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Phonology and Dictionary of Yavapai

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DISSERTATION

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DOCTORAL DEGREE CONFERRED

DECEMBER 17, 1983

YAVAPAI PHONOLOGY AND DICTIONARY

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Alan Shaterian

DEDICATION

For Jeanie

YAVAPAI PHONOLOGY AND DICTIONARY

by

Alan Shaterian

ABSTRACT

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 variety of members and geographic distribution is analagous to the Germanic family as of five centuries ago. The dissertation explores the relationship between the pattern of speech sounds and the shape of words in Yavapai. It describes the phonology, morphology, and a part of the lexicon 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 sponsored 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, p^h, t, t^h, č, č^h, kʷ, k, k^h, k^{hw}, q, q^w, ʔ, i, e, a, o, u, β, θ, s, (š), h, h^w, m, n, ŋ, 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.

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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 Ktñyí·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,

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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.

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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.

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	xxii
0.10 The Yavapai Language and Yavapai Dialects . .	xxii
0.20 Early Investigations	xxiii
0.30 Recent Investigations	xxiii
0.40 The Word "Yavapai"	xxiv
0.50 The UCLA Group	xxv
0.60 Survey of Shaterian Fieldwork (1965-1980) . .	xxv
0.70 Pai Languages	xxvi
0.71 Havasupai	xxvi
0.72 Hualapai (Walapai)	xxvii
0.73 Paipai	xxvii
0.80 Other Yuman Languages	xxvii
NOTES TO THE INTRODUCTION	xxix
 CHAPTER ONE: THE YAVAPAI PEOPLE AND THE YAVAPAI LANGUAGE	 1
1.10 Geographic Distribution	1
1.11 Ethnographic Distribution	1
1.12 Population	3
1.20 Linguistic Distribution	4
1.21 Neighboring Groups	5
1.30 Early Classification	5
1.31 Northeastern Yavapai	7

	<u>Page</u>
1.32 Western Yavapai (= Tolkapaya)	8
1.33 Southeastern Yavapai	9
1.40 Yavapai Dialects of Today	9
1.41 Yavapai Linguistic Consultants	10
1.50 Genetic Classification Within Yuman	10
1.51 Paipai	11
1.52 Resolution of the Paipai Problem	12
1.53 New Classification	13
1.54 Population of Pai Speakers	13
NOTES TO CHAPTER ONE	16
 CHAPTER TWO: THE SPEECH SOUNDS IN YAVAPAI	 18
2.00 Introduction	18
2.01 ʔwì·kβté:ʔpáya	18
2.02 Pronunciation Styles	19
2.03 Bases of Articulation: Crooked-mouth vs. Normal	20
2.04 Initiations	21
2.05 Hypocorism	21
2.10 Note on Exposition of Analysis	21
2.11 Syllabicity	22
2.12 Redundant Transcriptions	22
2.20 Note on Plosives and Affricates	23
2.21 Backvelar Spirantization	23
2.22 Articulatory Descriptions of Plosives and Affricates	23

	<u>Page</u>
2.221 /p/: voiceless bilabial stop	27
2.222 /p ^h /: voiceless bilabial aspirated stop	27
2.223 /t/: voiceless apicodental stop	27
2.224 /t ^h /: voiceless apicodental aspirated stop	28
2.225 /tʃ/: voiceless apico-alveolar, affricated stop	28
2.226 /tʃ ^h /: voiceless aspirated apico- alveolar affricated stop	28
2.227 Note on the Affricates	29
2.228 /kʲ/: voiceless palatalized, velar stop	29
2.30 Note on the Velar Stops	29
2.301 /k/: voiceless velar stop	29
2.302 /k ^h /: voiceless velar aspirated stop	30
2.303 /kʷ/: voiceless labiovelar stop	30
2.304 /k ^h ʷ/: voiceless labiovelar aspirated stop	30
2.310 /q/: voiceless backvelar or uvular stop	31
2.311 /qʷ/: voiceless labio-backvelar or uvular stop	31
2.320 /ʔ/: the glottal stop	31
2.40 Note on Coarticulation	32
2.41 Note on Aspiration	32
2.411 Epiphenomena	34
2.50 Articulatory Description of the Fricatives	34
2.501 /β/: voiced bilabial slit fricative	34

	<u>Page</u>
2.502 /θ/ voiceless postdental fricative . . .	35
2.503 /s/: voiceless apico-alveolar groove fricative	35
2.504 /š/: voiceless palato-alveolar fricative	36
2.505 /h/: voiceless laryngeal fricative . . .	36
2.506 /h ^w /: voiceless labialized laryngeal fricative	37
2.510 Note on Glides	37
2.511 Note on [h]	37
2.52 Nasals	38
2.521 /m/: voiced bilabial nasal stop	38
2.522 /n/: voiced apicodental to inter- dental nasal stop	38
2.523 /ɲ/: voiced palatal nasal stop	39
2.53 Liquids	39
2.531 /l/: apicodental lateral liquid	39
2.532 /r/: voiced alveolar trill to tap . . .	40
2.533 /ʎ/: voiced palatal lateral liquid . . .	40
2.534 Devoicing of Nasals and Liquids	41
2.54 Semivowels	41
2.541 /y/: voiced unrounded palatal glide . .	41
2.542 /w/: voiced rounded velar glide	42
2.543 Note on Glides II	42
2.60 Vowels	42
2.601 Optionality	43
2.602 First Approximation	43

	<u>Page</u>
2.70 Length	43
2.71 Pitch	46
2.72 Stress	46
2.73 Interaction of Length, Pitch, and Stress . . .	46
2.74 Realization of Pitch 1 and Pitch 2	47
2.75 Stress Assignment	47
2.76 Function and Analysis of Pitch	47
2.77 Recalcitrant Data	48
2.78 Transcribing Length, Pitch, and Stress	49
2.80 The Underlying Vowel System	50
2.81 Other Sources of /e/ and /o/	51
2.90 Schwa	52
2.91 The Inorganic Vowel	53
2.911 Pretonic vs. Posttonic	54
2.912 Simplex vs. Complex Environment	54
2.913 Free Variation	55
2.914 Ambiguous Vowels	55
2.915 Punctilating Convention	56
2.92 An Integrated Theory	57
NOTES TO CHAPTER TWO	58
CHAPTER THREE: INFLECTIONAL AND DERIVATIONAL MORPHOLOGY	59
3.00 Introduction	59
3.01 Chapter Three	59
3.02 From Meaning to Sound in Yavapai	60

	<u>Page</u>
3.03 Overall View	61
3.04 Level II Representation	61
3.05 Level I Representation	62
3.06 Example of Level I Representation	62
3.07 Homonymy vs. Polysemy	63
3.10 Word Stress	64
3.101 Predictability of Stress	64
3.102 Form Classes	65
3.103 Root and Stem	65
3.103a Stress Assignment Rule	65
3.103b Pitch Assignment Rule	65
3.103c Noun Marker Prefixation Rule	65
3.103d Root to Stem Conversion Rule	65
3.104 Type A Stems	66
3.105 Type B Stems	67
3.106 Type B Stem Nouns	68
3.107 Type C Stem Noun	68
3.20 The Verbal Stem	69
3.201 The Simplex Verbal Stem	69
3.202 Simplex Verbal Stem with Vocalic Prefix	71
3.203 Punctilation	72
3.204 Complex Verbal Stem	73
3.205 Unspecified Object Marking with Complex Verbal Stem	74
3.206 Augmented Verbal Stems	75

	<u>Page</u>
3.207 Quality of the Augment Vowel	75a
3.208 Note on Transcription	75a
3.210 The Auxiliary Verbs	76
3.211 The Locational Auxiliary /uk ^{wā} /	76
3.212 The Locational Auxiliary /(u-)nú·/	78
3.213 The Locational Auxiliary /wár-/	79
3.214 The Behavioral Auxiliaries /ʔí(·)/ 'say', /yú(·)/ 'be', /wí(·)/ 'do'	80
3.215 The Contracted Auxiliary Phrases	81
3.216 The Reduplicatable Verbal Stem with /ʔí(·)/	82
3.217 The Cognitive Auxiliary /yí(·)/	84
3.218 The Modal Auxiliary /yí·tè·/	84
3.219 The Modal Auxiliary /lwí(·)/	85
3.220 The Modal Auxiliaries /hí·/ and /yí·/	86
3.221 Speculations on /ʔí·/, /í·/, /hí·/, and /yí·/	88
3.222 The Adverbial Auxiliary /má:t-/ 'apparently'	94
3.223 The Negative Adverbial Auxiliary /-ʔūm-/	94
3.224 Additional Adverbial Auxiliaries	95
3.30 Pluralization	95
3.301 Number	95
3.302 Verbal and Nominal Pluralization	96
3.303 Variety of Plural Formation	97

	<u>Page</u>
3.40 Nominal Stems	98
3.401 Dictionary Entries	98
3.402 Nominal Inflection	98
3.50 Affixation	98
3.501 Introduction	98
3.502 Processes Besides Affixation	99
3.503 Order of Presentation of the Affixes	99
3.510 /p-/ 'synaesthetic alternate of /-β/'	99
3.521 /t-/ 'plural' (not productive)	100
3.522 /t-/ 'iterative'	100
3.523 /t-/ 'causative'	100
3.524 /-t/ 'temporal coordinator'	100
3.531 /-č-/ 'plural (on noun)'	101
3.532 /č-/ 'iterative'	101
3.533 /č-/ 'causative'	101
3.534 /-č/ 'plural (on verb)'	102
3.533 /-č/ 'iterative'	102
3.536 /-č/ 'subject case'	102
3.541 /k-/ 'relativizer; agentive'	102
3.542 /-k/ 'same subject'	103
3.543 /-k/ 'locative case'	103
3.544 /-k/ 'directional'	104
3.551 /ʔ-/ 'noun marker'	104
3.552 /ʔ-/ 'first-person (on verb or noun)'	104

	<u>Page</u>
3.553 /-ʔ/ 'disjunctive (on demonstra- tives'	105
3.554 /-ʔ/ 'interrogative/vocative'	105
3.561 /β-/ 'inchoative/punctual'	106
3.562 /β-/ 'demonstrative'	106
3.563 /-β/ 'demonstrative'	106
3.564 /-β/ 'stative; attributive'	107
3.565 /-β/ '(medio)passive'	107
3.571 /-θ/ 'temporal coordinator'	108
3.572 /-θ/ 'demonstrative'	108
3.580 /s-/ 'causative: move together or apart laterally'	109
3.591 /-h/ 'demonstrative'	109
3.592 /-h/ 'irrealis'	110
3.5101 /m-/ 'second person'	111
3.5102 /m-/ 'cylindrical'	111
3.5103 /-m/ 'temporal locative'	111
3.5104 /-m/ 'instrumental'	112
3.5105 /-m/ 'comitative'	112
3.5106 /-m/ 'imperfective aspect'	112
3.5107 /-m/ 'directional'	113
3.5108 /-m/ '(medio)passive/ stative'	113
3.5109 /-m/ 'different subject'	114
3.5110 /n-/ 'diminutive'	114
3.5111 /n-/ 'plural subject'	114

	<u>Page</u>
3.5112 /n-/ 'ascending generation in kinship system'	114
3.5113 /-n/ 'demonstrative'	115
3.5121 /p-/ 'possessive'	115
3.5122 /p-/ 'temporal subordinator' . . .	116
3.5123 /p-/ 'third-person subject with first-person object'	116
3.5124 /p-/ 'first-person subject with second-person object'	116
3.5125 /-p/ 'demonstrative'	117
3.5126 /-p/ 'perfective'	117
3.5127 /-p/ 'too'	118
3.5131 /-l/ 'inner locative'	118
3.5140 /-r/ 'plural'	119
3.5171 /i(·)-/ 'derivational prefix' . .	119
3.5172 /-i/ 'denominalizer'	121
3.5173 /-i/ 'recursive'	122
3.5174 /-i/ 'absolute'	122
3.5175 /-i/ 'artifact'	122
3.5176 /-i/ 'plural'	123
3.5181 /-eʔ/ 'interrogative'	124
3.5182 /-èʔ/ 'vocative'	124
3.5183 /-è/ 'spatiotemporal loca- tive'	124
3.5201 /o-/ 'inchoative'	127
3.5202 /o-/ 'demonstrative'	127
3.5203 /-ò/ 'applicative'	127

	<u>Page</u>
3.5204 /-o/ 'perfect'evidential'	128
3.5205 /-o/ 'resultative'	128
3.5206 /-ò·/ 'locational nominalizer'	129
3.5207 /-ò(?)/, /-ò:/ 'vocative (unseen addressee)'	129
3.5211 /u-/ 'derivational prefix'	130
3.5212 /-u/ 'demonstrative'	131
3.60 Multisegmental Prefixes and Suffixes	131
3.601 Introduction	131
3.602 Order of the Multisegmental Affixes	131
3.611 /-pè·/ 'interrogative conjunction'	133
3.612 /pa(·)-/ 'plural object'	133
3.613 /-tè·/ 'exhortative'	134
3.614 /-čβ-/ 'multiple plural'	134
3.615 /-ka/ 'incremented same-subject marker'	134
3.616 /-kθò·/ 'conditional'	135
3.617 /-km/ 'imperfective contracted auxiliary phrase'	135
3.618 /-kɾ/ 'perfective contracted auxiliary phrase'	135
3.619 /?...m-/ 'second-person subject with first person object'	135
3.6110 /-ha/ 'incremented irrealis marker'	136
3.6111 /-mè·/ 'conjunction after clause-final /-m/'	136
3.6112 /-ma/ 'assertive on clause- final /-m/'	137

	<u>Page</u>
3.6113 /-mó·/ 'dubitative'	137
3.6114 /-ra(β)/ 'intensifier'	138
3.6115 /-wèʔ/ 'past question'	138
3.70 Quantitative and Qualitative Vowel Alternations	138
3.71 Pitch Shift	139
3.711 Suprasegmental Adjustments in Derivation	139
3.72 Ablaut	141
3.73 Length Shift	142
3.74 Examples of Pluralization	143
3.741 Length Shift	143
3.742 Quantitative and Qualitative Alterna- tions Combined with Affixation	144
3.80 Sound Symbolism	145
3.801 Introduction	145
3.802 Overt and Covert Sound Symbolism	146
3.803 Reduplication	147
3.804 Reduplicands	148
3.81 Synaesthetic Alternations	151
3.82 Classification of Alternations	152
3.821 Phonostylistics	152
3.8211 Hypocorism	153
3.82111 The Hypocoristic [š]	153
3.82112 Nasalization	154
3.82113 /n/, /r/, /l/ Gradient Alternation	155

	<u>Page</u>
3.82114 Hypocoristic /l/, /ʌ/ Alternation	156
3.822 Progression of Alternations	156
3.8221 Paired Alternations	156
3.8222 Tandem Alternations	156
3.8223 Gradient Alternations	156
3.823 Productivity of Alternations	157
3.824 Meaning of the Synaesthetic Alterna- tions	157
3.8241 Discussion of /qʌê·p-/	158
3.825 Augmentative and Diminutive	159
3.83 Archisynaestheme	159
3.831 Archisynaesthetic Symbols	160
3.832 Synaesthetic Derivations	161
3.834 The Derivational Family of 'hand'	163
3.90 Conclusion	165
NOTES TO CHAPTER THREE	166
CHAPTER FOUR: THE PHONOLOGY	167
4.00 Introduction	167
4.01 Major and Minor Problems in Yavapai Phonology	167
4.02 Phonological Analyses by Kendall and by Hardy	168
4.021 Postaspiration	169
4.022 Palatalization and Labialization	169
4.023 Vowel Length	169

	<u>Page</u>
4.024 Pitch	170
4.025 Stress	170
4.03 Summary	170
4.04 Treatments of the Unstressed Vowel	171
4.05 History of the General Syllabicity Rule	173
4.10 The Yavapai Canon	175
4.11 Phonotactics	175
4.12 Examples of C ^ˈ V ^ˈ CV	180
4.13 Examples of CC ^ˈ V ^ˈ (C(C)V)	181
4.14 Examples of CCC ^ˈ V ^ˈ (C(C)V)	185
4.15 Examples of CCCC ^ˈ V ^ˈ (C(C)V)	186
4.16 Example of CCCCC ^ˈ V ^ˈ (C(C)V)	187
4.17 Examples of ... ^ˈ VC	188
4.18 Phonotactic Restrictions	189
4.181 A note on Coarticulated Consonants	189
4.19 Statements of Restrictions	190
4.20 Syllabicity	193
4.201 A Note on the Aspirated Stops and the Affricate	193
4.21 Hierarchy of Syllabicity	194
4.22 The Proliferation of Syllabicity	194
4.221 Ease of Articulation	195
4.222 Avoidance of a Monosyllable	195
4.223 The Creation of Inorganic Clusters	196
4.24 The Pronunciation of the Inorganic Clusters	198

	<u>Page</u>
4.25 Gemination	200
4.253 A Note on Transcription	202
4.254 A Note on Gemination	203
4.26 Epenthesis	204
4.263 Directionality of Syllabic Realization	205
4.30 The General Syllabicity Rule	205
4.302 Initiation	207
4.303 Gemination	207
4.304 Syllabicization	207
4.305 Phonetic Realization	207
4.31 Examples	208
4.312 Exceptions	209
4.32 CCCV'-Clusters	210
4.33 CCCV'-Clusters with [asyllabic] C ₂ s	212
4.34 Exceptions to Alternate Realizations	213
4.35 /h/ as C ₂ in CCCV'-Clusters	213
4.40 Aspiration in Yavapai	213
4.41 Classification of Aspiration	214
4.42 Preaspiration	214
4.43 Postaspiration	214
4.44 Sonorant Devoicing	214a
4.45 Resemblances to Havasupai and Hualapai	215
4.46 Aspiration in Pai	215
4.50 Intrusive Glides	216
4.60 Vowel Lowering	218

	<u>Page</u>
4.70 System Instabilities	219
4.71 Glide Variation	220
4.72 Vowel Variation	220
4.73 Consonant Variation	221
4.74 Stress Shift	222
4.75 Metathesis	223
4.80 Lenition	225
4.90 Conclusion	227
NOTES TO CHAPTER FOUR	229
APPENDIX 1	234
APPENDIX 2	308
Symbols Used	309
Abbreviations of Morphemes, Names and Other Words, Their Description and Shape	311
REFERENCES	316
PART II	329
5.00 Introduction to the Dictionaries	330
6.00 Yavapai-English Dictionary	336
7.00 English-Yavapai Dictionary	528

INTRODUCTION

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 /yàβʔpé/ 'a Northeastern Yavapai (person).' The word Yavapai is based on the plural of this form /yàβʔpâya/. The term "Yavapai" has been used since the time of early white contact for all three groups. The native term for Western Yavapai is /tòlkʔpâya/. The spelling Tolkapaya has come into English and is used in the linguistic literature. The native word for Southeastern Yavapai is /kwè:βkʔpâya/ (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"

2. Hinton, Leanne. Havasupai Songs: A Linguistic Perspective. San Diego: University of California dissertation, 1977. 598 pp. To appear.

3. Joël, Judith. Paipai Phonology and Morphology. Los Angeles: University of California dissertation, 1966. 86 pp.

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):



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

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?pé, yàβ?páya/³

2a. WY, b. Tolkapaya, c. /tòk?pâya/

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

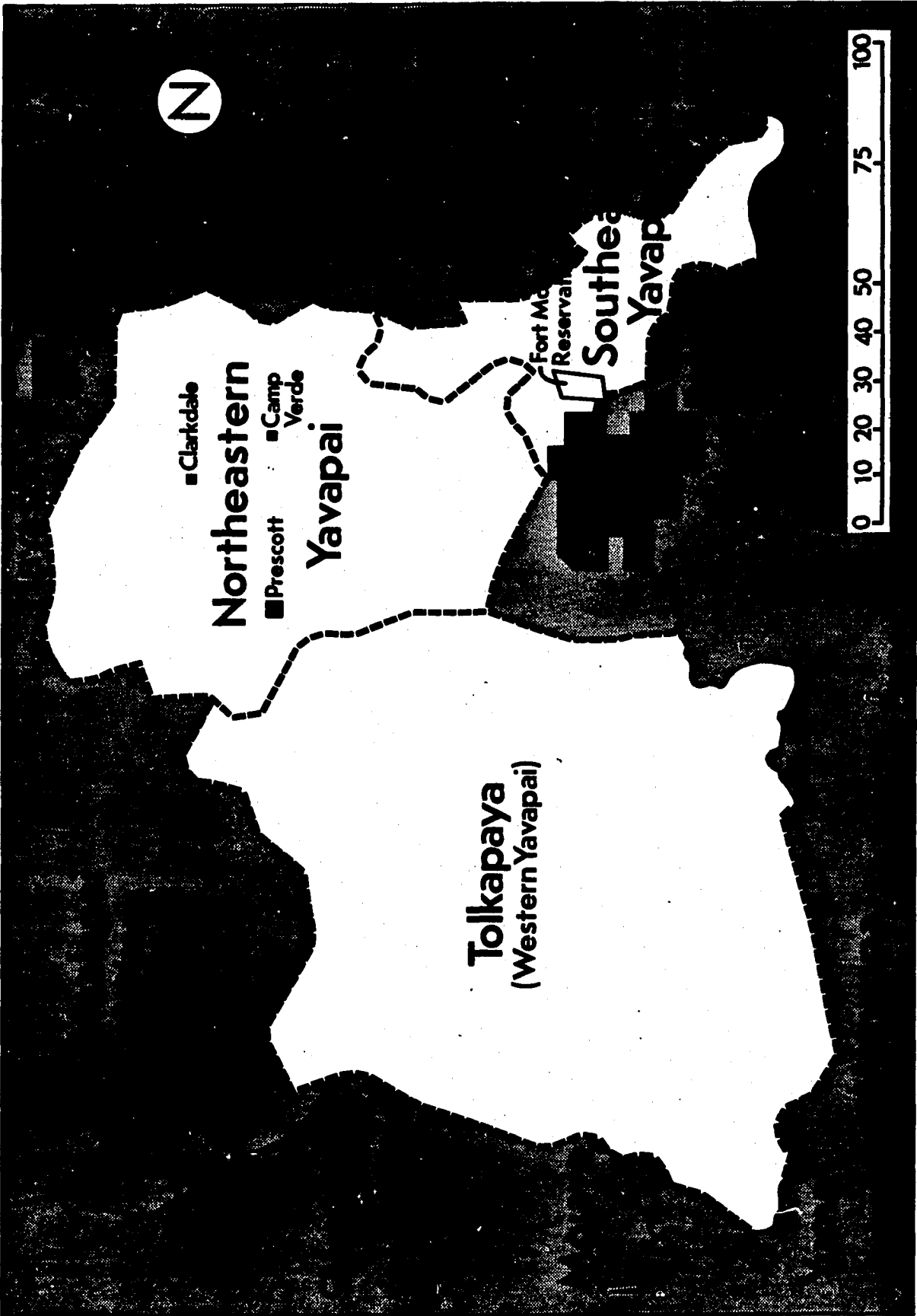
one each for Western and Southeastern Yavapai. The distribution of the groups and sub-groups which obtained at the time of Gifford's ethnographies is substantially the same, although reduced and somewhat truncated.

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 /ʔwi·púkʔpáya/ or Oak Creek Canyon band, whose name the informant constantly applied to the whole Northeastern Yavapai;
- (2) Matkiwawipa /màktβá:βʔpáya/ or upper Verde Valley people;
- (3) Wikutepa /ʔwi·kβté·ʔpáya/ or the people of the Prescott region;
- (4) Walkeyanyanhepa /hwà·lkyànyánʔpáya/ (people of the pine tree country) or Jerome tableland people;
- (5) Wikenichepa /wí·kʔnáčʔpáya/ or Black mountain people or people of the Crown King region;
- (6) Matkitotwapa /màktótβʔpáya/⁵ 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) /yàβʔpé/

- "(1) Wipukyipa or Wipukupa /ʔwi·púkʔpáya/
- (2) Matkitwawipa /màktβá:βʔpáya/, Matidipa /màtʔírʔpáya/, Matkitkavavepa /màktβá:βʔpáya/, or Matkoulvapa /màtkhúlβʔpáya/
- (3) Walkeyanyanyepa /hwà·lkyànyánʔpáya/

Mat-haupapaya /màthá:βk?páya/

(1) Wikutepa /?wì·kβté·?páya/

(2) Wikenichapa or Wikanadjapa /?wì·k?náč?páya/

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 /tòlk?páya/

"... comprised an eastern band

(1) Wiltaikapaya /?wìl?tá·yk?páya/ and a western band

(2) Hakehelapa /?hàkhé·l?páya/"

(1932:178)

Western Yavapai (1936)

"They had three bands, but no clans

(1) Hakupakapa /?hàk pák?páya/⁵ or Inyokapa
/h. nòq?páya/⁵

(2) Hakehelapa /?hàkhé·l?páya/ or Wiltaikapaya
/?wìl?tá·yk?páya/ (the two bands of 1932 proved
to be the same).

(3) Haka-whatapa /?hàk?h^wát?páya/ or Matakwarapa
/màt?q^wár?páya/"

(1932:249)

1.33 Southeastern Yavapai

Southeastern Yavapai (1932 only) "Keweyipaya

/kwè:βkʔpáya/

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

(1) Wikdjasapa /ʔwì·kčásʔpáya/

(2) Walkamepa" /hwà·lkʔámβʔpáya/⁵

(1932:177)

1.40 Yavapai Dialects of Today

All speakers of Northeastern Yavapai today call themselves /yàβʔpáya/; they do, however, recognize two subgroups: (1) /ʔwì·kβté·ʔpáya/, the Yavapai-Prescott tribe on the reservation adjacent to the city of Prescott: the 'great-mountain (i.e. Granite Mountain) people' and (2) /ʔwì·púkʔpáya/, 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: /yàβʔpé/ (pl. /yàβʔpáya/)

(a) Prescott Yavapai: /ʔwì·kβté·ʔpáya/

Grace Mitchell (and later Lucy Miller)

(b) Verde Valley Yavapai: /ʔwì·púkʔpáya/

i. Grace Nelson, Mary Sine (and later Clara Starr)

ii. Don Mitchell

(2) Western Yavapai: /tòlkʔpáya/ (also /tùlkʔpáya/)

Warren Gazzam (and later Molly Starr Fasthorse)

(3) Southeastern Yavapai: /kwè:βkʔpáya/

Flora Evans, Edwin Margo.⁷

1.50 Genetic Classification Within Yuman

The Havasupais /ʔhakhàβsú·ʔpáya/ and the Hualapais /hwà·lʔpáya/, 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·ʔpáya/, 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.⁸ 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: North-eastern Yavapai could have as many as 50 speakers; Western Yavapai may have only one; Southeastern Yavapai probably has only two.

TABLE 1

Pai Languages

- I. Havasupai-Hualapai
 - 1. Havasupai: /ʔhakhàβsú·ʔpáya/
 - 2. Hualapai=Walapai: /hwà·lʔpáya/

- II. Yavapai: /yàβʔpáya/
 - 1. Northeastern Yavapai: /yàβʔpé/
 - a. Prescott Yavapai: /ʔwì·kβté·ʔpáya/
 - b. Verde Valley Yavapai: /ʔwì·púkʔpáya/
 - 2. Western Yavapai: /tòlkʔpáya
 - 3. Southeastern Yavapai: /kwè·βkʔpáya/

- III. Paipai: /pà·ʔpáya/

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 /-ʔpé/. The verbal root is /pé/ '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.kʔpá:/ 'a

Cocopa (lit. cloud person)' and /mri:kʔpá:/ '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 *ʂ 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 ʔwì·kβté:ʔpáya

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 /ʔwì·kβté:ʔpáya/ '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

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 Hypocorism¹

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 [ʃ] and [ʌ] and the nasalization of vowels; [ã] 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

Four). 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 phonologically (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+Σ- sequences. Morphophonemically 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 possible 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 overspecify, 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, kʷ, k, kʷ/ and the affricate /č/ appear postvocally as lenis or partially voiced in Allegretto and optionally so in Andante: [b, ɡʷ, ɡ, ɡʷ, ʃ (dʒ)]. The aspirated plosives and affricate have fortis articulation: /pʰ, tʰ, kʰ, kʰʷ, čʰ/, as does /t/. /q/ and /qʷ/ are weakened to spirants (see the next section).

2.21 Backvelar Spirantization

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

Examples 2.21a-c

- | | | |
|-----|---------------------------|---------------------|
| (a) | /qaqá·qa/ | 'Hohokam ghosts' |
| | [qaqá·χa] | |
| (b) | /ʔčkmtú· tú· qʷâθa káča/ | 'cantaloupe' |
| | /ʔčkmtú· [tò χʷâθa] káča/ | |
| (c) | /qyāti/ | 'really, very much' |
| | [Ryāti] | |

2.22 Articulatory Descriptions of Plosives and Affricates

The plosives and the affricates in occurrences not affected by lenition, fortititon, spirantization, or voicing are described as follows:²

TABLE 2

Yavapai Systematic Phonetic Consonantal Segments

	a. voiced					y	w		
	b. voiceless					ɔ̇	ɣ	m	V. Glides
	a. voiced		l	r		ʌ			
	b. voiceless		l̥	r̥					IV. Liquids
	a. voiced	m	n			ɲ			
	b. voiceless	m̥	n̥			ɲ̥			III. Nasals
	a. labialized						χ ^w	h ^w	
	b. voiceless	ɸ	θ	s	ʂ		χ	h	IV. Fricatives
	c. voiced	β					ʀ	ɦ	
	a. labialized- aspirated								
	b. labialized						q ^w	ʔ ^w	
	c. aspirated	p ^h	t ^h		tʂ ^h				V. Stops and Affricates
	d. fortis	p	t		tʂ		q	ʔ	
	e. lenis	b			dʒ	ɣ			
					ɔ̇	ɣ			
1. bilabial									
2. (inter)dental									
3. alveolar									
4. palatoalveolar									
5. palatal(ized)									
6. velar									
7. back-velar									
8. glottal									

TABLE 3

Yavapai Systematic Phonetic Vocalic Segments

1. high	i	ɨ	u
	ɪ	ɜ	ʊ
2. mid	e	ə	o
	ɛ		ʌ ɔ
3. low	æ		
		a	ɑ ɒ
	front	central	back

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 /ā/ high, /â/ falling,
 /ǎ/ variable, /á/ uncertain
2. Secondary /à/ no pitch distinction
3. Tertiary /a/ no pitch distinction

III. Nasalization:

/ã/

IV. Syllable Boundary:

/ɛ.ɛ/

2.221 /p/: voiceless bilabial stop: [p]. (See Examples 2.221a-j).

Examples 2.221a-j

- | | | |
|-----|---------|---------------------------------|
| (a) | /pí/ | 'die; he is dead' |
| (b) | /pé/ | 'carry on head' |
| (c) | /pá/ | 'stick' v. |
| (d) | /spó/ | 'know' |
| (e) | /pú/ | 'put away' |
| (f) | /qʌēpi/ | 'bad ₁ ' |
| | /qʌēβi/ | 'bad ₂ ' |
| (g) | /lí·pi/ | 'soupy' |
| (h) | /čūpi/ | 'eat something mushy' |
| (i) | /pá·pa/ | 'potato' (Spanish <u>papa</u>) |
| (j) | /θrāpi/ | 'five' |

2.222 /p^h/: voiceless bilabial aspirated stop: [p^h]
(See Example 2.222a).

Example 2.222a,b

- | | | |
|-----|------------------------|-----------------|
| (a) | /yàp ^h ī/ | 'chin, jaw' |
| (b) | /ʔp ^h álka/ | 'ironwood tree' |

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

Examples 2.223a-e

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

2.224 /t^h/: voiceless apicodental aspirated stop:
 [t^h].

Examples 2.224a,b

- (a) /ʔt^há/ 'reed, cane'
 (b) /ʔmt^há·βk/ 'north'

2.225 /č/: voiceless apico-alveolar, affricated stop,
 more precisely [tš].

Examples 2.225a-e

- (a) /čī·/ 'lay, put'
 (b) /čē·/ 'put away'
 (c) /čá·/ 'pour'
 (d) /čúrka/ 'walnut'
 (e) /čó/ 'set down'

2.226 /č^h/: voiceless aspirated apico-alveolar,
 affricated stop:

Examples 2.226a,b

- (a) /ʔč^hura/ 'year'
 (b) /ʔč^hú·ri/ 'winter'

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

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

Examples 2.228a-d

- (a) /čkʲé·/ 'push'
 (b) /kʲá·/ 'shoot'
 (c) /čkʲó/ 'bite'
 (d) /kʲú·li/ 'long'

2.30 Note on the Velar Stops

For /k, k^h, k^w, k^{hw}/ 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, k^h, k^w, k^{hw}/ into account.

2.301 /k/: voiceless velar stop: [k].

Examples 2.301a-e

- (a) /kīŋa/ 'great-grandchild'
 (b) /kêla/ 'younger sibling'
 (c) /čká·βa/ 'cousin: mother's brother's or
 father's sister's son'
 (d) /i·kó/ 'carry in hand'
 (e) /ʔkúla/ 'jackrabbit'

2.302 /k^h/: voiceless velar aspirated stop: [k^h].

Examples 2.302a-d

- (a) /pà·k^háya/ 'Indian from another group'
 (b) /yūri sakháββi/ 'button' (See Punctuation 2.915)
 (c) /ʔk^hó·/ 'daughter's child'
 (d) /tk^hō·/ 'stomach'

2.303 /k^w/: voiceless labiovelar stop: [k^w].

Examples 2.303a-c

- (a) /k^wí·/ 'weave'
 (b) /ʔk^wē·/ 'something'
 (c) /k^wā/ 'horn'

2.304 /k^{hw}/: voiceless labiovelar aspirated stop:
 [k^{hw}].

Example 2.304

- /ʔk^{hw}á/ 'metal; knife'

2.310 /q/: voiceless backvelar or uvular stop: [q].

Examples 2.310a-c

- (a) /q̄irq̄iri/ 'rub something hard'
 (b) /βq̄èq̄ěʔi/ 'it is sticky'
 (c) /ʔq̄āta/ 'sunflower'

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

Examples 2.311a,b

- (a) /mqʷiθ/ 'flying squirrel'
 (b) /nqʷá/ '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) /ʔéʔ/ 'yes'
 [ʔéʔə]
 (b) /ʔíʔ/ 'stop!'
 [ʔíʔə]
 (c) /tʔámβa/ 'closed'
 [təʔámβa]
 (d) /čqnʔōni/ 'fold once'
 [č̣qnʔōni]

- (e) /mpù·klʔūt/ 'tarantula'
 [məpù·kɭʔūt]
- (f) /ʔwí· ʔwíykm/ 'I have money'
 [ʔwí ʔwíyɤkm]

2.40 Note on Coarticulation

The coarticulated consonants /kʏ, 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'
 [kɤyáya]
- (b) /kwí/ 'dove'
 [kwí]
- (c) /khʷáta/ 'the red one'
 [kahʷáta]
- (d) /qʷáwa/ 'hair; scalp'
 [qʷáwa]
- (e) /hwáki/ 'two'
 [hwáki]

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) /ʔhmál/ 'sack; bag'
[ʔamól]
- (b) /hnú/ 'scoop out'
[nú]
- (c) /hɾómi/ 'do exercise'
[ɾómɪ]
- (d) /hlī/ 'milk' v.
[lī]
- (e) /hrókβi/ 'crooked'
[ɣókβɪ]
- (f) /néhβi/ 'commit suicide'
[néβɪ]
- (g) /nō·hβi/ 'gambling'
[nō·βɪ]

One sees quite clearly, from comparative evidence, that the aspirated stops, /p^h, t^h, č^h, k^h, k^{hw}/, arose from "true" clusters, without syllable boundaries (See 2.90). They contrast with "apparent" clusters, those containing syllable boundaries.

Examples 2.41h-m

- (h) /thūma/ 'cloth'
[taɦūma] ~ [təɦūma]
- (i) /thəf·la/ 'lizard'
[taɦəf·la]
- (j) /čhāri/ 'avenge'
[čaɦāri]
- (k) /čhkāβi/ 'canyon'
[čaɦkāβi]
- (l) /khērβa/ 'the lazy one'
[kaɦērβa] ~ [kəɦērβa]
- (m) /khāβa/ 'the follower'
[kaɦāβa] ~ [kəɦāβa]

2.411 Epiphenomena: Postaspiration of stops is an epiphenomenon. It occurs after the historical metathesis of the sequence /h/ + Stop, which is interpreted as preaspiration. 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 /β̥/ (See 2.41 f,g).

Examples 2.501a-e

- | | | |
|-----|----------|------------------|
| (a) | /βá·/ | 'arrive' |
| (b) | /βó·/ | 'walk' |
| (c) | /βtōtβk/ | 'collapsed' |
| (d) | /čβkó/ | 'cup (ears)' |
| (e) | /βʔú·βi/ | 'become visible' |

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

Examples 2.502a-g

- | | | |
|-----|-----------------|------------------------------------|
| (a) | /θí·/ | 'drink' |
| (b) | /θê/ | 'billowing' |
| (c) | /qθáq/ | 'burden basket' |
| (d) | /θó·/ | 'eat meat' |
| (e) | /ktθūkβa/ | 'curved' |
| (f) | /h.pàqʔθó·ča/ | 'beaver-eaters' (obsolete term for |
| | [hɪ.pàqʔaɦô·ča] | 'white men') |
| (g) | /kθār/ | 'dog' |
| | [kɪɦāɾ] | (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) | /qsôβa/ | 'mole (on skin)' |
| (e) | /sūri/ | 'spot, espy' |

2.504 /š/: 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) | */msáyí/ ~ /mšáyí/ | '(they) fear' |
| (c) | */msê·βi/ ~ /mšê·βi/ | 'fearsome' |
| (d) | /sāhi/ ~ /šāhi/ | '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) | /hīpi/ | 'move (aside)' |
| (b) | /βhē/ | 'tail; dress' |
| (c) | /hāmi/ | 'look over there' |

- (d) /hòlhóli/ 'flow downward'
 (e) /hū:/ 'nose; head'

2.506 /h^w/: voiceless labialized laryngeal fricative:
 [h^w]; or voiceless labiovelar glide: [m].

Examples 2.506a-c

- (a) /h^wí/ 'smell' v.t.
 [mí]
 (b) /h^wá/ 'fighting, war'
 [má]
 (c) /slh^wó·/ 'nail; claw; hoof'
 [s.la.mó·]

2.510 Note on Glides: /ʔ, h, h^w/ 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 2.511a-d

- (a) /imá/ 'dances'
[himá]
- (b) /ikó/ 'carries in the hand'
[hikó]
- (c) /okʷá/ 'feels like' (modal)
[hokʷá]
- (d) /oʔāli/ 'draws out'
[hoʔāli]

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: [ŋ].

Examples 2.522a-e

- (a) /nī·sa/ 'spider'
 (b) /nē·/ 'scoop up'
 (c) /nāli/ 'fall; descend'
 (d) /nó·/ 'heavy'
 (e) /nú·ta/ 'mother's brother's daughter' (man speaking)

2.523 /ɲ/: voiced palatal nasal stop: [ɲ].

Examples 2.523a-e

- (a) /ɲī·ni/ 'copulate'
 (b) /ɲê/ 'hunt'
 (c) /ʔɲáʔ/ 'me' (disjunctive)
 (d) /ɲúʔ/ 'that one' (deictic)
 (e) /ɲō/ 'quiet! wait!' (interjection)

2.53 Liquids

Articulatory description of the liquids and their allophones.

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

Examples 2.531a-e

- (a) /slí:/ 'fry'
 (b) /lē·kò/ 'stick out the tongue'

- (c) /lá·wi/ 'many'
 (d) /ló·qi/ 'pluck'
 (e) /mlúθa/ 'measles'

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) /rē·/ 'play'
 (c) /ráβi/ 'hurt' v.i.
 (d) /ró·pi/ 'go down (sun)'
 (e) /rúβi/ 'dry'

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

Examples 2.533a-e

- (a) /qʎé·/ 'dislike' sg.
 (b) /qʎá·yi/ 'dislike' pl.

- (c) /qʌēpi/ 'bad₁'
 (d) /qʌēβi/ 'bad₂'
 (e) /qʌá·yβi/ 'bad 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) /hiθūl/ 'cheeks'
 [hɪθū̥l̥]
 (b) /kθār/ 'dog'
 [kɪθḁ̄ɾ̥] (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) /yīrki/ 'hatch'
 (b) /qryē:/ 'clear'
 (c) /yá/ 'mouth'
 (d) /yóqi/ 'vomit'
 (e) /yú·si/ 'cool, comfortable'

2.542 /w/: voiced rounded velar glide: [w].

Examples 2.542a-e

- | | | |
|-----|-------------|-----------------|
| (a) | /wí/ | 'do, make' |
| (b) | /wé/ | 'vagina' |
| (c) | /wá/ | 'sit' |
| (d) | /čwô·/ | 'set, put down' |
| (e) | /βčiqwusmī/ | '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) /ʔʔi/ 'I say'
 /ʔʔi·/ 'wood'
- (b) /kʔila/ 'rough sides'
 /kʔi·la/ 'canyon'
 /ʔʔi:li/ 'steep'
 /ʔʔi:la/ 'thread' (Spanish hilo)
 /ʔʔi·la/ 'worm'
 /ʔʔi:la/ 'worms'
- (c) /nwĩrçi/ 'cook' v. pl.
 /nwĩ·ri/ 'cook' v. sg.
- (d) /θpĩri/ 'hard'
 /θpĩ·rβi/ 'strengthen'
 /θpĩ::rβi/ 'strengthen' (emphatic)
- (e) /ʔʔē/ 'deep'
 /ʔʔē·/ 'I give'
- (f) /wé/ 'vagina'
 /ʔwē·/ 'mouse'
- (g) /kéla/ 'younger sibling'
 /ké·la/ 'younger siblings'
- (h) /hmá/ 'let's go!'
 /hmá·/ 'testicles'
 /ʔhmá/ 'quail'
 /ʔhmá:/ 'gourd'
 /ʔhā/ 'water'
 /ʔhá·/ 'cottonwood'

	/ʔhā:/	'bitter; spicy'
(j)	/čàčāčʔi/	'squirted on'
	/čàčā·či/	'sprinkle'
(k)	/čmā·li/	'rake' v.
	/čmā:li/	'rake' n.
(l)	/čyÁlβi/	'painted'
	/čyÁ·lβi/	'face paint'
(m)	/ʔŋáʔ/	'me' (disjunctive)
	/ʔŋā/	'road'
	/ʔŋǎ·/	'sun'
	/ʔŋā:/	'black'
(n)	/ʔkʰō/	'pifion'
	/ʔkʰó·/	'daughter's child'
(o)	/kóla/	'mother's mother'
	/kó·la/	'mother's mothers'
(p)	/npó·/	'father's father'
	/θmpō:/	'bee'
(q)	/hiθūl/	'cheeks'
	/hiθū·li/	'slow'
	/θú:lβi/	'lame'
(r)	/tpúli/	'wetten'
	/impú·la/	'forehead'
	/kmpū:lβa/	'humpback'
(s)	/čyûti/	'rub straight'
	/ččyû·ti/	'rub straight' pl. obj.
(t)	/skʔû·la/	'beads'
	/skʔū:la/	'bead'

- (u) /hàlʔū·βi/ 'mirror'
 /ʔū:βa/ 'tobacco'
- (v) /ʔčkūrθa/ 'once upon a time'
 /ʔčkū::rθà/ 'a long time ago'

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) /pèlmēlkʔi/ 'lick one's lips or chops'
 (b) /ʔhà·pú:čò/ 'cotton spring'
 (c) /ʔðhʷáyčʔǎlʔò·/ 'smoke hole'
 (d) /ʔðhʷáyá/ 'smoke'
 /ʔoʔáli/ '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) /ʔwā/ 'I am sitting'
 /ʔwâ/ '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 /^v/ 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) | /kmyē·/ | 'moan' |
| | /kmyā·yβa/ | 'the moaner' |
| (b) | /tyé/ | 'tell a lie' sg. subj. |
| | /tyáyí/ | 'tell a lie' pl. subj. |
| (c) | /topé/ | 'help' sg. subj. |
| | /topáyí/ | 'help' pl. subj. |
| (d) | /nó·/ | 'heavy' |
| | /kβnāwi/ | 'carry heavy objects in arms' |
| (e) | /yó:/ | 'be located' sg. subj. |
| | /yá:wi/ | 'be located' pl. subj. |
| (f) | /kìβō/ | 'rain' |
| | /kìβáwa/ | 'rain' (absolutive) |
| (g) | /βqī/ | 'woman' |
| | /βqū·ya/ | 'women' |

- (h) /θβlî/ 'hole'
 /θβlû·yi/ '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/ 'seed'
 [yâč] ~ [yêč]
- (b) /myâla/ 'bread'
 [mɪyâla] ~ [mɪyêla]

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) /βqîhmāŋ/ 'little girl'
 [βqèŋmāŋ/]
- (d) /tú· qʷâθa/ 'quite yellow'
 [tòχʷâθa]

Spontaneous alternations are found between /u/ and /o/ before liquids.

Examples 2.81e-g

- (e) /múl/ ~ /mól/ 'name'
 (f) /sùlsūli/ ~ /sòlsōli/ 'clear, transparent'
 (g) /mō·ri/ ~ /mú·ri/ 'knead'

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) /ʔmmāni/ 'get me up!'
 (b) /tmʔāmβi/ 'capsize'
 (c) /tmh^wirβi/ 'loincloth'
 (d) /βčlwá·qki/ 'come out'
 (e) /čβnpéβi/ 'carry many objects'

On the systematic phonetic level the situation is much the opposite; the language is rich in vowels and other [+syllabic] segments but very poor in consonant clusters:

Examples 2.90a₁-e₁

- (a₁) [ʔəʋmʋmōŋɪ]
- (b₁) [təʋməʔōmβɪ]
- (c₁) [tɪmō.hʋ(rβɪ)]
- (d₁) [βɪčəlwó.qkɪ]
- (e₁) [čʋβəŋʋpéβɪ]

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 posttonically 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) | /??f/ | 'I say' |
| | [?ɪ?f/ | |
| (b) | /??é/ | 'deep' |
| | [?ɛ?é] | |
| (c) | /??á/ | 'saguaro (cactus)' |
| | [?ʌ?á] | |
| (d) | /??ó/ | 'fire' |
| | [?ɔ?ó] | |
| (e) | /??ú·] | 'I see' |
| | [?ʊ?ú·] | |

If the consonantal environment is complex (see 2.90a₁-e₁), 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) /kəpámka/ 'grasshopper'
- (b) /ʔəčhū:rm/ 'in winter'
- (c) /hičī·la/ 'nit'

In Example 2.915c the [ɪ] 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(·)-/³ is a prefix. Since the root /+čī·l+/ means only 'to fall asleep (an arm, leg),' I cannot readily etymologize the form /hi+čī·l+a/, nor do I know other forms containing

/hčī·l+/. To resolve the ambiguity 'nit' is written /hičī·la/, 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 [š] (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 piecemeal, 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 *h^waL* (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: /h^wal-/ 'dig out (for planting)'; and /h^war-/ '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/ 'absolutive' (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 /mh^wāli/ 'dig!' and /mh^wāri/ '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 proposed 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 /ā/; Pitch 2: /Á/; Variable Pitch: /ǎ/; and Indeterminate Pitch: /á/ (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: wā 'sit' and wá 'dwelling.'
- 3.103c Noun Marker Prefixation Rule: /ʔ-/ is prefixed to the root wá.
- 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: /wā/ and /ʔwá/, verbal and nominal respectively. As the notational devices indicate, the abstract root wa, later wá, has become the morphophonemic or systematic phonemic verbal and nominal stems /wā/ and /ʔwá/.

3.104 Type A Stems: The verbal stem /wā/ 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 /wā/ 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': /mwā/ 'sit down!' /wā/ 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.'

/ʔwā/, 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 */hā:k/ 'look over this way (toward speaker)' and */hā: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 /wā/ above. Thus the forms can occur as /hā:ki/ and /hā:mi/. Prefixation of /m-/ 'second person' will produce the imperative forms (singular) of these verbs, as was the case for /wā/:

- a. /mhā:mi/ 'look away!'
- b. /mhā: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 /-ò./ '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'
	/kθʷē:/	'a drink made from berries'
	/pmí/	'cat'
Type B:	/kʷôya/	'crown of head'
	/ʷū:βa/	'tobacco'
	/skʷāla/	'large hawk'
Type C:	/hʷél/	'louse'
	/ʷβāk/	'awl'
	/mqʷîθ/	'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 3.201a-g

(a) Stem: /mā:/ 'eat (soft things)'

1 /ʔmā:/ /ʔmāči/

2 /mmā:/ /mmāči/

3 /mā:/ /māči/

singular plural

(b) Stem: /smá:/ 'sleep'

1 /ʔsmá:/ /ʔsmáči/

2 /msmá:/ /msmáči/

3 /smá:/ /smáči/

singular plural

(c) Stem: /kwā·w-/ 'speak'

1 /ʔkwā·wi/ /ʔkwā·wči/

2 /mkwā·wi/ /mkwā·wči/

3 /kwā·wi/ /kwā·wči/

singular plural

(d) Stem: /ʔē·/ 'give'

1 /ʔʔē·/ /ʔʔē·či/

2 /mʔē·/ /mʔē·či/

3 /ʔē·/ /ʔē·či/

singular plural

(e)	Root:	<u>smá:</u>	'sleep'
	Stem:	/tsmā·č-/	'dream'
	1	/ʔtsmā·či/	/ʔtsmā·čči/
	2	/mtsmā·či/	/mtsmā·čči/
	3	/tsmā·či/	/tsmā·čči/
		singular	plural

The above examples contain the following affixes:

(f) Derivational

/t-/	causative
/-č/	iterative

(g) Inflectional

/ʔ-/	first-person subject
/m-/	second-person subject
(/β-/	third-person subject)
/-č/	plural subject
/-i/	absolute

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 | /ʔi·pāri/ | /ʔi·pārči/ |
| 2 | /mi·pāri/ | /mi·pārči/ |
| 3 | /i·pāri/ | /i·pārči/ |
| | singular | plural |
| 1 | [ʔi·pārɪ] | [ʔi·pārčɪ] |
| 2 | [mi·pārɪ] | [mi·pārčɪ] |
| 3 | [hi·pārɪ] | [hi·pārčɪ] |
| | singular | plural |
- (b) Stem: /uʔāl-/ 'take out'
- | | | |
|---|----------|-----------|
| 1 | /ʔuʔāli/ | /ʔuʔālči/ |
| 2 | /muʔāli/ | /muʔālči/ |
| 3 | /uʔāli/ | /uʔālči/ |
| | singular | plural |
| 1 | [ʔoʔālɪ] | [ʔoʔālčɪ] |
| 2 | [moʔālɪ] | [moʔālčɪ] |
| 3 | [hoʔālɪ] | [hoʔālčɪ] |
| | singular | plural |

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'
 /ḥi·pāri/ 'he learns'
- (b) Stem: /uʔāl-/ 'take out'
 /ḥuʔāli/ '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 considered a special set of prefixes consisting of incorporated roots. The prefixes carry secondary stress and never take personal prefixes. The personal prefixes are infixes before the stem.

