td>
<td>rifle</td>
<td>/kqˈwáθ/</td>
<td>#kq.qwáθ#</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[koqʷ.ʔ.qwáθ]</td>
</tr>
<tr>
<td>82.</td>
<td>uncover</td>
<td>/ɬqʷɑti/</td>
<td>#ɬq.qwɑ.ti#</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[tɕqʷ.ʔ.qwɑ.ti]</td>
</tr>
<tr>
<td>83.</td>
<td>light v.t.</td>
<td>/tqʷɑti/</td>
<td>#tq.qwɑ.ti#</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[təqʷ.ʔ.qwɑ.ti]</td>
</tr>
<tr>
<td>84.</td>
<td>deer</td>
<td>/ʔqʷá:ka/</td>
<td>#ʔ.qwá:.ka#</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[ʔəqʷ.ʔ.qwá:.ka]</td>
</tr>
<tr>
<td>85.</td>
<td>yellow</td>
<td>/ʔqʷáθi/</td>
<td>#ʔ.qwá.θi#</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[ʔəqʷ.ʔ.qwá.θi]</td>
</tr>
<tr>
<td>86.</td>
<td>broken</td>
<td>/βqʷáqβi/</td>
<td>#βq.qwáq.βi#</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[βəqʷ.ʔ.qwáq.βi]</td>
</tr>
<tr>
<td>87.</td>
<td>stirred</td>
<td>/sqʷɑrʔi/</td>
<td>#sq.qwɑr.ʔi#</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[sqəqʷ.ʔ.qwɑr.ʔi]</td>
</tr>
<tr>
<td>88.</td>
<td>flying squirrel</td>
<td>/mqwɨθ/</td>
<td>#m.qwɨθ#</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[məqʷ.ʔ.qwɨθ]</td>
</tr>
</tbody>
</table>
89. pulverize
   /mqwāni/
   #mq.qwā.ni#
   [meq₁.qwā.ni]

90. crane
   /nqwâ/
   #nq.qwâ#
   [nq₁.qwâ]

91. plant species
   /mtqwI•sa/
   #mt.tq.qwI•sa#
   [met₁.teq₁.qwI•sa]
92. close, cover
   /tʰəmi/  
   #tʰəmi#  
   [tʰəŋ.əmi]

93. boil
   /tʰəli/  
   #tʰəli#  
   [tʰəŋ.əli]

94. gather (acorns)
   /ʃə.ə.mbi/  
   #ʃə.ə.mbi#  
   [ʃəŋ.ə.mbi]

95. pointing
   /ksikʔita/  
   #ks.ikʔita#  
   [ks.ikʔita]

96. canyon
   /kʔiˑla/  
   #kʔiˑla#  
   [kʔiˑla]

97. basket, plate
   /kʔúˑ/  
   #kʔúˑ#  
   [kʔúˑ]

98. biscuit
   /myəlqʔora/  
   #myəlqʔora#  
   [mi.yəlqʔora]

99. saguaro
   /ʔʔʔ/  
   #ʔʔʔ#  
   [ʔʔʔ]
100. become visible
    /βə′βi/
    #βə′βi#
    [βə′βi]
101. close (door)
    /sə′ami/
    #sə′ami#
    [sə′ami]
102. trap; skewer
    /sə′oni/
    #sə′oni#
    [sə′oni]
103. sour, bitter
    /θə′li/, /tə′li/
    #θə′li#
    [θə′li]
104. louse
    /hə′l/
    #hə′l#
    [hə′l]
105. antelope
    /mə′ul/
    #mə′ul#
    [mə′ul]
106. sweat
    /ŋə′o/
    #ŋə′o#
    [ŋə′o]
107. sacred
    /sə′rióiyi/
    #sə′rióiyi#
    [sə′rióiyi]
108. sift  
/sβû·yi/  
#sβ.û·yi#  
[t}sβ.û·yi]

109. pray, ask for  
/kβá·bi/  
#kβ.á·bi#  
[kβ.á·bi]

110. burro  
/yà·lβû·ra/  
#yà·lβ.û·ra#  
[yà·lβ.û·ra]

111. joint  
/sβálβô/  
#sβ.álβô#  
[sβ.álβô]

112. wait for  
/sβô/  
#sβô#  
[sβ.ô]

113. arrive pl. subj.  
/nβáː/  
#nβ.áː#  
[nβ.áː]

114. there  
/nβêʔ/  
#nβ.êʔ#  
[nβ.êʔ]

115. claw, nail  
/slhβöː/  
#sl. lh.βöː#  
[sl. la.φöː]
116. spotless /təəmi/

117. suck (blood) /təəeqi/

118. wash /təəuli/

119. burden basket /kəəq/

120. basket on back /qəəq/

121. salt /qəəi.ə/ 

122. breathe /pəəeq/

123. cave in /pəəʊ.ɾəi/
124. mother's older sister

125. over there
<table>
<thead>
<tr>
<th>Number</th>
<th>Word</th>
<th>Phoneme</th>
<th>Transcription</th>
</tr>
</thead>
<tbody>
<tr>
<td>126</td>
<td>squeal</td>
<td>/tsìtsì/</td>
<td>#ts.sl.ts.sí#</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[tś.sl.tś.sí]</td>
</tr>
<tr>
<td>127</td>
<td>crow</td>
<td>/qsåq/</td>
<td>#qs.såq#</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>[qś.såq]</td>
</tr>
<tr>
<td>128</td>
<td>mushroom</td>
<td>/qsåmta/</td>
<td>#q.sám.ta#</td>
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<td>[qś.sá.m.ta]</td>
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<tr>
<td>129</td>
<td>mole (on skin)</td>
<td>/qsôba/</td>
<td>#q.sô.ba#</td>
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<td></td>
<td></td>
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<td>[qś.sô.ba]</td>
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<td>130</td>
<td>shadow</td>
<td>/ʔsé/</td>
<td>#ʔ.sé#</td>
</tr>
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<td></td>
<td></td>
<td>[ʔś.sé]</td>
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<tr>
<td>131</td>
<td>bile</td>
<td>/βsú/</td>
<td>#β.sú#</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>[βś.sú]</td>
</tr>
<tr>
<td>132</td>
<td>woman</td>
<td>/msī/</td>
<td>#ms.sí#</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[mś.sí]</td>
</tr>
<tr>
<td>133</td>
<td>smell (like blood)</td>
<td>/msīwi/</td>
<td>#m.sī.wi#</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[mś.sī.wi]</td>
</tr>
</tbody>
</table>
134. fear

/mʃeɹ/
135. move v.t. /thǐni/  
    #t.hí.ni#  
    [ta.hí.ni]  
136. cloth /thūma/  
    #th.ū.ma#  
    [ta.hū.ma]  
137. avenge /čhāri/  
    #čh.hā.ri#  
    [tša.hā.ri]  
138. follower /khāβa/  
    #kh.hā.βa#  
    [ka.hā.βa]  
139. horse /ʔhát/  
    #ʔ.h.hát#  
    [ʔa.ʔát]  
140. tail; dress /βhē/  
    #β.hē#  
    [βa.hē]  
141. guts, entrails /βhā/  
    #βh.hā#  
    [βa.hā]  
142. hang v.t. /shá/  
    #s.há#  
    [sa.há]
143. hundred
\( /\text{shúna}/ \)
\#s.hú.na#
[sa.hú.na]

144. ashes
\( /\text{mhú(')l}/, \)
\( /\text{mhu(')l}/ \)
\#m.hú(')l# \#m.mh.hú(')l#
[ma.hú(')l] \[m.m.a.hú(')l]

145. liquid
\( /\text{nháya}/ \)
\#n.há.ya#
[na.há.ya]
146. brick-shaped /
/\ch\u00f3\b\a/
#\ch.h\u00f3\b\a#
[t\sa.h\u00f3.\b\a]

147. skunk /
/k\h\i.wa/
#k.h\i.wa#
[ka.h\i.wa]

148. blood /
/\ch.h\u00e1\t(a)/
#\ch.h\u00e1.ta#
[\a.h\u00e1.ta]

149. bristle, pop up /
/\b.h\u00f3.\b\i/
#\b.h\u00f3.\b\i#
[\b.a.h\u00f3.\b\i]

150. settle (coffee grounds) /
/\0.h\w\i.la/
#\0.h.h\w\i.la#
[\0.a.h\w\i.la]

151. badger /
/mh\u00e1:/
#m.h\u00e1:#
[ma.h\u00e1:]

152. claw, nail /
/s\a.lslh\u00f3./
#s\a.l.sl.h.h\u00f3.#
[s\a.l.sl.la.h\u00f3.]
153. put out, turn off /tmáči/
#tm.máči#
[tm.máči]
154. female /čmī·ya/
#čm.mī·ya#
[tšm.mī·ya]
155. bring, deliver /kmí·/ #km.mí·#
[km.mí·]
156. mistletoe /qmo:sa/ #q.mö:sa#
[qm.mö:sa]
157. wood rat /?málka/ #?ma.á.lk.ka#
[?m.má.lk.ka]
158. sundown /βmáρbi/ #βm.már.bi#
[βm.már.bi]
159. lend /θmá/ #θm.má#
[θm.má]
160. lose /smē·/ #s.mē·#
[sám.mē·]
161. sleep /smá:/
#smá:#
[smá:]

162. tall; ambitious; energetic /hmi/
#h.mí#
[hmi]

163. container /hmáti/
#hmáti#
[hmáti]

164. three /hmúki/
#hmúki#
[hmúki]

165. leave v.t. /nmúki/
#nmúki#
[nmúki]

166. settle, live on /nmáti/
#nmáti#
[nmáti]
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>167. meadow</td>
<td>/tná·kβa/</td>
<td>#tn.ná.kβa#</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[tn.ná.kβa]</td>
</tr>
<tr>
<td>168. lose; drop</td>
<td>/čná·li/</td>
<td>#čn.ná.li#</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[tšn.ná.li]</td>
</tr>
<tr>
<td>169. stirrups</td>
<td>/kní·li/</td>
<td>#kn.ní.li#</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[kŋ.ní.li]</td>
</tr>
<tr>
<td>170. muddied</td>
<td>/qnu·βi/</td>
<td>#qń.nú.βi#</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[qŋ.nú.βi]</td>
</tr>
<tr>
<td>171. mesquite tree</td>
<td>/qńá·li/</td>
<td>#qń.ná.li#</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[qŋ.ná.li]</td>
</tr>
<tr>
<td>172. cave in</td>
<td>/βná·m...i/</td>
<td>#βn.ná.m.i#</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[βŋ.ná.m.i]</td>
</tr>
<tr>
<td>173. rope</td>
<td>/snáβa/</td>
<td>#sn.ná.βa#</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[sŋ.ná.βa]</td>
</tr>
<tr>
<td>174. want</td>
<td>/hná:qi/</td>
<td>#hn.ná:qi#</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[hŋ.ná:qi]</td>
</tr>
</tbody>
</table>
175. yucca
   /mnāt/
   #m.nāt#
   [mŋ.nāt]

176. belly
   /mnúna/
   #m.nû.na#
   [mŋ.nû.na]
177. hollow /čnúlkbi/
   #čn.núlk.bi#
   [tšn.núlk.bi]

178. white oak /tník/
    #tn.ník#
    [tn.ník]

179. mother-in-law /kni·ya/
     #k.ní·ya#
     [kn.ní·ya]

180. slight rise in land /knána/
     #k.ná.na#
     [kn.ná.na]

181. sotol cf. poppy /qnúix/
     #qn.núix#
     [qn.núix]

182. sun /?ná:
     #?n.ná:
     [?n.ná:]

183. sit down /βná(·)nòl/
     #βn.ná(·)nòl#
     [βn.ná(·)nòl]

184. exercise /hnómi/
     #h.nó.mi#
     [hn.nó.mi]
185. fine, perfect tasty

186. this/that
187. tired
/tlähbi/
#tl.láh.bi#
[tl.láh.bi]

188. limp from arthritis
/klüm³l/
#kl.lüm.³l#
[kl.lüm.³l]

189. limp
/glümi/
#gl.lü.mi#
[gl.lü.mi]

190. bad
/³lå/
#³l.lå#
[³l.lå]

191. tired
/þläh³l/
#þl.láh.³l#
[þl.láh.³l]

192. fry
/slii:
#sl.lii:
[sl.lii]

193. paperflower
/slé/
#s.lé#
[sl.lé]

194. milk v.
/hli/
#h.lî#
[h.lî]
195. moon
   /hlå/
   #h.lå#
   [h.lå]  

196. cottontail
   /hlô/
   #h.lô#
   [h.lô]  

197. measles
   /mlûôa/
   #ml.lû.ôa#
   [ml.lû.ôa]  

198. tame
   /nlê.mi/
   #nl.lê.mi#
   [nl.lê.mi]
199. dislike /q̞ə(·)/
#q̞ə.q̞ə·#
[q̞ə.q̞ə·]
200. dry v.t. /trúbi/ #t.rú.bi# [tr.rú.bi]
201. important /'rýé/, /'ríyi/ #r.ry.yé# #r.rí.yi# [r.rí.yé] [r.rí.yi]
202. it hurt (interjection) /rã·/ #r.rã·# [r.rã·]
203. jump /príti/ /prít̃i/. #br.rí.ti# #br.rít̃i# [br.rí.ti] [br.rít̃i]
204. doubt; think /ðr̃i/ #ð.r̃i# [ð.r̃i]
205. five /θr̃api/ #θ.r̃api# [θ.r̃api]
206. pierce /θrúyo/ [θ.rú.yo# [θ.rú.yo]
207. brim; cliff /hr̃b̃a/ #h.ré.ba# [h.ré.ba]
208. hooked

209. untie, take off

210. bean(s)
211. tell a lie
/t'yé/
#t'yé#
[t'i.yé]

212. desert v.
/t'yé·mi/
#t'yé·mi#
[t'i.yé·mi]

213. bone
/č'yá·ka/
#č'yá·ka#
[tši.yá·ka]

214. set, put down
/č'yó·/
#č'yó#
[tši.yó·]

215. gray hair
/kyá·ya/
#kyá·ya#
[ki.yá·ya]

216. really, very
/qyáti/
#qyá.ti#
[qi.yá.ti]
(intensifier)

217. I think
/?yí·/
#?yí#
[?i.yí·]

218. mesquite beans
/?yá·/
#?yá·#
[?i.yá•]
219. this /βyá/
    #β.yá#
    [βi.yá]

220. mix /βyá.li/
    #β.yá.li#
    [βi.yá.li]

221. half-peeled juniper /čōqa əyá1qa/
    #čō.qa əy.yá1.qa#
    [čō.qa əi.yá1.qa]

222. pull /syō.mi/
    #sy.yō.mi#
    [si.yō.mi]

223. high /myá/    
    #my.yá#
    [mi.yá]

224. tomorrow /nyé:kkkkéd./
    #ny.yé:k.k.kθéd.#
    [ni.yé:kθkθθ.]
225. rest  /twë·mi/
   #tw.wë·mi#
   [tu.wë·mi]

226. scatter  /čwâ·wi/
   #čw.wâ·wi#
   [tšu.wâ·wi]

227. set, put down  /čwò·/
   #č.wò·#
   [tšu.wò·]

228. dove  /kwë/
   #kw.wë#
   [ku.wë]

229. cicada  /kwâ·/
   #k.wâ·#
   [ku.wâ·]

230. hair, scalp  /qwâwa/
   #qw.wâ.wa#
   [qu.wâ.wa]

231. mouse  /qwë·/
   #qw.wë·#
   [qw.wë·]

232. carry (a bucket)  /b'wâli/
   #b'wâ.li#
   [b'u.wâ.li]
233. placid
   /θwē/
   #θwē#
   [θu.wē]

234. scrape (hair from skin)
   /swē/
   #swē#
   [su.wē]

235. two
   /hwáki/
   #hwáki#
   [hu.wá.ki]

236. warm
   /nwē/
   #nwē#
   [mu.wē]

237. cook, prepare
   /nwē\ri/
   #nwē\ri#
   [nu.wē\ri]

238. over there
   /nwē\?
   #nwē\#
   [nu.wē\?]
239. kidney /čmpąbša/
#č.m.pąbša# ~ #č.m.pąbša#
[tš.m.pąbša] ~ [tš.m mop7.pąbša]

240. manzanita /čmpűk/
#č.m.pűk# ~ #č.m.mpuk#
[tš.m.pűk] ~ [tš.m mop7.pűk]

241. hump(back) /kmpűlša/
#km.pűlša# ~ #km.mpułša#
[km.pűlša] ~ [km mop7.pűlša]

242. brain(s) /qmpąya/
#qm.pą.ya#
[qm.pą.ya]

243. brush, plant /?mpąča/
#?m.pąča# ~ #?m.mpuča#
[?m.pątša] ~ [?m.mop7.pątša]

244. mushroom /?mpóqa/
#?m.póqa# ~ #?m.mpuqpa#
[?mpóqa] ~ [?m.mop7.póqa]

245. fly /θmpůrka/
#θm.půr.ka#
[θm.půr.ka]

246. band for cradle /smpůrši/
#sm.půr.ši# ~ #sm.mpušrši#
[smpůr.ši] ~ [sm mop7.půr.ši]

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247. **tie up, knot v.** 
/kθpålβi/

#kθ.pål.βi# ~ #kθ.pål.lβ.βi#

[kθ.pål.βi] ~ [kθ.pål.lβ.βi]

248. **have cramps** 
/βpølβi/

#βθ.pål.βi# ~ #βθ.pål.lβ.βi#

[βθ.pål.βi] ~ [βθ.pål.lβ.βi]

249. **fishhook cactus** 
/tpʰâ:/ /thpâ:/

#tpʰ.pʰâ:# ~ #th.pâ:#

[tapʰ.pʰâ: ] ~ [ta.pâ:]

250. **ironwood** 
/ʔpʰâ.lka/, /hpâ.lka/

#ʔpʰ.pʰâ.l.ka# ~ #h.pâ.1.ka#

[ʔapʰ.pʰâ.l.ka] ~ [ʔa.pâ.1.ka]

/ʔpâlka/

~ #ʔh.pâ.l.k.ka#

~ [ʔa.pâ.1.ekl.ka]

251. **swell v.** 
/βl.pâ.ʔ?i/

#βl.pâ.tʔi# ~ #βl.pâ.tʔ.ʔi#

[βl.pâ.tʔi] ~ [βl.pâ.tʔʔ.ʔi]

252. **armpit** 
/slpu/

#sl.pú# ~ #sl.lp.pú#

[sl.pú] ~ [sl.lpʔ.pú]

253. **navel** 
/mlpú/

#ml.pû# ~ #ml.lp.pû#

[ml.pú] ~ [ml.lpʔ.pú]
<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>254. animal</strong></td>
<td>/ʼčpâya/</td>
</tr>
<tr>
<td></td>
<td>#ʼč.č.pâ.ya#</td>
</tr>
<tr>
<td></td>
<td>[ʼtš.tšp̪.pâ.ya]</td>
</tr>
<tr>
<td><strong>255. climb</strong></td>
<td>/čkp̪a/</td>
</tr>
<tr>
<td></td>
<td>#č.kp.p̪.'#</td>
</tr>
<tr>
<td></td>
<td>[tšk̪.k̪.p̪.p̪.]</td>
</tr>
<tr>
<td><strong>256. full</strong></td>
<td>/tmpiri/</td>
</tr>
<tr>
<td></td>
<td>#tm.mp.pi.ri#</td>
</tr>
<tr>
<td></td>
<td>[tm.m̪.p̪.pi.ri]</td>
</tr>
<tr>
<td><strong>257. kidney</strong></td>
<td>/čmp̪âb̪.a/</td>
</tr>
<tr>
<td></td>
<td>#č.m.p̪âb̪.a# ~ #č.m.mp.p̪âb̪.a#</td>
</tr>
<tr>
<td></td>
<td>[tšm.p̪âb̪.a] ~ [tšm.m̪.p̪.p̪.a]</td>
</tr>
</tbody>
</table>
258. carry many objects W.G. 
   /čβnpē·βi/ 
   #čβ.βn np.pē·βi#
   [tšβ.βn np.pē·βi] 

259. carry many objects G.M. 
   /čµnpē·βi/ 
   #čµ mn np.pē·βi#
   [tšµ mn np.pē·βi] 

260. hug 
   /skljúyi/ 
   #sk kl lp.pú.yi#
   [sək kl np.pú.yi]
261. heaven, sky  
/myà·khti·la/  
#my.yà·kh.ti·la#  
[mi.yà·ka.ti·la]

262. porcupine  
/khtāta/, /khtāta/  
#kth.thā.ta# ~ #kh.htā.ta#  
[kat.l.thā.ta] ~ [ka.h.ta.ta]

263. reed, cane  
/ʔthā/  
#ʔth.thā#  
[#ʔl.thā]

264. brittlebrush  
/ʔmtaq/  
#ʔm.mt.taq#  
[#ʔm.mt.l.taq]

265. north  
/ʔm.th·bk/, /mat·bk/  
#ʔm.mt.th·bk# ~ #mat.th·bk#  
[#ʔm.mt.l.th·bk] ~ [mat.l.ta·bk]

266. barrel cactus  
/mltát/  
#ml.tát# ~ #ml.lt.tát#  
[ml.tát] ~ [ml.lt.l.tát]

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267. watermelon

/re'mtʊ/

[# Deborah Konstam #]

[?t̪ə.km.mət̪̪ə.tʊ]
268. precipice
   /wi·skči·bi/
   #wi·sk.kč.či·bi#
   [wi·sek7.ket7.tši·bi]

269. arc-shaped
   /tβču·ni/
   #tβ.βč.ču·ni#
   [tβ.βtš.tšu·ni]

270. winter
   /tšhú·ri/
   #tš.hú.ri#
   [tš.tšú.ri]

271. year
   /tšhúra/
   #tš.hú.ra#
   [tš.tšú.ra]

272. first cousins
   /tnča·ča/
   #tn.ča·ča# ~ #tn.nč.ča·ča#
   [tn.tša·tša] ~ [tn.net7.tša·tša]
273. thief

/thiء/ /?t\£.k\£.b\.a/

[?t\£.k\£.t\£.t\£.b\.a\£]
274. forked post

forked post

275. crack (egg) v.i.

276. tie around
CCk

277. two people massing /ktkā·ma/
    (Prn. m.) #kt.tk.kā·ma#
    [kt̩.tk̩.kā·ma]

278. sides coming almost /wl·ktkūpa/
    together #wl·kt.tkū·pa#
    [wl·kt̩.tk̩.kū·pa]

279. killdeer /hamkkī/
    #ham.kk.kī#
    [ham.k̩k̩.kī]

280. fingers /sàlkōkī·ča/
    #sàl.kē.č.kē·ča#
    [sàk.k̩t̩.tsk̩.kī·t̩.t̩a]

281. cup (ears), block /kβkó/
    #kβ.β.kó#
    [kβ.βk̩.k̩ó]

282. glass /kθek̩na/
    #kθ.kē.na#
    [kθ.k̩.n̩a]

283. tent /ksk̩·βa ?wâ/
    #ks.k̩·βa ?w.wâ#
    [ks.k̩·βa ?u.wâ]

284. stomach, tripe /tk̩hōː/, /thkōː/
    #tk̩.hōː# ~ #th.kōː#
    [tak̩.hōː] ~ [ta.kōː]
285. cross v., be across  
   /khkē\n/  
   #kh.kē\n#  
   [ka\n.kē\n]  

286. ford n.  
   /nàkhkē\n/  
   #nà.kh.kē\n#  
   [nà.ka\n.kē\n]  

287. piñon  
   /?kho/  
   #?kh.kho#  
   [?ak\n.kho]  

288. daughter's child  
   /?kho/  
   #?kh.kho#  
   [?ak\n.kho]  

289. pick n.  
   /?khwàshkēba/  
   #?kh.khwà.sh.kē.ba#  
   [?ak\n.khwà.sa.kē.ba]  

290. button  
   /yúri skhâβi/  
   #yúri skh.khâβi#  
   [yúri sak\n.khâβi]
291. shield n. /kkβkő·βi/

#kk.kβ.βk.kő···βi#

[kak̊.kβ.βek̊·kő···βi]
292. cotton  /čθkwâm a/
   #čθ.kwâm.ba#
   [tšθ.kwâm.ba]

293. stand up  /βskví(·)/
   #βs.skví(·)#
   [βs.skví(·)]

294. yellow palo verde  /čmkvíła/
   #čm.mk.kví.ła#
   [tšm.m k’l.kví.ła]

295. jealous (man)  /smkví·rβi/
   #sm.kuí·r.βi#   #sm.mk.kuí·r.βi#
   [sm.kuí·r.βi] ~ [sm.mk’l.kuí·r.βi]
296. dusk

/dətk̪ēp̪i/  
#d̪t. tq. qēp̪i#  
[βt̪l. teq̪l. qēp̪l. i

297. fingers

/səlq̪ēq̪e • tsa/  
#səl. qē. q̪e • tsa#  
[səl. q̪t̪s. t̪s̪q̪l. q̪e • t̪sa]

298. neck

/ml̪i/  
#ml̪i# ~ #ml̪l. q̪i#  
[ml̪i] ~ [ml̪l. q̪]̪i]
299. capsize

/tmʰamβi/

300. full

/tmʱɔrǐ/

301. tease

/tʃrʊ·yi/

302. necklace

/skʰʊ·la hnáqča/

303. engine (iron runner)

/kʰwàkʰβ̥̤ːmˈma/
306. curved
   /kt0ūkβa/
   #kt.t0.0ūk.βa#
   [kt.t0.0ūk.βa]

307. lizard
   /th0i.1a/
   #th.h0i.1a#
   [ta.h0i.1a]

308. earth (spread out)
   /mātkh0ī:1a/
   #māt.kh.0ī:.1a#
   [māt.ī.kh.0ī:.1a]
309. prairie dog
   /tqsi/
   #tq.qs.si#
   [teq].qs.si]

310. agate
   /wi·qsa/
   #wi·q.qs.sā#
   [wi·aq].qs.sā]

311. star
   /hammsi/
   #ham.ms.si#
   [ham.ms.si]
312. growl
   /βqβeti/
   #βq.qβ.βeti#
   [βqβeti]

313. feverish
   /khβeti/
   #kh.hβeti#
   [kah.hβeti]
314. Piñon Heights /ʔkʰɔykhɔɾβa/ #ʔkʰ.ʔkʰɔy.khɔɾ.ɾβa# [ʔa.kʰɔy.ka.hɔɾ.ɾβa]
315. store /ʔθkʰiːpɔː$/
#ʔθ.kʰiːpɔː#
[ʔtʃ.ka.hɛː.ŋetʃ.tʃɔː]
316. swell up  
/βh'ma:mk?i/  
#βh.hm.má.mk.?i#  
[βa.hm.má.mk.?i]

317. kind  
/nhméɾβi/  
#nh.hmér.βi#  
[nah.ım.ér.βi]

318. help me get up  
/ʔmũmãni/  
#ʔm.mm.mã.ni#  
[ʔm.mm.mã.ni]

319. eyebrow  
/yúklmē:/  
#yú.kl.lm.mē#:  
[yú.kl.lm.mē:]

320. sinew  
/msmā:/  
#ms.sm.mā#:  
[ms.sm.mā:]

321. quail  
/ʔhmá/  
#ʔh.hmá#  
[ʔa hmá]

322. gourd  
/ʔhmá:/  
#ʔh.hmá#:  
[ʔa hmá:]

323. sack, bag  
/ʔhmál/  
#ʔh.hmál#  
[ʔa hmál]
324. turn it off! /mskw\*inkmtm\*\*\*\*i/
   (an appliance) #ms.sk\*f.nkmt.tm.m\*\*\*# [ms.sk\*f.nkmtm\*\*\*t\*]

325. valley /m\*t\*ckm\*\*\*ya/
   #m\*t\*ck.km.m\*\*\*ya# [m\*t\*tk1.km.m\*\*\*ya]

326. I bring/brought /\*km\*\*\*km/
   #\*k.km.m\*\*\*km# [\*k1.km.m\*\*\*k\*m]

327. cousin /čsm\*\*\*\*\*\*ya/
   #čs.sm.m\*\*\*\*\*ya# ~ #čs.sm.m\*\*\*\*\*ya# [t\*šs.sm.m\*\*\*\*\*ya] ~ [t\*šs.sm.m\*\*\*\*\*ya]
328. I want /ʔhnaːqi/
   #ʔh.hnaːqi#
   [ʔaʰŋaːqi]

329. gourd rattle, /ʔhnaːl/
   bule #ʔh.haːl#
   [ʔaʰŋaːl]

330. small, level /ktnaːkba/
   land #kt.tn.naːk.ba#
   [kət⁷.tn.naːk.ba]

331. I dropped it /ʔcnā.1km/
   #ʔc.cn.naː1lk.km#
   [ʔtʃ.tʃn.naː1lk⁷.km]

332. whine /ʔqnæ.k/
   #ʔq.qn.næ.#
   [ʔeq⁷.qn.næ.k]

333. carry heavy /kβnæwi/
   objects #kβ.βn.næ.wi#
   [kβ.βn.næ.wi]
334. shoe  
/nhŋō/
#nh.ŋō#
[nahŋō]

335. scissors  
/khwàčmŋáyi/
#khw.č.mŋ.ŋá.yi#
[khw.čm.ŋ.ŋá.yi]

336. sun-ripened  
/ŋmā/
#m.ŋā#
[ŋ.m.ŋā]

337. discharge  
/βmŋē/  
#βm.ŋē#
[β.m.ŋē]

338. quiet; graceful  
/ktnī.βa/  
#kt.tnī.βa#
[k.tnī.βa]

339. scissors  
/khwàčbnáyi/
#khw.čβ.bn.ŋá.yi#
[khw.čβ.bn.ŋá.yi]
340. hunter  

\[\text{hunter} /'\text{ekn}\text{ē}/\]
\[\#^\text{ekn}n\#\]
\[\text{?tš.kn.nē}\]

341. I hunt  

\[\text{I hunt} /'\text{e}'pē/\]

\[\#^\text{epē}\#\]
\[\text{?tš.epē}\]
342. death rattle /\βh\d\:h\l\d\:hi/  
#β\h\l\\·\·h\l\d\·\·hi#
[β\·\l\·\·ha\·\l\·\·hi]  
343. snore /sml\·\·hi/  
#sml\·\·hi#
[sm.ml.ló(·).hi]  
344. crack like lightning /βčl\·\·?i/  
#βč.l\·\·?i#
[βtš.tš.l\·\·?i]  
345. crack like lightning /βčl\·\·čl\·\·?i/  
#βč.l\·\·čl.l\·\·?i#
[βtšt\·tš.l\·\·tš.l\·\·?i]  
346. hole /θβ\·/  
#θβ.l\·i#
[θβ.l\·i]  
347. cliff /wì.kh\·\·βa/  
#wì..kh.hl\·\·βa#
[wì..ka.l\·\·βa]
348. doll
   /χρē/  
   #χ.χr.χ/  
   [τό.τόr.τ/]

349. naked
   /hålsqrâ.pi/  
   #hål.sq.râ.pi#  
   [hål.sq]q.râ.pi]

350. make hot
   /t?ruyi/  
   #t?râ.yi# ~ #t?r.râ.yi#  
   [tœ7.râ.yi] ~ [tœ7.r r y]i]

351. pierce
   /θrî/  
   #θ.θr.θ/  
   [θ.θr.θ]

352. squint
   /θrîri/  
   #θ.θr.θri#  
   [θ.θr.θri]

353. pierce
   /θrûyô/  
   #θ.θr.rû.y#  
   [θ.θr.rû.y]

354. jump in surprise
   /θrîy?i/  
   #θ.θr.θi#  
   [θ.θr.θi]

355. untie!
   /mhrûyi/  
   #mhrû.yi#  
   [mahrû.yi]
356. ancient

\( /\text{čkyûki/} \)

\( /\text{č}.\text{ky.yd.ki#} \)

\( /\text{tš.ki.yû.ki} \)

357. cigar

\( /\text{ũ:βa čmyâlβa/} \)

\( /\text{ũ:βa čm.my.yâl.1β.βa#} \)

\( /\text{ũ:βa tšm.mi.yâ.1β.βa} \)
358. automobile
/kwɛ·tʃyəːmi/  
#kwɛ·tʃ.βyi.ə.mi#  
[kwɛ·tʃβi.ə.mi]

359. cantiles
/wi·khyarβa/  
#wi·khyarβa#  
[wι·ka.yar.βa]

360. table₁
/shyara/  
#sh.ya.ra#  
[saŋ.ya.ra] - [sa.hi.ya.ra]

table₂
/ʔi·shyarβa/  
#ʔi·shyarβa#  
[ʔi·sa.yar.βa]

361. ramada
/waʃyalaβa/  
#waʃ.ya.l.βa# - #waʃ.ya.l.βa#  
[wə.sə.ya.l.βa] - [wa.sə.ya.l.βa]

362. dig
/shyuki/  
#sh.yu.κi#  
[saŋ.yu.κi]

363. soda
/thwɔβi tmuíli/  
#thwɔβi tmuíli#  
[ta.huβi tmuíli]

364. the moaner
/kmyɑ·yβa/  
#km.my.yɑ·yβa# - #km.my.yɑ·yβa#  
[km.mi.yɑ·yβa] - [km.mi.yɑ·yβa]
365. clear /qryeː/
#qr.ry.yeː#
[qr.ri.yeː]
366. spider (W.G.)  /mətknweə/  
#mət.kn.nw.wə#  
[mət.kn.nu.wə]

367. snake  /'lwe/  
#l.lw.wi#  
[l.lu.wi]

368. correct  /βlwe/  
#βl.lw.wi#  
[βl.lu.wi]

369. elbow (SEY)  /səlqrwifəso/  
#səl.qr.rw.wi:sə#  
[səl.qr.ru.wi:sə]

370. determined  /ʃmwlβi/  
#ʃm.wi1.βi# ~ #ʃm.mw.wi1.βi#  
[tʃm.wi1.βi]~[tʃm.mu.wi1.βi]

371. spleen  /ʃmwəθa/  
#ʃm.mw.əθa#  
[tʃm.mu.əθa]

372. they massacre /pə.kmwətʃi/  
them  #pə.km.mw.wətʃ.ʃi#  
[pə.km.mu.wá.tʃ.tʃi]

373. old woman  /gμwi.rma/  
#gμ.wi.r.μma# ~ #gμ.mw.wi.r.μma#  
[gμ.wi.r.μma] ~ [gμ.mw.wi.r.μma]

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374. my brothers  
/naʔcwa:kβa/  
#naʔc.čw.wa:k.βa#  
[naʔc.čw.wa:k.βa]

375. scorpion  
/nĩˈstkwālka/  
#nĩˈst.kw.wāl.ka#  
[nĩˈst.kw.wāl.ka]  
#nĩˈst.tk.kw.wāl.lk.ka#  
[nĩˈst.tk.kw.wāl.lk.ka]

376. growl  
/βqwōɬ.ʔi/  
#βq.wo.ʔi#  
[βq.wo.ʔi]

377. perforate  
/kwoɬˀɾβi/  
#k.ɾw.ɾβi#  
[k.ɾw.ɾβi]

378. correct  
/luw/  
#lu.w#  
[lu.w]
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<th>Use or Meaning</th>
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<td>ˇ</td>
<td>acute</td>
<td>primary stress (no indication of pitch)</td>
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<tr>
<td>&lt;</td>
<td>left arrow</td>
<td>comes from</td>
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<tr>
<td>+</td>
<td>right arrow</td>
<td>goes to; is used in</td>
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<td>[X]</td>
<td>square brackets</td>
<td>systematic phonetic transcription</td>
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<td>̅</td>
<td>breve</td>
<td>tertiary stress or unstressed</td>
</tr>
<tr>
<td>ˇ̂</td>
<td>circumflex</td>
<td>low or falling pitch with primary stress</td>
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<tr>
<td>#CVC#</td>
<td>cross hatches</td>
<td>step in a phonological derivation</td>
</tr>
<tr>
<td>ç</td>
<td>degree subscript</td>
<td>voiceless or partially voiced</td>
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<tr>
<td>X=X</td>
<td>equal sign</td>
<td>one gloss for both elements</td>
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<tr>
<td>ˇ·</td>
<td>raised dot</td>
<td>one morae of vowel length</td>
</tr>
<tr>
<td>ˇ:</td>
<td>two dots</td>
<td>two morae of vowel length</td>
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<td>C...C</td>
<td>three dots</td>
<td>links elements in a discontinuous morpheme</td>
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<td>ˇ</td>
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<td>secondary stress with pitch neutralized to a mid tone</td>
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<td>C-C</td>
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<td>morpheme boundary</td>
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<td>macron</td>
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<td>Symbol</td>
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<td>C+C</td>
<td>plus sign</td>
<td>division between roots in a compound</td>
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<td>Ç</td>
<td>punct</td>
<td>inorganic segment (punctuation)</td>
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<td>Σ</td>
<td>sigma</td>
<td>a syllable</td>
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<td>single slashes</td>
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<td>̃</td>
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<td>/wâr-/</td>
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<tr>
<td>2/PLo/1</td>
<td>second-person plural object with first-person subj.</td>
<td>/ʔpəˈm-/</td>
</tr>
<tr>
<td>2P</td>
<td>second-person pronoun</td>
<td>/mɑː(ː)-/</td>
</tr>
<tr>
<td>VOCA</td>
<td>vocative on Type A stem</td>
<td>/-ʔ/</td>
</tr>
<tr>
<td>VOCB</td>
<td>vocative on Type B stem</td>
<td>/-ɛʔ/</td>
</tr>
<tr>
<td>VOCU</td>
<td>vocative (unseen addressee)</td>
<td>/-oʔ(?)/, /-oː:/</td>
</tr>
<tr>
<td>W.G.</td>
<td>Warren Gazzam</td>
<td>(Chapter One)</td>
</tr>
<tr>
<td>when</td>
<td>subordinator</td>
<td>/-kθʊː/</td>
</tr>
<tr>
<td>WH</td>
<td>wh-word</td>
<td>/kà-/</td>
</tr>
<tr>
<td>WY</td>
<td>Western Yavapai= Tolkapaya</td>
<td>(Chapter One)</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
<td>Shape</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>Pln</td>
<td>placename</td>
<td>(Dictionaries)</td>
</tr>
<tr>
<td>Prn</td>
<td>personal name</td>
<td>(Dictionaries)</td>
</tr>
<tr>
<td>POS</td>
<td>possessive</td>
<td>/-n/</td>
</tr>
<tr>
<td>Pp</td>
<td>Paipai</td>
<td>(Chapter One)</td>
</tr>
<tr>
<td>PRF</td>
<td>perfectivizer</td>
<td>/η-/</td>
</tr>
<tr>
<td>P/E</td>
<td>perfect/evidential</td>
<td>/-o/</td>
</tr>
<tr>
<td>QA</td>
<td>interrogative on Type A stem</td>
<td>/-ʔ/</td>
</tr>
<tr>
<td>QB</td>
<td>interrogative on Type B stem</td>
<td>/-èʔ/</td>
</tr>
<tr>
<td>QCON</td>
<td>interrogative conjunction</td>
<td>/-pèʔ/</td>
</tr>
<tr>
<td>QP</td>
<td>past question</td>
<td>/-wèʔ/</td>
</tr>
<tr>
<td>R:</td>
<td>reduplication of following stem</td>
<td>(Chapter Three)</td>
</tr>
<tr>
<td>REC</td>
<td>recursive, &quot;again&quot;</td>
<td>/-i/, /-n/</td>
</tr>
<tr>
<td>REL</td>
<td>relativizer; agentive</td>
<td>/k-/</td>
</tr>
<tr>
<td>RES</td>
<td>resultative</td>
<td>/-o/</td>
</tr>
<tr>
<td>S</td>
<td>archiphonaesthetic</td>
<td>/θ/ ~ /s/</td>
</tr>
<tr>
<td>s, sg</td>
<td>singular</td>
<td>(Chapter Three)</td>
</tr>
<tr>
<td>SEY</td>
<td>Southeastern Yavapai</td>
<td>(Chapter One)</td>
</tr>
<tr>
<td>Sp.</td>
<td>loanword ultimately but not necessarily directly from Spanish</td>
<td>(Dictionaries)</td>
</tr>
<tr>
<td>SS</td>
<td>same-subject marker</td>
<td>/-k/</td>
</tr>
<tr>
<td>SSA</td>
<td>emphatic increment</td>
<td>/-ka/</td>
</tr>
<tr>
<td>ST</td>
<td>stative</td>
<td>/-β/</td>
</tr>
<tr>
<td>STLOC</td>
<td>spatiotemporal locative</td>
<td>/-e/</td>
</tr>
</tbody>
</table>
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______. See also Hardy & Gordon.


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________. See also Kaufman, Terrence, and Kendall, Martha B. Silver, Shirley. See Langdon, Margaret.


See also Watahomigie, Lucille J.

YAVAPAI PHONOLOGY AND DICTIONARY

Alan Shaterian

PART II

5.00 Introduction to the Dictionaries
6.00 Yavapai-English Dictionary
7.00 English-Yavapai Dictionary
5.00 Introduction to the Dictionaries

The Yavapai-English and the English-Yavapai Dictionaries have been included alone in two sections of PART II of this dissertation in order that a user might detach the dictionaries for convenience. It is certainly not the case that one can use the dictionaries without some understanding of PART I.

5.01 Theoretical Level

All Yavapai entries are to be considered as appearing in phonemic slashes. The writing of each Yavapai form may be thought of as being on a theoretical level at any point between classical phonemic and systematic phonemic; that is, the forms are not highly abstract, nor are they filled with redundant phonetic detail at the segmental level. At the suprasegmental level such redundant detail is included. The reason for doing this and the motivating factors behind all transcriptions are discussed in PART I.

5.02 Ordering Within Each Entry

For each lexical item listed the first entry is its stem with the absolutive suffixes /-i/ and /-a/ for verbs and nouns respectively (See Chapter Three). If more forms follow this initial entry, they can be expected to
be 1) indication of different speakers' pronunciation of the same form; 2) free variation within one idiolect, sub-dialect, dialect, or even within Yavapai itself taken as a whole; 3) irregular inflections or derivations; 4) examples of usage, using compounds, phrases, or sentences as illustrations.

5.03 Key to the Symbols Used in Transcription and Listing

Table 4: YAVAPAI SUPRASEGMENTALS and Table 5:
YAVAPAI SYSTEMATIC PHONEMIC SEGMENTS are reproduced here for convenience to the reader.

5.04 Additional Symbols and Conventions

The dictionaries make use of other ways to abbreviate information contained in the entries. These are listed below (see also Appendix 2):

1. /,/, Comma separates forms in free variation or forms in different dialects. In the case of the latter, the speaker's initials are given.

2. /:/, Semicolon separates different lexical entries in one language corresponding to a single lexical entry in the other.

3. /./, Period may show open juncture as well as syllable boundary.

4. /:/, Colon may be used in English glosses in a conventional manner.
5. /-/ **Arrow** is used in English glosses to indicate that the Yavapai stem or root to the left of the arrow may be found in the word to the right of the arrow.

6. /-/ **Hyphen** is used occasionally for affix boundary.

7. /+/ **Plus** is used occasionally for morpheme boundary in compounds.

8. /./ **Punct** (a period beneath the segment) indicates the putative status of that segment. It may be a suspect vowel or an inorganic aspirate onset (See 2.915 for both).

9. /!/ **Exclamation Point** is used in the English glosses for imperative forms and interjections.

10. /(()/ **Parenthesis** is used 1) for Yavapai to show optional vowel length and 2) for English to enclose morphemes in compounds that explain more about the entry; for example, the gloss '(earth)quake' is interpreted as meaning that the Yavapai form is used mostly in 'earthquake' but make also mean 'quake.'

5.05 **Order of Entries in the Yavapai-English Dictionary**

Instead of the traditional alphabetical order, the Yavapai-English Dictionary uses a phonetically based order: an articulatory order based on two interlocking parameters — 1) manner of articulation and 2) point of articulation. The listings proceed (along Parameter 1) from a) stops and affricates, b) vowels, c) fricatives,
d) nasals, e) liquids to f) glides; and (along Parameter 2) from bilabial to glottal within each division of Parameter 1:

1. p (ph)
2. t (th)
3. ċ (ch)
4. kv
5. k (kh)
6. kw (khw)
7. q
8. qw
9. ?
10. ?i
11. i
12. ?e
13. e
14. ?a
15. a
16. ?o
17. o
18. ?u
19. o
20. ?
21. ?
22. s (š)
23. h
5.06 Diachronic Application

The lexical entries in the Yavapai-English Dictionary have been arranged articulatorily, not only for the sake of phonological elegance. This alone would not be worth the initial difficulty a user, particularly a linguistically naive user, would encounter. The dictionary is designed rather to enable the user to carry out diachronic investigations, i.e. to look for cognates.

5.061 Using the Dictionary: Each Yavapai word has several listings depending on its phonotactic complexity. One assumes a basic canonical shape of CV, where C is any consonant and V any vowel occurring with Primary or Secondary Stress. Words of this shape would have only one listing: under the consonant C followed by the vowel V in an i, e, a, o, u order. A phonotactically more complex form of the canonical structure C₁C₂C₃V would be listed three times: 1) under C₁C₂C₃V, 2) under C₂C₃V,
and 3) under \(-C_3V\). The procedure eliminates one step at a time the morphological material which might obscure cognation for the reader. This device is followed only for consonants occurring pretonically. After a stressed vowel one may find derivationally relevant material arranged within each entry.
<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ðpï</td>
<td>tired</td>
</tr>
<tr>
<td>ðhà...ðpû(·)yi</td>
<td>cause to die or be sick</td>
</tr>
<tr>
<td>tpûyi</td>
<td>corpse</td>
</tr>
<tr>
<td>pà'pï</td>
<td>father's sister</td>
</tr>
<tr>
<td>pï₁</td>
<td>father's older sister</td>
</tr>
<tr>
<td>hpi</td>
<td>grinder + jaw</td>
</tr>
<tr>
<td>ðpi</td>
<td>medication &lt; pï₁</td>
</tr>
<tr>
<td>hi'pinbï</td>
<td>win</td>
</tr>
<tr>
<td>pilu</td>
<td>be burnt</td>
</tr>
<tr>
<td>pilrûbï</td>
<td>plant species</td>
</tr>
<tr>
<td>kpi'lua</td>
<td>clover</td>
</tr>
<tr>
<td>ʰpï'ri</td>
<td>hard, strong</td>
</tr>
<tr>
<td>ʰpï'rbi</td>
<td>strengthen</td>
</tr>
<tr>
<td>ʰipï'rbi</td>
<td></td>
</tr>
<tr>
<td>tmpïri</td>
<td>full</td>
</tr>
<tr>
<td>?pïra</td>
<td>just, only</td>
</tr>
<tr>
<td>pë</td>
<td>carry on head</td>
</tr>
<tr>
<td>åmnpë'bi</td>
<td>carry many objects</td>
</tr>
<tr>
<td>åbnpë'bi</td>
<td></td>
</tr>
</tbody>
</table>

Die; dead, cf. hug (plural)
-pè('•)  'and where...'
spè  lean v.
spè  six
čpè  reach
pèbi  lean v.; follow
čpèbi  blanket
hipè  near
hàpèya  whatever may happen
topè  help
(topàyi  (plural)
pè'  bear fruit, be born
yà...pè'  be born
yà...pàyi  (plural)

syàpè•βa  soul
qmō•sa pè'  mistletoe berries
péqi  hit
čpèqi  hit
(s)peqi  pound v.
pèska  Pln: Prescott
impèsqi  slip, drop
pé•mi  not there
 zapè•mi  we two go
wàypè('•)mòi  beautiful; wonderful
pémi  stand object against
pèhi  cast a spell
pèlmèlk?l  lick one's chops or lips
màtsapé'yi

?pá:
  ?pá(‘)ča
pà-’, see page 347
pà-’, see page 348
pá’
  hi·pá’
pá, see page 344
  ?pá
h‘à(‘)čpá’
čpá
čpâ·
yà...pá
hopá
βlpâ·t?i
?mpâča
hù·pâ·ka lā·ka
pâkka
páqi
tpáqi
pâqpâq
čpâβi
páβi
čmpâβa
pâ:hči
kapâmkâ
qa(m)pâŋga

shovel
person, Indian
(plural)
(plural object)
(personifier prefix on adjective)
shine
evening
stick v.
arrow
raid
get out; sprout
freeze
responsible
four
blister
brush (plant)
elephant
snow
come out, sprout
(kausative)
sharp, cracking noise
wink
bake in ashes
kidney
ambush, cf. čpá·
grasshopper
bat (animal)
<table>
<thead>
<tr>
<th>dada</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>kepəlβi</td>
<td>tie up, knot</td>
</tr>
<tr>
<td>qepəlβi</td>
<td>peach</td>
</tr>
<tr>
<td>ɨpala</td>
<td>tongue</td>
</tr>
<tr>
<td>hi.pál</td>
<td></td>
</tr>
<tr>
<td>himpál</td>
<td></td>
</tr>
<tr>
<td>βθpálβe</td>
<td>cramps, cf. tie up</td>
</tr>
<tr>
<td>θpʰalka</td>
<td>ironwood tree</td>
</tr>
<tr>
<td>pári</td>
<td>sharp; intelligent</td>
</tr>
<tr>
<td>ipári</td>
<td>learn</td>
</tr>
<tr>
<td>kpəˈɾə</td>
<td>satisfied</td>
</tr>
<tr>
<td>hankpəˈra</td>
<td>butterfly</td>
</tr>
<tr>
<td>hankrá:pa</td>
<td></td>
</tr>
<tr>
<td>mpára</td>
<td>leg</td>
</tr>
<tr>
<td>páya</td>
<td>all</td>
</tr>
<tr>
<td>-páya cf. pé' , ʔpá:</td>
<td>dweller, inhabitant of</td>
</tr>
<tr>
<td>ʔpáya</td>
<td>animal</td>
</tr>
<tr>
<td>qmpáya</td>
<td>brain</td>
</tr>
<tr>
<td>páya</td>
<td></td>
</tr>
<tr>
<td>spó</td>
<td>know</td>
</tr>
<tr>
<td>npó</td>
<td>father's father</td>
</tr>
<tr>
<td>pó(ɾ)ra</td>
<td></td>
</tr>
<tr>
<td>póq póq</td>
<td>slender</td>
</tr>
<tr>
<td>?ʔlˈpóq póq</td>
<td>digging stick</td>
</tr>
<tr>
<td>póqi</td>
<td>spill</td>
</tr>
<tr>
<td>tpóqi</td>
<td>pour</td>
</tr>
<tr>
<td>?mpóqa</td>
<td>mushroom</td>
</tr>
<tr>
<td>pó</td>
<td>put away</td>
</tr>
</tbody>
</table>
čpú
wi·čpú·čč·
pú·
q·’əpű·ʔikí
(m)pù·klʔüt
ʔ hà·pù·čč
slpú
mlpú·
wèhpú
hpú₁
hpú₂
púk
i·púk
wèhipúk
mípúk/mmpúk
spúki
čpúki
spúki
hopáča spúk(k)
čmpúk
 hà(n)púk
púši
twpú·ši
twpú::ši
spúmi
pú·(·)nši
púli
insert things
bank (financial)
rip cloth
throwing out rays
tarantula
cottonwood spring
armpit
navel
buttock(s)
something which shoots
stagnant
bottom, foot (figurative)
neck
collarbone area
knee
cover v.
pillow
fourth time
manzanita
coral-colored snake
weave
preserve (food) v.
take apart
dome-shaped wickiup
be wet

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<p>| tpúli   | wetten       |
| ʰimpú(ʰ)la | forehead   |
| kmp̥ulβa     | hump(back)  |
| púr         | hat         |
| yàktpürβa   | lip         |
| ʰmp̥urka     | fly n.      |
| smp̥urβi     | band for cradle |
| sklpúyi     | hug v.      |</p>
<table>
<thead>
<tr>
<th>Loanword</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>pe'</td>
<td>money; dollar &lt; <em>peso</em></td>
</tr>
<tr>
<td>papé·la</td>
<td>paper &lt; <em>papel</em></td>
</tr>
<tr>
<td>kapé·la</td>
<td>(dissimilation)</td>
</tr>
<tr>
<td>pá·pa</td>
<td>potato &lt; <em>papa</em></td>
</tr>
<tr>
<td>pasté·la</td>
<td>pie &lt; <em>pastel</em></td>
</tr>
<tr>
<td>pá(*)n</td>
<td>(hand)kerchief &lt; <em>pañón</em></td>
</tr>
</tbody>
</table>
pá stick v.

?pá

(?)pák̄wɪr̄βa pointed weapon
pák̄wɪr̄βɔk̄wāye arrow
?pàmq̄wàn·a quiver
gunpowder
person, human; Indian

pá'na ?sī:ta
I name the people

?pá'βč klkňö·βi
a man is in jail

?pá'βč pîm tkāβi
funeral

?pá'βč pîm kwā·wi
funeral oration

?pá'βč pîm swā·ri
funeral song

?pá'βč ?črāβk spóβkm
It is apparent that the man
is ill

pá'pî
corpse

pá'pî čmí·ya
female corpse

pá'pî spûk wó(k) sčáβa
tombstone

pá·(pi)tú·yči
they cremate

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pà·hmì(ya) 'man'

pà·hmì

pà·hmì ?wi(?wiyi) I have a husband

pà·hmì ??û·(k?yùm) (W.G.) I see a man

pà·hmì·no ??è· I give it to the man

pà·hmì·bè lwèbi man marries

pà·hmì·bm hháki two men

pà·hmì·bm ?háki

pà·hmìnhìyìa man's breast
"plural object"

pà•- 'plural object'

pà•kmì•km brings them
pà•kmwā:čči they massacre
pà•kwì•či distribute
pà•??ē•či I give to them
pà•??ē•kwì•či I distribute to them
pà•??ē•kwìyči
pà•?sì:ti I name them
pà•?sì:bi I count them
pà•mòlimì:ye feel sorry for us!
pà•mòl?èmì:yi
mòl?è·yī· feel sorry for
pà•mnhmèrbi be kind to them
pà•wlìbò they drove away the people
<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>pà·'kpõqpõqa</td>
<td>the slim one (Prn)</td>
</tr>
<tr>
<td>pà·'kvû·lk  põqpõq?e</td>
<td>tall, slender person</td>
</tr>
<tr>
<td>pà·'qê·či</td>
<td>a small person</td>
</tr>
<tr>
<td>pà·'qyâta</td>
<td>rich person</td>
</tr>
<tr>
<td>pà·'kwí·ya</td>
<td>rich</td>
</tr>
<tr>
<td>pà·'lhůyâyi</td>
<td>mean, nasty, cranky</td>
</tr>
<tr>
<td>pà·'bãkõpêk</td>
<td>third-born</td>
</tr>
<tr>
<td>pà·'bã·myâ(·)mi</td>
<td>you're getting old</td>
</tr>
<tr>
<td>pà·'hãni</td>
<td>handsome male</td>
</tr>
<tr>
<td>pà·'hãnah ʔũmi</td>
<td>bad person</td>
</tr>
<tr>
<td>pàtáyi</td>
<td>he's old</td>
</tr>
<tr>
<td>tú· pà·lá·yi</td>
<td>ugly person</td>
</tr>
</tbody>
</table>
pà·qwāwa kyō
Skull Valley
pà·hū ·
skull
pà·ʔäbi
club
pà·tpūyi
witch doctor
pà·säyi
stinger
pà·pēhi
person wishing bad luck
pà·tāya
many people
pà·čeéqa
blood sucker, medicine man
pà·(h)čhwā
warrior
pà·čʔhwā
enemy
čʔhwā
pà·čhwā
čh’wā
pà·čhwā
čaʔhwā
pà·kwā:wo
sermon
pà·kkwā:wo
preacher
pà·kwā:wo ??é·ʔna ??ík
I came to hear the minister
?βá:km
pà·kčē:βa
healer
pà·kβʔò·ma
last man (Prn)
?qpà·kβʔòma
the last man
?qpàːkθiːyi
Indian doctor
?qpàːsmāča
medicine man
pà·smāča
?pà·hkā:ya
Indian from another group, stranger
pàːhkāya
pàːkhāya
pàːmūlβa
pàːnēha
pàːnyūča
pàː(?)rāwa
pàːlāwaʔkoyūči
pàːlāwkʔhēpūyi
New York pàːyūwa
New York pàːyūwk yūčk yūm
pàːwīya
pàčāːča
(W.G.) prominent person
prominent person
killer (Prn)
dwarf, midget; little (Prn)
fast person running
I'm making a new generation
many swim
he comes from New York (W.G.)
He came from New York (W.G.)
lesser chief
family, clan
pà'—  miscellaneous

pà'piló  grave offering
pà'pēqi  strike
pà'ttwï'ni  pushed on bone (?)
pà'tū:či  cremate
pà'tūri  crowded with people
pà'tmāri  bury
pà'tmārčo·  grave
    pà·tmarčó  burial ground
pà·tyú·či  friendship
pà·čeēqi  sucks blood
?pà·kmwā·či  massacre
pà·?sǐ·tk  roll call
pà·hipinči  I lose
    pà·nāhpinči  we lose
pà·niṭmīli  play a joke on someone
deep (Prn f.)
turn over
turned over
rip, tear
cut, plow
furrow
shake
shake (a blanket)
pregnant
thick
thick feet
spread
chest
heaven; sky
plate
tie
bracelet
prickly pear cactus
hàmté  pumpkin, squash
-té(•)  big; many; much
-táyi  (plural)
?té  many; old, grown
βté  big
të·qi  spicy, hot
té·qi  lick
θé·qi  
βtëθq?i  burning pain
-t(a)  larger of two similar animals
  mhwa(•)ta  bear, cf. gila monster, cow,
             squirrel, mountain lion

tá-
  tāpā  break
  tāphá:  fishhook cactus
  tāpá·  cf. Pima
  sāltāhkābi  ring
  myál tā{kwa·θa  toast: browned bread
-tá-
  čtā·ča  father
  nā?čtáha  my father₁
  nā?tāla  my father₂
britākm  I jump
?htá   reed
?thá

tá'  grind

tá:/tá'  
tá:bi  ground

táβha  
táβa

tapstáps

tá: /tapstáps?iça  wood rattle

sotát  thorn

hitát  thorny

mltát  cane

ča(h)tá·ti  spine, back

split open v.i.
brittlebrush
blossom, flower

snapped shut

church
?mthâ·βk
north

tâ:βkyâma
bladder

tâθtâθ

pâ:βtâθtâθ?ICâ
watch: "sun ticking"

q'âri hitâsa
bald

?i·tâ·sa
sycamore

tâhki
throw toward speaker

tâhmi
throw from speaker

tâ·βk < tâhβk
throw

tâltâla
elderberry

tâlā
father

See -tâ-

tô-

topê
help

topâyi
(plural)

tôm?âmâ

capsize

tô·
sated

tôčtôč?lka
drip

βtôtβk
collapsed

ктóhi
kick

tô(·)hâpi
gamble, play cards
<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>tolki</td>
<td>stubborn, going one's own way, like a bouncing ball</td>
</tr>
<tr>
<td>túlki</td>
<td>Western Yavapai</td>
</tr>
<tr>
<td>tôlk?páya</td>
<td>marbles (toy)</td>
</tr>
<tr>
<td>sátó:rc</td>
<td>burn v.t.</td>
</tr>
<tr>
<td>tú1</td>
<td>(plural)</td>
</tr>
<tr>
<td>tú:či</td>
<td>pound</td>
</tr>
<tr>
<td>tú:yči</td>
<td>gopher</td>
</tr>
<tr>
<td>tú2</td>
<td>watermelon</td>
</tr>
<tr>
<td>kotú</td>
<td>deaf</td>
</tr>
<tr>
<td>?čkmtů</td>
<td>jimsonweed</td>
</tr>
<tr>
<td>smálkatů</td>
<td>intensifier: very, just</td>
</tr>
<tr>
<td>smá'lkktů</td>
<td>bang</td>
</tr>
<tr>
<td>tú'</td>
<td>blacksmith</td>
</tr>
<tr>
<td>?khwátů:ta</td>
<td>middle, center</td>
</tr>
<tr>
<td>tú'βl</td>
<td>the one that waddles</td>
</tr>
<tr>
<td>tú'lša</td>
<td>crowded</td>
</tr>
<tr>
<td>túři</td>
<td>(Pln)</td>
</tr>
<tr>
<td>türšô</td>
<td>poppy</td>
</tr>
<tr>
<td>hântúr</td>
<td>uncertain, unsure, hopeless</td>
</tr>
<tr>
<td>túyi</td>
<td>midnight</td>
</tr>
<tr>
<td>hipá:k slbťú:yi</td>
<td></td>
</tr>
<tr>
<td>tpä</td>
<td>shell v.</td>
</tr>
<tr>
<td>tpäqi</td>
<td>sprout</td>
</tr>
<tr>
<td>tpåθi</td>
<td>touch</td>
</tr>
<tr>
<td>yàk.t.pûrβa</td>
<td>lip</td>
</tr>
<tr>
<td>khwåttq[q]ä·βa</td>
<td>nail</td>
</tr>
<tr>
<td>ttmö·</td>
<td>itches</td>
</tr>
<tr>
<td>tcéqβa</td>
<td>dress n.</td>
</tr>
<tr>
<td>ćčeqβa</td>
<td>rake</td>
</tr>
<tr>
<td>tcåqβa</td>
<td>add</td>
</tr>
<tr>
<td>tcåqwa</td>
<td>(we) stand up</td>
</tr>
<tr>
<td>tcämâ:li</td>
<td>gather</td>
</tr>
<tr>
<td>tké·</td>
<td>gather</td>
</tr>
<tr>
<td>tkf</td>
<td>gather</td>
</tr>
<tr>
<td>tkē·βi</td>
<td>(we) stand up</td>
</tr>
<tr>
<td>tkáβi</td>
<td>gather</td>
</tr>
<tr>
<td>ttkáβi</td>
<td>gather</td>
</tr>
<tr>
<td>takāβ?i</td>
<td>encircle</td>
</tr>
<tr>
<td>tká·βi</td>
<td>split</td>
</tr>
<tr>
<td>ttká·βi</td>
<td>split</td>
</tr>
<tr>
<td>nà·tkāβka</td>
<td>split</td>
</tr>
<tr>
<td>ktkā(·)ma</td>
<td>hour</td>
</tr>
<tr>
<td>tkūpa</td>
<td>two people passing across</td>
</tr>
<tr>
<td>mîtkθā</td>
<td>sides almost come together</td>
</tr>
<tr>
<td>tkβsá(·)</td>
<td>heel</td>
</tr>
<tr>
<td>tkru</td>
<td>shadow</td>
</tr>
<tr>
<td>nî·stkwâika</td>
<td>crook of a cane</td>
</tr>
<tr>
<td></td>
<td>scorpion: out of shape</td>
</tr>
</tbody>
</table>
Black Canyon: cottonwood lined along the banks

win
too much, be late
a little
complete
smoke v.t.
plant species
light v.t.
trash
getting dark

fox (W.G.)
prairie dog
stop! leave (it) alone!
spoiling
salty
dam up, cup (hand), cover, close
boil + sweat house
ball
summit, top; edge
show v.t.
drum
bubbles
arc-shaped + bow
tpkvdli comes away from + branch, fork

tståmi spotless

tktóukba curved

hàmtóülta gila monster

tokwí·l clean, wash + spotless

tsitsi squeal, squeak

tspé six, cf. lean

tspáya

tsklpu·yβi hug

tsmá·či dream

thfni move

thánhā·ni rub (an arm)

thūma cloth

thpá: Pima

thk̂ō stomach, tripe

tkhō

tǎkō

thθi(·)la lizard

thmē· pile up

thmū bake (bread)

thlθ(·)b̄a sweet mixture

thwəri shave

tq̄mʔamβi capsize

tmíli fool, play jokes

ttméli put out, turn off
bury, cover with dirt
scratch, cf. itch
eye-glare
full
roll, wrap
break
capsize
full
sweeten
still, quiet
agitare
(small) level field, meadow
white oak
rest, settle, see tní'βi-?
yesterday (SEY)
sit, keep still
I'm going to cry
tired
I'm tired
road runner
horned
we're getting married
lie v. (falsehood)
(plural)
near
tyę́mi  
  desert v.
tyą́(·)č  
corn
tyūpi  
  face v.
tyūβi  

tydč  
  relative; 'friend'
yu·ča

tywβa  
  edge, horizon
twí·mi  
  rest v.
ttwí·ni  
  pushed on bone (?)
twárbi  
  lazy
twāmi  
  carry
twāmi  
  cover, smother
twáyi  
  distant
twá·yi
twpú·βi  
  preserve
362
Loanwords

ta:plè

shawl < tápalo
tomá.ta
tomato < tomate	
tà·mĩŋka ?sìti
one week < domingo
thàrhā'ri
work < trabajar

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tú· intensifier

tú· pà·lā·yi ugly person
tú· čá·βm ?wá·ma ?núkm I'll skip over parts of it
tú· čr?ú·yk ??ím I'm joking
tú· čwárβi/čwárβa ?úmk cheap

tyókm
tú· kēčm ?spókm I know a little
tú· kâča máča lunch
tú· gâča máča a few
tú· kβlmīβm

tú· kyó·βi nothing
tú· ?βó·km I was walking
tú· ?βó·k ?βá·km I got here walking
tú· βyé pà·tyé·mkm he deserted them
tú· βgâwβí it breaks
tú· ?spóbk (n)βák ?wá·km I'm just sitting here waiting
tú· hihúl βyák kyá·mpha everything around
tú· míňka ?sí·ti one week < domingo
tú· mpópqóq qníná that long ago you were slender
tú· nóma?nóma countless
tú· nýú·č(o)k use v.
tú· láwa láwk beyond one thousand
tú· lullúl?lča flute
tú· yà??ím I'm just saying that
tú· yà·swárβi nθé ??á·mčkm (on vacation) it was very pleasant over there (where I went)
<table>
<thead>
<tr>
<th>Language</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>tú· yúči</td>
<td>be always</td>
</tr>
<tr>
<td>tú· mỳyúčk pà·mnhmérβi</td>
<td>always be good to people</td>
</tr>
<tr>
<td>tú· wóqwó·q?íkm</td>
<td>growl</td>
</tr>
<tr>
<td>tú· nyú·čk nuβyú</td>
<td>all the time</td>
</tr>
<tr>
<td>tú· kàβyú·čm</td>
<td>some other time</td>
</tr>
<tr>
<td>čí</td>
<td>lay, put</td>
</tr>
<tr>
<td>čí'</td>
<td>fish n.</td>
</tr>
<tr>
<td>kčí</td>
<td>step v.</td>
</tr>
<tr>
<td>kčíči mya'ni</td>
<td>step it up!</td>
</tr>
<tr>
<td>?očí</td>
<td>embers, coal</td>
</tr>
<tr>
<td>ččí</td>
<td>mother n.</td>
</tr>
<tr>
<td>sčí</td>
<td>sweep</td>
</tr>
<tr>
<td>čipá</td>
<td>split</td>
</tr>
<tr>
<td>čphá</td>
<td></td>
</tr>
<tr>
<td>čita</td>
<td></td>
</tr>
<tr>
<td>či'ta</td>
<td>mother n.</td>
</tr>
<tr>
<td>čiči</td>
<td>suck</td>
</tr>
<tr>
<td>kčíči</td>
<td>steals</td>
</tr>
<tr>
<td>čikwi'či</td>
<td>wrestle</td>
</tr>
<tr>
<td>wi'skči</td>
<td>precipice</td>
</tr>
<tr>
<td>čfio'ni</td>
<td>kiss</td>
</tr>
<tr>
<td>hamči'čo'ki</td>
<td>sneeze</td>
</tr>
<tr>
<td>čihůhi</td>
<td>whistle</td>
</tr>
<tr>
<td>čf'li</td>
<td>falls asleep (arm, leg)</td>
</tr>
<tr>
<td>hící'lá</td>
<td>nit</td>
</tr>
<tr>
<td>čf'li, see čélqi</td>
<td>defecate</td>
</tr>
<tr>
<td>čf'ri</td>
<td>shave</td>
</tr>
<tr>
<td>če·</td>
<td>put away (SEY)</td>
</tr>
<tr>
<td>βčé(·)</td>
<td>daughter (man speaking)</td>
</tr>
<tr>
<td>βčá·ya</td>
<td>(plural)</td>
</tr>
<tr>
<td>čé·bi</td>
<td>heal</td>
</tr>
<tr>
<td>qwaščem(?)i</td>
<td>admires a lover (woman speaking)</td>
</tr>
<tr>
<td>čélqi</td>
<td>defecate</td>
</tr>
<tr>
<td>čílqi</td>
<td>feces</td>
</tr>
<tr>
<td>čélqa</td>
<td></td>
</tr>
<tr>
<td>?ù·β čahmā·</td>
<td>chew tobacco</td>
</tr>
<tr>
<td>?wi·nākčakába</td>
<td>Black Canyon</td>
</tr>
<tr>
<td>βčá kʷā·k?i?i</td>
<td>yawn v., cf. gallop</td>
</tr>
<tr>
<td>βál...sčā</td>
<td>he owes</td>
</tr>
<tr>
<td>qočqočča</td>
<td>tickle</td>
</tr>
<tr>
<td>sčá</td>
<td>put up</td>
</tr>
<tr>
<td>hàbpčā(·)</td>
<td>mano</td>
</tr>
<tr>
<td>hàp?čá</td>
<td></td>
</tr>
<tr>
<td>nčā·</td>
<td>first cousin</td>
</tr>
<tr>
<td>tnčā·ča</td>
<td>(plural)</td>
</tr>
<tr>
<td>hàčā:</td>
<td>Milky Way</td>
</tr>
<tr>
<td>pàčā:ča</td>
<td>clan, family</td>
</tr>
</tbody>
</table>
(čà-) (? )qʷɑrɪ
clearing; desert
čá· pour
čyâː, čhâː
hâlčâtō
polish, cf. smooth
yū·tčâti
almost (SEY)
čâčâ·či
sprinkle, pour on
kʷâsočâča
rainbow
čâqčâq
drip
βčâqʔi
drop
kčâqi
leak
ʔ têmčâq
termite
mčâqi
choke on food
sčâqi
split
čâ·bi
eat up
čá·(β)·
on (top), above
čâ·βk
on top of
čâ·hk
čâ·ʔhe
čâsčâ·sa
piñon jay, blue jay
kčâsa
catclaw acacia
wi·kčâsa
smooth cliff + Four Peaks
hwâ·lkčâsča
broken-off pine (Pln)
čahāni
βčām?e
paint v.
throw away
čá·mi
mistake, misdeed
č-yá·mi (?)
čá·ne
on top
hčánap
girl, daughter
ˈwi·čalčalʔe
ridge, boulder
βčā·rʔi
shout nearby
mča·yi
hungry
-čō·
suffix: place where
-čō·
čō·
set down
čyō·
čwō·
(plurals)
sčō
pluck
čōqa
juniper, cedar
čō·bi
fight
čā·wbi
(plural)
βčōni
jump into
čō
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čũpi  eat something mushy

tpčũ'ni  arc-shaped

hãšču'li  blow with mouth

kcčũliki  small ditch shaped

sčůlβí  stick in

-čhúr

?čhú'ri  winter

?čhúra  year

-čuráčú'r

hù'θčù'račú'ra  plant for hummingbird

θčůr?i  insert on object (thread into needle)

čurka  walnut

čpé(')  reach, cover

čpé'βí  blanket

čpěqí  hoe v.

čphá  split

čipá

čpá'  sprout; get out

čpán  plant species

čpáya  animal

?čpáya

čpú(')  insert many objects + bank

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| čpū·bi | hibernate |
| čpūki | cover with dirt while planting |
| spūki |
| čtā | mother |
| čīta | father |
| čtūhi | spit |
| ččí | mother |
| ččūli·či | survey, measure |
| ččá·bi | put on ground (rug) |
| sčā·bi |
| ččá·yi | step on |
| čkuváti | knife, ax |
| čkuvá(·)sa | base of skull |
| čkud | bite |
| čkuvó |
| čkuvé· | push |
| čké· |
| čká· | push |
| čká·ba | cousin |
| čká·mi | wide |
| čkpā· | mount |
| čkmtū | melon |
| màtkčkmí·ya | valley |

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<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>wi·čkó·li</td>
<td>many rocks</td>
</tr>
<tr>
<td>čkl?ålki</td>
<td>make a fist</td>
</tr>
<tr>
<td>čkróti</td>
<td>short</td>
</tr>
<tr>
<td>čkwári</td>
<td>laugh</td>
</tr>
<tr>
<td>čkwá:ri</td>
<td>(plural)</td>
</tr>
<tr>
<td>čpé·:i čáčkwá-yi</td>
<td>saddle blanket</td>
</tr>
<tr>
<td>čkwá</td>
<td>put, lay many objects</td>
</tr>
<tr>
<td>čkwá:1</td>
<td>lung(s)</td>
</tr>
<tr>
<td>č(k)kwí</td>
<td>ask</td>
</tr>
<tr>
<td>čkpíti</td>
<td>peep</td>
</tr>
<tr>
<td>čkpá·</td>
<td>climb</td>
</tr>
<tr>
<td>čkmí·</td>
<td>creek</td>
</tr>
<tr>
<td>čkná:na</td>
<td>stink bug</td>
</tr>
<tr>
<td>čqnąána</td>
<td>command</td>
</tr>
<tr>
<td>čkná·</td>
<td>short</td>
</tr>
<tr>
<td>čkróti</td>
<td>fold once</td>
</tr>
<tr>
<td>čqn?ó:ni</td>
<td>fold repeatedly</td>
</tr>
<tr>
<td>čtqn?ó:ni</td>
<td></td>
</tr>
<tr>
<td>čliqwu:mi</td>
<td>gulp</td>
</tr>
<tr>
<td>čq̃áti</td>
<td>uncover</td>
</tr>
<tr>
<td>č?in?í·ni</td>
<td>shake, (earth)quake</td>
</tr>
<tr>
<td>č?á:mβi</td>
<td>gather (acorns)</td>
</tr>
<tr>
<td>č?áli</td>
<td>come out</td>
</tr>
<tr>
<td>?lwi.č?úr</td>
<td>Indian paintbrush (plant)</td>
</tr>
<tr>
<td>-čβ-</td>
<td>we (multiple plural)</td>
</tr>
<tr>
<td>páčβ-</td>
<td></td>
</tr>
</tbody>
</table>

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čpū·yi  sift, separate seed
čākō  cup (ears)
čpḗ  liver
čwḗ  (SEY)
čpdsó  rib
čwsó  (SEY)
čpnpḗβi  carry many objects
čmnbhéβi
čpndá·yi  chew + scissors
čmnáyi
čblwí  measure v.
čblwáqi  take out (many horses)
čbrári  lift
čbyámi
kwēčbyámi  automobile
čēili  poker stick
čēeqi  sucks blood
čēāči  sift
čēātpi  round, bowl-like back
čuÁ·li  wash
?ččuÁ·li  wash repeatedly
čepáli1  tie
čepáli2  suck, chew (cud)
čekuāmpša  cotton
čsá  bird
wi·kēsāwa  Superstition Mountain

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čskwá sated
čsmáyβa cousin
čháni paint, smear
čhári avenge
čhkåbi canyon
čhmá: eat dry, powdered substance
         ( parched corn)
čhüñi smallpox
čmí lay long object (down, across)
         ččmíči furrow v.
čmírmíri straight
?wáčmíča nation, tribe
čmí’ya female
čmá’li rake
čmáyi plate
čmpáβa kidney
čmpá’wa (SEY)
čmpúk manzanita
čmkwíla yellow palo verde
čmsí (elder) sister (man speaking)
čmhó(*)βa taraiso
-čmyála
  mätčmyála adobe
  čmyála packed into shape
čmñáyi chew
  mpé tasty
čmyíl red or fire ant

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determined
determined
spleen
spleen
lose, drop
lose, drop
black ant (small, brown)
black ant (small, brown)
bow
bow
middle is hollow, cf. dust
middle is hollow, cf. dust
lightning sound
lightning sound
kerosene can turned inside out
to make tortillas
tortilla
tortilla
comes out in the spring
comes out in the spring
joke, tease
joke, tease
bone
bone
paint
paint
face paint
face paint
(s)mash, squash
(s)mash, squash
rub straight
rub straight
( iterative)
( iterative)
sand, gravel
sand, gravel
scatter
scatter
miser
miser
cheap
cheap
swing
swing
cwâ(y)i

swing

cwó

brick + cheese

see also čo.
<table>
<thead>
<tr>
<th>Arabic Word</th>
<th>English Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>?چپایا</td>
<td>animal</td>
</tr>
<tr>
<td>?چ...چا:می</td>
<td>make a mistake</td>
</tr>
<tr>
<td>?چ...چو:لی</td>
<td>repeatedly</td>
</tr>
<tr>
<td>?چ...م:م</td>
<td>eat</td>
</tr>
<tr>
<td>?چ...ن:ه</td>
<td>hunt</td>
</tr>
<tr>
<td>?چ...پ:ری</td>
<td>intelligent</td>
</tr>
<tr>
<td>?چ...پ:قی</td>
<td>hit, beat</td>
</tr>
<tr>
<td>?چ?ویی</td>
<td>binoculars</td>
</tr>
<tr>
<td>?چبنا:میمی</td>
<td>needle</td>
</tr>
<tr>
<td>?چم:کم</td>
<td>energetic</td>
</tr>
<tr>
<td>?چن:ب:ا</td>
<td>sickness, disease</td>
</tr>
<tr>
<td>?چن:وگا</td>
<td></td>
</tr>
<tr>
<td>?چ:وکا</td>
<td>war</td>
</tr>
<tr>
<td>?چ:وک:یی</td>
<td>hostilities</td>
</tr>
<tr>
<td>?چ:وک(یک):حی:م:چی</td>
<td>war dance</td>
</tr>
<tr>
<td>?چ:وکیک:ک:ی:ک(ی) (چی)</td>
<td>peace + no more fighting</td>
</tr>
<tr>
<td>?چک:ف:ب:ا</td>
<td>thief</td>
</tr>
<tr>
<td>?چک:ه:ب:د</td>
<td>store</td>
</tr>
<tr>
<td>?چک:ک:ب:چی</td>
<td>money</td>
</tr>
<tr>
<td>?چک:م:ت:و</td>
<td>watermelon</td>
</tr>
<tr>
<td>?چ(ک):ک:ن:ب:ا</td>
<td>messenger</td>
</tr>
<tr>
<td>?čknwí•ra</td>
<td>cook n.</td>
</tr>
<tr>
<td>?čkné</td>
<td>hunter (Prn)</td>
</tr>
<tr>
<td>?čkúrθa</td>
<td>once upon a time, a long time ago</td>
</tr>
</tbody>
</table>

| ?čkú:rθà | diver or chicken hawk |
| ?čkyō•č | ancient |
| ?čkyůka | ancient people → Hohokam |
| ?čkyúkà?pá:ča | legend |
| ?čkyú'kta | eat |
| ?čmá• | a few eat |
| ?čmáči | food |
| ?čmáβa | restaurant |
| ?čmáčo | table is hard |
| ?čmáččè ňpíři | kitchen |
| ?čnwí•rò? | cook n. |
| ?čnwírčo | hunter (Prn) |
| ?čpáři | once upon a time, a long time ago |
| ?čpáynwá | diver or chicken hawk |
| ?čpéqi | ancient |
| ?čqváθa | ancient people → Hohokam |
| ?črąpi | legend |
| ?čré• | eat |
| ?čsá | a few eat |
| ?čsá lá•wi | food |
| ?čsá kwíla | restaurant |

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| ?čsk'wíli | sew NEY       |
| ?čsk'wí·li | needle SEY   |
| ?čhí: qyáti | drinks too much |
| ?čhí·č ?swáli | I drink too much |
| ?ččβlwi·km | I measure     |
| (?)čhwá.kkná·na | walking stick (insect) |
| čhwá·βč hwáyá·wi | enemy strikes  |
čaʔ?he on top
čaʔhk on top
čaʔbk on top
čaʔhè top; roof
čaʔbk ?cмάyči they devour it
ʔhàčáʔbk yáκi float, swim
ʔhàčáʔbk yáκi
ʔhàčáʔbk yáκi
ʔhàcgáʔm ?wáma ?nükm I'll skip over these
čaʔhk ʔkwáʔyi put on top
čaʔhʷáyi war, battle
čaʔwíri insist
čaʔhtáʔti crawl
čátáʔti
čálhú burp
čákči step on
čákčtči
pàʔčáʔca clan, family
čáčáʔči sprinkle
čáččʔl squirted on
pàʔnčáččʔl handkerchief on top: John
Charger (popular etymology)
ʔpáʔn čáččʔči
ʔhàčkáʔča water thrown on top
čáčkwáʔyi saddle v.
<table>
<thead>
<tr>
<th>č’ačkwáya</th>
<th>saddle n.</th>
</tr>
</thead>
<tbody>
<tr>
<td>čám sū·si</td>
<td>sprinkle</td>
</tr>
<tr>
<td>càmčá·či</td>
<td>pour on</td>
</tr>
<tr>
<td>càmčáki</td>
<td>splash</td>
</tr>
</tbody>
</table>
čkvé'  push
čké'  
kvá'  shoot
-kvát  break; cut
tkváti  cut with an ax
tkvá'tm ??ā'βi  hit with an ax
yā'β·kvāti?i  out of breath
čkvāti  cut with a knife
sakvāti  cut with an ax
skvāta  breastbone

kvá(·)βi  luck

čkvá(·)sa  base of skull
?ltśkvāla  forked post
?ltśkvāla  branch: comes away from tree

-kváy-
ēkvāyi  light (in weight)
ēkvāyβi  break
ēkvā'yi  shatter
βēkvā'yβi  crack (egg)

čkvó  bite
čkwó  

sālklkvō(yi)  hobble

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klvô̂bi
kyû(•)li
tie around an object
long
tkí
  tké

hàmkkí

(ʔ)ki·kâwi
kič
kéč
káč
qâč
kikvó(hi) + klkvó
kkíski
kihipâ:čm
kip-
kična
ki:čna
kična
knâ:
kična
mâtkî(·)la
tkē
tkí

add
I meet
little
little
little
little
hobble
slippery
tonight
a kinship term
great-grandchild
great-grandchildren
younger cousins (pl.)
younger cousins (pl.)
younger cousins (pl.)
wide earth
adds

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nâkhkē'  ford v.
čkē'  push
khkē'  across
hikē'  carry something heavy
    hiko
(β)kē'...(ádm-)
βkē?
kēč, see kîč
?kʰwàsakēβa  pick n.
kskē'βa ?wâ  tent
?i·kēθwi  we got here
kēhkēh  cough
kōkēna  glass
    kōkēno
kēla  younger sibling
    ké'la  (plural)
kапамка
  капамка
kₕ(ₕ)та
tₕта
kₐₕₕₐrₑ, kskᵢта
-ка
iₕₙка
mhₜᵯ(·)мₚₜₚₜ₢ₜ
mhₜₚₜₚₜ₢ₜ:
kₚ(β)

corner (outside)
soon, again; wait!
hello!
halloo!
what? how?

each one
many sitting (SEY)

erapist < Spanish papel

tooster's sound
mother's brother's sons/father's
sister's sons; cousins (m.s.)
gather wood
collecting money
hour

gasshopper
porcupine
somebody came
bridle: pin up, button, close
Black Canyon
button
hit bull's eye + noon
two people passing across
(Prn m.)

world, earth;
country, wide area

match
glide
rock back and forth
different, opposite + bridge,
ford

beautiful
I meet

continue
gopher

piñon, pinenut
daughter's child
(plural)
great-grandmother; great-aunt
i·kó
hāŋkó
kβkó
kθpko·p
βkóβi
kθpko·βi
kθmβi
(?)wί·čkó·li
kθrkó·r
θkwè·čkθrkó·ri
na?kóra
θkura
kó?è?
kóla
kó·la
kāβ kū·čk(?è
nkunε·ya
kkū·
kúp
θháhèla ktkúpa
wí·ktkúpa
(?)kúla
kúr
carry in hand
frog
block, cup (ears)
beat (heart)
fence
shield
ball
many rocks
dice
son (man speaking)
son (man speaking)
(vocative)
mother's mother
(plural)
where (SEY)
husband's father
bird that goes "ku:"
river narrows
sides almost come together
jackrabbit
long

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<table>
<thead>
<tr>
<th>Word</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ku-ra</td>
<td>long ago</td>
</tr>
<tr>
<td>ku-rm</td>
<td>very far</td>
</tr>
<tr>
<td>?čkúrēa</td>
<td>once upon a time</td>
</tr>
<tr>
<td>?čkū:rēa</td>
<td>a long time ago</td>
</tr>
<tr>
<td>kpí-t</td>
<td>turtle</td>
</tr>
<tr>
<td>čkpí’-ti</td>
<td>peep, peek</td>
</tr>
<tr>
<td>kpí’-la</td>
<td>clover</td>
</tr>
<tr>
<td>kpá-rβa</td>
<td>satisfied Prn m.</td>
</tr>
<tr>
<td>ktōhi</td>
<td>kick</td>
</tr>
<tr>
<td>ktú</td>
<td>pounding stone</td>
</tr>
<tr>
<td>ktkā:ma</td>
<td>two passing across (Prn m.)</td>
</tr>
<tr>
<td>kt?ōrβa</td>
<td>top of hill</td>
</tr>
<tr>
<td>ktβá</td>
<td>narrow, level land by mtn.</td>
</tr>
<tr>
<td>mātktpākβa</td>
<td>curved</td>
</tr>
<tr>
<td>ktθükβa</td>
<td>gentle + Grace (Prn)</td>
</tr>
<tr>
<td>ktní(’)βi</td>
<td>small level land</td>
</tr>
<tr>
<td>ktná’kβa</td>
<td>step down</td>
</tr>
<tr>
<td>kčí</td>
<td>one foot (measurement)</td>
</tr>
<tr>
<td>kčí’?sīti</td>
<td>step it up</td>
</tr>
<tr>
<td>mkčiče myá’mi</td>
<td>step on.</td>
</tr>
<tr>
<td>čakčė, čakčiči</td>
<td></td>
</tr>
<tr>
<td>kčiči</td>
<td>steal</td>
</tr>
<tr>
<td>kčí’čβi</td>
<td>thief</td>
</tr>
<tr>
<td>?ččkččβa</td>
<td>precipice</td>
</tr>
<tr>
<td>wi’skčč’βi</td>
<td></td>
</tr>
</tbody>
</table>
wl'na:kčąkąba
wl'ktkůpa

Black Canyon
gully: sides almost comes
together

kči:sa
kčąsa

Mescalero <Cochise?
catclaw acacia

hwá:l kčášča
kčáqi
kčůlki
kčįkő'bi

broken-off pine (Pln)
leak v.
small ditch

Right

killdeer
slippery
beg

(?)/ki'kawí

I meet

kků:
bird species (onomatopoeia)

kqi'rba
straight line

kqāqi
leak, cf. drip

kq'wąs
rifle

sik'ita

pointing

k?í():1-
rough sides (Pln)

k?í:1a

mountain

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?hâk?äma  | river
k?õri     | narrow → high wall
k?ôra     | ball → tomato
k?ôya     | crown of head → cock's comb
k?ôwyá    |
k?ú'       | basket, plate
k?üþo kđâqi | leak v.
k?ûlka    | swarm (of bees)
- k?ú'.l-  |
sk?ü:.la  | beads
  hñãqãça  |
sk?û:.la  | (singular)
sâlk?hâni | right hand
kõá'õi    | pray, ask for

wàkâbâri | like, love
kõtë'     | big
  kotë (SEY) |

kõkõ     | block
  ?i’kõkõbba | corral
  ?i’kõbba | fence
kõskwî’   | standing
kõhâõi    | tight
kõnãwì   | carry heavy objects < nò(•)
tü’ kõlmîbôm | a few
kəf:yi
(Indian) doctor

kəyé:

mikəá
heel

kəq
burden basket

kəár
dog

kəá·ri
left

... kəó(·)
when...