Examples 3.204a,b

(a) Stem: /yà...ʔéβ-/ 'understand'

1 /yàʔʔéβi/ /yàʔʔéβči/

2 /yàmʔéβi/ /yàmʔéβči/

3 /yàʔéβi/ /yàʔéβči/

singular plural

(b) Stem: /wà...sí·β-/ 'think'

1 /wàʔsí·βi/ /wàʔsí·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 /kʷè·-/ or /ʔč-/ . Personal prefixes, as in all complex verbal stems, are infixed before the stem carrying primary stress.

Examples 3.205a-c

(a) Stem: /kʷè...θō·/ 'eat something (hard)'

/kʷè·ʔθō·/ /kʷè·ʔθō·či/

/kʷè·mθō·/ /kʷè·mθō·či/

/kʷè·θō·/ /kʷè·θō·či/

singular plural

(b) Stem: /ʔč...čá·m-/ 'make a mistake'

1 /ʔčʔčá:mi/ /ʔčʔčá·mči/

2 /ʔčmčá·mi/ /ʔčmčá·mči/

3 /ʔččá·mi/ /ʔččá·mči/

singular plural

(c) Stem: /ʔč...răβ-/ 'be sick'

1 /ʔčʔrăβi/ /ʔčʔrăβči/

2 /ʔčmrăβi/ /ʔčmrăβči/

3 /ʔčrăβi/ /ʔčrăβči/

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 /ʔapē·mi/

2 /mapē·mi/

2 /pē·mi/

(b) Stem: /-ʔūm-/ 'no; not (negative verb)'

1 /ʔaʔūmi/

2 /maʔūmi/

3 /ʔūmi/

(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 /uk^wā/:

Example 3.211

Stem:	/smá:/	'sleep'
1sg	/ʔsmá:hk ʔuk ^w á/	'I feel sleepy'
2sg	/msmá:hk muk ^w á/	'you (sg) feel sleepy'
3sg	/smá:hk ɥuk ^w á/	'he feels sleepy'
1pl	/ʔsmá:čəhk ʔuk ^w á/	'we feel sleepy'
2pl	/msmá:čəhk muk ^w á/	'you (pl) feel sleepy'
3pl	/smá:čəhk ɥuk ^w á/	'they feel sleepy'

TABLE 6

Northeastern Yavapai Classes of Auxiliary Verbs

Class I: Locational Auxiliaries:

1. /uk^wā/ 'feel, sense'
2. /nú·/,
/unú·/ 'incompletive'
3. /wár-/ 'additional'

Class II: Existential Auxiliaries:

A: Behavioral:

1. /yú(·)/ 'be'
2. /wí(·)/ 'do'
3. /ʔí(·)/ 'say'

B: Cognitive:

4. /yí(·)/ 'think'

Class III: Modal Auxiliaries:

1. /yí·te·/ 'contrary to expectation'
2. /lwī/
(/lí(·)/) Verde Valley Yavapai
'should'
3. /hí:/
/yí:/ 'purposive/obligatory'

Class IV: Adverbial Auxiliaries:

1. /mā:t-/ 'apparently'
2. /-ʔūm-/ 'negative verb'

3.212 The Locational Auxiliary /-(u-)nú·/ '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 /unú·/ 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', /wí/ 'do', and /ʔí/ 'say' (see 3.214).

Example 3.212a

- (a) Stem: /yá·m-/ 'go away'
- | | | |
|-----|-------------------|-------------------|
| 1sg | /ʔyá·mąhk ʔunú·/ | 'I'm leaving' |
| 2sg | /myá·mąhk munú·/ | 'you're leaving' |
| 3rd | /yá·mąhk ɰunú·/ | 'he is leaving' |
| 1pl | /ʔyá·mčąhk ʔunú·/ | 'we're leaving' |
| 2pl | /myá·mčąhk munú·/ | 'you're leaving' |
| 3pl | /yá·mčąhk ɰunú·/ | 'they're leaving' |

Examples 3.212b,c,d

- (b) Stem: /yú/ 'be' 'is that what he's doing?'
- /nùβ yúk ɰunú·ʔ/ (e.g. being afraid)
- (c) Stem: /wí/ 'do' 'is that what he's doing?'
- /nùβ wík ɰunú·ʔ/ (e.g. eating)
- (d) Stem: /ʔí/ 'say' 'is that what he's doing?'
- /nùβ ʔík ɰunú·ʔ/ (e.g. telling something)

Example 3.212e

(e) Stem:	/yá·m-/	
1sg	/ʔyá·ma(h) ʔnú·/	'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	/ʔyá·mča(h) ʔnú·/	'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 /-ŋ/ alone or followed by the second recursive morpheme /-ì-/ (Tolkapaya -ee), glossed 'too' and 'again' respectively:

Examples 3.213a,b

(a) /ʔwí: ɲʔē·ɲok ʔwára(h) ʔnú·km/

'I am going to give him the money for you'

#ʔwí: ɲ-ʔē--ɲ-o-k ʔ-wár-h ʔ-nú·-km#

NM-money 1/2-give-too-APP-SS 1-ADD-IR 1-INC-IC

NM = noun marker

1/2 = first-person subject with second-person object

APP = applicative-benefactive

IR = irrealis

IC = imperfective contracted auxiliary phrase

(b) /tú· mčrʔūyɲik mwárèʔ/

'are you (sg) just teasing me again?'

#tú: m-črʔūy-ɲ-ì-k m-wár-èʔ#

PART 2-tease-too-again-SS 2-ADD-Q2

PART = particle

Q2 = interrogative on Type 2 stem

3.214 The Behavioral Auxiliaries /ʔí(·)/ 'say',

/yú(·)/ 'be', /wí(·)/ '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) /kná·β-/ 'tell' + /ʔī/
 /ʔkná·βk ʔʔim/ 'I am the one telling'
 /ʔkná·βk ʔʔin/ 'I am the one who told'
- (b) /smá·/ 'sleep' + /yū/
 /ʔsmá·k ʔyúm/ 'I am the one sleeping'
 /ʔsmá·k ʔyún/ 'I am the one who slept'
- (c) /mā:/ 'eat (soft things)' + /wī/
 /ʔmā:k ʔwim/ 'I am the one who eats'
 /ʔmā:k ʔwin/ '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·βkɾ/ 'he told'
- (b) Stem: /smá:/ 'sleep'
 /smá:km/ 'he is/was sleeping'
 /smá:kɾ/ 'he slept'
- (c) Stem: /mā:/ 'eat (soft things)'
 /mā:km/ 'he is/was eating'
 /mā:kɾ/ 'he ate'

3.216 The Reduplicatable Verbal Stem with /ʔi(·)/: To this special type of auxiliary phrase belong reduplicated stems as well as potentially reduplicatable stems. The behavioral auxiliary in such phrases might better be glossed as English 'go' as in 'the cow goes moo' /qʷāktč mū·ʔi/ or 'the old man coughs = the old man goes "cough, cough"' /βlhē·βč βkèhkēhʔi/. Another use is seen

in 'the earth quakes' /mátč βʔínʔíʔi/, which might be seen as 'the earth goes "ʔínʔín"' 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.' /ʔí(·)/ 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·ʔʔi/
 - 2 /βqlā·mì/
 - 3 /βqlā·ʔi/
- (b) Reduplicated Stem: /qlā·/ 'scream'
- 1 /βqlà·qla·ʔʔi/
 - 2 /βqlà·qlā·mì/
 - 3 /βqlà·qlā·ʔi/
- (c) Stem: /māč/ 'wink'
- 1 /βmāčʔʔi/
 - 2 /βmāčmì/
 - 3 /βmāčʔi/
- (d) Reduplicated Stem: /māč/ 'blink'
- 1 /βmàcmāčʔʔi/
 - 2 /βmàčmāčmì/
 - 3 /βmàčmāčʔi/

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·...-θō·-...wàl...-yī·-/ 'want to eat something (hard)'

1sg	/kʷè·ʔθō·hk wàlʔyī·/	'I want to eat'
2sg	/kʷè·mθō·hk wàlm(y)ī·/	'you (sg) want to eat'
3sg	/kʷè·θō·hk wàlyī·/	'one wants to eat'
1pl	/kʷè·ʔθō·čəhk wàlʔyī·/	'we want to eat'
2pl	/kʷè·mθō·čəhk wàlm(y)ī·/	'you (pl) want to eat'
3pl	/kʷè·θō·čəhk wàlyī·/	'they want to eat'

3.218 The Modal Auxiliary /yí·tè·/: 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) /ʔyá·ma(h) ʔnú· yí·tè· mǎrmǎrm yū·ha/
 'I intend to go, but it will be later'
 #ʔ-yá·m-h ʔ-nú· yí·tè· mǎrmǎr-m yū·-h-a#
 1-go-IR 1-INC MOD later-DS be-IR-ASSR
- (b) /ʔkná·βo yí·t yūh/
 'I tried to tell her, but didn't!'
 #ʔ-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) /mpī·tè·ʔ/
 'why don't you drop dead?!'
 #m-pī-tè·-ʔ#
 2-die-MOD(?)
- (d) /ʔnáʔ mʔē:patè·/
 'give me some, too!'
 ʔná-ʔ m-ʔē:-ŋ-a-tè·#
 1P-DISJ 2-give-too-IR-MOD(?)
 1P = first-person pronoun
 DISJ = disjunctive suffix

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

/kθyé: ʔʔū·h ʔlwí·a ʔyú·ma/

'I really ought to see a doctor'

#kθyé: ʔ-ʔū·-h ʔ-lwí·-a ʔ-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...yī·/ (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) /mβō·ma(h) myí·km/

'you are to return'

#m-βō·-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) /núl ʔyá·ma(h) ʔí·km/ alternates freely with

/ɲúl ʔyá·ma(h) ʔyí·km/

'I want to leave here'

#nú-1 ʔ-yá·m-h ʔ-X-km#

DEM-LOC 1-go-IR 1-X-IC

(d) /ʔhā mθī:(h) mí·kθò·/

'...when you want to drink water'

#ʔ-hā m-θī:-h m-í·-kθò·#

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) /ʔā·mča(h) ʔí·kɾ/

'he started out wandering'

#ʔā·mč-h ʔí·-kɾ/

wander-IR X-PI

PC = perfective contrated auxiliary phrase

(b) /ɾmíɾu ʔyō:k ʔwé· kmwā:ča(h) ʔí·ka/

'I got that cat to kill mice'

#ɾmí-ɾu ʔ-yō:-k ʔ-wé· kmwā:č-h ʔí·-ka#

cat-DEM I-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 /ʔí·β-/ 'pretend', in which Hardy (1979:167ff) sees a relationship to /ʔí·/ (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 /ʔí·/, /í·/, /hí·/, 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:	/ʔi(·)/	'say'
	1sg	/ʔʔi·/	
	2sg	/mi·/	
	3sg	/ʔi·/	

One could expect */mʔi·/ with the meaning 'you say.' Mixco (1972) makes the same observation in Kiliwa and suggests a phonological rule suppressing ʔ after m in this verb. This may seem rather ad hoc at first glance, but experience with NEY shows this can happen with /hi·/ and /yi·/; they both are realized as /mi·/ or /mi:/ (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 /myi·/ and /mi·/, in Andante and Allegretto respectively. One never finds, however, an variation between /mi·/ and */mhi·/. In 3.220c ones see free variation between /ʔi·/ and /ʔyi·/ (This speculation rests on the assumption of partial homonymy.)

3.2211 Let us assume that there are three distinct verbs at Level II: /ʔi·/ 'say'; /i·/ 'mean'; /yí·/ 'think' 'Think' is an ambiguous gloss in English. /wà...sī·β-/ is also glossed 'think.' The latter, however, is 'think' in the sense of using one's mind; the former /yi·/ 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 /ḥihá·ni/

One possibility is that the original verb, at Level I, was ʔi·. The stem at Level II, /ʔí·/, would have been conjugated:

- (b) 1st /ʔʔi·/
 2sg /mʔi·/
 3sg /ʔi·/

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

- (c) 1st /ʔi·/
 2sg /mi·/
 3sg /hi·/

The aspirate onglide of the third-person is 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 /i·/ as:

- (d) 1sg /ʔi·/
 2sg /mi·/
 3sg /yi·/

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

Example 3.2212b

(b) (repeated)

1sg /ʔʔf·/ = [ʔ₁ʔ₁[̣]·]2sg /mʔf·/ = [m₁ʔ₁[̣]·]

3sg /ʔf·/

and:

Example 3.2213a

(a) 1st /ʔiʔf·/ = [ʔ₁iʔ₁[̣]·]2sg /miʔf·/ = [miʔ₁[̣]·]

3sg /hiʔf·/ (Central: NEY, SEY, WY; and Paipai)

3sg /yiʔf·/ (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 /mā:t-/ 'apparently':

Example 3.222

/nθáč yŭh mā:tkm/

'it appears he will be the one'

#n-θá-č yŭ-h mā:t-km#

DEM-DEM-SUBJ be-IR ADV-IC

3.223 The Negative Adverbial Auxiliary /-ʔŭm-/: As a main verb /-ʔŭm-/ means 'be not.' It is as a third-person singular verb with infinitival suffixation, i.e. /ʔŭmi/, 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) /ʔaʔŭmčahk ʔnú·ma/

'we cannot do it'

#ʔ-a-ʔŭm-č-h-k ʔ-nú·-ma#

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

(b) /ʔná haβsù·ʔpâ:βč yŭh ʔaʔŭmi/

'I am not a Havasupai'

#ʔná haβsù·ʔpâ:-β-č yŭ-h ʔ-a-ʔŭm-i#

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

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·βō/ for 'first,' although the noun stem /púk/ does mean 'bottom, foot of; foundation. In SEY /yū·θčàti/ is 'almost,' however, NEY has /rī·pà/.

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·mč-/ plural subject stem

(b) 'kill'

/nēh-/ singular object stem

/kmwā:č-/ plural object stem

Pronouns can be inflected for singular, paucal plural, and multiple plural:

- (c) /ʔnǎ-/ first person singular stem
 /ʔnǎč-/ first person paucal plural stem
 /ʔnǎčβ-/ first person multiple plural stem
- (d) /má:-/ second person singular stem
 /máč-/ second person paucal plural stem
 /máčβ-/ second person multiple plural stem
- (e) /nθǎ-/ third person singular stem
 /nθǎč-/ third person paucal plural stem
 /nθǎčβ-/ third person multiple plural stem

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 7

Pluralization

1. Ablaut
 - a. /é(:)/ ~ /á(:)y/
 - b. /ó(:)/ ~ /á(:)w/
 - c. /í(:)/ ~ /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. /ç/ | 8. /s/ | 12. /ŋ/ | | 19. /a/ |
| 4. /k/ | 9. /h/ | 13. /l/ | | 20. /o/ |
| 5. /ʔ/ | | 14. /r/ | | 21. /u/ |

3.510 /p-/ 'synaesthetic alternate of /-β/': (See 3.565).

3.521 /t-/ 'plural' (not productive)

Example 3.521

/nčā·/ 'first cousin'

/tnčá·ča/ (plural)

3.522 /t-/ 'iterative':

Example 3.522

/čqnʔōni/ 'fold once'

/čtqnʔó·ni/ 'fold repeatedly'

3.523 /t-/ 'causative':

Examples 3.523a,b

(a) /púli/ 'be wet'

/tpúli/ 'wetten'

(b) /ʔú:βči/ 'they are seen'

/tʔú:βči/ 'they show'

3.524 /-t/ 'temporal coordinator':

(See Example 3.524 next page)

Example 3.524

/ʔū:tm yā:mkm/

'while one was looking, the other went away'

#ʔū:-t-m yā:m-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) /humé/ 'son (man speaking)'
 /hučmá·ya/ (plural)
- (b) /qmwírma/ 'old woman'
 /qčmwí·rma/ (plural)

3.532 /č-/ 'iterative':

Example 3.532

/čyûti/ 'rub'
 /ččyû·ti/ 'rub repeatedly'

3.533 /č-/ 'causative':

Examples 3.533a,b

- (a) /nâli/ 'fall'
 /čnâ·li/ 'drop'

- (b) /yá·mi/ 'go away'
 /čyá·mi/ 'send away'

3.534 /-č/ 'plural (on verb)':

Examples 3.534a,b

- (a) /ʔpá:/ 'person; Indian'
 /ʔpá:ča/ (plural)
- (b) /swâ·ri/ 'one sings'
 /swâ:rči/ 'they sing'

3.533 /-č/ 'iterative':

Example 3.535

- /ʔā·mi/ 'pass'
 /wàʔāmči/ 'visit frequently'

3.536 /-č/ 'subject case':

Example 3.536

- /ʔčkmtū·βč qčʔō·lkm/
 'the watermelon is round'
 #ʔč=kmtū-·β-č qčʔō·l-km#
 watermelon-DEM-SUBJ round-IC
 DEM = demonstrative

3.541 /k-/ 'relativizer; agentive':

Examples 3.541a,b

- (a) /myála/ 'bread'
 /kmyâ·la/ 'baker'
- (b) /yà...pâ·β-/ 'be responsible'
 /yà·kpâ·βa/ 'the one responsible'

3.542 /-k/ 'same subject':

Examples 3.542a,b

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

Compare:

- (b) /ʔū:tm kwá·wkm/
 'while he looked, he (someone else) spoke'
 #ʔū:-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':

Example 3.543

/wì·kβté·púkəh/

'at the foot of Granite Mountain'

#wì·-k-βté·-púk-h-k#

rock-REL-big-bottom-DEM-LOC

REL = relativizer

DEM = demonstrative

3.544 /-k/ 'directional':

Examples 3.544a,b

- (a) /táhki/ 'throw (toward speaker)'
 /mtáhki/ 'throw it this way!'

Compare:

- (b) /táhmi/ 'throw (away from speaker)'

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

Examples 3.551a,b

- (a) /ʔʔí·/ 'wood'
 /ʔì·shyārβa/ 'table'
- (b) /ʔwâ/ 'dwelling'
 /wàmpúrβa/ 'wickiup'

3.552 /ʔ-/ 'first-person (on verb or noun)':

Examples 3.552a,b

- (a) Stem: /βyám-/ 'run'
 /ʔβyámkm/ 'I am running'
- (b) Stem: /yá/ 'mouth'
 /ʔyá/ 'my mouth'

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

Examples 3.553a,b

- (a) /ʔŋáʔ/ 'me!'
- (b) /βyáʔ/ 'this one'

3.554 /-ʔ/ 'interrogative/vocative':

Examples 3.554a,b

- (a) /βkaʔ mʔū:ʔ/
 'who(m) do you see?'
- #β-ka-ʔ m-ʔū:-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'
 /kóla/ (absolute)
 /kólàʔ/ (vocative)

3.561 /β-/ 'inchoative/punctual':

Examples 3.561a,b

- (a) /mátč βʔú:βʔi/
 'twilight = the ground becomes visible'
 #mát-č β-ʔú:-β-ʔi#
 ground-SUBJ PCT-see-MP-"say"
 MP = (medio)passive
- (b) /βhi·pâ:ʔim/
 'it begins to get dark'
 #β-hi·pâ:-ʔi-m#
 PCT-night-"say"-IMP

3.562 /β-/ 'demonstrative':

Example 3.562

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

3.563 /-β/ 'demonstrative':

Example 3.563

/wí:βč ɲlâpkm/

'a rock hit me'

#wi:-β-č ɲ-lâp-km#

rock-DEM-SUBJ 2o-hit-IC

2o = second-person object with third-person
subject

3.564 /-β/ 'stative; attributive'

Example 3.564

/kʷâ:βi/

'horned'

#kʷâ:-β-i#

horn-ST-ABS

ABS = absolutive

3.565 /-β/ '(medio)passive':

Example 3.565

/ʔpâ·βč ʔčráβk spóβkm/

'it is apparent that the man is sick'

#ʔ-pâ·-β-č ʔč=râβ-k spó-β-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) /ʔū:θm nθá1 βqī·nč wám yð·k/
 'seeing that the woman was in there, he took her'
 #ʔū:-θ-m n-θá-1 βqī-:n-č wá-m yð·-k#
 see-TMP-DS DEM-DEM-LOC woman-DEM-SUBJ sit-DS
 take-SS
- (b) /nβlwī·θəh ʔnú·km/
 'I will have finished'
 #n-βlwī·-θ-h ʔ-nú·-km#
 PRF-finish-TMP-IR INC-IC
 PRF = perfectivizer
 IR = irrealis
 IC = imperfective constracted auxiliary phrase

3.572 /-θ/ 'demonstrative':

Examples 3.572a,b

- (a) /kʷē·θ kàβ mwī·/
 'what are you doing'
 #kʷē·-θ ká-β m-wī·#
 thing-DEM WH-DEM 2-do

- (b) /má:č mʔsitθk/
 'you are the only one'
 #má:-č m-ʔsīt-θ-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: /ʔām-/ 'move, pass'
 /tʔāmi/ 'cover, patch'
 /sʔāmi/ 'close (a door)'
 (b) Stem: /hkē·-/ 'other, opposite, different'
 /shkē·βa/ 'bridge'
 (c) Stem: /qāw-/ 'break' v.i.
 /sqāwa/ 'egg'

3.591 /-h/ 'demonstrative':

Examples 3.591a,b

- (a) /hlâh twáyi wâkm/
 'the moon is far away'
 #hlâ-h twáy-e wâ-km#
 moon-DEM far-TSLOC sit-IC

- (b) /ʔsā:hč nēhk /
 'the eagle killed (her)'
 #ʔ-sā-:h-č nēh-k #
 NM-eagle-DEM-SUBJ kill-PC
 PC = perfective constracted auxiliary phrase

3.592 /-h/ 'irrealis':

Examples 3.592a,b

- (a) /ʔnāč ʔkná·βahk ʔnú·k ʔyùm/
 'I am the one who is going to tell'
 #ʔnā-č ʔ-kná·β-h-k ʔ-nú·-k ʔ-yú-m#
 1P-SUBJ 1-tell-IR-SS 1-INC-SS 1-be-IMP
- (b) /kʷè·mθó·hàʔ/
 'do you want something to eat?'
 #kʷé·-m-θō·-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) /ʔnǎʔ mhwákk ʔapē·ma(h) ʔnú·ʔ/
 'are you going with me?'
 #ʔnǎ-ʔ m-hwák-k ʔ-a-pē:m-h ʔ-nú·-ʔ#
 1P-DISJ 2-two-SS 1-AUG-go=dual-IR 1-INC-QA
- (b) /nθǎč mʔē·kɾ/
 'he gave me'
 #n-θǎ-č m-ʔē·-kɾ#
 DEM-DEM-SUBJ 2-give-PC
- (c) /mi·tâtɾ ráβèʔ/
 'does your backbone hurt?'
 #m-i·tât-ɾ ráβ-èʔ#
 2-backbone-DEM hurt-QB

3.5102 /m-/ 'cylindrical':

Examples 3.5102a-e

- (a) /mpára/ 'leg'
- (b) /mlqī/ 'neck'
- (c) /myár/ 'penis'
- (d) /mltát/ 'barrel cactus'
- (e) /(?ð)młhū/ ~ /ʔmłłú·/ 'pipe'

3.5103 /-m/ 'temporal locative':

Example 3.5103

/myūla kʷəl.skʷī.skʷī māiči/

'Christmas=candycane-eating time'

#myūl-a kʷəl-skʷīskʷī mā-i-č-i#

sugar-ABS red-spirals eat-PL-PL-ABS

3.5104 /-m/ 'instrumental':

Example 3.5104

/?ŋá:βm pīli/

'one is burnt by the sun'

#?-ŋá:-β-m pīl-i#

NM-sun-DEM-INS burn-ABS

3.5105 /-m/ 'comitative':

Example 3.5105

/pà·hmí:βm ?hwāki/

'we are two men'

#pà·hmí:-β-m ?-hwāk-i#

man-DEM-COMIT 1-two-ABS

3.5106 /-m/ 'imperfective aspect':

Example 3.5106

/ʔnǎʔ yàβʔpē:βč ʔyúm/

'I am a Yavapai'

#ʔ-nǎ-ʔ yàβʔpē:-β-č ʔyú-m#

1P-DISJ Yavapai-DEM-SUBJ 1-be-IMP

3.5107 /-m/ 'directional':

Examples 3.5107a,b

(a) /ʔsmāmi/

'I stay overnight (literally: I sleep away)'

#ʔ-smā-m-i#

1-sleep-DIR-ABS

(b) /čyūwmi/

'drive away'

#č-yūw-m-i#

CAUS-come-DIR-ABS

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

Examples 3.5108a,b

(a) /yùri.sʔâmmi/

'button' (compound noun)

#yùr-i.s-ʔâm-β-i#

enter-ART+CAUS-move-MP-ART

ART = artifact

- (b) /wà·sì:pēmma/
 'drunkard ("crazied")' (compound noun):
 #wà·sī:-pēm-β-a#
 mind+go=dual-ST-ABS

3.5109 /-m/ 'different subject':

Examples 3.5109a,b

- (a) /ʔkwâ·wm hnú·km/
 'I'm speaking, and he's offended'
 #ʔ-kwâ·w-m hnú·-km#
 1-speak-DS offended-IC
- (b) /lâ·wm ʔʔū:km/
 'I see many (literally: there are many I see)'
 #lâ·w-m ʔ-ʔū:-km#
 many-DS 1-see-IC

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

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

Example 3.5111

- /βá·/ 'arrive (sg. subj.)'
 /nβá·/ '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)'
/npī·/ 'aunt (father's older sister)'
- (b) /ʔkʰó·/ 'daughter's child'
/nkó/ 'great-grandmother; great-aunt'

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

Examples 3.5113a,b

- (a) /ʔhā·n qnū·km/
'the water is muddy'
#ʔ-hā-·n qnū-·km#
NM-water-DEM muddy-IC
- (b) /ʔʔōnč qwāti/
'the fire is burning'
#ʔ-ʔō-n-č qwāt-i#
NM-fire-DEM-SUBJ burn-ABS

3.5121 /ŋ-/ 'possessive':

Examples 3.5121a,b

- (a) /ŋàʔŋmāta/
'my land'
#ŋá-ʔ+ŋ-māt-a# (compound)
1P-DISJ POS-land-ABS

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

3.5122 /ŋ-/ 'temporal subordinator'

Example 3.5122

/ŋyê·kkkθò·/
 'tomorrow (literally: when it dawns)'
 #ŋ-yê·k-k-k-θ-ò·#
 TSUB-dawn-SS-REL-CON-TEMP
 CON = contrastive modal

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

Example 3.5123

/wî:βč ŋlâpkm/
 'a rock hit me'
 #wî:-β-č ŋ-lâp-km#
 rock-DEM-SUBJ 3/1-hit-IC

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

Example 3.5124

/ɲʔū:ik ʔwá·rm ʔhánkɱ/

'I am glad to see you again'

#ɲ-ʔū:-y-k ʔ-wá·r-m ʔhán-kɱ#

1/2-see-again-SS 1-ADD-IMP good-IC

3.5125 /-ɲ/ 'demonstrative':

Examples 3.5125a,b

(a) /mčtāɲ kàβ ʔɪʔ/

'what did your father say?'

#m-čtā-ɲ ká-β ʔɪ-ʔ#

2-father-DEM WH-DEM say-QA

(b) /mlqĩɲ.màtháy.yâ·mʔò·/

'trachea (literally: where the air goes away
into the neck)'

#mlqĩ-ɲ+màtháy+yâ·m-ʔò·#

neck-DEM+wind+go away-NOM

NOM = nominalizer

3.5126 /-ɲ/ 'perfective':

Examples 3.5126a,b

(a) /ʔčkē·k ʔwĩɲ/

'I'm the one who pushed it'

#ʔ-čkē·-k ʔ-wĩ-ɲ#

1-push-SS 1-do-PERF

- (b) /ʔčkē·kɾ/
 'I pushed'
 #ʔ-čkē·-kɾ#
 1-push-PC
 PC = perfective contracted auxiliary phrase

3.5127 /-ɾ/ 'too':

Examples 3.5127a,b

- (a) /ɾɾúč swā·ɾɾk wárèʔ/
 'is he singing, too'
 #ɾ-ɾú-č swā·ɾ-ɾ-k wár-èʔ#
 DEM-DEM-SUBJ sing-too-SS ADD-QB
- (b) /ʔyā·mɾik wára(h) ʔnú·km/
 'I'm going, too'
 #ʔ-yā·m-ɾ-ì-k wár-h ʔ-nú·-km#
 1-go away-too-REC-SS ADD-IR 1-INC-IC

3.5131 /-l/ 'inner locative':

Examples 3.5131a,b

- (a) /ʔsáll ʔi·kôkm/
 'I carry it in my hand'
 #ʔ-sál-l ʔ-i·kô-km#
 1-hand-LOC 1-carry-IC

- (b) /ʔwâ:βl ʔwā/
 'I am (sitting) in the house'
 #ʔ-wâ-:β-l ʔ-wā#
 NM-house-DEM-LOC 1-sit

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

Examples 3.5140a,b

- (a) /hičáŋ/ 'daughter; girl'
 /hičā:raŋo/
 'for the girls'
 #hičā-r-a-ŋ-o#
 girl-PL-AUG(?) -DEM-APP

- (b) /hmē/ 'boy (sg.)'
 /hmâ:r(a)/ (plural)

also: /homé·ča/

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 3.5171a-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·púk/ | 'neck' |
| | /púk/ | 'bottom; foot (of a mountain)' |
| (e) | /i·tát/ | 'back; spine' |
| | /tát/ | 'thorn' |
| (f) | /yú(·)/ | 'eye' |
| | /ʔū:/ | 'see' |

- (g) /i·βō·/ 'be first; be in front'
 /βō·/ 'walk'
- (h) /i·wâya/ 'heart'
 /wā/ 'sit; dwell'
- (i) /i·má/ 'dance'
 /mā/ (?) 'be ripe, be ready'

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

Examples 3.5172a-c

- (a) /p̄hāyi/ 'be like liquid'
 #p̄-hā-i-i#
 DEM-water-DEN-ABS
- (b) /ʔkʷī·yi/ 'cloudy'
 #ʔ-kʷí-i-i#
 NM-cloud-DEN-ABS
- (c) /(?)rúyi/ 'hot'
 /rúβi/ 'dry'

This presupposes an unattested *rú undergoing two derivational processes:

- (c') /(?)rúyi/
 #(?)-rú-i-i#
 (?)-dry/hot-DEN-ABS
- (c'') /rúβi/
 #rú-β-i#
 dry-hot-ST-ABS

3.5173 /-i/ 'recursive':

Examples 3.5173a,b

- (a) /míyì/
 'say it again!'
 #m-í-ì#
 2-say-REC
- (b) /pθáč yā·mìyèʔ/
 'Is he gone, too?'
 #p-θa-č yā·m-ì-èʔ#
 DEM-DEM-SUBJ go away-REC-QB

3.5174 /-i/ 'absolute'

Examples 3.5174a,b

- (a) /ʔpá:h ʔspōh ʔaʔūmi/
 'I do not know the man'
 #ʔ-pá:-h ʔ-spō-h ʔ-a-ʔūm-i#
 NM-person-DEM 1-know-IR 1-AUG-NEG-ABS
- (b) /mpāθkčì/
 'shut up (pl.)!'
 #m-pāθk-č-i#
 2-shut up-PL-ABS

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

Examples 3.5175a,b

- (a) /ʔk^hwà.yúyi/
 'eyeglasses'
 #ʔ-k^hwā+yū-i-i#
 NM-glass/metal-eye-PL-ART
- (b) /ʔk^wè°.trúyβi/
 #ʔ-k^wè°+t-rú-i-β-i#
 NM-thing+CAUS-dry/hot-DEN-ST-ART

3.5176 /-i/ 'plural':

Examples 3.5176a-c

- (a) /ʔyā·s θō·iči kwā·hm/
 'Thanksgiving (literally: turkey eating time)'
 #ʔ-yā·s θō·-i-č-i k-wā·-h-m#
 NM-turkey eat-PL-PL-ABS REL-sit-DEM-TLOC
- (b) /ʔk^hòi.khō·rβa/
 'piñon hills (Pln.: Prescott Heights)'
 #ʔ-k^hō-i+k-hō·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 /-eʔ/ 'interrogative' (on Type B Stems):

Examples 3.5181a,b

- (a) /ʔyā·mčèʔ/
 'are we going?'
 #ʔ-yā·m-č-èʔ#
 1-go away-PL-QB
- (b) /kàkyúč̣βa mhnā:qèʔ/
 'which one did you want?'
 #ká-k-yú-č̣-β-a m-hnā:q-èʔ#
 WH-REL-be-NOM-DEM-ABS 2-want-QB

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

Examples 3.5182a,b

- (a) /ʔáwèʔ/, cf. /ʔáwa/ 'grandson' (ABS)
 'grandson (man speaking)!'
 #ʔáw-èʔ#
 grandson-VOC
- (b) /kɾmsâβèʔ/
 'Kemo Sabe!' (literally: 'white things,' not
 'white man')
 #k-ɾmsâβ-èʔ#
 REL-white-VOC

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

Examples 3.5183a-e

- (a) /mí:βkʔè/
 'after'
 #mí:βk-ʔè#
 after-STLOC
- (b) /púka(h)lè/
 'at the bottom'
 #púk-h-l-è#
 bottom-DEM-ILOC-STLOC
- (c) /qʔqʷârè/
 'outside'
 #q-ʔqʷâr-hè#
 REL-wilderness-STLOC
- (d) /mât.khōrβa čá·hè/
 'the top of the hill'
 #mât+k-hōr-β-a čá·-hè#
 land+REL-hill-ST-ABS top-STLOC
- (e) /βʔômè/
 'end, edge'
 /βʔômi/
 '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 allomorph of either the 'irrealis' /-h/ or the 'demonstrative' /-h/, the latter itself being in a synaesthetic or at least stylistic alternation 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 exemplified 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 /-ò/ 'applicative':

Examples 3.5203a-d

- (a) /ʔsmálkβa ʔθrúyòkm/
 'I pierce(d) my ear'
 #ʔ-smálk-β-a ʔ-θrúy-ò-km#
 l-ear-DEM-ABS l-pierce-APP-IC
- (b) /kwá·w ʔʔíwòk/
 'I am teaching him to speak'
 #kwá·w ʔ-ʔí-(w)ò-k#
 speak l-say-(?)APP-SS
- (c) /ʔhát ɲhɔ́yò/
 'shoe a horse'
 #ʔ-hát ɲhɔ́-i-ò#
 NM-horse shoe-DEN-APP
- (d) /ʔk^hwámíwò/
 'rock music' (literally: makes instrument cry)
 #ʔ-k^hwá+mí-(w)ò#
 NM-instrument cry-(?)APP

(Epenthetic w's, glossed as "(?)," are discussed in 4.50)

3.5204 /-o/ 'perfect/evidential':

Examples 3.5204a-c

- (a) /tí·βk yûokm/
 'she's pregnant for sure'
 #tí·β-k yū-o-km#
 pregnant-SS be-P/E-IC
- (b) /nmí·βč ʔwé:h nēhk wîwokm/
 'the cat did kill the mouse'
 #nmí·β-č. ʔ-wé:-h nēh-k wî-(w)o-km#
 cat-DEM-SUBJ NM-mouse-DEM kill-SS do-(?)P/E-IC
- (c) /ʔčθī: qyātōk wîwokm/
 'he drank too much (but he did not realize it)'
 #ʔč-θī: qyāt-o-k wî-(w)o-km#
 COM-drink much-RES-SS do-(?)P/E-IC

3.5205 /-o/ 'resultative'

Examples 3.5205a,b

- (a) /yàβʔpé·βč ʔhāno qyātk kʔū· púβkm/
 'the Yavapai weaves very beautiful baskets'
 #yàβʔpé·β-č ʔhān-o qyāt-k kʔū· púβ-km#
 Yavapai-DEM-SUBJ beautiful-RES much-SS basket
 weave-IC

- (b) /nâ:βm ʔčʔmā: qyâto/
 'I ate too much today'
 #nâ:-β-m ʔč-ʔ-mā: qyât-o#
 sun-DEM-TLOC COM-1-eat much-RES
 /ʔč...θī:/ and /ʔč...mā:/ are complex verbs.

3.5206 /-ò·/ 'locational nominalizer':

Examples 3.5206a,b

- (a) /nà·.rôpò·/
 'west'
 #nà·+rôp-ò·#
 sun+go=down-LNOM
- (b) /myà·.tyû·wβò·/
 'horizon' (literally: where the sky is made
 to come to)
 #myā·+t-yû·w-β-ò·#
 sky+CAUS-come-ST-LNOM

3.5207 /-ō(?)/, /-ō:/ 'vocative (unseen addressee)':

Examples 3.5207a,b

- (a) /kōlōʔ/
 'grandmother!' (literally: mother's mother)
 /kōla/
 (absolute)

- (b) /mhāmkō:/
 'hello'
 #m-hā-m-k-ō:#
 2-look-DIR-SS-VOC
 /mhāmka/ is the usual form.

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

Examples 3.5211a-c

- (a) /uʔā1-/
 'take out, remove'
 /čʔā1-/
 'rise, come out'
 /ʔá·1/
 'swell, be swollen'
- (b) /unú·/
 'incompletive' locational auxiliary (not well
 exemplified in 3.213 and contrasting with
 /nú·/):
- (c) /uṛé/
 'father-in-law'
 /ṛaʔṛé/
 'my daughter-in-law'

3.5212 /-u/ 'demonstrative':

Examples 3.5313a,b

- (a) /hmáŋu ʔhàʔθpū·yòh ʔnú·km/
 'I am going to wash the baby'
 #hmáŋ-u ʔ-hà-ʔ-θpū·y-ò-h ʔ-nú·-km#
 baby-DEM NM-water-1-wash-APP-IR 1-INC-IC
 /ʔhà...θpū·yi/ is a complex verb.
- (b) /(?kʷé·ŋu/ ~ /(?kʷé·ŋo/
 'some thing, the thing'
 #(?-kʷé·-ŋ-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. /-čβ-/ 'multiple plural'
5. /-ka/ 'emphatic' (?) 'increment' (?)
6. /-kθò·/ 'conditional'
7. /-km/ 'contracted imperfective auxiliary phrase'
8. /-kp/ 'contracted perfective auxiliary phrase'
9. /ʔ...m-/ 'second-person subject with first-person object' (on transitive verbs)
10. /-ha/ 'emphatic irrealis' (?) 'increment' (?)
11. /-mè·/ 'conjunction' (?) 'increment' (?)
12. /-ma/ 'assertive'
13. /-mó·/ 'dubitative'
14. /-ra(β)/ 'intensifier'
15. /-wèʔ/ 'past question'

3.611 /-pè·/ 'interrogative conjunction':

Examples 3.611a,b

- (a) /ʔyā·mk ʔyúβàpè·/
 'and how would it be if I went?'
 #ʔ-yā·m-k ʔ-yū-β-à-pè·#
 1-go=away-SS ʔ-be-DEM-IR-QCON
- (b) /nàʔččí·βčpè·/
 'and what about my mother (ellipticized: where
 is she? or what did she do?)'
 #ná-ʔ-ččí·-β-č-pè·#
 1-1P-mother-DEM-SUBJ-QCON

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

Examples 3.612a,b

- (a) /má:č pa·mswá:rčom ʔē·βč(a)h/
 'you (pl.) sing for them; they'll hear it'
 #má:-č pa·-m-swá:r-č-o-m ʔē·β-č-h#
 2P-SUBJ PLo-2-sing-PL-APP-DS hear-PL-IR
- (b) /nθáč nʔē·km/
 'he gives it to me'
 /nθác pa·nʔē·km/
 'he gives it to us'

3.613 /-tè·/ 'exhortative':

Examples 3.613a,b

- (a) /mpītè·ʔ/
 'why don't you drop dead?'
 #m-pī-tè·-ʔ#
 2-die-EXH-QB
- (b) /mʔē·natè·/
 'give me some, too!'
 #m-ʔē·-ŋ-a-tè·/
 2-give-REP-AUG(?) -EXH

3.614 /-čβ-/ 'multiple plural'

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

Examples 3.615a,b

- (a) /mi·wá·y1 mnhmē·rβka/
 'be kind in your heart!'
 #m-i·wá·y-1 m-nhmē·rβ-ka#
 2-heart-LOC 2-kind-SSa
- (b) /mnhmē·rβk mspōβka/
 'be kind and mindful!'
 #m-nhmē·rβ-k m-spō-β-ka#
 2-kind-SS 2 mindful-SSa

3.616 /-kθò·/ 'conditional' (discussed in 3.5122)

3.617 /-km/ 'imperfective contracted auxiliary phrase'

3.618 /-kɲ/ 'perfective contracted auxiliary phrase'

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

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

Examples 3.619a,b

- (a) /máčβč ʔmʔē·čkɲ/
'you (pl.) gave it to us'
#má-čβ-č ʔm-ʔē·-č-kɲ#
2P-MPL-SUBJ 2/1-give-PL-PC
- (b) /máčβč ʔpa·mʔē·čkɲ/
#má-čβ-č ʔ-pa·-m-ʔē·-č-kɲ#
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

/psāha/

'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) /náč kʔū· ʔpúβk ʔi·wīla ʔkvúlk mirmíra yúčmè·/
'we make baskets out of long, straight branches'
#ná-č kʔū· ʔ-púβ-k ʔi·wīla ʔkvúl-k mirmír-a
yú-č-mè·#
1P-SUBJ basket 1-weave branch long-SS straight-
ABS be-PL-mCON
- (b) /maʔūmmè·/
'and don't (do that either)!' .
#m-a-ʔūm-mè·#
2-AUG-NEG-mCON

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

Examples 3.6112a,b

- (a) /ʔʔi·ma/
 'I declare'
 #ʔ-ʔi·-ma#
 1-say-ASSR
- (b) /maʔūma(h) mnú·ma/
 'you cannot'
 #m-a-ʔūm-h m-nú·-ma#
 2-AUG-NEG-IR 2-INC-ASSR

3.6113 /-mó·/ 'dubitative':

Examples 3.6113a,b

- (a) /myā·mč ʔhāna hí·mó·/
 'I hope you have a good trip' (literally: that
 your going may be good)
 #m-yā·m-č ʔhān-a í·-mó·#
 2-go=away-SUBJ good-ABS X-DUB
- (b) /má·m ʔhwákk ʔapē·ma(h) yí·mó·/
 'maybe the two of us are going'
 #má·-m ʔ-hwák-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

/qʌē·ra/ ~ /qʌē·ràβa/

'disgusting!' (considered a strong oath)

#qʌē·-ra# #qʌē·-rà-β-a#

bad-INT bad-INT-ST-ABS

3.6115 /-wèʔ/ 'past question':

Examples 3.6115a,b

(a) /ʔhānok wíwèʔ/

'did he do it well?'

#ʔhān-o-k wí-wèʔ#

good-TEM-SS do-QP

(b) /kàβyú myúk mthó·towèʔ/

'why did you hide her from me?'

#ká-β yú m-yú-k m-thó·t-o-wèʔ#

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 /čyálβ-/ 'be painted.' The stems now derived surface as:

- (a) /čyāli/ 'paint (transitive verb)'
- (b) /čyálβi/ 'be painted (stative verb)'

The 'absolute' /-i/ must be added since both are Type B Stems. The transcription also reflects the different pitches on the forms: Pitch 1 on /čyāli/, Pitch 2 on /čyálβi/. The stative stem /cáyλβ-/ 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 /čyâ·lβi/ '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 consistency 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/, /é/, and /ó/ and /ú(·)y/, /á(·)y/, and /á(·)w/ respectively. The alternation /é/ ~ /á(·)y/ is common. Less common are the alternations /i/ ~ /ú(·)y/ and /ó/ ~ /á(·)w/.

Examples 3.721a-d

- | | | |
|-----|-----------|--------------------------|
| (a) | /pī/ | 'die, be dead' (sg.) |
| | /pú·yi/ | (plural) |
| (b) | /βqī/ | 'woman' (sg.) |
| | /βqū·ya/ | (plural) |
| (c) | /θβlī/ | 'make a (larger) hole' |
| | /θβlú·yi/ | 'having (larger) holes' |
| (d) | /θβrī/ | 'make a (smaller) hole' |
| | /θβrú·yi/ | 'having (smaller) holes' |

Examples 3.722a-c

- | | | |
|-----|----------|---------------------------------|
| (a) | /čó·βi/ | 'fight' (sg.) |
| | /čá·wβi/ | (plural) |
| (b) | /nó·/ | 'be heavy' |
| | /kβnāwi/ | 'carry heavy objects in arm(s)' |
| (c) | /kìβō/ | 'rain' |
| | /kìβáwi/ | 'be rainy' |

Examples 3.723a-c

- (a) /pé·/ 'bear fruit; be born (sg.)'
 /páyi/ (plural)
- (b) /βté/ 'big, large (sg.)'
 /βtā·yi/ (plural)
- (c) /qê(·)/ 'sticky; dusty (sg.)'
 /qāyi/ (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) | /wīsa/ | 'mother's older sister' |
| | /wī·sa/ | (plural object) |
| (b) | /kī _ɲ a/ | 'great-grandchild' |
| | /kī· _ɲ a/ | (plural object) |
| (c) | /ʔsīti/ | 'one' |
| | /ʔsī:ti/ | 'few' |
| (d) | /k ^w ēra/ | 'mother's older brother' |
| | /k ^w ē·ra/ | (plural object) |
| (e) | /kêla/ | 'younger sibling' |
| | /kê·la/ | (plural object) |

- (f) /wâka/ 'older sibling'
 /wā·ka/ (plural object)
- (g) /ʔāwa/ 'mother's parents to Ego'
 /ʔā·wa/ (plural object)
- (h) /pà·táya/ 'old person'
 /pà·tá·ya/ (plural)
- (i) /qwàw.kh^wâta/ 'Zuñi; Ute' (literally: redhead)
 #qwâw+k-h^wât-a#
 hair+REL-red-ABS
 /qwàw.kh^wâ·ta/ (plural)

3.742 Quantitative and Qualitative Alternations Combined with Affixation:

Examples 3.742a-1

- (a) /tkâβi/ 'gather'
 /ttkâ:βi/ (plural subject)
- (b) /sklpū·yi/ 'hug'
 /tsklpū·yβi/ 'hug each other'
- (c) /tnâkβi/ 'meadow-like'
 /ttnâ:nkβi/ (plural)
- (d) /kčāqi 'drip'
 /kččā:qi/ (plural subject)
- (e) /čkvâti/ 'cut'
 /ččkvâti/ (plural object)
- (f) /čθū:li/ 'wash'
 /ččθū:li/ (plural object)

- (g) /čyūti/ 'rub'
 /ččyū:ti/ (plural object)
- (h) /mā:/ 'eat (soft things)'
 /māči/ (plural subject)
- (i) /swá·ri/ 'sing'
 /swá·rči/ (plural subject)
- (j) /tβhké·βi/ 'exchange, swap'
 /tthkā·yβi/ (plural subject)
- (k) /ʔàrʔyé·km/ 'I thank you'
 /ʔàrʔyā·ykm/ 'we thank you'
- (l) /ʔè·ʔyī:/ 'I love' (from ʔè·...-yī:)
 /ʔè·čʔyí·čβi/ 'we love each other'

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

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. | /mū·ʔi/ | 'moo v.' |
| 3. | /βʔū:βʔū:ʔik/ | 'thunder v.' |

(b) Covert Sound Symbolism:

- | | | |
|----|------------|----------------------|
| 1. | /qʌê·pi/ | 'bad' |
| | /qʌê·βi/ | 'worse' |
| 2. | /nmsáβi/ | 'white' |
| | /nmθáβi/ | 'grey' |
| 3. | /kíči/ | 'tiny' |
| | /qéči/ | 'small' |
| 4. | /mkʷáni/ | 'pound' |
| | /mqʷáni/ | 'pulverize' |
| 5. | /hʷáli/ | 'dig out' |
| | /hʷári/ | 'scoop out' |
| 6. | /ʔná/ | 'ouch' |
| | /ʔrá/ | 'ow' |
| | /ʔlá/ | 'ugh' |
| 7. | /ʔkʷâθi/ | 'brown' |
| | /ʔqʷāθi/ | 'yellow' |
| | /ʔqʷā[ɣ]i/ | 'yellow' (W. Gazzam) |
| 8. | /klʔúlki/ | 'ridges' |
| | /qrʔúrqi | 'furrows' |
| 9. | /kʷâki/ | 'opens' |
| | /qʷâqi/ | '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:
 /há:há:/ 'whinny'
- (b) Synaesthesia:
 /hù:q^wiθq^wfíθa/ 'bird'
- (c) Overlap:
 /sèhséh/ 'sigh'
 /θèhθéh/ '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'

- | | | |
|-----|---------------|----------------------------------|
| 8. | /čáq/ | 'drip' |
| 9. | /čál/ | '...boulder' |
| 10. | /(θ)čúr/ | 'pierce' |
| 11. | /člá·/ | 'lightning' |
| 12. | /kíč/ | 'little' |
| 13. | /kéh/ | 'cough' |
| 14. | /ká(r)/ | 'cockadoodledo' |
| 15. | /ká·rk/ | 'rock back and forth' |
| 16. | <u>Kop</u> | 'beat; cave in' |
| 17. | <u>koL</u> | 'rocks; dice' |
| 18. | /ksí/ | 'point' |
| 19. | /kʷír/ | 'spin' |
| 20. | <u>Kʷa·Kβ</u> | 'open slowly; gallop; busted up' |
| 21. | /kʷá·m/ | '...cotton' |
| 22. | /(h)qís/ | 'rub hard' |
| 23. | /qír/ | 'giggle' |
| 24. | /qé/ | 'sticky' |
| 25. | /qáh/ | 'crack' |
| 26. | /qáw/ | 'fox bark' |
| 27. | /qóč/ | 'tickle' |
| 28. | /qlá·/ | 'scream' |
| 29. | /qwó·/ | 'stirred up' |
| 30. | /qʷíθ/ | 'point' |
| 31. | /qʷír/ | 'point' |
| 32. | /ʔín/ | 'quake' |
| 33. | /ʔír/ | '...butte' |
| 34. | /ʔú·(w)/ | 'howl' |

35.	/βó(h)/	'bark'
36.	/wó(h)/	'bark'
37.	/θírk	'...cricket'
38.	/θíw/	'...javelina'
39.	<u>θuL</u>	'itch'
40.	<u>Seh</u>	'sigh; breathe'
41.	<u>seL</u>	'stick up'
42.	/súl/	'transparent'
43.	/sól/	'transparent'
44.	/sk ^w í/	'...candycane'
45.	/híč/	'stacked'
46.	/hér/	'slide down'
47.	/há/	'pant'
48.	/há:/	'whinny'
49.	/hán/	'massage'
50.	/hár/	'work'
51.	/hól/	'flow'
52.	/hór/	'top'
53.	/hú·/	'hoot'
54.	/hún/	'...level ground'
55.	/h ^w ír/	'ripple'
56.	/mín/	'...hummingbird'
57.	/mír/	'straight'
58.	/máč/	'blink'
59.	/már/	'rub in circles'
60.	/mór/	'trot'
61.	/ní·/	'exclamation of fear'

- | | | |
|-----|------------|------------------------|
| 62. | /nóm/ | '...countless' |
| 63. | <u>LiB</u> | 'flutter; quiver; wag' |
| 64. | <u>Lap</u> | 'flat' |
| 65. | /láv/ | 'many' |
| 66. | /ló·h/ | 'snore' |
| 67. | /lúl/ | '...flute' |
| 68. | /ríβ/ | |
| 69. | /ríθ/ | '...freckles' |
| 70. | /ráβ/ | 'hurt' |
| 71. | /rúy/ | 'small path' |
| 72. | /yáŋ/ | 'very round' |
| 73. | <u>yaL</u> | 'circular' |
| 74. | /yúk/ | 'oblong' |
| 75. | /yús/ | 'cool' |
| 76. | <u>wiL</u> | '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 /r/
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," hypocoristic speech, under which one includes the nursery forms of baby talk. It is the latter phonostylistic category which will be examined first.