kəpäli
tie

kəpälbi
knot

kəkéña
glass

kəbir:n
hole + oven

kəʔē:
(a) drink (made) from berries

k(i)əyē'
doctor cf. kəf:yi

kəwərbi
perforate (ears)

ksik?Ita
corner

ksïksï?Ita

??i·ksïβa hwē·βa
cross, crucifix

wàksčïša
wall

kskë·βa ?wâ
corner

kəq'är?e ksk?Ita
outside corner

ksnákša
gap: saddle-like

dancers

khimāča

(m)ikḥi
scrape, cut skin out

kh

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?čkhē:βöö
khērβa
store
Prn given to one too lazy to walk

khāβa
follower

khāβsū(w)a
turquoise

k(?hána
right; good

khké·(β)i
(a)cross

khβö·yi

má:·tö khβö·yi
body is feverish

khtí·la

myā·khtí·la
heaven

khéi·la
wide-spread

khlo, see khlö
boat, canoe

khlūwijβa
pulled out

θāβa khyärβa
Kirkland

kmí·1
bring, deliver

kmí·2
cry for somebody

ŋkmí:km
cries to be brought along

?i·tmi·yi
ocotillo: sad plant (?)

måtēkmí·ya
valley

sākmāka/skmāka
skunk

kimāhwírβi
loin cloth

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sàlkmarpa  fingers

hithätk kmpulpa camel: humpback (dromedary)

ʔčkmți watermelon

wi.km?ërpa ridge

kmsärpa toes: small things sticking out, cf. sál

kmyē•

ʔl.kmi.ye - ʔlkmyē• ocotillo

kmyä’yβa the moaner

kmwā•či kill many

ʔkwē.kmwā•či poison

ʔpā.kmwā•či massacre

ʔpā.kmwā•čči massacre v. pl.

knī•li stirrups

šknā• command

săl?čknâ:mo index (i.e. pointing) finger

sāla ʔčknä:mi

(ʔ)chwākknā•ma walking stick (insect)

knā•pi tell

knāna slight rise in land

knī•ya mother-in-law

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knī:ča (plural)

knī:ča

sknōka elbow

klūm?i limp (from arthritis, rheumatism)

qlūmi

sklpuyi hug

klkvyyi tie around + jail

mpū·klūt tarantula

k?úlki round + beads

klhō boat

khlō

yùklmē: eyebrow

klmá: arms, buttocks

čkrōti short

nāč pā·čkrōtkm I am short

yà(·)krū(·)bm pî thirsty

khâkrvisa hammer

mā:t hiokylètk the whole body

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my whole body

gray hair

bubbling water (Pln)

vinagrillo (plant species)

nothing; no noise

ancient

legend

I was coming way back

dove

pigeon

distribute

mockingbird

owner

back; down + south

situated (found in Plns)

cicada

scorpion: out of shape

it's rusty

talk
k'vyük' h'áli

(?)kwí

kì (in compounds)

(?)kwí·yi

kwí·

-kwí

(?)?é·βkwí

transplant

catch, grab, hold on

candy cane

I listen

catch, grab, hold on

squeeze, wring (out)

candy cane

stand up

Black Canyon: cottonwood

lined along banks

soften (buckskin)

lock, doorknob

gruel

cream of wheat; gravy

wrinkled

wolf; mountain lion

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tkwi₁.₁bi
   qēćmtkwï₁.₁bk m?ē' give me a little!
   nā·tkwi₁.₁bi late
   nā·tkwilbi

?čskwi₃ili sew (SEY)
čmkwaila yellow palo verde
kwîrkwîr spinning

màthikwîra whirlwind

smkwi₁.₁rbi jealous (male)
kwîra rolled up, coiled, twined
   tmkwîri wrap
kwîwi stretch v.
?kwë· See something
   ?kwë·yi thingamajig
   kwëθa which?
   (?)kwë·θ which?
kwë·nō thing
kwëra mother's brother
   kwë·ra (plural)
kwàsqčáča rainbow
čačkwâya qrwî·sa pommel
   čačkwâya qrwî·sa
kwâčk alongside of
ukwâ feel like
ok'wa

n?òkk'wa

(?) kh'wa

I'm sweating
metal, iron, knife
horn
horned
Indian spinach
open

qw'qi

kw'kbi

open

kw'kbi ti

open slowly

gallop

deer

ok'wa bi

wide

(?) kw'qi

tą? kw' bi

brown, cf. yellow
toast
cotton
soft: "when you touch it, it goes in"

qw'äm'ba

qw'äm'bi m?i

thrash
peel v.
hide, buckskin
reddish, pink + rust
plant species: a bush
<table>
<thead>
<tr>
<th>Term</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>skwāla</td>
<td>large hawk</td>
</tr>
<tr>
<td>kwa (?)</td>
<td>I want to go to sleep</td>
</tr>
<tr>
<td>(?)kwa ra</td>
<td>red clay</td>
</tr>
<tr>
<td>kwāri</td>
<td>bind (a baby)</td>
</tr>
<tr>
<td>kwārēči</td>
<td>swaddled</td>
</tr>
<tr>
<td>tkwāri</td>
<td>smoke (a pipe), level of trees (?)</td>
</tr>
<tr>
<td>?kwā·y khūphūna</td>
<td>mix, turn food in pan</td>
</tr>
<tr>
<td>skwāyi</td>
<td></td>
</tr>
<tr>
<td>0kwāyi</td>
<td>light in weight (W.G.)</td>
</tr>
<tr>
<td>skwā·yi</td>
<td></td>
</tr>
<tr>
<td>kwāwa</td>
<td>mother's father</td>
</tr>
</tbody>
</table>
wear clothes
dice
knife
vegetable
poison
story
livestock
toy
flag
key
motion pictures
drum
checkers
sow seed
Christmas
eat
I want to eat
I hear tell that...
whatever you say
motion pictures
mortar
wrongs we do
one makes mistakes
kuwè·čáyi
kuwè·čbyámi
kuwè·čmáya
kuwè·hços hços(?)ča

jar
automobile
chewing gum
fiddle, violin: rub back and forth

kuwè·húáli
kuwè·kqlvéβha pà·mtvé·mo
kuwè·mába ?kuhá·βl yá·wa
kuwè·mába twpù·βi
kuwè·máčo·
?čmáičí
kuwè·mðá:tβiča
kuwè·mðok walmí·yé?
kuwè·ni·km n?è·
kuwè·nmiya
kuwè·nò
kuwè·páya
kuwè·qlvéβha βéam?e
(?)kuwè·mába

plant v.
take the bad away from us
can food v.
preserve food
dishes
net
do you want to eat?
gift
hair, fur
thing
fruits, nuts
garbage, trash
food

(?)kuwè·mácá
kuwè·sáya nháya
kuwè·shtára
kuwè·spó ?úmi
kuwè·tâβsa
kuwè·tóβa

grease
table
stupid
flower, blossom
meat; game

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kwè-wála  feather
(?)kwè-wê·bi  wear clothes
"khwâ metal, iron; knife

"khwâ lâ′wi metal, iron; knife (plural)
khwâtîrtîrâ a čmâyi plate
khwâttq[q]â′bâ nail, cf. 'hit'
khwâčmâyi spoon
khwâčpâyi scissors
khwâčmâyâ knife
khwâčkâvâti kerosene can turned inside-out to make tortillas
khwâčkâvâti blacksmith: bang v.
khwâčrâprâ′pi plate
khwâktû′ta hammer
khwâkâqâisa metal fence; barbed wire
khwâqâkiśma engine: 'iron runner'
hwâqâmâma manhole
khwâqâriya window: "metal like water"

(?)khwâsûlsûla drinking glass

(?)khwâsûlsûla + frying pan
khwâslî′yi phonograph
(?)khwâsâlî′yi musical instrument
khwâswâ′ri pick n.
<table>
<thead>
<tr>
<th>khwà</th>
<th>bucket</th>
</tr>
</thead>
<tbody>
<tr>
<td>(h)mat</td>
<td>make instrument cry + rock music</td>
</tr>
<tr>
<td>khwàmiwo</td>
<td>fork</td>
</tr>
<tr>
<td>(?)khwàmsârâsa</td>
<td>eyeglasses</td>
</tr>
<tr>
<td>khwàyûyi</td>
<td>metal chair</td>
</tr>
<tr>
<td>khwâwâyi</td>
<td></td>
</tr>
<tr>
<td>Term</td>
<td>Translation</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>mlqí</td>
<td>neck</td>
</tr>
<tr>
<td>?sè’ tqípi</td>
<td>evening: getting dark</td>
</tr>
<tr>
<td>?sè’ tğèpi</td>
<td></td>
</tr>
<tr>
<td>qırqıri</td>
<td>rub hard against</td>
</tr>
<tr>
<td>màtqí’s</td>
<td>plant sp.</td>
</tr>
<tr>
<td>βqırqır?l</td>
<td>giggles</td>
</tr>
<tr>
<td>kqıIrβa</td>
<td>straight line</td>
</tr>
<tr>
<td>?qı’ra</td>
<td>ditch, furrow</td>
</tr>
<tr>
<td>βçIqwusmĨ</td>
<td>gulp</td>
</tr>
<tr>
<td>βçiqİwusmĨ</td>
<td></td>
</tr>
<tr>
<td>βqęqęʔI</td>
<td>it’s sticky</td>
</tr>
<tr>
<td>qę(‘), qąya</td>
<td>dusty, sticky</td>
</tr>
<tr>
<td>βtqępʔI?I</td>
<td>dusk</td>
</tr>
<tr>
<td>qę(‘)č-</td>
<td>little</td>
</tr>
<tr>
<td>kąč, kőč (?)</td>
<td></td>
</tr>
<tr>
<td>qaqa’ärhe</td>
<td>outside</td>
</tr>
<tr>
<td>qa(‘)pąňqa</td>
<td>bat</td>
</tr>
<tr>
<td>qąmpąňqa</td>
<td></td>
</tr>
<tr>
<td>(?)qąta</td>
<td>sunflower</td>
</tr>
<tr>
<td>(hi’wąy) sqąta</td>
<td>chest</td>
</tr>
<tr>
<td>skvąta</td>
<td></td>
</tr>
<tr>
<td>qąč, see qęč-, etc.</td>
<td>'little'</td>
</tr>
<tr>
<td>hàlqwą’wa qąčqąča</td>
<td>Japanese</td>
</tr>
<tr>
<td>qaqa’qąa</td>
<td>Hohokam ghosts</td>
</tr>
</tbody>
</table>

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qa

(β)qâqβ?i
kqâqi
khâtt?q{l}ā·βa
qâsi
βqâhβk
βqâhβqâhβik
βqâmi
?hâtt?qqâmi
sqâmi
qâwi
sqâwa

qqôrč qâwqâw?lkm
βqânä·k
βqôpqôp?i
nyâl βqót?à?īmi
qôqôcč čâ
qoloyawa
qôri
qqôr
tgor
haŋtûr
qô?ō·li
qô?ôri
sâl qôqô·čâ
sâlkki·čâ
hpôq?ûrka

crack like a watermelon
leak, cf. drop
nail, cf. hit
shout
lightning sound
stab, cf. shove
spurs: little kicks
shoves quickly
broken, break in two
egg

fox goes X
whine
caved in (mining shaft)
fall down there
tickle
chicken, < gallina
swing, rock
fox
(W.G.)

poppy
round (watermelon)
round (marbles)
little finger; fingers

pistol

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myál q?öra  
βqβö:?i  
βqwö:?i  
q légq  
qtepâli  
ktepâli  
wł.?qsa  
qsáq  
qsâmta  
qsóqa  
màtqmötqi  
qmòti  
qmòsa  
qmpàya  
qmwí'ra  
qčmwí'ra  
sqmwi'ra  
βqnā'  
(?)qnu  
qnú'bi  
qnüyi  
čqn?öni  
qnmó:  
qnmwi'  
qnimá'  
?qnú'ra  

growl  
basket on back  
tie up  
agate  
crow  
mushroom  
mole (on skin)  
mound  
mound-shaped  
mistletoe  
brain(s), head  
old woman  
(plural)  
ankle  
whine  
mud  
muddied  
muddy  
fold once  
duck n.  
side, temple, cheekbone  
not long ago  
sotol, cf. poppy  

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qnú:r
βqlá·
qlūmi

klūm?i
hàlsqrâ·pi
qryē:
čàčkwā·ya qrwī·sa
čàčkwā·ya qrwī·sa
salqrwī·sò (SEY)
qlāé(·)
qlā(·)yi

qyáti
qyûrqi
qwáwa
mnûnc qwô·qwô·?l
βqwô·?l
βqôô(·)?l
croak; scream for help
limp (from arthritis, rheumatism)
naked, cf. flat
clear (water)
pommel
wrist, forearm
bad + dislike
very, really + rich, much
small ditch, furrow
hair, scalp
diarrhea: stirred up
growl

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mqwiθ  
flying squirrel
qwiθqwiθ  
beak, bill
qwilqwilr  
plant species
mtqwi'sa  
still (water); lukewarm
qwin  
sharp, pointed
qwi  
corner
?wàsqwilr(β)qwírβa  
beak
húqwílqwíra  
beak
qwasčem(?)i  
admire a lover (woman speaking)
nqwá  
crane
qwäti  
burn
tqwäti  
light, kindle
qwäqi  
shatters, open v.t.
kwäki  
busted
βqwäqβi  
busted up
qwäqβqwäqβi  
open (a wound)
qwáqβi  
qwa:ka  
deer
qwa:qa  
qw:qa  
cow
qwätta  
Verde Valley (G.M.)
qwa:ski  
yellow, cf. brown
qwá
qwâsi (W.G.)

qâwâ

kqâwâ

mqâni

(?)-qâr-

mâtkqâ rmâ

hmâqâr?i

sqâr?i

sqâ:r(?)l

çqâti

rifle

cracking sound

finely pounded

outside, desert; bald, nothing

cradle

stirred up (+ diarrhea)

uncover
qʷáktə 'cow'

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>qʷáktə pābi</td>
<td>barbecue a cow</td>
</tr>
<tr>
<td>qʷáktə čhāni</td>
<td>smear meat</td>
</tr>
<tr>
<td>?qʷáktəθāwwa</td>
<td>calf</td>
</tr>
<tr>
<td>?qʷáktəšāwa</td>
<td></td>
</tr>
<tr>
<td>qʷáktəθāwa msī</td>
<td>heifer</td>
</tr>
<tr>
<td>qʷáktəsāya</td>
<td>fat on cattle</td>
</tr>
<tr>
<td>qʷáktəhmā·y yōba</td>
<td>castrate</td>
</tr>
<tr>
<td>qʷáktəhmāba</td>
<td>bull</td>
</tr>
<tr>
<td>qʷáktəhmāβa</td>
<td>bull</td>
</tr>
<tr>
<td>qʷáktəhú·kβtē·</td>
<td>buffalo</td>
</tr>
<tr>
<td>qʷáktən háya</td>
<td>soup</td>
</tr>
<tr>
<td>qʷáktən mī·ya</td>
<td>cowhide</td>
</tr>
<tr>
<td>qʷáktən māya</td>
<td>cow’s milk, butter</td>
</tr>
<tr>
<td>qʷáqtənmā·yə čwβba</td>
<td>cheese</td>
</tr>
<tr>
<td>qʷáktayū·l</td>
<td>rawhide, leather; shoe string</td>
</tr>
<tr>
<td>qʷáktayū·l ḥāt sāqi</td>
<td>whip n.</td>
</tr>
</tbody>
</table>

Verde Valley dialect (G.M.)
??i· See
?l·βkɔβa
?lwila
?l·hmi(*)ya
?i?
?I
mt?ini
h'wi?l
?i·nka
?i(*)
??i
mí
?i
-?l
mû·?l

?iwo·
teach by saying
?i·wo

lûllûl?iča ??i·wok
βsû·spi ?I·wo
mâthâ't nû:lk?î?l
màtmûń?i
nmoáp?îkè
βhipâ?îm

wood
fence
grass
acorn
no! stop! listen! (interjection)
stop it!
what?
soon, again, wait
say
1s: I say
2s: you say
3s: one says
"goes," says (sound made by X)
moos

I play the fife
squirt
dust
autumn
dawn
begins to get dark, evening
whooping cough

want

I want to eat

corner

outside corner

pointing

bulrushes

move, shake, quake

thread < hilo

worm

(plural)

steep, precipitous, deep

canyon

rough sides (Pln)

butte; stem (on pipe)
??í: wood, tree

??í:pá.?ã̃bi

??í:bm pá.?ã̃:ã̃či

??í:pòqòqa

??í:tápstáps?îča

??í:tá.za

??í: tkãβí

??í: tqwáíči

??í:tqwáíča

??í:tβkva.la

??í:tβkva.la

??í:wìlã hàbpsü(w)à ttná:kba

wilhàbpsü tnàkbi

wilahàbpsü a ktnà:kba

wilhàbpsü(w) ttnã:nkbi

??í:čkvát(a) ?wì.ykm

??í:kβköβ(:)a

??í:ksíβa hwê'ba

??í:kmí.yi

??í:kmyé

??í:kvâla

??í:βòča

??í:βkòba

??í:êmâqa

hit with wood

strikes with a club

digging stick

wood rattle

gather wood

they light the wood

firewood

branch: comes away from tree

forked post

meadow

I own an ax

wooden cross, crucifix

ocotillo: 'sad plant'

plant species, a bush

wagon

fence

kindling wood
The bread is on the table.

wākm

medicine, cf. root, sinew

barrel

acorn

acorn meal

acorn meal

acorn meal

acorn meal

lots of acorns (Pln)
gather acorns

there are plenty of acorns

acorn soup

greasewood

root

weed, clean out, soften ground

I garden

bed

grass

grass

hoe n.

hoe v.
leaves floating on water
weeds sprout out
leaf out
weed out
wooden chair
I'm sitting in a chair (W.G.)
rocking chair: back and forth
Ipári

i\(\cdot\)púk [nape]
i\(\cdot\)këëwi [we got here]
i\(\cdot\)kó [carry in hand]
i\(\cdot\)khí [scrape, cut out skin]
i\(\cdot\)kwíëi [catch, grab]
i\(\cdot\)béó [be first, in front]
i\(\cdot\)búri [drowsy]

Må:t hiðkyëtk [whole body]

Nà?må:t ?iðkyëtk [my whole body]

Ihá'ni [tame, break in (horse)]

Imá [dance]

Impësqi [?]

Kökena impësqk ?cná'lk [I dropped the glass. It slipped out of my hand]

Impù(\(\cdot\))la [forehead]

I\(\cdot\)wá(\(\cdot\))ya [heart; chest]

I [say]

?i [say yes!]

?ë•mì [that is so]
miyí
kwè·kàbyúča kàptìmíwa
mí·ha
ił·yi
?hänkm ñlwíkm mi·yi
-i ~ -e
khwâčåyi
ké·yi
kôyé

-1

pà:β?âklí
qvâspá·?íkl
-i ~ -y-
miyí
?čmáiči
myúla kwàlskwískwí
máiči kwá·hm
?yá·s ñóiči kwá·hm
?čhúá, ?čhúá·yi
?k’höy khórfâ

say it again!
whatever you say
say it!
want
If you want, it is good.
(instrumental/agentive)
spoon
doctor

sun rising
throwing out rays
(plural; repetitive action)
say it again!
dishes
Christmas (candy cane eating time)
Thanksgiving (turkey eating time)
war
piñon hills: Prescott Heights
give

give (away from speaker)
I give back
give me a little!
gift giving
I give you
give to speaker
two or three collecting money
and giving it to somebody

depth; thick, dense

(plural)
yes
say yes!
that is so

a drink made from berries

shining

(get prefix)

loving (singular subject)

loving (plural subject)

I love

she loves me

I love you

we love each other
we love each other
very lovely
not pretty
sorry, sad
feel sorry for us!
hear
understand
bitter
sour? + orange
louse
ridge
(locational suffix)
outside
desert
ridge; boulder
after
pray to God
thrown away + garbage
noon
-é?
 yàmrüβë?
-(y)e
 màtsàpëye
 ?hàtβhēsči·yi
 ?òskāni
 kwè·čβyâmi
 -e
 humāne
 β?ôme
 čā·ne

(interrogative suffix)
are you thirsty?
(instrumental suffix = -i)
shovel
horsetail broom
match
automobile
(= -i (??))
like a child's
end, edge
on top of
??ā
saguaro (cactus)

?ā
interjection: hush! listen!

?āč
hail

ki?āč
hit, strike

ki?āč

?áβi
hit with wood

?á·βi
club

?á:βi

?l·pà·?āβi

pà·?āβi

??Ī:βm pà·?á:βči
strike with a club

hà?ā·ββi
jealous

?àmaná
ripened and dried by the sun

?qalhāti
greedy

?qanahmírβkm
I am kind

?āmi
place across

?ā·mi
pass v.

wà?ámči
visit

kʰwàkβʔāmma
gine: iron runner

tʔāmi
cover, patch, close, stop up;
catch, cup

tʔâmβa
closed, shut

tʔāmi
cup (the hand)
sʔámi
close (a door)
<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>č?â·mbi</td>
<td>gather (acorns)</td>
</tr>
<tr>
<td>k?âµbâ</td>
<td>ridge</td>
</tr>
<tr>
<td>k?â·mbâ</td>
<td>range</td>
</tr>
<tr>
<td>màtk?âµbâha</td>
<td>Verde Valley</td>
</tr>
<tr>
<td>s?ámi</td>
<td>close (a door)</td>
</tr>
<tr>
<td>yûri s?âmme</td>
<td>button</td>
</tr>
<tr>
<td>tm?âµbi</td>
<td>capsize</td>
</tr>
<tr>
<td>?â·li</td>
<td>swell, swollen</td>
</tr>
<tr>
<td>ð?â·lëi ?ëmi</td>
<td>go outward</td>
</tr>
<tr>
<td>ðâ·(ð)?â·li</td>
<td>sun rise slowly</td>
</tr>
<tr>
<td>č?âli</td>
<td>comes out, climbs</td>
</tr>
<tr>
<td>sà?ãri</td>
<td>peep, peek (in/out)</td>
</tr>
<tr>
<td>sà?ã·ri</td>
<td>sell</td>
</tr>
<tr>
<td>sà?â(·)ra</td>
<td>store</td>
</tr>
<tr>
<td>?r-/r-, ?àr-</td>
<td>glad, proud</td>
</tr>
<tr>
<td>?àr?ú·yi/?rëyï</td>
<td>glad, proud; thankful, happy</td>
</tr>
<tr>
<td>?àr... yé</td>
<td>one is happy</td>
</tr>
<tr>
<td>?àryë</td>
<td></td>
</tr>
<tr>
<td>?àryëkm</td>
<td></td>
</tr>
<tr>
<td>?àr?yëkm</td>
<td>I'm happy, thank you</td>
</tr>
<tr>
<td>?àrà ?yë·km</td>
<td>are you happy?</td>
</tr>
<tr>
<td>mà·ç armëë</td>
<td>we thank you</td>
</tr>
<tr>
<td>?àrà ?yá·ikm</td>
<td>son's child (sg., pl.)</td>
</tr>
<tr>
<td>?âwa, ?â·wa</td>
<td></td>
</tr>
</tbody>
</table>
-a

máčči mkwá:wča (W.G.) you (pl.) may speak. it's your turn to speak.
fire
cave
embers, coal
smoke
termite
sweat
place of shadow (from tree or
mountain)
I'm not so fine (W.G.)
catch, take
elbow
be quick; dart across
(imperative)
cough
end, edge
last
last woman (Prn)
trap
fish v.
cottonwood about to fall,
hanging there (Pln)
sʔóńča  wave v. + flag
čqnʔóni  fold once
ʔó1-  round + watermelon
qęʔó·1km

tʔóli  boil
ʔór-  round + marbles
ktʔóɾβa  lip
tmʔóɾi  full
ʔóyi  bring (incompletive)
kʔóya  head, crown
kʔówyə

mlqIn  trachea
máthāy  swallow water
yáˈmʔó
thing
(locational suffix)

lots of acorns (Pln)
Hassayampa River
church
horizon: end of sky
kitchen
throat
dishes
smoke hole₁
smoke hole₂
east
west
broiling oven
track
went the way came (?)
yard: around the house
eat lunch
cross

on the left side
on the right side
part of the back

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spâlbdó
sâl?īknâ:mo
nyê'kkæø'
-o
?čʔēʔi: qyâtok ?wíwkm
I didn't know I was drinking too much

nâ:ʔm ?čʔēʔi: qyâto
mâtpîló
lē·kō(')
θbrûyô
θbrûyu
halfiat<5
kâ:qïlvē'pha pâ·mtyē·mo
hnū·bo kwâ·wkm
βnâ·n?o
kyâha kwâ·kqlvē'pha βke?
pâ·mhipé(β)wo maʔūmi
polish
take the bad away from me!
he's speaking unpleasantly
I sit down for awhile
keep us from the bad

-w ~ -u ~ -o
?čʔēʔi: qyâtok ?wíwkm
I didn't know I was drinking too much
teach by saying
I'm teaching him to speak

?i(w)0
kwâ·w ??lwök
βsū·sβi ?ã·wo
?khwâmîwo
I'm squirting something
rock music: make instrument cry
yú(ː)wo

hàmèıl yúwo tlìlwìwì  I'm going to cry
kwìpà·àŋbã̀ yú:wo  drizzle
longtailed mouse
mortar

basket
plate

leak

make noise

wind goes X

heavy, low noise

thunder sounds

see

blind

mirror

binoculars

motion picture

show v.

I'm glad to see you again.

tobacco

tarantula

boil v.i.

no, not

drum

hunchback
??üli
give light

??ül
lantern

?á·li
string

hü·?üli
teddybear cholla

k?ú(·)l-
round in shape

sk?ü:la hñaqča
beads

sk?ú·la hñaqča
(singular)

θmpo· k?ülka
swarm of bees

?wíkl?ülka
beads

wí·kíp?ü·la
Bill Williams Mountain

m?üll
antelope

?lwí č?úrl
Indian paintbrush (plant species)

hpùq?úrka
pistol

?ú(·)yi

čr?ü·yi
joke, tease

(?(å)r...)ýyi
glad, proud

β̃íqwusmí
gulp
ukwā
ūnē

feel like
father-in-law
núl (ŋ)βé
mǒkwá: wβé
βá·
nβá·
mátbá yá'mpá:βk
pá·βá· myá(·)mi
páka
?βák
pák swáλβi
mítína pákωá
pák pěβi
páλ sčá
βá·m
βá·m(?)i
pásyd·(ba)
kwiβá·βáčβč yú:wo
kpá:bi
sβálβó
wákṣáβári
mβá·ri
βó·
i·βó
(?)kíβó
kíβáwa

yonder
are you (dual) speaking?
arrive sg.
arrive pl.
you are responsible for the earth
you're getting old
awl + mosquito
hold on
thick (eagle's) feet on top
follow
owe: stand in there
now
"and, but"

drizzle
ask, pray for
joint
love...
get up! (from sitting)
walk
first
rain
<table>
<thead>
<tr>
<th>Póki</th>
<th>come back</th>
</tr>
</thead>
<tbody>
<tr>
<td>βqβō(·)?l</td>
<td>growl</td>
</tr>
<tr>
<td>βqwō·?l</td>
<td></td>
</tr>
<tr>
<td>sβó</td>
<td>wait for</td>
</tr>
<tr>
<td>má:tč khβō·yi</td>
<td>body is feverish</td>
</tr>
<tr>
<td>β̄hβ̄h?i</td>
<td>bark v.</td>
</tr>
<tr>
<td>βù· h kukya</td>
<td>different, opposite</td>
</tr>
<tr>
<td>iβü·ri</td>
<td>drowsy</td>
</tr>
<tr>
<td>yà·l ?βü·ra</td>
<td>donkey &lt; burro</td>
</tr>
<tr>
<td>yà·lwüra</td>
<td></td>
</tr>
<tr>
<td>βpí·</td>
<td>tired, cf. pí 'die'</td>
</tr>
<tr>
<td>βtë</td>
<td>big, large</td>
</tr>
<tr>
<td>βtê·yi</td>
<td></td>
</tr>
<tr>
<td>βtáya</td>
<td></td>
</tr>
<tr>
<td>βtēsq... l</td>
<td>burning pain</td>
</tr>
<tr>
<td>βtábsi</td>
<td>snap shut</td>
</tr>
<tr>
<td>nà:βtâtâtâθIča</td>
<td>&quot;sun ticking&quot;: watch, clock</td>
</tr>
<tr>
<td>βtöβi</td>
<td>collapse</td>
</tr>
<tr>
<td>βtqépi?i</td>
<td>dusk</td>
</tr>
<tr>
<td>βtsI·tsI·?l</td>
<td>squeal</td>
</tr>
<tr>
<td>βčIe... l</td>
<td>kiss, cf. sneeze</td>
</tr>
<tr>
<td>βčé(·)</td>
<td>daughter (man speaking)</td>
</tr>
<tr>
<td>βčá·ya</td>
<td>(plural)</td>
</tr>
<tr>
<td>hàβčá(·)</td>
<td>mano, grinding stone</td>
</tr>
<tr>
<td>hàβččă</td>
<td></td>
</tr>
<tr>
<td>βčak&quot;ä·k?i?i</td>
<td>yawn v.</td>
</tr>
<tr>
<td>βčäq... l</td>
<td>drop</td>
</tr>
</tbody>
</table>
thrown away
shout, yell
... at greater distance
... at even greater distance
jump
smile
bow: arc-shaped weapon
blow with mouth
gulp
lightning
comes out (in the spring)
forked post: comes away from, falls
1. ne(... pas) as in French
2. where
cough
who
hit the mark + noon
cup (ears) v.
block
fence
gallop
woman, female (NEY, SEY)
(plural)
giggles
sticky
\( \beta q\alpha h\beta i \)

\( \beta q\alpha h\beta q\alpha h\beta \ldots i k \)

\( m\alpha t\check{c} \beta q\check{a}q\beta ?i m \)

\( \beta q\check{a}m i \)

\( \beta q\check{a}w\beta ?i \)

\( \beta q\check{a}p\check{a}p?i l \)

\( n\check{a}l \beta q\check{o}t?a?i m i \)

\( \beta q\check{a}n\check{a} \)

\( \beta ql\check{a} \cdot ?i k \)

\( \beta ql\check{a} \cdot ql\check{a} \cdot ?i l \)

\( \beta q\alpha \check{a}q\beta i \)

\( \beta q\beta \check{o}(\cdot) \ldots i l \)

\( \beta q\check{w}\check{o} \ldots i l \)

\( k\check{w}\check{a}k\beta ?i \)

\( m\alpha t\check{c} \beta ?\check{a}n?\check{a}n?i l \)

\( k\check{h}\check{w}\check{a}k\beta ?\check{a}m m a \)

\( \beta ?\check{a}l i \)

\( \beta ?\check{a}l k- \)

\( \beta ?\check{a} \cdot 1\beta (i) ?l m i \)

\( \beta ?\check{o} \cdot q \ldots i l \)

\( \beta ?\check{a} m i \)

\( \beta ?\check{a}k \)

\( \beta ?\check{u} \cdot \check{u} \cdot i k \)

\( \beta ?\check{u} \cdot \beta i \)

\( w l \cdot k\beta \check{u} \cdot l a \)

\( \beta \check{e} \cdot h (\check{e} \cdot h) l \)

lightning sound

gulch

stab

it breaks

caved in

fall down there

whine

croak

scream

busted, broken

growl

open slowly

earthquake

engine: iron runner

rise (sun)

go outward

be quick, dart across

last; all: no more

wind's sound

thunder noise: heavy, low

become visible

Bill Williams Mountain

breathe
catch oneself from falling by jerking
drizzle
caved in
sprained
soft, cf. cotton
scared
surprised
whooping cough
turquoise
bile
squirt
stand up
gut, entrails
rattle
snake rattles
rattle continuously
pant v.
tender (body, corn)
swell up, s.t. dead (a lump from a bite)
kbeta
sna
?h'a:beta maki beta
?imi
sphwe:beta
mbsphwe:bob
beta:pi
yaa:beta bmit:pi:qi
bmet:qikm
bmeta(p)...i
bmeta:meta...i
qaepi bmeta:kwet:qi
(b)mari
(b)marm mata
bmeta:meta:meta:meta:qi:li
hymbu
bmeta:li
bmeta:
mata:aya
meta
beta:meta:meta:meta:...i
ra:beta:meta:...i
kbeta
khawa:beta
khawa:beta
khawa:beta
khawa:beta
tighten
tie v.
tie v.
tie v.
tie v.
water ripples
cross
crossroad
pop up
kiss
overflow
wink
blink
smells bad
sundown, dusk
eat supper
trot
new, young
discharge, gun going off
1. caved in
2. sew
afternoon
afternoon
afternoon
afternoon
carry heavy object in arms
carry heavy object in arms
carry heavy object in arms
carry heavy object in arms
scissors (W.G.)
scissors (W.G.)
scissors (W.G.)
scissors (W.G.)
<table>
<thead>
<tr>
<th>khwa.čmnyi</th>
<th>(G.M.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>βná(·)n?i</td>
<td>sit</td>
</tr>
<tr>
<td>yāk ?wāha βnū.km</td>
<td>I'm going to sit here</td>
</tr>
<tr>
<td>βnuna</td>
<td>stomach; belly (W.G.)</td>
</tr>
<tr>
<td>mnū(·)na</td>
<td>(G.M.)</td>
</tr>
<tr>
<td>eplī</td>
<td>hole</td>
</tr>
<tr>
<td>eplū.yi</td>
<td>pierce</td>
</tr>
<tr>
<td>eβrī</td>
<td>small opening</td>
</tr>
<tr>
<td>eβrīya</td>
<td>oven: large opening</td>
</tr>
<tr>
<td>?dttqśtī kəβlī.n</td>
<td>flutters</td>
</tr>
<tr>
<td>βlīplīp?i</td>
<td></td>
</tr>
<tr>
<td>-βlī· - βlwi·</td>
<td></td>
</tr>
<tr>
<td>hwā:lrāpa ččplīyi</td>
<td>ruler; straightedge</td>
</tr>
<tr>
<td>?mātčβlī·ča</td>
<td>surveyor</td>
</tr>
<tr>
<td>čβlwi·</td>
<td>measure</td>
</tr>
<tr>
<td>nā·βlwi·βm kwē.māčō</td>
<td>eat lunch</td>
</tr>
<tr>
<td>nā: kaβlwiyi</td>
<td>what time is it?</td>
</tr>
<tr>
<td>nβlwiom ?nō?pīra</td>
<td>that's all for now</td>
</tr>
<tr>
<td>kāβlwi?</td>
<td>how much, how many</td>
</tr>
<tr>
<td>?hānkβm βlwíkm mī:yi</td>
<td>it is good that you want it</td>
</tr>
<tr>
<td>βlwí·βi</td>
<td>same</td>
</tr>
<tr>
<td>βlwīha</td>
<td>it will be done</td>
</tr>
<tr>
<td>βlwí</td>
<td>1. right, correct, proper</td>
</tr>
<tr>
<td></td>
<td>2. enough</td>
</tr>
<tr>
<td>βlāh?i</td>
<td>tired</td>
</tr>
<tr>
<td>βhlo·hlō'·h...i</td>
<td>death rattle</td>
</tr>
<tr>
<td>βliwliw?i</td>
<td>move</td>
</tr>
</tbody>
</table>
rilwíw
βlpá·t?í
βlhé
βlháya
βríti
θbrírpi
βráp?í
prápráβ...í
βrá·r?í
smálka θbrúyu
tú· βyé pà·tyé·mkm
βyé·km
βyá
βyámi
kwé·čbyámi
βyál
βyá·r...í
βábyú·βa
nà·βyú·si
βyú·li
βwé
βwá·βi
βwáli
βwári
βwáρβi

wag
blister
old man
(plural)
jump
squint
lightning
get up (after falling)
pierce ears
he deserted them
early tomorrow
this
run
automobile
mescal, cf. century plant
fly
"and, but"
two to four in the afternoon
mix
be on guard
ten
carry (a bucket)
cannot

βw

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I suspect, I'm not certain

doctor

strong

window: metal, like water

soft, separate (nuts from leaves)

mother's older sister

drink

salt

salty, bitter, sour

salty

toe

(plural) W.G.

overflow

Phoenix

'not by the hair of my chinny-chin-chin!'

earth: spread wide

fall
cricket
hollow
olla, clay jug
jabalina; wild boar (SEY)
leaves blown by wind
I breathe
fog, damp
\textit{foggy}
that's all
thin
suck out blood
leaf
swayback
breathe
pant v.
what did you see?
a long time ago
once upon a time
heel
toe
toes (W.G.)
burden basket
βεά'qβι

catch oneself from falling by

erkking

grey

clean; clear

tasteless (like water)

spotless

fall + moult

Indian spinach

net cf. sáł

drizzle

newspaper: lots of printed

matter, cf. moist

offspring, child

(plural)

(hypocoristic sg.)

(hypocoristic pl.)
is born

thousand

eat meat

Anglo: beaver eater(s) W.G.

when...
caved in (hole)

urinate

urine

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<table>
<thead>
<tr>
<th>Word</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ktēwkpēa</td>
<td>curved</td>
</tr>
<tr>
<td>ẽu:nži</td>
<td>weak, soft</td>
</tr>
<tr>
<td>hi(·)ơul</td>
<td>cheeks</td>
</tr>
<tr>
<td>hiẽl·li</td>
<td>slow</td>
</tr>
<tr>
<td>hàmtẽu·lta</td>
<td>gila monster</td>
</tr>
<tr>
<td>ẽu:lži</td>
<td>lame; lazy, without ambition</td>
</tr>
<tr>
<td>qnmô·ŏulža</td>
<td>goose: lame duck</td>
</tr>
<tr>
<td>ćeǔ(·)li</td>
<td>wash</td>
</tr>
<tr>
<td>hʷątkțuara</td>
<td>vein, artery</td>
</tr>
<tr>
<td>ẽurițu·ri</td>
<td>itch in one spot; tickles v.i.</td>
</tr>
<tr>
<td>ẽũlţuła</td>
<td>itching disease</td>
</tr>
<tr>
<td>ẽũlţu·li</td>
<td>itch all over</td>
</tr>
<tr>
<td>ěufi:</td>
<td>forearm, sleeve</td>
</tr>
<tr>
<td>hàlţu·yi</td>
<td>nine</td>
</tr>
<tr>
<td>ěpĩrī</td>
<td>hard (table)</td>
</tr>
<tr>
<td>ěpi:ri</td>
<td>raise (one's voice)</td>
</tr>
<tr>
<td>ěpĩ·rškm</td>
<td>he's strong</td>
</tr>
<tr>
<td>see ěipf(·)ri</td>
<td></td>
</tr>
<tr>
<td>ěpά·</td>
<td>freeze</td>
</tr>
<tr>
<td>ěpάqβi</td>
<td>wink, shut eyes</td>
</tr>
<tr>
<td>ěpālā</td>
<td>peach (WY, SEY)</td>
</tr>
<tr>
<td>pępálβe</td>
<td>cramps, cf. tie</td>
</tr>
<tr>
<td>kępǎlī</td>
<td>tie</td>
</tr>
<tr>
<td>qępǎlī</td>
<td>tie</td>
</tr>
<tr>
<td>kępálβi</td>
<td>knot</td>
</tr>
</tbody>
</table>
?hà...?pú·yi  bathe, swim
?píla  bark, skin
?pí·li  sheds
?píla  clover-like plant
nàč ?kvá·yi  I'm light (in weight)
?kvá·yi  broken (pottery)
?čéqba  skirt of squaw dress
tčéqba  plant for hummingbird
hù·?čù·račú·ra  put into, insert one object
?čúr?i  (thread into needle)
?kvá·yi  shatter
k0ké·na  glass
má:t hi?kyētk  whole body
?kwí·  squeeze, wring out, cf. wash, weave
?kwína  wrinkled
?kwíni  
tókwí·li  clean
?kwá·gi  wide
?ekwá·mkwá·m?i  soft
?kwá·yi  light (in weight)
skwá·yi  (W.G.)
see ?kvá·yi
k0ʔē:  a drink from berries
ʔaʔeli  sour, bitter, salty
tʔaʔeli
epif
epidyi
0 prl
©prlrpi
(em&lka) epruyu
?sm£lkpa ?0ruy£>km
0huila
émá
émá·bi
?i·émâqa
empó·
êimpâ·rka
ôrûyô
ôpô
ôhirâ·km
I suspect, I'm not certain
ôrîyi
ôrápi
ôrî
ôurî:
pîli ôrå·bi
ôrûyô
čôqa ôy[á]lqa
čôqa ôê·lqa
ôwê
ôwâ·mki
smâlka kewârêpi
hole, opening
wrist, forearm
squint
pierce (ears)
I pierce my ears
settle (as coffee grounds)
lend
borrow
kindling wood
bee
fly n.
pierce
jump in surprise
five
1. think
2. doubt, hesitate
forearm, sleeve
burnt up, burnt out
pierce
half-peeled juniper
placid
limp (because of short leg)
perforate ears
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s

msì
sì

mísì
sìk?'ìta
hämmsì
ham(m)sì·
(?)sìti
(?)sì·ti
(?)sì:ti
pà: ?sì:ti
wà...sì·bi
sì·bi
sì·bi
sì·bi
pà: ?sì·bi

??ì·ksì·ba hwê·ba
hipä:k siβtū·yi
sih·šì:ni
silòka
sìli
tyá·č sìwa

tyá·č sūwa

msìwi

woman
read, count
track, trail v.
pointing
sift
star
one
each one
I name them
think
count, read
I'm counting them
wooden cross, crucifix
midnight
turn (car, horse) in motion
spinal column
roast, broil
corn just becoming ripe; not ready cf. swá + dough
smell like cold blood, like grease or wet hair
sé  fatty
sáyi  (plural)
sē  is fat
sâ·ykm  are fat
sáya  fat n.
hâsēyi  gray, greasy
?sé  shadow
?sá·ya  (plural)
sá  (in compounds)
msé·  fear
msáyi  (plural)
sé·  buzzard
kwâlsé(·)  red; pink, light red
séqi  whip
wâsèqma  whipper (Prn.m.)
βsēhsēh?i  pant v.
ksēlsēli  (cock's) comb
pūrâksē·lβa  (war) bonnet
sē·lβi  sticks up
pūrkŵâθa sērβa  one cent: Indian head penny
?ðhâsē·r?lça  whooping cough
nīs?sā (G.M.)  spider
ni·sa
wī·?qsā  agate
sā  sting v.
?sā  eagle; widow
?sáyi  widow

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| ?čsá    | bird                     |
| sàkwìta | pigeon, cf. kwì 'dove'   |
| sà?hāni | sacred                  |
| sà?rīyi | sacred                  |
| sà·?rrī(yi) | holy, perfect          |
| màtsāpè·yi | shovel v.               |
| sàtō·ri | marbles (toy)           |
| sàkVāti | chop with ax            |
| shkVā·ti | ax                      |
| ?khwásákēga | pick n.                |
| yūri sákʰâbi | button                |
| sākmāka | striped skunk           |
| sā?āri | peek                    |
| sā?ē·ri | sell                    |
| sā?ā(·)ra | store                  |
| ?ösākó | place of shadow (from tree or mountain) |

<p>| qwākta yū·l ?hāt sāgi | whip n. |
| qsāq       | crow    |
| sāša       | white   |
| tmsā·bi    | whiten  |
| (?)hānkāsāša | centipede |
| màtsāša | chief, SEY |
| màteša |            |
| sāhi       | smell v.i., stink      |
| ŝāhi       | (nursery word)         |
| qsámta     | mushroom              |</p>
<table>
<thead>
<tr>
<th>Shushana</th>
</tr>
</thead>
<tbody>
<tr>
<td>sál</td>
</tr>
<tr>
<td>sàlmàka</td>
</tr>
<tr>
<td>(?)kʰwàmsàrβa</td>
</tr>
<tr>
<td>mìkmsà·rβa</td>
</tr>
<tr>
<td>wì·kčsáwa</td>
</tr>
<tr>
<td>sotát</td>
</tr>
<tr>
<td>swtàt</td>
</tr>
<tr>
<td>mhù·ksotáta</td>
</tr>
<tr>
<td>mhù·ksutáta ?qʷärkþáya</td>
</tr>
<tr>
<td>kʷàsočáča</td>
</tr>
<tr>
<td>qsòβa</td>
</tr>
<tr>
<td>sultá:βa</td>
</tr>
<tr>
<td>sultá:wa</td>
</tr>
<tr>
<td>sòlsóli</td>
</tr>
<tr>
<td>khàbsü(w)α</td>
</tr>
<tr>
<td>sú·ča</td>
</tr>
<tr>
<td>sú·si</td>
</tr>
<tr>
<td>yùsùná:</td>
</tr>
<tr>
<td>sùlsúli</td>
</tr>
<tr>
<td>sòlsóli</td>
</tr>
<tr>
<td>?tath'sú·la</td>
</tr>
<tr>
<td>sú·lítʔiča</td>
</tr>
<tr>
<td>súri</td>
</tr>
<tr>
<td>tyà·č sùwa, cf. swá</td>
</tr>
<tr>
<td>See síwa</td>
</tr>
<tr>
<td>tspé</td>
</tr>
<tr>
<td>spé</td>
</tr>
</tbody>
</table>

Superstition Mountain cane; plant species
pig
jalalina, wild boar
rainbow
mole (on skin)
soldier, scout
Spanish soldado
clear, transparent
turquoise
father's older brother to Ego
sprinkle, squirt
eyelash
clear
buckhorn
insect species
spot, espy
ripening corn
six
lean object against wall
tspáy-
?thàkspéba
màtspéqi
spó
spópi
spúki
hopáča spúk(k)
spúki

čpúki
spúmi

stíti
stí·ti
stí·ti
stúya
sčí
waksčípa
q'äsčëm(?)i
sčá
βálsčá
(m)sčáqi
sčá:βi
ččá:βi
sčō
sčyōqi
pā·pa sčōqβa

six (in compounds)
Pln: reed up
hoe: pounds ground
know
is apparent
pillow
fourth time
cover with dirt (while planting)
take apart (in order to do again)
plow v.
plow v.
cut v.
middle, center, half
sweep, comb, brush
wall
admire a lover (woman speaking)
put up
owe: stand in it
split v.
put on ground (rug)
pluck
(s)mash, squash
mashed potatoes

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<table>
<thead>
<tr>
<th>Dzóńla</th>
<th>sticking in</th>
</tr>
</thead>
<tbody>
<tr>
<td>?hā:hā:βk ksčūlβa ?pą:ča</td>
<td>Date Creek Tolkpays: cotton-wood sticking in the water</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>skvāta</th>
<th>breastbone</th>
</tr>
</thead>
<tbody>
<tr>
<td>kaquār:e kskİta</td>
<td>outside corner</td>
</tr>
<tr>
<td>kskē(·)βa</td>
<td>canvas</td>
</tr>
<tr>
<td>?δskāŋi</td>
<td>match</td>
</tr>
<tr>
<td>skāri</td>
<td>glide</td>
</tr>
<tr>
<td>skārak?ämča</td>
<td>Prn. Yavapai culture hero</td>
</tr>
<tr>
<td>skʔū:la hnaqča</td>
<td>beads</td>
</tr>
<tr>
<td>skʔū:la hnaqča</td>
<td>(singular)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>sknʔōka</th>
<th>elbow</th>
</tr>
</thead>
<tbody>
<tr>
<td>skmāka</td>
<td>striped skunk</td>
</tr>
<tr>
<td>tsklpý:bi</td>
<td>we hug each other</td>
</tr>
<tr>
<td>sklpũyi</td>
<td>put arm around, hug</td>
</tr>
<tr>
<td>skrpũyi</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>yāskābi</th>
<th>bridle</th>
</tr>
</thead>
<tbody>
<tr>
<td>yūri skhābi</td>
<td>button</td>
</tr>
<tr>
<td>wi·skčī·bi</td>
<td>precipice</td>
</tr>
<tr>
<td>βskwfi(·)</td>
<td>stand up</td>
</tr>
<tr>
<td>myulã kwélskwískwí</td>
<td>candy cane</td>
</tr>
<tr>
<td>?wãskwínì</td>
<td>lock, doorknob</td>
</tr>
<tr>
<td>?kwe·skwí·ni</td>
<td>key</td>
</tr>
<tr>
<td>skwfi(·)ni</td>
<td>turn off (appliance)</td>
</tr>
<tr>
<td>?čskwíli</td>
<td>sew</td>
</tr>
<tr>
<td>?čskwí·li</td>
<td>needle</td>
</tr>
<tr>
<td>skwá·ni</td>
<td>shell, husk (corn), peel</td>
</tr>
</tbody>
</table>

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sk'ala
sk'ā·yi
eker yi
skwāyi
sqī·ri
(hi·wāy)sqāta
skvāta
sqāmi
sqāwa
sqāwβi
sqmwi·ra
hālsqrā·pi
sqwār?i
mnūnc sqw'ā:r(?)l
?wāsqw'ir(β)q'irβa
hāms?Iβ
s?āmi
?wās?āmi
yūri s?āmmi < s?āmβi
t?āmi
s?ōni
s?ōnβi
s?ōnča
sqālβo
sβo
msβōka
large hawk
light in weight (W.G.)
mix, turn food in pan
make furrows
chest
breastbone
shoves quickly
egg
lay eggs
ankle
naked, cf. flat
stir
diarrhea
corner
bulrushes
close (door)
Sunday
button
cup the hands
trap, skewer
about to fall
flag
joint
wait
wait for me!
<table>
<thead>
<tr>
<th>En</th>
<th>Ber</th>
</tr>
</thead>
<tbody>
<tr>
<td>cross</td>
<td>ṣphansna</td>
</tr>
<tr>
<td>porch: extend</td>
<td>ṭwàshëli</td>
</tr>
<tr>
<td>hang</td>
<td>shá</td>
</tr>
<tr>
<td>weigh; hang down</td>
<td>shápi</td>
</tr>
<tr>
<td>hook</td>
<td>sahāyi</td>
</tr>
<tr>
<td>hundred</td>
<td>shūna</td>
</tr>
<tr>
<td>poker stick</td>
<td>ṭòshúli</td>
</tr>
<tr>
<td>cross</td>
<td>shkëβa</td>
</tr>
<tr>
<td>lay something across bridge</td>
<td>shkëβ</td>
</tr>
<tr>
<td>not on tight + ramada, float</td>
<td>shyálpi</td>
</tr>
<tr>
<td>table</td>
<td>shyára</td>
</tr>
<tr>
<td>dig</td>
<td>shyārika</td>
</tr>
<tr>
<td>turn (car, horse) something in motion</td>
<td>sìhwíni</td>
</tr>
<tr>
<td>gulp</td>
<td>βčIqwuṣmi</td>
</tr>
<tr>
<td>lost, cannot find</td>
<td>smë</td>
</tr>
<tr>
<td>sleep</td>
<td>smá</td>
</tr>
<tr>
<td>stay overnight</td>
<td>smāmi</td>
</tr>
<tr>
<td>dream</td>
<td>tsmāːci</td>
</tr>
<tr>
<td>(plural)</td>
<td>tsmāːccd</td>
</tr>
<tr>
<td>day (24 hours)</td>
<td>smá</td>
</tr>
<tr>
<td>medicine, cf. root</td>
<td>ṭl(·)smá(·)</td>
</tr>
</tbody>
</table>
m(i)smá·

?pá:smáča

smálka

smá·lka

smá·lktū·

smálkátū

smá·lki

?íwíl smá·lki

čsmáyga

smpu·rpi

smukwIna

smkwIrpi

smló·hi

smlóhi

ksnákša

?hat sná·yi

snáša

slí:

slé

slām

s(i)lōka

slpú

slhő·

slhšö·

slmáka

syápē·bi

?hásyámoč·

sinew, cf. root

medicine man

ear

(plural)
jimsonweed

deaf

earring

leaf out

cousin

band for carrying cradle

gruel

jealous (male)

snore

gap: saddle-like

harness

braid, rope

fry

paper flower

shawl

spinal column

armpit

nail, claw, hoof (W.G.)

(G.M.)

shoulder (blade)

soul: the one alive

Hassayampa River
hàsyā·mśö Hassayampa River
?hát syōmi reins
syē·mi pull
syûmi
syômi
swī scrape (hair off deerskin)
myála swā dough: not ready
sīwa
sūwa
swā olla-shaped water basket
swâ· waterpot
??i·swā barrel
swáni stir
swál–, swar–
swála always;
swāli love, like
swálḥi hold on, hang on
swârḥi hang on by fingertips
yâ·swârḥi suspended (fig.) + pleasant
swâ·ri sing
sálpč pilkm
sáltąkąbi
sáltątkąbi
sálba ?túkm
sáltʔámi
sáltsʔámi
?sálala či li
sálklkvý( yi)
sálkβte : βǎkpēβa
sálkβte ·
sálkoté · (SEY)
sálkθā . ri
sálkθǎ : rl
sálkθǎ·rō mčkpā ·
sálqčēβa
sálkʔhāni
sálkhāna
sálkhānō
sálkhānō mčkpā ·
sálkmā:rβa
sálqčqē·ča
sálıkliʔulki
sálqčqē·ča
sálkički·ča
sálqrwfi:sò (SEY?)

my hand is burnt
ring
I burned my finger
cup the hand
my arm falls asleep
hobble
middle finger
thumb
left hand
left hand
get on the left side!
left hand
right side
get on the right side
fingers, cf. toes
fingers
make a fist
little finger
wrist, forearm
sál?čkná:mo  
såla ?čkná:mi  
?såll ?i·kôkm  
sålstú·yûa  
sålqé·ča ðákpé·βha  
?sålβč h'átβkm  
sålsľh'ö·

index finger: 'pointing'

I carry in my hand

middle finger

my hand is bloody

fingernail
hipinbi
hipē
hipá

hipātm
hipātk

祎pi:ʔim
祎pi?im

祎pāč tū·βk yāki
祎pā·m

祎pā:k sištū·yi
祎hipā:čm

 pii·kk 祎pā:tm
 pii·km 祎pā:tm

祎pāl
祎mipāl

祎pūk

祎itát (G.M.)
祎i·thát (W.G.)

qwa·ri hitāsa
祎çi·la
祎ča·rapo
祎kē·
祎khi
祎kwi·θi

wins
near
this morning
evening: beginning to get dark
midnight
at night
midnight
tonight
night before last
night before last
tongue
neck
spine, back
bald
nit
to the girls
carry something heavy (olla with water) on back
scrape, cut skin out
hold on

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màthikwíra  whirlwind
hiβ̣áta  goat < chiva, chivo, chivato?
hiβ̣ó  go first
hiβ̣ụ̄ṛi  drowsy
hiβ̣mād  new, young
hi(ɨ)thul  cheek(s)
hitẉli  slow
hihạ́ni  repair, fix
tụ́ hihul  byák kyā:ṃha
hihúli  environment
hi(ɨ)má  time moves, passes
tụ́ hihul  byák kyā:ṃha
dance
himp̣ụla  forehead
himẉạ̄la  calf (of leg)
hiŋōqa  green onion (wild)
hilịpḷịpi  flutters
hiẉil  thigh, hip, hindquarter
hiẉáya  heart
  hiẉáya
hiẉáya  stacked: on top of one another
  + book (pages)
hiṇi  move (aside)
thiṇi  + transplant, checkers move around
màthē:  white clay or dirt
  màthē'
màthē  wind n.
  he
matháya
βhē
tail; dress
β1hē
old man
pāhlē
(W.G.)
βlḥāya
(plural)
čkhē:βčō
store
?wāshēlβi
porch: extend
hē(·)li
flow
khērβa
too lazy to walk Prn
-hè
(locational suffix)
 čā·?he
top, roof
 čā·hē
qaq'ārhe
outside
qoloyāwa sqāwa māhe
Easter
kwā·hm

-ha/-h/-a
(irrealis; definitizer)
haʔā·ββi
jealous
ʔhā
water
nḥāya
liquid
ʔhā...ʔpū(·)yi
swim, bathe
ʔhd(·)
cottonwood
ʔhā·
spicy, hot, bitter
ʔhā:ki

βhā·ʔlča
rattles (snake)
shā
hang
βhā
guts, entrails

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hát
 phá·ta
hátmāča
hátamā·la
(?)?hát(?)kūila
?álhāti
čwahāβa
 wa...hāβi
kháβa
hāβʔčā
 hāβčǎ(·)
 hāβčǎ·li
 hāβsǎ·(w)ì
 māthā·βi
 ?mthā·βk (W.G.)
 hāβì

βhāhǎ·i
 hāhǎ·i
 wí·hohǎ·hm
 βhāmʔì
 há-
 hā:ki
 hâmi
 hā:mi

"domesticated" animal
horse
tick n.
gophersnake, bull snake
wolf, mountain lion
greedy 
miser 
stingy 
follower 
mano, grinding stone 
blow with mouth
blue, green
north
scrape, shave
continues to
whinnies
side of mountain
pant v.
look
look this way
look over there
look that way

ha
mhā(·)mka!

hàmté

hàmtëlta

hàmči(·)ọki

hàmkki

ḥi·tāt hàmʔēŋa

ḥitāt hàmʔēla

hàmēl

hāmmsi

hamēl(·)la

hàmsēlta

 hàmsʔēp

 hàm(m)si

hammsi

 hàmēl

(ʔ)hāni

ōhāni

sā·ʔhāni

ihā·ni

ihāni

thànhā·ni

kərʔhāna

hānā

hąnkō

hąnk(a)sāga

hąnkrā·pa (G.M.)

hello!

squash

gila monster

sneeze

killdeer

hunchback

camel

sift

snot

gila monster

bulrushes

star

sift

good, handsome, right, first,
real, perfect

paint

honored

tame

repair, fix

rub (an arm)

coyote

frog$_2$

frog$_1$

centipede

butterfly

ha

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háŋkpá·ra (W.G.)

háŋmée·ra  watersnake
háŋktú·r   poppy
ha(n)pük    coralillo (snake)
hal-    shine; smooth, naked, +
         reflection, etc.

hàlóú·yi  nine

yàhál(?)mí    lip
hál ~ θál ~ ŋθál there (locative)
hàikö    Anglo
háykö
β(q)hā:wi    tender (body, corn)
hopá    four
hupá
hókwá    make one’s presence felt
hukwá
kəár hókwākm    a coyote is near
kəár hókwā:čkm

hóʔāli    draw out, take out
čmhó(·)ʔa    taraiso
wl·hohā·hm   side of mountain
hōmē·ča    sons
ŋθák ʔhátč howā·ʔk habitat: where horses stay
hōlhól    flowing downward → waterfall
hōrhōr    top; tent

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<table>
<thead>
<tr>
<th>Word</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>hórpa</td>
<td>father-in-law</td>
</tr>
<tr>
<td>huñē</td>
<td>dew</td>
</tr>
<tr>
<td>huñē</td>
<td>son</td>
</tr>
<tr>
<td>huñē</td>
<td>like a child's</td>
</tr>
<tr>
<td>?omlhu</td>
<td>pipe</td>
</tr>
<tr>
<td>hū· (W.G.)</td>
<td>nose; head</td>
</tr>
<tr>
<td>hū· (G.M.)</td>
<td>hoots</td>
</tr>
<tr>
<td>shûna</td>
<td>hundred</td>
</tr>
<tr>
<td>hûnhûn</td>
<td>level ground + Thomson Valley</td>
</tr>
<tr>
<td>hihûli</td>
<td>time moves, passes</td>
</tr>
<tr>
<td>?ôshûli</td>
<td>poker stick</td>
</tr>
<tr>
<td>?uhûl</td>
<td>longtailed mouse</td>
</tr>
<tr>
<td>(?)mhû(·)l</td>
<td>ashes</td>
</tr>
<tr>
<td>?hpâ</td>
<td>metate, grinding stone + chin, jaw</td>
</tr>
<tr>
<td>hpínči</td>
<td>lose cf. hipíni</td>
</tr>
<tr>
<td>hpīndi</td>
<td>late</td>
</tr>
<tr>
<td>hpínčgi</td>
<td></td>
</tr>
<tr>
<td>mûtapê·yi</td>
<td>shovel</td>
</tr>
<tr>
<td>?hpâ·lka</td>
<td>ironwood tree</td>
</tr>
<tr>
<td>?pâ·lka</td>
<td></td>
</tr>
<tr>
<td>?phâlka</td>
<td></td>
</tr>
</tbody>
</table>
hpú₁
  wèhpú
  hpúqʔúrka

hpú₂
  čnàhphūka
  myā·khtī·la
  ?hàhtí·ri
  hté
  kā(h)tāta
  hčā·
  hčān
    hčā·ra
    hčā·ra
  hčī·la/hičī·la
  skvēba
  sāhkvāti
    shkvā·ti
  hkē·
    shkē·
  ?hk̲wāsakēba
  saltakābi
  takāp?i
  hkē
  hkāya

arc-shaped + pond, bow
(stagnant)
buttock(s)
pistol
something to shoot with + gun, rifle
black ant, small, brown ant
heaven
shallow water
prickly pear cactus
porcupine
Milky Way
girl, virgin
nit
cross
chop with ax
ax
carry
lay something across + bridge, ford
pick n.	ring
encircle
other, different

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tθhκē
 tθhκē:bi
 tθhθκē:yi
 hqθsqi's
 hθél
 sθlhθō
 khθθyi
 mθtkθtθla
 miθθča
 mθčθtθča
 hmí
 pà:hmí(ya)
 nhmí:bi
 ?l:hmí(ya)
 hmé
 hmθnhmí
 hmθnhmē
 hmíra
 hmí:ra
 hmθlta
 nhmθrθi
 nhθrθi
 h(φ)mθča
 hmθra
 hmθ:ra

 change v.
 swap, exchange
 rub back and forth + fiddle, violin
 louse
 nail, claw,
 feverish
 earth, wide-spread
 toe
 (plural) W.G.
 tall, energetic, ambitious
 man
 marry (woman speaking)
 acorn

 boy
 chipmunk
 Harris ground squirrel
 kind, gentle
 sons
 boys

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ʔú·béahmá·
chew tobacco
hmá
let's go!
hmá·
testicles
hmá·yi
male
hmáβa
male
hmá
testicles
 hmá:
wáhmá (SEY)

ʔhmá
quail
ʔhmá:
gourd
ʔhmá·

hmát
clay pot, water pot
hmán
baby, child (not weaned)
hmá:ña
(plural)
β(h)má(·)mk?i
swell up
ʔhmál
sack, bag + pocket
hmá·r < hmé
boy
thmú
bake (bread)
ʔuhmú
mortar
hmú·
move one's home
hmú·či

čh'áhmú·ča
Navajo
hmúki
three
hmú·ki

(h)mú:ka
Navajo, Hopi
hlà hnē·ya
Big Dipper: moon coat (?)
| hńaq/hnak | necklace |
| wi·hnäki |  |
| hńá:qi | want, need |
| kβnäβi | tighten |
| yà·hnä:na | palate |
| ?hná·l | gourd rattle |
| hnû | shovel, scoop out |
| hnú | offended |
| ?chnūβa | sickness, disease |
| ?chnōβa |  |
| h.ńá(·)qa | beaver |
| nhńó | shoe |
| hńńōqa | green onion (wild) |
| hńōmi | exercise, constitutional |
| hńó·mi |  |
| hlľ | milk v. |
| wi·khlē·βa | cliff |
| hlá | moon |
| βałö·hålō·hi | death rattle, cf. snore |
| hlö | cottontail |
| sąβkhλύβa | scooped out white: Pln |
| khλuíβa | pulled out |
| hréβa | brim, cliff |
| hléβa |  |
| hrökβi | hooked |
| hrōyi | untie, doff |
| čůrka kąyąlβa | walnut spreading: Pln |

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<table>
<thead>
<tr>
<th>Word</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>shyálba</td>
<td>not on tight, float + ramada</td>
</tr>
<tr>
<td>shyára</td>
<td>table</td>
</tr>
<tr>
<td>shyárba</td>
<td></td>
</tr>
<tr>
<td>wì·khyärba</td>
<td></td>
</tr>
<tr>
<td>shyúki</td>
<td></td>
</tr>
<tr>
<td>??î·ksIβa hwê·βa</td>
<td></td>
</tr>
<tr>
<td>hwáki</td>
<td></td>
</tr>
<tr>
<td>hwà·ki</td>
<td></td>
</tr>
<tr>
<td>hwâkβa</td>
<td>(elder) brother</td>
</tr>
<tr>
<td>hwá(:)l</td>
<td>ponderosa pine</td>
</tr>
</tbody>
</table>

| ?há:ná?q?ó | swallow water |
| kwé ·  bkpa · ya hámma | |
| ?há:ru · βm | water recede |
| ?há:pí · rβi ké · la | current |
| ?há:wáyi | stagnant water |
| ?há:áma | flood comes and goes; passes through |

### ?há:á · mi

| ?há:(·βč) ??é | the water is deep |
| ?há: ?ei: | I drink water |

| ?há: ?há · na | good water |
| ?há: ?wáta | wine |
| ?há: māla | beer |
| ?há: táya kyák | ocean: much water lying |
| ?há: βč ?máti | the water is dirty |
| ?há: βč máki βhvirβhirβa | the water ripples |
| ?há: βč myá · ye · km | the water rises |
| ?há: βč sólsóli | the water is clear |
| ?há: βč yo · km | puddle |
| ?há: βl pi | drown |

---

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sink into the water
water coming out
float; swim (lie on top of the water)

water pot
the river narrows
opposite shore
body of water, lake,
shallow water
well n.
river
salty water
Salt River
ocean
water thrown on top
Havasupai people

Fossil Creek
Colorado River
land of water (Pln)
shore, water's edge
Montezuma Well: water broken up
Pln: crk. near Miller Valley
(bubbling water)

jump into the water
the water is muddy
the water is placid
stagnant: not flowing
the water reflects, cf. smooth
the water finishes ground (?)
grey water
still water; ditch
still water ditch
Hassayampa River
dam
island
ice
bathe, swim; wash oneself
the water isn't deep
drink water!
dip in water
gray; greasy
blue, green
### Milky Way
- "thermos bottle"

### Spit
- "sand, gravel"

### Sand Sinking to the Bottom
- "sand sinking to the bottom"

### River, Stream
- "well n."
- "Maricopa"
- "river"
- "hot springs"
- "Chinese: speaking in water"
- "sneeze"

### Killdeer
- "killdeer"

### Bulrushes
- "watersnake"

### Spring, Source
- "creek"

### Creek Near Ironsprings
- "Pln: creek near Ironsprings"

### Whiskey
- "ditch"

### Seashore
- "put (lay) it into water!"
- "put (set) it into water!"
- "thirsty (SEY)"
### smell v.t.
- **skunk**
- **what? (interjection)**
- **take care**
- **swing in hand**
- **turn something in motion** (horse, car)

### settle (coffee grounds)
- **it ripples**
- **unfold**
- **loin cloth**
- **cross**
- **fighting, war + enemy**
- **Apache**
- **badger**
- **bear**
- **red; blood**
- **look for, search**

### dig, scoop... plant, hollow out
- **shave**
- **mean, nasty, cranky**
- **purify with smoke**
<table>
<thead>
<tr>
<th>Term</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>ʔəhʌwʌya</code></td>
<td>smoke</td>
</tr>
<tr>
<td><code>thwɔ̃bi</code></td>
<td>popper (in cooking)</td>
</tr>
<tr>
<td><code>thwɔ̃bi</code></td>
<td>yeast</td>
</tr>
<tr>
<td><code>ʔθwɔ̃ba</code></td>
<td>brick-shaped + cheese</td>
</tr>
<tr>
<td><code>cwɔ̃bo</code></td>
<td></td>
</tr>
<tr>
<td><code>səlslhʌwʌ</code></td>
<td>fingernail</td>
</tr>
<tr>
<td><code>bθwɔ̃bi</code></td>
<td>bristle, pop up, rise (bread);</td>
</tr>
<tr>
<td></td>
<td>harden</td>
</tr>
</tbody>
</table>

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mí
mipük
mmpük
misí
nmí
mi'ra
nmí
hmí
βčīqw’dsmí
yàhàl(?).mí
mwê•mi
mwê•m?l
?ē•mí
mí:
mí•či
?khw'amíwo
?i•kmí•yi
?i•kmye•
wàmí•
wa...míyi
wà...míyi
kmyá'yba
nkmi•km
nàč ?kmí•km

foot; bits (in money)
knee
track, trail
mother's younger sister
(W.G.)
cat
tall, ambitious
gulp
lip
springtime
give (away from speaker)
cry
(plural)
rock music: make instrument cry
ocotillo: sad plant
scold
mourn
the moaner
my enemy
I brought it (completive)
yá·ba ʔmítβiʔi
mi·ka
mi·ʔkʔē
mínmi·na
hmíl-, hmír-
pá·niṯmíli
mírmiri
čírmiri
míra
nmí
nhmírpi
nhmérpi
míyi
myé
mátčkmí·ya
n míya
smá·
ʔsmē·
yükılmē:
humē
hučmá·ya
ʔmē·t ʔĩqkm
mpēlmílκʔl
ʔē·mēla
mēra
hāmē(·)ra
nhmérpi

kiss
father's brother's son
after
hummingbird
chipmunk, squirrel
play a joke on some people
straight
mother's younger sister (W.G.)
(G.M.)
kind, gentle
(bad) spirit, ghost; devil
valley
hair
lose
I cannot find it; I lost it.
eyebrow
son (man speaking)
(plural)
overflow
lick one's chops or lips
get even
slender (like a rope)
watersnake
kind, gentle

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nhmírpi
kaŋyúm(?)e?
kaŋyúmē?
má
?âmanaā
mā.
māči
mái-

why?
when?
ripe, well-done
ripened by the sun
eat
(plural)
(plural)

chew tobacco
you (singular subject)
you (plural subject)
matron
Mohave
speak angrily
chief (folk etymology. Sp. mayora)
dance
quail
gourd (wild, larger)
lend
sleep
sinew, cf. root
container
earth

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brittlebrush
white clay or dirt
windy
wind
flesh, body, skin
wink
wink
blink
turn off (appliance)!
back, backward
leave
douse
kindling wood
raccoon
swell up
move (fast) vertically: fall;
get up
help me get up!
foam
bullsnake
rake v.
rake n.
sack, bag, pocket
wood rat
smálka
màrmár
čmàrmâri
màrmâri
màrmâ'r?lča
nà·mârβi
tmâri
sàlkmâ:rβa
thpâ·mâya
nmâya
(?)mâya
màymâ:
?wîla ?mâya
čsmâyβa
mâ·ya
qmôt-
màtqmôtqî
?mâtx ə a qmôtkm
ttmô·tkm
nûgyû·mô?
qmô:sa
môl ?è·...yi·
môra
βmôrmôr?l·
mwâ-ra mô·rk
mô·ri
ear
rub in circles
long (temporally)
minute
sundown, dusk
cover; bury
fingers, cf. toes
Papago
breast
milk n.
matron
little piles of bushes
cousin
first cousins: children of two sisters
mound-shaped
ground forms mounds
itches v. (hair)
I am not certain
mistletoe
sad; feel sorry for
father's mother
trot
dough
knead
<table>
<thead>
<tr>
<th>Word/Phrase</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>mu₇é</td>
<td>moist, damp</td>
</tr>
<tr>
<td>mu₇₃(:)yi</td>
<td>foggy</td>
</tr>
<tr>
<td>mu₇₃ya</td>
<td>steam</td>
</tr>
<tr>
<td>mu₇₃</td>
<td>fog</td>
</tr>
<tr>
<td>see hu₇₃</td>
<td>Mojave</td>
</tr>
<tr>
<td>?mukʰaββa</td>
<td>sheep; Pleiades</td>
</tr>
<tr>
<td>ma(·)kʰāβa</td>
<td></td>
</tr>
<tr>
<td>?mú</td>
<td>goes &quot;moo&quot;</td>
</tr>
<tr>
<td>mú·ʔl</td>
<td>new, young</td>
</tr>
<tr>
<td>hiβmú</td>
<td></td>
</tr>
<tr>
<td>?č(h)ūri hiβomūča kwā</td>
<td>January: where the new year is</td>
</tr>
<tr>
<td>hmú·</td>
<td>move</td>
</tr>
<tr>
<td>?uhmú</td>
<td>mortar</td>
</tr>
<tr>
<td>?hva·ʔmú·ča</td>
<td>Navajo: connected with Apache</td>
</tr>
<tr>
<td>mű(·)ka</td>
<td>Navajo (confused with Hopi)</td>
</tr>
<tr>
<td>mű·ka</td>
<td>Hopi</td>
</tr>
<tr>
<td>(h)mű:ka</td>
<td></td>
</tr>
<tr>
<td>hmúki</td>
<td>three</td>
</tr>
<tr>
<td>műni</td>
<td>cold</td>
</tr>
<tr>
<td>mát mű·nʔime</td>
<td>autumn</td>
</tr>
<tr>
<td>műl</td>
<td>name</td>
</tr>
<tr>
<td>môle</td>
<td></td>
</tr>
<tr>
<td>mú·ri</td>
<td>knead</td>
</tr>
<tr>
<td>mó·ri</td>
<td></td>
</tr>
<tr>
<td>myāla mű·rča</td>
<td>dough</td>
</tr>
<tr>
<td>mwāra mű·ra</td>
<td></td>
</tr>
<tr>
<td>mpēlmēlk?i</td>
<td>lick one's chops or lips</td>
</tr>
</tbody>
</table>
I dropped the glass; it fell
brush
tongue
leg; wheel
mushroom
knee
tarantula
dome-shaped: wickiup
forehead
camel: humpback
band for carrying cradle
squash, pumpkin
brittlebrush
north
watermelon
plant species
gila monster
sneeze
termite
choke on food
hungry
trousers
steps into
killdeer
gruel, gravy
rolled up: cigarette
jealous (male)
flaying squirrel
pound
pulverize
break
ridge
antelope
greasewood
soft
nasal mucus
net
newspaper
woman
maiden
(elder) sister (man speaking)
sift
star
smell like cold blood, grease, or wet hair
fear
dangerous, fearsome
mšè:βi  
?msè·(km)  
?mšè·yi  
msáyi  
tmsâ·βi  
mìkmsâ·rβa  
(?)khamsârβa  
hàms?Iβ  
??l·msmā·  
msmá:  
(?)mhú·(·)l  
?mhlı?u·?u·βa tkwârči  
mhwa:  
mhwa·(·)ta  
mhwa ksotāta  
mná:  
mnú·(·)na  
βnúna  
mnē  
mnâya  
(β)mñe·  
mñâya  
βmñé·(yi)  
kwè·cmñâya  
?khwâčmñáyi  
?khwâčmñáyi  
mlpū·  
fearsome  
they are afraid  
whiten  
toes  
fork  
bulrushes  
root, cf. sinew, sleep  
root, sinew, cf. medicine  
ashes  
they smoke a pipe  
badger  
bear  
pig  
yucca  
stomach, belly  
(W.G.)  
fine, perfect; tasty  
semen  
gun going off  
chewing gum  
scissors (W.G.)  
(G.M.)  
navel
mltát  barrel cactus; prickly poppy
mlqǐ  neck
smló(·)hi  snore
mlū8a  measles; chickenpox
(ʔò)mlhū  pipe
ʔmlhū·

mrī·ka  bean
myē(·)  ghost, (bad) spirit
wàmyē·
mourn, be sorrowful, cf. moan

myēla  bread
see myála
myá·

myá·l  high
myā:yi  upstream

myála  bread
kmyá·la  baker
màtōmyāla  adobe
čmmyālβa  packed into shape

myår  penis
myāya  scar
myā·yβi  moan
myâ·wʔl  mews, meows
myû(·)la  sugar
myû:li  sweet
tmyû·li

gmwmwarzma  old woman

myá·yi

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<table>
<thead>
<tr>
<th>Shona Word</th>
<th>English Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>sqmwira</td>
<td>ankle</td>
</tr>
<tr>
<td>mwé</td>
<td>warm</td>
</tr>
<tr>
<td>mwé·m(?)i</td>
<td>springtime</td>
</tr>
<tr>
<td>tmwé</td>
<td>heal</td>
</tr>
<tr>
<td>numwé</td>
<td>harvest</td>
</tr>
<tr>
<td>himwā·la</td>
<td>calf (of leg)</td>
</tr>
<tr>
<td>mwára</td>
<td>flour</td>
</tr>
</tbody>
</table>
mât

earth, land, ground, dirt, clay

?mât ?hâtû·βl yâ·wa

island

?mâtç ṭêq̱á qmótkm

ground

mâtç βq̱âq̱β?im

gulch

mâtç β?în?în?î

earthquake

mâtç β?û·βkm

break of dawn

mâtç β?û·β?î

twilight: ground becomes visible

mâtç β?û·βì

rake v.

mât čmâ·li

shovel v.

mât hnu

I shovel

?mât ?hnu

you're responsible for the earth

mâtktpâkša

narrow, level land by mountain

mâtktnâ·kβal wâyö·km

they're living in that part world, earth; country, wide area

mâtk čkâ·ma

mâtk čkâ·mi

valley

mâtkqwâ·rm?e

desert

mâtk?ämïqa ha

Verde Valley

mâtkhörâhôra

hill, mountain (not rocky)

mâtkhôi·la

earth

mâtkpôwe· (W.G.)

spider

mâtqâqwâra

prairie

mât

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matpiló
mat(s)pēqi
matsapē·yi
matsapēyi
matpukmāk
mattwāya
matčā:bk myā'·yu
?matččβlī·ča
matčmyāla
matkI(·)la
matqī·s
matqmōtqī
matq'wāra ?sīti
matq'wāra
mat?I·la
mat?qwāta
matβō
matēiwa
matēiwa əkvāyβi
matsāga nū:k?i?i
matsāga
matsāga
matsβlī·ya
matsβlī·l mānkm

lava
hoe: pounds ground
shovel v.
shovel n.
foot of mountain, bottom
distant land
on earth as it is in heaven
surveyor
adobe
wide earth
plant species (root used as medicine)
mound
one mile
desert
bank; cliff
red dirt
scout, spy
olla, clay jug
pottery is broken
dust
chief SEY
hole
fall into a hole

mat
mat (continued)

çpayč mätęblįya yūri  hibernate
rčhū:rm

çpayč mätęblįya yūrm  rčhū:rm

mätsti·ti  plow n.
mätsti·tk  furrow n.
mätsti·ti  plow v.
mätsti·tča  plowed land

mätshyůki  shovel n.
màthikwiększra  whirlwind
màthūrṣa  top, hill
màthörhōra

māthā·bi  north (G.M., G.N.)
mātmūn?i  autumn
mātmū·nū́ime
dust, cf. pound

mātmqwaŋa  plow v.
mātŋū·stīti  patch (in a garden)
mātŋū·qeča  farmer
mātŋū·kwī·ya  garden, field
mātŋū·  farm, garden
mātŋū·  autumn
mātyū·si
mātyū·si  mat
<table>
<thead>
<tr>
<th>English</th>
<th>Bhutanese</th>
</tr>
</thead>
<tbody>
<tr>
<td>windy</td>
<td>घाड़ी</td>
</tr>
<tr>
<td>dust</td>
<td>नुङ्किल</td>
</tr>
</tbody>
</table>
myál  bread

myála píla  crust
myáltq̣kʷəŋβa  toast
myâ·la thmü  take bread
myál twpu·βi  preserve bread for future use
myâlčråpra·pa  tortilla
myâlq̣ora  biscuit
myâlsÍló  broiler
myâlaswá  dough: not ready
myâlamyúla  cake
myâlamú·rča  dough
<table>
<thead>
<tr>
<th>ni'i·ni'</th>
<th>exclam. of fear (woman speaking)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ni'kwa'y</td>
<td>old</td>
</tr>
<tr>
<td>nil'es:mi</td>
<td>gentle (of animals, people)</td>
</tr>
<tr>
<td>ni(')ya</td>
<td>great-grandparent</td>
</tr>
<tr>
<td>kni'ya</td>
<td>mother-in-law</td>
</tr>
<tr>
<td>kni:ča</td>
<td>(plural)</td>
</tr>
<tr>
<td>kni:ča</td>
<td>(plural)</td>
</tr>
<tr>
<td>ktni'βa</td>
<td>quiet, graceful</td>
</tr>
<tr>
<td>ni'sa</td>
<td>spider</td>
</tr>
<tr>
<td>nī:s?sa (G.M.)</td>
<td></td>
</tr>
<tr>
<td>ni'mi</td>
<td>take apart</td>
</tr>
<tr>
<td>kni·li</td>
<td>stirrups</td>
</tr>
<tr>
<td>nē'</td>
<td>scoop up</td>
</tr>
<tr>
<td>hànē'ka</td>
<td>dip in water</td>
</tr>
<tr>
<td>nāya</td>
<td>sap</td>
</tr>
<tr>
<td>nēhi</td>
<td>kill</td>
</tr>
<tr>
<td>nēhβi</td>
<td>commit suicide</td>
</tr>
<tr>
<td>(hlà)hnē'ya</td>
<td>Big Dipper: moon coat (?)</td>
</tr>
<tr>
<td>cf. nē'</td>
<td></td>
</tr>
<tr>
<td>(?)nà</td>
<td>ouch</td>
</tr>
<tr>
<td>na??wí</td>
<td></td>
</tr>
<tr>
<td>nθåm ?nälkŋ yàpē'yi</td>
<td>I became alive</td>
</tr>
<tr>
<td>smä na??wí</td>
<td></td>
</tr>
<tr>
<td>sná+</td>
<td>tie v.</td>
</tr>
</tbody>
</table>

493

ni

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?hat snà•yi
snä্বi
kphnä্বi
snä्बa kphnä্বk nāli
mnāt
tknā·kبا
kšnäkبا
βqαnα·
sk?ú·la hńąqča
hnąkča
wį· ?hną:qi
nåsi
βnåmi
βnå:m?I
βnå·mβi
yą·hną:na
nåli
nå·lkı
nå·βnå·li
?čnå·lkm
čnåli
(?nå·lа
?hnå·l(a)
kβnåwi

harness
braid
tighten
knee and inner thigh are taut
yucca
small level land
gap: saddle-like
whine
beads
I want money
think (?)
sew
caved in (mining shaft)
palate
fall; get down, descend; be
born
comes down
afternoon
I dropped (it)
lose
mesquite tree
gourd rattle (too bitter to
eat)
carry heavy objects in arms

cf. nó(·)

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no

?nwë·nùm
mnúna
βnúna
nkwáyi
nkwáyi
nqwá
nhmírþi
nhmérþi
nmåki
cf. mák-
nmâe(a)
 nwírči
 nwí·ri
(?)nwâ(·)ha

that's all for now
heavy
mother's younger sister
(plural)
gamble
a game
scoop
modal: be going to, about to, be doing
I'm going to sit here
mother's brother's daughter
(man speaking)

rape
belly, stomach
(W.G.)
old, worn out

crane
kind
leave
raccoon
cook v. plural
cook v. singular
friend
<table>
<thead>
<tr>
<th><strong>ni</strong></th>
<th><strong>ni</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>qmwí·rma ni</td>
<td>wife's mother</td>
</tr>
<tr>
<td>béhë ni</td>
<td>wife's father</td>
</tr>
<tr>
<td>kñí·ya</td>
<td>mother-in-law</td>
</tr>
<tr>
<td>kñíːca</td>
<td>(plural)</td>
</tr>
<tr>
<td>kñíːca</td>
<td>(plural)</td>
</tr>
<tr>
<td>ni·ni</td>
<td>copulate</td>
</tr>
<tr>
<td>niːnɕi</td>
<td>(medio-passive)</td>
</tr>
<tr>
<td>čñíːbi</td>
<td>(plural subject)</td>
</tr>
<tr>
<td>né</td>
<td>hunt</td>
</tr>
<tr>
<td>?čnē</td>
<td>hunt for something</td>
</tr>
<tr>
<td>?čknē</td>
<td>hunter</td>
</tr>
<tr>
<td>kʰar ?čnē·ča</td>
<td>hound</td>
</tr>
<tr>
<td>?č?nē</td>
<td>I hunt</td>
</tr>
<tr>
<td>unē</td>
<td>father-in-law</td>
</tr>
<tr>
<td>nkuné·ya</td>
<td>husband's father</td>
</tr>
<tr>
<td>na?né</td>
<td>my daughter-in-law</td>
</tr>
<tr>
<td>mñē</td>
<td>fine, perfect; tasty</td>
</tr>
<tr>
<td>mñāya</td>
<td></td>
</tr>
<tr>
<td>(β)mñē·</td>
<td>semen</td>
</tr>
<tr>
<td>mñáya</td>
<td></td>
</tr>
<tr>
<td>βmñē·(yi)</td>
<td>discharge like a gun</td>
</tr>
<tr>
<td>?lwa·l čā·ne shyālβkm</td>
<td>leaves floating on water</td>
</tr>
</tbody>
</table>

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I, me, my, mine: first person pronoun, we, us, our, ours
mine; I own
I, subj.
we, subj.
we (two) go away
my/our land
as we feel sorry for those who make mistakes with us
road, path
bridge
sun
today
yesterday
black
black (in compounds)
Bible: flat, black book
eyelash
frog
I came to hear the minister
ripened by the sun
forget
bow
beaver
naba
nab'ba
?naba tasha
nako
mako
knana
bnani
nale winbi
nalqi
?bon chalqa
?khwa chna yi
?khwa chma yi
?no ca

?no
no
tu?no
nho
pa hmno ?e
hiroqa
homi
tha wsa tu?nom
tu?nom ma noma
numwe
numwe
nu
nu-
nl

(mát)nl
mátłnl:(w)
stüzm čnlkši
máthl nlk?l?l
mátłša nlk?l?l

dl(’)ri
tdl(’)ri
(?)wánplnlša
nkmI:
nkwljy (W.G.)
nkwljy (G.M.)
hánlr’ra
hánlrura
hánl r
n?ó
sknlška
nlč?
nlá-
nlá? klnšši
nlk
nlé? (G.M.)
nlá?
nlčš
nlčšč
nłáya
yáki nlé?el

till, cultivate
farm, garden
middle is hollow
dust
spotted
write
wickiup
cries to be brought along
old, worn out
California yellow poppy; (Prn)
gold poppy
sweat
elbow
there
this
there
over there
that (disjunctive)
he, she, that one (subj.)
they, those
liquid
bedbug

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nhmí(·)βi

nhnö

nhñú

nmí

nmíta

yà(·β)nmí

nmíya

hārmēra

nmāt

nmāti

nmáya

q'āktānmáya

(ŋ)msābi

wĩ'nsāba

nmsābi

nmsā·βki

nlē·mi

nyē·k këô

yē·kôw

nyál βqötʔaʔĩmi

snāba nyā·ki

tu·nyú·č(o)k

nyū·ča

nwē?

mātknwe· (W.G.)

nwá·

marries a man

shoe

cat

mountain lion

beard

fur, hair, hide, skin; bark

watersnake, cf. mér- slender

homeland

settle

breast

cow's milk, butter

white

silver

grey

dawn

tame

(to-)morrow

(W.G.)

fall down there

rope v.

be; use

little (horse, person + pony, midget)

the one over there

spider

home

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nwé(·)βi  live, dwell
nwā·yi  live, dwell
one is burnt by the sun
sunlight
sun is shining
hour
one hour
one second
I drank too much today
east: sun comes out
sun up
sun rising
sun rises slowly
late
watch, clock: sun ticking
noon
noon, cf. strike, hits the bull's eye
noon
good afternoon!
sundown, dusk
afternoon
eat lunch
what time is it?

two to four in the afternoon

one o'clock

give us bread today

it's cold today

sundown

west

sun is hot

summer

it's hot today

day: sun sits
nū- deictic

nū mwi

nūmwi ?i
nūmwi ?i
nūmwi mwi:?