3.8211 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.

3.82111 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 3.82111a-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 /mšyě:/, and cognates in other, non-Pai languages suggest the Proto-Yuman form was *mšya:y. One could account for /mšē·/ by postulating a rule: sy → š / __ e. The restricted environment accounts for forms like:

Example 3.82111d

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

Personal names offer another source for hypocorism. The /šì.hmī/, phonetically [šìmi] is from unmarked /msì.hmī/. (/msí/ 'woman' + /hmī/ 'energetic').

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

Examples 3.82112a-c

- (a) Onomatopoeia:
 /hà·há·/ 'pant' vs. /hǎ·hǎ·/ 'whinny'

(b) Synaesthesia:

/šáwa/ 'offspring (sg.)' vs. /šá:wa/ 'offspring (pl.)'

(c) Interjections:

/nī·nī·/ or /nī̃·nī̃·/ (exclamation of fear)

(d) Sporadic Occurrence:

/mh^wā:/ 'badger' or /mh^wā̃:/ (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 /ráβi/ 'hurt' and /ʔlá: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 infix, causing nasalization.

3.82114 Hypocoristic /l/, /ʌ/ Alternation: This alternation is related to the gradient alternation /n ~ r ~ l/ above and occurs in only one stem, /qʌē·/ '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 /β/
- b. /k/ and /q/
- c. /kʷ/ and /qʷ/
- d. /θ/ and /s/
- e. /l/ and /r/
- f. /l/ and /ʌ/

3.8222 Tandem Alternations

- a. /kʷ...θ/ and /qʷ...s/
- b. /k...l/ and /q...r/
- c. /kʷ...k/ and /qʷ...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 /k^w/ and /q^w/
- 4 /k^w...k/ and /q^w...q/
- 5 /k...l/ and /q...r/
- 6 /θ/ and /s/
- 7 /n/ and /r/ and /l/
- 8 /l/ and /ʌ/
- 9 /p/ and /β/
- 10 /ki/, /ke/, /ka/, /qa/, /qe/
- 11 /k^w...θ/ and /q^w...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, /h^wáli/ 'dig out' involves larger physical motions than /h^wári/ 'hollow out.' /mk^wáni/ 'pound' could be said to involve less intensity of motion than /mq^wáni/ 'pulverize.' /k^wáki/ 'open' has less

intensity than /q^wâqi/ 'shatter.' The 'furrows' described by /qr[?]úrqi/ are of smaller dimensions than the 'ridges' described by /kl[?]úlki/. /[?]ná/, /[?]rá/, and /[?]lá/ 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 /[?]msáβi/ 'white' and /[?]mθáβi/ 'grey' or /kwáθi/ 'brown' and /q^wáθi/ 'yellow.' /q[?]â·pi/ 'bad' is not as "bad" as /q[?]â·βi/, but only when one sees nouns from the same stem, does one begin to have an idea of the difference; i.e. /q[?]â·pa/ is 'something rotten,' while /q[?]â·βa/ is used for a 'real slob.'

3.8241 Discussion of /q[?]â·p-/: For a number of reasons /q[?]â·p-/ 'bad (in some way)' is the most interesting stem in the language. It is derived from /q[?]â·/ 'dislike.' The /p/ is the alternate of /β/, which is identified with /-β/ '(medio)passive.' The derivation is clear this far: 'disliked, dislikable.' The /[?]/ is a subjective/metaphorical distortion of la 'bad'; the /q/ could be understood to be a /k-/, perhaps the 'relative,' perhaps another derivational /k-/. The presence of /[?]·/ is easy to understand when one knows the ablauted plural /q[?]á:yβi/. 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 /š/; 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. mKwan
- e. hwaL
- f. ʔDa
- g. ʔkwaS
- h. KLʔuLK
- 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, K^w, 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 /š/ and /ʎ/ 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 /sèhséh/ 'sigh'
 /èhèhéh/ 'breathe'
- R = reduplication
- (b) SYaw /θáwa/ 'offspring'
 /šáwa/ (hypocoristic)
- (c) SYah /sāhi/ 'stink'
 /šāhi/ (hypocoristic)
- (d) mSYe· /msé·/ 'fear'
- (e) R:ha· /hà·há·/ 'pant'
- (f) R:Nha· /hǎ·hǎ·/ 'whinny'
- (g) SYNa:w /šǎ:wa/ 'offspring (pl.)'
- (h) mh^wNa: /mh^wǎ:/ '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'
 /impû·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 archi-synaestheme is puL.

- (b) /kapámka/ 'grasshopper'
 /qa(m)pánqa/ 'bat (animal)'

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

- (c) /hē·li/ 'flow (as a river)'
 /hòlhól/ 'flowing (as a waterfall)'
 /hèrhér/ 'slide down'

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

- (d) /skʷI/ 'stand up v.t.'
 /ʔčskʷīli/ 'sew' (SEY)
 /skʷī·ni/ 'turn off (an appliance)'

I can see the relatedness of the above forms by means of skʷi-D, from which I can detach the prefix, leaving kʷi, which looks like /kʷi·/ 'weave.' Example set 2.832e lists these and other possibilities.

(e)	/kʷi·/	'weave'
	/θkʷi·/	'squeeze, wring out'
	/θkʷiɲi/	'wrinkled'
	/ʔkʷiɲi	
	/kʷinči/	'soften (buckskin)'
	/smkʷinβa/	'stirred around (like gruel)'
	/kʷirβa/	'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, /ʔkʷi/ 'cloud' might be seen as 'spinning, whirling,' but the puL underlying 'hat' and 'forehead' bear no obvious semantic resemblance to /pūli/ 'be wet.'

3.834 The Derivational Family of 'hand': /sâl/ 'hand; arm' is a Yavapai morpheme which recurs in the lexicon in many guises. As the quasi-classifier /sl-/ and as the first root /sâl-/ 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.	/slmâka/	'shoulder blade'
	3.	/sàlqčqē·ča/	'little finger' (sg.)
	4.	/sàlkčkí·ča/	'little finger' (pl.)
	5.	/sàslhʷō·/	'fingernail' (classifier and root)

To write /sâl/ in the archisynaesthemes SVL would be motivated by the examples below:

- (b)
- | | | |
|-----|-------------------------------|--|
| 1. | /k ^h wàmsârβa/ | 'fork' |
| 2. | /mìkmsâ·rβa/ | 'toe' |
| 3. | /kθár/ | 'dog; <u>archaic</u> : 'coyote'
("lefty") |
| 4. | /sàlkθá:rò·/ | 'left hand' |
| 5. | /k ^w è·mθā:rβʔiça/ | 'net' |
| 6. | /θrāpi/ | 'five' |
| 7. | /hàlθū·yi/ | 'nine' |
| 8. | /sé·lβi/ | 'stick up like fingers' |
| 9. | /ksèlséli/ | '...(cock's) comb' |
| 10. | /pùrksē·lβa/ | 'war bonnet' |
| 11. | /pùrksérβa/ | '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...yī·/ is a complex verbal stem. When it occurs in an auxiliary phrase, the 'same-subject marker' /-k/ preceding the /wàl...yi·/ 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 wàlʔyī·/ occurs as:

[ʔṣ̌.ṣṃ.má:h.kwàl.ʔī.yì·]

(Three levels of sentence stress are: ['] primary, [ˈ] secondary, and [ˊ] tertiary. [ṣ̌] and [ṃ] are syllabic. This circumstance led me initially to analyze auxiliary phrases of this type as /kwàl...yī·/)

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

CHAPTER FOUR

THE PHONOLOGY

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 dissertations¹ 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: /p^h, t^h, tʃ^h, k^h, 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 /h^w, k^w, kh^w, kv/ 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:² Judith Joël² and I are the only Yumanists to distinguish three distinctive vowel lengths.¹ 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 Mixco³ 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 meeting⁴ 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 post-aspirated 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.
- 1966:
 - a. Crawford for Cocopa.
 - b. Joël for Paipai.
 - c. Langdon for Diegueño.
 - d. Redden for Hualapai (Walapai).
 - e. Shaterian for Yavapai (ms.)
 - f. Winter for Hualapai (Walapai).
- 1971:
 - a. Mixco for Kiliwa.
 - b. Shaterian for Yavapai (ms.)
- 1972:
 - a. Kendall for Yavapai (Verde Valley dialect).
 - b. Kozlowski for Havasupai.
- 1974: Munro for Mojave.
- 1977: Hinton for Havasupai.

1979: Hardy for Tolkapaya (Western Yavapai).

1980: Gordon for Maricopa.

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 morpho-phonemic 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 syllabicity, 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:

1. C^ˈV
2. C^ˈVCV
3. CC^ˈV(C(C)V)
4. CCC^ˈV(C(C)V)
5. CCCC^ˈV(C(C)V)
6. CCCCC^ˈV(C(C)V)
7. ...^ˈVC

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 C^ˈV:

- | | | |
|-----|-------|---------------------|
| 1a. | /pí/ | 'die' |
| b. | /pé/ | 'carry on the head' |
| c. | /pá/ | 'stick' v.t. |
| d. | -- | |
| e. | /pú/ | 'put away' |
| 2a. | -- | |
| b. | -- | |
| c. | /tá·/ | 'grind' |
| d. | /tó·/ | 'sated' |

- e. /tú/ 'burn' v.t.; 'pound'
- 3a. /čí·/ 'lay, put'
- b. /čé·/ 'put away' (SEY)
- c. /čá·/ 'pour'
- d. /čó/ 'set down'
- e. --
- 4a. --
- b. --
- c. /kʋá·/ 'shout'
- d. --
- e. --
- 5a. --
- b. --
- c. /ká/ 'what? how?'
- d. --
- e. --
- 6a. /kʋí·/ 'weave'
- b. --
- c. /kʋâ/ 'Indian spinach'
- d. --
- e. --
- 7a. --
- b. /qé/ 'dirty, sticky'
- c. --
- d. --
- e. --

- 8a. --
 b. --
 c. --
 d. --
 e. --
- 9a. /ʔí(·)/ 'say'
 b. /ʔē·/ 'give'
 c. /ʔā/ 'hush!' (interjection)
 d. --⁵
 e. /ʔú·/ 'see'
- 10a. --
 b. --
 c. /βá·/ 'arrive'
 d. /βó·/ 'walk'
 e. --
- 11a. /θí·/ 'drink'
 b. /θé/ 'blown by wind'
 c. --
 d. /θó·/ 'eat meat'
 e. --
- 12a. /sí/ 'count; read'
 b. /sé/ 'fatty'
 c. /sá/ 'sting'
 d. --
 e. --
- 13a. --
 b. --

- c. --
- d. --
- e. /hū:/ 'nose'
- 14a. /hwí/ 'smell' v.t.
- b. --
- c. --
- d. --
- e. --
- 15a. /mí/ 'foot'
- b. --
- c. /má/ 'ripe, well-done'
- d. --
- e. --
- 16a. --
- b. /nē·/ 'scoop up'
- c. --
- d. /nō·/ 'heavy'
- e. /nú(·)/ 'going to, etc.' (auxiliary)
- 17a. /pĩ·/ 'an in-law'
- b. /pē/ 'hunt'
- c. --
- d. /pō/ 'quiet!' (interjection)
- e. /pú/ 'this'
- 18a. --
- b. --
- c. --
- d. --

- e. --
- 19a. --
- b. /rē·/ 'play'
- c. --
- d. --
- e. --
- 20a. /yí·/ 'want' think'
- b. --
- c. /yá/ 'mouth'
- d. /yó·/ 'tooth'
- e. /yú/ 'be'
- 21a. /wí/ 'do'
- b. /wé/ 'vagina'
- c. /wā/ 'sit'
- d. --
- e. --

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. /pá·pi/ 'carry on back'
2. /qwāti/ 'burn' v.i.
3. /yá·či/ 'harvest'
4. *CVCV
5. /βóki/ 'come back'
6. *CVCwV
7. /péqi/ 'hit'

8. *CṽqʷV
 9. *CṽʔV
 10. /pī·βi/ 'medication'
 11. /qāθi/ 'shout'
 12. /yū·si/ 'cool'
 13. /pēhi/ 'cast a spell'
 14. *CṽhʷV
 15. /pémi/ 'stand against' v.t.
 16. /qʷíni/ 'lukewarm'
 17. /típi/ 'thick'
 18. /píli/ 'burnt'
 19. /súri/ 'spot, catch sight of'
 20. /pú·yi/ 'die' pl. subj.
 21. /qâqi/ 'break in two'

4.13 Examples of CCṽ(C(C)V)

- 1a. /θpíri/ 'hard; strong'
 b. /spé/ 'lean against'
 c. /θpā·/ 'freeze'
 d. /npō·/ 'father's father'
 e. /čpu/ 'insert' v.
 2a. /stī:ti/ 'cut; plow'
 b. /ʔté/ 'many; old, grown up'
 c. /βtāβsi/ 'snap shut'
 d. /βtōtβi/ 'collapse'
 e. /hi·pā:k sīβtū·yi/ 'midnight'

- 3a. /kčī/ 'step v.'
 b. /βčé·/ 'daughter' (man speaking)
 c. /nčā·/ 'first cousin'
 d. /sčó/ 'pluck'
 e. /sčúlβi/ 'stick into'
- 4a. --
 b. /čkvé·/ 'push'
 c. /tkvátí/ 'cut with an ax'
 d. /čkvó/ 'bite'
 e. /ʔkvú·li/ 'long'
- 5a. /tkí/ 'add'
 b. /βkéʔ/ 'where?; NEG'
 c. /skāri/ 'glide'
 d. /βkóβi/ 'fence' n.
 e. /kkū·/ 'bird species'
- 6a. /θkwī·/ 'squeeze, wring out'
 b. /ʔkwé·/ 'something'
 c. /θkwá·βi/ 'wide'
 d. --
 e. --
- 7a. /ʔqí·ra/ 'ditch; furrow'
 b. /βqèqèʔì/ 'sticky'
 c. /sqāwa/ 'egg'
 d. /qqór/ 'fox'
 e. --
- 8a. /mqwîθ/ 'flying squirrel'
 b. --

- c. /ʔqʷá:ka/ 'cow'
d. --
e. --
- 9a. /kʔí·la/ 'canyon'
b. /hʔél/ 'louse'
c. /sʔámi/ 'close (door)'
d. /tʔōli/ 'boil'
e. /mʔūl/ 'antelope'
- 10a. --
b. /ʔ(n)βêʔ/ 'over there'
c. /sβâlβò/ 'joint'
d. /sβó/ 'wait for'
e. /yà·l ʔβū·ra/ 'burro'
- 11a. /nθī·/ 'mother's older sister'
b. /βθē·/ 'breathe'
c. /tθámi/ 'spotless'
d. /čθú·li/ 'wash'
e. /βθò·rʔi/ 'cave in'
- 12a. /msīwi/ 'smell (like blood)'
b. /ʔsé/ 'shadow'
/msē·/ 'fear'
c. /qsámta/ 'mushroom'
d. /qsôβa/ 'mole (on skin)'
e. /βsú/ 'bile'
- 13a. /thípi/ 'move' v.t.
b. /βhē/ 'tail; dress'
c. /shá/ 'hang' v.t.

- d. --
- e. /shúna/ 'hundred'
- 14a. /kh^wiwa/ 'skunk'
- b. --
- c. /mh^wā:/ 'badger'
- d. /βh^wō·βi/ 'bristle' v.
- e. --
- 15a. /hmí/ '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. /kpī·ya/ 'mother-in-law'
- b. /mpē/ 'fine, perfect; tasty'
- c. /kpāpa/ 'slight rise in land'
- d. /hpómi/ 'exercise' v.
- e. /ppúʔ/ 'that one'
- 18a. /hlí/ 'milk' v.
- b. /slé/ 'paperflower'
- c. /hlá/ 'moon'
- d. /hló/ 'cottontail'
- e. /mlúθa/ 'measles'

- 19a. /θrī/ 'doubt; think'
 b. /hréβa/ 'cliff; brim'
 c. /θrāpi/ 'five'
 d. /hrōkβi/ 'hooked'
 e. /trúβi/ 'dry' v.t.
- 20a. --
 b. /qʌē·/ '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. /čwô·/ 'set, put down'
 e. --

4.14 Examples of CCCV(C(C)V)

1. /čkpā:/ 'climb'
 2. /ʔmtáq/ 'brittlebrush'
 3. /tβčū·pi/ 'arc-shaped'
 4. /βθkva·yβi/ 'crack (egg)' v.i.

5.	/kθk'épa/	'glass'
6.	/čmk ^w īla/	'yellow palo verde'
7.	/mlqi/	'neck'
8.	/mtq ^w ī·sa/	'plant species'
9.	/kθ ^ʔ ē:/	'drink made from berries'
10.	/βqβō· ^ʔ i/	'growl'
11.	/ktθūkβa/	'curved'
12.	/tqsi/	'prairie dog'
13.	/ ^ʔ mhú(·)l/	'ashes'
14.	/(sàl)slh ^w ō·/	'claw, nail'
15.	/čsmāyβa/	'cousin'
16.	/kβnāwi/	'carry heavy objects'
17.	/ktpī·βa/	'quiet; graceful'
18.	/θβlî/	'hole'
19.	/βθrī·θ ^ʔ i/	'jump in surprise'
20.	/qryē:/	'clear'
21.	/čmwâ·θa/	'spleen'

4.15 Examples of CCCC^ʔ(C(C)V)

1.	/sklpúyi/	'hug'
2.	*CCct ^ʔ V	
3.	/ ^ʔ čkčīčβa/	'thief'
4.	*CCck ^ʔ v ^ʔ	
5.	/kkβkō·βi/	'shield' n.
6.	*CCck ^w v ^ʔ	
7.	*CCCg ^ʔ v ^ʔ	

8. *CCCq[́]v
9. /skn[́]v[́]o[́]ka/ 'elbow'
10. /slh[́]β[́]o[́]/ 'claw'
11. *CCCθ[́]v
12. *CCCs[́]v
13. /ʔ[́]čkhē:β[́]č[́]o[́]/ 'store'
14. *CCCh[́]v
15. *CCcm[́]v
16. /ʔ[́]čβnām[́]mi/ 'needle'
17. /ʔ[́]čk[́]ŋē/ 'hunter'
18. /č[́]čβlī[́]·yi/ 'ruler'
19. *CCCr[́]v
20. /ʔ[́]čky[́]úki/ 'ancient'
21. /sqmw[́]i[́]·ra/ 'ankle'

4.16 Example of CCCC[́](C(C)V)

1. /tsklp[́]ú·yβi/ 'hug each other'
2. /ʔ[́]čkmt[́]ū/ 'watermelon'
3. *CCCCč[́]v
4. *CCCCk[́]v
5. *CCCCk[́]v
6. *CCCCk[́]v
7. *CCCCq[́]v
8. *CCCCq[́]v
9. /č[́]tqn[́]ʔ[́]o[́]ni/ 'fold repeatedly'
10. *CCCCβ[́]v

11. *CCCCθV́
12. *CCCCsV́
13. *CCCCChV́
14. *CCCCChwV́
15. *CCCCmV́
16. *CCCCnV́
17. *CCCCŋV́
18. *CCCClV́
19. *CCCCrV́
20. *CCCClV́
21. /ʔčknwí·ra/ 'cook' n.

4.17 Examples of ...VC

1. *...Vp
2. /tát/ 'thorn'
3. /kìʔāč/ 'hail'
4. *...Vkv
5. /hípúk/ 'neck'
6. *...Vkw
7. /kθáq/ 'burden basket'
8. *...Vqʷ
9. /ŋáʔ/ 'I/me' (disjunctive)
10. /hàmsʔiβ/ 'bulrushes'
11. /mqʷiθ/ 'flying squirrel'
12. /ʔyá·s/ 'turkey'
13. *...Vh

14. *...Vh^w
 15. /tɬk^wǎm/ 'horned toad'
 16. /kθβlî·n/ 'oven'
 17. /hmáŋ/ 'baby'
 18. /ʔʔūl/ 'lantern'
 19. /kθár/ '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 /k^v, k^w, q^w, h^w/ are coarticulated and limited in distribution. /ŋ/ 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 /kʲ, 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 /ʔ/), and /p/ are excluded.

TABLE 7

Cooccurrence Restrictions: CV

p	pi	pe	pa	po	pu
t	ti	te	ta	to	tu
č	či	če	ča	čo	ču
ky	--	kve	kva	kvo	kvu
k	ki	ke	ka	ko	ku
kw	kwi	kwe	kwa	--	--
q	qi	qe	qa	qo	--
qw	qwi	qwe	qwa	--	--
ʔ	ʔi	ʔe	ʔa	ʔo	ʔu
β	--	βε	βα	βo	βu
θ	θi	θe	θa	θo	θu
s	si	se	sa	so	su
h	hi	he	ha	ho	hu
hw	hwi	hwe	hwa	hwo	--
m	mi	me	ma	mo	mu
n	ni	ne	na	no	nu
ɲ	ɲi	ɲe	ɲa	ɲo	ɲu
l	li	le	la	lo	lu
r	ri	re	ra	ro	ru
y	yi	ye	ya	yo	yu
w	wi	we	wa	wo	wu

TABLE 8
Cooccurrence Restrictions: CCV

p	t	č	ky	k	kʷ	q	qʷ	ʔ	β	θ	s	h	hʷ	m	n	ɲ	l	r	y	w
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
tp	tč	tč	tk	tkʷ	tq	tqʷ	tʔ	--	--	tθ	ts	th	thʷ	tm	tn	tn	tl	--	ty	tw
čp	čt	čč	čk	čkʷ	--	čqʷ	čʔ	cβ	čθ	--	čh	čhʷ	čm	čn	čɲ	čl	--	--	čy	čw
ky	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
k	kp	kt	kč	--	kk	--	kqʷ	kʔ	kβ	kθ	ks	kh	khʷ	km	kn	kn	kl	--	ky	kw
kʷ	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
q	--	qt	--	--	--	--	qq	--	qβ	qθ	qs	--	--	qm	qn	qn	ql ^(v)	--	qy	qw
qʷ	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ʔ	ʔp	ʔt	ʔč	ʔk	ʔkʷ	ʔq	ʔqʷ	ʔʔ	ʔβ	ʔθ	ʔs	ʔh	ʔhʷ	ʔm	ʔn	ʔɲ	ʔl	ʔr	ʔy	ʔw
β	βp	βt	βč	βk	βkʷ	βq	βqʷ	βʔ	--	βθ	βs	βh	βhʷ	βm	βn	βɲ	βl	βr	βy	βw
θ	θp	--	θč	θk	θkʷ	--	--	θʔ	--	--	--	--	θhʷ	θm	--	--	--	θr	θy	θw
s	sp	st	sč	sk	skʷ	sq	sqʷ	sʔ	sβ	--	--	sh	--	sm	sn	sn	sl	--	sy	sw
h	hp	ht	hč	--	hk	--	hq	--	hβ	hθ	--	--	--	hm	hn	hn	hl	hr	hy	hw
h	--	--	--	--	--	--	--	--	--	--	mš	--	--	--	--	--	--	--	--	--
m	mp	--	mč	mk	mkʷ	--	mqʷ	mʔ	--	--	ms	mh	mhʷ	--	mn	mn	ml	mr	my	mw
n	np	--	--	nk	--	--	--	--	nβ	--	--	--	--	nm	--	--	--	--	--	nw
ɲ	--	--	--	--	--	--	--	--	ɲβ	ɲθ	--	ɲh	--	ɲm	--	ɲɲ	ɲl	--	ɲy	ɲw
l	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	lw
r	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ry	--
y	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
w	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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, ɲ, l, r, (ʌ), y, ʔ, h, hʷ, 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, (ʃ)/, nasals, liquids, and glides become syllabic themselves; while the remaining consonants, the stops and the affricate /p, t, č, kʷ, 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. [αsyllabic]: /β, θ, s, (š), m, n, ŋ, l, r, (ʌ), y, ʔ, h, h^w, w/ and sometimes /č/.
3. [-syllabic]: /p, t, k^v, k, k^w, q, q^w/ 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 monosyllables in Yavapai. They all come from one of three categories: (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.

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.⁷ One recalls that the 'noun marker' is removed when the CV'(CV) structures enter into a compound:

Examples 4.223(1)-(8)

- | | | |
|-----|------------|-----------------|
| (1) | /ʔpā:/ | 'person' |
| | /pà·qyâta/ | 'rich person' |
| (2) | /ʔkwê·/ | 'something' |
| | /kwê·pâya/ | 'fruits, nuts' |
| (3) | /ʔsá/ | 'eagle' |
| | /sàwâla/ | 'eagle feather' |
| (4) | /ʔʔî:/ | 'wood' |
| | /ʔî·wâyi/ | 'wooden chair' |
| (5) | /ʔhâ/ | 'water' |
| | /hâwâlpâ/ | 'well n.' |

- (6) /ʔwī·/ 'rock'
 /wì·čwò/ 'brick (hardened rock)'
- (7) /ʔná/ 'road'
 /nàshē·βa/ 'bridge'
- (8) /ʔrā·/ 'it hurt!' (interjection)
 /râβi/ 'hurt v.i.'

4.2231 If one accepts that the so-called noun marker is largely a phonotactic constraint,⁸ 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 'absolute' 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.⁹

4.2232 The clusters achieved by the prefixation of /ʔ-/ 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 syllabicity (cf. 4.20):

1. Vocalization: glide to homorganic vowel:
 - a. /y/ to /i/
 - b. /ʔ/ to /ə/
 - c. /h/ to /a/
 - d. /h^w/ to /a/
 - e. /w/ to /u/
2. Syllabication: spirants, nasals, and liquids to syllabic spirants, nasals, and liquids:
 - a. /β, θ, s, (š)/ to /β̥, θ̥, s̥, (š̥)/
 - b. /m, n, ŋ/ to /m̥, n̥, ŋ̥/
 - c. /l, r, (ʌ)/ to /l̥, r̥, (ʌ̥)/

3. Epenthesis: stop augmented by schwa:

- a. /p, t, kʷ, k, kʷ, q, qʷ/ to
/əp, ət, əkʷ, ək, əkʷ, əq, əqʷ/
- c. /č/ to /tʃ/ or /ətʃ/

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) | /ʔpā:/ | 'person' |
| | [ʔəpā:] | |
| (2) | /ʔkʷe·/ | 'something' |
| | [ʔəkʷé·] | |
| (3) | /ʔsa/ | 'eagle' |
| | [ʔəsá] | |
| (4) | /ʔʔī:/ | 'wood' |
| | [ʔəʔī:] | |
| (5) | /ʔha/ | 'water' |
| | [ʔəhá] | |
| (6) | /ʔwī·/ | 'rock' |
| | [ʔəwī·] | |
| (7) | /ʔna/ | 'road' |
| | [ʔəná] | |
| (8) | /ʔrā·/ | 'it hurt!' |
| | [ʔərā·] | |

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) | [ʔʌhâ] | 'water' |
| (6) | [ʔuwɪ·] | '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 Gemination¹⁰

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 unreleased¹¹ [-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) | #ʔʔ.ʔɪ:# | 'wood' |
| (5) | #ʔh.hâ# | 'water' |
| (6) | #ʔw.wɪ·# | '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) #ʔṣ.śa# 'eagle'
 (4) #ʔi.ʔī:# 'wood'
 (5) #ʔḥ.hâ# 'water'
 (6) #ʔẉ.wī·# 'rock'
 (7) #ʔp̣.pá# 'road'
 (8) #ʔṛ.rā·# '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) [ʔṣ.sá]
 (4) [ʔi.ʔī:]
 (5) [ʔa.hâ]
 (6) [ʔu.wī·]
 (7) [ʔp̣.pá]
 (8) [ʔṛ.rá·]

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.

4.254 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.ʔī:/ ~ /ʔʔī:/ | 'wood' |
| (5) | /ʔ.hâ/ ~ /ʔhâ/ | 'water' |
| (6) | /ʔ.wī·/ ~ /ʔwī·/ | 'rock' |
| (7) | /ʔ.pá/ ~ /ʔpá/ | 'road' |
| (8) | /ʔ.rā·/ ~ /ʔrā·/ | 'it hurt!' |

4.26 Epenthesis

If one follows the steps with examples (1) /ʔpā:/ 'person' and /ʔkʷê-/ '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)	/ʔpā:/	(2)	/ʔkʷê-/
Step 1:		#ʔ.pā:#		#ʔ.kʷê.#
Step 2:		#ʔp̣. pā:#		#ʔḳ. kʷê.#
Step 3:		*ʔp̣.pā:		*ʔḳ.kʷê.

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) [ʔəp̣. pā:] (2) [ʔəḳ. kʷê.]

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) [ʔəp̣. pā:] (2) [ʔəḳ. kʷê.]

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. [']), 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 syllabicity as its morphemes emerge from underlying representations to surface manifestations. The examples above have shown, by using simple instances, how additional syllabicity 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: #C₁C₂V#: identifying the two consonants as different.

1. Initiation: #C₁.C₂V#: initiator separates from consonant immediately preceding stressed vowel.

2. Splitting/
Geminatio
Cloning: #C₁C₂¹.C₂V#: first C₂ is unreleased.¹¹

3. Syllabicity
designa-
tion: #C₁C₂^{1,2}.C₂V#: first C₂ is [+syllabic].

4. Phonetic
realiza-
tion: #C₁X.C₂V#: X shows that the final step cannot be illustrated diagrammatically, since this depends on the category of C₂: [+syllabic], [-syllabic], or [asyllabic].

4.301 The name General Syllabicity 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. Cp^ʹV...
2. Ct^ʹV...
3. Cč^ʹV...
4. Ck^{vʹ}V...
5. Ck^ʹV...
6. Ck^{wʹ}V...
7. Cq^ʹV...
8. Cq^{wʹ}V...
9. Cʔ^ʹV...
10. Cβ^ʹV...
11. Cθ^ʹV...
12. Cs^ʹV...
13. Ch^ʹV...
14. Ch^{wʹ}V...
15. Cm^ʹV...
16. Cn^ʹV...
17. Cɲ^ʹV...
18. Cl^ʹV...
19. Cr^ʹV...
20. Cy^ʹV...
21. Cw^ʹV...

4.311 An example in the Appendix will not show all six steps of a GSR application: namely

- i. Underlying form: /ʔpā:/ 'person; Indian'
- ii. Coding: #ʔ₁p₂ā:#
- iii. Initiation: #ʔ₁.p₂ā:#
- iv. Gemination: #ʔ₁.p¹₂.p₂ā:#
- v. Syllabicization: #ʔ₁^ə.p¹₂.p₂ā:#
- vi. Phonetic realization: [ʔəp¹.pā:]

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

- /ʔpā:/ 'person; Indian'
- #ʔp.pā:#
- [ʔəp¹.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) /θkʷā.yβi/ 'shatter v.i'
- #θkʷā.y.βi#
- (2) /θkʷâ.βi/ 'wide'
- #θkʷâ.βi#

Clusters of this type are restricted to the structures

SKV' or SKW'

(This is interpreted as a /θ/ or /s/ before a palatalized or labialized velar or backvelar, that is, before /kʲ/, /kʷ/, or /qʷ/.)

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

4.32 CCCV'-Clusters

A more complicated situation obtains for CCCV'-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: | /CCCV'.../ |
| ii. Coding: | #C ₁ C ₂ C ₃ V'...# |
| 1. Initiation: | #C ₁ .C ₂ .C ₃ V'...# |
| 2. Gemination: | #C ₁ C ₂ ^ˀ .C ₂ C ₃ ^ˀ .C ₃ V'...# |
| 3. Syllabicization: | #C ₁ C ₂ ^ˀ .C ₂ C ₃ ^ˀ .C ₃ V'...# |
| 4. Phonetic Realization: | #C ₁ X.C ₂ X.C ₃ V'...# |

Examples 4.32(1), (2)

- (1) i. /ktθūkβa/ 'curved'
 ii. #k₁t₂θ₃ūk₄β₅a# (coding unnecessary in real examples)
1. #k.t.θūk.βa#
 2. #kt.tθ.θūk.βa#
 3. #k₁t₂.tθ.θūk.βa#
 4. [k t.tθ.θūk.βa]
- (2) /θβlî/ 'hole'
1. #θ.β.lî#
 2. #θβ.βl.lî#
 3. #θβ.β₁.lî#
 4. [θβ.β₁.lî]

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 /k^v, k^w, q^w/ 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, (š), h, m, n, ŋ, l, r, y, w/ (/h^w/ and /ʌ/ having been excluded by morpheme structure conditions -- the result is one of two possibilities, illustrated using the CV-notation:

I. Expected Realization:

- i. /CCC'V'/
- ii. #C₁C₂C₃'V#
- 1. #C₁.C₂.C₃'V#
- 2. #C₁C₂∩.C₂C₃∩.C₃'V#
- 3. #C₁C₂∩.C₂C₃∩.C₃'V#
- 4. #C₁X.C₂X.C₃'V#

II. Alternate Realization:

- i. /CCC'V'/
- ii. #C₁C₂C₃'V#
- 1. #C₁C₂.C₃'V#
- 2. #C₁C₂∩.C₃'V#
- 3. #C₁C₂∩.C₃'V#
- 4. #C₁X.C₃'V#

(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 'syllabicity'.')

Examples 4.33(1)-(4)

I. Expected Realization:

- /ʔmpâča/ 'brush, plant'
- 1. #ʔ.m.pâ.ča#
- 2. #ʔm.mp∩.pâ.ča#
- 3. #ʔṃ.mp∩.pâ.ča#
- 4. [ʔṃ.məp.pâ.ča]

II. Alternate Realization:

- /ʔmpâča/
- #ʔm.pâ.ča#
- #ʔm.pâ.ča#
- #ʔṃ.pâ.ča#
- [ʔṃ.pâ.ča]

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 [q̄m.pá.ya], never *[q̄m.məp.pá.ya].

4.35 /h/ as C₂ in CCC'-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:
	/ʔhpálka/	'ironwood'	/ʔhpálka/
1.	#ʔh.pál.ka#		#ʔ.h.pál.ka#
2.	#ʔh.pál.ka#		#ʔh.hp̣.pál.ka#
3.	#ʔh.pál.ka#		#ʔh.hp̣.pál.ka
			(??) #ʔa.p ^h .pál.ka (??)
4.	[ʔa.pál.ka] ¹³		[ʔa.p ^h ál.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: /p^h, t^h, č^h, k^h, k^{hw}/ contrast minimally at the systematic phonetic or classical phonemic level with their plain or unaspirated congeners: /p, t, č, k, k^w/ (Recall that /k^v, q, q^w/ 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: /ʔC^hV.../. 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 CCC^hV, where C₁ is /ʔ-/, C₂ is /h/, and C₃ is any of /p, t, č, k, k^w/. 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, ŋ/, 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 ʔhC^hV...: 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/ → [m̥]
2. /hn/ → [n̥]
3. /h / → [ɸ]
4. /hl/ → [l̥]
5. /hr/ → [r̥]

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/ → [m̥í] 'tall; ambitious, energetic'
2. /hná:qi/ → [n̥á:qi] 'want'
3. /hɸómi/ → [ɸómi] 'exercise' v.
4. /hli/ → [l̥í] 'milk' v.
5. /hreβa/ → [r̥eβa] '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. /hmi/ → [h̥m̥.mí]
2. /hná:qi/ → [h̥n̥.ná:.qi]
3. /hɸómi/ → [h̥ɸ.ɸó.mi]
4. /hli/ → [h̥l̥.lí]
5. /hreβa/ → [h̥r̥.ré.βa]

(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 $\text{?hCV}^{\cdot}\dots$ -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 /x^w/ have not been develarized, 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, ŋ, l, r, (ʌ)/ which is realized as preaspiration does not take the position of the stressed syllable into account before it operates. Postaspiration, 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; ʔ; h, hʷ/ (the last is phonetically [ʍ]); the phone is analyzed /hʷ/ phonologically to capture its structural parallelism with the labiovelar and labiopostvelar /kʷ/ and /qʷ/) 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, h^w/ 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 /^ʔk^wi/ and the stative verb /(^ʔ)k^wi·yi/ 'be cloudy' appear to be related by a straightforward derivational process: In both cases the root is k^wi. The noun requires only the 'noun marker' /^ʔ-/. The denominalized verb seems to require only the absolutive /-i/, so that at one stage in the derivation of the verb, we could imagine #k^wi-i#; at a subsequent stage #k^wi.ii#; and then #k^wi.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 /k^wi·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 ʔ-segments as well.

4.60 Vowel Lowering

I repeat here the Example 2.21b:

1. /ʔčkmtú· tú· q^wáθa káča/ 'cantaloupe'
 melon+INT+yellow+little
 /ʔčkmtú· [tò χ^wâha] káča/

and cite:

2. /βqi-hmáɲ/ 'girl'
 woman+child
 [βqè. h^wmáɲ]

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 absolute, 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.

4.701 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. /č'ó·/
2. /č'y'ó·/
3. /čw'ó·/
4. /čh'ó/

The verb 'bite' is usually (5) /čk'ó/, but it is occasionally heard as /čk'w'ó/. 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. /m'úl/ ~ /m'ól/ 'name'
2. /m'úru/ ~ /m'óri/ 'knead'
3. /sy'úmi/ ~ /sy'ómi/ 'pull'

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

4. /tk'í/ ~ /tk'é/ 'add'
5. /sm'é/ ~ /sm'á/ 'lose'¹⁵

(6) /s'íwa/ varies freely with /s'ūwa/ 'ripen' but also with /sw'á/. 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:

/mòl...yí.βi/	
/mòlʔyí.βi/	'I am sad'
/mòlmyí.βi/	'you (sg.) are sad'
/mòlyí.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. /θʔēli/ ~ /tʔēli/ 'sour, bitter, salty'
2. /θčéqβa/ ~ /tčéqβa/ '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.sʔâmβi/ 'button'
 Allegretto: /yùri.sʔâmmi/

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 /í/ ~ /ú(·)y/ and have other more strictly historical significance for Pai and Yuman. I will suggest below how this could be true.

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

- | | | |
|----|----------------------------|-----------------------|
| 1. | /ʔrīyi/ ~ /ʔriyē/ ~ /ʔryē/ | 'important' |
| 2. | /kθí:yi/ ~ /kθyē·/ | 'physician' |
| 3. | /ʔi·kmī·yi/ ~ /ʔi·kmyē·/ | 'ocotillo' |
| 4. | /mīyi/ ~ /myé/ | 'bad spirit' |
| 5. | /kí·pa/ ~ /kṛā·/ | 'younger cousins' |
| 6. | /sīwa/ ~ /sūwa/ ~ /swá/ | 'not ready, not ripe' |

4.742 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. /sili/ | 'roast, broil' |
| 2. /sli:/ | 'fry' |
| 3. /saʔriyi/ | 'holy, sacred' |
| 4. /riyi/ ~ /riyē/ ~ /ryē/ | 'important' |
| 5. /qryē:/ | '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. /haŋkrâ·pa/ | 'butterfly' NEY-SEY |
| /haŋkpâ·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. /βlhé/ : /phlé/ 'old man'
2. /ʔòmlhū/ : /ʔmhlú·/ 'pipe'
3. /klhō/ : /khlō/ 'boat'
4. /pà·hkāya/ : /pa·k^hāya/ 'stranger'
5. /thpâ·/ : /tp^hâ:/ 'fishhook cactus'
6. /ʔhtā/ : /ʔt^hā/ 'reed, cane'
7. /thkō·/ : /tk^hō·/ 'tripe'
8. /khtāta/ : /kt^hāta/ 'procupine'

4.753 Occasionally one finds aspiration in one dialect with no corresponding /h/ in the other:

1. /i·tát/ : /i·t^hát/ 'back, spine'
2. /čipā/ : /čp^hā/ 'split'

4.754 One example shows a contrast in NEY and between Ch and Ch:

1. /màthā·βi/ : /ʔmthā·βi/ '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. /ʔč^húra/ 'winter'
2. /ʔč^hu·ri/ 'year'
3. /ʔk^hó/ 'piñon'
4. /ʔk^hó/ 'daughter's child'
5. /ʔk^hwá/ 'metal; knife'

- | | | |
|-----|-----------|------------------|
| 6. | /ʔhmá/ | 'quail' |
| 7. | /ʔhná:la/ | 'gourd rattle' |
| 8. | /p̄hpó/ | 'shoe' |
| 9. | /hló/ | 'cottontail' |
| 10. | /hrúyi/ | 'take off, doff' |
| 11. | /nōhβi/ | '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, kʷ, 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: /β/ and /βʷ/ or /χ/ and /χʷ/. (Historically *p̄ underwent a similar spirantization.) If /q^(ʷ)/ 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 [ɦ]. 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 /pθá-/ 'that' and /pθé-/ 'there.' That is, in connected discourse (never in citation form) they occur as /p há-/ and /p hé-/, sometimes simply as /há-/ and /hé-/, that is, weakened to the extent that the prefix /p-/ is also lost. Occasionally I also observed a sporadic lenition of a pretonic /θ/ in other forms; for example, /kθár/ ~ /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 /pθá-/ and /p há-/ and between /pθé-/ and /p hé-/, 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 [ɲi.háʔ] and [ɲi.héʔ]. If the /h/ were of any antiquity and not historically different from /θ/, then one would expect *[ɲa.háʔ] and *[ɲa.héʔ] as phonetic outputs. One would expect *[ka.háʔ] instead of [ki.θáʔ], a possible variation with inserted vowel of [kθ.θáʔ].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,¹⁸ 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

1. Kendall, Martha B. Selected Problems in Yavapai Syntax: The Verde Valley Dialect. New York: Garland, 1976. 247 pp. Hardy, Heather K. Tolkapaya Syntax: Aspect, Modality, and Adverbial Modification in a Yavapai Dialect. Los Angeles: University of California dissertation, 1979. 319 pp.
2. Joël, Judith. Paipai Phonology and Morphology. Los Angeles: University of California dissertation, 1966. 86 pp.
3. Mixco, Mauricio. Kiliwa Grammar. Berkeley: University of California dissertation, 1971. 279 pp.
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 /ʔʔó/ 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 ʔə-" 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 /ʔkṵ·li/ 'long, tall,' which cannot refer to humans without the

prefixation of /pà·-/ , a classifier. /pà·kvū·li/ is 'tall (about humans)'. The /ʔ-/ has been deleted, since it would now create ambiguity: /pəáč pà·kvū·lkm/ 'he is tall/she is tall' contrasts with /ʔpáč pà·ʔkvū·lkm/ 'I am tall'. This would seem an excellent example of the appearance and disappearance of /ʔ-/ in initial position. There are, however, some occurrences of /ʔ-/ on verbs which cannot be explained by invoking deletion motivated by disambiguation. For example,

(1) /rúβi/ 'dry'

(2) /ʔrúyi/ 'hot'

are assumed to have the same root ru 'hot'. The addition of the infinitival /-i/ preceded by its desyllabified clone /y/ and the prefixation of /ʔ-/ all are required to produce /ʔrúyi/. Suffixation of /-β/ 'mediopassive' and the automatic /-i/ produce /rúβi/. Thus far all has proceeded predictably; however, the addition of the prefix /t-/ 'causative' to (1) and (2) produces:

(3) /trúβi/ 'dry v.t.'

(4) /tʔrúyi/ 'heat v.t.'

One does not get *trúyi; that is, the /ʔ-/ 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 /ʔ-/ , since this

would be interpreted as 'first person possessor.' It also has no absolutive /-a/. This may be related to the extraordinary semantic potential of /sâ1/ 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:

- p: [ɛp[̚].pɛ]
- t: [ɛt[̚].tɛ]
- č: [ɛt[̚].tʃɛ]
- kʏ: [ɛk[̚].kʏɛ]
- k: [ɛk[̚].kɛ]
- kʷ: [ɛk[̚].kʷɛ]
- q: [ɛq[̚].qɛ]
- qʷ: [ɛq[̚].qʷɛ]

12. /β/ comes from Proto-Yuman *p.

13. The First Realization may also be written more narrowly [ʔa^h.pá1.ka] or [ʔa.^hpá1.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.p^há1.ka].

14. Langdon (p.c.) believes that this is historically *kwi: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 l 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 /š/ 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).

APPENDIX 1

Cp

- | | |
|-------------------|---|
| 1. person, Indian | /ʔpā:/
#ʔp.pā:#
[ʔəp̄. pā:] |
| 2. tired | /βpí·/
#βp.í·#
[βəp̄. pí·] |
| 3. hard, strong | /θpíri/
#θ.pí.ri#
[θəp̄. píri] |
| 4. strengthen | /θpí·rβi/
#θp.pí·r.βi#
[θəp̄. pí·rβi] |
| 5. touch | /tpáθi/
#tp.paθi#
[təp̄. páθi] |
| 6. hoe v. | /čpēqi/
#čp.pē.qi#
[tšp̄. pē.qi] |
| 7. insert v. | /čpú/
#č.pú#
[čəp̄. pú] |
| 8. clover | /kpí·la/
#kp.pí·la#
[kəp̄. pí·.la] |

Cp

9. freeze /θpá·/
#θp.pá·#
[θəp̣. pá.]
10. wink /θpáqβi/
#θp.páq.βi#
[θəp̣. páq̣. βi]
11. lean v. /spé/
#s.pé#
[səp̣. pé]
12. know /spó/
#sp.pó#
[səp̣. pó]
13. grinder /hpi/
#hp.pi#
[həp̣. pí]
14. leg /mpára/
#mp.pá.ra#
[məp̣. pá.ra]
15. father's older sister /npi/
#np.pi·#
[nəp̣. pí.]
16. father's father /npō·/
#n.pō·#
[nəp̣. pō.]