nūβmwi + nūmwi

nūč tūʾnmm(?)nōk shāβkm
nūč tkēkm
nūč ?āryēkm
nūč βkē smlōha ?ūmkm
nūč hwaćlē?

nūč nēβkm
nūč nē(·)
nū ?ējri·km

nūč ḫkvātk βpī·km
nūč βpī(·)km

nūč βrīkm
nūβa?ī
nūβ ?īcm

nūβlūi
nūβlūiōi

nūβyū
nūβyū·
nūβyūča
nūβyū·mo?

nū:kk ṭnā:hm

do it!
I ask you to do it
he asks you to do it
do you think you can do it?

he weighs a lot
he adds
one is happy
he doesn't snore
is he digging?
one is kind
it's heavy
I suspect; I'm not certain
he's tired from chopping wood
he's tired
he jumps
says (it)
they said
same, cf. right
that's all
it's that way
it was that way
just that kind (?)
I'm not certain
day before yesterday

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nū- (continued)

nū:km ?nā:hm
nū·kkhipā:tm
nū·kmhipā:tm
nūk mshā
nūk yū
nūl (ŋ)bê?

night before last
hang it!
there is
over there
there's hunger in that land
he's going toward it
I saw him (W.G.)
one measures
she loves us

he is strong (W.G.)
they are strong (W.G.)
it is he
They are Havasupais
habitat: there where the horses stay

I'm going to sit here
I was born there
I became alive
it was coming way back
slí:
hlí
hwà:lräpa čąbliyi < lwí
øhlí
øhlá·yi
øhrí
øhríya
wà·lë plíplíp?í
wá̊ l háli̊·plí̊·pi
li·pi
lì̊·pk
sú·lít?íča
?ɔtqʷáti kə̄blí·n
βlíwlíw?í
hàmél yùwo tliwlíwi
rìwrìw
slé
lë·kò
lëqi
klmä̊: lë·qβí
cf. klmë:
lë·qβa
wì·khlë·βa
nlë·mi

fry
milk v.

ruler, straightedge
hole

pierce
small opening
wing flutters

soupy (thick liquid with something in it)
soupy

insect species
oven
quiver

I'm going to cry
wag

paper flower
stick out tongue
squash v.

my rear end is sore

sore n.

cliff
tame, gentle

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?lá?
?lá
?lá:yi
tū· ?lá:yi
tū· pā·lā·yi
β ślā·ik, β ślā·ćlā·ik
β qlā·qlā·i
hlá
hi·wā·ya ?lāyi
wāya...(?),lā·yi
láp
wī·β č ?lāpǐkm
hū·pā·ka lā·ka
(?),lāβa
β lāh?ī
β lāh?ī
slám
lá(·)wi
hló
β hlō·hālō·hi
sīlōka
smlō(·)hi
(m)łōhi
lō(·)qī
?iwīl lū·βī
mlōtā
lūllūl?ī
ugh! keep away! (interjection)
bad
bad (plural subject)
ugly person
lightning sound
scream for help
moon
angry
angry
flat cf. butterfly
a rock hit him
elephant
prickly pear fruit
tired
shawl
many
cottontail
death rattle, cf. snore
spinal column
snore
bake (a cake)
remove; pluck; undo
weed out
measles
bubble + fife, flute

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βlpâ't?i
mlpū·
mltāt
mlqī
β1hē
β1hāya
?alhāti
?òmlhū k?Ir?īra
čālhu
pā·?lhⅧayi
klmā:(ča)
yùklmē:
?1lwī
lwī
?1lwē
lwāyī
?1lwē·βi
tlwa·yβa ?nū·
lwā
?1lwē·num
mwē·mm βōlwā·qki

blistер
navel
barrel cactus; prickly poppy
neck
old man
(plural)
greedy
pipe stem
burp
mean, nasty, cranky
anus; buttocks
eyebrow
snake
correct
marry (man speaking)
(plural)
marrIed (man speaking)
we're getting married
wife
rape
comes out in the spring
r

?riyi

rī·pà

θrī

ννu ?θirī·km

βrī·t?l

βrīti

mrī·ka

yù·rīβrīβ

yù·rīrīrīθ

θβrīrīθ

θηrīy?i

sà·?rrī(yi)

sà?rīyi

rē·

rā·yi

ré·βi

?kwērāya

kwē·rē

?črē·

yà·krē·βa

hrēβa

?rā·

θrāpi

rāprāp

important, cf. holy, sacred
almost
1. doubt, hesitate
2. think
I suspect, I'm not certain
jump, spring up
bean
freckles
squat
surprised; jump in surprise
holy, sacred; perfect
play
(plural)
play(ing)
toy
toy
doll
lip
brim; cliff
it hurt! ouch! (interjection)
five
flat

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halsqrâ·pi  naked
hàñkrâ·pa  butterfly
hàñkpâ·ra  (W.G.)
hàlkrâ·pa  blue-green seashell
ràβráβ  pointed
ràβi  it hurts v.i.
?čráβi  sick
βràβráβ?i  sparks from lightning
wráβi  (W.G.)
(m)βrâ·r?i  get up! (after falling)
pà·(?)råwa  fast person running
rå·pi  go down, set
näč pà·čkrôtkm  I am short
hrôkβi  hooked
(?)rú(y)i  hot
trúβi  dry v.t.
rúβi  dry
t>rûyi  make hot
yà(·)krû(·)mpí  thirsty
nà·krûyrûya  small trail, path
hrô(·)yi  untie
mwîβi mhrûyi  take off your clothes!
θβrûyb, θβrûyu  pierce (ears)
?ryé, ?rîyi  important
khrâkrwîsa  hammer
sâlqrwî:sò  wrist, forearm
| yí· | want, want to love |
| ?è·...yí | sad |
| mòl?è·...yí· | want |
| -k wàl...yí· | he's going toward it |
| .k'òl...yí· | |
| yím- | |
| nòá yìmk yá·mk | |
| yìrki | |
| òöyì | hatch |
| òkè wìyì ?a?úmàha | tire, wheel, cf. walk |
| ...yé | I'll never do it again |
| ...yáyì | (singular) |
| ?àr...yé | (plural) |
| tyé·mi | happy, glad, thankful |
| keyë: | desert v. |
| keyë· | doctor |
| kòf:yi | |
| myé | spirit |
| mìyi | |
| gryë: | clear (water) |
| ?yé? òk'wà:mañ nù· (G.N.) | she puts it away |
| mà:t hiòkyëtk | whole body |
| yé·k | dawn v. |
| yé·tk kwè·màčò· | eat in the morning |
| yè·βm | oneself |
| | ye |
myéla
myála
?riye
hláh twàye wàkm
hwà:lràpa čöplîyi, -e
sâhåyi
?khwàwåyi
?khwàyûyi
?khwàsâlî(·)yi
wâyi
mnûna wâyi
yá
yá:ßa
?yá·
ßyá
?ô(·)yâ
?ûyá
tü· yâ??Im
?hàkyâ·ça
kyâ·ya
hwâyâ·
yâ...pé·
sỳàpè·ßi
yà...pá·(ß)i
yà·pà·?ûmk Ëkwà·rkm
hû·ëíla myà?pâ·ßkm

bread

important, cf. holy, sacred
the moon is far away
ruler, straightedge
hook
metal chair
eyeglasses
drying pan
seat
visceral sack
mouth
face
mesquite beans
this
cave

I'm just saying that
bubbling water (Pln)
gray hair
strike out
alive, be born
soul
responsible
laughs in disbelief

"not by the hair of my chinny-chin-chin!"

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yâpki (Verde Valley, G.M.)  jump

wyâti  hurt, harm v.
qyâti  really, very much
yâč  seed
  yâ·či  harvest v.
  tyâ·č  corn
yâk/ŋθâk  ?wâ  ?nû:  I'm going to sit here
yâki  lie, recline
  kya(·)ki  lies down
  ?l'yâki  bed
  yâki  bed
  yâkýi  bed
  yâ·ki  bed
yâ·k  in front
snâba  nyâ·ki  rope v.
yâ·ke  Yaqui
yà...?é·bi  understand
yâβpé  Yavapai
  yâβ?pé  
yâβ(?)pâya
  ?yà·s  turkey
yà·swârbi  suspended like a spider, +
  pleasant
  yâ(·)mi  go
  ßyâmi  run
  kwè·čßyâmi  automobile

ya

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Hassayampa River: 'the water disappears'
1. send away
2. err

village
very round + butte, mesa
into, under
rectangular
cylindrical, rectangular
big, flat top

loaf of bread
penis
ramada
cigar
mescal
donkey
spreading
bunch of bushes
blanket
cantiles (large boulders near Santa Catarina)
table
fly v.
high
the moaner
yáwi₁
yá′wi
yá′wi
háyáwa
ʔmat̪ ʔhátû̂ ʔl yâ′wa
ʔwá ʔwyá:wò
čhwā′b ċhwâyā′wi
qoloyáwa
yáwi₂
yá′wi
qwáwa pâ′kči′r(i) kųči
qwáwa pâ′kči′r(i) kyoči
qwáwa pâ′kči′r(i) kʔoči
qwáwa pâ′kči′r(i) čʔoči
ʔú:ba ʔhmâli yō′ča
ʔčhwâyk kyo′(či)
ʔhát nhñoyo
yó:
  yá′wi
čyō′
  čwō′, čō′
ʔyo:
yō′ bi
yó′
yō′ba ʔūmi
  yō′bi
yō′či

be located, cf. yó:

island
island
yard: around the house
enemy striker
chicken < gallina?
noise, echo
barber
roll-your-own’s
peace: no more fighting
shoe a horse
be located
(plural)
set, put down
willow
make
tooth
not sharp, dull
the blade
catch, take

ya

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?ö·či

yó:  grab
yó(·)₁  be located
yó₂  make
yó₃  take
yó₄  tooth
?yó·  willow
wàyó·βi  noisy + ya·wi₂
yóqi  vomit
sçyóqi  smash, mash, squash
?hat syōmi  reins
     syô·mi  pull
     syûmi
     syômi
     syûmi
màk?yó:ra  chief
      mayó·ra  < Spanish mayor
tyú(·)ča  relative
yú  be
yúβ - nùβyú·  that is so
yú(·)  eye, face
     yú(·)βa
     yò < yū  eye
     ?hväybqāya  Tonto: dirty-eyed enemy
tyúpi  face v.
?yú·  owl
čyûti  rub straight

yu
ččyû·ti
hátnyû·ča
yûkyûk
k?ù·yûkyûka
shyûki
?čkyûka
?čkyû·kta
yú·si
yûsyûs
tyûsyûspû
ni·mk yûl wími
nhòkyû·la
myû(·)l-
mkyûl
mkvûl
yû·l
byû·li
thwöppî tmyû·li
yûri
yûri
myû·rki
qyûrqî
yûwi
čyû·wi
čyûwmi
yûwò

pony: little horse
oblong basket
dig
ancient
legend
cool, comfortable
fan v.
takes apart and throws away
sandals
sweet; sugar
trousers
rope made of cowhide
mix v.
soda
go in
shirt
enter!
small ditch, furrow
come
send toward speaker
drive
track

yu
wi
wiwo
myúwk mwI·wo
?wiwó
?wiwo
wiw-
?wik ?wiwkí
?i·këowi
wiβó(?)
pà·wiβó
?wí`
wí:
pu mwI mwI:?
-wí
neám [hám] ?nålkn
yàpë·yi smá na??wí
swí
nwí`
blwí
do, make
show, teach
come and show
I couldn't help doing it
we got here
they drove the people away
rock, mountain; money
do you think you can do it?
I was born
scrape (hair off deer hide)
father's older brother
correct, right, proper
<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>βlwi</td>
<td>snake</td>
</tr>
<tr>
<td>?lwi</td>
<td>snake</td>
</tr>
<tr>
<td>wíta</td>
<td>1. father's older brother</td>
</tr>
<tr>
<td></td>
<td>2. father's or mother's younger brother</td>
</tr>
<tr>
<td>wí'ta</td>
<td>(plural)</td>
</tr>
<tr>
<td>sàkwíta</td>
<td>pigeon</td>
</tr>
<tr>
<td>kwí</td>
<td>dove</td>
</tr>
<tr>
<td>wíβi</td>
<td>clothes</td>
</tr>
<tr>
<td>wí'βi</td>
<td>wear clothes</td>
</tr>
<tr>
<td>wísa</td>
<td>mother's older sister</td>
</tr>
<tr>
<td>wí'sa</td>
<td>(plural)</td>
</tr>
<tr>
<td>sàlqrwi:sò</td>
<td>wrist, forearm</td>
</tr>
<tr>
<td>(SEY)</td>
<td></td>
</tr>
<tr>
<td>kh'wàkwísa</td>
<td>hammer</td>
</tr>
<tr>
<td>wími</td>
<td>throws away</td>
</tr>
<tr>
<td>twí'mi</td>
<td>rest v.</td>
</tr>
<tr>
<td>ná'l winβi</td>
<td>wear socks</td>
</tr>
<tr>
<td>ēn̓ lo yâ:l winβi</td>
<td>sock</td>
</tr>
<tr>
<td>wílwí'li</td>
<td>shake to make something sit properly</td>
</tr>
<tr>
<td>?wíla</td>
<td>bush, tree, grass</td>
</tr>
<tr>
<td>?lwíla</td>
<td></td>
</tr>
<tr>
<td>?čsá kwíla</td>
<td>mockingbird</td>
</tr>
<tr>
<td>hi·wil</td>
<td>thigh, hip, hindquarters</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>wilβi</td>
<td>quick; early</td>
</tr>
<tr>
<td>čmwilβi</td>
<td>determined</td>
</tr>
<tr>
<td>wlrwir</td>
<td>flutter</td>
</tr>
<tr>
<td>wi·ri</td>
<td>finish, use up, spend</td>
</tr>
<tr>
<td>wiri</td>
<td>dried out muscles</td>
</tr>
<tr>
<td>?čknwi·ra</td>
<td>cook n.</td>
</tr>
<tr>
<td>sqmwí·ra</td>
<td>ankle</td>
</tr>
<tr>
<td>qmwí·rma</td>
<td>old woman</td>
</tr>
<tr>
<td>ča?wíri</td>
<td>insist</td>
</tr>
<tr>
<td>wi·yi</td>
<td>own, have</td>
</tr>
<tr>
<td>wi:yi</td>
<td></td>
</tr>
<tr>
<td>wi/wíy-/wi·</td>
<td></td>
</tr>
<tr>
<td>nà?wí·(yi)</td>
<td>mine</td>
</tr>
<tr>
<td>pà·hmí ?wí</td>
<td>I have a husband</td>
</tr>
<tr>
<td>pà·wíya</td>
<td>lesser chief</td>
</tr>
<tr>
<td>kwí:ya</td>
<td>owner</td>
</tr>
<tr>
<td>?wé·</td>
<td>mouse</td>
</tr>
<tr>
<td>wé</td>
<td>vagina</td>
</tr>
<tr>
<td>wèhipük</td>
<td>collarbone area</td>
</tr>
<tr>
<td>wèhpū</td>
<td>buttocks</td>
</tr>
<tr>
<td>wè</td>
<td>take care of</td>
</tr>
<tr>
<td>βwè</td>
<td>on guard</td>
</tr>
<tr>
<td>ñwè</td>
<td>care for</td>
</tr>
<tr>
<td>mwé</td>
<td>warm</td>
</tr>
<tr>
<td>màtknwè·</td>
<td>spider (W.G.)</td>
</tr>
<tr>
<td>qʌβpi βmâ:kwè·?i</td>
<td>smells bad</td>
</tr>
<tr>
<td>Pinyin</td>
<td>Meaning</td>
</tr>
<tr>
<td>--------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>?wâ</td>
<td>house</td>
</tr>
<tr>
<td>nwá</td>
<td>abode</td>
</tr>
<tr>
<td>wā</td>
<td>sit</td>
</tr>
<tr>
<td>?i\w'âyi</td>
<td>wooden chair</td>
</tr>
<tr>
<td>i\wâya</td>
<td>heart, chest</td>
</tr>
<tr>
<td>??i\swâ</td>
<td>barrel</td>
</tr>
<tr>
<td>swâ, swâ</td>
<td>basket, pot</td>
</tr>
<tr>
<td>?mâ ?yô</td>
<td>many sitting</td>
</tr>
<tr>
<td>kwâ\h'm</td>
<td>season, time</td>
</tr>
<tr>
<td>hà\ćwâ</td>
<td>sand</td>
</tr>
<tr>
<td>čwâ(')yâi</td>
<td>swing</td>
</tr>
<tr>
<td>čwâyî</td>
<td></td>
</tr>
<tr>
<td>nwâ\h'a</td>
<td>friend</td>
</tr>
<tr>
<td>nà?wâ\nč ?wî\čâi</td>
<td>my enemy (G.N.)</td>
</tr>
<tr>
<td>myâla swá</td>
<td>dough: not ready</td>
</tr>
<tr>
<td>kwâ</td>
<td>cicada</td>
</tr>
<tr>
<td>hû\wâ</td>
<td>cricket-like insect</td>
</tr>
<tr>
<td>?wá</td>
<td>okay</td>
</tr>
<tr>
<td>wà\âmči</td>
<td>visit</td>
</tr>
<tr>
<td>wàkâ\bâri</td>
<td>love, like</td>
</tr>
<tr>
<td>wàsêqma</td>
<td>swayback</td>
</tr>
<tr>
<td>wàsêqma</td>
<td>whipper (Prn m.)</td>
</tr>
<tr>
<td>wà... si\bi</td>
<td>think cf. count, read</td>
</tr>
<tr>
<td>wàsi\bi</td>
<td></td>
</tr>
<tr>
<td>wàsî\bi</td>
<td>wild, untamed</td>
</tr>
<tr>
<td>wà\sî\bâ ?ûmi</td>
<td>crazy</td>
</tr>
<tr>
<td>wà\sî\pê\mi</td>
<td>drunk</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Chinese Characters</th>
<th>English Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>wà...haβi</td>
<td>stingy</td>
</tr>
<tr>
<td>ĉwàhãβa</td>
<td>scold</td>
</tr>
<tr>
<td>wà...mî•</td>
<td>mourn, cf. cry</td>
</tr>
<tr>
<td>(?)wàmîyi</td>
<td>mourn by fasting</td>
</tr>
<tr>
<td>wàmiyêk ?cwàh ?UMi</td>
<td>forget</td>
</tr>
<tr>
<td>wà... nå(‘)</td>
<td>plant species</td>
</tr>
<tr>
<td>?wà•lāpa</td>
<td>noisy</td>
</tr>
<tr>
<td>wàyô•βi</td>
<td>many sitting</td>
</tr>
<tr>
<td>?wà?yô</td>
<td>neighbor</td>
</tr>
<tr>
<td>tyê•pk wàyôyi</td>
<td>-wa</td>
</tr>
<tr>
<td>kwê•kâpyûca kâβmîwa</td>
<td>whatever you say</td>
</tr>
<tr>
<td>wâka, wâ•ka</td>
<td>elder sibling</td>
</tr>
<tr>
<td>nå?cwâ•kβa pà•m?ē•βi</td>
<td>ask my brothers!</td>
</tr>
<tr>
<td>hwâki</td>
<td>two</td>
</tr>
<tr>
<td>ĉwâ•qi</td>
<td>scatter</td>
</tr>
<tr>
<td>mwe•mm pêlwâ•wki</td>
<td>comes out in the spring</td>
</tr>
<tr>
<td>hòwâ•βi</td>
<td>stay, inhabit</td>
</tr>
<tr>
<td>βwâ•βi</td>
<td>ten</td>
</tr>
<tr>
<td>cmwâ•eα</td>
<td>spleen</td>
</tr>
<tr>
<td>nwâ(•)ha</td>
<td>friend</td>
</tr>
<tr>
<td>wâ•mi</td>
<td>bring, deliver</td>
</tr>
<tr>
<td>?hâ pà•wâmma ?pâ•ča</td>
<td>Paipai</td>
</tr>
<tr>
<td>tú• čâ•βm ?wâ•ma ?nûkm</td>
<td>I’ll skip over parts of it.</td>
</tr>
<tr>
<td>yâ•βa twâmi</td>
<td>cover mouth, smother</td>
</tr>
<tr>
<td>yâ•βa twâmi</td>
<td>carry on head</td>
</tr>
<tr>
<td>swâni</td>
<td>stir</td>
</tr>
</tbody>
</table>

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wāna
wā'na
k̕wā'ni
k̕wála
-kyk̕wāl... yī'/k̕wāl... yī
k̕w̄ę̀k̕w̄ał yī·km
βwāli
ni·stkwālka
swālī
náć?swālkm
hwā'ł
wā'li
hw̄ā'li
ḥimwā'la
βwāri
kwā'w?wāri
wārī
mβ̄ökkmwārka
mwāra
hālwāri
yā·swārbi
swārī
k̕swārbi
mattwāya
nikwāykm̄hw̄āti
ṅwḗβi
ṅw̄ā'yī

mother's older brother
(plural)
limp (because of short leg)
feather, wing
one wants to eat
carry (a bucket)
scorpion: 'out of shape'
always; hold on; love
I love/like
pine
look for, look up
calf of leg
cannot
stutter (cannot speak)
again
come back!
flour
smooth
pleasant, be suspended
sing
perforate (ears)
distant land
it's rusty
live, dwell
wàypé•m₃i

wàypé•m₃km

wàya?lå•yi

wàyö•km

čwò•

čyö•, čó•

q'àqta pmà•ya čwòβa

βqwö•?i

βqβö(•)?i

wòwö?i

wòqwöq?i

tú• wòqwö•q?ikm

wìwò

?ìwò

lùlùl?îča ??î•wok

βčİqwusmî

yà•lwúra

yà•ίβúra

myál twpú•bi

wráβi

wyáti

beautiful, wonderful

one is angry

they are living there

set, put down

cheese

growl

barks

growls

growl

show

teach by saying

I play the fife

gulp

donkey < burro

preserve bread

lightning sound

hurt, harm v.
?wi· rock; mountain

?wi·páya ?wi·ri
wi·pükka
wi·pükkahk
(?)wi·pük?pā:(ča)
?wi·pük?pā·kwawča
wi·tāya
wi·tāyakwāha ?č?āli
wi·ktōrpa
wi·kčāsa
wi·čālcā·1?e
wi·čālcā·lle
wi·čpū·čó
wi·čpū·čókwĩ·yi
wi·čkō·li
wi·kčsāwa
wi·čwō
wi·kāča
wi·ktkūpa

?wi·k?ī·la
wi·kã?ī·la
?wi·kã?ī·lāha
wi·kcōrpa
wi·kγn̓yá̱na
wi·kγn̓yá̱na

I used up all my money
foot of the mountain
foot of mountain
Northeastern Yavapai people
Northeastern Yavapai language
mountain
I climb the mountain
summit
Four Peaks: smooth cliffs
ridge, boulder
bank (financial)
banker
many rocks
Superstition Mountain
brick
rock for building
gully: sides almost come together

mountain
Grand Canyon
canyon
ridge
mesa
Thumb Butte; butte

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?wi· (continued)

\[\text{wl·kwäga}\]
\[\text{?wi:kwäga ksik?ita}\] Prescott: brown rock (granite) pointing into water
\[\text{wl·k?Ir?ira}\] butte
\[\text{wl·kämä}\] ridge of rocks
\[\text{wl·kä·mä}\] mountain range
\[\text{wl·qsä}\] agate (white stone found in area)
\[\text{wl·kβ?ü·la}\] Bill Williams Mountain
\[\text{wl·tä·wa}\] pebble
\[\text{wl·thväya}\] light rock
\[\text{wl·skči·bi}\] precipice
\[\text{wl·haśsū(w)ā}\] diabase
\[\text{wl·hohā·hm}\] side of mountain
\[\text{wl·khlē·ba}\] cliff
\[\text{wl·khyărba}\] cantiles
\[\text{wl·mūn kwå}\] San Francisco Peaks
\[\text{?wi·nakčakāba}\] Black Canyon
\[\text{wl·nmsäba}\] silver

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abode
animal's abode
be about to (modal auxiliary)
about to fall
above
become accustomed
acorn
acorn meal
acorn soup
gather acorns
lots of acorns (Pln)
there are plenty of acorns
across
add
admire a lover (woman speaking)
they are afraid, cf. fear
after
afternoon
two to four in the afternoon
again
agate (white stone found in area)
agitate
be alive
I became alive; I was born
all
all: no more
that's all, finished
that's all for now
all the time
almost
almost (SEY)
alongside of
always
ambitious, cf. man; tall
ambush, cf. čpá·
ancient
ancient people + Hohokam
"and, but"
'and where... ' (enclitic)
Anglo
Anglo: beaver eater(s) W.G.
angry
animal
"domesticated" animal: hát
animal's abode: ?chapay.nwá
ankle: squmwi(ra)
antelope: m?úl
anus: klmá:(ča)
Apache: pà·č?hwá
is apparent: spóži
It is apparent that the man is ill: ?pa·čč črāžk spóžkm
arc-shaped bow: tžčů·ni; mpd(·)nži
tžčů·na
arc-shaped + pond, bow (stagnant): hpž
wide area: mátk čká:ma, mátk čká·mi
arm: sål
my arm falls asleep: ?sála čľ·li
armpit: slpd
arrive: źá· (sg.), nžá· (pl.)
arrow: ?pá, (? pákůirža
artery: hwat.kůra
ashes: (? můh(·)l
ask: č(k)wž
ask for: kžá·ži, kžá·ži
automobile: kwè·čpyámi
autumn: màtp̃ám?i, mát mú·n?ˈime;
   màtyʊ·si (W.G.), màtyʊ·si (G.M.)
ax
awl → mosquito
čkváti; shkvá·ti
päka, ?päk
<table>
<thead>
<tr>
<th>English</th>
<th>Chinese</th>
</tr>
</thead>
<tbody>
<tr>
<td>baby</td>
<td>hmá̃n (sg.), hmāːna (pl.)</td>
</tr>
<tr>
<td>back</td>
<td>hitát (G.M.), hiʾthát (W.G.)</td>
</tr>
<tr>
<td>back</td>
<td>máka</td>
</tr>
<tr>
<td>move back or down, cf.</td>
<td>kwé́</td>
</tr>
<tr>
<td>south</td>
<td>máka</td>
</tr>
<tr>
<td>backward</td>
<td>qālād(·) (sg.), qālād(·)yi (pl.)</td>
</tr>
<tr>
<td>bad + dislike</td>
<td>pāʾhānah ?ūmi</td>
</tr>
<tr>
<td>bad person</td>
<td>mhraw· (W.G.), mhrawː (G.M.)</td>
</tr>
<tr>
<td>badger</td>
<td>?hmál</td>
</tr>
<tr>
<td>bag, sack</td>
<td>thmū</td>
</tr>
<tr>
<td>bake (bread)</td>
<td>(m)lōhi</td>
</tr>
<tr>
<td>bake (a cake)</td>
<td>pāqi</td>
</tr>
<tr>
<td>bake in ashes</td>
<td>kmyā·la</td>
</tr>
<tr>
<td>baker</td>
<td>qwāri hitāsa</td>
</tr>
<tr>
<td>bald (person)</td>
<td>māt.kqwā·rm?e</td>
</tr>
<tr>
<td>bald (land, mountain)</td>
<td>kōmūi; t?ōra</td>
</tr>
<tr>
<td>ball</td>
<td>k?ōra</td>
</tr>
<tr>
<td>ball + tomato</td>
<td>smpū·rūi</td>
</tr>
<tr>
<td>band for cradle</td>
<td>tū·ti</td>
</tr>
<tr>
<td>bank</td>
<td>māt?ī·la</td>
</tr>
<tr>
<td>bank (river)</td>
<td>wī·qpū·čō·</td>
</tr>
<tr>
<td>bank (financial)</td>
<td>wī·qpū·čō.kwī·yi</td>
</tr>
<tr>
<td>banker</td>
<td>?khwā·βm ?l·βkōβa</td>
</tr>
<tr>
<td>English</td>
<td>Wamfree Language</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>barber</td>
<td>qwáwa pà·kčí·r(i) čʔőči,</td>
</tr>
<tr>
<td></td>
<td>qwáwa pà·kčí·r(i) kʔőči,</td>
</tr>
<tr>
<td></td>
<td>qwáwa pà·kčí·r(i) kyūči,</td>
</tr>
<tr>
<td></td>
<td>qwáwa pà·kčí·r(i) kyőči</td>
</tr>
<tr>
<td>bark (on a tree)</td>
<td>ʔpíla, ʔmíya</td>
</tr>
<tr>
<td>bark v.</td>
<td>ʔoʔhoʔli; wōwōʔi</td>
</tr>
<tr>
<td>barrel</td>
<td>??l·swá</td>
</tr>
<tr>
<td>barrel cactus</td>
<td>(?l)mltát</td>
</tr>
<tr>
<td>base of skull</td>
<td>čkvá(·)sa</td>
</tr>
<tr>
<td>basket</td>
<td>kʔú·; swá</td>
</tr>
<tr>
<td>basket (burden)</td>
<td>qθāq</td>
</tr>
<tr>
<td>oblong basket</td>
<td>kʔù·yûkyûka</td>
</tr>
<tr>
<td>bat (animal)</td>
<td>qà(·)pάŋqa (G.M.), qάmpάŋqa (W.G.)</td>
</tr>
<tr>
<td>bathe</td>
<td>?hà...ʔpú(·)yi</td>
</tr>
<tr>
<td>battle</td>
<td>čàʔhwaʔyi</td>
</tr>
<tr>
<td>be₁</td>
<td>yū</td>
</tr>
<tr>
<td>be₂</td>
<td>yō(ː) (sg.), yā:wi (pl.), yā:wi</td>
</tr>
<tr>
<td>beads</td>
<td>?wl·klʔulka; skʔú:la hńákča</td>
</tr>
<tr>
<td>beak</td>
<td>qʷieqʷiθ, qʷirqʷir, hů·qʷirqʷira</td>
</tr>
<tr>
<td>be always</td>
<td>tů· yůči</td>
</tr>
<tr>
<td>bean</td>
<td>mři·ka</td>
</tr>
<tr>
<td>mesquite beans</td>
<td>ʔyá·</td>
</tr>
<tr>
<td>English</td>
<td>Scientific Name</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>bear, cf. gila monster,</td>
<td>mhwa(·)ta</td>
</tr>
<tr>
<td>cow, squirrel, mountain lion</td>
<td></td>
</tr>
<tr>
<td>bear fruit, be born</td>
<td>pé</td>
</tr>
<tr>
<td>beard</td>
<td>yâ(·)mâî</td>
</tr>
<tr>
<td>beat, strike</td>
<td>?ë?péqi</td>
</tr>
<tr>
<td>beat (heart)</td>
<td>kôpko'p</td>
</tr>
<tr>
<td>beautiful</td>
<td>way pé(·)mbi; waykâ·yâî</td>
</tr>
<tr>
<td>beaver</td>
<td>h.ña(·)qa</td>
</tr>
<tr>
<td>bed</td>
<td>yâkyi, yâkl, yâ·ki, ?ì·yâki</td>
</tr>
<tr>
<td>bedbug</td>
<td>yâki nh?ël</td>
</tr>
<tr>
<td>bee</td>
<td>òmpô</td>
</tr>
<tr>
<td>beer</td>
<td>?hâ?mâla</td>
</tr>
<tr>
<td>beginning to get dark</td>
<td>ßhipâ:ßim, ßhipâ?im</td>
</tr>
<tr>
<td>always be good to people</td>
<td>tû· mñydëk pà·mnhmërêbi</td>
</tr>
<tr>
<td>belly</td>
<td>ðnûna (W.G.), mnû(·)na (G.M.)</td>
</tr>
<tr>
<td>beyond one thousand</td>
<td>tû· lâwa lâwk</td>
</tr>
<tr>
<td>Bible: flat, black book</td>
<td>tñû·rûq ðnâ:klûpa</td>
</tr>
<tr>
<td>big</td>
<td>ßté, ßtê·yi, ßtâya, kptê', kotê (SEY)</td>
</tr>
<tr>
<td>Big Dipper: moon coat (?)</td>
<td>hlâ.hnë·ya</td>
</tr>
<tr>
<td>big, flat top</td>
<td>yâlyâl, yâl?yâl</td>
</tr>
<tr>
<td>bile</td>
<td>ßsû</td>
</tr>
<tr>
<td>bill (of bird)</td>
<td>qw1eqwîθ, qwirqwir</td>
</tr>
<tr>
<td>Bill Williams Mountain</td>
<td>wî·kptû·la</td>
</tr>
<tr>
<td>bind (a baby)</td>
<td>kwäri</td>
</tr>
<tr>
<td>binoculars</td>
<td>?çïûyi</td>
</tr>
<tr>
<td>Word</td>
<td>Pronunciation</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>bird</td>
<td>?čsá, ?čsá lá·wi (pl.)</td>
</tr>
<tr>
<td>bird that goes &quot;ku:&quot;</td>
<td>kkū· (W.G.), kkū: (G.M.)</td>
</tr>
<tr>
<td>biscuit</td>
<td>myâlq?ōra</td>
</tr>
<tr>
<td>bite</td>
<td>čkvō, čkvō</td>
</tr>
<tr>
<td>bits (in money)</td>
<td>mf</td>
</tr>
<tr>
<td>bitter</td>
<td>?ēli, ?ēli; ?hā·, ?hā:ki</td>
</tr>
<tr>
<td>black</td>
<td>?nā· (G.M.), ?nā· (W.G.), ?nā·a</td>
</tr>
<tr>
<td>black ant (small, brown)</td>
<td>čnâhpūka</td>
</tr>
<tr>
<td>Black Canyon₁</td>
<td>?wi·nâkčakāβa</td>
</tr>
<tr>
<td>Black Canyon₂: cottonwood</td>
<td>?hā·ktkwī·βa</td>
</tr>
<tr>
<td>lined along the banks</td>
<td></td>
</tr>
<tr>
<td>blacksmith: bang v.</td>
<td>?khwâ·ktû·ta</td>
</tr>
<tr>
<td>bladder</td>
<td>tâ·βkyāma</td>
</tr>
<tr>
<td>blade</td>
<td>yō·βi</td>
</tr>
<tr>
<td>blanket</td>
<td>čpē·βi; yâryâra</td>
</tr>
<tr>
<td>blind</td>
<td>yu·?û·βa ?ûmi</td>
</tr>
<tr>
<td>blink</td>
<td>βmâčmâč?i</td>
</tr>
<tr>
<td>blister</td>
<td>βlpa·t?i</td>
</tr>
<tr>
<td>block</td>
<td>kβkō</td>
</tr>
<tr>
<td>blood</td>
<td>(?hâwâta</td>
</tr>
<tr>
<td>blood sucker</td>
<td>pâ·čgeh∂a</td>
</tr>
<tr>
<td>blossom</td>
<td>táβsa, táwsa (SEY), kwè·táβsa</td>
</tr>
<tr>
<td>blow with mouth</td>
<td>hâgčú·li</td>
</tr>
<tr>
<td>blue</td>
<td>hâgsû·(w)i</td>
</tr>
<tr>
<td>blue jay</td>
<td>čāsĉā·sa</td>
</tr>
<tr>
<td>boat</td>
<td>khló, see klhō</td>
</tr>
<tr>
<td>English Word</td>
<td>Chinese Pinyin</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------</td>
</tr>
<tr>
<td>body</td>
<td>mā:t</td>
</tr>
<tr>
<td>body is feverish</td>
<td>mā:tō khbō*yi</td>
</tr>
<tr>
<td>boil + sweat house</td>
<td>tō*li</td>
</tr>
<tr>
<td>boil v.i.</td>
<td>?ù*ti</td>
</tr>
<tr>
<td>bone</td>
<td>čyā*ka</td>
</tr>
<tr>
<td>be born₁</td>
<td>pē*, yà...pē*, yà...páyì, yà...pēčì; nàli</td>
</tr>
<tr>
<td>be born₂</td>
<td>tāwbi</td>
</tr>
<tr>
<td>borrow</td>
<td>tōmá*bi</td>
</tr>
<tr>
<td>bottom</td>
<td>pūk</td>
</tr>
<tr>
<td>bottom of mountain</td>
<td>màtpūkmāk</td>
</tr>
<tr>
<td>boulder</td>
<td>wī·cālčà·lē, wī·cālčà·lle</td>
</tr>
<tr>
<td>bow</td>
<td>hpuτβčū*na; hpučnâ(·)kβa</td>
</tr>
<tr>
<td>boy</td>
<td>hmaŋhmī, hmaŋhmē, hmā*ra (pl. W.G.), hmâ:ra (pl. G.M.)</td>
</tr>
<tr>
<td>bracelet</td>
<td>tōpři·tiri</td>
</tr>
<tr>
<td>braid</td>
<td>snāβa n. snāβi v.</td>
</tr>
<tr>
<td>brain (brains)</td>
<td>qmpāya</td>
</tr>
<tr>
<td>branch: comes away from tree</td>
<td>ʔl:tβk*vāla</td>
</tr>
<tr>
<td>bread</td>
<td>myāl, myāla, myēla</td>
</tr>
<tr>
<td>the bread is on the table</td>
<td>??l·shyārβa myāla čā*nk wākm</td>
</tr>
<tr>
<td>give us bread today</td>
<td>nā<em>βm myāla pā</em>m?ē</td>
</tr>
<tr>
<td>preserve bread for future use</td>
<td>myāl twpū*βi</td>
</tr>
<tr>
<td>bake bread</td>
<td>myâ*la thmū</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>English</th>
<th>Yiddish</th>
</tr>
</thead>
<tbody>
<tr>
<td>break v.t.</td>
<td>kváti; ɐkvaɣjbi; ṭmqváni</td>
</tr>
<tr>
<td>break v.i.</td>
<td>bgawβi, tů- bgawβi</td>
</tr>
<tr>
<td>break v.t.</td>
<td>tąpá</td>
</tr>
<tr>
<td>break of dawn</td>
<td>mātč βʔu-βkm</td>
</tr>
<tr>
<td>break in (horse)</td>
<td>i(•)há-ni</td>
</tr>
<tr>
<td>break in two</td>
<td>qâwi</td>
</tr>
<tr>
<td>breast</td>
<td>nmâya</td>
</tr>
<tr>
<td>man's breast</td>
<td>pâ-hmı̇nmâya</td>
</tr>
<tr>
<td>breastbone</td>
<td>skvâta</td>
</tr>
</tbody>
</table>
| breathe          | βθë- •, βθëhi, θɛhâθë- ,  
                      | βθë-h(θë-h)i |
| I breathe        | βθë- (?)?i |
| brick            | wî-çwó |
| brick + cheese   | çwó |
| brickshaped + cheese | čhuvōβa, čwôbo |
| bridge           | ?nà-shkâ-βa |
| bridle           | ɣâskâβi |
| brim             | hrēβa |
| bring            | kmî-• wâ-mi |
| bring (incomplete) | ?öyi |
| bristle          | βhuvō-βi |
| brittlebrush     | ?mâtâq |
| broil            | sîli |
| broiler          | myâlsîlô |
| broken           | qâwi, βqwa-ąqβi |
| broken-off pine (Pln) | hwâ:1kčásça |
| broken (pottery) | ɐkvaɣjbi |
(elder) brother
ask my brothers!
father's older brother
father's or mother's younger brother
brown
brush (plant)
brush v.
bubble + fife, flute
bubbles
bubbling water (Pln):
creek near Miller Valley
bucket
buckhorn
buckskin
buffalo
bug
bull
bull snake
bulrushes
bunch of bushes
burden basket
burial ground
burn v.i.
burning pain
be burnt

hwâk'ba
nâ?çwâ:k'ba pà:mëžë:bi
nwî.
wîta (sg.), wî:ta (pl.)
(?)(wâ?si
?mpâča
sëî
lûllûlî
tâpûni
?hâkyâ:ča
khâ.(h)mât
?tàth'sû:la
kwâlî
qwâktâ hû:kâtë·
kkâ·ba
qwâktâhmâa, qwâktâhmâba
hâtâmâ:la
hâms?îp
?wIlâ kàrìyâra
kəaq, qəaq
pâ'tmârçô
qwâti
pîlî

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<table>
<thead>
<tr>
<th>English</th>
<th>Yugh</th>
</tr>
</thead>
<tbody>
<tr>
<td>burnt up</td>
<td>píli</td>
</tr>
<tr>
<td>burp</td>
<td>čālhi</td>
</tr>
<tr>
<td>bury</td>
<td>tmári</td>
</tr>
<tr>
<td>bunch of bushes</td>
<td>?wilā</td>
</tr>
<tr>
<td>bush</td>
<td>?wilā</td>
</tr>
<tr>
<td>plant species (a bush)</td>
<td>?l'kwāla</td>
</tr>
<tr>
<td>busted</td>
<td>βqw'agβi</td>
</tr>
<tr>
<td>busted up</td>
<td>qw'agβq'agβi</td>
</tr>
<tr>
<td>butte</td>
<td>wi:kyānyāna; wi:k'ir?ira</td>
</tr>
<tr>
<td>Thumb Butte</td>
<td>wi:kyānyāna</td>
</tr>
<tr>
<td>butter</td>
<td>qwaktânmâya</td>
</tr>
<tr>
<td>butterfly</td>
<td>hànkra'pa (G.M.), hànkpâ'ra (W.G.)</td>
</tr>
<tr>
<td>buttocks₁</td>
<td>wēhpü</td>
</tr>
<tr>
<td>buttocks₂</td>
<td>klmá:, klmá:(ča)</td>
</tr>
<tr>
<td>button</td>
<td>yàskāβi; yūri skhâβi, yūri sækhâβi; yūri s?âmni &lt; s?âmβi</td>
</tr>
<tr>
<td>buzzard</td>
<td>sé'</td>
</tr>
</tbody>
</table>
cake  myâla  myâla

calf  ?qûâktâ  ġâwwa,  ?qûâktâ  ōâwa

calf (of leg)  himwâ·la

California yellow poppy  hàntû·ra,  hàŋtû·ra

(Prn)
camel: humpback  hitat  hàm?öla

Bactrian  hitbâtk  kmpû·laβa

dromedary  hitbât  hàm?öla

candy cane  myûla  kwâlskwïskwi

cane  sotât

canned food  kwè·mâβa,  ?khwâ·βl  yâ·wa

cannot  βwâri,  βwârpi

(cannot speak) stutter  kwâ·w  ?wâri

cannot find  smè·,  smâ·

canoe  khló,  see  klhô

cantaloupe  ?çkmtû  tû·  qwââa  kâča

cantiles (large boulders near Santa Catarina)  wî·khyârša

canvas  kskê(·)ša

canyon  čhkâši;  kâ·š,  ?wî·kâšI·ľhâ

Black Canyon  ?wî·hâkčâkša

Grand Canyon  wî·kâšI·ša

capsize  tmiâmši

care for  ŋwê

corral  ?l·køkšša

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carry
carry (a bucket)
carry heavy object in
   cf. nō 'heavy'
carry in hand
   I carry in my hand
carry many objects
carry on back
carry on head
carry something heavy
   (olla with water)
on back
casaba
cast a spell
castrate
cat
catch
catch oneself from falling
   by jerking
catclaw acacia
fat on cattle
cause to die or be sick
cave
caved in (hole)
caved in (mining shaft)
cedar
center  
tū·bi, stūyī

centipede  
(?)

metal chair  
?kʰwàwàyī

rocking chair: back and forth  
?l·wāɣy kā·rrkā·rrʔičá

wooden chair  
?l·wāɣi

change v.  
tbʰkē·

cheap  
čwāɾbi

checkers  
?kwè·thīʔiči

cheekbone  
qnwī·

cheeks  
i(·)sūl

cheese  
čwō, čhwōba, čwōba

chest  
(i·wāy) sqāta, skvāta;
   i·wāy ktīltīlʔi; i·wā(·)ya

chew  
čmāyī

chew + scissors  
čbʰná·yī (W.G.), čmāyī (G.M.)

chew (cud)  
čbʰpālīʔ

chew tobacco  
?ū·β čahmā·

chewing gum  
kwè·čmāya

chicken, < gallina  
qoloyáwa

chickenpox  
mlūæa

chief, SEY  
mâtsâba, mâteâba

chief (loanword) < Spanish  
mayō:ra (G.M.), mayō:ra (W.G.),
   mayor  
mâʔyō:ra (SEY) (folk etymology)

lesser chief  
pà·wīya
child

Chinese: speaking in water
chipmunk
choke on food
chop with ax
Christmas

church
cicada
cigar
clan
claw
lay
clay jug
clay pot
clean
clean + spotless
clean out
clear
clear (water)
clearing
cliff
Four Peaks: smooth cliffs
climb₁
climb₂

θáwa (sg.), θá:wa (pl.), šáwa (sg.), šá:wa (pl.); hmáŋ (not weaned), hmā:ŋa
hákwáwa
hmíra, hmí:ra
mčáqi
sākvāti, sāhkvāti
myūla kwálsa kwíškwi māiči kwá·hm; kwè·ʔé·či kwá·hm
ʔwátáββò
kwá·
ʔū:βa čmmyālβa
pāčː:ča
slhβò· (G.M.), slh'wó· (W.G.)
máτ
máteǐwa
hmáτ
θámi
tokwí·li
(ʔ)?i·nū·, ??i·ná·
θámi, sólśoli; súlsúli
qryē:
(čá·) (? )qwári
wi·khli·βa, hréβa; máτʔi·la
wi·kčása
čkpá·
čʔáli
clock: sun ticking
close
close (a door)
closed
cloth
cloud
clothing
clothes
wear clothes
clover
clover-like plant
club
coal
(cock's) comb
coiled
cold
it's cold today
collapsed
collarbone area
Colorado River
comb
come
he comes from New York (W.G.)
I was coming from far away

nà:btâ:btâ?ǐča
tâ:mi; yâskāpi
sâ:mi
tâ:mâa
thūma
(?):kwi, ki+ (in compounds)
(?):kwi:yi
wf(')bi
wf'bi
kpî:la
spîla
pâ:'â:bi
?oči
ksèlsèli
kwîrâ
mûni
nâ:gm mûni
âtōtâhk
wêhipûk

?hâkwâta
sčI
yûwi
New York pâ:yûwa
nēâl kûr kyûwâha
He came from New York
(W.G.)
it was coming way back
come and show
come away from + branch,
forked
come back
come back!
come down
come out
come out, sprout
come out
come out in the spring
come out in the spring
comfortable
command
complete
constitutional n.
container
continue
continues to pant
cook n.
cook v.
cool
copulate
coral-colored snake,
coralillo

New York pà'yuwk yūđk yüm
n̪ə̀l kū́i kyūwə́ha
mydwk mwi:wō
t̪b̪kvlá, ʔl̪tkvlála
póki
m̪b̪ōk̪k m̪w̪ark̪ā
n̪āl̪ki
cʔáli
páqi, tpáqi
β̪l̪w̪á'qki
mwē:mm β̪l̪w̪ā'qki
mwē:mm β̪l̪w̪ā'wki
yú'si, yúsyūs
čkná'
ttkwí(·)l̪bi
hŋō:ma
hmāt
kōyūči
β̪h̪h̪āʔl
?čkn̪w̪i:ra
nw̪r̪i (sg.), nw̪Ir̪či (pl.)
yú'si, yúsyūs
n̪i:ni, n̪i:n̪i, čni:bi
hā(n)p̪ūk
corn
corn just becoming ripe
corner
corner (outside)
corpse
female corpse
correct
cotton
cottontail
cottonwood
cottonwood about to fall,
hanging there (Pln)
cottonwood spring
cough
count
I'm counting them
countless
country
cousin (man speaking)
first cousins: children
of two sisters
cover
cover mouth
cover with dirt
tyâ·č
tyâ·č sīwa, tyâ·č sūwa
ksīksīʔīta; ṭwâsqwîr(β)q̃wîr̃βa
kâq̃wârhe kskʔīta
pà·pî
pâ·plömi·ya
βlwi
čok̃wâm̃βa
hlô
ʔhâ(·)
ʔhâ·ksʔōñβa
ʔhâ·pâ:čô
ʔōhi; βkèhkéhi
sî, sîbi, sî·βi, sî:βi
pâ:sî:βi
tu· nōma ṭnōma
mâtk čkâ·mi, mâtk čkâ:ma
čkâ·βi, čsmāỹβa
mâ·ya
čpê(·), čpûki, tʔâmi, tmâri,
twâmi
yâ:βa twâmi
tmâri
<table>
<thead>
<tr>
<th>English Word</th>
<th>Tlingit Word</th>
</tr>
</thead>
<tbody>
<tr>
<td>cover with dirt while planting</td>
<td>spūki</td>
</tr>
<tr>
<td>cow</td>
<td>q'äktə, qwaqta</td>
</tr>
<tr>
<td>cowhide</td>
<td>qwaqta ṁmī'ya</td>
</tr>
<tr>
<td>cow's milk</td>
<td>q'āktən̓māya</td>
</tr>
<tr>
<td>barbecue a cow</td>
<td>q'āktə pāsi</td>
</tr>
<tr>
<td>coyote</td>
<td>kə̣rʔhāna</td>
</tr>
<tr>
<td>crack (egg)</td>
<td>βə̣kə̣vá'yə̣i</td>
</tr>
<tr>
<td>cracking sound</td>
<td>kqwaθa</td>
</tr>
<tr>
<td>crack like a watermelon</td>
<td>(β)qåqβ?i</td>
</tr>
<tr>
<td>cradle</td>
<td>hmə̣nqwárʔi</td>
</tr>
<tr>
<td>cramps, cf. tie up</td>
<td>βə̣pâlβ?i</td>
</tr>
<tr>
<td>crane</td>
<td>nqwa</td>
</tr>
<tr>
<td>cranky</td>
<td>pà·ʔlw̓aʔi</td>
</tr>
<tr>
<td>crawl</td>
<td>čə̣(h)tá·ti</td>
</tr>
<tr>
<td>crazy</td>
<td>wə̣síβaʔúmi</td>
</tr>
<tr>
<td>cream of wheat</td>
<td>mw̓ə̣ra smkw̓ínβa</td>
</tr>
<tr>
<td>creek</td>
<td>čkmf·; hâqéʔi khé·la</td>
</tr>
<tr>
<td>Pln: creek near Iron-springs</td>
<td>hâqwaθa khé·la</td>
</tr>
<tr>
<td>they cremate</td>
<td>pà·(pl)tu·yči</td>
</tr>
<tr>
<td>cricket</td>
<td>tlr(k)tlrka</td>
</tr>
<tr>
<td>cricket-like insect</td>
<td>hū·w̓a</td>
</tr>
<tr>
<td>croak</td>
<td>βqla·ʔlk</td>
</tr>
<tr>
<td>crook of a cane</td>
<td>tkru</td>
</tr>
<tr>
<td>cross</td>
<td>shkvēʔa, khké·βa; sβ̓h̓vēʔa</td>
</tr>
<tr>
<td></td>
<td>msβ̓h̓vē·ʔb̓o</td>
</tr>
</tbody>
</table>
crow

crowded

crowded with people

crown of head + cock's comb

crucifix

crust

cry

cry for somebody

I'm going to cry

rock music: make instrument cry

cultivate

cup v.
cup (ears)
cup (hand)
cup the hand

current

curved

cut

cut skin out

qsâq
túrī
pā·tūrī
k?ōya, k?ōwyə
??i·ksīβa hwē·bə
myāla pîla
mî: (sg.), mî·či (pl.)
hāməîl yūwo tliwlîwi
?kʰwəmîwo
(māt)nū·
t?āmî
cēbko, kəbko
t?āmî
sâlt?āmi, sâls?āmi
?haeqí·rəi khē·lə
ktəükə
stî:tî; kvti
(m)ïkhî, i·khî, ñikîhî
dam

damp

dam up

dance

dancers

dangerous

begins to get dark

get dark

getting dark

dart across

Date Creek Tolkapayas:

cottonwood sticking

in the water

daughter

daughter (man speaking)

my daughter-in-law

mother's brother's daughter

(man speaking)

daughter's child

dawn

break of dawn

day: sun sits

day (24 hrs.)

day before yesterday

dead, cf. hug; die

?=hat?ámpa

muéé, muéá, muéáyi

t?ámi

i(•)má

khimáča

msé:bi

βhipá?ím

βhipă(:)l?im

tqípi, tqepi

βʔʔ̬ʔ̬ʔ̬̬̬̬̬g...l

ʔhā: hà·ʔk ksčůlʔa ?pá·ča

hčáŋ

βčá·ya, βčé(•)

ŋa?ŋé

nd·t(a)

(?)kʰó·• (sg.), (?)kʰó·ča (pl.)

ŋmθáβʔíkè, řmθáβki

máʔč βʔʔ̬·ʔkm

ŋā:wá

smá·


p̂̃l, p̂̃·yi
<table>
<thead>
<tr>
<th>English</th>
<th>Smålkėtū</th>
</tr>
</thead>
<tbody>
<tr>
<td>deaf</td>
<td>βhló·hló·h...1, βhló·hałó·hi, βhló·hałó·hi</td>
</tr>
<tr>
<td>death rattle</td>
<td>??ō:li; ??ē (sg.), ??āy (pl.)</td>
</tr>
<tr>
<td>deep</td>
<td>tikwē·ča</td>
</tr>
<tr>
<td>deep (Prn f.)</td>
<td>kwá:qa, ṭqá:ka, ṭqá:qa</td>
</tr>
<tr>
<td>deer</td>
<td>čilqī, čelqī</td>
</tr>
<tr>
<td>defecate</td>
<td>-ha/-h/-a</td>
</tr>
<tr>
<td>(definitizer)</td>
<td>nū, nēn</td>
</tr>
<tr>
<td>(deictic)</td>
<td>kmį·l; wā·mi</td>
</tr>
<tr>
<td>deliver</td>
<td>??ē (sg.), ??āy (pl.)</td>
</tr>
<tr>
<td>dense</td>
<td>nālī</td>
</tr>
<tr>
<td>descend</td>
<td>(čà-) (?q Airways, màtkwārm?e, màtkwāra; tyē·mi</td>
</tr>
<tr>
<td>desert</td>
<td>tū· βyē pā·tyē·mkm</td>
</tr>
<tr>
<td>determined</td>
<td>čmwiši</td>
</tr>
<tr>
<td>they devour it</td>
<td>čā·βk ṭcmayči</td>
</tr>
<tr>
<td>dew</td>
<td>ḥušē, ḥošē</td>
</tr>
<tr>
<td>diabase</td>
<td>wō·hašsū(w)a</td>
</tr>
<tr>
<td>diarrhea: stirred up</td>
<td>mnûnč qwō·qwō·?l; mnûnč sqvā:r(?)l</td>
</tr>
<tr>
<td>dice</td>
<td>?kwē·čkōrkō·ri</td>
</tr>
<tr>
<td>die</td>
<td>pǐl, pū·yi</td>
</tr>
<tr>
<td>different</td>
<td>hōkē, khāyi</td>
</tr>
<tr>
<td>different, opposite + bridge, ford</td>
<td>βū·hkāya</td>
</tr>
<tr>
<td>dig</td>
<td>shyūki</td>
</tr>
</tbody>
</table>
is he digging?  ṃuč hwâlê
digging stick  ṃi'pɔ̌̄qɔ̃qa
dip in water  hànè·ka
dirt  màt
red dirt  màt'hwâta
discharge, gun going off  mnè, βmnè·, βmnè·i, βmnè·(yi), mnâya
disease  ṃechnûβa, ṃechnûβa
dishes  ṃečmâči, kâ·mâčò·
distant  twâyì, twâ·yi
distant land  màttwâya
distribute  pâ·kwì·či
I distribute to them  pâ·??ē·kwì·ói ~ pâ·??ē·kiyčì
ditch  ṃhasqî·ìi, ṃhasqì·ìi, ṃhasqî·ra
ditch  ṃhasqî·ri
still water ditch  qyûrqi
small ditch  wì
do  ṃù mwì
do it!  ṃumwì ??Ì
I ask you to do it  ṃumwì ?ì
does he ask you to do it  ṃumwì mwì:?, ñuβmwì + ṃumwì
do you think you can do it?
do you think you can do it?
it will be done  βlwìha
be doing (modal auxiliary)  ṃù(·)
I couldn't help doing it  ?wìk ?wìwkm
doctor  k(i)yē'·, kə́fiːyi, kə́iyē'·, kə́yē'·, kə́iyē'·
doff  hrúyi
dog  kə́ár
doll  ?črē'
dollar  pé· < peso
donkey  yà·l  ?βǔ·ra, yà·lwúra < burro
doorknob  ?wàskwíni
doctor  ðrī
dough  mwàra mō·rk, mwàra mū·ra,
         myála mū·rča
dough: not ready  myála swá, myála sīwā, myála sūwā
douse  māqī
dove  kwī
down + south  kwē'
draw out  oʔāli
dream  tsmá·či, tsmāːči, tsmā·čči
        (pl.)
dress  ñhē; tčēqša, ŋčēqša, tčâqša,
       tčâqwa
drink  ði·
drink water!  (?) hà mðí(·)
(a) drink (made) from  kθ?ē:
    berries
drip  tōčtōč?ika; čåqčåq
drive  ŋyuwmi
<table>
<thead>
<tr>
<th>English Word</th>
<th>Mandarin Character</th>
</tr>
</thead>
<tbody>
<tr>
<td>they drove the people away</td>
<td>pà·wîbó</td>
</tr>
<tr>
<td>drizzle</td>
<td>kwîbá·baâbì yû:wo; kwîbêââyì</td>
</tr>
<tr>
<td>drop</td>
<td>bìâq?ì; ânà(·)li</td>
</tr>
<tr>
<td>I dropped (it)</td>
<td>?ânà·lkì</td>
</tr>
<tr>
<td>drown</td>
<td>?hâ·bì pi</td>
</tr>
<tr>
<td>drowsy</td>
<td>i·bû·ri</td>
</tr>
<tr>
<td>drum</td>
<td>?kwè·t?ùmi</td>
</tr>
<tr>
<td>drunk</td>
<td>wà·sì·pè·mi</td>
</tr>
<tr>
<td>dry</td>
<td>rûbì</td>
</tr>
<tr>
<td>dry v.t.</td>
<td>trûbì</td>
</tr>
<tr>
<td>dried out muscles</td>
<td>wîrì</td>
</tr>
<tr>
<td>duck</td>
<td>qnmò:</td>
</tr>
<tr>
<td>dull</td>
<td>yî·bà ?ùmi</td>
</tr>
<tr>
<td>dusk</td>
<td>bîtqêpì?ì; nà·mârbì, nà·bìmârbì</td>
</tr>
<tr>
<td>dust</td>
<td>màthā·y nû·lkì?ì; màtōàbà</td>
</tr>
<tr>
<td>dust, cf. pound</td>
<td>màtmgwàña</td>
</tr>
<tr>
<td>dusty</td>
<td>qê(·), qāya</td>
</tr>
<tr>
<td>dwarf</td>
<td>pà·nyû·çà</td>
</tr>
<tr>
<td>dwell</td>
<td>nwē·, nwâ·yì (pl.), nwê·bì (pl.)</td>
</tr>
<tr>
<td>dweller</td>
<td>(?)=yà cf. pé·, ?pa:</td>
</tr>
</tbody>
</table>
each one  
eagle  
ear  
early  
early tomorrow  
earring  
earth  
ext: spread wide  
on earth as it is in heaven  
you're responsible for the earth  
exthquake  
(earth)quake  
est: sun comes out  
Easter  
eat  

I am eating  
one is eating  
a few eat  
eat dry, powdered substance  
(parched corn)  
eat in the morning  
eat lunch  

kà?si:ta  
?sá  
smálka, smá·lka (pl.)  
wilbi  
βyè·km  
smá·lki  
mát; mātk kōkâ:ma, mātk čkā·mi 
mátkhoi:la  
mātčâ:bk myā:yu  
mātβa yâ·mpâ:bk  
č?in?i·ni  
č?i·nä:lo·  
qoloyâwa sqâwa mâhe kwâ·hm  
mā· (sg.), māči (pl.), māiči (pl.)  
?č?má·  
?čmá·  
?čmáči  
čhmâ:  
yē·tk kwê·mâčö·  
ña·pîwî·bm kwê·mâčö
eat meat
I eat
I want to eat
do you want to eat?
eat something mushy
eat supper
eat up
echo
dge
egg
elbow
elderberry
elder sibling
elephant
embers, coal
encircle
end n.
enemy
enemy striker (Pron)
energentic
engine: iron runner
enough
enter!
entrails
err
espy, sight v.
<table>
<thead>
<tr>
<th>English</th>
<th>Sâtîpám, Šhipâ?lm</th>
</tr>
</thead>
<tbody>
<tr>
<td>evening</td>
<td>hi·pá·, šhipá?lm</td>
</tr>
<tr>
<td>evening: getting dark</td>
<td>?sè· ṭípi, ?sè· ṭépi;</td>
</tr>
<tr>
<td>everything around</td>
<td>tû· hihûl byâk kyâmûha</td>
</tr>
<tr>
<td>exchange</td>
<td>tišāhkē·bi</td>
</tr>
<tr>
<td>exclamation of fear</td>
<td>nî·nî·</td>
</tr>
<tr>
<td>(woman speaking)</td>
<td></td>
</tr>
<tr>
<td>exercise</td>
<td>hñò(·)mi</td>
</tr>
<tr>
<td>eye</td>
<td>yû(·)</td>
</tr>
<tr>
<td>eyebrow</td>
<td>yûkłmēː</td>
</tr>
<tr>
<td>eye-gaze</td>
<td>yû·tmû(·)rbi</td>
</tr>
<tr>
<td>eyeglasses</td>
<td>?kʰwâyûyi</td>
</tr>
<tr>
<td>eyelash</td>
<td>yûsuṇâː</td>
</tr>
</tbody>
</table>
face
face v.
face paint
fall
fall down there
fall + moult
falls asleep (arm, leg)
family, clan
fan v.
farm
farmer
fast person running
fat n.
fat
father
my father
husband's father
wife's father
father-in-law
father's brother's son
father's father
father's mother
father's older brother

yâ:βa; yú:βa
tyüπi, tyüπi
čyâ'βi
ēiri; máni; nâli
nyâl βqot?a?îmi
ēâli
čî'li
pâčä:ča
tyùsyùspi
mâtnû:, matnû·
mâtnû·kwî'ya
pâ·(?)[rawa
sâya
së (sg.), sâ·ykm (pl.)
čtâ·ča), tála
nà?čtáha, nà?tâla
nkûné·ya
βlhe nî·
ùnē
mî·ka
npô· (G.M.), pò(·)ra (W.G.)
môra
sû·ča

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father's or mother's younger brother
father's older sister
father's sister
father's sister's sons
fear
fearsome
feather
feces
feel like
female
fence
metal fence
feverish
a few
fiddle v.: rub back and forth
field
fife
fight
fighting
I cannot find it
fine
finely pounded
I burned my finger
index finger: 'pointing'

wīta, wī'ra
npī'
pī₂
čkā'βa
msē', msāyi, mšē', mšāyi
msē:βi, mšē:βi
wāla, k'wē'wāla
čélqa
uk'wā
čmī'ya; βqī (sg.), βqū'ya (pl.)
?l·βkōβa
?k'wā·βm ?l·βkōβa
khβō·yi
tū· kphabetm
k'wē·hqíshqí(?)ča
mātnū·
lūllūl?i
čā·wβi
h'ā
?smē·, ?smā·
mnē, mnāya
mqwāni
sālβa ?tūkm
sāl?čknā:mo, sāla ?čknā:mi
<table>
<thead>
<tr>
<th>English Word</th>
<th>Saint Pauline</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>middle finger</td>
<td>sàlkọ̀tē: bàkpẹ́ọ́, sàlqé·ća</td>
<td>bàkpẹ́·ọ́</td>
</tr>
<tr>
<td>little finger</td>
<td>sàlqẹ́qē·ća, sàlkéki·ća</td>
<td></td>
</tr>
<tr>
<td>fingernail</td>
<td>sàlslnh·ọ́</td>
<td></td>
</tr>
<tr>
<td>fingers</td>
<td>sàlkmb·rọ́ cf. toes,</td>
<td>sàlqẹ́qē·ća, sàlkéki·ća</td>
</tr>
<tr>
<td>finish</td>
<td>wí·ri</td>
<td></td>
</tr>
<tr>
<td>fire</td>
<td>??ó</td>
<td></td>
</tr>
<tr>
<td>firewood</td>
<td>??l·tq̄m̄tča</td>
<td></td>
</tr>
<tr>
<td>first + original</td>
<td>(?)háni</td>
<td></td>
</tr>
<tr>
<td>be first</td>
<td>i(·)βó(·)</td>
<td></td>
</tr>
<tr>
<td>first cousin</td>
<td>nčā· (sg.), tnčā·ća (pl.)</td>
<td></td>
</tr>
<tr>
<td>first cousin (female)</td>
<td>pāya</td>
<td></td>
</tr>
<tr>
<td>(first person pronoun)</td>
<td>?ná·</td>
<td></td>
</tr>
<tr>
<td>fish n.</td>
<td>?či·</td>
<td></td>
</tr>
<tr>
<td>fish v.</td>
<td>?či· s?òni</td>
<td></td>
</tr>
<tr>
<td>fishhook cactus</td>
<td>təp̄há:</td>
<td></td>
</tr>
<tr>
<td>make a fist</td>
<td>sàlčk̄l̄ul̄ki</td>
<td></td>
</tr>
<tr>
<td>five</td>
<td>ọrãpi</td>
<td></td>
</tr>
<tr>
<td>fix</td>
<td>iháni, ihá·ni</td>
<td></td>
</tr>
<tr>
<td>flag</td>
<td>?k̄v̄e·s?onča</td>
<td></td>
</tr>
<tr>
<td>flat, cf. butterfly</td>
<td>ràpráp</td>
<td></td>
</tr>
<tr>
<td>flesh</td>
<td>má:ň̄</td>
<td></td>
</tr>
<tr>
<td>float</td>
<td>?hàč̄á·β̄k yáki, ?hàč̄á·β̄k yáki</td>
<td></td>
</tr>
<tr>
<td>flood comes and goes;</td>
<td>?hàʔáma, hàʔá·mi</td>
<td></td>
</tr>
<tr>
<td>passes through</td>
<td></td>
<td></td>
</tr>
<tr>
<td>flour</td>
<td>mwára</td>
<td></td>
</tr>
</tbody>
</table>
flow
flower
flowing downward + water-fall
flute
flutter
flutters
wing flutter
wing flutters
fly n.
fly
flying squirrel
foam
fog
foggy
fold once
fold repeatedly
follow
follower
food
fool
foot
foot (figurative)
foot of mountain
foot of the mountain
ford v.
<table>
<thead>
<tr>
<th>forearm</th>
<th>ορί, ορί:; sάlqρwί:σό (SEY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>forehead</td>
<td>impά(*)la (W.G.), impί:la (G.M.)</td>
</tr>
<tr>
<td>forget</td>
<td>wά...ŋa</td>
</tr>
<tr>
<td>fork</td>
<td>(?kʰwάmσάɾŋa</td>
</tr>
<tr>
<td>forked post</td>
<td>ʔiτŋkvāla</td>
</tr>
<tr>
<td>Fossil Creek</td>
<td>ʔhάkhâβsůwə</td>
</tr>
<tr>
<td>four</td>
<td>hopά</td>
</tr>
<tr>
<td>fourth time</td>
<td>hopάča spúk(k)</td>
</tr>
<tr>
<td>Four Peaks: smooth cliffs</td>
<td>wi*kčāsə</td>
</tr>
<tr>
<td>fox</td>
<td>qqόɾ</td>
</tr>
<tr>
<td>fox (W.G.)</td>
<td>tqόɾ (sic)</td>
</tr>
<tr>
<td>fox goes X</td>
<td>qqόɾc qάwqwebdriver?kzm</td>
</tr>
<tr>
<td>freckles</td>
<td>yù<em>rίβίɾβ, yù</em>rίθrιθ</td>
</tr>
<tr>
<td>freeze</td>
<td>θpά'</td>
</tr>
<tr>
<td>friend</td>
<td>nwά'ha</td>
</tr>
<tr>
<td>friendship</td>
<td>Ɂa·tyû·cɁi</td>
</tr>
<tr>
<td>frog₁</td>
<td>hάnko</td>
</tr>
<tr>
<td>frog₂</td>
<td>hάnə</td>
</tr>
<tr>
<td>in front</td>
<td>yά:k</td>
</tr>
<tr>
<td>fruits</td>
<td>kWε·páya</td>
</tr>
<tr>
<td>fry</td>
<td>slί:, slί:</td>
</tr>
<tr>
<td>frying pan</td>
<td>(?kʰwάsλɁ(·)yi</td>
</tr>
<tr>
<td>full</td>
<td>tṃpίɾι, tṃʔɔɾί, kʔmʔɔɾί</td>
</tr>
<tr>
<td>funeral</td>
<td>?pά·βč pίm tkάββι</td>
</tr>
<tr>
<td>funeral oration</td>
<td>?pά·βč pίm kwά·wi</td>
</tr>
<tr>
<td>funeral song</td>
<td>?pά·βč pίm swά·ri</td>
</tr>
<tr>
<td>fur</td>
<td>nmίya, kʷε·nмиya</td>
</tr>
</tbody>
</table>

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furrow n.        qyûrqî, màtstîtk
furrow v.        čêmîčî
gallop
gamble
gambling
a game
game (meat)
gap: saddle-like
garbage
garden
gather
gather (acorn)
gather wood
gentle
gentle + Grace (Prn)
gentle (of animals, people)
get down
get even
get out; sprout
get up (after falling)
get up! (after falling)
get up! (from sitting)
we got here
ghost
gift
gift giving
giggles

\[ \begin{align*}
g & \rightarrow g
\end{align*} \]
gila monster: hàmtog'ëlta

girl: hčǎn, hča:ra, hča'ra

to the girls: hǐhča·rān̄o

give: ṭē· (sg.), ṭē·či (pl.)

give to speaker: nʔē·ki

give (away from speaker): ṭē·mi

I give back: kwē·kk ??ē

give me a little!: qēčmtkʷt·lβk mʔē·; kēčm mʔēni

I give you: nʔē·km

I give to the man: pà·hmā·n̄o ??ē·
give light: ??ūli
glad: ṭārʔú·yi/?rʔūyi, ṭār...yē

I’m glad to see you again: nʔū:yk ṭwā·rm ṭhānkā

glass: kēkēna, kēkēno

glide: skārā

go: yā·mi, yāmi

"goes," says X: -ʔi

he’s going toward it: nθā yīm k yā·mk

be going to (modal auxiliary): nū(·)

I’m going to sit here: yāk ṭwāha βnū·km; nθāk/yāk

?wā ?nū:

let’s go: hmaá

go down: rō·pi

go first: i(·)βó(·)
go in: yūri

go outward: βʔā·lβi ?īm, βʔā·lβ(i)?īm
goat < chiva, chivo, chivato

gold poppy

good

good afternoon

goose; lame duck

gopher

gopher snake

gourd (wild)
gourd rattle (too bitter
to eat)
grab

graceful

Grand Canyon

grass

grasshopper

grave

gravel

grave offering

gravy

gray

gray hair

grease

greasewood

greasy

great aunt

great-grandchild
great-grandchildren  ki:na
great-grandmother  nkó
great-grandparent  ní(·)ya
greedy  ?álhāti
green  hàbśú·(w)i
green onion (wild)  hinōqa
grind  tá·, tá·
grinder + jaw  hpi, ?pl
grinding stone  hàbčā, hàbčā(·)
ground  màt
ground up  táβi, táβa, táβa
hoe: pounds ground  màt(s)plqì
twilight: ground becomes visible  mat?ū·?li, māt̪i β?ū·βi
growl  βqβē·?li, βqwō·?li
grown up  ?tē
gruel  smykw'ina
gulch  māt̪i βqāqβ?lm
gully: sides almost come together  wi·ktkūpa
gulp  βčiqwúsmī
gun going off  βmne·(yi)
gunpowder  ?pāmq̦wán·a
guts  βhā
habitat: where horses stay
hail
hair
half
half-peeled juniper
halloo!
hammer
hand
my hand is bloody
my hand is burnt
cup the hand
I carry in my hand
left hand
hand down
(hand) kerchief < paño
handsome
handsome male
hang
hang on
hang on by fingertips
happy
I'm happy
are you happy?
hard

nēdak ṭhātē howā·bk
kīʔāč
qwāwa; nmīya, kwē·nmīya
stūyi
čōqa ʔy[á]lqa, čōqa ʔē·lqa
mhâmkô:
kʰwâkrwîsa
sâl
ʔsâlβč hʷâtβkm
sâlβč pîlk̓m
sâltʔəmi, sâlsʔəmi
ʔsâll ?i·kôkm
sâlk̓ə·rî, sâlk̓ə·rî;
sâlq̓əβə
shâbi
pā(·)n
ʔhâni
pâ·ʔhâni
shá
swâlβi
swârβi
ʔâr...yé
ʔârʔyêkm
mâ·č ârmyē
θpîri
table is hard
harden
harm v.
harness
Harris ground squirrel
harvest
Hassayampa River: 'the water disappears'
hat
hatch
Havasupai people
they are Havasupais
have
diver or chicken hawk
he (deictic)
it is he
head
heal
healer
hear
I hear tell that...
heart
heaven
heavy
it's heavy
heel

?čmáččí opíri
bhwö·bi
wyāti
?ḥat snā'yi
hmīlta
nuµmwe; yâ·či
?hāsyāmcb', ?hāsyā'mbō
pūr
yīrki
?hākhābsūʔpa·, hābsūʔpā:(ča)
ŋeʔč hābsū·ʔpāβ č yūčm
wi·yi, wi·yi
?čkyö·č
ŋeʔč
ŋeʔč yūm
qmpāya; k?ōya, k?ōya;
hu· (W.G.), hu: (G.M.)
čé·bi; tmwē
pā·kčē·βa
?e·bi
?kwē·kaβʔi(·)ča ??e·bk ?yūm
i(·)wā(·)ya
myā·khtī·la
nō(·)
nuč nō
mīkθā, mītkθā
<table>
<thead>
<tr>
<th>English</th>
<th>Pronunciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>hollow</td>
<td>ðiwa</td>
</tr>
<tr>
<td>middle is hollow</td>
<td>stūym ēndulki</td>
</tr>
<tr>
<td>hollow out</td>
<td>h'ári</td>
</tr>
<tr>
<td>holy</td>
<td>sà·?rî(yi), sà?rîyi</td>
</tr>
<tr>
<td>home</td>
<td>ðwá</td>
</tr>
<tr>
<td>homeland</td>
<td>pmat</td>
</tr>
<tr>
<td>honored</td>
<td>sà·?hâni</td>
</tr>
<tr>
<td>hoof</td>
<td>slh'wó· (G.M.), slh'pô· (W.G.)</td>
</tr>
<tr>
<td>hook</td>
<td>sâhâyi</td>
</tr>
<tr>
<td>hooked</td>
<td>hr̃kβi</td>
</tr>
<tr>
<td>hoots</td>
<td>hūhū, βhūhū</td>
</tr>
<tr>
<td>hopeless</td>
<td>tūya, tû·yi</td>
</tr>
<tr>
<td>Hopi</td>
<td>(h)mû:ka, mû·ka</td>
</tr>
<tr>
<td>horizon: end of sky</td>
<td>myâ·tyû·wpô'</td>
</tr>
<tr>
<td>horn</td>
<td>k'ā</td>
</tr>
<tr>
<td>horned</td>
<td>k'âβa</td>
</tr>
<tr>
<td>horned toad</td>
<td>t1k′âm</td>
</tr>
<tr>
<td>horse</td>
<td>?hât</td>
</tr>
<tr>
<td>horsetail broom</td>
<td>?hâtβhêsčî·yi</td>
</tr>
<tr>
<td>hot</td>
<td>?hâ·, ?hâ:ki; (?rú(y)i</td>
</tr>
<tr>
<td>it's hot today</td>
<td>nā·βm ?rû·yi</td>
</tr>
<tr>
<td>make hot</td>
<td>t?rûyi</td>
</tr>
<tr>
<td>hot springs</td>
<td>hàkmwê·</td>
</tr>
<tr>
<td>hound</td>
<td>kēâr ?čnē·ča</td>
</tr>
<tr>
<td>hour</td>
<td>nà·tkâβka</td>
</tr>
<tr>
<td>one hour</td>
<td>nà·tkâβka ?sî·tm</td>
</tr>
<tr>
<td>house</td>
<td>ðwá</td>
</tr>
<tr>
<td>English</td>
<td>Language</td>
</tr>
<tr>
<td>------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>how?</td>
<td>káβ, ká</td>
</tr>
<tr>
<td>how many?</td>
<td>kāβlwi?</td>
</tr>
<tr>
<td>how much?</td>
<td>kāβlwi?</td>
</tr>
<tr>
<td>hug v.</td>
<td>sklpüyi, skrpüyi</td>
</tr>
<tr>
<td>we hug each other</td>
<td>tsklpü:yiβi</td>
</tr>
<tr>
<td>(human attribute)</td>
<td></td>
</tr>
<tr>
<td>hummingbird</td>
<td>mînmî·na</td>
</tr>
<tr>
<td>hump (back)</td>
<td>kmpü:1βa</td>
</tr>
<tr>
<td>hunchback</td>
<td>hi·tât håm?üna</td>
</tr>
<tr>
<td>hundred</td>
<td>shüna</td>
</tr>
<tr>
<td>hungry</td>
<td>mčá·yi</td>
</tr>
<tr>
<td>hunt</td>
<td>nê, ?čnē</td>
</tr>
<tr>
<td>I hunt</td>
<td>?č?nē</td>
</tr>
<tr>
<td>hunter (Fmn)</td>
<td>?čkne</td>
</tr>
<tr>
<td>hurt</td>
<td>wyäti</td>
</tr>
<tr>
<td>it hurts v.i.</td>
<td>râβi</td>
</tr>
<tr>
<td>it hurt!</td>
<td>?rā·</td>
</tr>
<tr>
<td>I have a husband</td>
<td>pâ·hmî ?wî, pâ·hmî (wîyi)</td>
</tr>
<tr>
<td>husband's father</td>
<td>nkupë·ya</td>
</tr>
<tr>
<td>hush (interjection)</td>
<td>?ã</td>
</tr>
<tr>
<td>husk (corn)</td>
<td>shwâ·ni</td>
</tr>
<tr>
<td>English</td>
<td>Emilia</td>
</tr>
<tr>
<td>---------</td>
<td>--------</td>
</tr>
<tr>
<td>I (pronoun)</td>
<td>ʔná-, ʔnáči subj</td>
</tr>
<tr>
<td>I own</td>
<td>náwí</td>
</tr>
<tr>
<td>I own an ax</td>
<td>ʔiˑčk̕vá̂t(a) ʔwíˑykm</td>
</tr>
<tr>
<td>ice</td>
<td>ʔháʔpáč</td>
</tr>
<tr>
<td>important, cf. holy, sacred</td>
<td>ʔríye, ʔrye, ʔríyē</td>
</tr>
<tr>
<td>index (i.e. pointing)</td>
<td>sálʔčnâ:mo, sāla ʔčnâ:mi</td>
</tr>
<tr>
<td>finger</td>
<td></td>
</tr>
<tr>
<td>Indian</td>
<td>ʔpáˑ (sg.), ʔpáˑča (pl.) (G.M.)</td>
</tr>
<tr>
<td></td>
<td>ʔpá: (sg.), ʔpáˑča (pl.) (W.G.)</td>
</tr>
<tr>
<td>(Indian) doctor</td>
<td>k̕tíˑyi, ʔpáˑk̕tíˑyi</td>
</tr>
<tr>
<td>Indian from another group</td>
<td>ʔpáˑhkâˑya (G.M.), pâˑhkâˑya (G.M.), pâˑk̕hâˑya (W.G.)</td>
</tr>
<tr>
<td>Indian paintbrush (plant)</td>
<td>?lwi čʔûr</td>
</tr>
<tr>
<td>Indian spinach</td>
<td>k̕wáˑ₂, k̕wá(ʔála)</td>
</tr>
<tr>
<td>be in front</td>
<td>i(•)βó(•)</td>
</tr>
<tr>
<td>inhabit</td>
<td>hówâˑβi</td>
</tr>
<tr>
<td>inhabitant of</td>
<td>pâya cf. péˑ, ʔpá:</td>
</tr>
<tr>
<td>insect species</td>
<td>sūˑlîtʔîča</td>
</tr>
<tr>
<td>insert one object (thread into needle)</td>
<td>ʔčûrʔi</td>
</tr>
<tr>
<td>insert many objects</td>
<td>čpû(•)</td>
</tr>
<tr>
<td>insist</td>
<td>čàʔwîrî</td>
</tr>
<tr>
<td>(instrumental/agentive)</td>
<td>-i ~ -eˑ, -(y)e</td>
</tr>
<tr>
<td>intelligent</td>
<td>i(•)pâri, čpâri</td>
</tr>
</tbody>
</table>
I'm intelligent
intensifier: very, just
(interrogative suffix)
intertwine
into
iron
ironwood tree
(irrealis)
island
itch all over
itches
itching disease
itch in one spot

?čʔpárkm
ᵗᵘ·
⁻é?
kʷi·
ʸá·l
ʔkʰwá, ʔkʰwä lā·wi (pl.)
ʔhpá·lka (G.M.), ʔpá·lka,
ʔphálka (W.G.)
⁻hᵃ⁻h⁻a
ʔmát ?ḥàtᵘ·ḅl yâ·wa,
ʔḥà·tű·ḅl mát yáwa
θùlô·li
ttmô·km
θùlôula
θùriθû·ri
jabalina

jackrabbit

January: where the new year is

Japanese

jar

jay

jealous, envious

jealous (male)

jimsonweed

joint

joke

I'm joking

jump

jump in surprise

jump into

jump into the water

juniper

just adv.