Ct

17. itch /t̩mō·/
 #tt.t̩m.mō·#
 [t̩əť̩.t̩m̩̌.mō̌·]
18. spit v. /čtúhi/
 #čt.túhi#
 [t̩ʃť̩.tú̌.hi]
19. kick /ktōhi/
 #kt.tōhi#
 [k̩əť̩.tō̌.hi]
20. collapse /βtōt̩βi/
 #βt.tōt̩.βi#
 [β̩əť̩.tō̌ť̩.βi]
21. many; old, grown /ʔté/
 #ʔ.té#
 [ʔ̩əť̩.té]
22. thorny /ʔtáth̩a/
 #ʔt.tá.th̩a#
 [ʔ̩əť̩.tá̌.th̩a]
23. snap shut /βtāβsi/
 #β.tāβ.si#
 [β̩əť̩.tā̌β̌.si]
24. midnight /hi·pā:k š̩βtū̌·yi/
 #hi·.pā:k š̩.β̌.tū̌·yi#
 [hǐ·.pā̌:k š̩̌.β̌əť̩̌.tū̌̌·yi]

Ct

25. cut, plow

/stī:ti/

#s.tī:.ti#

[sət̚.tī:.ti]

26. prickly pear cactus

/hté/

#ht.té#

[hət̚.té]

čě

27. dress /tčéqβa/
#tč.čéq.βa#
[tət̚. tšéq.βa]
28. step on /ččá.yi/
#čč.čá.yi#
[tšt̚. tšá.yi]
29. step v. /kčī/
#k.čī#
[kət̚. tšī]
30. fish /ʔčí./
#ʔč.čí.#
[ʔət̚. tší.]
31. kiss /βčīθ...i/
#βč.čīθ.i#
[βət̚. tšīθ.i]
32. daughter (man speaking) /βčé./
#β.čé.#
[βət̚. tšé.]
33. squaw dress /θčéqβa/, /tčéqβa/
#θč.čéq.βa#
[θət̚. tšéq̚.βa]
34. sweep /sčī/
#sč.čī#
[sət̚. tšī]

cč

35. stick in /sčŭlβi/
#s.čŭl.βi#
[sətʃ.tšŭl.βi]
36. pluck /sčó/
#s.čó#
[sətʃ.tšó]
37. Milky Way /hčā·/
#hč.čā·#
[hətʃ.tšā·]
38. sneeze /hamčīθki/
#ham.čīθ.ki#
[ham.čīθ.ki]
39. hungry /mčá·yi/
#mč.čá·.yi#
[mətʃ.tšá·.yi]
40. first cousin /nčā·/
#n.čā·#
[nətʃ.tšā·]

CkV

41. cut with an ax /tkv́ati/
#t.kv́a.ti#
[tək̚˧.kv́a.ti]
42. push /čkvé./
#č.kvé.#
[tʃk̚˧.kvé.]
43. knife. ax /čkv́ati/
#čk.kv́ati#
[tʃk̚˧.kv́a.ti]
44. bite /čkvó/
#č.kvó#
[tʃk̚˧.kvó]
45. long /ʔkvú.li/
#ʔk.kvú.li#
[ʔək̚˧.kvú.li]
46. the whole body /má:t hiθkvētk/
#má:t hiθ.kvē.tk#
[má:t hiθ.kvē.tək]
47. shatter v.i. /θkvā.yβi/
#θkvā.y.βi#
[θkvā.y.βi]
48. breastbone /skvāta/
#sk.kvā.ta#
[sək̚˧.kvā.ta]

Ckʷ

49. step into

/mkʷú.li/

#mk.kʷú.li#

[məkʷ.kʷú.li]

Ck

50. add /tkí/
#t.kí#
[təḱ̚.kí]
51. split /tká·βi/
#tk.ká·βi#
[təḱ̚.ká·βi]
52. wide /čká·mi/
#čk.ká·mi#
[tš̚ḱ̚.ká·mi]
53. slippery /kkĩsli/
#kk.kĩs.ki#
[kəḱ̚.kĩs.ki]
54. bird species /kkū·/
#k.kū·#
[kəḱ̚.kū·]
55. jackrabbit /ʔkúla/
#ʔk.kú.la#
[ʔəḱ̚.kú.la]
56. where?; NEG /βkéʔ/
#β.ké.ʔ#
[βəḱ̚.ké.ʔə]
57. who (m)? /βkáʔ/
#βk.káʔ.#
[βəḱ̚.káʔə]

Ck

58. fence n. /βkóβi/
#β.kó.βi#
[βək̚˧.kó.βi]
59. bridel /yàskāβi/
#yà.sk.kā.βi#
[yà.sək̚˧.kā.βi]
60. glide v. /skāri/
#sk.kā.ri#
[sək̚˧.kā.ri]
61. great-grandmother;
great-aunt /nkó/
#nk.kó#
[nək̚˧.kó]
62. other, different /hké/
#hk.ké#
[hək̚˧.ké]

Ck^w

63. win /tk^wí:li/
#tk.k^wí:li#
[tək^l.k^wí:.li]
64. lung(s) /čk^wá1/
#čk.k^wá1#
[tš^lk^l.k^wá1]
65. cloud /ʔk^wí/
#ʔk.k^wí#
[ʔək^l.k^wí]
66. something /ʔk^wé·/
#ʔ.k^wé·#
[ʔək^l.k^wé·], [ʔək^l.k^wé·]
67. gallop /βk^wà·kβək^wá:kβəʔí/
#βk.k^wà·k.βk.k^wá:k.βʔ.ʔí#
[βək^l.k^wà·k^l.βək^l.k^wá:k^l.βəʔ.ʔí]
68. squeeze, wring out /θk^wī·/
#θk^wī·#
[θk^l.k^wī·]
69. wide /θk^wá·βi/
#θk^wá·βi#
[θk^l.k^wá·βi]
70. shell, peel /sk^wá·ni/
#sk.k^wá·ni#
[sək^l.k^wá·ni]

Ck^w

71. rolled up

/mk^wirβi/#mk.k^wir.βi#[mək^ɿ.k^wir.βi]

Cq

72. leak v. /kqāqi/
#kq.qāqi#
[kəq^l.qā.qi]
73. fox /qqór/
#q.qór#
[qəq^l.qór]
74. ditch, furrow /ʔqí:ra/
#ʔ.qí.ra#
[ʔəq^l.qí.ra]
75. sunflower /ʔqáta/
#ʔq.qá.ta#
[ʔəq^l.qá.ta]
76. sticky /βqèqéʔì/
#β.qè.qé.ʔì#
[βq^l.qè.qé.ʔì]
77. stab /βqámi/
#βq.qá.mi#
[βəq^l.qá.mi]
78. shove /sqāmi/
#sq.qā.mi#
[səq^l.qā.mi]
79. egg /sqāwa/
#s.qā.wa#
[sq^l.qā.wa]

Cq

80. rub back and forth

(violin)

/hqi'sqi·sʔi/

#hq.qi's.qi·sʔi#

[həqʰ.qi's.qi·s.ʔi]

Cq^w

81. rifle /kq^wáθ/
#kq.q^wáθ#
[kəq^l.q^wáθ]
82. uncover /čq^wāti/
#čq.q^wā.ti#
[tšq^l.q^wā.ti]
83. light v.t. /tq^wāti/
#tq.q^wāti#
[təq^l.q^wā.ti]
84. deer /ʔq^wá:ka/
#ʔ.q^wá:.ka#
[ʔəq^l.q^wá:.ka]
85. yellow /ʔq^wáθi/
#ʔq.q^wá.θi#
[ʔəq^l.q^wá.θi]
86. broken /βq^wáqβi/
#βq.q^wáq.βi#
[βəq^l.q^wáq.βi]
87. stirred /sq^wârʔi/
#sq.q^wâr.ʔi#
[səq^l.q^wâr.ʔi]
88. flying squirrel /mq^wíθ/
#m.q^wíθ#
[məq^l.q^wíθ]

Cq^w

89. pulverize /mq^wāni/
 #mq.q^wā.ni#
 [məq^l.q^wā.ni]
90. crane /nq^wâ/
 #nq.q^wâ#
 [nəq^l.q^wâ]
91. plant species /mtq^wī.sa/
 #mt.tq.q^wī.sa#
 [mət^l.təq^l.q^wī.sa]

C?

92. close, cover /tʔāmi/
 #tʔ.ʔāmi#
 [təʔʔ.ʔāmi]
93. boil /tʔōli/
 #t.ʔō.li#
 [təʔʔ.ʔō.li]
94. gather (acorns) /čʔâ·mβi/
 #čʔ.ʔâ·m.βi#
 [tʂʔʔ.ʔâ·m.βi]
95. pointing /ksikʔīta/
 #ks.sì.kʔ.ʔīta#
 [kʂ.sì·kəʔʔ.ʔī.ta]
96. canyon /kʔí·la/
 #k.ʔí·la#
 [kəʔʔ.ʔí·la]
97. basket, plate /kʔú·/
 #kʔ.ʔú·#
 [kəʔʔ.ʔú·]
98. biscuit /myàlqʔōra/
 #my.yàl.qʔ.ʔō.ra#
 [mi.yàl.qəʔʔ.ʔō.ra]
99. saguaro /ʔʔā/
 #ʔʔ.ʔā#
 [ʔa.ʔā]

C?

100.	become visible	/βʔú·βi/ #βʔ.ʔú·βi# [βəʔʌ.ʔú·βi]
101.	close (door)	/sʔámi/ #s.ʔá.mi# [səʔʌ.ʔá.mi]
102.	trap; skewer	/sʔõni/ #sʔ.ʔõ.ni# [səʔʌ.ʔõ.ni]
103.	sour, bitter	/θʔēli/, /tʔēli/ #θʔ.ʔē.li# [θəʔʌ.ʔē.li]
104.	louse	/hʔél/ #h.ʔél# [həʔʌ.ʔél]
105.	antelope	/mʔūl/ #m.ʔūl# [məʔʌ.ʔūl]
106.	sweat	/ɲʔó/ #ɲʔ.ʔó# [ɲəʔʌ.ʔó]
107.	sacred	/sàʔríyi/ #sà.ʔr.rí.yi# [sà.ʔɾ.rí.yi]

Cβ

108. sift /čβá·yi/
#čβ.βú·yi#
[tšβ.βú·yi]
109. pray, ask for /kβá·βi/
#kβ.βá·βi#
[kβ.βá·βi]
110. burro /yà·lʔβū·ra/
#yà·l.ʔβ.βū·ra#
[yà·l.ʔβ.βū·ra]
111. joint /sβá1βò/
#s.βá1.βò#
[sβ.βá1.βò]
112. wait for /sβó/
#s.βó#
[sβ.βó]
113. arrive pl. subj. /nβá:/
#nβ.βá:#
[nβ.βá:]
114. there /nβéʔ/
#nβ.βé.ʔ#
[nβ.βé.ʔə]
115. claw, nail /slhβō·/
#sl.lh.hβō·#
[sl.la.φō·]

CØ

116. spotless /tθâmi/
#t.θâ.mi#
[tθ.θâ.mi]
117. suck (blood) /čθēqi/
#čθ.θēqi#
[tšθ.θē.qi]
118. wash /čθú·li/
#č.θú·li#
[tšθ.θú·.li]
119. burden basket /kθâq/
#kθ.θâq#
[kθ.θâq]
120. basket on back /qθâq/
#qθ.θâq#
[qθ.θâq]
121. salt /ʔθí·/
#ʔθ.θí·#
[ʔθ.θí·]
122. breathe /βθē·/
#β.θē·#
[βθ.θē·]
123. cave in /βθó·rʔi/
#βθ.θó·r.ʔi#
[βθ.θó·r.ʔi]

cə

124. mother's older sister /nθī·/
 #n.θī·#
 [nθ.θī·]
125. over there /pθē·/
 #pθ.θē·?#
 [pθ.θē·?ə]

Cs

126. squeal /tsìtsí/
#ts.sì.ts.sí#
[tʃ.sì.tʃ.sí]
127. crow /qsáq/
#qs.sáq#
[qʃ.sáq]
128. mushroom /qsámta/
#q.sám.ta#
[qʃ.sá.mət̚.ta]
129. mole (on skin) /qsôpa/
#q.sô.pa#
[qʃ.sô.pa]
130. shadow /ʔsé/
#ʔ.sé#
[ʔʃ.sé]
131. bile /βsú/
#β.sú#
[βʃ.sú]
132. woman /msī/
#ms.sī#
[mʃ.sī]
133. smell (like blood) /msīwi/
#m.sī.wi#
[mʃ.sī.wi]

cš

134. fear

/mšé·/

#m.šé·#

[mṣ̌.šē·]

Ch

135. move v.y.	/thípi/ #t.hí.pi# [ta.hí.pi]
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/ #ʔh.hát# [ʔa.hát]
140. tail; dress	/βhē/ #β.hē# [βa.hé]
141. guts, entrails	/βhā/ #βh.hā# [βa.hā]
142. hang v.t.	/shá/ #s.há# [sa.há]

Ch

143.	hundred		/shúna/ #s.hú.na# [sa.hú.na]
144.	ashes	/mhú(·)l/, #mh.hú(·)l# [ma.hú(·)l]	/ʔmhú(·)l/ #ʔm.mh.hú(·)l# [ʔm.ma.hú(·)l]
145.	liquid		/rháya/ #rh.há.ya# [ra.há.ya]

Chw

146. brick-shaped /čh^wôβa/
 #čh.h^wôβa#
 [tša.h^wô.βa]
147. skunk /kh^wíwa/
 #k.h^wí.wa#
 [ka.h^wí.wa]
148. blood /ʔh^wát(a)/
 #ʔh.h^wá.ta#
 [ʔa.h^wá.ta]
149. bristle, pop up /βh^wō·βi/
 #β.h^wō·βi#
 [βa.h^wō·βi]
150. settle (coffee grounds) /θh^wíla/
 #θh.h^wí.la#
 [θa.h^wí.la]
151. badger /mh^wá:/
 #m.h^wá:#
 [ma.h^wā:]
152. claw, nail /sàlslh^wō·/
 #sàl.sl.lh.h^wō·#
 [sàl.sl.la.h^wō·]

Cm

153. put out, turn off /tmáči/
 #tm.máči#
 [tm.má.či]
 [tm.mát.ši]
154. female /čmī·ya/
 #čm.mī·ya#
 [tšm.mī·ya]
155. bring, deliver /kmí·/
 #km.mí·#
 [kṃ.mí·]
156. mistletoe /qmō:sa/
 #q.mō:.sa#
 [qm.mō:.sa]
157. wood rat /ʔmālkā/
 #ʔma.ā.lk.kā#
 [ʔṃ.mā.ləkʰ.kā]
158. sundown /βmárβi/
 #βm.már.βi#
 [βṃ.már.βi]
159. lend /θmá/
 #θm.má#
 [θṃ.má]
160. lose /smē·/
 #s.mē·#
 [sṃ.mē·]

Cm

161. sleep	/smá:/ #sm.má:# [sq.má:]
162. tall; ambitious; energetic	/hmí/ #h.mí# [ḥṃ.mi]
163. container	/hmāt/ #h.māt# [ḥṃ.māt]
164. three	/hmúki/ #h.mú.ki# [ḥṃ.mú.ki]
165. leave v.t.	/nmāki/ #nm.mā.ki# [nṃ.mā.ki]
166. settle, live on	/pmāti/ #pm.mā.ti# [pṃ.mā.ti]

Cn

167. meadow /tná·kβa/
#tn.ná·k.βa#
[tɲ.ná·kʌ.βa]
168. lose; drop /čná·li/
#čn.ná·li#
[tʃn.ná·li]
169. stirrups /knī·li/
#kn.nī·li#
[kɲ.nī·li]
170. muddied /qnú·βi/
#qn.nú·.βi#
[qɲ.nú·.βi]
171. mesquite tree /ʔná·li/
#ʔn.ná·.li#
[ʔɲ.ná·.li]
172. cave in /βná·m...i/
#βn.ná·m.i#
[βɲ.ná·m.i]
173. rope /snáβa/
#sn.ná.βa#
[sɲ.ná.βa]
174. want /hná:qi/
#hn.ná:.qi#
[hɲ.ná:.qi]

Cn

175. yucca

/mnāt/

#m.nāt#

[m̩.nāt]

176. belly

/mnúna/

#m.nú.na#

[m̩.nú.na]

Cɲ

177. hollow /ʒɲúlkβi/
 #ʒɲ.ɲúlk.βi#
 [tʂɲ.ɲúlk.βi]
178. white oak /tɲík/
 #tɲ.ɲík#
 [tɲ.ɲík]
179. mother-in-law /kɲī·ya/
 #k.ɲī·ya#
 [kɲ.ɲī·ya]
180. slight rise in land /kɲāɲa/
 #k.ɲā.ɲa#
 [kɲ.ɲā.ɲa]
181. sotol cf. poppy /qɲú:r/
 #qɲ.ɲú:r#
 [qɲ.ɲú:r]
182. sun /ʔɲā:/
 #ʔɲ.ɲā:#
 [ʔɲ.ɲā:]
183. sit down /βɲá(·)ɲʔì/
 #βɲ.ɲá(·)ɲʔì#
 [βɲ.ɲá(·)ɲ.ʔì]
184. exercise /hɲómi/
 #h.ɲó.mi#
 [hɲ.ɲó.mi]

Cp

185. fine, perfect tasty

/mpe/

#m.ṛē#

[mṛ.ṛē]

186. this/that

/ṛṛú/

#ṛṛ.ṛú#

[ṛṛ.ṛú]

C1

187.	tired	/tláhβi/ #t1.láh.βi# [ṭ1.láh.βi]
188.	limp from arthritis	/klūmʔi/ #k1.lūm.ʔi# [ḳ1.lūm.ʔi]
189.	limp	/qlūmi/ #q1.lū.mi# [q̣1.lū.mi]
190.	bad	/ʔlá/ #ʔ1.lá# [ʔ̣1.lá]
191.	tired	/βláhʔi/ #β1.láh.ʔi# [β̣1.láh.ʔi]
192.	fry	/slī:/ #s1.lī:# [ṣ1.lī:]
193.	paperflower	/slé/ #s.lé# [ṣ1.lé]
194.	milk v.	/hlí/ #h.lí# [ḥ1.lí]

c1

195. moon /hlá/
 #h.lá#
 [ḥl.lá]
196. cottontail /hló/
 #h.ló#
 [ḥl.ló]
197. measles /mlūθa/
 #ml.lū.θa#
 [ṃl.lū.θa]
198. tame /p̄lē.mi/
 #p̄l.lē.mi#
 [p̣l.lē.mi]

Cλ

199. dislike

/qλé(·)/

#qλ.λé·#

[qλ.λé·]

Cr

200.	dry v.t.		/trúβi/ #t.rú.βi# [tr̩.rú.βi]
201.	important	/ʔryé/, #ʔr.ry.yé# [ʔr̩.ri.yé]	/ʔríyi/ #ʔr.rí.yi# [ʔr̩.rí.yi]
202.	it hurt (inter- jection)		/ʔrā·/ #ʔr.rā·# [ʔr̩.rā·]
203.	jump	/βríti/ #βr.rí.ti# [βr̩.rí.ti]	/βrítʔi/ #βr.rít.ʔi# [βr̩.rít.ʔi]
204.	doubt; think		/θrī/ #θ.rī# [θr̩.rī]
205.	five		/θrāpi/ #θ.rā.pi# [θr̩.rā.pi]
206.	pierce		/θrúyo/ [θr̩.rú.yo# [θr̩.rú.yo]
207.	brim; cliff		/hréβa/ #h.ré.βa# [hr̩.ré.βa]

Cr

208. hooked /hrōkβi/
 #h.rōk.βi#
 [h_ɾ.rōk.βi]
209. untie, take off /hrúyi/
 #hr.rú.yi#
 [h_ɾ.rú.yi]
210. bean(s) /mrî·ka/
 #mr.rî·ka#
 [mr.rî·ka]

Cy

211. tell a lie /tyé/
#ty.yé#
[ti.yé]
212. desert v. /tyé.mi/
#t.yé.mi#
[ti.yé.mi]
213. bone /čyá.ka/
#čy.yá.ka#
[tši.yá.ka]
214. set, put down /čyô./
#č.yô.#
[tši.yô.]
215. gray hair /kyá.ya/
#ky.yá.ya#
[ki.yá.ya]
216. really, very /qyáti/
(intensifier) #qy.yá.ti#
[qi.yá.ti]
217. I think /ʔyí./
#ʔ.yí.#
[ʔi.yí.]
218. mesquite beans /ʔyā./
#ʔy.yā.#
[ʔi.yā.]

Cy

219. this /βyá/
#β.yá#
[βi.yá]
220. mix /βyú.li/
#β.yú.li#
[βi.yú.li]
221. half-peeled juniper /čǝqa θyálqa/
#čǝ.qa θy.yál.qa#
[čǝ.qa θi.yál.qa]
222. pull /syô.mi/
#sy.yô.mi#
[si.yô.mi]
223. high /myá./
#my.yá.#
[mi.yá.]
224. tomorrow /nyé:kkkθð./
#ny.yé:k.k.kθ.θð.#
[ni.yé:kək⁷.kθ.θð.]

Cw

225. rest /twī·mi/
#tw.wī·mi#
[tu.wī·mi]
226. scatter /čwâ·wi/
#čw.wâ·wi#
[tšu.wâ·wi]
227. set, put down /čwô·/
#č.wô·#
[tšu.wô·]
228. dove /kwī/
#kw.wī#
[ku.wī]
229. cicada /kwá·/
#k.wá·#
[ku.wá·]
230. hair, scalp /qwáwa/
#qw.wá.wa#
[qu.wá.wa]
231. mouse /ʔwé·/
#ʔw.wé·#
[ʔu.wé·]
232. carry (a bucket) /βwâli/
#βw.wâ.li#
[βu.wâ.li]

Cw

233. placid /θwē/
 #θw.wē#
 [θu.wē]
234. scrape (hair from skin) /swī/
 #sw.wī#
 [su.wī]
235. two /hwáki/
 #hw.wá.ki#
 [hu.wá.ki]
236. warm /mwé/
 #m.wé#
 [mu.wé]
237. cook, prepare /nwī·ri/
 #nw.wī·ri#
 [nu.wī·ri]
238. over there /ɲwē?/
 #ɲw.wē.ʔ#
 [ɲu.wē.ʔə]

CCp

239. kidney /čmpâββa/
 #čm.pâβ.βa# ~ #čm.mp.pâβ.βa#
 [tšm.pâβ.βa] ~ [tšm.məp^l.pâβ.βa]
240. manzanita /čmpúk/
 #čm.púk# ~ #čm.mp.púk#
 [tšm.púk] ~ [tšm.məp^l.púk]
241. hump (back) /kmpū:lβa/
 #km.pū:l.βa# ~ #km.mp.pū:l.βa#
 [km.pū:l.βa] ~ [km.məp^l.pū:l.βa]
242. brain(s) /qmpáya/
 #qm.pá.ya#
 [qm.pá.ya]
243. brush, plant /ʔmpâča/
 #ʔm.pâ.ča# ~ #ʔm.mp.pâ.ča#
 [ʔm.pâ.tša] ~ [ʔm.məp^l.pâ.tša]
244. mushroom /ʔmpóqa/
 #ʔm.pó.qa# ~ #ʔm.mp.pó.qa#
 [ʔmpó.qa] ~ [ʔm.məp^l.pó.qa]
245. fly /θmpû·rka/
 #θm.pû·r.ka#
 [θm.pû·r.ka]
246. band for cradle /smpū·rβi/
 #sm.pū·r.βi# ~ #sm.mp.pū·r.βi#
 [smpū·r.βi] ~ [sm.məp^l.pū·r.βi]

CCp

247. tie up, knot v. /kθpâlβi/
 #kθ.pâl.βi# ~ #kθ.pâl.lβ.βi#
 [kθ.pâl.βi] ~ [kθ.pâl.lβ.βi]
248. have cramps /βθpalβʔi/
 #βθ.pâlβ.ʔi# ~ #βθ.pâl.βʔ.ʔi#
 [βθ.pâl.βʔ.i] ~ [βθ.pal.βəʔ.ʔi]
249. fishhook cactus /tp^hâ:/ /thpâ:/
 #tp^h.p^hâ:# ~ #th.pâ:#
 [tap^l.p^hâ:] ~ [ta.pâ:]
250. ironwood /ʔp^hâlka/, /ʔhpâ.lka/
 #ʔp^h.p^hâl.ka# ~ #ʔh.pâ.l.ka#
 [ʔap^l.p^hâl.ka] ~ [ʔa.pâ.l.ka]
 /ʔhpâlka/
 ~ #ʔh.pâl.lk.ka#
 ~ [ʔa.pâl.lək^l.ka]
251. swell v. /βlpâ.tʔi/
 #βl.pâ.t.ʔi# ~ #βl.pâ.tʔ.ʔi#
 [βl.pâ.tʔi] ~ [βl.pâ.təʔ^l.ʔi]
252. armpit /slpú/
 #sl.pú# ~ #sl.lp.pú#
 [sl.pú] ~ [sl.ləp^l.pú]
253. navel /mlpū·/
 #ml.pū·# ~ #ml.lp.pū·#
 [ml.pū·] ~ [ml.ləp^l.pū·]

CCp

254. animal /ʔčpâya/
 #ʔč.čp.pâ.ya#
 [ʔtš.tšpʔ.pâ.ya]
255. climb /čkpā·/
 #čk.kp.pā·#
 [tškʔ.kəpʔ.pā·]
256. full /tmpíri/
 #tm.mp.pí.ri#
 [tm.məpʔ.pí.ri]
257. kidney /čmpâββa/
 #čm.pâβ.βa# ~ #čm.mp.pâβ.βa#
 [tšm.pâβ.βa] ~ [tšm.məpʔ.pâβ.βa]

CCCp

258. carry many /čβnpē·βi/
 objects W.G. #čβ.βn.np.pē·βi#
 [tšβ.βn.nəp^l.pē·βi]
259. carry many /čmnpē·βi/
 objects G.M. #čm.mn.np.pē·βi#
 [tšm.mn.nəp^l.pē·βi]
260. hug /sklúyi/
 #sk.kl.lp.pú.yi#
 [sək^l.kl.ləp^l.pú.yi]

CCT

261. heaven, sky /myà·khtí·la/
 #my.yà·kh.tí·la#
 [mi.yà·ka.tí·la]
262. porcupine /kthāta/, /khtāta/
 #kth.thā.ta# ~ #kh.htā.ta#
 [kat̚.thā.ta] ~ [kah.tā.ta]
263. reed, cane /ʔthá/
 #ʔth.thá#
 [ʔat̚.thá]
264. brittlebrush /ʔmtáq/
 #ʔm.mt.táq#
 [ʔm̚.mət̚.táq]
265. north /ʔmthá·βk/, /mathá·βk/
 #ʔm.mth.thá·βk# ~ #mat.th.há·βk#
 [ʔm̚.mət̚.thá·βək] ~ [mat̚.ta.há·βək]
266. barrel cactus /mltát/
 #ml.tát# ~ #ml.lt.tát#
 [ml̚.tát] ~ [ml̚.lət̚.tát]

CCCCt

267. watermelon

/ʔčmtū/

#ʔč.km.mt.tū#

[ʔtš.km.mət̚.tū]

CCĚ

268. precipice /wì·skčī·βi/
 #wì·.sk.kč.čī·.βi#
 [wì·.sək^l.kət^l.tšī·.βi]
269. arc-shaped /tβčū·ni/
 #tβ.βč.čū·.ni#
 [tβ.βtš.čšū·.ni]
270. winter /ʔčhú·ri/
 #ʔčh.čhú·.ri#
 [ʔat^l.tšhú·.ri]
271. year /ʔčhúra/
 #ʔčh.čhú·.ra#
 [ʔat^l.tšhú·.ra]
272. first cousins /tnčā·ča/
 #tn.čā·.ča# ~ #tn.nč.čā·.ča#
 [tn.tšā·.tša] ~ [tn.nət^l.tšā·tša]

cccč

273. thief

/ʔčkčičβa/

#ʔč.kč.čič.čβ.βa#

[ʔtš.kətʃ.tšitʃ.tšβ.βa]

CCKY

274. forked post /ʔi·tβkṽāla/
 #ʔi·tβ.βk.kṽā.la#
 [ʔi·tβ.βək^l.kṽā.la]
275. crack (egg) v.i. /βθkṽâ·yβi/
 #βθ.kṽây.βi#
 [βθ.kṽâ·y.βi]
276. tie around /klkṽôβi/
 #kl.kṽô.βi#
 [kl.kṽô.βi]

CCK

277. two people massing /k^htkā·ma/
 (Prn. m.) #kt.tk.kā·ma#
 [kət^h.tək^h.kā·ma]
278. sides coming almost
 together /wi·k^htkūpa/
 #wi·kt.tk.kū.pa#
 [wi·.kət^h.tək^h.kū.pa]
279. killdeer /hamk^hkī/
 #ham.kk.kī#
 [ham.kək^h.kī]
280. fingers /sàlkčkī·ča/
 #sàl.kč.čk.kī·.ča#
 [sàk.k^htš.tšk^h.kī·.tša]
281. cup (ears), block /kβkó/
 #kβ.βk.kó#
 [kβ.βək^h.kó]
282. glass /kθképa/
 #kθ.ké.pa#
 [kθ.ké.pa]
283. tent /kskē·βa ʔwâ/
 #ks.kē·.βa ʔw.wâ#
 [ks.kē·.βa ʔu.wâ]
284. stomach, tripe /tk^hō:/, /thkō:/
 #tk^h.k^hō:# ~ #th.kō:#
 [tak^h.k^hō:] ~ [ta.kō:]

Cck

285. cross v., be across /khkē·/
 #kh.kē·#
 [ka^h.kē·]
286. ford n. /pàkhkē·/
 #pà.kh.kē·#
 [pà.kah.kē·]
287. piñon /ʔkhó/
 #ʔkh.khó#
 [ʔak^l.khó]
288. daughter's child /ʔkhó·/
 #ʔkh.khó·#
 [ʔak^l.khó·]
289. pick n. /ʔkhwàshkēβa/
 #ʔkh.khwà.sh.kē.βa#
 [ʔak^l.khwà.sa.kē.βa]
290. button /yúri skhâββi/
 #yú.ri skh.khâβ.βi#
 [yú.ri sak^l.khâβ.βi]

CCCK

291. shield n.

/kβkō·βi/

#kk.kβ.βk.kō·βi#

[kək̚. kβ. βək̚. kō·βi]

CCk^w

292. cotton /čθk^wâm a/
 #čθ.k^wâm.βa#
 [tšθ.k^wâm.βa]
293. stand up /βsk^wí(·)/
 #βs.sk^wí(·)#
 [βs.sk^wí(·)]
294. yellow palo verde /čmk^wīla/
 #čm.mk.k^wī.la#
 [tšm.m k^l.k^wī..la]
295. jealous (man) /smk^wī.rβi/
 #sm.k^wī.r.βi# ~ #sm.mk.k^wī.r.βi#
 [sm.k^wī.r.βi] ~ [sm.mək^l.k^wī.r.βi]

CCq

296. dusk /βtqēpʔi/
 #βt.tq.qēp.ʔi#
 [βətʰ.təqʰ.qēpʰ.ʔi]
297. fingers /sàlqčqē.ča/
 #sàl.qč.čq.qē.ča#
 [sàl.qtš.tšqʰ.qē.tša]
298. neck /mlqí/
 #ml.qí# ~ #ml.lq.qí#
 [ml.qí] ~ [ml.ləqʰ.qí]

CC?

299. capsize /tmʔámβi/
 #tm.mʔ.ʔám.βi#
 [tm.məʔʔ.ʔám.βi]
300. full /tmʔóri/
 #tm.mʔ.ʔó.ri#
 [tm.məʔʔ.ʔó.ri]
301. tease /črʔū.yi/
 #čr.ʔū.yi#
 [tšr.ʔū.yi]
302. necklace /skʔū:la hnáqča/
 #sk.kʔ.ʔū:.la hn.náq.qč.ča#
 [səkʔ.kəʔʔ.ʔū:.la hŋ.náqʔ.qtš.tša]
303. engine (iron runner) /khwàkβʔāmma/
 #khwà.kβ.βʔ.ʔām.ma#
 [khwà.kβ.βəʔʔ.ʔām.ma]
304. last one /kβʔó.ma/
 #kβ.βʔ.ʔó.ma#
 [kβ.βəʔʔ.ʔó.ma]
305. drink made from berries /kθʔē:/
 #kθ.θʔ.ʔē:#
 [kθ.θəʔʔ.ʔē:]

CC0

306. curved /ktθūkβa/
 #kt.tθ.θūk.βa#
 [kətʔ.tθ.θūkʔ.βa]
307. lizard /thθí·la/
 #th.hθí·la#
 [ta^h.θí·.la]
308. earth (spread
 out) /màtkhθī:la/
 #màt.kh.θī:.la#
 [màtʔ.ka^h.θī:.la]

CCs

309. prairie dog /tqsi/
 #tq.qs.sî#
 [təq^l.q̣s.sî]
310. agate /wi.ʔqsā/
 #wi.ʔq.qs.sā#
 [wi.ʔəq^l.q̣s.sā]
311. star /hammsî/
 #ham.ms.sî#
 [ham.ṃs.sî]

CCβ

312. growl

/βqβō:ʔi/

#βq.qβ.βō:.ʔi#

[βəq⁷.qβ.βō:.ʔi]

313. feverish

/khβō.yi/

#kh.hβō.yi#

[ka^h.əō.yi]

CCh

314. Piñon Heights

/ʔk^hõykhõrβa/#ʔk^h.k^hõy.kh.hõr.rβ.βa#[ʔa.k^hõy.ka.hõr.rβ.βa]

CCCh

315. store

/ʔčkhē:βčò·/

#ʔč.kh.hē:·βč.čò·#

[ʔtš.ka.hē:·βət̚¹.tšò·]

CCm

316. swell up /βhmá·mkʔi/
 #βh.hm.má·mk.ʔi#
 [βa.hm̩.má·mk.ʔi]
317. kind /nhmérβi/
 #nh.hmér.βi#
 [na^h.m̩ér.βi]
318. help me get up /ʔmmāni/
 #ʔm.mm.mā.ni#
 [ʔm̩.mm̩.mā.ni]
319. eyebrow /yùklmē:/
 #yù.kl.lm.mē:#
 [yù.kl.lm̩.mē:]
320. sinew /msmā:/
 #ms.sm.mā:#
 [ms̩.sm̩.mā:]
321. quail /ʔhmá/
 #ʔh.hmá#
 [ʔa^hm̩á]
322. gourd /ʔhmá:/
 #ʔh.hmá:#
 [ʔa^hm̩á:]
323. sack, bag /ʔhmál/
 #ʔh.hmál#
 [ʔa^hm̩ál]

CCm

324. turn it off! /msk^winkmtmāč̣i/
 (an appliance) #ms.sk^wî.nkmt.tm.mā.č̣i#
 [mṣ.sk^wị̂.nəḳṃəṭ.ᵀ.ṭṃ.mạ̄.ṭṣ̌i]
325. valley /màtč̣kmị̄.ya/
 #màt.č̣k.km.mị̄.ya#
 [màt.ṭṣ̌ḳ.ᵀ.ḳṃ.mị̄.ya]
326. I bring/brought /ʔkmị̄.km/
 #ʔk.km.mị̄.km.#
 [ʔəḳ.ᵀ.ḳṃ.mị̄.kəm]
327. cousin /č̣smāyβa/
 #č̣s.sm.māy.βa# ~ #č̣s.sm.māy.yβ.βa#
 [ṭṣ̌ṣ.sṃ.māỵ.βa] ~ [ṭṣ̌ṣ.sṃ.māỵ.iβ̣.βa]

CCn

328. I want /ʔhná:qi/
 #ʔh.hná:qi#
 [ʔa^h.ŋá:.qi]
329. gourd rattle,
 bule /ʔhná:l/
 #ʔh.há:l#
 [ʔa^h.ŋá:l]
330. small, level
 land /ktná·kβa/
 #kt.tn.ná·k.βa#
 [kət^l.tn.ná·k.βa]
331. I dropped it /ʔčná·lk^m/
 #ʔč.čn.ná·l.lk.km#
 [ʔtš^l.tš^ln.ná·l.lk^l.kəm]
332. whine /βqnā·k/
 #βq.qn.nā·k#
 [βəq^l.qn.nā·k]
333. carry heavy
 objects /kβnāwi/
 #kβ.βn.nā.wi#
 [kβ.βn.nā·wi]

CCP

334. shoe /nɪnɔ̃/
 #nɪ.nɪnɔ̃#
 [nɪ^h.nɪnɔ̃]
335. scissors /kʰwàčmɪnájyi/
 #kʰwà.čm.mɪ.náj.yi#
 [kʰwà.tšm.nɪ.náj.yi]
336. sun-ripened /ʔmɪnā/
 #ʔm.mɪ.nā#
 [ʔm.mɪ.nā]
337. discharge /βmɪnê·/
 #βm.mɪ.nê·#
 [βm.mɪ.nê·]
338. quiet; graceful /ktɪnī·βa/
 #kt.tɪ.nī·βa#
 [kətɪ.tɪ.nī·βa]
339. scissors /kʰwàčβɪnájyi/
 #kʰwà.čβ.βɪ.náj.yi#
 [kʰwà.tšβ.βɪ.náj.yi]

CCCp

340. hunter

/ʔčkɲē/

#ʔč.kɲ.ɲē#

[ʔtš.kɲ.ɲē]

341. I hunt

/ʔčʔɲē/

#ʔč.ʔɲ.ɲē#

[ʔtš.ʔɲ.ɲē]

CC1

342. death rattle /βhlò:h1ō:hi/
 #βh.h1ò·h.h1ō·.hi#
 [βa.ɭò.ha.ɭō·.hi]
343. snore /smló(·)hi/
 #sm.ml.ló(·).hi#
 [sm.ml.ló(·).hi]
344. crack like lightning /βčlâ:ʔi/
 #βč.č1.lâ:.ʔi#
 [βtš.tš1.lâ:.ʔi]
345. crack like lightning /βčlâ·člā·ʔi/
 #βč.č1.lā·.č1.č1.lā·.ʔi#
 [βtštʰ.tš1.lā·.tš1.lā·.ʔi]
346. hole /θβi/
 #θβ.β1.lî#
 [θβ.β1.lî]
347. cliff /wi·khlē·βa/
 #wi·.kh.hlē·.βa#
 [wi·.ka.ɭē·.βa]

CCr

348. doll /ʔčrē·/
 #ʔč.čr.rē·#
 [ʔtš.tšr.rē·]
349. naked /hàlsqrâ·pi/
 #hàl.sq.qr.râ·pi#
 [hàl.səq^l.qr.râ·pi]
350. make hot /tʔrûyi/
 #tʔ.rû.yi# ~ #tʔ.ʔr.rû.yi#
 [təʔ^l.rû.yi] ~ [təʔ^l.ʔr.rû.yi]
351. pierce /əprī/
 #əβ.βr.rī#
 [əβ.βr.rī]
352. squint /əprīri/
 #əβ.βr.rī.ri#
 [əβ.βr.rī.ri]
353. pierce /əβrúyò/
 #əβ.βr.rú.yò#
 [əβ.βr.rú.yò]
354. jump in surprise /βəriyʔi/
 #βə.ər.rīy.ʔi#
 [βə.ər.rīy.ʔi]
355. untie! /mhrūyi/
 #mh.hrū.yi#
 [ma^h.rū.yi]

CCCy

356. ancient

/ʔčkyûki/

#ʔč.ky.yû.ki#

[ʔtṣ̌.ki.yû.ki]

357. cigar

/ʔū:βa čmmyālβa/

#ʔū:.βa čm.my.yāl.lβ.βa#

[ʔū:.βa tṣ̌m.mi.yā.lβ.βa]

CCy

358. automobile /kʷè·čβyâ:mi/
 #kʷè·čβ.βy.yâ.mi#
 [kʷè·tšβ.βi.yâ.mi]
359. cantiles /wi·khyārβa/
 #wi·.kh.yār.βa#
 [wi·.ka.yār.βa]
360. table₁ /shyára/
 #sh.hy.yá.ra#
 [sa^h.yá.ra] ~ [sa.hi.yá.ra]
- table₂ /ʔi·shyārβa/
 #ʔi·.sh.yār.βa#
 [ʔi·.sa.yār.βa]
361. ramada /wàshyâ1βa/
 #wà.sh.yâ1.βa# ~ #wà.sh.yâ1.1β.βa#
 [wà.sa.yâ1.βa] ~ [wà.sa.yâ1.1β.βa]
362. dig /shyûki/
 #sh.hyû.ki#
 [sa^h.yû.ki]
363. soda /th^wõβi tmyû·li/
 #th.h^wõ.βi tm.my.yû·.li#
 [ta.h^wõ.βi tᵐ.mi.yû·.li]
364. the moaner /kmyā·yβa/
 #km.my.yā·y.βa# ~ #km.my.yā·y.yβ.βa#
 [kᵐ.mi.yā·y.βa] ~ [kᵐ.mi.yā·y.iβ.βa]

CCy

365. clear

/qryē:/

#qr.ry.yē:#

[qr̄.ri.yē:]

CCw

366. spider (W.G.) /màtkp̄wē·/
 #màt.kp̄.pw.wē·#
 [màt.kp̄.pu.wē·]
367. snake /ʔlwí/
 #ʔl.lw.wí#
 [ʔl.lu.wí]
368. correct /βlwí/
 #βl.lw.wí#
 [βl.lu.wí]
369. elbow (SEY) /sàlqrwî:so/
 #sàl.qr.rw.wî:.sò#
 [sàl.qr̄.ru.wî:.sò]
370. determined /čmwílβi/
 #čm.wíl.βi# ~ #čm.mw.wíl.βi#
 [tš̄m.wíl.βi]~[tš̄m.mu.wíl.βi]
371. spleen /čmwâ·θa/
 #čm.mw.wâ·θa#
 [tš̄m.mu.wâ·θa]
372. they massacre /pà·kmwá:čči/
 them #pà·km.mw.wá:č.č.či#
 [pà·km̄.mu.wá:t̄.tš̄t̄.tši]
373. old woman /qmwi·rma/
 #qm.wî·r.rm.ma# ~ #qm.mw.wî·r.rm.ma#
 [qm̄.wî·r.rm.ma] ~ [qm̄.mu.wî·r.rm̄.ma]

CCw

374. my brothers /naʔčwā:kβa/
 #na.ʔč.čw.wā:k.βa#
 [na.ʔətʰ.tš̩u.wā:k.βa]
375. scorpion /ni·stkwālka/
 #ni·s.tk.kw.wāl.ka# ~
 [ni·s.təkʰ.ku.wāl.ka] ~
 #ni·.st.tk.kw.wāl.lk.ka#
 [ni·sətʰ.təkʰ.ku.wāl.ləkʰ.ka]
376. growl /βqwō·ʔi/
 #βq.qw.wō·.ʔi#
 [βəqʰ.q̩u.wō·.ʔi]
377. perforate /kəwârβi/
 #kə.əw.wâr.βi#
 [kə̩.əu.wâr.βi]
378. correct /lwí/
 #lw.wí#
 [lu.wí]

APPENDIX 2

SYMBOLS USED

<u>Symbol</u>	<u>Name of Symbol</u>	<u>Use or Meaning</u>
´	acute	primary stress (no indication of pitch)
<	left arrow	comes from
→	right arrow	goes to; is used in
[X]	square brackets	systematic phonetic transcription
˘	breve	tertiary stress or unstressed
ˆ	circumflex	low or falling pitch with primary stress
#CVC#	cross hatches	step in a phonological derivation
◌̥	degree subscript	voiceless or partially voiced
X=X	equal sign	one gloss for both elements
V·	raised dot	one morae of vowel length
V:	two dots	two morae of vowel length
C...C	three dots	links elements in a discontinuous morpheme
̀	grave	secondary stress with pitch neutralized to a mid tone
C-C	hyphen	morpheme boundary
<u>CVC</u>	italicization	root or pre-stem (Level I Representation)
̄	macron	high pitch with primary stress
(X)	parentheses	optional or alternate element
C.C	period	syllable boundary

<u>Symbol</u>	<u>Name of Symbol</u>	<u>Use or Meaning</u>
C+C	plus sign	division between roots in a compound
Ç	punct	inorganic segment (punctuation)
Σ	sigma	a syllable
/C/	single slashes	classical phonemic or systematic phonetic
ṽ	tilde	nasalization of vowel
Ç	verticle underline	syllabic segment
ṽ	wedge	variable pitch with primary stress

ABBREVIATIONS OF MORPHEMES, NAMES, AND OTHER WORDS,
THEIR DESCRIPTION AND SHAPE

<u>Abbreviation</u>	<u>Description</u>	<u>Shape</u>
A	Type A Stem	(Chapter Three)
ABS	absolutive	/-i/ on verbs /-a/ on nouns
ADD	additional, "too"	/wár-/
ADV	adverbial auxiliary	/má:t-/
APP	applicative-benefactive	/-o/
ART	artifactive	/-i/
ASC	ascending generation	/n-/
ASSR	assertive	/-ha/, /-ma/, /-a/
AUG	vocalic augment	/-a/
B	Type B Stem	(Chapter Three)
B	archiphonaesthetic	/p/ ~ /β/
C	Type C Stem	(Chapter Three)
CAUS	causative	/t-/, /č-/, /s-/
COG	cognitive existential auxiliary	/yí·/
COM	dummy object complement	/kʷè·-/, /ʔč-/
COMIT	comitative	/-m/
CON	contrastive modal	/-θ/
CYL	cylindrical	/m-/
D	archiphonaesthetic	/n/ ~ /r/ ~ /l/
DPRN	demonstrative pronoun	/θá-/, /nú-/
DEM	demonstrative prefix	/β-/, /n-/

<u>Abbreviation</u>	<u>Description</u>	<u>Shape</u>
DEM	demonstrative suffix	/-u/, /-o/, /-β/, /-θ/, /-h/, /-n/, /-ŋ/, /-nu/
DEN	denominalizer	/-i-/, /-y-/
DS	different subject marker	/-m/
DISJ	disjunctive	/-ʔ/
DIR	directional derivational morpheme	/-k/, /-m/
DUB	dubitative	/-mó·/
EXH	exhortative	/-tè·/
G.M.	Grace Mitchell	(Chapter One)
GSR	General Syllabicity Rule	(Chapter Four)
Ha	Havasupai	(Chapter One)
Hu	Hualapai (also Walapai)	(Chapter One)
I	archiphonaesthetic	/i/ ~ /e/
IC	imperfective contracted auxiliary phrase	/-km/
IMP	imperfective	/-m/
INCP	incompletive locational auxiliary	/-(u)nú·/
INCR	increment	/-a/
INS	instrumental	/-m/
INT	intensifier	/-ra(β)/
IP	inchoative-punctual	/β-/
IR	irrealis	/-h/, /-a/
IRa	emphatic irrealis	/-ha/
ITER	iterative	/č-/, /-č/

<u>Abbreviation</u>	<u>Description</u>	<u>Shape</u>
K	archiphonaesthetic	/k/ ~ /q/
K ^w	archiphonaesthetic	/k ^w / ~ /q ^w /
L ^v	archiphonaesthetic	/l/ ~ /ʌ/
LNOM	locational nominalizer	/-ò·/
LOC	locative case	/-k/, /-l/
mCON	conjunction increment	/-mè·/
MOD	modal auxiliary	/lwi/
		/i·/, /hi·/, /yi·/
MP	(medio)passive	/-β/
MP1	multiple plural	/-čβ-/
N	archiphonaesthetic vocalic nasalization	(Chapter Three)
NEG	negative adverbial auxiliary, negative verb	/-ʔúm-/
NEY	Northeastern Yavapai	(Chapter One)
NM	noun marker	/ʔ-/
1 (i.e. one)	first-person prefix	/ʔ-/
1P	first-person pronoun	/(ʔ)ɲá-/
1/2	first-person subject with second person subject	/ɲ-/
p, pl, PL	plural	(Chapter Three)
pSUBJ	plural subject	/n·/, /-i·/, /-č/
PART	particle	/tú:/, /tú·/
PC	perfective contracted auxiliary phrase	/-kɲ/
PERF	perfective	/-ɲ/

<u>Abbreviation</u>	<u>Description</u>	<u>Shape</u>
PLo	plural object personal prefix	/pà·-/
SY	archiphonaesthetic	/θ/ ~ /š/, /s/ ~ /š/
SUBJ	subject	(Chapter Three)
3/1	third-person subject with first-person object	/p-/
TC	temporal coordinator	/-t/, /-θ/
TLOC	temporal locative	/-m/
TST	temporal stative	/-o/
TSUB	temporal subordinator	/-p/
2	second-person prefix	/m-/
2/1	second-person subject with first-person object	/ʔ...m-/
2/PLo/1	second-person plural object with first-person subj.	/ʔpà·m-/
2P	second-person pronoun	/má(:)-/
VOCA	vocative on Type A stem	/-ʔ/
VOCB	vocative on Type B stem	/-èʔ/
VOCU	vocative (unseen addressee)	/-ō(ʔ)/, /-ō:/
W.G.	Warren Gazzam	(Chapter One)
when	subordinator	/-kθò·/
WH	wh-word	/kà-/
WY	Western Yavapai= Tolkapaya	(Chapter One)

<u>Abbreviation</u>	<u>Description</u>	<u>Shape</u>
Pln	placename	(Dictionaries)
Prn	personal name	(Dictionaries)
POS	possessive	/-p/
Pp	Paipai	(Chapter One)
PRF	perfectivizer	/p-/
P/E	perfect/evidential	/-o/
QA	interrogative on Type A stem	/-ʔ/
QB	interrogative on Type B stem	/-èʔ/
QCON	interrogative conjunction	/-pè·/
QP	past question	/-wèʔ/
R:	reduplication of following stem	(Chapter Three)
REC	recursive, "again"	/-ì/, /-p/
REL	relativizer; agentive	/k-/
RES	resultative	/-o/
S	archiphonaesthetic	/θ/ ~ /s/
s, sg	singular	(Chapter Three)
SEY	Southeastern Yavapai	(Chapter One)
Sp.	loanword ultimately but not necessarily directly from Spanish	(Dictionaries)
SS	same-subject marker	/-k/
SSa	emphatic increment	/-ka/
ST	stative	/-β/
STLOC	spatiotemporal locative	/-e/

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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 may 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 (p^h)
2. t (t^h)
3. č (č^h)
4. k^v
5. k (k^h)
6. k^w (k^{hw})
7. ɣ
8. ɣ^w
9. ʔ
10. ʔi
11. i
12. ʔe
13. e
14. ʔa
15. a
16. ʔo
17. o
18. ʔu
19. u
20. β
21. θ
22. s (š)
23. h

- 24. h^w
- 25. m
- 26. n
- 27. ɲ
- 28. l (ʌ)
- 29. r
- 30. y
- 31. w

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 -C₃V. The procedure eliminates one step at a time the morphological material which might obscure cognition 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.