I'm just saying that

I'm just sitting here

waiting
keep away!
keep still
keep us from the bad kerosene can turned inside out to make tortillas
key
kick
kidney
kill
killdeer
kill many
killer (Prn)
kind be kind to them!
kindle
kindling wood
Kirkland
kiss
kiss, cf. sneeze
kitchen
knead
knee

?lā?
trē·bī
kyōha k̃w̃e·k̃g̃̇̃̄b̃̇̃ha b̃k̃ē?
pā·mhipē(β) wo maʔūmi
khwāčraprā·pī
kwē·skwi·ni
ktōhi
čmpâβ̄a, čmpāwa (SEY)
nēhi
hāmkkī
kmwā·či
pā·nēha
nhmirtβi, nhmērβi
pā·mnhmērβi
tq̃w̃āti
ʔi·emāqa
θāβa khyārβa
yā·βa βmītβi?i
βčiʔi, βčiʔ̃...i, yā·βa
βmītβi?i
ʔcnwIrw̃, ʔcnwI·r̃ò?
mō·ri, mú·ri
mipūk, mmpūk (SEY)
knife
knot v.
know
I know a little

 (?)khwá; ?kwè·čkváti;
khwáčkváti

 kepálbi, qepálbi
spó

tú· kěčm ?spókm
<table>
<thead>
<tr>
<th>English</th>
<th>Yidu</th>
</tr>
</thead>
<tbody>
<tr>
<td>lake</td>
<td>?hàhpə</td>
</tr>
<tr>
<td>lame</td>
<td>òd:lipi</td>
</tr>
<tr>
<td>land</td>
<td>mát</td>
</tr>
<tr>
<td>land of water (Pln)</td>
<td>?hà.kmáta</td>
</tr>
<tr>
<td>distant land</td>
<td>mát.twáya</td>
</tr>
<tr>
<td>plowed land</td>
<td>mát.stI:tča</td>
</tr>
<tr>
<td>small level land</td>
<td>ktná,kβa</td>
</tr>
<tr>
<td>narrow, level land by mountain</td>
<td>mát.ktβākβa</td>
</tr>
<tr>
<td>lantern</td>
<td>??üh</td>
</tr>
<tr>
<td>large</td>
<td>βté, βtáya, βté·yi</td>
</tr>
<tr>
<td>large hawk</td>
<td>skwâla</td>
</tr>
<tr>
<td>larger of two similar animals, cf. badger/bear, deer/cow</td>
<td>-t(a)</td>
</tr>
<tr>
<td>last</td>
<td>β?ømi</td>
</tr>
<tr>
<td>last man (definite)</td>
<td>?pà·.kβ?ømak</td>
</tr>
<tr>
<td>last man (Prn)</td>
<td>pà·.kβ?ø·ma</td>
</tr>
<tr>
<td>last woman (Prn)</td>
<td>msì.kβ?ø·ma</td>
</tr>
<tr>
<td>late</td>
<td>nà·tkuílpì, nà·tkuí·lβi</td>
</tr>
<tr>
<td>laugh</td>
<td>čkwári, čkwá:ri</td>
</tr>
<tr>
<td>laughs in disbelief</td>
<td>yà·pà·?úmk čkwá·rkìm</td>
</tr>
<tr>
<td>lava</td>
<td>mát.pìlò</td>
</tr>
<tr>
<td>lay</td>
<td>čì·</td>
</tr>
<tr>
<td>lay eggs</td>
<td>sqáwβì</td>
</tr>
<tr>
<td>lay long object (down, across)</td>
<td>čmí:</td>
</tr>
<tr>
<td>lay many objects</td>
<td>čk'wá</td>
</tr>
<tr>
<td>lay something across bridge, ford</td>
<td>shkē:</td>
</tr>
<tr>
<td>lazy</td>
<td>twârbi; ŋulbí</td>
</tr>
<tr>
<td>leaf</td>
<td>ŋeqa</td>
</tr>
<tr>
<td>leaf out</td>
<td>?iwíl smā·lkβí</td>
</tr>
<tr>
<td>leak</td>
<td>k?ū·βó kčáqi</td>
</tr>
<tr>
<td>lean v.</td>
<td>péβí</td>
</tr>
<tr>
<td>lean object against wall</td>
<td>spē</td>
</tr>
<tr>
<td>learn</td>
<td>i(·)pāri</td>
</tr>
<tr>
<td>leather</td>
<td>qʷáktayú:l</td>
</tr>
<tr>
<td>leave</td>
<td>nmāki, cf. máka 'back'</td>
</tr>
<tr>
<td>leave (it) alone</td>
<td>t?íní</td>
</tr>
<tr>
<td>leaves blown out</td>
<td>ŋeq</td>
</tr>
<tr>
<td>leaves floating on water</td>
<td>?iwíla čā·ne shyālβkm</td>
</tr>
<tr>
<td>left</td>
<td>kēa·ri</td>
</tr>
<tr>
<td>left hand</td>
<td>sálkēa·ri, sálkēa·ri; sálqēβa</td>
</tr>
<tr>
<td>get on the left side!</td>
<td>sálkēa·rō mčkpā·</td>
</tr>
<tr>
<td>leg</td>
<td>mpāra</td>
</tr>
<tr>
<td>legend</td>
<td>?čkyū·kta</td>
</tr>
<tr>
<td>lend</td>
<td>ŋmá</td>
</tr>
<tr>
<td>level ground</td>
<td>hūnhúŋ</td>
</tr>
<tr>
<td>Thomson Valley</td>
<td>?k'vá·y khūnhúŋa</td>
</tr>
<tr>
<td>lick</td>
<td>té·qi, ŋé·qi</td>
</tr>
<tr>
<td>English</td>
<td>L冈i</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>lick one's chops or lips</td>
<td>pēlmēlk?î</td>
</tr>
<tr>
<td>lie (position)</td>
<td>yâki</td>
</tr>
<tr>
<td>lies down</td>
<td>kyâ(·)ki</td>
</tr>
<tr>
<td>lie v. (falsehood)</td>
<td>tyé, tyâyi</td>
</tr>
<tr>
<td>lift</td>
<td>čbrāri</td>
</tr>
<tr>
<td>light v.t.</td>
<td>tqʷāti</td>
</tr>
<tr>
<td>they light the wood</td>
<td>??I: tqʷātçi</td>
</tr>
<tr>
<td>light in weight</td>
<td>Ḋkʷāyi (G.M.), skʷā·yi (W.G.),</td>
</tr>
<tr>
<td></td>
<td>Ḋkvāyi</td>
</tr>
<tr>
<td>I'm light (in weight)</td>
<td>nāc Ḋkvāyi</td>
</tr>
<tr>
<td>lightning</td>
<td>brāβ?î, brābrāβ...l</td>
</tr>
<tr>
<td>lightning sound</td>
<td>bčlā·ik, bčlā·člā·?ik; βgâhqk,</td>
</tr>
<tr>
<td></td>
<td>βgâhqâqâḥ?îk</td>
</tr>
<tr>
<td>light red</td>
<td>kwâlsé(·)</td>
</tr>
<tr>
<td>like</td>
<td>swâli; wâkâbâri</td>
</tr>
<tr>
<td>I like</td>
<td>nāc ?swâlkm</td>
</tr>
<tr>
<td>limp (because of short leg)</td>
<td>Ḋwâ·mki, Ḋwâ·nki</td>
</tr>
<tr>
<td>limp (from arthritis)</td>
<td>qłūmi, klūmî</td>
</tr>
<tr>
<td>lip</td>
<td>yâktpûrβa; kt?ôrβa; yâ·krê·βa;</td>
</tr>
<tr>
<td></td>
<td>yâhâl(?)mî</td>
</tr>
<tr>
<td>liquid</td>
<td>nhâya</td>
</tr>
<tr>
<td>listen!</td>
<td>?i?; ?î; ?ā (interjection)</td>
</tr>
<tr>
<td>listen</td>
<td>?ê·βkkʷî</td>
</tr>
<tr>
<td>little</td>
<td>kēč, kâč, qâč, qé(·)č; see</td>
</tr>
<tr>
<td></td>
<td>kîč, kēč, qâč, kâč, kôč</td>
</tr>
<tr>
<td>English Word</td>
<td>Phillips Word</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td>little (horse, person + pony, midget)</td>
<td>nyū·ča</td>
</tr>
<tr>
<td>little (Prn)</td>
<td>pà·nyû·ča</td>
</tr>
<tr>
<td>a little</td>
<td>tkwI·lβk</td>
</tr>
<tr>
<td>little finger</td>
<td>sàlkči·ča, sàlgčgē·ča</td>
</tr>
<tr>
<td>live v.</td>
<td>nwē·bi, nwā·yi</td>
</tr>
<tr>
<td>they are living there.</td>
<td>wayō·km</td>
</tr>
<tr>
<td>they're living in that part</td>
<td>màtktnā·kβal wayō·km</td>
</tr>
<tr>
<td>liver</td>
<td>čbθi·, čwθi· (SEY)</td>
</tr>
<tr>
<td>livestock</td>
<td>?kwē·nhátča</td>
</tr>
<tr>
<td>lizard</td>
<td>thθi(·)la</td>
</tr>
<tr>
<td>loaf of bread</td>
<td>myál</td>
</tr>
<tr>
<td>(location)</td>
<td>-ò</td>
</tr>
<tr>
<td>lock</td>
<td>?wàskw′ini</td>
</tr>
<tr>
<td>loin cloth</td>
<td>tmhwiβi, kmhwiβi</td>
</tr>
<tr>
<td>long</td>
<td>kvú(·)li</td>
</tr>
<tr>
<td>long (temporally)</td>
<td>màrmāri</td>
</tr>
<tr>
<td>long ago</td>
<td>kūra</td>
</tr>
<tr>
<td>longtailed mouse</td>
<td>?uhūl</td>
</tr>
<tr>
<td>a long time ago</td>
<td>?čkū:reča, ?čkúrθa</td>
</tr>
<tr>
<td>long ago you were slender</td>
<td>tū· mpọqpọq qnimā·</td>
</tr>
<tr>
<td>look for</td>
<td>hwá·li, wá·li</td>
</tr>
<tr>
<td>look this way</td>
<td>hā:ki</td>
</tr>
<tr>
<td>look that way</td>
<td>hā:mi</td>
</tr>
<tr>
<td>lose</td>
<td>čnāli; hpínči</td>
</tr>
<tr>
<td>English</td>
<td>Chinese</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>I lose</td>
<td>pà·hǐpínči</td>
</tr>
<tr>
<td>we lose</td>
<td>pà·nǎhpínči</td>
</tr>
<tr>
<td>lost</td>
<td>smé·, smá:</td>
</tr>
<tr>
<td>lots of acorns</td>
<td>?ī·hmī tūrbò</td>
</tr>
<tr>
<td>pl (lots)</td>
<td></td>
</tr>
<tr>
<td>louse</td>
<td>h?él</td>
</tr>
<tr>
<td>love</td>
<td>?è·...yì; swáli; wàkabāri</td>
</tr>
<tr>
<td>I love</td>
<td>?è·?yì, náč ?swālkm</td>
</tr>
<tr>
<td>I love you</td>
<td>?è·nǐ·km</td>
</tr>
<tr>
<td>she loves me</td>
<td>?è·nǐ(yì)</td>
</tr>
<tr>
<td>low noise</td>
<td>β?ū·?ū·k</td>
</tr>
<tr>
<td>lucky</td>
<td>kvá(·)βi</td>
</tr>
<tr>
<td>lukewarm</td>
<td>qùní</td>
</tr>
<tr>
<td>lunch</td>
<td>tú· kâča máča, tú· qâča máča; nà·βlwī·βm kwè·māčó</td>
</tr>
<tr>
<td>lung(s)</td>
<td>čkwáľ</td>
</tr>
<tr>
<td>English</td>
<td>Algonquian</td>
</tr>
<tr>
<td>---------</td>
<td>------------</td>
</tr>
<tr>
<td>maiden</td>
<td>msíya</td>
</tr>
<tr>
<td>make</td>
<td>yó₂, ye·bi; wi</td>
</tr>
<tr>
<td>make a fist</td>
<td>sàlčkiʔúlki</td>
</tr>
<tr>
<td>make furrows</td>
<td>sqī·ri</td>
</tr>
<tr>
<td>I'm making a new generation</td>
<td>pà·lā·wa ʔköyūči</td>
</tr>
<tr>
<td>make instrument cry + rock music</td>
<td>?kʰwàmíwo</td>
</tr>
<tr>
<td>make noise</td>
<td>?ũwi</td>
</tr>
<tr>
<td>male</td>
<td>hmaβa</td>
</tr>
<tr>
<td>handsome male</td>
<td>pà·ʔhāni</td>
</tr>
<tr>
<td>man</td>
<td>pà·hmí(ya)</td>
</tr>
<tr>
<td>last man (definite)</td>
<td>?pà·kβʔómąk</td>
</tr>
<tr>
<td>last man (Prn)</td>
<td>pà·kβʔό·ma</td>
</tr>
<tr>
<td>man's breast</td>
<td>pà·hmi·náiya</td>
</tr>
<tr>
<td>two men</td>
<td>pà·hmí·βm ʔhʷáki, pà·hmí·βm hhʷáki</td>
</tr>
<tr>
<td>mano</td>
<td>hàβčä(·), hàβʔčä</td>
</tr>
<tr>
<td>many</td>
<td>?te; lá(·)wi</td>
</tr>
<tr>
<td>many people</td>
<td>pà·táya</td>
</tr>
<tr>
<td>many rocks</td>
<td>(?w)ń·čkő·li</td>
</tr>
<tr>
<td>many swim</td>
<td>pà·lā·wk ʔhàpū:yi</td>
</tr>
<tr>
<td>manzanita</td>
<td>čmpûk</td>
</tr>
<tr>
<td>marbles (game)</td>
<td>sàtö·ri</td>
</tr>
<tr>
<td>Maricopa</td>
<td>hàlčő·ma</td>
</tr>
<tr>
<td>Word</td>
<td>Definition</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>marry (man speaking)</td>
<td>?lwe, lwáyi, ?lwe'bi</td>
</tr>
<tr>
<td>marry (woman speaking)</td>
<td>nhmí(·)bi</td>
</tr>
<tr>
<td>a man marries</td>
<td>pà·hmí:βč lwéβi</td>
</tr>
<tr>
<td>we're getting married</td>
<td>tlwá·yβa ?nū'</td>
</tr>
<tr>
<td>mash</td>
<td>sc'yöqi</td>
</tr>
<tr>
<td>mashed potatoes</td>
<td>pā'pa scöqβa</td>
</tr>
<tr>
<td>massacre v.</td>
<td>?pà·kmwā·či (sg.)</td>
</tr>
<tr>
<td>massacre</td>
<td>?pà·kmwā·čči (pl.)</td>
</tr>
<tr>
<td>match (fire)</td>
<td>?òskāni</td>
</tr>
<tr>
<td>matron</td>
<td>màymâ:</td>
</tr>
<tr>
<td>me (pronoun)</td>
<td>?ná-</td>
</tr>
<tr>
<td>meadow</td>
<td>tná·kβa, wił hàbsú(w) ttña:nkβi,</td>
</tr>
<tr>
<td></td>
<td>?ılwila hàbsú(w)α ttña:kβa</td>
</tr>
<tr>
<td>mean (temperament)</td>
<td>pà·?1hw'åyi</td>
</tr>
<tr>
<td>measles</td>
<td>mlüθa</td>
</tr>
<tr>
<td>measure</td>
<td>čβlwí', ččláli·či</td>
</tr>
<tr>
<td>meat</td>
<td>k'wè·θóβa</td>
</tr>
<tr>
<td>medication &lt; pI</td>
<td>pI·βi</td>
</tr>
<tr>
<td>medicine, cf. root</td>
<td>?l(·)smá(·)</td>
</tr>
<tr>
<td>medicine man</td>
<td>pà·čθéqa, ?pà:smǎča, pà·smǎča</td>
</tr>
<tr>
<td>melon</td>
<td>?čkmtu</td>
</tr>
<tr>
<td>meows</td>
<td>myå·w?i</td>
</tr>
<tr>
<td>mesa</td>
<td>wi·kyånyá·na</td>
</tr>
<tr>
<td>mescal, cf. century plant</td>
<td>βyāl</td>
</tr>
<tr>
<td>Mescalero &lt; Cochise?</td>
<td>kči:sa</td>
</tr>
<tr>
<td>mesquite beans</td>
<td>?yá'</td>
</tr>
<tr>
<td>mesquite tree</td>
<td>(?)na·la</td>
</tr>
<tr>
<td>Word</td>
<td>Meaning</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>messenger</td>
<td>?č(k)kná:βa, ?č(k)kná:βča</td>
</tr>
<tr>
<td>metal</td>
<td>(?kʰwā, (?kʰwā lā·wi (pl.))</td>
</tr>
<tr>
<td>metate, cf. chin, jaw</td>
<td>?hpí</td>
</tr>
<tr>
<td>middle</td>
<td>tú·βi, stūyí</td>
</tr>
<tr>
<td>middle is hollow, cf. dust</td>
<td>stūym čůłkgβi</td>
</tr>
<tr>
<td>middle finger</td>
<td>sālkβtē: βākpēβa; sālqē·ča</td>
</tr>
<tr>
<td>midget</td>
<td>bākpē·βha</td>
</tr>
<tr>
<td>midnight</td>
<td>pā·nyů·ča</td>
</tr>
<tr>
<td>one mile</td>
<td>hipāč tū·βk yākí; hipā:k</td>
</tr>
<tr>
<td>milk n.</td>
<td>mātq'āra ?sīti</td>
</tr>
<tr>
<td>cow's milk</td>
<td>(?máya</td>
</tr>
<tr>
<td>milk v.</td>
<td>q'əktənmáya</td>
</tr>
<tr>
<td>Milky Way</td>
<td>hāčā: (G.M.), hčā· (W.G.)</td>
</tr>
<tr>
<td>one million</td>
<td>ə̄wβa tū·?nōm</td>
</tr>
<tr>
<td>mine, of me, of mine</td>
<td>?ná-, pā́wī·</td>
</tr>
<tr>
<td>minute</td>
<td>mārmā·r?iča</td>
</tr>
<tr>
<td>mirror</td>
<td>hāl?ū·βi</td>
</tr>
<tr>
<td>misdeed</td>
<td>čyā·mi</td>
</tr>
<tr>
<td>miser</td>
<td>čwàhāβa</td>
</tr>
<tr>
<td>mistake</td>
<td>čyā·mi</td>
</tr>
<tr>
<td>one makes mistake</td>
<td>kwè·čá·mkm</td>
</tr>
<tr>
<td>mistletoe</td>
<td>qmōːsa</td>
</tr>
<tr>
<td>mistletoe berries</td>
<td>qmō·sa pé·</td>
</tr>
<tr>
<td>mix</td>
<td>ṣyů·li; skwāyi</td>
</tr>
</tbody>
</table>
moan

the moaner

mockingbird

(modal: be going to, be about to, be doing)

moist

Mojave

mole (on skin)

money

I used up all my money

Montezuma Well: water

broken up

moon

the moon is far away

moos

this morning

eat in the morning

morrow

mortar

mother n.

father's mother

wife's mother

mother-in-law

mother's brother

mother's older brother

mother's or father's younger brother
mother's brother's daughter  nú·t(a)

(man speaking)

mother's brother's sons  čkā·βa
mother's father  kwāwa
mother's mother  kōla (sg.), kō·la (pl.)
mother's older sister  nō·i; wīsa (sg.), wī·sa (pl.)
mother's older brother  wāna (sg.), wā·na (pl.)
mother's younger sister  nmī (G.M.), mīra (W.G.);
  nō·, nō·ča (pl.)
motion picture  ?kʷè·t?ú·βi; kʷè·tnúrt?úβa
mound  màtgmōtql
mount  čkpā·
mountain  ?wī·, wī·tāya; ?wī·k?i·la
I climb the mountain  wī·tāyakwāha ?č?āli
mountain (not rocky)  màtkhōrāhōra
mountain range  wī·k?ā·m̥a
Bill Williams Mountain  wī·kβ?ū·la
Superstition Mountain  wī·kčsāwa
foot of mountain, bottom  màtpūkmāk; wī·pūkahk
side of mountain  wī·hohā·hm
mountain lion  (?hāt(?kʷilα; n̥mīta
mourn, cf. cry  wà...m̥yi, wàmyē·
mourn by fasting  wàmiyēk čm̥a· ŋūmi
mouse  ?wē·
mouth  yā
move  ?in?in; βlllwliw?l
move (aside)  hīni
<table>
<thead>
<tr>
<th>English</th>
<th>Khmer</th>
</tr>
</thead>
<tbody>
<tr>
<td>move one's home</td>
<td>hmu', hmū'či</td>
</tr>
<tr>
<td>move (fast) vertically</td>
<td>máni</td>
</tr>
<tr>
<td>much</td>
<td>+té(', +táy-</td>
</tr>
<tr>
<td>mud</td>
<td>(?)qnu, qnú'βi</td>
</tr>
<tr>
<td>muddy</td>
<td>qnūyi</td>
</tr>
<tr>
<td>mushroom</td>
<td>q̃s̃amta; ?mp̃ga</td>
</tr>
<tr>
<td>musical instrument</td>
<td>kʰwâswâ'ri, kʰwâswâ'ro</td>
</tr>
<tr>
<td>my</td>
<td>?ná-</td>
</tr>
<tr>
<td>my land</td>
<td>nà?nmat</td>
</tr>
</tbody>
</table>
nail
slhωó·, slhβó· (body part);
kʰwàttq[q]ä·βa

naked, cf. flat
hàlsqrâ·pi
name
múl, móí
I name them
pàː?sìːti
nape
i(·)púk
narrow + high wall
k?ōri
narrow, level land by
mountain
màtktβákβa
nasty
pàː?lhwáyí
nation
?wàčmíča
Navajo
čhʷàhmú·ča; (h)múːka, mū(·)ka
(confused with Hopi);
?hwá·?mú·ča (connected with
Apache)

navel
mlpů·
near
tyé·β; ḫipō
neck
mlqī
necklace
hnáq, hnak; wí·hnāki
need
hnáːqi
needle
?čβnámmi; ?čskʷiːli (SEY)
(negative cf. French
ne...pas)
neighbor
tyé·βk wàyōyi
net
kʷē·mθāːrβ?įča
I'll never do it again
new
newspaper: lots of printed matter, cf. moist...
at night
night before last
nine
nit
no
no!
noise
noisy (?) + ya'w
noon
north
Northeastern Yavapai language
Northeastern Yavapai people
nose
not
'not by the hair of my chinny-chin-chin!'
I'm not certain
nothing
he's not lazy
not long ago
βkē wīyī ?a?úmâha
hiβmû
nûr(m) mëā:yβ?îča
hipā·m
nû·kk hipā:tm, nû·km hipā:tm
hâlēú·yi
hičI·la
?ūmi
?ī?, ?Ī (interjection)
yâwi, yâ:wi
wâyô·βi
nà·βkâθè, nà·βkâθî,
À·βkâθî
mâthâ·βî (G.M., G.N.);
?mṭhâ(·)βk (W.G.)
?wî·pûk?pâ·kwâwɔa
(?wî·pûk?pâ:(ča)
hû· (W.G.), hû: (G.M.)
?ūmi
hû·θîla myâ?pâ·βkm
nû ?eîrI·km; nûpîyû·mûb
tû· kyô·βi
?čhmîkm
qnimâ·
<table>
<thead>
<tr>
<th>English</th>
<th>Spanish</th>
</tr>
</thead>
<tbody>
<tr>
<td>not on tight + ramada,</td>
<td>shyálša</td>
</tr>
<tr>
<td>float</td>
<td></td>
</tr>
<tr>
<td>not pretty</td>
<td>?è·yí·ša ?ūmi</td>
</tr>
<tr>
<td>not ready</td>
<td>tyá·č sīwa, tyá·č sūwa</td>
</tr>
<tr>
<td>not sharp</td>
<td>yō·ša ?ūmi</td>
</tr>
<tr>
<td>I'm not so well (W.G.)</td>
<td>?ō·p ?rāši</td>
</tr>
<tr>
<td>not there</td>
<td>pā·mi</td>
</tr>
<tr>
<td>nothing</td>
<td>(?qüárí, màtkqü·m?e</td>
</tr>
<tr>
<td>now</td>
<td>βá·m, βā·m(?i</td>
</tr>
<tr>
<td>nuts</td>
<td>küè·pāya</td>
</tr>
</tbody>
</table>
ocean
ocean: much water lying
ocotillo: sad plant
offended
offspring
okay
old
he's old
old man
old woman
olla
olla-shaped water basket
once upon a time
one
one cent: Indian head penny
one foot (measurement)
one o'clock
the one over there
the one that waddles
oneself
be on guard

?hà.kp'té·
?hà?táya kyák
?i·kmí·yi, ?i·kmyé·
hnú
@áwa (sg.), @á:wa (pl.);
šáwa (sg.), šá:wa (pl.)
?wá
?té (of a person); nkwáyi
(W.G.) (of a thing),
nkwáyi (G.M.)
pátáyi
βlhē (sg.); pahlē (W.G.),
βlháya (pl.)
qmwi·rma, qčmwí·rma (pl.)
måtθíwa
swā
?čkú:ra, ?čkú:rñə
(?)síti, (?)si·ti
pùrk'wáθa sèrβa
kči·síti
nà·síti
nwē?
tû·lβa
yē·βm
βwé
<table>
<thead>
<tr>
<th>English</th>
<th>BSR</th>
</tr>
</thead>
<tbody>
<tr>
<td>only</td>
<td>?pīra</td>
</tr>
<tr>
<td>on the left side</td>
<td>sàlkə̀ød̪̪̆̀ṛ̆̄o</td>
</tr>
<tr>
<td>on the right side</td>
<td>sàlkhànö</td>
</tr>
<tr>
<td>on (top)</td>
<td>čá:bk, čá:hk</td>
</tr>
<tr>
<td>on top</td>
<td>čá:ne, čá:ʔhe</td>
</tr>
<tr>
<td>put on top</td>
<td>čá:hkwà:yı</td>
</tr>
<tr>
<td>handkerchief on top:</td>
<td>pà:nčàč̣̬̬̬̬̬̬̬́č̣̬̬̬̬̬̬̬́?l, ?pàn čàč̣̬̬̬̬̬̬̬́č̣̬̬̬̬̬̬̬́i</td>
</tr>
<tr>
<td>Charger (popular</td>
<td></td>
</tr>
<tr>
<td>etymology)</td>
<td></td>
</tr>
<tr>
<td>water thrown on top</td>
<td>?hàkč̣̬̬̬̬̬̬̬́č̣̬̬̬̬̬̬̬́a</td>
</tr>
<tr>
<td>open</td>
<td>kʷáki, qʷáqi; kʷákβi</td>
</tr>
<tr>
<td>opening</td>
<td>øβlì, øβlùyi</td>
</tr>
<tr>
<td>open slowly</td>
<td>kʷákβi</td>
</tr>
<tr>
<td>open (a wound)</td>
<td>qʷáqβi</td>
</tr>
<tr>
<td>opposite</td>
<td>βù·.hkãya</td>
</tr>
<tr>
<td>other</td>
<td>hkã, hkãya</td>
</tr>
<tr>
<td>ouch (interjection)</td>
<td>(?)ná, ?rã·</td>
</tr>
<tr>
<td>our, my</td>
<td>?nã-</td>
</tr>
<tr>
<td>our land</td>
<td>nà?nmát</td>
</tr>
<tr>
<td>ours</td>
<td>?nã-</td>
</tr>
<tr>
<td>out of breath</td>
<td>yá·β·kʷàtìʔl</td>
</tr>
<tr>
<td>outside</td>
<td>kãqʷàrʔe, qãqʷàrhe</td>
</tr>
<tr>
<td>oven: large opening</td>
<td>?òtqʷàti kòβlì·n</td>
</tr>
<tr>
<td>overflow</td>
<td>βmê·t øIGM</td>
</tr>
<tr>
<td>over there</td>
<td>noth? (G.M.)</td>
</tr>
<tr>
<td>the one over there</td>
<td>nwe?</td>
</tr>
<tr>
<td>owe: stand in it</td>
<td>ñàlsčá</td>
</tr>
</tbody>
</table>
owl
own
I own an ax
owner

?ywí.
wi·yi, wi·yi, wi/wiyi/wí.
?l·čŷnt(a) ?wí·ykm
kwí·ya, kwí·ya
<table>
<thead>
<tr>
<th>English</th>
<th>Spanish</th>
</tr>
</thead>
<tbody>
<tr>
<td>packed into shape</td>
<td>čmmυάβα</td>
</tr>
<tr>
<td>paint v.1</td>
<td>čαhανι, ᛆʔhανι</td>
</tr>
<tr>
<td>paint v.2</td>
<td>čyάλι</td>
</tr>
<tr>
<td>painted</td>
<td>čyάλβι</td>
</tr>
<tr>
<td>Paipai</td>
<td>ṭά pά·wάmma ၵpά:čα;</td>
</tr>
<tr>
<td></td>
<td>kwέ·βkάya ḋάwάmma</td>
</tr>
<tr>
<td>palate</td>
<td>yά·hνά:na</td>
</tr>
<tr>
<td>pant v.</td>
<td>βσέhςhʔi; βήmʔi</td>
</tr>
<tr>
<td>Papago</td>
<td>thpά·mάya</td>
</tr>
<tr>
<td>paper &lt; papel</td>
<td>papε·lά, kapε·lά</td>
</tr>
<tr>
<td>paper flower</td>
<td>slέ</td>
</tr>
<tr>
<td>part of the back</td>
<td>mάkο·</td>
</tr>
<tr>
<td>pass v.</td>
<td>ṭά·mι</td>
</tr>
<tr>
<td>patch (in a garden)</td>
<td>mάτnύ·qέčα</td>
</tr>
<tr>
<td>patch v.</td>
<td>tʔάmι</td>
</tr>
<tr>
<td>path</td>
<td>ṭnά, ṭά·kύyάrύyά</td>
</tr>
<tr>
<td>peace: no more fighting</td>
<td>ṭcʰwάyκ kyό·(či)</td>
</tr>
<tr>
<td>peach</td>
<td>ṭpάlά (WY, SEY)</td>
</tr>
<tr>
<td>pebble</td>
<td>wi·ʔά·wά</td>
</tr>
<tr>
<td>peek</td>
<td>čkύί·tί; sάʔάrί</td>
</tr>
<tr>
<td>peel</td>
<td>skwά·nί</td>
</tr>
<tr>
<td>peep</td>
<td>čkύί·tί; sάʔάrί</td>
</tr>
<tr>
<td>peel v.</td>
<td>skwά·nί</td>
</tr>
<tr>
<td>penis</td>
<td>mύάr</td>
</tr>
<tr>
<td>crowded with people</td>
<td>pά·tύrί</td>
</tr>
<tr>
<td>English</td>
<td>Ngiya</td>
</tr>
<tr>
<td>-------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>many people</td>
<td>pà·táya</td>
</tr>
<tr>
<td>they drove away the people</td>
<td>pà·wişó</td>
</tr>
<tr>
<td>perfect</td>
<td>sà?rîyi, sà·?rî(hi); ?hâni</td>
</tr>
<tr>
<td>perforate ears</td>
<td>smâlka kūwârî</td>
</tr>
<tr>
<td>person, Indian</td>
<td>?pâ· (sg.), ?pâ·ča (pl.)</td>
</tr>
<tr>
<td></td>
<td>(G.M.), ?pâ: (sg.),</td>
</tr>
<tr>
<td></td>
<td>?pâ:ča (pl.) (W.G.)</td>
</tr>
<tr>
<td>(personifier prefix on</td>
<td>pà·-</td>
</tr>
<tr>
<td>adjective)</td>
<td></td>
</tr>
<tr>
<td>bad person</td>
<td>pà·hânah ?ūmi</td>
</tr>
<tr>
<td>fast person running</td>
<td>pà·(?râwa</td>
</tr>
<tr>
<td>prominent person</td>
<td>pà: mû·l̄a</td>
</tr>
<tr>
<td>rich person</td>
<td>pà·qyâta</td>
</tr>
<tr>
<td>a small person</td>
<td>pà·qê·či</td>
</tr>
<tr>
<td>tall, slender person</td>
<td>pà·kū·lk pōq̃p̃q̃e</td>
</tr>
<tr>
<td>ugly person</td>
<td>tū· pà·lā·yi</td>
</tr>
<tr>
<td>person wishing bad luck</td>
<td>pà·pēhi</td>
</tr>
<tr>
<td>Phoenix</td>
<td>?wâšînka</td>
</tr>
<tr>
<td>phonograph</td>
<td>kʰwàswâ·ri</td>
</tr>
<tr>
<td>pick n.</td>
<td>?kʰwàsâk̃a</td>
</tr>
<tr>
<td>pie &lt; pastel</td>
<td>pasté·la</td>
</tr>
<tr>
<td>pierce</td>
<td>t̄brî, t̄brîya, t̄rûȳ</td>
</tr>
<tr>
<td></td>
<td>smâlka t̄brûyu</td>
</tr>
<tr>
<td>pierce ears</td>
<td></td>
</tr>
<tr>
<td>pig</td>
<td>mhwa kotsâta</td>
</tr>
<tr>
<td>pigeon</td>
<td>sâkwiâta</td>
</tr>
<tr>
<td>little piles of bushes</td>
<td>?wïla ?mâya</td>
</tr>
<tr>
<td>pile up</td>
<td>thm̄é·</td>
</tr>
</tbody>
</table>
pillow  spûki
Pima  thpá:
pine  hwá(:)l
pinenut  ṭkhō, ṭkhōyi
pink  kwâlsé(’)
pink + rust  kwâl2
piñon  ṭkhō, ṭkhōyi
    piñon hills: Prescott  ṭkhōy khôrβa
   Heights
piñon jay  čâsčä’sa
pin up  yâskǎbi
pipe  (?ò)m lhū
pipe stem  ṭøm lhū k?Ir?Irα
pistol  hput.q?ürka
place across  ṭāmī
place of shadow (from
   tree or mountain)
   Pln: reed upright  ṭthâ.kspēβa
place where (suffix)  -čō·
placid  twē
plant v.  kwē·hwâli
plant for hummingbird  hû·čù·račû·ra
plant species  pîlrōβi; čpân; sotât, swtât;
   matqî’s, mtqw’î·sa; ṭwâ·lāpa
plant species: a bush  ṭi·kwâla
plant species (root used
   as medicine)  matqî’s
ocotillo: 'sad plant'
plate
play
play cards
I play the fife
play jokes
play a joke on some people
pleasant
(on vacation) it was very pleasant over there (where I went)
Pleiades
plow n.
plow
plowed land
pluck (plural object) (plural; repetitive action)
pocket
pointed
pointing
poison
poker stick
polish, cf. smooth

?l̃·kmI·yi, ?l̃·kmyē·
khw̃atiirtīra čmāyi; ?khw̃ak?ū:
čmāyi
rē*, rā·yi, ré·bi
tō(·)hūi
lūlūl?īča ??I·wok
tmīli, ttmēli
pā·nītmīli
yā·swārbi
tū· yā·swārbi nōē ??ā·mūkm
?mū
mātstī·ti
mātstī·ti; mānū·stīti
mātstī·tēa
sčō̃; lō·qi
pā·-ū
-i- ~ -y-
?hmāl
qūši; rā̃brāś
sīk?īta, ksīk?īta
?k̃·wē·kmwā·či
čōīli; ṭōshūli
hālčētō
pommel  čáč·kwáya qrwí·sa, čáč·kwáya 
qrwí·sa
ponderosa pine  hwá(:)l
pony: little horse  hάτ̣nyū·ča
popper (in cooking)  thw∅βi
poppy  hάŋqtú'r, hάŋqtú·r
California yellow poppy;  hάŋtú·ra, hάŋqtūra
(Prn)
gold poppy  hάŋtú·r
pop up  βh∅βi
porch: extend  ṭwāshēlβi
porcupine  kə(h)tāta, kətʰāta
pot  swǎ
potato < papa  pά·pa
pottery is broken  mətəiwa ək′y̪βi
pour  (s)péqi; t récup ni
pour on  ktú
prairie  tjog; čyˈː, čʰā:
prairie dog  čáč·či, čǎmčǎ·či
pray  mətqaaˌrəra
pray to God  kβːβi
preacher  myǎ·(k) kβːβmʔè
precipice  pà·kkwˈəwo
precipitous  wi·skːi·βi
pregnant  ???i·li
tiβi
Pin: Prescott
Prescott: brown rock
( granite) pointing
into water
preserve bread
preserve food
prickly pear cactus
prickly pear fruit
prickly poppy
prominent person
proper
Prn given to one too lazy
to walk
Prn. Yavapai culture hero
proud
puddle
pull
pulled out
pulverize
pumpkin
purify with smoke
push
put
put (lay) it into
water!
she puts it away
put arm around

pēska
?wī:k'wāθa ksīkīta
myāl twpū:βi
k'wē:māθa twpū:βi
htē
(?)lāβa
(?)mltāt
pā: mú:1βa
βlwi
khērβa
skārąk?āmča
?حارβč yό:km
syūmi, syūmi, syōmi, syō:mi
khlūwiβa
tmq'α:ni
hāmtē
h'wā(‘)yi
čkvé:, čkē:, čkē:
čē:, čk:wā
hā:ya:1 mči:
?yē? čk:wā:mah nū· (G.N.)
sklpūyi, skrpūyi

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<table>
<thead>
<tr>
<th>Action</th>
<th>Pali/Chinese</th>
</tr>
</thead>
<tbody>
<tr>
<td>put away</td>
<td>pū; čē· (SEY)</td>
</tr>
<tr>
<td>put down</td>
<td>čyō·, čwō·</td>
</tr>
<tr>
<td>put (set) it into water</td>
<td>hā·yā·l mčō</td>
</tr>
<tr>
<td>put into</td>
<td>ečār?i</td>
</tr>
<tr>
<td>put on ground (rug)</td>
<td>sčá·βi, ččá·βi</td>
</tr>
<tr>
<td>put on top</td>
<td>čał·hk čkwā·yi</td>
</tr>
<tr>
<td>put out</td>
<td>tmāči</td>
</tr>
<tr>
<td>put up</td>
<td>sčá</td>
</tr>
<tr>
<td>Word</td>
<td>Pronunciation</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>quail</td>
<td>?hmá</td>
</tr>
<tr>
<td>quake</td>
<td>?in?ín</td>
</tr>
<tr>
<td>quick</td>
<td>wilβi</td>
</tr>
<tr>
<td>be quick</td>
<td>β?ö·q...i</td>
</tr>
<tr>
<td>quiet</td>
<td>tní·βi, ktí·βa</td>
</tr>
<tr>
<td>quiet! (interjection)</td>
<td>nö, tū·?nö</td>
</tr>
<tr>
<td>quiver n.</td>
<td>pàkwIrβčkwäyi</td>
</tr>
<tr>
<td>quiver v.</td>
<td>βlIwlIw?i</td>
</tr>
<tr>
<td>English</td>
<td>Rroma</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>raccoon</td>
<td>n mâθ(a), n mâθ</td>
</tr>
<tr>
<td>radio</td>
<td>mâthāym ?kwâ:wi; mâthāym</td>
</tr>
<tr>
<td>swā'ri</td>
<td></td>
</tr>
<tr>
<td>raid</td>
<td>h'â(·)čpā'</td>
</tr>
<tr>
<td>rain</td>
<td>kîbâwa</td>
</tr>
<tr>
<td>rainbow</td>
<td>k'âsočâča</td>
</tr>
<tr>
<td>raise (one's voice)</td>
<td>əpî:ri</td>
</tr>
<tr>
<td>rake</td>
<td>čmā:li v., tčmâ:li v.;</td>
</tr>
<tr>
<td>ramada</td>
<td>?wâ.shyâlβa</td>
</tr>
<tr>
<td>mountain range</td>
<td>wî·k?â·mβa</td>
</tr>
<tr>
<td>rape</td>
<td>?lwē·num</td>
</tr>
<tr>
<td>rattle</td>
<td>βhâ:, hâč(·)i</td>
</tr>
<tr>
<td>rattles (snake)</td>
<td>βhâ·?iča</td>
</tr>
<tr>
<td>snake rattles</td>
<td>?lwî.βhâ·?iča</td>
</tr>
<tr>
<td>rawhide</td>
<td>q'âktâyú:l</td>
</tr>
<tr>
<td>reach</td>
<td>čpé</td>
</tr>
<tr>
<td>read</td>
<td>sî, sîβi, sî·βi, sî:βi</td>
</tr>
<tr>
<td>real</td>
<td>?hâni</td>
</tr>
<tr>
<td>really + rich; much</td>
<td>qyâti</td>
</tr>
<tr>
<td>recline</td>
<td>yâki</td>
</tr>
<tr>
<td>rectangular</td>
<td>yâlyâl</td>
</tr>
<tr>
<td>red</td>
<td>(?)h'â:ti; k'âlsê(·)</td>
</tr>
<tr>
<td>red dirt</td>
<td>mät?h'â:ta</td>
</tr>
<tr>
<td>red clay</td>
<td>(?)k'âra</td>
</tr>
<tr>
<td>Term</td>
<td>Meaning</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>reddish</td>
<td>k'val₂</td>
</tr>
<tr>
<td>red or fire ant</td>
<td>čmyul</td>
</tr>
<tr>
<td>reed</td>
<td>ṭhtá, ṭhá</td>
</tr>
<tr>
<td>reins</td>
<td>ṭḥät syōmi, syō·mi</td>
</tr>
<tr>
<td>relative</td>
<td>tyúči, tyú·či</td>
</tr>
<tr>
<td>remove</td>
<td>ló(·)qi</td>
</tr>
<tr>
<td>repair</td>
<td>i(·)hā(·)ni</td>
</tr>
<tr>
<td>repeatedly scratching</td>
<td>ṭč?čéu·li</td>
</tr>
<tr>
<td>responsible</td>
<td>yá...pá(·βi)</td>
</tr>
<tr>
<td>you are responsible</td>
<td>mātβa yá·mpá:βk</td>
</tr>
<tr>
<td>for the earth</td>
<td></td>
</tr>
<tr>
<td>rest</td>
<td>tní·βi; twi·mi</td>
</tr>
<tr>
<td>restaurant</td>
<td>ṭčmáčò</td>
</tr>
<tr>
<td>revenge</td>
<td>čhāri</td>
</tr>
<tr>
<td>rib</td>
<td>čβsó·, čwsó· (SEX)</td>
</tr>
<tr>
<td>rich</td>
<td>pā·?čkwí·ya</td>
</tr>
<tr>
<td>rich person</td>
<td>pā·qyata</td>
</tr>
<tr>
<td>ridge</td>
<td>k?āmβa; wi·km?érβa;</td>
</tr>
<tr>
<td>ridge of rocks</td>
<td>wi·čålê·la?e; wi·čålca·lle</td>
</tr>
<tr>
<td>rifle</td>
<td>kwáœ, qqwâœ</td>
</tr>
<tr>
<td>right</td>
<td>k?hāna; blví</td>
</tr>
<tr>
<td>right hand</td>
<td>sàlk?hāni</td>
</tr>
<tr>
<td>right side</td>
<td>sàlk?hāni, sàlkhāna, sàlkhânō</td>
</tr>
<tr>
<td>get on the right side</td>
<td>sàlkhânō mčkpä·</td>
</tr>
<tr>
<td>ring</td>
<td>sàltâhkâβi</td>
</tr>
<tr>
<td>rip</td>
<td>títí</td>
</tr>
</tbody>
</table>

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rip cloth
ripe
ripened and dried by the sun
it ripples
rise (bread)
rise (sun)
rises
river
river narrows
road
road runner
toast
rock n.
light rock
many rocks
rock for building
Prescott: brown rock (granite) pointing into water
ridge of rocks
rock v.
rock back and forth
rocking chair: back and forth
rock music: make instrument cry
<table>
<thead>
<tr>
<th>English Word</th>
<th>Fula Word</th>
</tr>
</thead>
<tbody>
<tr>
<td>roll v.t.</td>
<td>tmkwiri</td>
</tr>
<tr>
<td>rolled up</td>
<td>kwirba</td>
</tr>
<tr>
<td>rolled up: cigarette</td>
<td>mkwirbì</td>
</tr>
<tr>
<td>roll-your-own's</td>
<td>?á:ba ?hmali yō:ča</td>
</tr>
<tr>
<td>roll call</td>
<td>pà:?sì:tk</td>
</tr>
<tr>
<td>roof</td>
<td>ča:he, ča:he</td>
</tr>
<tr>
<td>rooster's sound</td>
<td>kakāra</td>
</tr>
<tr>
<td>root</td>
<td>??li:msmá:, cf. sinew, sleep, msmá: cf. medicine</td>
</tr>
<tr>
<td>rope n.</td>
<td>snába</td>
</tr>
<tr>
<td>rope v.</td>
<td>snába nyà:ki</td>
</tr>
<tr>
<td>rope made of cowhide</td>
<td>yû:l</td>
</tr>
<tr>
<td>rough sides (Pln)</td>
<td>k?íla</td>
</tr>
<tr>
<td>round</td>
<td>k?úlki, gr?úrqì</td>
</tr>
<tr>
<td>round + beads</td>
<td>k?úlki</td>
</tr>
<tr>
<td>round, bowl-like back</td>
<td>če:të:bi</td>
</tr>
<tr>
<td>round (marbles)</td>
<td>që?:òri</td>
</tr>
<tr>
<td>round (watermelon)</td>
<td>që?:ò:li</td>
</tr>
<tr>
<td>rub (an arm)</td>
<td>thàn:hà:ni</td>
</tr>
<tr>
<td>rub back and forth</td>
<td>hqìsqì:s</td>
</tr>
<tr>
<td>rub hard against</td>
<td>qìrqìri</td>
</tr>
<tr>
<td>rub in circles</td>
<td>čmàrmàri</td>
</tr>
<tr>
<td>rub straight</td>
<td>čyùtì, čchéù:ti</td>
</tr>
<tr>
<td>ruler</td>
<td>hwà:lràpa čép̣lı:i &lt; lwì</td>
</tr>
<tr>
<td>run</td>
<td>įyāmi</td>
</tr>
<tr>
<td>fast person running</td>
<td>pà:?(?)ràwa</td>
</tr>
<tr>
<td>it's rusty</td>
<td>nìkwàỵk ?hwāti</td>
</tr>
</tbody>
</table>
sack
sacred
sad
ocotillo: sad plant
saddle
saddle blanket
saguaro (cactus)
said by younger children to older ones (SEY)
salt
Salt River
salty
same
same, cf. right
sand
sand sinking to the bottom
sandals
San Francisco Peaks
sap
sated
satisfied
say

?hmál
sà?rāni; sà?rīyi, sà?rī(yi)
mōlyībi, mōl?ēyībi, mōl?ē....yi.
?i·kmī·yi, ?i·kmyē·
čàčkwā·yi, čàčkwāya
čpē·bi čàčkwā·yi
??ā
?nō· (sg.), ?nō·ča (pl.)
?ō·
?hák(a?)nàča
?ō·yi; ?ēli, t?ēli
βlwi·bi
nūβlwī
(?)hāčwā
hāčwā·nč hāyá·l yómkm
nhnō.kyû·la
wi:mūn.kwā
nāya
tō·, čskwá
kpā·r̩a
?i(·), ??i (I say), mī (you say), ?i (one says)
<table>
<thead>
<tr>
<th>English</th>
<th>Guimaro</th>
</tr>
</thead>
<tbody>
<tr>
<td>I'm just saying that</td>
<td>tú· yá ??ím</td>
</tr>
<tr>
<td>say it!</td>
<td>mí·ha</td>
</tr>
<tr>
<td>say it again!</td>
<td>mīyī</td>
</tr>
<tr>
<td>say yes!</td>
<td>?ē·mī</td>
</tr>
<tr>
<td>scalp n.</td>
<td>qwáwa</td>
</tr>
<tr>
<td>scar</td>
<td>myáya</td>
</tr>
<tr>
<td>scared</td>
<td>βhörī...i</td>
</tr>
<tr>
<td>scatter</td>
<td>čwâ·qi; čwâ·wi</td>
</tr>
<tr>
<td>scissors</td>
<td>kʰwâčmňâyi (G.M.); kʰwâčpâyi</td>
</tr>
<tr>
<td>(W.G.)</td>
<td></td>
</tr>
<tr>
<td>scold</td>
<td>wà...mī·</td>
</tr>
<tr>
<td>scoop</td>
<td>hnu, hńó; hńári</td>
</tr>
<tr>
<td>scoop out</td>
<td>hńó; hńỳi</td>
</tr>
<tr>
<td>scooped-out white: Pln</td>
<td>sâbkhľúyβa</td>
</tr>
<tr>
<td>scoop up</td>
<td>nē·</td>
</tr>
<tr>
<td>scorpion: out of shape</td>
<td>nîs.tkwałka, nî·s.tkwałka</td>
</tr>
<tr>
<td>scout</td>
<td>màtβó</td>
</tr>
<tr>
<td>scout &lt; Spanish soldado</td>
<td>sultá:βa, sultá:wa (SEY)</td>
</tr>
<tr>
<td>scrape</td>
<td>i·khí; hâβī</td>
</tr>
<tr>
<td>scrape (hair off deerskin)</td>
<td>swî</td>
</tr>
<tr>
<td>scratch, cf. itch</td>
<td>(t)tmó·</td>
</tr>
<tr>
<td>scream for help</td>
<td>βqlá·, βqlá· qlâ·?í</td>
</tr>
<tr>
<td>search</td>
<td>hńá·li, wâ·li</td>
</tr>
<tr>
<td>blue-green seashell</td>
<td>hàlkrâ:pa</td>
</tr>
<tr>
<td>seashore</td>
<td>hâtáya kyâka</td>
</tr>
<tr>
<td>season</td>
<td>hwâ·hm</td>
</tr>
<tr>
<td>seat</td>
<td>wâyi</td>
</tr>
</tbody>
</table>
one second
see
I see a man
I saw him
seed
sell
semen
send away
send toward speaker
separate (nuts from leaves)
separate seed
sermon
set (sun)
set down
settle
settle, settled
settle (as coffee grounds)
sew
shadow
shake
shake (a blanket)
shake to make something
sit properly
sharp
sharp; intelligent
sharp, cracking noise
shatter

pà·tkāpha wilįk ?sî·ti
?ǘ·
pà·humî ??ǘ·(k?yûm) (W.G.)
neâ? ??ǘ·k?yûn (W.G.)
yâč
sâʔâ·ri
(β)mné·; mnâya
čyâ·mi
čyû·wi
hâmèî
čbû·yi
pâ·kwâ:wo
ró·pi
čyó, čwó
n♠ãti
tnî·bi
θhwi·la
bnâmi, bnâ·m...l; ?cškwi·li
?sé, ?sá·ya; tkbšá(·)
č?ln?f·ni, ?ìn?ln
čtîpî·bi
wîlwi·li
q′iri
pâri
pâqpaq
θkva·yi, q′aği, k′aκi
shave
shawl
shawl < tāpalo
shed v.
sheep
shell v.
shield
shine

shining
shirt
shoe
shoe a horse
shoe string
shoot
shore
opposite shore
short
I am short
shoulder (blade)
shout
shovel
shoves quickly

thwaːri; čf'ri; hâθ̣i
slām
tāːplè
θpī'li
?mū
tpā; shwâ'ni
kōbkō•bi; kkēkō•bi
pā•; hâl+
hâlä•ē
yûri
nhrō; nhrū
?qhât nhrōyo
q'^áktä yû•l
k'yä'
?qhâ.ktyûw(i)βa
?qhâ.hkē•βa
čkro’ti
nač pâ•čkro’tkm
slmäka
qâši; βčâ•...l, βčâ•r•...l
(at greater distance),
βčâ•r•...l (at even greater
distance)
mâtsâpēyi n., mâtsâpē'yi v.;
mät hnū v.; mâtshyûki n.