YAVAPAI-ENGLISH DICTIONARY

p

pí ₁	die; dead, cf. hug
púyi	(plural)
pú·yi	
βpí·	tired
?há...θpú(·)yi	bathe, swim
tpúyi	cause to die or be sick
pà·pī	corpse
pí ₂	father's sister
npí·	father's older sister
hpi	grinder → jaw
?pí	
pī·βi	medication < pi ₁
hi·pînβi	win
pīli	be burnt
pīlrūβi	plant species
kpí·la	clover
θpíri	hard, strong
θpí·rβi	strengthen
θipí:rβi	
tmpíri	full
?píra	just, only
pé	carry on head
čmpé·βi	carry many objects
čβnpé·βi	

-pè(·)	'and where... '
spé	lean v.
spé	six
čpé	reach
péβi	lean v.; follow
čpéβi	blanket
hipé	near
hàpēya	whatever may happen
topé	help
topáyi	(plural)
pé·	bear fruit, be born
yà...pé·	be born
yà...páyī	(plural)
syàpé·βa	soul
qmō·sa pé·	mistletoe berries
péqi	hit
čpéqi	hit
(s)peqi	pound v.
pēska	Pln: Prescott
impésqi	slip, drop
pé·mi	not there
ʔapé·mi	we two go
wàypé(·)mβi	beautiful; wonderful
pémi	stand object against
pēhi	cast a spell
pèlmēlkʔi	lick one's chops or lips

màtsapé·yi	shovel
?pá:	person, Indian
?pá(·)ča	(plural)
pà·-, see page 347	(plural object)
pà·-, see page 348	(personifier prefix on adjective)
pá·	shine
hi·pá·	evening
pá, see page 344	stick v.
?pá	arrow
hʷà(·)čpā·	raid
čpā	get out; sprout
θpā·	freeze
yà...pá	responsible
hopá	four
βlpá·tʔi	blister
?mpáča	brush (plant)
hù·pā·ka lā·ka	elephant
pákka	snow
páqi	come out, sprout
tpáqi	(causative)
pàqpaq	sharp, cracking noise
θpáqβi	wink
páβi	bake in ashes
čmpáββa	kidney
pā:hči	ambush, cf. čpá·
ka:pámka	grasshopper
qa (m) pánqa	bat (animal)

kəpálβi	tie up, knot
qəpálβi	
əpāla	peach
hi·pál	tongue
himpál	
βəpálβʔe	cramps, cf. tie up
ʔp ^h álka	ironwood tree
pári	sharp; intelligent
ipári	learn
kpá·rβa	satisfied
hankpá·ra	butterfly
hankrá·pa	
mpára	leg
páya	all
-páya cf. pé·, ʔpá:	dweller, inhabitant of
ʔčpáya	animal
qmpáya	brain
pāya	first cousin (female)
spó	know
npó·	father's father
pó(·)ra	
pòqpóq	slender
ʔʔi·pòqpóqa	digging stick
póqi	spill
tpóqi	pour
ʔmpōqa	mushroom
pú	put away

čpú	insert things
wì·čpū·čó·	bank (financial)
pú·	rip cloth
qʷàəpǔ· ?ĩki	throwing out rays
(m)pù·kl?ūt	tarantula
?hà·pú:čò	cottonwood spring
slpú	armpit
mlpū·	navel
wèhpū	buttock(s)
hpú ₁	something which shoots
hpú ₂	stagnant
púk	bottom, foot (figurative)
i·púk	neck
wèhipúk	collarbone area
mipúk/mmpúk	knee
spūki	
čpūki	cover v.
spúki	pillow
hopáča spúk(k)	fourth time
čmpúk	manzanita
hà(ŋ)púk	coral-colored snake
púβi	weave
twpū·βi	preserve (food) v.
twpú:βi	
spúmi	take apart
pú(·)ŋβi	dome-shaped → wickiup
púli	be wet

tpúli	wetten
himpú(·)la	forehead
kmpū:lβa	hump(back)
púr	hat
yàktpūrβa	lip
θmpú·rka	fly n.
smpū·rβi	band for cradle
sklpúyi	hug v.

pu

pu

Loanwords

pe·	money; dollar < <u>peso</u>
papé·la	paper < <u>papel</u>
kapé·la	(dissimilation)
pá·pa	potato < <u>papa</u>
pasté·la	pie < <u>pastel</u>
pá(·)n	(hand)kerchief < <u>pañó</u>

Loanwords

pá stick v.

ʔpá

pointed weapon

(?)pàkʷirβa

arrow

pàkʷirβčkwāye

quiver

ʔpàmqʷán·a

gunpowder

ʔpá·

ʔpá· (sg.), ʔpá·ča (pl.) (G.M.)

ʔpá: (sg.), ʔpá:ča (pl.) (W.G.)

person, human; Indian

pà·na ʔsī:ta	I name the people
ʔpá·βč klkʋó·βi	a man is in jail
ʔpā·βč pīm tkāββi	funeral
ʔpā·βč pīm kwā·wi	funeral oration
ʔpā·βč pīm swā·ri	funeral song
ʔpā·βč ʔčrāβk spóβkm	It is apparent that the man is ill
pà·pī	corpse
pá·pí čmí·ya	female corpse
pá·pí spúk wó(k) sčá:βa	tombstone
pá·(pì) tú·yči	they cremate

ʔpá·

pà·hmí(ya) 'man'

pà·hmí	
pà·hmī ?wí(?wíyi)	I have a husband
pà·hmí ??ú·(k?yùm) (W.G.)	I see a man
pà·hmī·no ??ê·	I give it to the man
pà·hmí:βǎ lwêβi	man marries
pà·hmí·βm hhʷáki	two men
pà·hmí·βm ?hʷáki	
pà·hmìṛmāya	man's breast

pà·-₁ 'plural object'

pà·kmī·km	brings them
pà·kmwā:čči	they massacre
pà·kwī·či	distribute
pà·??ē·či	I give to them
pà·??ē·kwī·či	I distribute to them
pà·??ē·kwīyči	
pà·?sī:ti	I name them
pà·?sī:βi	I count them
pà·mòlimī:ye	feel sorry for us!
pà·mòl?èmf:yi	
mol?è·yī·	feel sorry for
pà·mnhmérβi	be kind to them
pà·wìβó	they drove away the people

pà·-₂ human attribute

pà·kpōq̄póqa	the slim one (Prn)
pà·kʷú·lk pōq̄pōq̄e	tall, slender person
pà·qé·či	a small person
pà·qyáta	rich person
pà·ʔčkwí·ya	rich
pà·ʔlh̄wāyi	mean, nasty, cranky
pà·βàkpéβk	third-born
pà·βà·myá(·)mi	you're getting old
pà·hāni	handsome male
pà·hānah ʔūmi	bad person
pàtáyī	he's old
tú· pà·lá·yi	ugly person

pà·- compounds

pà·qwāwa kyō	Skull Valley
pà·hū·	skull
pà·ʔāβi	club
pà·tpúyi	witch doctor
pà·sāyi	stinger
pà·péhi	person wishing bad luck
pà·tāya	many people
pà·čθéqa	blood sucker, medicine man
pà·(h)čhʷá	warrior
pà·čʔhʷā	enemy
ʔčhʷá	
pà·čhʷā	
čʔhʷā	
pà·kwá:wo	sermon
pà·kkʷá:wo	preacher
pà·kwá·wo ʔʔé·βna ʔʔík	I came to hear the minister
ʔβá:km	
pà·kčē:βa	healer
pà·kβʔó·ma	last man (Prn)
ʔpà·kβʔóma	the last man
ʔpá:kθī:yi	Indian doctor
ʔpà:smāča	medicine man
pà·smāča	
ʔpà·hká:ya	Indian from another group, stranger

pà·- (continued)

pà·hkāya	
pá:khāya	(W.G.)
pà·mú·lβa	prominent person
pà·nēha	killer (Prn)
pà·nyû·ča	dwarf, midget; little (Prn)
pà·(?)rāwa	fast person running
pà·lā·wa ?koyūči	I'm making a new generation
pà·lá·wk ?hàəpū:yi	many swim
New York pà·yūwa	he comes from New York (W.G.)
New York pà·yūwk yūčk yùm	He came from New York (W.G.)
pà·wīya	lesser chief
pàčā:ča	family, clan

pà·- miscellaneous

pà·-

pà·píló	grave offering
pà·pēqi	strike
pà·ttwī·ni	pushed on bone (?)
pà·tū:či	cremate
pà·tūri	crowded with people
pà·tmāri	bury
pà·tmārčò·	grave
pà·tmārčó	burial ground
pà·tyú·či	friendship
pà·čθēqi	sucks blood
?pà·kmwā·či	massacre
pà·?sī·tk	roll call
pà·hipínči	I lose
pà·ṇahpinči	we lose
pà·niṭmīli	play a joke on someone

pà·-

t

tikwē·ča	deep (Prn f.)
tihw̄ni	turn over
tihw̄nɕi	turned over
tīti	rip, tear
stī:ti	cut, plow
mātstī·ti	furrow
tɪɕtɪ·ɕi	shake
čtɪɕtɪ·ɕi	shake (a blanket)
tɪɕi	pregnant
tīpi	thick
mītɪpa	thick feet
tīθi	spread
tɪltɪl	
hi·wáy ktɪltɪlʔl	chest
myā·khtɪ·la	heaven; sky
tirtɪr	
khwātirtɪrʔa čmāyi	plate
tɪri	tie
θɪri·tɪri	bracelet
hté	prickly pear cactus

hàmté	pumpkin, squash
-té(·)	big; many; much
-táyí	(plural)
?té	many; old, grown
βté	big
tē·qi	spicy, hot
té·qi	lick
θé·qi	
βtêθq?i	burning pain
-t(a)	larger of two similar animals
mh ^w á(·)ta	bear, cf. gila monster, cow, squirrel, mountain lion
tə-	
tapâ	break
tap ^h â:	fishhook cactus
tapâ·	cf. Pima
sàltəhkăβi	ring
myál tə?k ^w ā·θβa	toast: browned bread
-tá-	
čtá·ča	father
nà?čtáha	my father ₁
nà?tála	my father ₂

prìtākm	I jump
?htá	reed
?thá	
tá°	grind
tá:/tǎ°	
tá:βi	ground
táββa	
táβa	
tàpstáps	
??ī·tâpstâps?īča	wood rattle
tát	thorn
?tát ^h a	thorny
sotát	cane
hitát	spine, back
mltát	barrel cactus
čà(h)tá·ti	crawl
tâqβi	split open v.i.
?mâtáq	brittlebrush
tâβsi	blossom, flower
tâwsi (SEY)	
βtâβsik	snapped shut
?wâtâββò	church

ʔmt ^h â·βk	north
tà:βkyāma	bladder
tàθtáθ	
nà:βtáθtáθʔīča	watch: "sun ticking"
q ^w ári hitāsa	bald
ʔi·tâ·sa	sycamore
tâhki	throw toward speaker
tâhmi	throw from speaker
tâ·βk < tâhβk	throw
tàltála	elderberry
tála	father
See -tá-	
tə-	
topé	help
topáyi	(plural)
tomʔāmpi	capsize
tó·	sated
tōčtōčʔlka	drip
βtōtβk	collapsed
ktōhi	kick
tó(:)hpi	gamble, play cards

tólki	stubborn, going one's own way, like a bouncing ball	to
túlki		
tòlk?páya	Western Yavapai	
sətó·rč	marbles (toy)	
tú ₁	burn v.t.	
tū:či	(plural)	
tú·yči		
tú ₂	pound	
kotú	gopher	
ʔčkmtū	watermelon	
smàlkatū	deaf	
smá·lkkū·	jimsonweed	
tú·	intensifier: very, just	
	bang	
ʔkhwàktū·ta	blacksmith	
tú·βl	middle, center	
tú·lβa	the one that waddles	
túri	crowded	
túrβò	(Pln)	
hàŋqtúr	poppy	
túyi	uncertain, unsure, hopeless	
hipā:k sɪptū·yi	midnight	

tpā	shell v.
tpāqi	sprout
tpâθi	touch
yàk.t.pûrβa	lip
k ^h wàttq[q]ā·βa	nail
ttmō·	itches
tčéqβa	dress n.
θčéqβa	
tčâqβa	
tčâqwa	
tčmâ:li	rake
tké·	add
tkí	
tkē·βi	(we) stand up
tkáβi	gather
ttkáβi	
takāβ?i	encircle
tká·βi	split
ttká·βi	
nà·tkǎβka	hour
ktkā(·)ma	two people passing across (Prn m.)
tkūpa	sides almost come together
mìtkθā	heel
tkβsá(·)	shadow
tkrū	crook of a cane
nì·stkwālka	scorpion: out of shape

?há·k ^w tk ^w ī·βa	Black Canyon: cottonwood lined along the banks
tk ^w í:li	win
tk ^w íβi	too much, be late
tk ^w ī·lβk	a little
ttk ^w í(·)lβi	complete
tk ^w ári	smoke v.t.
mtq ^w ī·sa	plant species
tq ^w āti	light v.t.
tk ^w āni	thrash
tq ^w ípi	getting dark
tqēpi	
tqôr	fox (W.G.)
tqsi	prairie dog
tʔīni	stop! leave (it) alone!
tʔéli	spoiling
θʔéli	salty
tʔámi	dam up, cup (hand), cover, close
tʔōli	boil → sweat house
tʔōri	ball
tʔórβa	summit, top; edge
tʔú·βi	show v.t.
tʔúmi	drum
tβpūni	bubbles
tβǔ·pa	arc-shaped → bow

tβkváli	comes away from + branch, fork
tθâmi	spotless
ktθūkβa	curved
hàmtθû·lta	gila monster
tθkʷí·l	clean, wash + spotless
tsltsí	squeal, squeak
tspé	six, cf. lean
tspáya	
tsklpú·yβi	hug
tsmá·či	dream
thíŋi	move
thànhā·ni	rub (an arm)
thūma	cloth
thpá:	Pima
thkō·	stomach, tripe
tkʰō·	
təkō·	
thθí(·)la	lizard
thmē·	pile up
thmū	bake (bread)
thlí(·)βa	sweet mixture
thʷâri	shave
təmʔāmβi	capsize
tmíli	fool, play jokes
ttméli	
tmáči	put out, turn off

tmári	bury, cover with dirt
tmó·	scratch, cf. itch
yù·tmū(·)rβi	eye-glare
tmpíri	full
tmk ^w íri	roll, wrap
tmq ^w áni	break
tmʔāmβi	capsize
tmʔóri	full
tmyū·li	sweeten
tní·βi	still, quiet
tnīri	agitate
tná·kβa	(small) level field, meadow
tník	white oak
tní·βi	rest, settle, see tnī·β- ?
tné·	yesterday (SEY)
tnē·βi	sit, keep still
tliwliw	
háməil yúwo tliwliwi	I'm going to cry
tláhβi	tired
pláhaʔl	I'm tired
tlpū	road runner
tlk ^w ám	horned
tlwá·yβa ʔnū·	we're getting married
tyé	lie v. (falsehood)
tyáyí	(plural)
tyé·	near
tyé·βi	

tyé·mi	desert v.
tyá(·)č	corn
tyūpi	face v.
tyūβi	
tyúč	relative; 'friend'
tyu·ča	
tyúwβa	edge, horizon
twī·mi	rest v.
ttwī·ni	pushed on bone (?)
twârβi	lazy
twāmi	carry
twāmi	cover, smother
twáyi	distant
twá·yi	
twpú·βi	preserve

Loanwords

ta:plè

shawl < tápalo

tomá·ta

tomato < tomate

tù·mīŋka ?síti

one week < domingo

thàrhā·r?i

work < trabajar

Loanwords

tú· intensifier

tú· pà·lá·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 ?úmkm yóβkm	cheap
tú· kêčm ?spôkm	I know a little
tú· kâča máča	lunch
tú· qáča máča	
tú· kβlmiβm	a few
tú· kyô·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· βqâwβ?l	it breaks
tú· ?sβóβk (n)βák ?wâ·km	I'm just sitting here waiting
tú· hihúl βyák kyá:mβha	everything around
tú· mίnka ?sí·ti	one week < <u>domingo</u>
tú· mpóqpóq qnimá·	that long ago you were slender
tú· nóma?nóma	countless
tú· nyú·č(o)k	use v.
tú· láwa lówk	beyond one thousand
tú· lùllú1?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)

tú· (continued)

tú· yúči	be always
tú· mnyúčk pà·mnhmérβi	always be good to people
tú· wóqwó·qʔikm	growl
tú· nyú·čk nuβyú	all the time
tú· kàβyú·čm	some other time

č

čī·	lay, put
ʔčf·	fish n.
kčf	step v.
kčīči myā·mi	step it up!
ʔočī	embers, coal
ččī	mother n.
sčf	sweep
čipā	split
čphā	
číta	
čī·ta	mother n.
čfči	suck
kčī·čβi	steals
čikwí·θβi	wrestle
wi·skčī·βi	precipice
βčfθʔi	kiss
hamčfθki	sneeze
čihūhi	whistle
čf·li	falls asleep (arm, leg)
hicī·la	nit
čfłqi, see čélqi	defecate
čf·ri	shave

čē.	put away (SEY)
βčé(·)	daughter (man speaking)
βčâ·ya	(plural)
čé·βi	heal
qʷasčēm(?)i	admires a lover (woman speaking)
čélqi	defecate
čílqi	
čélqa	feces
ʔú·β čahmā·	chew tobacco
ʔwì·nakčakáβa	Black Canyon
βčà kʷā·kʔiʔi	yawn v., cf. gallop
βàl...sčā	he owes
qòčqóčča	tickle
sčá	put up
hàβčā(·)	mano
hàβʔčá	
nčā·	first cousin
tnčā·ča	(plural)
həčâ:	Milky Way
pàčā:ča	clan, family

(čà-)(?)qwāri	clearing; desert
čá·	pour
čyá:, čhā:	
hàlčātó	polish, cf. smooth
yū·θčāti	almost (SEY)
čàčā·či	sprinkle, pour on
kʷàsōčāča	rainbow
čàqčáq	drip
βčāqʔi	drop
kčáqi	leak
ʔòmčāq	termite
mčāqi	choke on food
sčáqi	split
čā·pi	eat up
čá·(β)-	on (top), above
čǎ:βk	on top of
čā:hk	
čā·ʔhe	
čàsčā·sa	pifion jay, blue jay
kčāsa	catclaw acacia
wi·kčāsa	smooth cliff → Four Peaks
hwà:lčásča	broken-off pine (Pln)

čahāni	paint v.
βčāmʔe	throw away
čá·mi	mistake, misdeed
č-yá·mi (?)	
čá·ne	on top
hčáŋ	girl, daughter
wi·čálčá·lʔe	ridge, boulder
βčā·rʔi	shout nearby
mča·yi	hungry
-čò·	suffix: place where
-čō·	
čó·	set down
čyó·	(variants)
čwó·	
sčó	pluck
čóqa	juniper, cedar
čó·βi	fight
čá·wβi	(plural)
βčóŋi	jump into

čūpi	eat something mushy
tβčū·ni	arc-shaped
hàβču·li	blow with mouth
kčūlki	small ditch shaped
sčúlβi	stick in
-čhúr	
?čhú·ri	winter
?čhúra	year
-čùračú·r	
hù·θčù·račú·ra	plant for hummingbird
θčúr?i	insert on object (thread into needle)
čūrka	walnut
čpé(·)	reach, cover
čpé·βi	blanket
čpēqi	hoe v.
čphá	split
čipā	
čpā·	sprout; get out
čpān	plant species
čpáya	
?čpáya	animal
čpú(·)	insert many objects → bank

čpū·βi	hibernate
čpūki	cover with dirt while planting
spūki	
čtā	
číta	mother
čtā(·ča)	father
čtúhi	spit
ččí	mother
ččplī·či	survey, measure
ččá:βi	put on ground (rug)
sčá:βi	
ččá·yi	step on
čkváti	knife, ax
čkvá(·)sa	base of skull
čkvó	bite
čkwó	
čkvé·	push
čké·	
čké·	push
čkvé·	
čká·βa	cousin
čká·mi	wide
čkpā·	mount
ččkmtū	melon
màtkčkmí·ya	valley

(?)wi·čkó·li	many rocks
čkl?úłki	make a fist
čkróti	short
čkwári	laugh
čkwá:ri	(plural)
čpé·βi čáčkwā·yi	saddle blanket
čkwá	put, lay many objects
čkwál	lung(s)
č(k)kwí	ask
čkpíti	peep
čkpá·	climb
čkmí·	creek
čknāna	stink bug
čqnána	
čkná·	command
čkróti	short
čqn?ōni	fold once
čtqn?ōni	fold repeatedly
βčìqwusmí	gulp
čqwāti	uncover
č?in?í·ni	shake, (earth)quake
č?â·mβi	gather (acorns)
č?áli	come out
?łwi.č?úr	Indian paintbrush (plant)
-čβ-	
náčβ-	we (multiple plural)

čβú·yi	sift, separate seed
čβkò	cup (ears)
čβθí·	liver
čwθí· (SEY)	
čβsó·	rib
čwsó· (SEY)	
čβnpéβi	carry many objects
čmnpé·βi	
čβná·yi	chew → scissors
čmnpáyi	
čβlwí	measure v.
čβlwá·qi	take out (many horses)
čβrāri	lift
čβyámi	
kwè·čβyámi	automobile
čθīli	poker stick
čθēqi	sucks blood
čθāč?i	sift
čθātβi	round, bowl-like back
čθú(·)li	wash
?č?čθú·li	wash repeatedly
čθpáli ₁	tie
čθpáli ₂	suck, chew (cud)
čθk ^w ámβa	cotton
?čsá	bird
wì·kčsāwa	Superstition Mountain

čskwá	sated
čsmāyβa	cousin
čhāni	paint, smear
čhāri	avenge
čhkāβi	canyon
čhmá:	eat dry, powdered substance (parched corn)
čhwāpi	smallpox
čmí'	lay long object (down, across)
ččmīč'i	furrow v.
čmirmīri	straight
?wàčmīča	nation, tribe
čmī·ya	female
čmá·li	rake
čmāyi	plate
čmpāββa	kidney
čmpā·wa (SEY)	
čmpūk	manzanita
čmkwíla	yellow palo verde
čmsī	(elder) sister (man speaking)
čmhó(·)βa	taraiso
-čmyāla	
màtčmyāla	adobe
čmmyālβa	packed into shape
čmpāyi	chew
mpé	tasty
čmyúl	red or fire ant

čmwɪlβi	determined
čmwá·θa	spleen
čná(·)li	lose, drop
čnaḥpúka	black ant (small, brown)
hpùčná(·)kβa	bow
stūym črúlkβi	middle is hollow, cf. dust
βčlá:ik	lightning sound
βčlá·člá·ʔik	
ʔk ^h wàčràprá·pi	kerosene can turned inside out to make tortillas
myà·lčràprá·pa	tortilla
člwá·qki	
mwē·mm βčlwā·qki	comes out in the spring
črʔū·yi	joke, tease
čyá·ka	bone
čyāli	paint
čyálβi	painted
čyá·lβi	face paint
sčyōqi	(s)mash, squash
čyúti	rub straight
ččyú·ti	(iterative)
(?)hàčwā	sand, gravel
čwá·wi	scatter
čwàhāβa	miser
čwārβi	cheap
čwáyi	swing

čwâ(·)yβi

swing

čw

čwó

brick → cheese

see also čó.

čw

?č-

?čpáya	animal
?č...čá:mi	make a mistake
?č...čəú·li	repeatedly
?č...má·	eat
?č...pé	hunt
?č...pári	intelligent
?č...péqi	hit, beat
?č?úyi	binoculars
?čβnámmi	needle
?čhmíkm	energetic
?čhnúβa	sickness, disease
?čhnóβa	
?čhwá	war
?čhwá·yi	hostilities
?čhwá(·yk)himáči	war dance
?čhwáyk kyó·(či)	peace + no more fighting
?čkčíčβa	thief
?čkhé:βčò	store
?čkká·βči	money
?čkmtú	watermelon
?čkmtú ?qwáθa·	
?čkmtú tú· qwáθa káča	cantaloupe
?čkmtú ?qwáθa ?kwípa	casaba
?č(k)kná:βa	messenger
?č(k)kná:βča	

?č- (continued)

?čknwí·ra	cook n.
?čkré	hunter (Prn)
?čkúrəa	once upon a time, a long time ago
?čkú:rəà	
?čkyô·č	diver or chicken hawk
?čkyúka	ancient
?čkyúka?pá:ča	ancient people → Hohokam
?čkyú·kta	legend
?čmá·	eat
?čmáči	a few eat
?čmăβa	food
?čmăčò	restaurant
?čmăčòč ɸpíri	table is hard
?čnwí·rò?	kitchen
?čnwírčo	
?čpári	intelligent
?čpəɣpwá	animal's abode
?čpéqi	hits
?čqwáəa	
?črăβi	sick
?čré·	doll
?čsá	bird
?čsá lá·wi	(plural)
?čsá kwíla	mockingbird

?č- (continued)

?čskwíli	sew NEY
?čskwí·li	needle SEY
?čŕí: qyâti	drinks too much
?čŕí·č ?swâli	I drink too much
?ččplwí·km	I measure
(?) čhwà.kkná·na	walking stick (insect)
čhwá·pč hwàyá·wi	enemy strikes

ča-- 'top'

čá·?he	on top
čá:hk	on top
čá:βk	on top
čá·hè	top; roof
čá·βk ?čmáyci	they devour it
?hàčá·βk yáki	float, swim
?hàčá:βk yáki	
?hàčá·βk yáki	
tù·čā:βm ?wāma ?nūkm	I'll skip over these
čá·hk čkwā·yi	put on top
čà?h·áyi	war, battle
čà?wíri	insist
čà·htá·ti	crawl
čátá·ti	
čàlhú	burp
čàkčí	step on
čàkčíčí	
pà·čā:ča	clan, family
čàčā·čí	sprinkle
čàčāč?i	squirted on
pá·p čàčāč?i	handkerchief on top: John
?páp čàčā·čí	Charger (popular etymology)
?hàkča·čpa	water thrown on top
čàčkwá·yi	saddle v.

ča·- (continued)

čàčkwâya	saddle n.
čám sū·si	sprinkle
càmčā·či	pour on
càmčāki	splash

kʷ

čkvé·	push
čké·	
kvá·	shoot
-kvát	break; cut
tkváti	cut with an ax
tkvá·tm ʔʔā·βi	hit with an ax
yá·β·kvātiʔi	out of breath
čkvāti	cut with a knife
sákvāti	cut with an ax
skvāta	breastbone
kvá(·)βi	luck
čkvá(·)sa	base of skull
ʔitβkvāla	forked post
ʔl:tβkvāla	branch: comes away from tree
-kváy-	
θkvāyi	light (in weight)
θkvāyβi	break
θkvā·yi	shatter
βθkvā·yβi	crack (egg)
čkvó	bite
čkwó	
sàlklkvō(yi)	hobble

klkvóβi

tie around an object

kYo

kvú(·)li

long

kYu

k

tkí	add
tké	
hàmkkī	killdeer
(?)ki·kâwi	I meet
kíč	little
kéč	little
káč	little
qáč	little
kikvó(hi) → klkvó	hobble
kkíski	slippery
kihipă:čm	tonight
kíp-	a kinship term
kīpa	great-grandchild
kí:pa	great-grandchildren
kīpa	younger cousins (pl.)
kpā·	younger cousins (pl.)
kí·pa	younger cousins (pl.)
màtkī(·)la	wide earth
tkē	adds
tkí	

nàkhkē·	ford v.
čkē·	push
khkē·	across
hikē·	carry something heavy
hiko	
(β)kè·... (?úm-)	negative cf. French ne... (pas)
βké?	where
kéč, see kíč	
ʔk ^h wàsakēβa	pick n.
kskē·βa ʔwâ	tent
ʔi·kéθwi	we got here
kèhkéh	cough
kθképa	glass
kθképo	
kêla	younger sibling
ké·la	(plural)

kaṗāṃka	grasshopper
kampāṃka	
ka(h)tāta	porcupine
kthāta	
kaq̄wār?e ksk?īta	corner (outside)
-ka	
?ī·nka	soon, again; wait!
mhă(·)mka	hello!
mhâmkô:	halloo!
ká(β)	what? how?
ka?sí:ti	each one
?káppi	many sitting (SEY)
kapél	
papē·la	paper < Spanish <u>papel</u>
káč-, see kíč	
kakāra	rooster's sound
čkā·βa	mother's brother's sons/father's sister's sons; cousins (m.s.)
-káβ	
??ī·mtkāβpi	gather wood
wí:tkāβk	collecting money
nà·tkāβka	hour

ʔpā·βč kāβkm	somebody came
yàskāβi	bridle: pin up, button, close
ʔwì nàkčákāβa	Black Canyon
yūri sakhâββi	button
βkāβʔi	hit bull's eye + noon
-ká·m-	
ktkā·ma	two people passing across
	(Prn m.)
mátk kčká:ma	world, earth;
mátk čkā·mi	country, wide area
ʔòskāni	match
skâra	glide
kà·rkká·rk	rock back and forth
βù·hkâya	different, opposite + bridge, ford
wàykā·yβi	beautiful
(ʔ)ki·kâwi	I meet
kø-	
koyūč-	continue
kotú	gopher
-k ^h ó	
ʔk ^h ō	piñon, pinenut
ʔk ^h ōyi	
-k ^h ó·	
(ʔ)k ^h ó·	daughter's child
(ʔ)k ^h ó·ča	(plural)
nkó	great-grandmother; greataunt

i·kó	carry in hand
hāṛkō	frog
kβkó	block, cup (ears)
kòpkó·p	beat (heart)
βkóβi	fence
kkβkō·βi	shield
kōmβi	ball
(?)wí·čkō·li	many rocks
kòrkó·r	
?kʷè·čkòrkō·ri	dice
na?kōra	son (man speaking)
?kura	son (man speaking)
kór?è?	(vocative)
kóla	mother's mother
kó·la	(plural)
kāβ kū·čk(?)è	where (SEY)
nkunē·ya	husband's father
kkū·	bird that goes "ku:"
-kúp	
?hàhēla ktkūpa	river narrows
wí·ktkūpa	sides almost come together
(?)kúla	jackrabbit
kúr	long

kúra	long ago
kūrm	very far
ʔčkūrθǎ	once upon a time
ʔčkū:rθà	a long time ago
kpít	turtle
čkpi'ti	peep, peek
kpí'la	clover
kpá'rβa	satisfied Prn m.
ktōhi	kick
ktú	pounding stone
ktkā:ma	two passing across (Prn m.)
ktʔōrβa	top of hill
ktβá	
màtktβākβa	narrow, level land by mtn.
ktθūkβa	curved
ktní(°)βi	gentle → Grace (Prn)
ktná·kβa	small level land
kčí	step down
kčī·ʔsīti	one foot (measurement)
mkčīče myá·mi	step it up
čákčé, čákčīči	step on
kčī:či	steal
kčī·čβi	
ʔčkčīčβa	thief
wi·skčī·βi	precipice

wi·nàkčəkāβa	Black Canyon
wi·ktkūpa	gully: sides almost comes together
kčf:sa	Mescalero <Cochise?
kčāsa	catclaw acacia
hwà:l kčásča	broken-off pine (Pln)
kčâqi	leak v.
kčūlki	small ditch
kčβkō·βi	shield
kkβkō·βi	
hàmkkī	killdeer
kkīski	slippery
kká·βi	beg
(?)ki·kâwi	I meet
kkū:	bird species (onomatopoeia)
kqī·rβa	straight line
kqāqi	leak, cf. drip
kqwáθ	rifle
sík?īta	pointing
k?í(:)l-	
k?íla	rough sides (Pln)
?wì·k?ī:la	mountain

ʔhàkʔāma	river
kʔōri	narrow → high wall
kʔōra	ball → tomato
kʔóya	crown of head → cock's comb
kʔówya	
kʔú·	basket, plate
kʔūβo kčáqi	leak v.
kʔùlka	swarm (of bees)
-kʔú·l-	
skʔū:la hnāqča	beads
skʔú·la	(singular)
sàlkʔhāni	right hand
kʔá·βi	pray, ask for
wàkəβāri	like, love
kʔté·	big
koté (SEY)	
kʔkō	block
ʔi·kʔkōββa	corral
ʔi·βkóβa	fence
kʔskwī·	standing
kʔháβi	tight
kʔnāwi	carry heavy objects < nó(·)
tū· kʔlmīβm	a few

kθí:yi	(Indian) doctor
kθyé:	
mikθá	heel
kθáq	burden basket
kθár	dog
kθá·ri	left
... kθô(·)	when...
kθpāli	tie
kθpālβi	knot
kθképa	glass
kθβlí·n	hole + oven
kθ?ē:	(a) drink (made) from berries
k(i)θyē·	doctor cf. kθí:yi
kθwárβi	perforate (ears)
ksík?īta	corner
ksīksi?īta	
??ì·ksīβa hwê·βa	cross, crucifix
wàksčīβa	wall
kskē·βa ?wá	corner
kaq ^w ār?e ksk?īta	outside corner
ksnákβa	gap: saddle-like
khimāča	dancers
(m)ikhí	scrape, cut skin out

ʔčkhē:βčò	store
khērβa	Prn given to one too lazy to walk
khāβa	follower
khàβsū(w)a	turquoise
k(?)hána	right; good
khké·(β)i	(a)cross
khβó·yi	
má:tč khβó·yi	body is feverish
khtí·la	
myā·khtí·la	heaven
khθī:la	wide-spread
khló, see khlō	boat, canoe
khlūwīβa	pulled out
θāβa khyārβa	Kirkland
kmf· ₁	bring, deliver
kmī· ₂	cry for somebody
nkmī:km	cries to be brought along
ʔi·tmī·yi	ocotillo: sad plant (?)
màtčkmī·ya	valley
sakmāka/skmāka	skunk
kimahwírβi	loin cloth

sàlkmâ:rβa	fingers
hithâtk kmpú:lβa	camel: humpback (dromedary)
?čkmtū	watermelon
wi·km?érβa	ridge
kmsâ·rβa	toes: small things sticking out, cf. sál
kmyē·	
?i·kmī·ye ~ ?ikmyē·	ocotillo
kmyā·yβa	the moaner
kmwā·či	kill many
?kwè·kmwā·či	poison
?pà·kmwā·či	massacre
?pà·kmwā:čči	massacre v. pl.
knī·li	stirrups
čkná·	command
sál?čkná:mo	index (i.e. pointing) finger
sāla ?čknā:mi	
(?)čhwākknā·ma	walking stick (insect)
kná·βi	tell
knǎpa	slight rise in land
knī·ya	mother-in-law

knī:ča	(plural)
kɲī:ča	
skɲʔōka	elbow
klūmʔi	limp (from arthritis, rheuma-
qlūmi	tism)
sklɲúyi	hug
klkʋôyi	tie around → jail
mpū·klʔūt	tarantula
kʔúlki	round → beads
klhō	boat
khló	
yùklmē:	eyebrow
klmá:	arms, buttocks
čkrōti	short
ɲāč pà·čkrôtkm	I am short
yà(·)krú(·)βm pí	thirsty
kʰwàkrwísa	hammer
mā:t ɲiθkyētk	the whole body

na?mā:t ?iθkyē·tk	my whole body	ky
kyá·(ya)	gray hair	
?hàkyā·ča	bubbling water (Pln)	
hmaŋkyō	vinagrillo (plant species)	
kyó·	nothing; no noise	
?čkyŋka	ancient	
?čkyū·kta	legend	
nθál kúr kyūwaha	I was coming way back	
kwī	dove	
sàkwīta	pigeon	
kwí(·)či	distribute	
čsàkwīla	mockingbird	
kwī·ya	owner	
kwé·	back; down + south	
kwá·ha	situated (found in Plns)	
kwā·	cicada	
nīstkwālka	scorpion: out of shape	
nī·stkwālka		
nīkwáyk ?hwāti	it's rusty	
kwá·wi	talk	
kwá·wi		

kw

kʷyūčk hʷáli	transplant
(?)kʷí	cloud
kì (in compounds)	
(?)kʷí·yi	cloudy
kʷí·	weave, intertwine
-kʷí	
(?)ʔé·βkkʷí	I listen
i·kʷíθi	catch, grab, hold on
θkʷí·	squeeze, wring (out)
myūla kʷàlskʷískʷí	candy cane
βskʷí(·)	stand up
ʔhà·kʷkʷí·βa	Black Canyon: cottonwood lined along banks
kʷínči	soften (buckskin)
ʔwàskʷfni	lock; doorknob
smʷkʷína	gruel
mʷára smkʷínβa	cream of wheat; gravy
ʔkʷíni	wrinkled
θkʷíni	
(?)hat(?)kʷíla	wolf; mountain lion

tkwī·lβi	
qēčm̄tkwī·lβk mʔē·	give me a little!
nà·tkwī·lβi	late
nà·tkwīlβi	
ʔčskwīli	sew (SEY)
čmkwīla	yellow palo verde
kʷl̄rkʷl̄r	spinning
màthikʷl̄ra	whirlwind
smkwī·rβi	jealous (male)
kʷl̄rβa	rolled up, coiled, twined
tmkwīri	wrap
kʷl̄wi	stretch v.
ʔkwē· See	something
ʔkwē·yi	thingamajig
kʷéβθa	which?
(?)kwé·θ	which?
kʷé·pò	thing
kʷéra	mother's brother
kʷé·ra	(plural)
kʷàsɔçâça	rainbow
čàčkʷâya qrwī·sa	pommel
čàčkʷâya qrwī·sa	
kʷāčk	alongside of
ukʷá	feel like

okʷá	
nʔòkkʷá	I'm sweating
(?)kʰwá	See
kʷá	metal, iron, knife
	horn
kʷáβa	horned
kʷā	Indian spinach
kʷāki	open
qʷāqi	
kʷákβi	opened
kʷākβʔi	open slowly
βkʷà·kβakʷā:kβaʔi	gallop
kʷá:qa	deer
θkʷá·βi	wide
(?)kʷáθi	brown, cf. yellow
təʔkʷā·θβa	toast
čθkʷámβa	cotton
βθkʷá:mʰkʷá:mʔi	soft: "when you touch it, it goes in"
tkʷāni	thrash
skʷá·ni	peel v.
kʷál ₁	hide, buckskin
kʷál ₂	reddish, pink + rust
ʔi·kʷāla	plant species: a bush

skwāla	large hawk	kwa
kwál (?)		
?smā:kwâl	I want to go to sleep	
(?)kwára	red clay	
kwári	bind (a baby)	
kwārβçi	swaddled	
tkwári	smoke (a pipe),	
?kwá'y khūphūpa	level of trees (?)	
skwāyi	mix, turn food in pan	
θkwāyi	light in weight	
skwā'yi	(W.G.)	
kwāwa	mother's father	

?kwè·-

?kwé·βm wí·βi	wear clothes
?kwè·čkòrkò·ri	dice
?kwè·čkváti	knife
?kwè·hwálmáča	vegetable
?kwè·kmwá·či	poison
?kwè·kná·βča	story
?kwè·nhátča	livestock
kwè·ré	toy
?kwèráya	
?kwè·s?ónča	flag
?kwè·skwí·ni	key
?kwè·t?ú:βi	motion pictures
?kwè·t?úmi	drum
?kwè·thín?iči	checkers
?kwè·yáč hwáli	sow seed
kwè·?é·či kwá·hm	Christmas
kwè·...θó·	eat
kwè·?θók wál?í·km	I want to eat
?kwè·kaβ?i(·)ča ??é·βk	I hear tell that...
?yùm	
kwè·kàβyúča kàβnmíwa	whatever you say
kwè·tɲùrt?úβa	motion pictures
kwè·túyi	mortar
kwè·čámčaha	wrongs we do
kwè·čá·mkm	one makes mistakes

?kwè·- (continued)

kwè·čáyí	jar
kwè·čβyámi	automobile
kwè·čmḡáya	chewing gum
kwè·hqís hqís(?)čá	fiddle, violin: rub back and forth
kwè·hwáli	plant v.
kwè·kqlvéβha pà·mtyé·mo	take the bad away from us
kwè·máβa ?khwá·βl yá·wa	can food v.
kwè·máβa twpú:βi	preserve food
kwè·máčò·	dishes
?čmáiči	
kwè·mθá:rβ?íča	net
kwè·mθθk wàlmí·yé?	do you want to eat?
kwè·nî·km ḡ?é·	gift
kwè·ḡmíya	hair, fur
kwè·ḡò	thing
kwè·páya	fruits, nuts
kwè·qlvá·yβa βčám?e	garbage, trash
(?)kwè·măβa	food
(?)kwè·máča	
kwè·sáya ḡháya	grease
kwè·shyára	table
kwè·spó ?úmi	stupid
kwè·táβsa	flower, blossom
kwè·θóβa	meat; game

kwè·- (continued)

kwè·wála

feather

(?)kwè:wí·βi

wear clothes

?khwà metal, iron; knife

?khwā lā·wi	metal, iron; knife (plural)
khwàtīrtīr?a čmāyi	plate
khwàttq[q]ā·βa	nail, cf. 'hit'
khwàčmāyi	spoon
khwàčβnāyi	scissors
khwàčmpāya	
khwàčkvāti	knife
khwàččkvāti	
khwàčràprá·pi	kerosene can turned inside- out to make tortillas
?khwàktū·ta	blacksmith: bang v.
?khwàk?ú:	plate
khwàkrwisa	hammer
?khwā·βm ?i·βkóβa	metal fence; barbed wire
khwàkβ?āmma	engine: 'iron runner'
khwàəβriya	manhole
(?)khwàsūlsūla	window: "metal like water"
(?)khwàsūlsóla +	drinking glass
?hàəí·ya/?hàəí·yi	
(?)khwàslī(·)yi	frying pan
khwàs wā·ri	phonograph
khwàs wā·ri	musical instrument
khwàs wā·ro	
?khwàsəkēβa	pick n.

?khwà (continued)

khwà(h)mát	bucket
?khwàmīwo	make instrument cry → rock music
(?)khwàmsárpa	fork
?khwàyūyi	eyeglasses
?khwàwāyi	metal chair

q

mlqí	neck
?sè· tqípi	evening: getting dark
?sè· tqêpi	
qīrqīri	rub hard against
màtqí·s	plant sp.
βqīrqír?i	giggles
kqīrβa	straight line
?qí·ra	ditch, furrow
βčīqwusmī	gulp
βčiqīwusmī	
βqêqê?ī	it's sticky
qê(·), qāya	dusty, sticky
βtqēpī?ī	dusk
qé(·)č- see kíč, kéč, qáč-,	little
káč, kóč (?)	
qaq ^w ârhe	outside
qà(·)pānqa	bat
qāmpānqa	
(?)qáta	sunflower
(hi·wây) sqāta	chest
skváta	
qáč, see qéč-, etc.	'little'
hàlqwâ·wa qáčqáča	Japanese
qaqá·qa	Hohokam ghosts

qa

(β)qáqβ?i	crack like a watermelon
kqāqi	leak, cf. drop
k ^h wàttq[q]ā·βa	nail, cf. hit
qāθi	shout
βqáhβk	lightning sound
βqàhβqāh?ik	
βqāmi	stab, cf. shove
?hàtqqāmi	spurs: little kicks
sqāmi	shoves quickly
qáwi	broken, break in two
sqāwa	egg
q̄q̄ōrč qāwqāw?ikm	fox goes X
βqānā·k	whine
βqòp̄q̄ōp̄?i	caved in (mining shaft)
nyál βqót?ā?imi	fall down there
qòčqóč čā	tickle
qoloyáwa	chicken, < <u>gallina</u>
qōri	swing, rock
qqór	fox
tqór	(W.G.)
hanqtúr	poppy
qč?ō·li	round (watermelon)
qč?óri	round (marbles)
sàl qčqē·ča	little finger; fingers
sàlkčki·ča	
hpùq?úrka	pistol

myál qʔōra	biscuit
βqβō:ʔi	growl
βqwō·ʔi	
qθāq	basket on back
qθpáli	tie up
kθpáli	
wi·ʔqsā	agate
qsáq	crow
qsāmta	mushroom
qsôβa	mole (on skin)
màtqmōtqī	mound
qmōti	mound-shaped
qmō:sa	mistletoe
qmpâya	brain(s), head
qmwí·rma	old woman
qčmwī·rma	(plural)
sqmwí·ra	ankle
βqnā·	whine
(?)qnū	mud
qnú·βi	muddied
qnūyi	muddy
čqnʔōni	fold once
qnmó:	duck n.
qnwī·	side, temple, cheekbone
qnimâ·	not long ago
ʔqnū·ra	sotol, cf. poppy

qrú:r	
βqlá·	croak; scream for help
qlūmi	limp (from arthritis, rheumatism)
klūm?i	
hàlsqrá·pi	naked, cf. flat
qryē:	clear (water)
čàčkwā·ya qrwī·sa	pommel
čàčkwā·ya qrwī·sa	
salqrwī:sò (SEY)	wrist, forearm
qlʌé(·)	bad → dislike
qlʌá(·)yi	
qyát-i	very, really → rich, much
qyúrqi	small ditch, furrow
qwáwa	hair, scalp
mnúnč qwó·qwó·?i	diarrhea: stirred up
βqwō·?i	growl
βqβō(·)?i	

q^w

m ^w iθ	flying squirrel
q ^w iθq ^w iθ	beak, bill
q ^w i ^r q ^w i ^r	
mtq ^w i·sa	plant species
q ^w i ⁿ i	still (water); lukewarm
q ^w i ^r i	sharp, pointed
?wàsq ^w i ^r (β)q ^w i ^r βa	corner
hú·q ^w i ^r q ^w i ^r a	beak
q ^w asčém(?)i	admire a lover (woman speaking)
nq ^w á	crane
q ^w āti	burn
tq ^w āti	light, kindle
q ^w āqi	shatters, open v.t.
k ^w āki	
βq ^w áqβi	busted
q ^w āqβq ^w āqβi	busted up
q ^w áqβi	open (a wound)
?q ^w á:ka	deer
q ^w á:qa	
k ^w á:qa	
q ^w ākta	cow
q ^w āta	Verde Valley (G.M.)
(?)q ^w áθi	yellow, cf. brown

q^wa

ʔq^wási (W.G.)qq^wáθ

rifle

kq^wāθa

cracking sound

mq^wāni

finely pounded

(?)q^wár-

outside, desert; bald, nothing

màtkq^wā·rmʔehmàŋq^wárʔi

cradle

sq^wárʔi

stirred up (→ diarrhea)

sq^wá:r(?)ičq^wāti

uncover

q^wākta 'cow'q^wāqtaq^wāta

Verde Valley dialect (G.M.)

q ^w ákta pāβi	barbecue a cow
q ^w ákta čhāni	smear meat
?q ^w áktaθāwwa	calf
?q ^w áktašāwa	
q ^w áktaθāwa msi	heifer
q ^w āktasáya	fat on cattle
q ^w áktaħmā·y yóβa	castrate
q ^w aktahmāβa	bull
q ^w àktahmáββa	bull
q ^w áktaħú·kβtē·	buffalo
q ^w āktahâya	soup
q ^w āktahmī·ya	cowhide
q ^w áktahmäya	cow's milk, butter
q ^w àqtahmà·yačwóβa	cheese
q ^w áktayú·l	rawhide, leather; shoe string
q ^w áktayū·l ?hát sāqi	whip n.

q^wākta

ʔi

ʔʔí· See	wood
ʔí·βkóβa	fence
ʔíwīla	grass
ʔí·hmi(·)ya	acorn
ʔí?	no! stop! listen! (interjection)
ʔī	
mtʔīni	stop it!
hʷīʔi	what?
ʔí·nka	soon, again, wait
ʔí(·)	say
ʔʔí	1s: I say
mí	2s: you say
ʔí	3s: one says
-ʔi	"goes," says (sound made by X)
mú·ʔi	moos
ʔíwò	teach by saying
ʔí·wo	
lólólólʔíča ʔʔī·wok	I play the fife
βsū·spi ʔí·wo	squirt
màthā·t ɲú:lkʔlʔi	dust
màtmúnʔi	autumn
ɲmθáβʔíkè	dawn
βhipáʔīm	begins to get dark, evening

ʔi

òhpsé·r?iča	whooping cough
?í·	want
yí·	
kʷè· ?θōkʷàl ?īkm	I want to eat
ksīksī?īta	corner
kšk?īta	outside corner
ksík?īta	pointing
hàms?īβ	bulrushes
?ín?ín	move, shake, quake
??í:la	thread. < <u>hilo</u>
??í·la	worm
??ī:la	(plural)
??ī:li	steep, precipitous, deep
k?í·la	canyon
k?íla	rough sides (Pln)
k?īr?īra	butte; stem (on pipe)

??í· wood, tree

??í:

?i·pà·?āβi

hit with wood

??ī:βm pà·?ā:βči

strikes with a club

??i·pòqpòqa

digging stick

??i·tápstáps?īča

wood rattle

?i·tá·sa

??ī· tkāββi

gather wood

??ī: tqwātči

they light the wood

??i:tqwātča

firewood

?i:tβkvàla

branch: comes away from tree

?itβkvāla

forked post

?lwfīla hàpsū(w)ə ttná:kβa

meadow

wilhàpsū tnakβi

wīlahàpsūa ktnà·kβa

wīlhàpsū(w) ttnā:nkβi

?i·čkvāt(a) ?wī·ykm

I own an ax

?i·kβkōβ(:)a

??i·ksīβa hwé·βa

wooden cross, crucifix

?i·kmī·yi

ocotillo: 'sad plant'

?i·kmyē·

?i·kwāla

plant species, a bush

??i·βòča

wagon

?i·βkòβa

fence

?i·əmáqa

kindling wood

ʔʔi· (continued)

ʔʔi·shyārβa myāla čā·nk	The bread is on the table.
wākm	
ʔiṣomā·	medicine, cf. root, sinew
ʔismă	
ʔismâ·	
ʔʔi·swā	barrel
ʔi·hmī(·)ya	acorn
ʔi·hmī(·)y tāβa	acorn meal
ʔi·hmī(·)ya táββa	
ʔi·hmī(·)ya tá·ča	
ʔi·hmī(·)ya mɔwána	
ʔi·hmī·ya tâβa	
ʔi·hmī tûrβò	lots of acorns (Pln)
ʔi·hmī·ya čʔâ·mβi	gather acorns
ʔi·hmī·ya qyātkm	there are plenty of acorns
ʔi·hmī·ya ɲhāya	acorn soup
ʔimθī(·)	greasewood
ʔʔi·msmā·	root
(?)ʔi·ɲū·	weed, clean out, soften ground
ʔʔi:ɲû·	I garden
ʔi·yâki	bed
ʔiwīla	grass
ʔiwīl	grass
ʔiwīlpéqi	hoe n.
ʔiwīl čpēqi	hoe v.

ʔʔi· (continued)

ʔiwīla čā·ne shyá1βkm	leaves floating on water
ʔiwīl tpáqi	weeds sprout out
ʔiwīl smā·lkβi	leaf out
ʔiwīl lū·βi	weed out
ʔi·wáyi	wooden chair
ʔi·wá·yi ʔwakʔyùm	I'm sitting in a chair (W.G.)
ʔi·wāy kà·rkká·rkʔfčá	rocking chair: back and forth

i(·)-	(prefix)
ipári	learn, become accustomed, know (a language)
i(·)púk	nape
i·kēθwi	we got here
i·kó	carry in hand
i·khí	scrape, cut out skin
i·kʷíθi	catch, grab
i(·)βó·	be first, in front
i·βú·ri	drowsy
mā:t hiθkyētk	whole body
nà?mā:t ?iθkyētk	my whole body
ihá·ni	tame, break in (horse)
imá	dance
impésqi	?
kθkepa impésqk ?čná·lkm	I dropped the glass. It slipped out of my hand
impû(·)la	forehead
i·wā(·)ya	heart; chest
í	
?í	say
?ē·mī	say yes!
?ê?mī ^h	
?ēmī	that is so

mīyi	say it again!
kʷè·kàβyūča kàβpmīwa	whatever you say
mī·ha	say it!
í:/yí·	want
ʔhānkm βlwīkm mī:yi	If you want, it is good.
-i ~ -e·	(instrumental/agentive)
kʰwàčāyi	spoon
kθí:yi	doctor
kθyé·	
-i	?
nà:βʔālkɪ	sun rising
qʷàθpǔ·ʔɪkɪ	throwing out rays
-i- ~ -y-	(plural; repetitive action)
mīyi	say it again!
ʔčmáiči	dishes
myūla kʷàlskʷɪskʷɪ	Christmas (candy cane
māiči kwá·hm	eating time)
ʔyá·s θōiči kwā·hm	Thanksgiving (turkey eating time)
ʔčhʷá, ʔčhʷā·yi	war
ʔkʰōy khōrβa	piñon hills: Prescott Heights

ʔe

ʔē·	give
ʔē·či	
ʔē·mì	give (away from speaker)
kwē·kk ʔʔé	I give back
kēčm mʔēɾi	give me a little!
kʷè·ɾé·km	gift giving
ɾʔē·km	I give you
ɾʔē·ki	give to speaker
wí: tkāβk ʔʔē·čakm	two or three collecting money and giving it to somebody
ʔʔē	deep; thick, dense
ʔʔáyí	(plural)
ʔé?	yes
ʔē·mī, ʔé?mī	say yes!
ʔēmī	that is so
kθʔē:	a drink made from berries
hàlʔé	shining
ʔè·-	(prefix)
ʔè·méla	get even
ʔè...yī·	love (singular subject)
ʔā·yī· < ʔáy...yī·	love (plural subject)
ʔè·ʔyí	I love
ʔē·ɾí (yi)	she loves me
ʔè·ɾī·km	I love you
ʔè·č ʔī·čβi	we love each other

ʔē· ʔičī:čβi	we love each other
ʔèyí·βi	very lovely
ʔè·yí·βa ʔūmi	not pretty
mòlyfβi	sorry, sad
mòlʔèyíβi	
pà·mòlimī:yi	feel sorry for us!
pà·mòlʔèmi:yi	
ʔê·βi	hear
yà... ʔéβi	understand
-ʔé1-	
tʔēli	bitter
θʔéla	sour? + orange
hʔé1	louse
wì·kmʔérβa	ridge
-ʔe	(locational suffix)
kaqʷārʔe	outside
màtkqʷá·rmʔe	desert
wì·čàlčá·lʔe	ridge; boulder
mī:βkʔē	after
myā·(k) kβá:βmʔè	pray to God
βčāmʔe	thrown away + garbage
nà·βkāθʔè	noon
nà·βkāθʔi	
nà·βkāθí	

e

-é?	(interrogative suffix)
yàmrūβē?	are you thirsty?
-(y)e	(instrumental suffix = -i)
màtsapēye	shovel
?hàtβhēsčī·yi	horsetail broom
?òskāpi	match
kʷè·čβyāmi	automobile
-e	(= -i (?))
humāpe	like a child's
β?òme	end, edge
čā·pe	on top of

ʔa

ʔʔā	saguaro (cactus)
ʔā	interjection: hush! listen!
ʔāč	
kiʔāč	hail
kiʔāč	
ʔáβi	hit, strike
ʔá·βi	
ʔá:βi	
ʔi·pà·ʔāβi	hit with wood
pà·ʔāβi	club
ʔʔī:βm pà·ʔá:βči	strike with a club
həʔā·ββi	jealous
ʔàmaná	ripened and dried by the sun
ʔəlhāti	greedy
ʔəŋəhmírβkm	I am kind
ʔāmi	place across
ʔā·mi	pass v.
wàʔámči	visit
k ^h wàkβʔāmma	engine: iron runner
tʔāmi	cover, patch, close, stop up;
	catch, cup
tʔámβa	closed, shut
tʔāmi	cup (the hand)
sʔámi	close (a door)

čʔá·mβi	gather (acorns)
kʔā̄mβa	ridge
kʔā̄·mβa	range
màtkʔā̄mβaha	Verde Valley
sʔámi	close (a door)
yūri sʔám̄mi	button
tmʔám̄βi	capsize
ʔā̄·li	swell, swollen
βʔā̄·lβi ʔīmi	go outward
nā̄·(č)βʔá:li	sun rise slowly
čʔáli	comes out, climbs
səʔári	peep, peek (in/out)
səʔā̄·ri	sell
səʔá(·)ra	store
ʔr-/r-, ʔàr-	
ʔàrʔú·yi/ʔrʔūyi	glad, proud
ʔàr... yé	glad, proud; thankful, happy
ʔàryē	one is happy
ʔàryék̄m	
ʔàrʔyék̄m	I'm happy, thank you
ʔàra ʔyé·km	
mā·č àrmyē	are you happy?
ʔàra ʔyá:ik̄m	we thank you
ʔāwa, ʔá·wa	son's child (sg., pl.)

a

a

-a

mácβči mkwá:wča (W.G.) you (pl.) may speak. it's
your turn to speak.

a

?o

??ō	fire
?ò·yá	cave
?uyá	
?wì·yá	
?očĭ	embers, coal
?òh ^w áya	smoke
?òmčáq	termite
n?ó	sweat
?òsākó	place of shadow (from tree or mountain)
?ō·p ?rāβi	I'm not so fine (W.G.)
?ō·či	catch, take
yō·či	
skn?ōka	elbow
β?ō·q...i	be quick; dart across
β?ō·qmi	(imperative)
?óhi	cough
β?óm-	
β?óme	end, edge
β?ómi	last
msi kβ?ó·ma	last woman (Prn)
?óni	trap
?čì:s?óni	fish v.
?hà·ks?ónβa	cottonwood about to fall, hanging there (Pln)

sʔōnča	wave v. + flag
čqnʔōni	fold once
ʔól-	round + watermelon
qčʔō·lkm	
tʔōli	boil
ʔór-	round + marbles
ktʔǒrβa	lip
tmʔór±	full
ʔóyi	bring (incompletive)
kʔóya	head, crown
kʔōwya	
mlqĩn màthāy yâ·mʔō	trachea
ʔhàpâlqʔó	swallow water

kʷêŋò	thing
-ò	(locational suffix)
?ì·hmī tûrβò	lots of acorns (Pln)
hàsŷā·mβò	Hassayampa River
?wàtâββò	church
myà·tyú·wβò·	horizon: end of sky
?čnwīrčò	kitchen
-?čnwī·rò?	kitchen
ŋàlqčò·	throat
kʷè·māčò·	dishes
?òhʷàyyámmò	smoke hole ₁
?òhʷâ(·)yč?ǎl?ò·	smoke hole ₂
ŋà·č?ālò·	east
ŋà·rò(·)pò	west
myàlsīlò	broiling oven
yūwò	track
yūwò·m yá·mk	went the way came (?)
?wâ ?wyâ:wò	yard: around the house
ŋà·βlwī·βm kʷè·māčó	eat lunch
msβhʷē·βó	cross
sβhʷēβa	
-ó	
sàlkθā·rō	on the left side
sàlkhānō	on the right side
mākò·	part of the back

sβálβó	joint
sàl?íkñá:mo	index, pointing finger
nyé·kkkθó·	tomorrow
-o	
?č?θī: qyātók ?wíwkm	I didn't know I was drinking too much
ná:βm ?č?θī: qyáto	I drank too much today
màtpīló	lava
lē·kò(·)	stick out tongue
θβrūyò	pierce (ears)
θβrúyu	
hàlčató	polish
kʷè·qlyēβha pà·mtyē·mo	take the bad away from me!
hnū·βo kwā·wkm	he's speaking unpleasantly
βnā·n?o	I sit down for awhile
kyóha kʷè·kqlyēβha βke?	keep us from the bad
pà·mhipé(β)wo ma?ūmi	
-w ~ -u ~ -o	
?č?θī: qyātók ?wíwkm	I didn't know I was drinking too much
?í(w)o	teach by saying
kwá·w ??fìwòk	I'm teaching him to speak
βsū·sβi ?ī·wo	I'm squirting something
?khwàmīwo	rock music: make instrument cry

yú(:)wo

hàmθíl yúwo tliwliwi

I'm going to cry

kʷiβā·βaçβč yú:wo

drizzle

o

o

ʔu

ʔùhǔl	longtailed mouse
ʔuhmū	mortar
-ʔú·	
kʔú·	basket
ʔkʰwàkʔú:	plate
kʔū·βó kčáqi	leak
ʔūwi	make noise
màthāyč βʔú:k	wind goes X
βʔū·ʔū·k	heavy, low noise
βʔū·k	thunder sounds
βʔū:βʔū:ʔìk	
ʔú·	see
yū·ʔú·βa ʔūmi	blind
hàlʔū·βi	mirror
ʔčʔūyi	binoculars
ʔkʷè·tʔú:βi	motion picture
tʔū·βi	show v.
tʔū:βči (pl.)	
nʔú:yk ʔwâ·rm ʔhānkm	I'm glad to see you again.
ʔū:βa	tobacco
mpū·klʔūt	tarantula
ʔú·ti	boil v.i.
ʔūmi	no, not
ʔkʷè·tʔūmi	drum
hi·tát hāmʔūpa	hunchback

??ūli	give light
??ūl	lantern
?ū·li	string
hū·?úli	teddybear cholla
k?ú(·)l-	round in shape
sk?ū:la hnáqča	beads
sk?ú·la hnáqča	(singular)
θmpò· k?ūlka	swarm of bees
?wìk1?ūlka	beads
wì·kβ?ū·la	Bill Williams Mountain
m?ūl	antelope
?lwĩ č?úr	Indian paintbrush (plant species)
hpùq?ūrka	pistol
?ú(·)yi	
čr?ū·yi	joke, tease
(? (à) r...)úyi	glad, proud
βčīqwusmī	gulp

u

u

ukwá

feel like

upē

father-in-law

u

β

núl (n)βê?	yonder
mčkwà:wβé	are you (dual) speaking?
βá·	arrive sg.
nβá·	arrive pl.
mātβa yà·mpá:βk	you are responsible for the earth
pà·βà· myâ(·)mi	you're getting old
βāka	awl → mosquito
?βāk	
βāk swálβi	hold on
mītíŋa βàkwá	thick (eagle's) feet on top
βāk pēβi	follow
βàl sčā	owe: stand in there
βá·m	now
βā·m(?)i	
βàβyú· (βa)	"and, but"
kwiβá·βačβč yū:wo	drizzle
kβâ:βi	ask, pray for
sβâlβô	joint
wákaβāri	love...
mβâ·ri	get up! (from sitting)
βó·	walk
i·βó	first
(?)kiβō	rain
kiβáwa	

βóki	come back
βqβō(·)?i	growl
βqwō·?i	
sβó	wait for
má:tč khβó·yi	body is feverish
βôhβôh?i	bark v.
βù· hkăya	different, opposite
iβū·ri	drowsy
yà·l ?βū·ra	donkey < <u>burro</u>
yà·lwúra	
βpí·	tired, cf. pí 'die'
βté	big, large
βté·yi	
βtáya	
βtêθq... i	burning pain
βtáβsi	snap shut
nà:βtâθtâθ?iča	"sun ticking": watch, clock
βtōtβi	collapse
βtqépi?i	dusk
βtsī·tsī·?i	squeal
βčīθ... i	kiss, cf. sneeze
βčé(·)	daughter (man speaking)
βčá·ya	(plural)
hàβčá(·)	mano, grinding stone
hàβ?čā	
βčak ^w ā·k?i?i	yawn v.
βčāq... i	drop

βčām?e	thrown away
βčár...i	shout, yell
βčá·r...i	... at greater distance
βčá:r...i	... at even greater distance
βčōp...imi	jump
βčkwá:r...i	smile
hpùtβčū·na	bow: arc-shaped weapon
hàβčú·li	blow with mouth
βčqīwusmɪ	gulp
βčlá:...i	lightning
βčlá·člá·...ik	
βčlwá·qki	comes out (in the spring)
ʔitβkvāla	forked post: comes away from, falls
βké (... ʔūmi)	1. ne (... pas) as in French 2. where
βkèhkéh	cough
βká	who
βkáəʔi	hit the mark + noon
čβkó	cup (ears) v.
kβkó	block
ʔi·βkóβa	fence
βkwá·kβákwā:kβaʔi	gallop
βqī	woman, female (NEY, SEY) (plural)
βqū·ya	
βqirqir...i	giggles
βqéqé...i	sticky

βqáhβi	lightning sound
βqàhβqáhβ...ik	
mātč βqāqβ?im	gulch
βqámi	stab
βqáwβ?ī	it breaks
βqōpβqōp?i	caved in
nyál βqót?ā?īmi	fall down there
βqanā·	whine
βqlā·?ik	croak
βqlā·qlā·?i	scream
βqʷáqβi	busted, broken
βqβō(·)...i	growl
βqwō...i	
kwākβ?i	open slowly
mātč β?īn?īn?i	earthquake
khwākβ?āmma	engine: iron runner
β?áli	rise (sun)
β?álk-	
β?ā·lβ(i)?īmi	go outward
β?ō·q...i	be quick, dart across
β?ómi	last; all: no more
β?ú:k	wind's sound
β?ū·?ū·ik	thunder noise: heavy, low
β?ú·βi	become visible
wì·kβ?ū·la	Bill Williams Mountain
βθê·h(θê·h)i	breathe

βəá·qβi	catch oneself from falling by jerking
kʷiββəāyi	drizzle
βəô·rʔi	caved in
βəpâlβʔe	cramps
βəkʷà·yβi	crack (egg)
βəkʷâ:mkʷâ·m...i	soft, cf. cotton
βərī...i	scared
βərī·ʔlči	surprised
βsēhsēhʔi	pant v.
ʔòhβsê·rʔiča	whooping cough
khàβsū(w)a	turquoise
βsú	bile
βsū·sβi ʔī·wo	squirt
βskʷí·	stand up
βhipā(:)ʔim	get dark
βhé	tail, skirt
βhērherʔi	slide down
βhā	guts, entrails
βhâ:	rattle
hâč(·)i	
ʔlwiphâ·ʔiča	snake rattles
βhāhāʔi	rattle continuously
βhāmʔi	pant v.
βhā:wi	tender (body, corn)
βhmá(·)mkʔi	swell up, s.t. dead (a lump from a bite)

kβhnāβi	tighten
snáβi	tie v.
ʔhá·βč mākl βhwirβhwirβa	water ripples
ʔimi	
sβhwēβa	cross
msβhwē·βb	crossroad
βhwó·βi	pop up
yā·βa βmītβiʔi	kiss
βmē·t θīqkm	overflow
βmāč(β)...i	wink
βmáčmáč...i	blink
qʌēpi βmá:kwé·ʔi	smells bad
(β)márβi	sundown, dusk
(β)márm máča	eat supper
βmórmórʔi	trot
hīβmú	new, young
βmḡé·i	discharge, gun going off
βmḡé·	
mḡáya	
mḡé	
βná·m...i	1. caved in
	2. sew
ḡà·βná· li	afternoon
kβnāwi	carry heavy object in arms
kβḡāwi	
khwà čβḡáyi	scissors (W.G.)

k ^h wà.čmǰáyi	(G.M.)
βnǎ(·)ǰ?i	sit
yák ?wāha βnū·km	I'm going to sit here
βnūna	stomach; belly (W.G.)
mnú(·)na	(G.M.)
θβlí	hole
θβlú·yi	
θβrī	pierce
θβriya	small opening
?òtq ^w āti kθβlí·n	oven: large opening
βlìplìp?i	flutters
-βlí· - βlwí·	
hwà:lrāpa ččβlíyi	ruler; straightedge
?màtččβlí·ča	surveyor
čβlwī·	measure
ǰà·βlwī·βm k ^w è·māčó	eat lunch
ǰā: kǰβlwīyi	what time is it?
ǰβlwīθm ?nō?píra	that's all for now
kāβlwī?	how much, how many
?hānk ^m βlwīk ^m mī:yi	it is good that you want it
βlwí·βi	same
βlwīha	it will be done
βlwī	1. right, correct, proper 2. enough
βláh?i	tired
βhlò·hló·h...i	death rattle
βlìwlíw?i	move

riwriw	wag
βlpá·tʔi	blister
βlhé	old man
βlháya	(plural)
βríti	jump
θβrīrβi	squint
βráβʔi	lightning
βrāβrāβ...i	
βrá·rʔi	get up (after falling)
smálka θβrūyu	pierce ears
tú· βyé pà·tyé·mkm	he deserted them
βyé·km	early tomorrow
βyá	this
βyāmi	run
kʷè·čβyāmi	automobile
βyāl	mescal, cf. century plant
βyá·r...i	fly
βaβyū·βa	"and, but"
nà·βyū·si	two to four in the afternoon
βyû·li	mix
βwé	be on guard
βwâ:βi	ten
βwâli	carry (a bucket)
βwāri	cannot
βwārβi	

θ

npú ?θirī·km	I suspect, I'm not certain
kθiyē·	doctor
kθyé:	
kθí:yi	
θipí:rβi	strong
θpí:rβi	
(?)k ^h wà sùlsūla ?hàθí·ya	window: metal, like water
(?)k ^h wà sùlsōla ?hàθí·yi	
?imθí(·)	greasewood
hàmθī	soft, separate (nuts from leaves)
nθī·	mother's older sister
θí·	drink
?θí·	salt
θ?ēli	salty, bitter, sour
?θī·yi	salty
mìhθá·ča	toe
mìhθī:ča	(plural) W.G.
βmē·t θīqkm	overflow
?wàθīnka	Phoenix
hú·θíla myà?pā·βkm	'not by the hair of my chinny- chin-chin!'
hàmθí(·)la	
màtkhθī:la	earth: spread wide
θíri	fall

θìr(k)θírka	cricket
θīwa	hollow
màtθīwa	olla, clay jug
θìwθí·wa	jabalina; wild boar (SEY)
θé	leaves blown by wind
βθé·(?)?i	I breathe
muθé	fog, damp
muθá	
muθāyi	foggy
nyβlwíθi	that's all
θēqi	thin
čθēqa	suck out blood
θēqa	leaf
waθēqma	swayback
βθē·	breathe
θèhaθé·	
βθēhi	
βθèhθéhi	pant v.
θéłqa see θyálqa	
kʷéβea mʔū·?	what did you see?
ʔčkū:rəà	a long time ago
ʔčkúreə	once upon a time
mitkəā	heel
mīhəá·ča	toe
mīhəī:ča	toes (W.G.)
kəáq	burden basket
qəáq	

βθά·qβi	catch oneself from falling by jerking
θάβi	grey
θάmi	clean; clear
θά·mi	tasteless (like water)
tθάmi	spotless
θάli	fall → moult
kʷá(θάla)	Indian spinach
kʷè·mθā·rβ ?iča	net cf. sál
kʷè·mθā:rβ ?iča	
kʷiββθāyi	drizzle
nùr(m)mθā:yβ?iča	newspaper: lots of printed matter, cf. moist
θάwa	offspring, child
θá:wa	(plural)
šáwa	(hypocoristic sg.)
šā:wa	(hypocoristic pl.)
θāwβi	is born
θá(·)wβa	thousand
θó·	eat meat
θó	
hṛāqa hó·ča	Anglo: beaver eater(s) W.G.
hṛāqa θó·ča	
...kθò·	when...
βθó·r?ik	caved in (hole)
θŭči	urinate
θŭ·ča	urine

ktθūkβa	curved
θū:nβi	weak, soft
ħi(·)θūl	cheeks
ħiθú·li	slow
ħamtθú·lta	gila monster
θú:lβi	lame; lazy, without ambition
qnmò·θūlβa	goose: lame duck
čθú(·)li	wash
hʷàtkθūra	vein, artery
θùriθū·ri	itch in one spot; tickles v.i.
θùlθúla	itching disease
θùlθú·li	itch all over
θurī:	forearm, sleeve
ħàlθú·yi	nine
θpīri	hard (table)
θpf:ri	raise (one's voice)
θpī·rβkm	he's strong
see θipf(:)ri	
θpá·	freeze
θpáqβi	wink, shut eyes
θpāla	peach (WY, SEY)
βθpálpʔe	cramps, cf. tie
kθpáli	tie
qθpáli	
kθpálβi	knot

ʔhà...θpú·yi	bathe, swim
θpíla	bark, skin
θpí·li	sheds
θpīla	clover-like plant
nàč ʔθkvāyi	I'm light (in weight)
θkvāyβi	broken (pottery)
θčéqβa	skirt of squaw dress
tčéqβa	
hù·θčù·račú·ra	plant for hummingbird
θčúrʔi	put into, insert one object (thread into needle)
θkvā·yi	shatter
kθkéna	glass
mā:t hiθkyētk	whole body
θkwī·	squeeze, wring out, cf. wash, weave
ʔkwīna	wrinkled
θkwīni	
tθkwí·li	clean
θkwâ·βi	wide
βθkwâ:mkwâ·mʔi	soft
θkwáyi	light (in weight)
skwá·yi	(W.G.)
see θkváyi	
kθʔē:	a drink from berries
θʔēli	sour, bitter, salty
tʔēli	

θβlí	hole, opening
θβlúyi	
θβrī·	wrist, forearm
θβrīrβi	squint
(smálka) θβrūyu	pierce (ears)
?smálkβa ?θrúyòkm	I pierce my ears
θh·fíla	settle (as coffee grounds)
θmá	lend
θmá·βi	borrow
?i·θmáqa	kindling wood
θmpó·	bee
θimpú·rka	fly n.
θrúyò	pierce
ηηú ?θirī·km	I suspect, I'm not certain
βθrīyi	jump in surprise
θrápi	five
θrī	1. think
	2. doubt, hesitate
θurī:	forearm, sleeve
píli θrá:βi	burnt up, burnt out
θrúyò	pierce
čŏqa θy[á]lqa	half-peeled juniper
čóqa θê·lqa	
θwē	placid
θwā·mki	limp (because of short leg)
smálka kθwârβi	perforate ears

s

msī	woman
sí	read, count
misī	track, trail v.
sìkʔīta	pointing
hāmsī	sift
ham(m)sī·	star
(?)sīti	one
(?)sī·ti	
(?)sī:ti	each one
pà:ʔsī:ti	I name them
wà...sī·βi	think
sīβi	count, read
sī·βi	
sī:βi	
pà: ʔsī:βi	I'm counting them
ʔʔi·ksīβa hwê·βa	wooden cross, crucifix
hipā:k sīptū·yi	midnight
sihwī:ni	turn (car, horse) in motion
silôka	spinal column
sīli	roast, broil
tyâ·č sīwa	corn just becoming ripe; not ready cf. swá → dough
tyâ·č sūwa	
msīwi	smell like cold blood, like grease or wet hair

sé	fatty
sáyi	(plural)
sē	is fat
sá·ykm	are fat
sáya	fat n.
hàsēyi	gray, greasy
?sé	shadow
?sá·ya	(plural)
sá	(in compounds)
msé·	fear
msáyi	(plural)
sé·	buzzard
kʷàlsé(·)	red; pink, light red
séqi	whip
wàsēqma	whipper (Prn.m.)
βsēhsēh?i	pant v.
ksēlsēli	(cock's) comb
pūraksē·lβa	(war) bonnet
sé·lβi	sticks up
pùrkʷâθa sērβa	one cent: Indian head penny
?òhβsē·r?iča	whooping cough
nīs?sā (G.M.)	spider
nī·sa	
wi·?qsā	agate
sá	sting v.
?sá	eagle; widow
?sáyi	widow

ʔǒsá	bird
sàkwīta	pigeon, cf. kwí 'dove'
sàʔhāni	sacred
sàʔrīyi	sacred
sà·ʔrrí(yi)	holy, perfect
màtsapè·yi	shovel v.
sàtō·ri	marbles (toy)
sàkvāti	chop with ax
shkvā·ti	ax
ʔk ^h wàsakēβa	pick n.
yūri sàk ^h âββi	button
sàkmāka	striped skunk
sàʔǎri	peek
sàʔā·ri	sell
sàʔá(·)ra	store
ʔòsākó	place of shadow (from tree or mountain)
q ^w ākta yū·l ʔhāt sāqi	whip n.
qsǎq	crow
sáβa	white
tmsá·βi	whiten
(ʔ)hàpkasāβa	centipede
màtsáβa	chief, SEY
màtəáβa	
sáhi	smell v.i., stink
šáhi	(nursery word)
qsámta	mushroom

sál	hand
sàlmáka	upper back
(?)k ^h wàmsârβa	fork
mìkmsâ·rβa	toes
wì·kčsāwa	Superstition Mountain
sotát	cane; plant species
swtát	
mh ^w à ksotāta	pig
mh ^w à·ksutáta ?q ^w ārkpàya	jabalina, wild boar
k ^w àsòčáča	rainbow
qsôβa	mole (on skin)
sultá:βa	soldier, scout
sultá:wa	Spanish <u>soldado</u>
sòlsōli	clear, transparent
khàβsū(w)a	turquoise
sū·ča	father's older brother to Ego
sú·si	sprinkle, squirt
yùsupá:	eyelash
sùlsúli	clear
sòlsōli	
?tàt ^h sú·la	buckhorn
sū·līt?īča	insect species
sūri	spot, espy
tyá·č sūwa, cf. swá	ripening corn
See sīwa	
tspé	six
spé	lean object against wall

tspây-	six (in compounds)
?t ^h àkspēβa	Pln: reed up
màtspéqi	hoe: pounds ground
spó	know
spóβi	is apparent
spûki	pillow
hopáča spúk(k)	fourth time
spúki	cover with dirt (while planting)
čpúki	
spūmi	take apart (in order to do again)
stīti	plow v.
stī·ti	plow v.
stī:ti	cut v.
stúya	middle, center, half
sčī	sweep, comb, brush
waksčīβa	wall
q ^w asčēm(?)i	admire a lover (woman speaking)
sčá	put up
βalsčá	owe: stand in it
(m)sčáqi	split v.
sčá:βi	put on ground (rug)
ččá:βi	
sčō	pluck
sčyōqi	(s)mash, squash
pā·pa sčōqβa	mashed potatoes

sčûlβa	sticking in
ʔhā:hā·βk ksčûlβa ʔpá·ča	Date Creek Tolkpays: cotton- wood sticking in the water
skʷāta	breastbone
kəqʷārʔe kskʔīta	outside corner
kskē(·)βa	canvas
ʔòskāpi	match
skâri	glide
skâraḱʔāmča	Prn. Yavapai culture hero
skʔū:la hnāqča	beads
skʔû·la hnāqča	(singular)
skpʔōka	elbow
skmāka	striped skunk
tsklpú:yβi	we hug each other
sklpūyi	put arm around, hug
skrpūyi	
yàskāβi	bridle
yūri sk ^h âβi	button
wi·skčī·βi	precipice
βskʷi(·)	stand up
myūla kwàlskʷiskwī	candy cane
ʔwàskʷini	lock, doorknob
ʔkwè·skʷi·ni	key
skʷi(·)ni	turn off (appliance)
ʔčskʷīli	sew
ʔčskʷi·li	needle
skʷá·ni	shell, husk (corn), peel

sk ^w āla	large hawk
sk ^w ā·yi	light in weight (W.G.)
θk ^w āyi	
sk ^w āyi	mix, turn food in pan
sqī·ri	make furrows
(hi·wáy) sqāta	chest
skʷáta	breastbone
sqāmi	shoves quickly
sqāwa	egg
sqāwβi	lay eggs
sqmwí·ra	ankle
hàlsqrâ·pi	naked, cf. flat
sq ^w âr?i	stir
mnûnč sq ^w á:r(?)i	diarrhea
?wàsq ^w ír(β)q ^w írβa	corner
hàms?iβ	bulrushes
s?āmi	close (door)
?wàs?āmi	Sunday
yūri s?āmmi < s?āmpβi	button
t?āmi	cup the hands
s?ōni	trap, skewer
s?ónβi	about to fall
s?ōnča	flag
sβá1βó	joint
sβó	wait
msβōka	wait for me!

sβh ^w ēβa	cross
msβh ^w ē·βò	
?wàshēlβi	porch: extend
shá	hang
sháβi	weigh; hang down
sháβi	
sahāyi	hook
shūna	hundred
?òshûli	poker stick
shk ^v ēβa	cross
shkē·	lay something across bridge
shkē·βa	
shyálβi	not on tight → ramada, float
shyâra	table
shyārβa	
shyûki	dig
sih ^w ī:ni	turn (car, horse) something
	in motion
βčīqwusmī	gulp
smē·	lost, cannot find
smá:	
smá:	sleep
smāmi	stay overnight
tsmā:či	dream
tsmā·čči	(plural)
smá·	day (24 hours)
?i(·)smá(·)	medicine, cf. root

m(i) smá·	sinew, cf. root
ʔpà: smāča	medicine man
smálka	ear
smá·lka	(plural)
smá·lktū·	jimsonweed
smàlkaṭū	deaf
smá·lki	earring
ʔiwīl smā·lkβi	leaf out
čsmāyβa	cousin
smṑ·rβi	band for carrying cradle
smuḵwīna	gruel
smk ^w ī·rβi	jealous (male)
smlô·hi	snore
smlôhi	
ksnākβa	gap: saddle-like
ʔhat snà·yi	harness
snáβa	braid, rope
slī:	fry
slé	paper flower
slām	shawl
s(i)lôka	spinal column
slpú	armpit
slh ^w ó·	nail, claw, hoof (W.G.)
slhβó·	(G.M.)
slmáka	shoulder (blade)
syàpé·βi	soul: the one alive
ʔhàsyāmčò·	Hassayampa River

hàsyā·mβô	Hassayampa River
?hát syōmi	reins
syô·mi	pull
syûmi	
syômi	
swī	scrape (hair off deerskin)
myála swá	dough: not ready
sīwa	
sūwa	
swā	olla-shaped water basket
swâ·	waterpot
??i·swā	barrel
swáni	stir
swál-, swar-	
swála	always;
swáli	love, like
swálβi	hold on, hang on
swârβi	hang on by fingertips
yà·swārβi	suspended (fig.) + pleasant
swá·ri	sing

sál hand; arm

sálβč pīlkm	my hand is burnt
sàltakǎβi	ring
sàltatǎkǎβi	
sálβa ?tūkm	I burned my finger
sàlt?āmi	cup the hand
sàls?āmi	
?sála čī·li	my arm falls asleep
sàklkVō(yi)	hobble
sàkβtē: βàkpēβa	middle finger
sàkβtē·	thumb
sàlkotē· (SEY)	
sàlkθā·ri	left hand
sàlkθā:rì	left hand
sàlkθā·rō mčkpā·	get on the left side!
sàlqǎēβa	left hand
sàlk?hāni	right side
sàlkhána	
sàlkhānō	
sàlkhānō mčkpā·	get on the right side
sàlkmá:rβa	fingers, cf. toes
sàlqčqē·ča	fingers
sàlčkl?ólki	make a fist
sàlqčqē·ča	little finger
sàlkički·ča	
sàlqrwí:sò (SEY?)	wrist, forearm

sál (continued)

sàlʔčkná:mo

index finger: 'pointing'

sāla ʔčkná:mi

ʔsál1 ʔi·kòkm

I carry in my hand

sàlstú·yβa

sàlqê·ča βàkpé·βha

middle finger

ʔsálβč hwátβkm

my hand is bloody

sàslhwō·

fingernail

h

ḥipînβi	wins
ḥipē	near
ḥipá	
ḥipātm	this morning
ḥipātk	
βḥipâ:ʔim	evening: beginning to get dark
βḥipāʔim	
ḥipāč tū·βk yāki	midnight
ḥipā·m	at night
ḥipā:k sîβtū·yi	midnight
kîḥipā:čm	tonight
pû·kk ḥipā:tm	night before last
pû·km ḥipā:tm	night before last
ḥipāl	tongue
ḥimpāl	
ḥipúk	neck
ḥitát (G.M.)	spine, back
ḥi·thát (W.G.)	
q ^w āri hitāsa	bald
ḥičī·la	nit
ḥičā·raṇo	to the girls
ḥikē·	carry something heavy (olla with water) on back
ḥikhí	scrape, cut skin out
ḥik ^w íei	hold on

màthik ^w íra	whirlwind
hìḃāta	goat < <u>chiva</u> , <u>chivo</u> , <u>chivato</u> ?
hìḃó	go first
hìḃū·ri	drowsy
hìḃmú	new, young
hì(·)éú	cheek(s)
hiéú·li	slow
hìhá·ni	repair, fix
tú· hihūl ḃyák kyā:mḃha	environment
hihūli	time moves, passes
hì(·)má	dance
hìmpūla	forehead
hìmwā·la	calf (of leg)
hiṇōqa	green onion (wild)
hili·pli:pi	flutters
hì·wíl	thigh, hip, hindquarter
hiwáya	heart
hì·wáya	
hì·wá·ya	
hičhíč	stacked: on top of one another
	→ book (pages)
hīṇi	move (aside)
thíṇi	→ transplant, checkers move
	around
màthē:	white clay or dirt
màthē·	
màthé	wind n.

matháya	
βhē	tail; dress
βlhē	old man
pahlê	(W.G.)
βlhāya	(plural)
čkhē:βčò	store
ʔwàshēlβi	porch: extend
hé(·)li	flow
khērβa	too lazy to walk Prn
-hè	(locational suffix)
čâ·ʔhe	
čā·hè	top, roof
qaq ^w ârhe	outside
qoloyâwa sqāwa mâhe	Easter
kwâ·hm	
-ha/-h/-a	(irrealis; definitizer)
haʔā·ββi	jealous
ʔhá	water
nháya	liquid
ʔhà...θpú(·)yi	swim, bathe
ʔhá(·)	cottonwood
ʔhā·	spicy, hot, bitter
ʔhā:ki	
βhá·ʔìča	rattles (snake)
shá	hang
βhā	guts, entrails

hát	"domesticated" animal
?hát	horse
phā·ta	
hàtmāčā	tick n.
hàtamā·la	gophersnake, bull snake
(?)hát(?)k ^w īla	wolf, mountain lion
?alhāti	greedy
čwahāβa	miser
wà...hāβi	stingy
kháβa	follower
hàβ?čā	mano, grinding stone
hàβčǎ(·)	
hàβčú·li	blow with mouth
hàβsú·(w)i	blue, green
màthā·βi	north
?mthá·βk (W.G.)	
háθβi	scrape, shave
βhāhā?i	continues to
hāhā?i	whinnies
wi·hohā·hm	side of mountain
βhām?i	pant v.
há-	look
hā:ki	look this way
hāmi	look over there
hā:mi	look that way

mhǎ(·)mka!	hello!
hàmté	squash
hàmtəú·lta	gila monster
hàmčí(·)θki	sneeze
hàmkkī	killdeer
h̄i·tât hām?ūpa	hunchback
h̄itát hām?ōla	camel
hàmθī	sift
hāmmsî	
haməf(:)la	snot
hàməúlta	gila monster
hàms?īβ	bulrushes
hàm(m) sī·	star
hammsî	sift
hàməī	
(?)hāni	good, handsome, right, first, real, perfect
čháni	paint
sà·?hāni	honored
ihā·ni	tame
iháni	repair, fix
thànhā·ni	rub (an arm)
kəàr?hāna	coyote
hapa	frog ₂
hapkǒ	frog ₁
hapk(a) sāβa	centipede
hapkrá·pa (G.M.)	butterfly

haŋkpá·ra (W.G.)	
hàpmē(·)ra	watersnake
hàŋqtú·r	poppy
ha(ŋ)púk	coralillo (snake)
hal-	shine; smooth, naked, + reflection, etc.
hàlθú·yi	nine
yàhàl(?)mī	lip
hál ~ θál ~ pθál	there (locative)
hàikō	Anglo
hàykō	
β(ə)hā:wi	tender (body, corn)
hopá	four
hupá	
hokwá	make one's presence felt
hukwá	
kθár hokwāk	a coyote is near
kθár hokwā:čkm	
hoʔāli	draw out, take out
čmhó(·)pa	taraiso
wi·hohā·hm	side of mountain
hōmē·ča	sons
pθák ʔhátč howā·βk	habitat: where horses stay
hòlhól	flowing downward → waterfall
hòrhór	top; tent

hórβa	
huṛē	father-in-law
huθé	dew
hoθé	
humē	son
hučmāya	
humápe	like a child's
?omlhū	pipe
hū· (W.G.)	nose; head
hū: (G.M.)	
hūhū	hoots
βhūhū	
shúna	hundred
hùṛhúp	level ground → Thomson Valley
hihúli	time moves, passes
?òshúli	poker stick
?uhùl	longtailed mouse
(?)mhǔ(·)l	ashes
?hpí	metate, grinding stone → chin, jaw
hpínči	lose cf. hipíni
hpīṛβi	late
hpíṛčβi	
màtsapé·yi	shovel
?hpá·lka	ironwood tree
?pá·lka	
?p ^h álka	

hpú ₁	arc-shaped → pond, bow (stagnant)
wèhpú	buttock(s)
hpùq?úrka	pistol
hpú ₂	something to shoot with → gun, rifle
čnəhpǔka	black ant, small, brown ant
myā·khtī·la	heaven
?hàhtī:ri	shallow water
hté	prickly pear cactus
kə(h)tāta	porcupine
hčā·	Milky Way
hčā _n	girl, virgin
hčā:ra	
hčǎ·ra	
hčī·la/hičī·la	nit
skvēβa	cross
səhkʋāti	chop with ax
shkʋá·ti	ax
hké·	carry
shkē·	lay something across → bridge, ford
?k ^h ʋəsəkēβa	pick n.
saltəkǎβi	ring
təkāβ?i	encircle
hké	other, different
hkáya	

tβhkē·	change v.
tìβəhkē·βi	swap, exchange
tthəkā:yβi	
hqīsqi·s	rub back and forth → fiddle, violin
h?él	louse
sìlahβō·	nail, claw,
khβō·yi	feverish
màtkhθī:la	earth, wide-spread
mìhθā·ča	toe
mìčhθī:ča	(plural) W.G.
hmí	tall, energetic, ambitious
pà·hmí(ya)	man
nhmí·βi	marry (woman speaking)
?i·hmí(ya)	acorn
hmé	
hmaṇhmī	boy
hmaṇhmē	
hmíra	chipmunk
hmí:ra	
hmíлта	Harris ground squirrel
nhmírβi	kind, gentle
nhmérβi	
h(ɔ)mé·ča	sons
hmā:ra	boys
hmā·ra	

?ú·βčahmā·	chew tobacco
hmá	let's go!
hmá·	testicles
hmá·yi	male
hmāβa	male
hmá	testicles
hámá:	
wəhmā (SEY)	
?hmá	quail
?hmá:	gourd
?hmā·	
hmát	clay pot, water pot
hmáɲ	baby, child (not weaned)
hmā:ɲa	(plural)
β(h)má(·)mkʔi	swell up
?hmál	sack, bag → pocket
hmá·r < hmé	boy
thmū	bake (bread)
?uhmū	mortar
hmú·	move one's home
hmū·či	
čh ^w àhmú·ča	Navajo
hmúki	three
hmú·ki	
(h)mú:ka	Navajo, Hopi
hlà hnē·ya	Big Dipper: moon coat (?)

hnáq/hnak	necklace
wì·hnāki	
hná:qi	want, need
kβnāβi	tighten
yà·hnā:na	palate
?hná·l	gourd rattle
hnû	shovel, scoop out
hnú	offended
?čhnūβa	sickness, disease
?čhnōβa	
h.ná(·)qa	beaver
nhpó	shoe
hi.póqa	green onion (wild)
hpómi	exercise, constitutional
hpó·mi	
hlī	milk v.
wi·khlē·βa	cliff
hlá	moon
βalò·halō·hi	death rattle, cf. snore
hló	cottontail
sàβkhlúyβa	scooped out white: Pln
khlúwiβa	pulled out
hréβa	brim, cliff
hléβa	
hrōkβi	hooked
hrúyi	untie, doff
čúrka kayālβa	walnut spreading: Pln

shyálβa	not on tight, float → ramada
shyára	table
shyárβa	
wì·khyārβa	cantiles
shyûki	dig
??ì·ksīβa hwê·βa	cross, crucifix
hwáki	two
hwá·ki	
hwákβa	(elder) brother
hwá(:)l	ponderosa pine

ʔhá/ʔhǎ/ʔhá water

ʔhá:há·βk ksčú1βa ʔpá·ča	Date Creek Tolkapays: cotton- wood sticking in the water
ʔhàhòlhòlʔfča	waterfall: flowing downward
ʔhàpálqʔó	swallow water
ʔhàpà·wámmaʔpá:ča	Paipai people
kwê·βkpáya hàwámma	
ʔhârú·βkm	water recede
ʔhàθpí·rβi khé·la	current
ʔhàwáyí	stagnant water
ʔhàʔáma	flood comes and goes; passes through
hàʔá·mi	
ʔhá(·βč) ʔʔé	the water is deep
ʔhá ʔθí:	I drink water
ʔhàʔhána	good water
ʔhàʔhwáta	wine
ʔhàʔmála	beer
ʔhàʔtáya kyák	ocean: much water lying
ʔhá:βč ʔmáti	the water is dirty
ʔhǎ·βč máki βhwírβhwírβa	the water ripples
ʔhá·βč myá·yεkm	the water rises
ʔhá:βč sólsóli	the water is clear
ʔhá·βč yó:km	puddle
ʔhá·βl pí	drown

ʔhá (continued)

ʔhá·βl ró·pi	sink into the water
ʔhàčʔáalka	water coming out
ʔhàčá:βk yáki	float; swim (lie on top of the water)
ʔhàčá·βk yáki	
ʔhàčá·βk yáki	
ʔhàčáyi	water pot
ʔhàhéla ktkúpa	the river narrows
ʔhàhké·βa	opposite shore
ʔhàhpǔ	body of water, lake,
ʔhàhtí:ri	shallow water
ʔhàhʷáɪβa	well n.
ʔhàkʔáma	river
ʔhàkʔóí·	salty water
ʔhàkə (?) náča	Salt River
ʔhàkβté·	ocean
ʔhàkčá·čβa	water thrown on top
ʔhàkhàβsúəʔpá·	Havasupai people
həβsùʔpá: (ča)	
ʔhàkhàβsúwa	Fossil Creek
ʔhàkhʷáta	Colorado River
ʔhàkmáta	land of water (Pln)
ʔhàktyúw(i) βa	shore, water's edge
ʔhàkəkʷáyβa	Montezuma Well: water broken up

ʔhá (continued)

ʔhàkyá·čá	Pln: crk. near Miller Valley (bubbling water)
ʔhá·l βčónk kʔími	jump into the water
ʔhá·n qnú·km	the water is muddy
ʔhá·n tú·θwé·km	the water is placid
ʔhá:nč βkè hé·la ʔúmkm	stagnant: not flowing
ʔhá·nč hàlwárkm	the water reflects, cf. smooth
ʔhá·nč hàlwári	
ʔhá·nč mát wī·rkm	the water finishes ground (?)
ʔhànmθáβa	gray water
ʔhàqʷíni	still water; ditch
ʔhàʔqʷíni	
ʔhàsqí·ri	still water ditch
hàsyámčò·	Hassayampa River
hàsyá·mβó	
ʔhàtʔámβa	dam
ʔhá·tũ·βl mát yáwa	island
ʔhàθpáč	ice
ʔhàθpú·yi	bathe, swim; wash oneself
ʔhìθpúyi	
hàʔʔé ʔúmi	the water isn't deep
(?)hà mθí(·)	drink water!
hàné·ka	dip in water
hàséyi	gray; greasy
hàβsú(w) i	blue, green

ʔhá (continued)

hacá:	Milky Way
háčáyi	thermos bottle
háčtúhi	spit
(?)háčwá	sand, gravel
háčwá·nč hàyá·l yómkm	sand sinking to the bottom
(?)hà(k)hě(·)la	river, stream
hàhʷáɪβa	well n.
hàlčǝǝ·ma	Maricopa
hàkhi·la	river
hàkmwé·	hot springs
hàkwáwa	Chinese: speaking in water
hàmčfǝki	sneeze
hàmčí·θki	
hàmkkí	killdeer
hàmsʔíβ	bulrushes
hàɲméra	watersnake
hàpáqa	spring, source
hàqéčǝi khé·la	creek
hàqʷáθa khé:la	Pln: creek near Ironsprings
(?)hàráβa	whiskey
hàsqí·ra	ditch
hàtáya kyáka	seashore
há·yá·l mčí·	put (lay) it into water!
há·yá·l mčǝ	put (set) it into water!
hěβmpí	thirsty (SEY)

hw

hwí	smell v.t.
khwíwa	skunk
hwí?i	what? (interjection)
hwí·sβi	take care
hwí·si	swing in hand
síhwí:ni	turn something in motion (horse, car)
θhwíla	settle (coffee grounds)
hwíلمي	throw down (a log)
βhwírhwír ?ími	it ripples
hwírβi	unfold
kimahwírβi	loin cloth
sβhwēβa, msβhwē·βò	cross
hwá	fighting, war → enemy
pà·č?hwá	Apache
mhwá·	badger
mhwāta	bear
(?)hwát-	red; blood
hwá·li	look for, search
wá·li	
hwáli, hwári	dig, scoop... plant, hollow out
thwári	shave
pà·?lhwāyi	mean, nasty, cranky
hwā(·)yi	purify with smoke

hwa

ʔòhʷáya	smoke	hʷa
thʷõβi	popper (in cooking)	
thʷô·βi	yeast	
čhʷôβa	brick-shaped + cheese	
čwôβo		
sàlslhʷõ·	fangernail	
βhʷõ·βi	bristle, pop up, rise (bread); harden	

m

mí	foot; bits (in money)
mipūk	knee
mmpúk	
mísi	track, trail
nmī	mother's younger sister
mīra	(W.G.)
pmí	cat
hmí	tall, ambitious
βčiqwúsmī	gulp
yàhàl(?)mī	lip
mwê·mi	springtime
mwê·m?i	
?ē·mì	give (away from speaker)
mí:	cry
mí·čì	(plural)
?khwàmīwo	rock music: make instrument cry
?i·kmī·yi	ocotillo: sad plant
?i·kmye·	
wàmī·	scold
wà...míyi	mourn
wà...míyi	
kmyá·yβa	the moaner
nà?wá: nč ?wī:čβi	my enemy
pkmī:km	
nàč ?kmī·km	I brought it (completive)

mi

yá·pa βmītβi?i	kiss
mī·ka	father's brother's son
mī:βk?ē	after
mīnmī·na	hummingbird
hmíl-, hmir-	chipmunk, squirrel
pà·nītmīli	play a joke on some people
mīrmīri	straight
čmīrmīri	
mīra	mother's younger sister (W.G.)
nmī	(G.M.)
nhmīrβi	kind, gentle
nhmérβi	
mīyi	(bad) spirit, ghost; devil
myé	
màtčkmī·ya	valley
pmīya	hair
smá·	lose
?smē·	I cannot find it, I lost it.
yùklmē:	eyebrow
humē	son (man speaking)
hučmá·ya	(plural)
βmē·t θīqkm	overflow
mpèlmīlk?ì	lick one's chops or lips
?è·mēla	get even
mēra	slender (like a rope)
hàpme(·)ra	watersnake
nhmérβi	kind, gentle

nhmírβi	
kaβyúm (?) ē?	why?
kaŋyúmē?	when?
má	ripe, well-done
ʔamaŋā	ripened by the sun
mā·	eat
māč̣i	(plural)
mái-	(plural)
ʔúβč̣ahmā·	chew tobacco
má:č̣	you (singular subject)
má·	
máč̣β̣č̣i	you (plural subject)
màymá:	matron
mə(·)kʰāβa	Mohave
ʔmukʰāββa	
kwá·w hnū (km)	speak angrily
màkʔyō:ra	chief (folk etymology. Sp.
mayó:ra	<u>mayora</u>)
ḥi·má	dance
ʔhmá	quail
ʔhmá:	gourd (wild, larger)
əmə	lend
smá·	sleep
ṃsmā:	sinew, cf. root
hmāt	container
māt	earth