?mât ?hnū
sqâmi
<table>
<thead>
<tr>
<th>Term</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>show</td>
<td>wíwò</td>
</tr>
<tr>
<td>come and show</td>
<td>myúwk mwí·wò</td>
</tr>
<tr>
<td>show v.t.</td>
<td>t?ū·bi (sg.), t?ū·bäi (pl.)</td>
</tr>
<tr>
<td>shut</td>
<td>t?âmäa</td>
</tr>
<tr>
<td>shut eyes</td>
<td>ṭpáqbi</td>
</tr>
<tr>
<td>shut up!</td>
<td>mñaθki</td>
</tr>
<tr>
<td>elder sibling</td>
<td>wāka (sg.), wá·ka (pl.)</td>
</tr>
<tr>
<td>sick</td>
<td>ṭčrâbi</td>
</tr>
<tr>
<td>sickness</td>
<td>ṭčhnúba, ṭčhnóba</td>
</tr>
<tr>
<td>side</td>
<td>qnwí·</td>
</tr>
<tr>
<td>sides almost come together</td>
<td>wi·ktkúpa</td>
</tr>
<tr>
<td>(at the) side of mountain</td>
<td>wi·hohä·hm</td>
</tr>
<tr>
<td>sift</td>
<td>čpû·yi; čθâč?i; hâmmśf, hâmðí</td>
</tr>
<tr>
<td>be silent</td>
<td>náθki</td>
</tr>
<tr>
<td>silver</td>
<td>wí·nmsäba</td>
</tr>
<tr>
<td>sinew, cf. medicine, root</td>
<td>msmá:, miśmy·</td>
</tr>
<tr>
<td>sing</td>
<td>swá·ri</td>
</tr>
<tr>
<td>sink into the water</td>
<td>ṭhâ·bì ró·pi</td>
</tr>
<tr>
<td>(elder) sister (man speaking)</td>
<td>čmsí</td>
</tr>
<tr>
<td>mother's younger sister</td>
<td>míra, nmí; nō·, nō·ča (pl.)</td>
</tr>
<tr>
<td>mother's older sister</td>
<td>wísa (sg.), wí·sa (pl.)</td>
</tr>
<tr>
<td>sit</td>
<td>tńē·bi; βná(·)ñ?i; wá</td>
</tr>
<tr>
<td>I'm going to sit here</td>
<td>yák ?wāha βnū·km, yák/ŋθák</td>
</tr>
<tr>
<td>I'm just sitting here</td>
<td>?wā ?nū:</td>
</tr>
<tr>
<td>waiting</td>
<td>tū· ?sṭóš (ŋ)źák ?wâ·km</td>
</tr>
</tbody>
</table>
many sitting
situated (found in Plns)
six, cf. lean
skewer
skin
skirt
skirt of squaw dress
skull
Skull Valley
skunk
sky
sleep
I want to go to sleep
sleeve
slender
long ago you were slender
slender (like a rope)
slide down
slight rise in land
the slim one (Prn)
slippery
slow
small ditch
(small) level field
small opening
a small person

?wā?yô
kwā·ha
tspē, tspâya
s?ōni
θpîla; má:t; ńmíya
βhé
θČcqβa, tČcqβa
pā'hu·
pā'qwa wa kyō
kh'íwâ; sâkmâka, sκmâka
myā·.khtî·lα
smá:, smâ·
?smâ:?k'ál
θurî:
pòqpóq
tú· mpöqpóq qnimâ·
mēra
βhērhēr?î
kṇâna
pâ'kpöqpóqa
kkîski
hīθū·li
kčulkî; qyûrqi
tnâ·kβa
θβrîya
pâ'qê·či

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<table>
<thead>
<tr>
<th>English Word</th>
<th>Tamil Word</th>
</tr>
</thead>
<tbody>
<tr>
<td>smallpox</td>
<td>ḍh‘āṇi</td>
</tr>
<tr>
<td>(s)mash</td>
<td>sṟyōqi</td>
</tr>
<tr>
<td>smear</td>
<td>ḍhāṇi</td>
</tr>
<tr>
<td>smear meat</td>
<td>q‘ākta ḍhāṇi</td>
</tr>
<tr>
<td>smell v.i.</td>
<td>sāhi, śāhi</td>
</tr>
<tr>
<td>smell v.t.</td>
<td>ḍh‘ī</td>
</tr>
<tr>
<td>smell like cold blood, grease, or wet hair</td>
<td>msūwi</td>
</tr>
<tr>
<td>smells bad</td>
<td>q‘ēpi ḍmā:kwē·ʔi</td>
</tr>
<tr>
<td>smile</td>
<td>ḍckwā:r...l</td>
</tr>
<tr>
<td>smoke</td>
<td>ḍh‘āya</td>
</tr>
<tr>
<td>smoke v.t.</td>
<td>tk‘wāɾi</td>
</tr>
<tr>
<td>they smoke a pipe</td>
<td>ḍmhĪ·ʔū·ʔa tk‘wāɾči</td>
</tr>
<tr>
<td>smoke hole</td>
<td>ḍh‘ā(·)yēʔāl?ːʔ; ḍh‘āyammō</td>
</tr>
<tr>
<td>smooth; naked</td>
<td>ḍhāl‘wāɾi</td>
</tr>
<tr>
<td>smooth cliff + Four Peaks</td>
<td>wi·kčāsa</td>
</tr>
<tr>
<td>smother</td>
<td>yā:βa twāmī</td>
</tr>
<tr>
<td>snake</td>
<td>ḍl‘wī</td>
</tr>
<tr>
<td>snapped shut</td>
<td>ṭtāḇsīk</td>
</tr>
<tr>
<td>sneeze</td>
<td>ḍamčīθķi, ḍamčī(·)θķi</td>
</tr>
<tr>
<td>snore</td>
<td>smlōhi, smlō·hi</td>
</tr>
<tr>
<td>he doesn't snore</td>
<td>ṭūč βkē smlōha ṭūmkm</td>
</tr>
<tr>
<td>snot, nasal mucus</td>
<td>ḍamθī(ː)la</td>
</tr>
<tr>
<td>snow</td>
<td>pākka</td>
</tr>
<tr>
<td>that is so</td>
<td>ṭēmī</td>
</tr>
<tr>
<td>sock</td>
<td>ṁhrō yāː1 ṭīnṛi</td>
</tr>
<tr>
<td>wear socks</td>
<td>ṭā·1 ṭīnṛi</td>
</tr>
</tbody>
</table>
soda
soft
soft: "when you touch it, it goes in"
soften (buckskin)
soften ground
soldier < Spanish soldado
some other time
something
something dead (a lump from a bite)
something which shoots +
gun, rifle
son
son (man speaking)
son's child
father's brother's son
soon
sore n.
my read end is sore
be sorrowful
sorry
sotol, cf. poppy
soul

th'ōβi tmyū·li
θū:nβî; hâmēî
βθk'wâ:mk'wâ:m?î,
βθk'wâ:mk'wâ·m...î
k'wînči
(?:) ʔi·pû·, ʔʔl:γû·
sultá:βa, sultá:wa (SEY)
kâβyû·čm
ʔk'wē·
βhmá(·)mk?î
hpú
humē (sg.), hučmâya (pl.),
homē·ča (pl.)
na?køra, ?kúra, kóřè?
(vocative)
ʔēwa (sg.), ?â·wa (pl.)
mī·ka
ʔi·nka
lē·qβa
klmâ: lē·qβi, cf. klmē:
wâmyē·
mòlyîβi, mòl?èyîβi,
mâl ?è·...yî·
ʔγnû·ra
syãpē·βî

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<table>
<thead>
<tr>
<th>English Word</th>
<th>Bantu-English Transliteration</th>
</tr>
</thead>
<tbody>
<tr>
<td>soup</td>
<td>qwäktə ŋháya</td>
</tr>
<tr>
<td>soupy (thick liquid with something in it)</td>
<td>lǐ·pi, lì·pi</td>
</tr>
<tr>
<td>sour</td>
<td>əʔèli, təʔèli</td>
</tr>
<tr>
<td>sour + orange</td>
<td>əʔèla</td>
</tr>
<tr>
<td>source</td>
<td>hàpáqa</td>
</tr>
<tr>
<td>sow seed</td>
<td>kwà·yāč hwàlí</td>
</tr>
<tr>
<td>sparks from lightning</td>
<td>βràβráβ?i, wráβi</td>
</tr>
<tr>
<td>speak</td>
<td>kwà·wi, kwà·wí</td>
</tr>
<tr>
<td>he's speaking unpleasantly</td>
<td>hnū·βo kwà·wíkm</td>
</tr>
<tr>
<td>you (pl.) may speak.</td>
<td>māčβči mkwà:wča (W.G.)</td>
</tr>
<tr>
<td>it's your turn to speak.</td>
<td></td>
</tr>
<tr>
<td>speak angrily</td>
<td>kwà·w hnū(km)</td>
</tr>
<tr>
<td>are you (dual) speaking?</td>
<td>mčkwà:wβé</td>
</tr>
<tr>
<td>spend</td>
<td>wí·ri</td>
</tr>
<tr>
<td>spicy</td>
<td>tē·qi, ŋhā·, ŋhā:ki</td>
</tr>
<tr>
<td>spider</td>
<td>ni·sa, nǐ(:)s?sa (G.M.);</td>
</tr>
<tr>
<td></td>
<td>màtkrwé· (W.G.)</td>
</tr>
<tr>
<td>spinal column</td>
<td>sílòka</td>
</tr>
<tr>
<td>spine</td>
<td>hitát (G.M.), hi·tʰát (W.G.)</td>
</tr>
<tr>
<td>spinning</td>
<td>kwǐrkvir</td>
</tr>
<tr>
<td>spirit</td>
<td>myē, mïyi</td>
</tr>
<tr>
<td>spit</td>
<td>čtūhi, hàcțúhi</td>
</tr>
<tr>
<td>splash</td>
<td>cāmčāki</td>
</tr>
<tr>
<td>spleen</td>
<td>čmwâ·θa</td>
</tr>
<tr>
<td>English Word</td>
<td>Definition</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>split</td>
<td>tká·βi; čípā, čpʰā; sčdqi</td>
</tr>
<tr>
<td>split open v.i.</td>
<td>tágβi</td>
</tr>
<tr>
<td>spoiling</td>
<td>tʔéli</td>
</tr>
<tr>
<td>spoon</td>
<td>kʰwʰαčáyi; kʰwʰαčmáyi</td>
</tr>
<tr>
<td>spot v.</td>
<td>súri</td>
</tr>
<tr>
<td>spotted</td>
<td>nú(·)ri</td>
</tr>
<tr>
<td>spotless</td>
<td>tθâmi</td>
</tr>
<tr>
<td>spread</td>
<td>tʔi</td>
</tr>
<tr>
<td>spreading</td>
<td>yàréyář</td>
</tr>
<tr>
<td>spring</td>
<td>hàpáqa</td>
</tr>
<tr>
<td>hot springs</td>
<td>hàkmwê</td>
</tr>
<tr>
<td>springtime</td>
<td>mwê·mi, mwê·mʔi</td>
</tr>
<tr>
<td>spring up</td>
<td>βrI·tʔi, βrIti</td>
</tr>
<tr>
<td>sprinkle</td>
<td>čáčǎ·či, čám sǔ·si</td>
</tr>
<tr>
<td>sprout</td>
<td>pǎqi, tpǎqi; čpǎ, čpǎ·</td>
</tr>
<tr>
<td>spurs: little kicks</td>
<td>?hátqqámi</td>
</tr>
<tr>
<td>spy n.</td>
<td>màtβó</td>
</tr>
<tr>
<td>squash</td>
<td>sčyőqi v., lēqi v.</td>
</tr>
<tr>
<td>squash v.</td>
<td>hamtē</td>
</tr>
<tr>
<td>squeak, squeal</td>
<td>tsl-tsí</td>
</tr>
<tr>
<td>squeeze</td>
<td>ʔkʰtʔi</td>
</tr>
<tr>
<td>squint</td>
<td>ʔβrIrβi</td>
</tr>
<tr>
<td>squirrel</td>
<td>hmíra</td>
</tr>
<tr>
<td>squirt</td>
<td>βsű·βi ?I·wo</td>
</tr>
<tr>
<td>I'm squirting something</td>
<td>βsű·βi ?I·wo</td>
</tr>
<tr>
<td>squirted on</td>
<td>čàčáčʔi</td>
</tr>
<tr>
<td>stab, cf. shove</td>
<td>βqámi</td>
</tr>
</tbody>
</table>
stacked: on top of one another + book (pages)

stagnant

stagnant: not flowing

stand object against

stand up

stand up

star

stay

stay overnight

steal

steam

steep

stem (on pipe)

step down

step into (trousers)

step it up!

step on

stick v.

stick in

stick out tongue

sticks up

sticky

it's sticky

still

still (water)
sting v.  sá
stinger  pà·sáyi
stingy  và...hǎbi, čwàhǎba
stink  sáhi, šáhi
stink bug  čknána, čqnána
stir  sq'ár?i; swáni
stirred up (+ diarrhea)  sq'ár?i, sq'á:r(?i)
stirrups  kní·li
stomach  thkò·, tk'hò·, təko·; bñúna
           (W.G.), mnû(·)na (G.M.)
stop!  t?ìni; ?í?, ?ɪ (interjection)
stop it!  mt?ìni
stop up  t?əmi
store  ?ćkhe·čô; sà?â(·)ra
storm: wind is strong  màthá·yc ṭipIrβi
story  ?k'wè·knâ·βča
straight  čmlrmíri, mlrmíri
straightedge  hwà:lrāpa ččβlįyi < lwí
straight line  kqI(·)βa
stranger  ?pà·hkâ:ya (G.M.), pà·hkäya,
           pà:kʰâya (W.G.)
stream  (?hà(k)hé(·)la
strengthen  ṭpi·rbi, ṭipí·rβi
stretch v.  k'wíwi
strike  (pà·)pěqi; ?â·βi
        strike with a club  ??I:βm pà· ?h·βči, ??I:βm
        pà·?ã·βči
strike
  enemy strikes
string
striped skunk
strong
  he's strong
  they are strong
stubborn, going one's own way, like a bouncing ball
stupid
stutter (cannot speak)
suck
suck blood
sugar
commit suicide
summer
  (?)nà·(?)rū·yi, ?nà:?rūyi,
    ?nā·βm rū·yi, nà:rū·yi
summit
sun
  sun is shining
  one is burnt by the sun
sunlight
sun-up
sun rising
east: sun comes out
watch, clock: sun ticking
sun rises slowly
sun is hot
day: sun sits
sundown
Sunday
sunflower
Superstition Mountain
surprised
jump in surprise
survey
surveyor
suspect
I suspect
suspended (fig.) -> pleasant
swaddled
swallow
soap swallower
swallow water
swap
swarm of bees
swayback
sweat
I'm sweating
sweep
sweet

nà:βtâotáʔiča
nā:(ē)β?â:li
nā:βč ?rū·yi
nā:wa
nà·mârβi, nà·βmârβi; ?nà·r̕opi
?wà·s?âmi
(ʔ)qáta
wi·kčsāwa
β̕r̕ɪ·ʔlcí
β̕r̕iyʔi
ččβl̕či
ʔmáttččβl̕ča
ʔj̕r̕í·
nnú ʔj̕r̕í·km
yà·swârβi
kʷárβčkm
nâl̕gi
ʔβ̕o·n čn̕ǎl̕qa
ʔhà nâl̕qʔó
tɪβ̕ahk̕έ·βi
θmp̕o·k̕ułka
wàθ̕eqma
nʔó
nʔəkkva
sčí
myú:li
<table>
<thead>
<tr>
<th>English</th>
<th>Yucatec</th>
</tr>
</thead>
<tbody>
<tr>
<td>sweeten</td>
<td>tmyů́·li</td>
</tr>
<tr>
<td>sweet mixture</td>
<td>thlî(·)βa</td>
</tr>
<tr>
<td>swell</td>
<td>?ā·li</td>
</tr>
<tr>
<td>swell up</td>
<td>βhmá(·)mk?i, β(h)má(·)mk?i</td>
</tr>
<tr>
<td>swim</td>
<td>?hà...epū'yi, ?hàčâ·bk yāki, ?hàčâ·bk yāki</td>
</tr>
<tr>
<td>many swim</td>
<td>pà·lâ·wk ?hàepū:yi</td>
</tr>
<tr>
<td>swing</td>
<td>ċwâyi, ċwâ(·)yβi; qōri</td>
</tr>
<tr>
<td>swing in hand</td>
<td>hwî·si</td>
</tr>
<tr>
<td>swollen</td>
<td>?ā·li</td>
</tr>
<tr>
<td>sycamore</td>
<td>?î·tâ·sa</td>
</tr>
</tbody>
</table>

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table
the bread is on the table

tail

take

take apart
takes apart and throws away
take apart (in order to do again)
take the bad away from me!
take care
take care of
take off your clothes!
take out
take out (many horses)
talk
tall
tall, slender person
tame
taraiso
tarantula
tasteless (like water)
tasty

kwè·shyâra; ??í·shyârša
??í·shyârša myâla čä·nk wäkm

bēhē
yó3
nî·mi
nî·mk yûk wîmi

spûmi

kwè·qâēbha pà·mtyē·mo
hî·sî
wê
mwîbi mhrûyi
côâli
čûlwâ·qi
kwâ·wi, kwâ·wi
hmî
pâ·kû·lk pôqpôq?i
ihâ·ni; nîâ·mi, nîâ·mi
čmîho(·)ša
mpû·k1?ût
θâ·mi
mënë, mûâya

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legs are taut

teach by doing

teach by saying

I'm teaching him to

speak

tear v.

tease

teddybear cholla
tell

temple (part of face)
ten
tender (body, corn)
tent
termite
testicles

thankful

thank you

we thank you

Thanksgiving

that

that's all for now

that is so

that one

it's that way, that's the

way it is

there

snā'pa kphnā'bk nāli

wīwo

?iwō

kwā'w ?iwo'k

ti'ti

črū'yi

hū'úli

knā'bi

qnwī'

βwā'bi

β(ə)hā:wi

kskē'βa ?wā

?omčāq

hmā, hmā', hāmā:, hāmā'ya,

wāhmā (SEY)

r...yē(')

?ārā?yē'km

?ārā?yā'ikm

?yā's ōići kwā'hm

nē'--; nū--

nūlwiθm ?nō ?pīra

nūbyû

nūnū-

nūbyû

nēʔ?; nē'uk; nē'āl, θāl, hāl
<p>| over there                  | nθē? (G.M.), nul (ŋ)βē?        |
| the one over there         | nwē?                           |
| thermos bottle             | hàčáyi                         |
| they (pronoun)             | nθâčβ-                         |
| thick                      | tİni; ??ē, ??áyi (pl.)         |
| thick feet                 | mİtİna                         |
| thief                      | ?čköİβa                        |
| thigh                      | hi·wil                         |
| thin                       | θēqi                          |
| thing                      | kwē·ŋb                         |
| thingamajig                | ?kwē·yi                        |
| think                      | wà·...sî·βi, cf. count, read;  |
|                           | tÎ; nāsî                       |
| third-born                 | pà·βâkpēβk                     |
| thirsty                    | yà(·)krú(·)mpî, hέβmpî (SEY)  |
| are you thirsty?           | yâmrûβē?                      |
| this                       | βyá--; ŋβā-                    |
| thorn                      | tât                           |
| thorny                     | ?tâthâ                        |
| thousand                   | əâ(·)wβa                      |
| thrash                     | tkwâni                        |
| thread &lt; hilo              | ??i:la                         |
| three                      | hmûki                         |
| throat                     | nâlqčō-                       |
| throw away                 | wîmi                          |
| throw down (a log)         | h'îlmi                         |
| throw                      | tâ·βk &lt; tâhêk                  |</p>
<table>
<thead>
<tr>
<th>English</th>
<th>Amharic</th>
</tr>
</thead>
<tbody>
<tr>
<td>throw toward speaker</td>
<td>táhki</td>
</tr>
<tr>
<td>throw from speaker</td>
<td>táhmi</td>
</tr>
<tr>
<td>throwing out rays</td>
<td>qwàepí· ?íkl</td>
</tr>
<tr>
<td>thrown away + garbage</td>
<td>ðçăm?è</td>
</tr>
<tr>
<td>thumb</td>
<td>sàlkštē<code>, sàlkotē</code> (SEY)</td>
</tr>
<tr>
<td>Thumb Butte</td>
<td>wi:kyânyâna</td>
</tr>
<tr>
<td>thunder sounds</td>
<td>ð?ū·k, ð?ū:ð?ū:ðík, ð?ū·ðū·ík</td>
</tr>
<tr>
<td>tick n.</td>
<td>hätmača</td>
</tr>
<tr>
<td>tickle</td>
<td>qočqočča, qočqoč čä</td>
</tr>
<tr>
<td>tickles v.i.</td>
<td>ðùríèú·ri</td>
</tr>
<tr>
<td>tie</td>
<td>tiri; ðepáli₁, ðepáli, qðpáli</td>
</tr>
<tr>
<td>tie around an object</td>
<td>klkvöbi</td>
</tr>
<tr>
<td>tie around + jail</td>
<td>klkvöyi</td>
</tr>
<tr>
<td>tie up</td>
<td>ðepáli₁, qðpáli</td>
</tr>
<tr>
<td>tight</td>
<td>ðpáhi</td>
</tr>
<tr>
<td>tighten</td>
<td>ðpáñài, kññâìi; snâìi</td>
</tr>
<tr>
<td>till</td>
<td>(mât)ñû·</td>
</tr>
<tr>
<td>time, season</td>
<td>kwâ·hm</td>
</tr>
<tr>
<td>time moves</td>
<td>hihûli</td>
</tr>
<tr>
<td>what time is it?</td>
<td>ñâ:kašlwi yi</td>
</tr>
<tr>
<td>tire n, cf. walk</td>
<td>ðöyi</td>
</tr>
<tr>
<td>tired</td>
<td>tlâshi, ðlâh?l; ðpí·</td>
</tr>
<tr>
<td>I'm tired</td>
<td>ðlâha?l</td>
</tr>
<tr>
<td>he's tired</td>
<td>ðñũč ðpí(·)km</td>
</tr>
<tr>
<td>he's tired from chopping wood</td>
<td>ðñũč ðčkátk ðpí·km</td>
</tr>
<tr>
<td>toast: browned bread</td>
<td>myâltg?qwâ· øßâa</td>
</tr>
</tbody>
</table>
tobacco

today

it's cold today

it's hot today

give us bread today

toe

toes: small things sticking out

tomato < tomate

tombstone

tomorrow

tongue

tonight

Tonto: dirty-eyed enemy

too much

tooth

top

hilltop

big, flat top

on top

handkerchief on top: John

Charger (folk etymology)

put on top

water thrown on top

tortilla

touch

?ű:βa

(?)nâ:βm

nâ:βm mûni

nâ:βm ?rû:yi

nâ:βm myâla pà:m?ē

miheâ:ča, miheîi:ča (pl.)
miksâ:řβa

tomá:ta

pá:ří spûk wó(k) sčá:βa

nyé:k këθ, yë:kol

hmîpâl (G.M.), hipâl (W.G.)

kihipâ:čm

?qhâayâqâya

tkwâlβi

yó:4

t?óřβa; čâ:he; hörβa

mâthô:řβa, mâthôrhôra

yâlyâl, yâl?yâl

čâ:he, čâ:βk, čâ:hk, čâ:ne

?pâp čâčâ:či

čâ:hk čkwâ:yi

?hâkča:čβa

myâ(·)lořâprâ:pa

tpâθi
<table>
<thead>
<tr>
<th>English</th>
<th>Tlingit</th>
</tr>
</thead>
<tbody>
<tr>
<td>toward</td>
<td>yími</td>
</tr>
<tr>
<td>he's going toward it</td>
<td>n̓ ̓eÁ y̓ ̓imk yá̓ ·mk</td>
</tr>
<tr>
<td>toy</td>
<td>kw̓ e·rë́, ?kw̓ èrë́ya</td>
</tr>
<tr>
<td>trachea</td>
<td>mlq̓ n̓ màth̓ y yâ̓ ·m?̓ ō</td>
</tr>
<tr>
<td>track</td>
<td>y̓ u̓ wō</td>
</tr>
<tr>
<td>track v.</td>
<td>mis̓ î</td>
</tr>
<tr>
<td>small trail</td>
<td>nà·krūyrûya</td>
</tr>
<tr>
<td>trail v.</td>
<td>mis̓ î</td>
</tr>
<tr>
<td>transparent</td>
<td>sōlsōli</td>
</tr>
<tr>
<td>transplant</td>
<td>k̓ w̓ yū̓ čk h̓ w̓ āli</td>
</tr>
<tr>
<td>+ transplant, checkers</td>
<td>th̓ í̓ n̓ i</td>
</tr>
<tr>
<td>move around</td>
<td></td>
</tr>
<tr>
<td>trap</td>
<td>?óni; s?ōni</td>
</tr>
<tr>
<td>trash</td>
<td>kw̓ e·glv̓ a·y̓ ̓əβa β̓ čám?̓ e</td>
</tr>
<tr>
<td>tree</td>
<td>?wíla; ?iwíla; ??í̓ ·</td>
</tr>
<tr>
<td>branch: comes away from</td>
<td>?ì:tβk̓ v̓ āla</td>
</tr>
<tr>
<td>tree</td>
<td>?wâčmîča</td>
</tr>
<tr>
<td>tribe</td>
<td>thkō· (G.M.), tk̓ h̓ ō· (W.G.), tako· (G.N.)</td>
</tr>
<tr>
<td>tripe</td>
<td></td>
</tr>
<tr>
<td>trot</td>
<td>βm̓ ōrm̓ ōr?i</td>
</tr>
<tr>
<td>trousers</td>
<td>mik̓ yūl, mk̓ yūl, mkyūl</td>
</tr>
<tr>
<td>turkey</td>
<td>?yá·s</td>
</tr>
<tr>
<td>turn (car, horse) in motion</td>
<td>sih̓ w̓ í·ni</td>
</tr>
<tr>
<td>turn food in pan</td>
<td>sk̓ w̓ āyi</td>
</tr>
<tr>
<td>turn off</td>
<td>tmâči</td>
</tr>
<tr>
<td>turn off (appliance)</td>
<td>sk̓ w̓ í(·)ni</td>
</tr>
</tbody>
</table>
turn it off!

turn over

turned over

turquoise

turtle

twilight: ground becomes visible

twined

two

two men

two go

two to four in the afternoon

two people passing across (Prn m.)

mskw'ink mtačči
tihw'ini
tihw'inši
khąśsū(w)a
kpit
mátč βʔū·βʔi, mátč βʔū·βi
kwirśa
hwâki
pà·hmí·βm hwâki,
pà·hmí·βm ?hwâki
(a)pē·mi, (a-)pē·mi
nà·βyū·si
ktkā(·)ma, ktkā:ma
<table>
<thead>
<tr>
<th>English Word</th>
<th>Mandarin</th>
</tr>
</thead>
<tbody>
<tr>
<td>ugh!</td>
<td>?lå? (interjection)</td>
</tr>
<tr>
<td>ugly person</td>
<td>tū· pà·lā·yi</td>
</tr>
<tr>
<td>uncertain</td>
<td>tūya, tū·yi</td>
</tr>
<tr>
<td>uncover</td>
<td>čqʷäti</td>
</tr>
<tr>
<td>under</td>
<td>yá·l</td>
</tr>
<tr>
<td>understand</td>
<td>yà...?ö(·)βi</td>
</tr>
<tr>
<td>undo</td>
<td>ló(·)qi</td>
</tr>
<tr>
<td>unfold</td>
<td>hwiřβi</td>
</tr>
<tr>
<td>unsure</td>
<td>tūya, tū·yi</td>
</tr>
<tr>
<td>untamed</td>
<td>wàsIβi</td>
</tr>
<tr>
<td>untie</td>
<td>hrú(·)yi</td>
</tr>
<tr>
<td>upper back</td>
<td>sàlmàka</td>
</tr>
<tr>
<td>upstream</td>
<td>myá·l</td>
</tr>
<tr>
<td>urinate</td>
<td>ɵʊči</td>
</tr>
<tr>
<td>urine</td>
<td>ɵʊ·ča</td>
</tr>
<tr>
<td>use v.</td>
<td>tū· nyú·č(o)k</td>
</tr>
<tr>
<td>use up</td>
<td>wi·ri</td>
</tr>
<tr>
<td>English</td>
<td>Tokwawan</td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>vagina</td>
<td>wé</td>
</tr>
<tr>
<td>valley</td>
<td>màtk'mí'ya</td>
</tr>
<tr>
<td>vegetable</td>
<td>?kwè·hwál.kmáča</td>
</tr>
<tr>
<td>vein</td>
<td>hwát.k̥ura</td>
</tr>
<tr>
<td>Verde Valley</td>
<td>màtk.k̥ámβ̥a</td>
</tr>
<tr>
<td>very</td>
<td>tû·; qyāti</td>
</tr>
<tr>
<td>very far</td>
<td>kūrm</td>
</tr>
<tr>
<td>very lovely</td>
<td>?e'yī·bi</td>
</tr>
<tr>
<td>very much</td>
<td>qyāti</td>
</tr>
<tr>
<td>very round + butte, mesa</td>
<td>yàŋyāŋ</td>
</tr>
<tr>
<td>village</td>
<td>vàyâma</td>
</tr>
<tr>
<td>vinagrillo (plant species)</td>
<td>hmaŋ.kyō</td>
</tr>
<tr>
<td>violin: rub back and forth</td>
<td>hqīsqí·s, k̥wè·hqíshqíς(?)ča</td>
</tr>
<tr>
<td>virgin</td>
<td>hčǎn, hčǎ·ra (pl.) (G.M.),</td>
</tr>
<tr>
<td></td>
<td>hčǎ·ra (pl.) (W.G.)</td>
</tr>
<tr>
<td>visceral sack</td>
<td>mnûna wâyi</td>
</tr>
<tr>
<td>become visible</td>
<td>βʔú·βi</td>
</tr>
<tr>
<td>visit</td>
<td>wàʔâmî (sg.), wàʔâmči (pl.)</td>
</tr>
<tr>
<td>vomit</td>
<td>yóqi</td>
</tr>
</tbody>
</table>
wag
wagon
wait
wait for me!
I'm just sitting here waiting
wait!
walk
I was walking
I got here walking
walking stick (insect)
wall
walnut
walnut spreading: Pln
want
I want to eat
do you want to eat?
I want money
war
warrior
(war) bonnet
warm
wash

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<table>
<thead>
<tr>
<th>English</th>
<th>Yakan</th>
</tr>
</thead>
<tbody>
<tr>
<td>wash repeatedly</td>
<td>?čʔeqú·li</td>
</tr>
<tr>
<td>wash oneself</td>
<td>?hàʔpū·yi</td>
</tr>
<tr>
<td>wash + spotless</td>
<td>tekwí·li</td>
</tr>
<tr>
<td>watch: &quot;sun ticking&quot;</td>
<td>nà:btâ&amp;tât?îča</td>
</tr>
<tr>
<td>water</td>
<td>?hā</td>
</tr>
<tr>
<td>Montezuma Well: water</td>
<td>?hâkʔk'yáβa</td>
</tr>
<tr>
<td>broken up</td>
<td></td>
</tr>
<tr>
<td>water coming out</td>
<td>?hâčʔálka</td>
</tr>
<tr>
<td>water thrown on top</td>
<td>?hâkčá·čβa</td>
</tr>
<tr>
<td>bubbling water (Pln)</td>
<td>?hâkyâ·ča</td>
</tr>
<tr>
<td>crk. near Miller Valley</td>
<td></td>
</tr>
<tr>
<td>good water</td>
<td>?hâʔhâna</td>
</tr>
<tr>
<td>gray water</td>
<td>?hâʔmēʔāβa</td>
</tr>
<tr>
<td>ocean: much water lying</td>
<td>?hâʔtáya kyâk</td>
</tr>
<tr>
<td>salty water</td>
<td>?hâʔtö·i·</td>
</tr>
<tr>
<td>shallow water</td>
<td>?hâhtî:ri</td>
</tr>
<tr>
<td>still water</td>
<td>?hâq&quot;ini, ?hâʔq&quot;ini</td>
</tr>
<tr>
<td>still-water ditch</td>
<td>?hâsqí·ri</td>
</tr>
<tr>
<td>the water is clear</td>
<td>?hâ:βč sólsóli</td>
</tr>
<tr>
<td>the water is deep</td>
<td>?hâ(·βč) ??é</td>
</tr>
<tr>
<td>the water isn't deep</td>
<td>hâ??é ?úmi</td>
</tr>
<tr>
<td>the water is dirty</td>
<td>?hâ:βč ?mâti</td>
</tr>
<tr>
<td>the water is muddy</td>
<td>?hâ·n qnú·km</td>
</tr>
<tr>
<td>the water is placid</td>
<td>?hâ·n tú· òwé·km</td>
</tr>
<tr>
<td>water recedes</td>
<td>?hârú·βkm</td>
</tr>
</tbody>
</table>
the water reflects, cf. smooth
water ripples
the water rises
water is stagnant
I drink water
drink water!
body of water
Date Creek Tolkapayas: cottonwood sticking in the water
dip in water
float; swim (lie on top of the water)
jump into the water
land of water (Pln)
put (lay) it into water!
put (set) it into water!
sink into the water
Chinese: speaking in water
water's edge
waterfall: flowing downward
watermelon
waterpot
watersnake, cf. mēra

slender

wave v. + flag

we (multiple plural)

we (two) go away

we got here

weak

wear clothes

wear socks

weather is nice, no wind

(breeze)

weave

weeds sprout out

weed v.

weed out

one week < domingo

weigh

he weighs a lot

well n.

well-done

west

Western Yavapai

be wet

wetten

what?
what did you see? kwęβəa mʔũʔ?
whatever may happen hàpêya
whatever you say kwè·kâpyũča kâŋmĩwa
what time is it? nã: kâŋlwiąyi
wheel mpára
wheel, cf. walk póyi
when ...kəð(·)
when? kânyümë?
where ñkéʔ; kâβ kũ·čk(ʔ)ẽ (SEy)
which? kwęβəq, (?kwęʔθ
whine ñqañ-commit
whinnies hähãʔi
whip n. qʷäkta yũ·l ñhãt sãqi
whip séqi
whipper (Prn. m.) wäséqma
whirlwind màthikʰ̊ira
whiskey (?hàrâβa
whistle čihũhi
white (n)msápi
whiten tmsâ·βi
white clay or dirt màthẽ:
white oak tŋík
who? ñká
the whole body mã:t hiŋkyēt
my whole body nãmã:t ?iŋyēt,
whooping cough ñ̩h̩ β̩se·rʔiča
<table>
<thead>
<tr>
<th>English</th>
<th>Lom语言</th>
</tr>
</thead>
<tbody>
<tr>
<td>why?</td>
<td>kaβyûm(?)ē?</td>
</tr>
<tr>
<td>wickiup</td>
<td>(ʔ)wàmpûƞβa</td>
</tr>
<tr>
<td>wide</td>
<td>čká’mi; ʔkwa’bi</td>
</tr>
<tr>
<td>wide area</td>
<td>màtk čká’mi; màtk čkà:ma</td>
</tr>
<tr>
<td>wide earth</td>
<td>màtkī(’)la</td>
</tr>
<tr>
<td>wide-spread</td>
<td>màtkheī:la</td>
</tr>
<tr>
<td>widow</td>
<td>ʔsá, ʔsáyi</td>
</tr>
<tr>
<td>wife</td>
<td>lwâ</td>
</tr>
<tr>
<td>wife’s father</td>
<td>ʔlhē ni’</td>
</tr>
<tr>
<td>wife’s mother</td>
<td>qmwí:rmâ ni’</td>
</tr>
<tr>
<td>wild</td>
<td>wàsîβi</td>
</tr>
<tr>
<td>wild boar</td>
<td>ʔlwèi:wa (SEY), mhvá:ksutâta</td>
</tr>
<tr>
<td>willow</td>
<td>ʔyó:, ʔyó’</td>
</tr>
<tr>
<td>win</td>
<td>tkw’f:li; hi:pinβi</td>
</tr>
<tr>
<td>wind n.</td>
<td>màt(:)háya, màthâ:ya, màthâya</td>
</tr>
<tr>
<td>wind is breezy</td>
<td>màthây yû:si</td>
</tr>
<tr>
<td>wind is howling</td>
<td>màthâ’yč yâ:wi</td>
</tr>
<tr>
<td>wind is still</td>
<td>màthâ’yč qw’ini</td>
</tr>
<tr>
<td>storm: wind is strong</td>
<td>màthâ’yč òipírβi</td>
</tr>
<tr>
<td>wind goes X</td>
<td>màthâyč ʔ?u:k</td>
</tr>
<tr>
<td>wind’s sound</td>
<td>ʔ?u:k</td>
</tr>
<tr>
<td>windy</td>
<td>màthè</td>
</tr>
<tr>
<td>weather is nice, no wind</td>
<td>màthâya pë:mi ʔhâni</td>
</tr>
<tr>
<td>window: metal, like water</td>
<td>(ʔ)khvâ sûlsûla ʔhâef’ya,</td>
</tr>
<tr>
<td></td>
<td>(ʔ)khvâ sûlsôla ʔhâef’yi</td>
</tr>
<tr>
<td>English</td>
<td>Balamalker</td>
</tr>
<tr>
<td>------------------</td>
<td>------------</td>
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<tr>
<td>wine</td>
<td>?hà?hwa'ta</td>
</tr>
<tr>
<td>wing</td>
<td>wála</td>
</tr>
<tr>
<td>wink</td>
<td>βmáč(β)...1; epáqβi</td>
</tr>
<tr>
<td>winter</td>
<td>?čhū:ri</td>
</tr>
<tr>
<td>witch doctor</td>
<td>pà'tpúyi</td>
</tr>
<tr>
<td>without ambition</td>
<td>ðu:λíβi</td>
</tr>
<tr>
<td>wolf</td>
<td>(?)hát(?)=k'ila</td>
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<tr>
<td>woman</td>
<td>βqí (sg.), pqí (sg.), βqū:ya (pl.), pqū:ya (pl.); msí</td>
</tr>
<tr>
<td>wonderful</td>
<td>wàyèpê:mbì</td>
</tr>
<tr>
<td>wood</td>
<td>??í:</td>
</tr>
<tr>
<td>gather wood</td>
<td>??í: tkāβí</td>
</tr>
<tr>
<td>they light the wood</td>
<td>??í: tq̂̀wātɔí</td>
</tr>
<tr>
<td>hit with wood</td>
<td>?i:pà?āβí</td>
</tr>
<tr>
<td>firewood</td>
<td>??í: tq̂̀wātČa</td>
</tr>
<tr>
<td>greasewood</td>
<td>?ímβí(·)</td>
</tr>
<tr>
<td>kindling wood</td>
<td>?i:θmáqa</td>
</tr>
<tr>
<td>wooden chair</td>
<td>?i:wâyi</td>
</tr>
<tr>
<td>wooden cross</td>
<td>??í:ksIβa hwè:βa</td>
</tr>
<tr>
<td>wood rat</td>
<td>(?)mâlka</td>
</tr>
<tr>
<td>work &lt; trabajar</td>
<td>thàrhâ:r?i</td>
</tr>
<tr>
<td>world</td>
<td>mátk þkâ:ma, mátk þkâ:ma, mátk þkâ:mi</td>
</tr>
<tr>
<td>worm</td>
<td>??í:la, ??í:la</td>
</tr>
<tr>
<td>worn out</td>
<td>nkwâyi (W.G.), nkwâyi (G.M.)</td>
</tr>
</tbody>
</table>
wrap
wrestle
wring (out)
wrinkled
wrist
write
tmkwiri
čikwifoβi
θkwí·
kwína, θkwíni
θbrí·; sálqrwfísò (SEY)
tnú(·)ri
<table>
<thead>
<tr>
<th>Word</th>
<th>Pronunciation</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yaqui</td>
<td>yá'ke</td>
<td>around the house</td>
</tr>
<tr>
<td>yard: around the house</td>
<td>?wą ?wyą:wò</td>
<td></td>
</tr>
<tr>
<td>Yavapai</td>
<td>yàβ?pé, yàβ(?)páya</td>
<td></td>
</tr>
<tr>
<td>yawn v., cf. gallop</td>
<td>βčàk'wä·k¿i¿i</td>
<td></td>
</tr>
<tr>
<td>year</td>
<td>?čhúra</td>
<td></td>
</tr>
<tr>
<td>yeast</td>
<td>thwó·bi</td>
<td></td>
</tr>
<tr>
<td>yell</td>
<td>βčár...i, βčá·ri (yell at greater distance), βčá·ri (yell at even greater distance)</td>
<td></td>
</tr>
<tr>
<td>yellow, cf. brown</td>
<td>(?)qwá±a</td>
<td></td>
</tr>
<tr>
<td>yellow palo verde</td>
<td>ċmkwíla</td>
<td></td>
</tr>
<tr>
<td>California yellow poppy (Prn)</td>
<td>hąntù·ra, hàngtūra</td>
<td></td>
</tr>
<tr>
<td>yes</td>
<td>?ê?</td>
<td></td>
</tr>
<tr>
<td>yesterday</td>
<td>(?)nâ:hm</td>
<td></td>
</tr>
<tr>
<td>yesterday (SEY)</td>
<td>tné·</td>
<td></td>
</tr>
<tr>
<td>yonder</td>
<td>núl (n)βê?</td>
<td></td>
</tr>
<tr>
<td>you</td>
<td>má:-, má:</td>
<td></td>
</tr>
<tr>
<td>young</td>
<td>hiβmû</td>
<td></td>
</tr>
<tr>
<td>younger cousin</td>
<td>kina (sg.), kña· (sg.), kí:ná (pl.)</td>
<td></td>
</tr>
<tr>
<td>younger sibling</td>
<td>kêla (sg.), ké:la (pl.)</td>
<td></td>
</tr>
<tr>
<td>yucca</td>
<td>mnåt</td>
<td></td>
</tr>
<tr>
<td>yucca fruit</td>
<td>?nâša tąša</td>
<td></td>
</tr>
</tbody>
</table>