ʔmatāq	brittlebrush
mathē:	white clay or dirt
mathé	windy
màtháya	wind
màthá:ya	
má:t	flesh, body, skin
βmāč(β)i	wink
βmāčʔi	
βmāčmāčʔi	blink
mškʷink mtmāči	turn off (appliance)!
mák-	back, backward
nmáki	leave
māqi	douse
ʔì·θmāqa	kindling wood
nmâθ(a)	raccoon
nmāθ	
β(h)má(·)mkʔi	swell up
máni	move (fast) vertically: fall; get up
ʔomumāni	help me get up!
(ʔ)mā:li	foam
māla	
hàtamā·la	bullsnake
čmā·li	rake v.
čmá:li	rake n.
ʔhmál	sack, bag, pocket
(ʔ)mālka	wood rat

smálka	ear
màrmár	
čmàrmári	rub in circles
màrmāri	long (temporally)
mārmā·rʔiča	minute
nà·mārβi	sundown, dusk
tmári	cover; bury
sàlkmā:rβa	fingers, cf. toes
thpà·māya	Papago
pmāya	breast
(?)māya	milk n.
màymā:	matron
?wila ?māya	little piles of bushes
čsmāyβa	cousin
mā·ya	first cousins: children of two sisters
qmót-	
màtqmōtqī	mound-shaped
?mātč pθa qmōtkm	ground forms mounds
ttmō·tkm	itches v. (hair)
nùβyû·mò?	I am not certain
qmō:sa	mistletoe
mól ?è...yí·	sad; feel sorry for
mōra	father's mother
βmōrmōrʔi·	trot
mwāra mō·rk	dough
mō·ri	knead

muθě	moist, damp
muθā(:)yi	foggy
muθāya	steam
muθā	fog
see huθā	
?muk ^h aββa	Mojave
ma(·)k ^h āβa	
?mú	sheep; Pleiades
mú·?i	goes "moo"
hiβmú	new, young
?č ^(h) ūri hiβomūča kwā	January: where the new year is
hmú·	move
?uhmū	mortar
?h ^w a·?mú·ča	Navajo: connected with Apache
mū(·)ka	Navajo (confused with Hopi)
mú·ka	Hopi
(h)mū:ka	
hmúki	three
mūni	cold
mát mú·n?īme	autumn
múl	name
mól	
mú·ri	knead
mó·ri	
myála mū·rča	dough
mwára mū·ra	
mpèlmēlk?i	lick one's chops or lips

kθképa impésqk ?čná·lkm	I dropped the glass; it fell
?mpáča	brush
himpál	tongue
hi·pál	
mpára	leg; wheel
?mpōqa	mushroom
mmpûk	knee
mipûk	
mpû·kl?ūt	tarantula
mpú(·)rβi	dome-shaped: wickiup
impú:la	forehead
hit ^h ātk kmpū:lβa	camel: humpback
smpū·rβi	band for carrying cradle
hàmtē	squash, pumpkin
?matāq	brittlebrush
?mthÁ(·)βk (W.G.)	north
?mtáβk	
?čkmtū	watermelon
mtq ^w ī·sa	plant species
hàmtθú·lta	gila monster
hàmčī(·)θki	sneeze
?mčáq	termite
?omčáq	
mčáqi	choke on food
mčá·yi	hungry
mikvúl	trousers
mkvúl	

mk ^v ú·li	steps into
mkyú·li	
hàmkkī	killdeer
smuk ^w ín(β)a	gruel, gravy
mk ^w írβi	rolled up: cigarette
smk ^w ī·rβi	jealous (male)
m ^q wîθ	flying squirrel
m ^q wāni	pound
tm ^q wá:ni	pulverize
tm ^q wáni	break
wi·km [?] érβa	ridge
m [?] ūl	antelope
?imθí(·)	greasewood
hàmθī	soft
hàmθí:la	nasal mucus
k ^w è·mθā:rβ?iča	net
nū·r(m) mθā:yβ?iča	newspaper
msī	woman
msíya	maiden
čmsī	(elder) sister (man speaking)
hāmsí	sift
ham(m) sī·	star
msīwi	smell like cold blood, grease, or wet hair
msē·	fear
mšē·	
msé:βi	dangerous, fearsome

mšê:βi	fearsome
?msē·(km)	
?mšē·yi	
msáyi	they are afraid
tmsá·βi	whiten
mikmsá·rβa	toes
(?)khwàmsârβa	fork
hàms?iβ	bulrushes
??i·msmā·	root, cf. sinew, sleep
msmá:	root, sinew, cf. medicine
(?)mhú(·)l	ashes
?mhlù·?ù·βa tkwârçi	they smoke a pipe
mhwā:	badger
mhwā(·)ta	bear
mhwā ksotāta	pig
mnāt	yucca
mnú(·)na	stomach, belly
βnúna	(W.G.)
mṛē	fine, perfect; tasty
mṛāya	
(β)mṛe·	semen
mṛāya	
βmṛê·(yi)	gun going off
kʷè·čmṛāya	chewing gum
?khwàčβṛáyi	scissors (W.G.)
?khwàčmṛáyi	(G.M.)
mlpū·	navel

(?)mltát	barrel cactus; prickly poppy
mlqī	neck
smló(·)hi	snore
mlūθa	measles; chickenpox
(?ò)mlhū	pipe
?mhlù·	
mrí·ka	bean
myē(·)	ghost, (bad) spirit
wàmyē·	mourn, be sorrowful, cf. moan
	myá·yi
myēla	bread
see myála	
myá·	high
myá·l	upstream
myá:yi	rises, is high up
myála	bread
kmyá·la	baker
màtčmyāla	adobe
čmmyāλpa	packed into shape
myár	penis
myáya	scar
myā·yβi	moan
myā·wʔi	mews, meows
myû(·)la	sugar
myú:li	sweet
tmyū·li	
qmwī·rma	old woman

sqmwira	ankle
mwé	warm
mwé·m(?)i	springtime
tmwê	heal
numwê	harvest
himwā·la	calf (of leg)
mwára	flour

mât

earth, land, ground, dirt, clay

?mât ?hàtú·βl yá·wa	island
?mātč nθá qmōtkm	ground
mātč βqāqβ?im	gulch
mātč β?In?In?i	earthquake
mātč β?ū·βkm	break of dawn
mátč β?ū·β?i	twilight: ground becomes visible
mātč β?ú·βi	
māt čmā·li	rake v.
māt hnū	shovel v.
?māt ?hnū	I shovel
mātβa yà·mpá:βk	you're responsible for the earth
màtktβākβa	narrow, level land by mountain
màtktnā·kβal wáyō·km	they're living in that part
mātk čká:ma	world, earth; country, wide area
matk čkā·mi	area
màtkčkmī·ya	valley
màtkqwā·rm?e	desert
màtk?āmβaha	Verde Valley
màtkhōrahōra	hill, mountain (not rocky)
màtkhōī:la	earth
màtkpwe· (W.G.)	spider
màtqaqwāra	prairie

mât (continued)

màtpīló	lava
mât(s)pēqi	hoe: pounds ground
màtsapê·yi	shovel v.
màtsapēyi	shovel n.
màtpūkmàk	foot of mountain, bottom
màttwáya	distant land
màtčâ:βk myā· yu	on earth as it is in heaven
?màtččβlī·ča	surveyor
matčmyāla	adobe
matkī(·)la	wide earth
matqī·s	plant species (root used as medicine)
màtqmōtqí	mound
màtq ^w āra ?sīti	one mile
màtq ^w āra	desert
màt?ī·la	bank; cliff
màt?h ^w āta	red dirt
màtβó	scout, spy
màtθīwa	olla, clay jug
màtθīwa θkvāyβi	pottery is broken
màtθāpa nŭ:k?i?i	dust
màtθāpa	chief SEY
màtsāpa	
màtθβlī·ya	hole
màtθβlī·l mānkm	fall into a hole

mât (continued)

čpáyč mâtθβlīya yûri	hibernate
ʔač ^h ū:rm	
čpáyč mâtθβlīya yûrm	
ʔač ^h ū:rm	
mâtstī·ti	plow n.
mâtstī·tk	furrow n.
mâtstī:ti	plow v.
mâtstī:tča	plowed land
mâtshyûki	shovel n.
mâthik ^w īra	whirlwind
mâthō·rβa	top, hill
mâthōrhōra	
mâthā·βi	north (G.M., G.N.)
mâtmūnʔi	autumn
mâtmû·nʔīme	
mâtmq ^w āna	dust, cf. pound
mâtrū·stīti	plow v.
mâtrū·qēča	patch (in a garden)
mâtrū·kwī·ya	farmer
mâtrū·	garden, field
mâtrū:	farm, garden
mâtrū·	
mâtyū·si	autumn
mâtyū:si	

màthāya wind

màthē	windy
màthā·y nû:lkʔiʔi	dust
màtθāβa nû:lkʔiʔi	
màthāy yū·si	wind is breezy
màthāya pé·mi ʔhāni	weather is nice, no wind (breeze)
màthā·yč qʷini	wind is still
màthāyč βʔû:k	wind goes X
màthā·yč θipīrβi	storm: wind is strong
màthā·yč yâ:wi	wind is howling, whistling
màthāym ʔkwâ:wi	radio (talking)
màthāym swā·ri	radio (singing)

myál bread

myála píla	crust
myàltaʔkʷā·θβa	toast
myá·la thmū	take bread
myál twpū·βi	preserve bread for future use
myàlčrâprâ·pa	tortilla
myàlqʔōra	biscuit
myàlsiló	broiler
myàlaswá	dough: not ready
myàlamyúla	cake
myálamū·rča	dough

n

nī·nī·	exclamation of fear (woman speaking)
nīkwáyi	old
nilē:mi	gentle (of animals, people)
ní(·)ya	great-grandparent
kpī·ya	mother-in-law
knī:ča	(plural)
kpī:ča	(plural)
ktnī·βa	quiet, graceful
nī·sa	spider
nī:s?sa (G.M.)	
nī·mi	take apart
knī·li	stirrups
nē·	scoop up
hànē·ka	dip in water
nāya	sap
nēhi	kill
nēhβi	commit suicide
(hlà)hnē·ya	Big Dipper: moon coat (?)
cf. nē·	
(?)ná	ouch
na??wī	
noám ?nálkp yàpé·yi	I became alive
smá na??wī	
sná+	tie v.

na

ʔhat snà·yi	harness
snāβi	braid
kβhnāβi	tighten
snāβa kβhnāβk nāli	knee and inner thigh are taut
mnāt	yucca
ktná·kβa	small level land
ksnākβa	gap: saddle-like
βqanā·	whine
skʔú:la hnáqča	beads
hnákča	
wī· ʔhná:qi	I want money
nāsi	think (?)
βnāmi	sew
βná:mʔī	caved in (mining shaft)
βnā·mβi	
yà·hnā:na	palate
nāli	fall; get down, descend; be born
ná·lki	comes down
nà·βná·li	afternoon
ʔčnā·lkm	I dropped (it)
čnāli	lose
(?)ná·la	mesquite tree
ʔhná:l(a)	gourd rattle (too bitter to eat)
kβnāwi	carry heavy objects in arms cf. nó(-)

nβlwīθm ?nō?nīra	that's all for now
nó(·)	heavy
nō·	mother's younger sister
nō·ča	(plural)
nōhβi	gamble
nō·hβi	a game
hnú/hnó	scoop
nú(·)	modal: be going to, about to, be doing
yak ?wāha βnū·km	I'm going to sit here
nú·t(a)	mother's brother's daughter (man speaking)
?lwē·nùm	rape
mnúna	belly, stomach
βnúna	(W.G.)
nkwáyí	old, worn out
nkwáyí	
nqʷá	crane
nhmírβi	kind
nhmérβi	
nmāki	leave
cf. mák-	
nmáθ(a)	raccoon
nwīrči	cook v. plural
nwī·ri	cook v. singular
(?)nwá(·)ha	friend

n

nī·	
qmwi·rma nī·	wife's mother
βehē nī·	wife's father
knī·ya	mother-in-law
knī:ča	(plural)
knī:ča	(plural)
nī·ni	copulate
nī:nβi	(medio-passive)
čnī:βi	(plural subject)
né	hunt
?čnē	hunt for something
?čknē	hunter
kθár ?čnē·ča	hound
?č?nē	I hunt
unē	father-in-law
nkuné·ya	husband's father
na?né	my daughter-in-law
mnē	fine, perfect; tasty
mnāya	
(β)mné·	semen
mnáya	
βmné·(yi)	discharge like a gun
?iwila čā·ne shyālβkm	leaves floating on water

?nǎ-	I, me, my, mine: first person pronoun, we, us, our, ours
nǎ?wī·(yi)	mine; I own
?nǎčǐ	I, subj.
nǎčβč	we, subj.
(?)nǎč ?apē·mi	we (two) go away
nǎ?nmât	my/our land
yū·ha pǎ·mōl?ičk nǎčk kʷè·čā·mčǐ	as we feel sorry for those who make mistakes with us
?nǎ	road, path
?nǎ·shkē·βa	bridge
?nǎ:	sun
?nǎ·	
(?)nǎ:βm	today
(?)nǎ:hm	yesterday
?nǎ:	black
?nǎ·	
?nǎča	black (in compounds)
tǎ·rβa ?nǎ:klāpa	Bible: flat, black book
yǎsupǎ:	eyelash
hǎnǎ	frog ₂
pǎ·kwǎ·wo ??ē·βna ??ík ?βǎ:km	I came to hear the minister
?àmanǎ	ripened by the sun
wǎ...nǎ	forget
hpùčnǎ(·)kβa	bow
h.nǎqa	beaver

nāβa	yucca
nā(·)βa	
?nāβa tāβsa	yucca fruit
nāθki	be silent
mpāθki	shut up!
kpāna	slight rise in land
βnāpi	sit down.
nā·l wīnβi	wear socks
nālqi	swallow
?βò·n čnā·lqa	soap swallower
?khwà čβnāyi	scissors (W.G.)
?khwà čmpāyi	(G.M.)
?nō·ča	said by younger children to older ones (SEY)
?nō·	(singular)
nō	quiet! wait!
tū·?nō	
nhnō	shoe
pā·hmī·no ??é·	I give to the man
hīnōqa	green onion (wild)
hnómi	exercise
θá·wβa tū·?nōm	one million
tū·nōma?nōma	countless
numwē	harvest
nmwē	
nūč	that subj.
nnú-	that one

nū·	
(màt)nū·	till, cultivate
màtnū:(w)	farm, garden
stūym čnŭlkβi	middle is hollow
màthā·y nŭ:lkʔiʔi	dust
màtθāβa nŭ:lkʔiʔi	
nŭ(·)ri	spotted
tnŭ(·)ri	write
(?)wànpŭnβa	wickiup
nkmī:	cries to be brought along
nkwāyi (W.G.)	old, worn out
nkwāyi (G.M.)	
hàntŭ·ra	California yellow poppy; (Prn)
hànpqtŭra	
hàntŭ·r	gold poppy
nʔó	sweat
sknʔōka	elbow
nβéʔ	there
nβá-	this
nβáʔ knā·βi	
nβúk	there
nθēʔ (G.M.)	over there
nθáʔ	that (disjunctive)
nθâč	he, she, that one (subj.)
nθâčβč	they, those
nháya	liquid
yáki nhʔēl	bedbug

nhmí(·)βi	marries a man
nhpō	shoe
nhpú	
nmí	cat
nmīta	mountain lion
γà(·β)nmī	beard
nmíya	fur, hair, hide, skin; bark
hànmēra	watersnake, cf. mér- slender
nmāt	homeland
nmāti	settle
nmáya	breast
q ^w àkta _n nmáya	cow's milk, butter
(n)msáβi	white
wì·nmsāβa	silver
nmθáβi	grey
nmθā·βki	dawn
nlē·mi	tame
nyē·k kθō	(to-)morrow
yē·kòw	(W.G.)
nyál βqót?ə?īmi	fall down there
snāβa nyá·ki	rope v.
tu·nyú·č(o)k	be; use
nyū·ča	little (horse, person + pony, midget)
nwē?	the one over there
màtknwē· (W.G.)	spider
nwá·	home

nwé(·)βi

live, dwell

nw

nwā·yi

live, dwell

nw

ná· sun

?ná:βm píli	one is burnt by the sun
ná·č pā	sunlight
ná·č pá:	sun is shining
(?)ná(·)č pá(·)	
nà·tkǎβka	hour
nà·tkǎβka ?sī·tm	one hour
... ?sī(·)ti	
nà·tkāβka wílβk ?sī·ti	one second
ná:βm ?č?θí: qyáto	I drank too much today
nà·č?ālò·	east: sun comes out
?ná·č?āli	sun up
nà:β?ālkì	sun rising
nā·(č)β?á:li	sun rises slowly
nà·tkwī·lβi	late
nà·tkwílβi	
nà:βtÁθtÁθ?īča	watch, clock: sun ticking
nà:βkāθ?i	noon
nà·βkāθi	noon, cf. strike, hits the bull's eye
nà·βkāθ?è	noon
nà·βkāθk ?háni	good afternoon!
nà·βmárβi	sundown, dusk
nà·márβi	
nà·βná·li	afternoon
nà·βlwī·βm kwè·māčó	eat lunch

ná· (continued)

nā:kaβlwīyi	what time is it?
nà·βyū·si	two to four in the afternoon
nà·?sīti	one o'clock
nā·βm myāla pà·m?ē	give us bread today
nā:βm mūni	it's cold today
?nā·rōpi	sundown
nà·rōpò	west
nà·rō·pò	
nā:βč ?rū·yi	sun is hot
(?)nà·(?)rū·yi	summer
?nā: ?rūyi	
?nā·βm ?rū·yi	
na: ?rú·yi	
nā:βm ?rū·yi	it's hot today
nā:wâ	day: sun sits

nū- deictic

nū mwī	do it!
numwī ??I	I ask you to do it
numwī ?í	he asks you to do it
nūmwī mwī:?	do you think you can do it?
nùβmwí + nūmwí	
nūč tū·nmm(?)nōk shāβkm	he weighs a lot
nuč tkēkm	he adds
nūč ?àryékm	one is happy
nūč βkē smlōha ?ūmkm	he doesn't snore
nūč h ^w álè?	is he digging?
nūč nhmírβkm	one is kind
nūč nō(·)	it's heavy
nru ?θirī·km	I suspect; I'm not certain
nruč ?čkvátk βpī·km	he's tired from chopping wood
nruč βpī(·)km	he's tired
nruč βrītkm	he jumps
nùβa?ī	says (it)
nūβ ?īčkm	they said
nùβlwī	same, cf. right
nùβlwíθi	that's all
nùβyū	it's that way
nùβyú·	it was that way
nùβyūča	just that kind (?)
nùβyú·mo?	I'm not certain
nū:kk ?nâ:hm	day before yesterday

nū- (continued)

nū:k m ?nā:hm	
nū·kkhipā:tm	night before last
nū·kmhipā:tm	
nūk mshā	hang it!
nūk yū	there is
nūl (n)βê?	over there

nθā deictic

nθā mātl mčā·yβkm	there's hunger in that land
nθā yfmk yā·mk	he's going toward it
nθā? ??ŭ·k?yùŋ	I saw him (W.G.)
nθāč čβlwī·	one measures
nθāč (pà·)?ě·nī(yi)	she loves us
nθáč pà·θipī·rβč yùm	he is strong (W.G.)
nθáčβč pà·θipī:rβč yùčm	they are strong (W.G.)
nθáč yūm	it is he
nθáčβč háβsū·?pā:βč yùčm	They are Havasupais
nθák ?hátč hōwā·βk	habitat: there where the horses stay
nθák/yák ?wá ?nū:	I'm going to sit here
nθám[hám] ?nálkŋ	I was born there
yàpé·yi smā na??wī	I became alive
nθál kúri kyūwaha	it was coming way back

1

slí:	fry
hlí	milk v.
hwà:lrāpa ččβlīyi < lwí	ruler, straightedge
əβlí	hole
əβlú·yi	
əβrī	pierce
əβriya	small opening
wá·lč βlìplíp?i	wing flutters
wál hlī·plī:pi	
lí·pi	soupy (thick liquid with something in it)
lī:pk	soupy
sú·lít?íča	insect species
?òtqwāti kəβlí·n	oven
βlīwlīw?i	quiver
hàmθíl yùwo tliwliwi	I'm going to cry
riwríw	wag
slé	paper flower
lē·kò	stick out tongue
lêqi	squash v.
klmā: lē·qβi	my rear end is sore
cf. klmē:	
lē·qβa	sore n.
wi·khlē·βa	cliff
plē:mi	tame, gentle

ʔláʔ	ugh! keep away! (interjection)
ʔlá	bad
ʔlá:yi	bad (plural subject)
tū· ʔlá:yč̣i	
tū· pà·lá·yi	ugly person
βč̣lá:ik, βč̣lá·č̣lá·ʔik	lightning sound
βqlā·qlā·ʔi	scream for help
hlá	moon
hi·wá·ya ʔlāyi	angry
wáya... (?)lá·yi	angry
láp	flat cf. butterfly
wí:βč̣ ʔlápikm	a rock hit him
hū·pā·ka lā·ka	elephant
(?)láβa	prickly pear fruit
βláhʔī	tired
βláhʔi	
slám	shawl
lá(·)wi	many
hló	cottontail
βhlò·həlō·hi	death rattle, cf. snore
sílōka	spinal column
smló(·)hi	snore
(m)lōhi	bake (a cake)
ló(·)qi	remove; pluck; undo
ʔiwīl lū·βi	weed out
mlúəa	measles
lūllūlʔi	bubble → fife, flute

βlpá·tʔi	blister
mlpū·	navel
mltāt	barrel cactus; prickly poppy
mlqī	neck
βlhē	old man
βlhāya	(plural)
ʔalhāti	greedy
ʔòmlhū kʔīrʔīra	pipe stem
čàlhū	burp
pà·ʔlhʷāyi	mean, nasty, cranky
klmā:(ča)	anus; buttocks
yùklmē:	eyebrow
ʔlwǐ	snake
lwí	correct
ʔlwé	marry (man speaking)
lwáyi	(plural)
ʔlwé·βi	married (man speaking)
tlwa·yβa ʔnū·	we're getting married
lwá	wife
ʔlwē·nùm	rape
mwē·mm βčlwā·qki	comes out in the spring

r

?rìyi	important, cf. holy, sacred
rī·pà	almost
θrī	1. doubt, hesitate
	2. think
ppú ?θirī·km	I suspect, I'm not certain
βrī·tʔi	jump, spring up
βrīti	
mri·ka	bean
yù·rìβrīβ	freckles
yù·rìθrīθ	
θβrīrβi	squint
βθrīyʔi	surprised; jump in surprise
sà·ʔrrí(yi)	holy, sacred; perfect
sàʔrīyi	
rē·	play
rā·yi	(plural)
ré·βi	play(ing)
ʔkwèrāya	toy
kwè·rē	toy
ʔčrē·	doll
yà·krē·βa	lip
hréβa	brim; cliff
ʔrā·	it hurt! ouch! (interjection)
θrāpi	five
ràpráp	flat

ra

halsqrâ·pi	naked
hàṅkrâ·pa	butterfly
hàṅkpâ·ra	(W.G.)
hàlkrâ:pa	blue-green seashell
ràḃráḃ	pointed
râḃi	it hurts v.i.
ʔčráḃi	sick
ḃràḃráḃʔi	sparks from lightning
wráḃi	(W.G.)
(m)ḃrá·rʔi	get up! (after falling)
pâ·(?)ráwa	fast person running
ró·pi	go down, set
ṅāč pá·čkrôtkm	I am short
hrōkḃi	hooked
(?)rú(y)i	hot
trúḃi	dry v.t.
rúḃi	dry
tʔrúyi	make hot
yâ(·)krû(·)mpí	thirsty
ṅâ·krūyrūya	small trail, path
hrú(·)yi	untie
mwīḃi mhrūyi	take off your clothes!
ḃḃrúyò, ḃḃrūyu	pierce (ears)
ʔryé, ʔríyi	important
khwàkrwísa	hammer
sàlqrwí:sò	wrist, forearm

y

yí·	want, want to
ʔè·...yí	love
mòlʔè·...yí·	sad
-k wàl...yí·	want
kʷàl...yí·	
yím-	he's going toward it
nə́á yīm̩k yá·mk	
yīrki	hatch
βōyì	tire, wheel, cf. walk
βkē wīyì ʔaʔúmaha	I'll never do it again
...yé	(singular)
...yáyì	(plural)
ʔàr...yé	happy, glad, thankful
tyé·mi	desert v.
kəyē:	doctor
kəyē·	
kəf:yì	
myé	spirit
mfiyì	
gryē:	clear (water)
ʔyéʔ ɕkwá:mah nū· (G.N.)	she puts it away
má:t hiθkyētk	whole body
yé·k	dawn v.
yē·tk kwè·māčò·	eat in the morning
yē·βm	oneself

myēla	bread
myála	
?riyē	important, cf. holy, sacred
hlâh twāye wâkm	the moon is far away
hwà:lrāpa ččβlīyi, -e	ruler, straightedge
sahāyi	hook
?khwàwāyi	metal chair
?khwâyūyi	eyeglasses
?khwàsli(·)yi	drying pan
wāyi	seat
mnûna wāyi	visceral sack
yá	mouth
yá:βa	face
?yá·	mesquite beans
βyá	this
?ò(·)yǎ	cave
?ùyá	
tū· yà??im	I'm just saying that
?hàkyā·ča	bubbling water (Pln)
kyā·ya	gray hair
hwâyā·	strike out
yà...pé·	alive, be born
syàpé·βi	soul
yà...pá·(β)i	responsible
yà·pà·?úm̄k čkwá·rkm	laughs in disbelief
hū·θila myà?pā·βkm	"not by the hair of my chinny- chin-chin!"

yâpki (Verde Valley, G.M.)	jump
wyāti	hurt, harm v.
qyāti	really, very much
yáč	seed
yâ·či	harvest v.
tyá·č	corn
yák/pθák ?wā ?nū:	I'm going to sit here
yâki	lie, recline
kya(·)ki	lies down
?i·yâki	bed
yâki	bed
yākyi	bed
yâ·ki	bed
yá:k	in front
snāβa nyâ·ki	rope v.
yâ·ke	Yaqui
yà...?é·βi	understand
yàβpé	Yavapai
yàβ?pé	
yàβ(?)páya	
?yá·s	turkey
yà·swárβi	suspended like a spider, + pleasant
yá(·)mi	go
βyámi	run
kwè·čβyámi	automobile

ʔhàsyaṃčò·	Hassayampa River: 'the water
ʔhàsya·mβò	disappears'
čyā·mi	1. send away
	2. err
wàyaṃa	village
yànyán	very round → butte, mesa
yá·l	into, under
yàlyál ₁	rectangular
yál	cylindrical, rectangular
yàlyál ₂	big, flat top
yàlʔyál	
yál, yár	
myál	loaf of bread
myár	penis
ʔwàshyálβa	ramada
ʔū:βa čmmyālβa	cigar
βyāl	mescal
yà·l ʔβū·ra	donkey
yàryár	spreading
ʔwīla kyàryāra	bunch of bushes
yàryāra	blanket
wi·khyārβa	cantiles (large boulders near Santa Catarina)
ʔʔi·shyārβa	table
βyá·ri	fly v.
myā:yi	high
kmyā·yβa	the moaner

yáwi ₁	be located, cf. yó:
yá·wi	
yá:wi	
hàyáwa	island
?mát ?hátú·βl yá·wa	island
?wá ?wyá:wò	yard: around the house
čh ^w ā·βč h ^w àyā·wi	enemy striker
qoloyáwa	chicken < <u>gallina</u> ?
yáwi ₂	noise, echo
yá:wi	
qwáwa pà·kčī·r(i) kyūči	barber
qwáwa pà·kčī·r(i) kyōči	
qwáwa pà·kčī·r(i) k?ōči	
qwáwa pà·kčī·r(i) č?ōči	
?ú:βa ?hmāli yō·ča	roll-your-own's
?čh ^w áyk kyō·(či)	peace: no more fighting
?hát n ^h ōyo	shoe a horse
yó:	be located
yá:wi	(plural)
čyó·	set, put down
čwó·, čó·	
?yo:	willow
yó·βi	make
yó·	tooth
yō·βa ?ūmi	not sharp, dull
yó:βi	the blade
yō·či	catch, take

ʔō·č̣i	
yó:	grab
yó(:) ₁	be located
yó ₂	make
yó ₃	take
yó ₄	tooth
ʔyó·	willow
wàyô·βi	noisy + ya·wi ₂
yóqi	vomit
sčyōqi	smash, mash, squash
ʔhat syōmi	reins
syô·mi	pull
syûmi	
syômi	
syūmi	
màkʔyō:ra	chief
mayó·ra	< Spanish <u>mayor</u>
tyú(·)ča	relative
yú	be
yúb ~ nùβyú·	that is so
yú(·)	eye, face
yú(·)βa	
yò < yū	eye
ʔh ^w âyòqāya	Tonto: dirty-eyed enemy
tyúpi	face v.
ʔyú·	owl
čyúti	rub straight

ččyú·ti	
hàtnyū·ča	pony: little horse
yùkyúk	
kʔù·yûkyúka	oblong basket
shyúki	dig
ʔčkyúka	ancient
ʔčkyū·kta	legend
yú·si	cool, comfortable
yùsyús	
tyùsyúsβi	fan v.
ní·mk yúl wími	takes apart and throws away
nhpòkyú·la	sandals
myú(·)l-	sweet; sugar
mkyúl	trousers
mkvúl	
yū·l	rope made of cowhide
βyú·li	mix v.
thʷβi tmyū·li	soda
yûri	go in
yûri	shirt
myû·rki	enter!
qyûrqi	small ditch, furrow
yûwi	come
čyú·wi	send toward speaker
čyúwmi	drive
yūwò	track

w

wí	do, make
wíwo	show, teach
myúwk mwī·wo	come and show
?wíwò	
?wíwo	
wíw-	
?wík ?wíwkm	I couldn't help doing it
?i·kēθwi	we got here
wíβó(?)	they drove the people away
pà·wíβó	
?wí·	rock, mountain; money
wí:	
pú mwī mwī:?	do you think you can do it?
-wí	
pəám [hám] ?nÁlkn	I was born
yàpé·yi smá na??wī	
swī	scrape (hair off deer hide)
nwī·	father's older brother
βlwí	correct, right, proper

βlwī	
?lwí	snake
wīta	1. father's older brother 2. father's or mother's younger brother
wī·ta	(plural)
sàkwīta	pigeon
kwí	dove
wíβi	clothes
wí·βi	wear clothes
wīsa	mother's older sister
wī·sa	(plural)
sàlqrwí:sò (SEY)	wrist, forearm
khwàkrwīsa	hammer
wīmi	throws away
twí·mi	rest v.
ṅá·l wīṅβi	wear socks
ṅhṅō yá:l wīṅβi	sock
wilwí·li	shake to make something sit properly
?wīla	bush, tree, grass
?iwīla	
?čsá kwīla	mockingbird

hi·wíl	thigh, hip, hindquarters
wílβi	quick; early
čmwílβi	determined
wirwír	flutter
wí·ri	finish, use up, spend
wíri	dried out muscles
?čknwí·ra	cook n.
sqmwí·ra	ankle
qmwi·rma	old woman
ča?wíri	insist
wí·yi	own, have
wí:yi	
wí/wíy-/wí·	
nà?wí·(yi)	mine
pà·hmī ?wí	I have a husband
pà·wīya	lesser chief
kwí:ya	owner
?wé·	mouse
wé	vagina
wèhipūk	collarbone area
wèhpū	buttocks
wē	take care of
βwē	on guard
pwē	care for
mwé	warm
màtkpwē·	spider (W.G.)
qʌēpi βmá:kwé·?i	smells bad

?wá	house
nwá	abode
wā	sit
?i·wáyí	wooden chair
i·wāya	heart, chest
??i·swā	barrel
swā, swá	basket, pot
?mā ?yô	many sitting
kwā·hm	season, time
hàčwá	sand
čwá(·)yβi	swing
čwáyí	
nwā·ha	friend
nà?wá:nč ?wī:čβi	my enemy (G.N.)
myála swá	dough: not ready
kwá·	cicada
hū·wā	cricket-like insect
?wá	okay
wà?ámči	visit
wàkəβāri	love, like
wàθēqma	swayback
wàsēqma	whipper (Prn m.)
wà·... sī·βi	think cf. count, read
wàsí:βi	
wàsīβi	wild, untamed
wà·sī·βa ?ūmi	crazy
wà·sī·pé·mi	drunk

wà...haβi	stingy
čwàhāβa	
wà...mī·	scold
(?)wāmīyi	mourn, cf. cry
wāmīyēk ?čmā· ?ūmi	mourn by fasting
wà... ná(·)	forget
?wà·lāpa	plant species
wàyô·βi	noisy
?wā?yô	many sitting
tyê·βk wàyôyi	neighbor
-wa	
kʷè·kàβyūča kàβmīwa	whatever you say
wāka, wá·ka	elder sibling
nà?čwā:kβa pà·m?ē·βi	ask my brothers!
hwāki	two
čwá·qi	scatter
mwē·mm βčlwā·wki	comes out in the spring
hōwā·βi	stay, inhabit
βwá:βi	ten
čmwá·θa	spleen
nwá(·)ha	friend
wá·mi	bring, deliver
?hà pà·wāmma ?pā:ča	Paipai
tú· čā:βm ?wā·ma ?nūkm	I'll skip over parts of it.
yá:βa twāmi	cover mouth, smother
yá·βa twāmi	carry on head
swáni	stir

wāna	mother's older brother
wā·na	(plural)
θwā·nki	limp (because of short leg)
wála	feather, wing
-k wàl... yí·/kʷàl... yí	
kʷè·θōkwāl yī·km	one wants to eat
βwáli	carry (a bucket)
nì·stkwālka	scorpion: 'out of shape'
swāli	always; hold on; love
náč ?swālkm	I love/like
hwá·l	pine
wá·li	look for, look up
hʷá·li	
himwá·la	calf of leg
βwári	cannot
kwā·w ?wāri	stutter (cannot speak)
wári	again
mβōkk mwārka	come back!
mwára	flour
hālwári	smooth
yà·swárβi	pleasant, be suspended
swá·ri	sing
kəwárβi	perforate (ears)
màttwáya	distant land
nìkwáyk ?hʷāti	it's rusty
nwě·βi	live, dwell
nwā·yi	

wàypé·mβi	
wàypémβkm	beautiful, wonderful
wàya?lá·yi	one is angry
wàyō·km	they are living there
čwō·	set, put down
čyō·, čó·	
qwàqta nma·ya čwōβa	cheese
βqwō·?i	growl
βqβō(·)?i	
wōwō?i	barks
wōqwōq?i	growls
tú· wōqwō·q?ikm	growl
wíwò	show
?íwò	teach by saying
lúllú! ?iča ??i·wok	I play the fife
βčiqwusmī	gulp
yà·lwúra	donkey < <u>burro</u>
yà·lβúra	
myál twpū·βi	preserve bread
wráβi	lightning sound
wyāti	hurt, harm v.

?wī· rock; mountain

?wī·pāya ?wī·ri	I used up all my money
wī·pūka	foot of the mountain
wī·pūkəh	foot of mountain
(?)wī·pūk?pā:(ča)	Northeastern Yavapai people
?wī·pūk?pā·kwawča	Northeastern Yavapai language
wī·tāya	mountain
wī·tāyakwāha ?č?āli	I climb the mountain
wī·kt?ōrβa	summit
wī·kčāsa	Four Peaks: smooth cliffs
wī·čālcā·l?e	ridge, boulder
wī·čālcā·lle	
wī·čpū·čó	bank (financial)
wī·čpū·čókwī·yi	banker
wī·čkó·li	many rocks
wī·kčsāwa	Superstition Mountain
wī·čwó	brick
wī·kāča	rock for building
wī·ktkūpa	gully: sides almost come together
?wī·k?ī:la	mountain
wī·ka?ī·la	Grand Canyon
?wī·ka?ī·laha	canyon
wī·km?érβa	ridge
wī·kyànyá·pa	mesa
wī·kyànyápa	Thumb Butte; butte

?wī· (continued)

wi·k ^w āθa	
?wī:k ^w āθa ksík?īta	Prescott: brown rock (granite) pointing into water
wi·k?īr?īra	butte
wi·k?āmβa	ridge of rocks
wi·k?ā·mβa	mountain range
wi·?qsā	agate (white stone found in area)
wi·kβ?ū·la	Bill Williams Mountain
wi·θā·wa	pebble
wi·θk ^w āya	light rock
wi·skčī·βi	precipice
wi·haβsū(w)a	diabase
wi·hohā·hm	side of mountain
wi·khlē·βa	cliff
wi·khyārβa	cantiles
wi:mūn kwā	San Francisco Peaks
?wi·pakčākāβa	Black Canyon
wi·nmsāβa	silver

ENGLISH-YAVAPAI DICTIONARY

abode	ɲwá
animal's abode	ʔčpáy.ɲwá
be about to (modal auxiliary)	nú(·)
about to fall	sʔónɓi
above	čǎ:βk, čǎ:hk
become accustomed	ipāri
acorn	ʔi·hmī, ʔi·hmī(·)ya
acorn meal	ʔi·hmī(·)ya tá·ča, ʔi·hmī(·)ya tāβa, ʔi·hmī·ya tāβa, ʔi·hmī(·)ya táβa, ʔi·hmī(·)ya mɔwána
acorn soup	ʔi·hmī·ya ɲhāya
gather acorns	ʔi·hmī·ya čʔá·mɓi
lots of acorns (Pln)	ʔi·hmí túrβò
there are plenty of acorns	ʔi·hmī·ya qyātkm
across	khkē·
add	tké·, tkí
admire a lover (woman speaking)	qʷasčēm(?)i
they are afraid, cf. fear	mšáyí
after	mī:βkʔē
afternoon	ɲà·βná·li
two to four in the after- noon	ɲà·βyū·si

again	ʔf·nka; wári
agate (white stone found in area)	wl·ʔqsā
agitate	(t)tnīri
be alive	yà...pé·
I became alive; I was born	nθám [hàm] ʔnálkp yàpé·yi smā naʔʔwī
all	páya
all: no more	βʔómi
that's all, finished	nùβlwíθi
that's all for now	nβlwíθm ʔnō ʔpíra
all the time	tú· nyú·čk nυβyú
almost	rī·pà
almost (SEY)	yū·θčàti
alongside of	kʷāčk
always	swála
ambitious, cf. man; tall	hmí
ambush, cf. čpá·	pā:hči
ancient	ʔčkyúka
ancient people → Hohokam	ʔčkyúka ʔpá:ča
"and, but"	βàβyū· (βa)
'and where... ' (enclitic)	-pè(·)
Anglo	hàikō, hàykō
Anglo: beaver eater(s) W.G.	h·nāqa hō·ča, h·nāqa θō·ča
angry	hi·wá·ya ʔlāyi, wáya... (?)lá·yi
animal	ʔčpáya

"domesticated" animal	hát
animal's abode	?čpàý.ɲwá
ankle	sqmwí(·)ra
antelope	m?ūl
anus	klmā:(ča)
Apache	pà·č?hwá
is apparent	spóβi
It is apparent that	?pa·βč ?črāβk spóβkm
the man is ill	
arc-shaped	tβčū·ɲi; mpú(·)ɲβi
bow	tβčū·ɲa
arc-shaped + pond, bow	hpú ₁
(stagnant)	
wide area	mātk čká:ma, mātk čkā·mi
arm	sál
my arm falls asleep	?sála čī·li
armpit	slpú
arrive	βá· (sg.), ɲβá· (pl.)
arrow	?pá, (?)pàkwīrβa
artery	hwat.kəūra
ashes	(?)mhǔ(·)l
ask	č(k)kwí
ask for	kβá·βi, kβá:βi
automobile	kwè·čβyámi
autumn	màtmún?i, mát mú·n?īme; màtyū·si (W.G.), màtyū:si (G.M.)

ax

čkváti; shkVá·ti

awl → mosquito

βāka, ?βāk

baby	hmáŋ (sg.), hmā:ŋa (pl.)
back	hitát (G.M.), hi·thát (W.G.)
back	máka
move back or down, cf.	kwé·
south	
backward	máka
bad → dislike	qláé(·) (sg.), qlá(·)yi (pl.)
bad person	pà·hānah ?ūmi
badger	mhwá· (W.G.), mhwā: (G.M.)
bag, sack	?hmál
bake (bread)	thmū
bake (a cake)	(m)lôhi
bake in ashes	páβi
baker	kmyá·la
bald (person)	qwāri hitāsa
bald (land, mountain)	màt.kqwā·rm?e
ball	kômβi; t?óra
ball → tomato	k?óra
band for cradle	smpū·rβi
bank	tú·ti
bank (river)	màt?ī·la
bank (financial)	wl·čpū·čó·
banker	wl·čpū·čó.kwī·yi
barbed wire	?khwá·βm ?i·βkôβa

barber	qwa ^w wa pa·kčī·r(i) čʔōčī, qwa ^w wa pa·kčī·r(i) kʔōčī, qwa ^w wa pa·kčī·r(i) kyūčī, qwa ^w wa pa·kčī·r(i) kyōčī
bark (on a tree)	əpīla; nmfiya
bark v.	βōhβōhʔi; wōwōʔi
barrel	ʔʔi·swā
barrel cactus	(?)mltāt
base of skull	čkvá(·)sa
basket	kʔú·; swá
basket (burden)	qəāq
oblong basket	kʔù·yúkyúka
bat (animal)	qà(·)pǎŋqa (G.M.), qampàŋqa (W.G.)
bathe	ʔhà...əpú(·)yi
battle	čàʔhwáyī
be ₁	yú
be ₂	yó(:) ₁ (sg.), yá:wi (pl.), yá·wi
beads	ʔwì·klʔūlka; skʔú:la hnākča
beak	q ^w iəq ^w iə, q ^w irq ^w ir, hú·q ^w irq ^w ira
be always	tú· yúčī
bean	mrí·ka
mesquite beans	ʔyá·

bear, cf. gila monster, cow, squirrel, moun- tain lion	mhwā(·)ta
bear fruit, be born	pé·
beard	yà(·β)nmī
beat, strike	ʔčʔpéqi
beat (heart)	kòpkó·p
beautiful	wày pé(·)m̄βi; wàykā·yβi
beaver	h. nā(·)qa
bed	yākyi, yáki, yá·ki, ʔi·yáki
bedbug	yáki n̄hʔēl
bee	empó·
beer	ʔhàʔmāla
beginning to get dark	βhipá:ʔim, βhipāʔim
always be good to people	tú· m̄nyúčk pà·m̄nhmérβi
belly	βnūna (W.G.), mnū(·)na (G.M.)
beyond one thousand	tú· láwa láwk
Bible: flat, black book	t̄nū·rβa ʔnā:klāpa
big	βté, βté·yi, βtáya, k̄βté·, koté (SEY)
Big Dipper: moon coat (?)	hlà.hnē·ya
big, flat top	yàlyál, yàlʔyál
bile	βsú
bill (of bird)	q̄wleq̄wíθ, q̄wirq̄wir
Bill Williams Mountain	wì·k̄βʔū·la
bind (a baby)	k̄wāri
binoculars	ʔčʔūyi

bird	ʔčsá, ʔčsá lá·wi (pl.)
bird that goes "ku:"	kkū· (W.G.), kkū: (G.M.)
biscuit	myàlqʔōra
bite	čkvó, čkwó
bits (in money)	mí
bitter	tʔēli, ɸʔēli; ʔhā·, ʔhā:ki
black	ʔnā: (G.M.), ʔnā· (W.G.), ʔnāča
black ant (small, brown)	čnəhpūka
Black Canyon ₁	ʔwi·nəkčəkāβa
Black Canyon ₂ : cottonwood lined along the banks	ʔhà·ktkwī·βa
blacksmith: bang v.	ʔkhwà.ktū·ta
bladder	tà:βkyāma
blade	yó:βi
blanket	čpé·βi; yàryára
blind	yu·ʔú·βa ʔūmi
blink	βmāčmāčʔi
blister	βlpá·tʔi
block	kβkó
blood	(ʔ)hwáta
blood sucker	pà·čθéqa
blossom	táβsa, táwsa (SEY), kwè·táβsa
blow with mouth	hàβčú·li
blue	hàβsú·(w)i
blue jay	čàsčā·sa
boat	khló, see khō

body	má:t
body is feverish	má:tč khβô·yi
boil → sweat house	tʔōli
boil v.i.	ʔú·ti
bone	čyá·ka
be born ₁	pé·, yà...pé·, yà...páyí, yà...péči; náli
be born ₂	θáwβi
borrow	θmá·βi
bottom	púk
bottom of mountain	màtpūkmāk
boulder	wi·čàlčá·lʔe, wi·čàlčá·lle
bow	hpùtβčū·na; hpùčnâ(·)kβa
boy	hmaphmī, hmaphmē, hmā·ra (pl. W.G.), hmá:ra (pl. G.M.)
bracelet	θβrì·tíri
braid	snáβa n. snāβi v.
brain (brains)	qmpâya
branch: comes away from tree	ʔì:tβkʋála
bread	myál, myála, myēla
the bread is on the table	ʔʔì·shyārβa myāla čā·nk wākm
give us bread today	nâ·βm myāla pà·mʔē
preserve bread for future use	myál twpū·βi
bake bread	myâ·la thmū

break v.t.	kváti; θkvāyβi; tmqwáni
break v.i.	βqáwβ?ī, tú· βqáwβ?i
break v.t.	tapá
break of dawn	mātč β?ū·βkm
break in (horse)	i(·)há·ni
break in two	qáwi
breast	nmáya
man's breast	pà·hmìnmāya
breastbone	skvāta
breathe	βθē·, βθēhi, θèhəθé·, βθé·h(θé·h)i
I breathe	βθé·(?)?i
brick	wì·čwó
brick → cheese	čwó
brickshaped → cheese	čh ^w óβa, čwóβo
bridge	?nà·shkē·βa
bridle	yàskāβi
brim	hréβa
bring	kmí·; wā·mi
bring (incompletive)	?óyi
bristle	βh ^w ō·βi
brittlebrush	?mątāq
broil	sīli
broiler	myàlsīló
broken	qáwi, βq ^w áqβi
broken-off pine (Pln)	hwà:lkčásča
broken (pottery)	θkvāyβi

(elder) brother	hwákβa
ask my brothers!	ɲàʔčwā:kβa pà·mʔē·βi
father's older brother	nwī·
father's or mother's	wīta (sg.), wī·ta (pl.)
younger brother	
brown	(?)kwáθi
brush (plant)	ʔmpáča
brush v.	sčī
bubble → fife, flute	lūllūlʔi
bubbles	tβpūni
bubbling water (Pln):	ʔhàkyā·ča
creek near Miller	
Valley	
bucket	khwà.(h)mát
buckhorn	ʔtàth̄sú·la
buckskin	kwál ₁
buffalo	qwákta hú·kβtē·
bug	kká·βa
bull	qwàktahmāβa, qwàktahmāββa
bull snake	hàtamā·la
bulrushes	hàmsʔīβ
bunch of bushes	ʔwīla kyàryāra
burden basket	kəáq, qəáq
burial ground	pà·tmārčó
burn v.i.	qwāti
burning pain	βtēθqʔi
be burnt	pīli

burnt up	píli ɔrâ:βi
burp	čàlhū
bury	tmári
bunch of bushes	?wīla kyàryāra
bush	?wīla, ?iwīla
plant species (a bush)	?i·kʷāla
busted	βqʷáqβi
busted up	qʷāqβqʷāqβi
butte	wì:kyànyána; wì·kʷirʷira
Thumb Butte	wì:kyànyána
butter	qʷàktənmăya
butterfly	hànkra·pa (G.M.), hànkpa·ra (W.G.)
buttocks ₁	wèhpū
buttocks ₂	klmá:, klmā:(ča)
button	yàskāβi; yūri skʰâβi, yūri səʰâββi; yūri sʷâmmi < sʷâmβi
buzzard	sé·

cake	myála myúla
calf	ʔqwáktaθáwwa, ʔqwáktašáwa
calf (of leg)	himwā·la
California yellow poppy (Prn)	hàptú·ra, hàṅqtūra
camel: humpback	hitat hámʔōla
Bactrian	hithātk kmpū:lpa
dromedary	hithāt hámʔōla
candy cane	myúla kwálskwískwí
cane	sotát
canned food	kwè·mápa ʔkhwá·βl yá·wa
cannot	βwāri, βwārβi
(cannot speak) stutter	kwā·w ʔwāri
cannot find	smē·, smá:
canoe	khló, see klhō
cantaloupe	ʔčkmtú tú· qwáθa káča
cantiles (large boulders near Santa Catarina)	wi·khyārβa
canvas	kskē(·)βa
canyon	čhkáβi; kʔí·la, ʔwi·kaʔí·laha
Black Canyon	ʔwi·nákčakāβa
Grand Canyon	wi·kaʔí·la
capsize	tmʔāmpβi
care for	pwē
corral	ʔi·kβkōββa

carry	twāmi; hké·
carry (a bucket)	βwáli
carry heavy object in cf. nó 'heavy'	kβnāwi
carry in hand	i·kó
I carry in my hand	?sáll ?i·kókm
carry many objects	čmnpé·βi (W.G.), čβnpé·βi (G.M.)
carry on back	pá·pī
carry on head	pé, yá·βa twāmi
carry something heavy (olla with water) on back	hikē·, hikó
casaba	?čkmtú ?qwáθa ?kwípa
cast a spell	pēhi
castrate	qwáktą hmā·y yóβa
cat	nmí
catch	i·kwíθi; t?āmi
catch oneself from falling by jerking	βθâ·qβi
catclaw acacia	kčāsa
fat on cattle	qwāktą sáya
cause to die or be sick	tpúyi
cave	?wi·yá, ?ò(·)yǎ, ?ùyá
caved in (hole)	βθô·r?i
caved in (mining shaft)	βqòpqp?i; βná:m?i
cedar	čóqa

center	tú·pi, stúyi
centipede	(?)hànkasāpa
metal chair	ʔkhwàwáyi
rocking chair: back and forth	ʔl·wāy kà·rkká·rkʔičá
wooden chair	ʔl·wáyi
change v.	tʔhkē·
cheap	čwārpi
checkers	ʔkwè·thfʔiči
cheekbone	qnwī·
cheeks	i(·)θūl
cheese	čwó, čhwópa, čwöpa
chest	(i·wáy) sqāta, skváta; i·wáy ktiltīlʔl; i·wā(·)ya
chew	čmpáyi
chew → scissors	čpá·yí (W.G.), čmpáyi (G.M.)
chew (cud)	čpáli ₂
chew tobacco	ʔú·β čahmā·
chewing gum	kʷè·čmpāya
chicken, < <u>gallina</u>	qoloyáwa
chickenpox	mlūθa
chief, SEY	màtsápa, màtəápa
chief (loanword) < Spanish <u>mayor</u>	mayó:ra (G.M.), mayó·ra (W.G.), màkʔyō:ra (SEY) (folk etymology)
lesser chief	pà·wīya

child	θáwa (sg.), θá:wa (pl.), šáwa (sg.), šá:wa (pl.); hmáŋ (not weaned), hmā:ŋa
Chinese: speaking in water	hàlkwáwa
chipmunk	hmífra, hmí:ra
choke on food	mčāqi
chop with ax	səkvāti, səhkvāti
Christmas	myūla kwàlskwīskwī māiči kwá·hm; kwè·ʔé·či kwá·hm
church	ʔwàtáββò
cicada	kwā·
cigar	ʔū:βa čmyālβa
clan	pàčā:ča
claw	slhβó· (G.M.), slhʷó· (W.G.)
lay	mát
clay jug	màtθīwa
clay pot	hmát
clean	θāmi
clean → spotless	təkwí·li
clean out	(?)ʔi·ŋū·, ʔʔi:ŋú·
clear	θāmi, sòlsōli; sùlsúli
clear (water)	qryē:
clearing	(čà-)(?)qwāri
cliff	wi·khlē·βa, hréβa; màtʔī·la
Four Peaks: smooth cliffs	wi·kčāsa
climb ₁	čkpá·
climb ₂	čʔáli

clock: sun ticking	ɲá:βtáθtáθʔīčá
close	tʔāmi; yáskāβi
close (a door)	sʔámi
closed	tʔámβa
cloth	thūma
cloud	(ʔ)kwí, kí+ (in compounds)
cloudy	(ʔ)kwí·yi
clothes	wí(·)βi
wear clothes	wí·βi
clover	kpf·la
clover-like plant	θpīla
club	pá·ʔāβi
coal	ʔočí
(cock's) comb	ksélsēli
coiled	kwírβa
cold	mūni
it's cold today	ɲá:βm mūni
collapsed	βtōtβk
collarbone area	wèhipūk
Colorado River	ʔhàkhwáta
comb	sčí
come	yúwi
he comes from New York (W.G.)	New York pá·yúwa
I was coming from far away	ɲéál kúr kyūwaha

He came from New York (W.G.)	New York pà·yúwk yūčk yùm
it was coming way back	nəál kúri kyūwaha
come and show	myúwk mwī·wo
come away from → branch, forked	tβkvála, ʔitβkvāla
come back	βóki
come back!	mβōkk mwārkā
come down	ná·lki
come out	čʔáli
come out, sprout	páqi, tpáqi
come out	βčlwá·qki
come out in the spring	mwē·mm βčlwā·qki
come out in the spring	mwē·mm βčlwā·wki
comfortable	yú·si, yùsyús
command	čkná·
complete	ttkwí(·)lβi
constitutional n.	hɲó·ma
container	hmāt
continue	kòyūči
continues to pant	βhāhāʔi
cook n.	ʔčknwí·ra
cook v.	nwī·ri (sg.), nwīrči (pl.)
cool	yú·si, yùsyús
copulate	nī·ni, ní:nβi, čni:βi
coral-colored snake, coralillo	hà(ɲ)púk

corn	tyá·č
corn just becoming ripe	tyá·č sīwa, tyá·č sūwa
corner	ksīksī?īta; ?wàsqwīr(β)qwīrβa
corner (outside)	kəqwārhe ksk?īta
corpse	pà·pī
female corpse	pà·pičmi·ya
correct	βlwī
cotton	čθkwāmpa
cottontail	hló
cottonwood	?há(·)
cottonwood about to fall, hanging there (Pln)	?há·ks?ónβa
cottonwood spring	?há·pú:čò
cough	?óhi; βkèhkéhi
count	sí, síβi, sí·βi, sí:βi
I'm counting them	pà: ?sī:βi
countless	tu· nōma ?nōma
country	mátk čkā·mi, mátk čká:ma
cousin (man speaking)	čkā·βi; čsmāyβa
first cousins: children of two sisters	mā·ya
cover	čpé(·), čpūki, t?āmi, tmári, twāmi
cover mouth	yá:βa twāmi
cover with dirt	tmári

cover with dirt while planting	spūki
cow	qwākta, qwāqta
cowhide	qwākta nmī·ya
cow's milk	qwākta nmáya
barbecue a cow	qwākta pāβi
coyote	kə̀arʔhāna
crack (egg)	βəkʷá·yβi
cracking sound	kqwāθa
crack like a watermelon	(β)qáqβʔi
cradle	hmàŋqwárʔi
cramps, cf. tie up	βəpá1βʔi
crane	nqʷá
cranky	pà·ʔlhwāyi
crawl	čà(h)tá·ti
crazy	wà·si·βa ʔūmi
cream of wheat	mwára smkʷinβa
creek	čkmí·; hàqéči khé·la
Pln: creek near Iron- springs	hàqʷáθa khé:la
they cremate	pà·(p1)tú·yč1
cricket	θ1r(k)θ1rka
cricket-like insect	hū·wā
croak	βqlā·ʔ1k
crook of a cane	tkrū
cross	shkʷēβa, khké·βa; sβhwēβa msβhwē·βə

crow	qsǎq
crowded	túri
crowded with people	pà·tūri
crown of head + cock's comb	kʔóya, kʔōwya
crucifix	ʔʔi·ksīβa hwé·βa
crust	myála píla
cry	mí: (sg.), mí·či (pl.)
cry for somebody	kmí· ₂
I'm going to cry	hàmθíl yùwo tliwliwi
rock music: make instrument cry	ʔk ^h wámīwo
cultivate	(màt) pū·
cup v.	tʔāmi
cup (ears)	čβkô, kβkó
cup (hand)	tʔāmi
cup the hand	sàltʔāmi, sàlsʔāmi
current	ʔhàθpí·rβi khé·la
curved	ktθūkβa
cut	stī:ti; kváti
cut skin out	(m)ǎkhí, i·khí, ʔikhí

dam	ʔhàtʔámɸa
damp	muθé, muθá, muθáyí
dam up	tʔámi
dance	i(·)má
dancers	khimāča
dangerous	msé:βi
begins to get dark	βhipáʔim
get dark	βhīpā(:)ʔim
getting dark	tqípi, tqēpi
dart across	βʔō·q...i
Date Creek Tolkapayas: cottonwood sticking in the water	ʔhā:há·βk ksčúlɸa ʔpá·ča
daughter	hčáɸ
daughter (man speaking)	βčá·ya, βčé(·)
my daughter-in-law	ɸaʔɸé
mother's brother's daughter (man speaking)	nú·t(a)
daughter's child	(?)kʰó· (sg.), (?)kʰó·ča (pl.)
dawn	ɸmθáβʔIkè, ɸmθā·βki
break of dawn	mātč βʔū·βkm
day: sun sits	ɸā:wá
day (24 hrs.)	smá·
day before yesterday	ɸū:kk ʔɸá:hm, ɸú:km ʔɸá:hm
dead, cf. hug; die	ɸí ₁ , ɸú·yi

deaf	smàlkaṭū
death rattle	βhlò·hló·h...l, βalò·həlō·hi, βhlò·həlō·hi
deep	??ī:li; ??ē (sg.), ??áyí (pl.)
deep (Prn f.)	tikwē·ča
deer	kʷá:qa, ?qʷá:ka, qʷá:qa
defecate	čflqi, čélqi
(definitizer)	-ha/-h/-a
(deictic)	ɲū, ɲə
deliver	kmí· ₁ ; wā·mi
dense	??ē (sg.), ??áyí (pl.)
descend	náli
desert	(čà-)(?)qʷāri, màtkqʷā·rmʔe, màtqʷāra; tyé·mi
he deserted them	tú· βyé pà·tyé·mkm
determined	čmwílβi
they devour it	čá·βk ?čmáyci
dew	ɣuθé, ɣoθé
diabase	wl·haβsū(w)a
diarrhea: stirred up	mnúnč qwó·qwó·?i; mnúnč sqʷá:r(?)i
dice	?kʷè·čkòrkó·ri
die	pí ₁ , pú·yi
different	hké, kháyí
different, opposite → bridge, ford	βù·hkáya
dig	shyúki

is he digging?	puč hʷáɫè
digging stick	ʔʔl·pòq̄pòq̄a
dip in water	hàñē·ka
dirt	mât
red dirt	mâtʔhʷāta
discharge, gun going off	mpé, βmpé·, βmpé·ì, βmpé·(yi), mṛáya
disease	ʔčhnūβa, ʔčhnōβa
dishes	ʔčmáiči, kʷè·māčò·
distant	twáyì, twá·yì
distant land	màttwáya
distribute	pà·kwí·či
I distribute to them	pà·ʔʔē·kwí·či ~ pà·ʔʔē·kiyči
ditch	ʔhàqʷíni, ʔhàʔqʷíni; hàsqí·ra
still water ditch	ʔhàsqí·ri
small ditch	qyúrqi
do	wí
do it!	ṛū mwī
I ask you to do it	ṛumwī ʔʔì
he asks you to do it	ṛumwī ʔí
do you think you can	ṛūmwī mwī:ʔ, ṛuβmwí → ṛùmwí
do it?	
do you think you can	ṛú mwī mwī:ʔ
do it?	
it will be done	βlwīha
be doing (modal auxiliary)	nú(·)
I couldn't help doing it	ʔwík ʔwíwkm

doctor	k(i)θyē·, kθí:yi, kθiyē·, kθyé·, kθyē:
doff	hrúyi
dog	kθár
doll	?črē·
dollar	pé· < <u>peso</u>
donkey	yà·l ?βū·ra, yà·lwúra < <u>burro</u>
doorknob	?wàsk ^w íni
doubt	θrī
dough	mwāra mō·rk, mwāra mū·ra, myála mū·rča
dough: not ready	myála swá, myála síwa, myála sūwa
douse	māqi
dove	kwī
down → south	kwé·
draw out	o?āli
dream	tsmá·č̣i, tsmā:č̣i, tsmā·č̣č̣i (pl.)
dress	βhē; tčéqβa, θčéqβa, tčâqβa, tčâqwa
drink	θí·
drink water!	(?)hà mθí(·)
(a) drink (made) from berries	kθ?ē:
drip	tōčtōč?ìka; čàqčáq
drive	čyúwmi

they drove the people away	pà·wìβó
drizzle	kʷìβá·βačβč yū:wo; kʷìββθāyi
drop	βčāqʔì; čná(·)li
I dropped (it)	ʔčná·lkm
drown	ʔhá·βl pí
drowsy	i·βú·ri
drum	ʔkʷè·tʔūmi
drunk	wà·sī·pé·mi
dry	rúβi
dry v.t.	trúβi
dried out muscles	wiri
duck	qnmó:
dull	yō·βa ʔūmi
dusk	βtqēpìʔì; nà·mârβi, nà·βmârβi
dust	màthā·y nú:lkʔìʔì; màtθāβa nú:lkʔìʔì
dust, cf. pound	màtmqʷāna
dusty	qê(·), qāya
dwarf	pà·nyû·ča
dwell	nwē, nwā·yi (pl.), nwě·βi (pl.)
dweller	(?)pāya cf. pé·, ʔpa:

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each one	kàʔsí:ta
eagle	ʔsá
ear	smálka, smá·lka (pl.)
early	wílβi
early tomorrow	βyé·km
earring	smá·lki
earth	mát; māt̄k kčká:ma, māt̄k čkā·mi
earth: spread wide	māt̄khøí:la
on earth as it is in heaven	māt̄čá:βk myā·yu
you're responsible for the earth	māt̄βa yà·mpá:βk
earthquake	māt̄č βʔīnʔīnʔi
(earth)quake	čʔīnʔi·ni
east: sun comes out	nà·čʔā̀lò·
Easter	qoloyáwa sqāwa máhe kwá·hm
eat	mā· (sg.), māči (pl.), máiči (pl.)
I am eating	ʔčʔmá·
one is eating	ʔčmá·
a few eat	ʔčmáči
eat dry, powdered substance (parched corn)	čhmá:
eat in the morning	yē·tk kwè·māčò·
eat lunch	nà·βlwī·βm kwè·māčó

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eat meat	θó(·)
I eat	kʷè·ʔθó·k
I want to eat	kʷè·ʔθók wálʔf·km
do you want to eat?	kʷè·mθōk wálmí·yéʔ
eat something mushy	čūpi
eat supper	(β)márm máča
eat up	čá·βi
echo	yáwi, yá:wi
edge	tʔórpí, tyúwβi, βʔóme
egg	sqāwa
elbow	skʀʔōka
elderberry	tàttála
elder sibling	wāka (sg.), wá·ka (pl.)
elephant	hù·pā·ka lā·ka
embers, coal	ʔòčɿ
encircle	takāβʔi
end n.	βʔóme
enemy	hwá, pà·čʔhwā, ʔčhwá, pà·čhwā, čəʔhwā
enemy striker (Prn)	čhwā·βč hwáyā·wi
energetic	hmí
engine: iron runner	khwàkβʔāmma
enough	βlwī
enter!	myú·rki
entrails	βhā
err	čyā·mi
espy, sight v.	sūri

evening	hi·pá·, βhipá?īm
evening: getting dark	?sè· tqípi, ?sè· tqépi; βhipá:?īm, βhipā?īm
everything around	tú· hihŭl βyák kyā:mβha
exchange	tìβahkē·βi
exclamation of fear	nī·nī·
(woman speaking)	
exercise	hŋó(·)mi
eye	yú(·)
eyebrow	yùklmē:
eye-glare	yù·tmŭ(·)rβi
eyeglasses	?k ^h wàyŭyi
eyelash	yùsuná:

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face	yá:βa; yú·βa
face v.	tyūpi, tyūβi
face paint	čyá·lβi
fall	θfri; máni; náli
fall down there	nyál βqótʔaʔimi
fall → moult	θáli
falls asleep (arm, leg)	čí·li
family, clan	páčā:ča
fan v.	tyùsyúsβi
farm	màtrū:, matrū·
farmer	màtrū·kwī·ya
fast person running	pà·(?)ráwa
fat n.	sáya
fat	sē (sg.), sá·ykm (pl.)
father	čtā(·ča), tála
my father	ɲàʔčtáha, ɲàʔtála
husband's father	nkupé·ya
wife's father	βlhē ɲī·
father-in-law	uɲē
father's brother's son	mī·ka
father's father	npó· (G.M.), pó(·)ra (W.G.)
father's mother	mōra
father's older brother	sū·ča

father's or mother's younger brother	wīta, wī·ta
father's older sister	npí·
father's sister	pí ₂
father's sister's sons	čkā·βa
fear	msē·, msáyí, mšē·, mšáyí
fearsome	msé:βi, mšé:βi
feather	wála, k ^w è·wála
feces	čélqa
feel like	uk ^w á
female	čmī·ya; βqī (sg.), βqū·ya (pl.)
fence	?i·βkôβa
metal fence	?k ^h wá·βm ?i·βkôβa
feverish	khβô·yi
a few	tú· kβlmíβm
fiddle v.: rub back and forth	k ^w è·hqíshqís(?)ča
field	màt ⁿ ū·
fife	lūllūl?i
fight	čá·wβi
fighting	h ^w á
I cannot find it	?smē·, ?smá·
fine	m ⁿ ē, m ⁿ áya
finely pounded	m ^q wāni
I burned my finger	sálβa ?tūkm
index finger: 'pointing'	sàl?čkná:mo, sála ?čkná:mi

middle finger	sàlkpētē: pàkpēβa, sàlqē·ča pàkpé·pha
little finger	sàlqčqē·ča, sàlkčkí·ča
finger nail	sàslh ^w ō·
fingers	sàlkmâ:rβa cf. toes, sàlqčqē·ča, sàlkčkí·ča
finish	wí·ri
fire	??ó
firewood	??i:tq ^w ātča
first → original	(?)háni
be first	i(·)βó(·)
first cousin	nčā· (sg.), tnčā·ča (pl.)
first cousin (female)	pāya
(first person pronoun)	?ná-
fish n.	?čí·
fish v.	?čí: s?óni
fishhook cactus	tap ^h á:
make a fist	sàlčkl?úłki
five	θrāpi
fix	iháni, ihā·ni
flag	?k ^w è·s?ónča
flat, cf. butterfly	ràpráp
flesh	má:t
float	?hàčá·βk yáki, ?hàčâ:βk yáki
flood comes and goes; passes through	?hà?áma, hà?á·mi
flour	mwára

flow	hé(·)li
flower	táβsa, táwsa (SEY), tʷè·táβsa
flowing downward → water- fall	hòlhól
flute	lūllūlʔi, tú· lùllúʔiča
flutter	wirwir
flutters	βlìplípʔi, hilī·plī:pi
wing flutter	wál hilī·plī:pi
wing flutters	wá·lč βlìplípʔi
fly n.	θmpú·rka
fly	βyá·ri; βyá·r...i
flying squirrel	mɣʷiθ
foam	(?)mā:li, māla
fog	muθé, muθā
foggy	muθā(:)yi
fold once	čqnʔōni
fold repeatedly	čtqnʔōni
follow	βàk pēβi
follower	khāβa
food	ʔčmāβa, (?)kʷè·māβa, (?)kʷè·māča
fool	tmíli (sg.), ttméli (pl.)
foot	mí
foot (figurative)	púk
foot of mountain	màtpūkmāk, wi·pūkəhk
foot of the mountain	wi·pūka
ford v.	nàkhkē·

forearm	θprī·, θurī:; sàlqrwí:sò (SEY)
forehead	impú(·)la (W.G.), impú:la (G.M.)
forget	wà...pā
fork	(?)khwàmsárβa
forked post	?itβkvāla
Fossil Creek	?hàkhàpsúwa
four	hopá
fourth time	hopáča spúk(k)
Four Peaks: smooth cliffs	wì·kčāsa
fox	qqór
fox (W.G.)	tqór (sic)
fox goes X	qqōrč qàwqāw?ikm
freckles	yù·rìβrīβ, yù·rìθrīθ
freeze	θpā·
friend	nwā·ha
friendship	pà·tyú·čì
frog ₁	hànkǒ
frog ₂	hàpâ
in front	yá:k
fruits	kʷè·pāya
fry	slī:, slí:
frying pan	(?)khwàsli(·)yi
full	tmpíri, tm?óri, km?óri
funeral	?pā·βč pīm tkāββi
funeral oration	?pā·βč pīm kwā·wi
funeral song	?pā·βč pīm swā·ri
fur	nmíya, kʷè·nmiya

furrow n.

qyúrqi, mâtstītk

furrow v.

ččmīči

g

gallop	βkwá·kβákwā:kβaʔi
gamble	nó(:)hβi
gambling	nōhβi
a game	nō·hβi
game (meat)	kʷè·θóβa
gap: saddle-like	ksnākβa
garbage	kʷè·q1vá·yβa βčámʔe
garden	màtrū:, matrū·
gather	tkáβi (sg.), ttkáβi (pl.)
gather (acorn)	čʔá·mβi
gather wood	ʔʔī·mtkāββi, ʔʔī·tkāββi
gentle	nhmírβi, nhmérβi; nlē:mi
gentle → Grace (Prn)	ktɾí(·)βa
gentle (of animals, people)	nlē:mi
get down	náli
get even	ʔè·mēla
get out; sprout	čpā(·)
get up (after falling)	βrá·rʔi, máni
get up! (after falling)	(m)βrá·rʔi
get up! (from sitting)	mβrá·ri
we got here	ʔi·kēθwi
ghost	myé(·)
gift	kʷè·ní·km pʔé·
gift giving	kʷè·né·km
giggles	βqìrqìrʔi, βqìrqìr...ì

gila monster	hàmtəú·lta
girl	hčá _ɲ , hčā:ra, hčä·ra
to the girls	hičā·rá _{ɲo}
give	ʔē· (sg.), ʔē·či (pl.)
give to speaker	ɲʔē·ki
give (away from speaker)	ʔē·mì
I give back	kwē·kk ʔʔé
give me a little!	qēčm ^k ʔi·lβk mʔē·; kēčm mʔē _{ɲi}
I give you	ɲʔē·km
I give to the man	pà·hmī· _{ɲo} ʔʔé·
give light	ʔʔūli
glad	ʔà _r ʔú·yi/ʔrʔūyi, ʔà _r ...yé
I'm glad to see you again.	ɲʔú:yk ʔwá·rm ʔhā _n km
glass	kθké _{ɲa} , kθké _{ɲo}
glide	skára
go	yá·mi, yámi
"goes," says X	-ʔi
he's going toward it	ɲθā yím _k yā·m _k
be going to (modal auxiliary)	nú(·)
I'm going to sit here	yák ʔwāha βnū·km; ɲθák/yák ʔwá ʔnū:
let's go	hmá
go down	ró·pi
go first	i(·)βó(·)
go in	yûri
go outward	βʔā·lβi ʔimi, βʔā·lβ(i)ʔimi

goat < <u>chiva</u> , <u>chivo</u> , <u>chivato</u>	hɪpāta
gold poppy	hàptú·r
good	(?)hāni, kʔhāna
good afternoon	nà·βkāθk ʔhāni
goose; lame duck	qnmò·θūlβa
gopher	kotú
gopher snake	hàtamā·la
gourd (wild)	ʔhmá:
gourd rattle (too bitter to eat)	ʔhná·l, ʔhna:l(a)
grab	i(·)kwíθi; yó:
graceful	ktɪī·βa
Grand Canyon	wì·kəʔī·laha
grass	ʔiwīla, ʔiwíl, ʔwíl
grasshopper	kəpámka (G.M.), kampámka (W.G.)
grave	pà·tmārčò·
gravel	(?)hàčwā
grave offering	pà·píló
gravy	mwára smkʷɪnβa
gray	hàsēyi, nmθaβi
gray hair	kyā·(ha)
grease	kʷè·sāya rháya
greasewood	ʔiməɪ(·), ʔiməɪf(·)
greasy	hàsēyi
great aunt	nkó
great-grandchild	kīpa

great-grandchildren	kí:na
great-grandmother	nkó
great-grandparent	ní(·)ya
greedy	?alhāti
green	hàβsú·(w)i
green onion (wild)	hiŋōqa
grind	tá·, tâ:
grinder + jaw	hpí, ?pí
grinding stone	hàβ?čā, hàβčā(·)
ground	mât
ground up	tá:βi, táββa, tâβa
hoe: pounds ground	mât(s)pēqi
twilight: ground becomes visible	matč β?ū·β?ì, mātč β?ú·βi
growl	βqβō:??ì, βqwō·?i
grown up	?té
gruel	smuk ^w īna
gulch	mātč βqāqβ?im
gully: sides almost come together	wì·ktkūpa
gulp	βčīqwúsmī
gun going off	βmpé·(yi)
gunpowder	?pām ^w án·a
guts	βhā

h

habitat: where horses stay	noák ?hátč howā·βk
hail	ki?āč
hair	qwáwa; nmiya, k ^w è·nmiya
half	stúyi
half-peeled juniper	čóqa θy[š]lqa, čóqa θé·lqa
halloo!	mhámkó:
hammer	k ^h wàkrwisa
hand	sál
my hand is bloody	?sálβč h ^w átβkm
my hand is burnt	sálβč pīlkm
cup the hand	sàlt?āmi, sàls?āmi
I carry in my hand	?sáll ?i·kókm
left hand	sàlkθā·ri, sàlkθā:ri; sàlq ^h ēβa
hand down	sháβi
(hand)kerchief < <u>pañó</u>	pā(·)n
handsome	?hāni
handsome male	pà·?hāni
hang	shá
hang on	swálβi
hang on by fingertips	swârβi
happy	?àr...yé
I'm happy	?àr?yékm
are you happy?	mā·č àrmyē
hard	θpīri

h

table is hard	ʔčmáčòč ɒpʔri
harden	βhwō·βi
harm v.	wyāti
harness	ʔhāt sná·yi
Harris ground squirrel	hmífta
harvest	nʊmwē; yá·či
Hassayampa River: 'the water disappears'	ʔhàsyāmčò·, ʔhàsyā·mβó
hat	púr
hatch	yírki
Havasupai people	ʔhàkhàβsúʔpá·, hapsùʔpá:(ča)
they are Havasupais	nθáčβč háβsū·ʔpā:βč yùčm
have	wí·yi, wí:yi
diver or chicken hawk	ʔčkyó·č
he (deictic)	nθáč
it is he	nθáč yūm
head	qmpáya; kʔóya, kʔōya; hu· (W.G.), hu: (G.M.)
heal	čé·βi; tmwé
healer	pà·kčē:βa
hear	ʔé·βi
I hear tell that...	ʔkwè·kaβʔí(·)ča ʔʔé·βk ʔyùm
heart	i(·)wā(·)ya
heaven	myā·khtí·la
heavy	nó(·)
it's heavy	nūč nō
heel	mìkθá, mìkθā

heifer	qʷáktəθāwa msī
hello!	mhǎ(·)mka
help	topé, topáyi
hesitate	θrī
hibernate	... čpū·βi; čpáyč mətθβlīya yûri ?açʰū:rm, čpáyč mətθβlīya yûrm ?açʰū:rm
hide n.	kʷàl; nmíya
high	myá·, myā:yi (pl.)
hill (not rocky)	màtkhòrahōra, mǎthō·rβa
hindquarter, hip	hi·wíl
hit	čpéqi; ?â·βi
hit with wood	?ì·pà·?āβi
hit with an ax	tkʷa·tm ??ā·βi
I hit	?č?péqi
hit bull's eye → noon	βkāβ?ì
a rock hit him	wí:βč ?lâpikm
hobble	sàlklkʷō(yi)
hoe n.	?ìwìlpéqi
hoe v.	?ìwìl čpēqi
hoe: pounds ground	màt(s)pēqi
Hohokam ghosts	qaqá·qa
hold on	i·kʷíθi; βàk swâlβi, swârβi
hole	θβlī (sg.), θβlú·yi (pl.), mətθβlī·ya
hole → oven	kθβlī·n
fall into a hole	mətθβlī·l mǎnkm

hollow	θīwa
middle is hollow	stūym čnúlkb̥i
hollow out	h ^w ári
holy	sà·ʔrî(yi), sàʔrīyi
home	ɲwá
homeland	ɲmāt
honored	sà·ʔhāni
hoof	slh ^w ó· (G.M.), slhβó· (W.G.)
hook	sahāyi
hooked	hrōkβi
hoots	hūhū, βhūhú
hopeless	tūya, tū·yi
Hopi	(h)mú:ka, mú·ka
horizon: end of sky	myà·tyú·wβò·
horn	k ^w ā
horned	k ^w áβa
horned toad	tlk ^w ám
horse	ʔhát
horsetail broom	ʔhàtβhēsčī·yi
hot	ʔhā·, ʔhā:ki; (?)rú(y)i
it's hot today	ɲā:βm ʔrū·yi
make hot	tʔrūyi
hot springs	hàkmwé·
hound	kθár ʔčnē·ča
hour	ɲà·tkǎβka
one hour	ɲà·tkǎβka ʔsī·tm
house	ʔwá

how?	káβ, ká
how many?	kāβlwī?
how much?	kāβlwī?
hug v.	sklpūyi, skrpūyi
we hug each other	tsklpú:yβi
human	?pá· (sg.), ?pá·ča (pl.) (G.M.)
	?pá: (sg.). ?pá:ča (pl.)
	(W.G.)
(human attribute)	pà·- ₂
hummingbird	mìnmí·na
hump (back)	kmpū:lβa
hunchback	hi·tât hám?ūpa
hundred	shūna
hungry	mčá·yi
hunt	né, ?črē
I hunt	?č?rē
hunter (Prn)	?čkrē
hurt	wyāti
it hurts v.i.	râβi
it hurt!	?rā·
I have a husband	pà·hmī ?wī, pà·hmī (?wīyi)
husband's father	nkupē·ya
hush (interjection)	?ā
husk (corn)	sh ^w â·ni

I (pronoun)	?ná-, ?náči subj
I own	nà?wī·
I own an ax	?i·čkVāt(a) ?wī·ykm
ice	?hàθpáč
important, cf. holy, sacred	?riye, ?rye, ?riyē
index (i.e. pointing)	sàl?čknâ:mo, sâla ?čkna:mi
finger	
Indian	?pă· (sg.), ?pâ·ča (pl.) (G.M.) ?pâ: (sg.), ?pâ:ča (pl.) (W.G.)
(Indian) doctor	kθí:yi, ?pâ:kθī:yi
Indian from another group	?pâ·hkâ:ya (G.M.), pà·hkāya (G.M.), pâ:k ^h āya (W.G.)
Indian paintbrush (plant)	?lwĩ č?úr
Indian spinach	k ^w â ₂ , k ^w â(θála)
be in front	i(·)βó(·)
inhabit	howā·βi
inhabitant of	pâya cf. pé·, ?pâ:
insect species	sū·līt?iča
insert one object (thread into needle)	θčûr?i
insert many objects	čpú(·)
insist	čà?wīri
(instrumental/agentive)	-i ~ -e·, -(y)e
intelligent	i(·)pári, čpári

I'm intelligent	ʔčʔpárkm
intensifier: very, just	tú·
(interrogative suffix)	-éʔ
intertwine	kwí·
into	yá·l
iron	ʔkhwà, ʔkhwā lā·wi (pl.)
ironwood tree	ʔhpá·lka (G.M.), ʔpá·lka, ʔpháalka (W.G.)
(irrealis)	-ha/-h/-a
island	ʔmát ʔhàtú·βl yá·wa, ʔhà·tǔ·βl mát yáwa
itch all over	θùlθú·li
itches	ttmō·km
itching disease	θùlθúla
itch in one spot	θùriθū·ri

jabalina	θiwθi·wa (SEY), mh ^w à·ksutáta ?q ^w ārkpàya
jackrabbit	(?)kúla
January: where the new year is	?č ^(h) ūri hiβomūča kwā
Japanese	hàlqwá·wa qàčqáča
jar	k ^w è·čáyi
jay	čàsčā·sa
jealous, envious	hə?ā·ββi
jealous (male)	smk ^w ī·rβi
jimsonweed	smá·lkkū·, smá·lktū·
joint	sβâlβô
joke	čr?ū·yi
I'm joking	tú· čr?ú·yk ??ím
jump	βčōn...ìmi; βrī·t?ì, βrīti; yâpki (Verde Valley, G.M.)
he jumps	n ⁿ ūč βrītkm
jump in surprise	βθrīyi
jump into	βčóni
jump into the water	?há·l βčónk k?ími
juniper	čóqa
just adv.	?píra; tú·
I'm just saying that	tū· yā ??ím
I'm just sitting here waiting	tú· ?sβóβk (n)βák ?wá·km

k

keep away!	?lá?
keep still	tɾē·βi
keep us from the bad	kyóha kʷè·kqʌēβha βkè? pà·mhipé(β)wo ma?ūmi
kerosene can turned inside out to make tortillas	?kʰwàčraprá·pi
key	?kʷè·skʷí·ni
kick	ktōhi
kidney	čmpáββa, čmpáwa (SEY)
kill	nēhi
killdeer	hámkkī
kill many	kmwā·či
killer (Prn)	pà·nēha
kind	nhmírβi, nhmérβi
be kind to them!	pà·mnhmérβi
kindle	tqʷāti
kindling wood	?ì·θmáqa
Kirkland	θāβa khyārβa
kiss	yā·βa βmītβi?ì
kiss, cf. sneeze	βčíθ?i, βčíθ...ì, yá·βa βmītβi?i
kitchen	?čnwīrčò, ?čnwī·rò?
knead	mō·ri, mú·ri
knee	mipūk, mmpûk (SEY)

k

knife	(?)khwá; ?kwè·čkváti; khwàččkváti
knot v.	kθpálβi, qθpálβi
know	spó
I know a little	tú· kéčm ?spók

lake	ʔhàhpǔ
lame	θú:lβi
land	mát
land of water (Pln)	ʔhà.kmáta
distant land	mát.twáya
plowed land	mát.stI:tča
small level land	ktnǎ.kβa
narrow, level land by mountain	mát.ktβākβa
lantern	ʔʔūl
large	βté, βtáya, βté·yi
large hawk	skwāla
larger of two similar animals, cf. badger/ bear, deer/cow	-t(a)
last	βʔômi
last man (definite)	ʔpà·kβʔômak
last man (Prn)	pà·kβʔô·ma
last woman (Prn)	msì.kβʔô·ma
late	nà·tkwǐlβi, nà·tkwǐ·lβi
laugh	čkwári, čkwá:ri
laughs in disbelief	yà·pà·ʔúm k čkwá·rk m
lava	mát.pīló
lay	čī·
lay eggs	sqāwβi

lay long object (down, across)	čmí·
lay many objects	čkʷá
lay something across bridge, ford	shkē· shkē·βa
lazy	twárβi; θú:lβi
leaf	θēqa
leaf out	?iwīl smā·lkβi
leak	k?ū·βò kčáqi
lean v.	péβi
lean object against wall	spé
learn	i(·)pāri
leather	qʷàktayú·l
leave	nmāki, cf. máka 'back'
leave (it) alone	t?īni
leaves blown out	θê
leaves floating on water	?iwīla čā·pe shyālpkm
left	kθā·ri
left hand	sàlkθā·ri, sàlkθā:ri; sàlqʷēβa
get on the left side!	sàlkθā·rō mčkpā·
leg	mpára
legend	?čkyū·kta
lend	θmá
level ground	hùrhúr
Thomson Valley	?kʷá·y khūrhūna
lick	té·qi, θé·qi

lick one's chops or lips	pèlmēlkʔi
lie (position)	yâki
lies down	kyá(·)ki
lie v. (falsehood)	tyé, tyáyi
lift	čprāri
light v.t.	tqʷāti
they light the wood	ʔʔi: tqʷātči
light in weight	θkʷāyi (G.M.), skʷā·yi (W.G.), θkʷāyi
I'm light (in weight)	náč ʔθkʷāyi
lightning	βráβʔi, βrāβrāβ...i
lightning sound	βčlá:ik, βčlá·člá·ʔik; βqáhβk, βqáhβqāhʔik
light red	kʷàlsé(·)
like	swáli; wàkəβāri
I like	náč ʔswālk̄m
limp (because of short leg)	θwā·mki, θwā·nki
limp (from arthritis)	qlūmi, klūmʔi
lip	yàktpūrβa; ktʔōrβa; yà·kré·βa; yàhàl(?)mī
liquid	nháya
listen!	ʔiʔ; ʔi; ʔā (interjection)
listen	ʔê·βkkʷi
little	kéč, káč, qáč, qé(·)č; see kíč, kéč, qáč, káč, kóč

little (horse, person + pony, midget)	nyū·ča
little (Prn)	pà·nyū·ča
a little	tk ^w ī·lβk
little finger	sàlkčkí·ča, sàlqčqē·ča
live v.	ɲwě·βi, ɲwā·yi
they are living there.	wàyō·km
they're living in that part	màtktnā·kβal wàyō·km
liver	čβθí·, čwθí· (SEY)
livestock	?k ^w è·ɲhátča
lizard	thθí(·)la
loaf of bread	myál
(location)	-ò
lock	?wàsk ^w ini
loin cloth	tmh ^w írβi, kmh ^w írβi
long	k ^v ú(·)li
long (temporally)	màrmāri
long ago	kûra
longtailed mouse	?ɲhǔl
a long time ago	?čkū:rθà, ?čkúrθa
long ago you were slender	tú· mpóqpóq qɲimâ·
look for	hwá·li, wá·li
look this way	hā:ki
look that way	hā:mi
lose	čnāli; hpínči

I lose	pà·hìpínči
we lose	pà·nàhpínči
lost	smé·, smá:
lots of acorns (Pln)	?ì·hmī tûrβò
louse	h?él
love	?è·...yí; swáli; wàkàβāri
I love	?è·?yí, náč ?swālkm
I love you	?è·nī·km
she loves me	?ě·nî(yi)
low noise	β?ū·?ū·k
lucky	kʷá(·)βi
lukewarm	qʷíni
lunch	tú· kâča máča, tú· qâča máča; nà·βlwī·βm kʷè·māčó
lung(s)	čkwál

m

maiden	msiya
make	yó ₂ , yó·βi; wí
make a fist	sàlčklʔúlki
make furrows	sqī·ri
I'm making a new genera- tion	pà·lā·wa ʔkoyūči
make instrument cry → rock music	ʔk ^h wámīwo
make noise	ʔūwi
male	hmāβa
handsome male	pà·ʔhāni
man	pà·hmí(ya)
last man (definite)	ʔpà·kβʔômak
last man (Prn)	pà·kβʔô·ma
man's breast	pà·hmi.ɲmāya
two men	pà·hmí·βm ʔh ^w áki, pà·hmí·βm hh ^w áki
mano	hàβčā(·), hàβʔčā
many	ʔté; lá(·)wi
many people	pà·tāya
many rocks	(?)wì·čkô·li
many swim	pà·lâ·wk ʔhàθpū:yi
manzanita	čmpúk
marbles (game)	sətō·ri
Maricopa	hàlčđô·ma

marry (man speaking)	?lwé, lwáyi, ?lwé·βi
marry (woman speaking)	ɲhmí(·)βi
a man marries	pà·hmí:βč lwéβi
we're getting married	tlwá·yβa ?nū·
mash	sčyōqi
mashed potatoes	pā·pa sčōqβa
massacre v.	?pà·kmwā·či (sg.)
massacre	?pà·kmwā:čči (pl.)
match (fire)	?òskāni
matron	màymâ:
me (pronoun)	?ná-
meadow	tná·kβa, wilháβsū(w) ttnā:nkβi, ?iwíla hàβsū(w) ą ttná:kβa
mean (temperament)	pà·?lh ^w āyi
measles	mlūθa
measure	čβlwī·, ččβlī·či
meat	k ^w è·θóβa
medication < pī ₁	pī·βi
medicine, cf. root	?i(·)smá(·)
medicine man	pà·čθéqa; ?pà:smāča, pà·smāča
melon	?čkmtū
meows	myâ·w?i
mesa	wì·kyànyá·na
mescal, cf. century plant	βyāl
Mescalero < Cochise?	kčí:sa
mesquite beans	?yá·
mesquite tree	(?)na·la

messenger	ʔč(k)kná:βa, ʔč(k)kná:βča
metal	(?)k ^h wá, ʔk ^h wā lā·wi (pl.)
metate, cf. chin, jaw	ʔhpi
middle	tú·βi, stúyi
middle is hollow, cf.	stūym čnúlkiβi
dust	
middle finger	sàlkβtē: βàkpēβa; sàlqé·ča βàkpé·βha
midget	pà·nyú·ča
midnight	hipāč tū·βk yāki; hipā:k siβtū·yi
one mile	màtq ^w āra ʔsīti
milk n.	(?)máya
cow's milk	q ^w àktaŋmáya
milk v.	hlī
Milky Way	hačá: (G.M.), hčā· (W.G.)
one million	θá·wβa tū·ʔnôm
mine, of me, of mine	ʔná-, nàʔwī·
minute	mārmā·rʔiča
mirror	hàlʔū·βi
misdeed	čyá·mi
miser	čwàhāβa
mistake	čyá·mi
one makes mistake	k ^w è·čá·mkm
mistletoe	qmō:sa
mistletoe berries	qmō·sa pé·
mix	βyú·li; sk ^w āyi

moan	myā·yβi
the moaner	kmyā·βa
mockingbird	?čsàkwīla
(modal: be going to, be about to, be doing)	nú(·)
moist	muθě
Mojave	mā(·)k ^h āβa, ?muk ^h āββa
mole (on skin)	qsóβa
money	pé· < <u>peso</u> ; ?wí·; ?čkká·βči
I used up all my money	?wí·páya ?wí·ri
Montezuma Well: water broken up	?hàkək ^v áyβa
moon	hlá
the moon is far away	hlâh twāyi wákm
moos	mú·?i
this morning	hipātm
eat in the morning	yē·tk k ^w è·māčò·
morrow	nyē·kkθó; yē·kòw (W.G.)
mortar	k ^w è·túyi; ?uhmū
mother n.	ččī; číta, čī·ta
father's mother	mōra
wife's mother	qm ^w í·rma pī·
mother-in-law	k ^r ī·ya (sg.), k ^r ī:ča (pl.)
mother's brother	k ^w éra (sg.), k ^w é·ra (pl.)
mother's older brother	wāna (sg.), wā·na (pl.)
mother's or father's younger brother	wīta (sg.), wī·ta (pl.)

mother's brother's daughter	nú·t(a)
(man speaking)	
mother's brother's sons	čkā·βa
mother's father	k ^w āwa
mother's mother	kóla (sg.), kó·la (pl.)
mother's older sister	nθī·; 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	?k ^w è·t?ú:βi; k ^w è·t ⁿ ùrt?úβa
mound	màtqmōtqì
mount	čkpā·
mountain	?wī·, wī·tāya; ?wì·k?ī:la
I climb the mountain	wī·tāyakwāha ?č?āli
mountain (not rocky)	màtkhòrahōra
mountain range	wì·k?ā·mβa
Bill Williams Mountain	wì·kβ?ū·la
Superstition Mountain	wì·kčsāwa
foot of mountain, bottom	màtpūkmāk; wì·pūkahk
side of mountain	wì·hohā·hm
mountain lion	(?)hàt(?)k ^w īla; nmīta
mourn, cf. cry	wà...mīyi, wàmyē·
mourn by fasting	wàmīyēk ?čmā· ?ūmi
mouse	?wé·
mouth	yá
move	?ín?ín; βlìwliw?ì
move (aside)	hīpi

move one's home	hmú·, hmū·č̣i
move (fast) vertically	máni
much	+té(·), +táy-
mud	(?)qnū, qnú·βi
muddy	qnūyi
mushroom	qsāmta; ?mpōqa
musical instrument	k ^h wàs ^{wá} ·ri, k ^h wàs ^{wá} ·ro
my	?ná-
my land	nà?nmât

n

nail	slh ^w ó·, slhβó· (body part); k ^h wàttq[q]ā·βa
naked, cf. flat	hàlsqrá·pi
name	múl, mól
I name them	pà:ʔsī:ti
nape	i(·)púk
narrow → high wall	kʔōri
narrow, level land by mountain	màtktβākβa
nasty	pà·ʔlh ^w āyi
nation	ʔwáčmīča
Navajo	čh ^w àhmû·ča; (h)mú:ka, mū(·)ka (confused with Hopi); ʔh ^w a·ʔmû·ča (connected with Apache)
navel	mlpū·
near	tyé·β; hipē
neck	mlqī
necklace	hnáq, hnak; wi·hnāki
need	hná:qi
needle	ʔčβnám̄mi; ʔčsk ^w î·li (SEY)
(negative cf. French <u>ne...pas</u>)	(β)kè·...ʔūmi
neighbor	tyé·βk wàyôyi
net	k ^w è·mθā:rβʔīča

n

I'll never do it again	βkē wīyì ?a?úmaha
new	hìβmú
newspaper: lots of printed matter, cf. moist...	núr(m) mθā:yβ?iča
at night	hipā·m
night before last	nú·kk hipā:tm, nú·km hipā:tm
nine	hàlθú·yi
nit	hìčī·la
no	?ūmi
no!	?í?, ?ī (interjection)
noise	yáwi, yá:wi
noisy (?) + ya·w	wáyô·βi
noon	nà·βkāθ?è, nà·βkāθ?i, nà·βkāθí
north	màthā·βi (G.M., G.N.); ?mthâ(·)βk (W.G.)
Northeastern Yavapai lan- guage	?wì·pūk?pā·kwâwča
Northeastern Yavapai people	(?)wì·pūk?pā:(ča)
nose	hū· (W.G.), hū: (G.M.)
not	?ūmi
'not by the hair of my chinny-chin-chin!'	hū·θíla myà?pā·βkm
I'm not certain	nnú ?θirī·km; nβyú·mb?
nothing	tú· kyô·βi
he's not lazy	?čhmíkm
not long ago	qñimâ·

not on tight → ramada, float	shyá1βa
not pretty	?è·yí·βa ?ūmi
not ready	tyá·č sīwa, tyá·č sūwa
not sharp	yō·βa ?ūmi
I'm not so well (W.G.)	?ō·p ?rāβi
not there	pē·mi
nothing	(?)qʷári, màtkqʷā·m?e
now	βá·m, βā·m(?)i
nuts	kʷè·páya

ocean	?há.kβté·
ocean: much water lying	?há?táya kyák
ocotillo: sad plant	?i·kmī·yi, ?i·kmyē·
offended	hnú
offspring	θáwa (sg.), θá:wa (pl.); šáwa (sg.), šă:wa (pl.)
okay	?wá
old	?té (of a person); nkwayi (W.G.) (of a thing), nkwāyi (G.M.)
he's old	pátáyi
old man	βlhē (sg.); pahlê (W.G.), βlhāya (pl.)
old woman	qmwī·rma, qčmwī·rma (pl.)
olla	màtθīwa
olla-shaped water basket	swā
once upon a time	?čkūrθă, ?čkú:rθà
one	(?)síti, (?)sí·ti
one cent: Indian head penny	pùrkʷâθa sêrβa
one foot (measurement)	kčī·?sīti
one o'clock	nà·?sīti
the one over there	nwē?
the one that waddles	tû·lβa
oneself	yē·βm
be on guard	βwé

only	ʔpīra
on the left side	sàlkθā·rō
on the right side	sàlkhānō
on (top)	čá:βk, čá:hk
on top	čá·ne, čá·ʔhe
put on top	čá·hk čkwā·yi
handkerchief on top: John Charger (popular etymology)	pá·nčàčāčʔì, ʔpán čàčā·či
water thrown on top	ʔhàkčā·čβa
open	kʷāki, qʷāqi; kʷákβi
opening	θβlī, θβlūyi
open slowly	kʷākβʔi
open (a wound)	qʷáqβi
opposite	βù·hkāya
other	hkē, hkāya
ouch (interjection)	(?)ná, ʔrā·
our, my	ʔná-
our land	nàʔnmát
ours	ʔná-
out of breath	yá·β·kvǎtiʔi
outside	kəqʷārʔe, qəqʷárhe
oven: large opening	ʔòtqʷāti kθβlí·n
overflow	βmē·t θīqkm
over there	nθē? (G.M.)
the one over there	nwē?
owe: stand in it	βàlsčá

owl

ʔyú·

own

wí·yi, wí:yi, wí/wíyi/wí·

I own an ax

ʔì·čkṽāt(a) ʔwī·ykm

owner

kwī·ya, kwí:ya

o

o

packed into shape	čmmyā1βa
paint v. 1	čahāni, čʔhāni
paint v. 2	čyāli
painted	čyā1βi
Paipai	ʔhà pà·wāmma ʔpā:ča; kwé·βkpáya hàwāmma
palate	yà·hnā:na
pant v.	βsēhsēhʔi; βhāmʔi
Papago	thpà·māya
paper < <u>papel</u>	papē·la, kapē·la
paper flower	slé
part of the back	mākò·
pass v.	ʔā·mi
patch (in a garden)	màtrū·qēča
patch v.	tʔāmi
path	ʔná, nà·krūrūya
peace: no more fighting	ʔčhʷáyk kyō·(či)
peach	θpāla (WY, SEY)
pebble	wi·θā·wa
peek	čkpí·ti; saʔǎri
peel	skʷâ·ni
peep	čkpí·ti; saʔǎri
peel v.	skʷâ·ni
penis	myár
crowded with people	pà·tūri

many people	pà·táya
they drove away the people	pà·wiβó
perfect	sà?rīyi, sà·?rī(hi); ?hāni
perforate ears	smālka kəwárβi
person, Indian	?pǎ· (sg.), ?pá·ča (pl.) (G.M.), ?pá: (sg.), ?pá:ča (pl.) (W.G.)
(personifier prefix on adjective)	pà·-
bad person	pà·hānah ?ūmi
fast person running	pà·(?)ráwa
prominent person	pà: mú·lβa
rich person	pà·qyáta
a small person	pà·qé·či
tall, slender person	pà·kvú·lk pōqpōq?e
ugly person	tū· pà·lā·yi
person wishing bad luck	pà·péhi
Phoenix	?wàθīnka
phonograph	k ^h wàs wā·ri
pick n.	?k ^h wàs akēβa
pie < <u>pastel</u>	pasté·la
pierce	θβrī, θβriya, θrúyó
pierce ears	smālka θβrūyu
pig	mh ^w ā ksotāta
pigeon	sàkwīta
little piles of bushes	?wīla ?māya
pile up	thmē·

pillow	spúki
Pima	thpá:
pine	hwá(:)l
pinenut	?k ^h ō, ?k ^h ōyi
pink	k ^w álsé(·)
pink + rust	k ^w ál ₂
piñon	?k ^h ō, ?k ^h ōyi
piñon hills: Prescott Heights	?k ^h ōy khōrβa
piñon jay	čàsčā·sa
pin up	yàskāβi
pipe	(?ò)mlhū
pipe stem	?òmlhū k?īr?īra
pistol	hpù.q?ūrka
place across	?āmi
place of shadow (from tree or mountain)	?òsākó
Pln: reed upright	?t ^h à.kspēβa
place where (suffix)	-čō·
placid	θwē
plant v.	k ^w è·h ^w áli
plant for hummingbird	hù·θçù·račú·ra
plant species	pìlrūβi; čpān; sotát, swtát; màtqí·s, mtq ^w ī·sa; ?wà·lāpa
plant species: a bush	?ì·k ^w āla
plant species (root used as medicine)	màtqí·s

ocotillo: 'sad plant'	ʔi·kmī·yi, ʔi·kmyē·
plate	khwàtīrtīrʔa čmáyi; ʔkhwàkʔú;
	čmáyi
play	rē·, rā·yi, ré·βi
play cards	tó(:)hβi
I play the fife	lúllúllʔīča ʔʔī·wok
play jokes	tmíli, ttméli
play a joke on some people	pà·nītmīli
pleasant	yà·swárβi
(on vacation) it was very pleasant over there (where I went)	tú· yà·swárβi nθé ʔʔá·mčkm
Pleiades	ʔmú
plow n.	màtstī·ti
plow	màtstī:ti; màtṛū·stīti
plowed land	màtstī:tča
pluck	sčō; lō·qi
(plural object)	pà·- ₁
(plural; repetitive action)	-i- ~ -y-
pocket	ʔhmál
pointed	qʷíri; ràβráβ
pointing	síkʔīta, ksíkʔīta
poison	ʔkʷè·kmwā·či
poker stick	čθīli; ʔòshúli
polish, cf. smooth	hàlčātó

pommel	čáčkwáya qrwī·sa, čáč·kwáya qrwī·sa
ponderosa pine	hwá(:)l
pony: little horse	hàtɲyū·ča
popper (in cooking)	thwōβi
poppy	hàŋqtúr, hàŋqtú·r
California yellow poppy; (Prn)	hàntú·ra, hàŋqtūra
gold poppy	hàntú·r
pop up	βhwō·βi
porch: extend	?wàshēlβi
porcupine	kə(h)tāta, kt ^h āta
pot	swă
potato < <u>papa</u>	pá·pa
pottery is broken	màtθīwa θk ^v āyβi
pound v.	(s)péqi; tú ₂ ; mq ^w āni
pounding stone	ktú
pour	tpóqi; čyâ:, č ^h ā:
pour on	čáčā·či, cāmčā·či
prairie	màtqəq ^w āra
prairie dog	tqsí
pray	kβá:βi
pray to God	myā·(k) kβá:βm?è
preacher	pà·kk ^w á:wo
precipice	wì·skčī·βi
precipitous	??ī:li
pregnant	tíβi

Pln: Prescott	pēska
Prescott: brown rock	?wī:kʷáθa ksíkīta
(granite) pointing into water	
preserve bread	myál twpū·βi
preserve food	kʷè·máβa twpú:βi
prickly pear cactus	hté
prickly pear fruit	(?)láβa
prickly poppy	(?)mltāt
prominent person	pà: mú·lβa
proper	βlwí
Prn given to one too lazy to walk	khērβa
Prn. Yavapai culture hero	skâraḡ?āmča
proud	?âr?ú·yi, ?r?ūyi
puddle	?há·βč yó:km
pull	syūmi, syūmi, syômi, syô·mi
pulled out	khlūwiβa
pulverize	tmqʷâ:ni
pumpkin	hàmtē
purify with smoke	hʷā(·)yi
push	čkvé·, čké·, čkē·
put	čī·; čkʷá
put (lay) it into water!	há·ya·l mčí·
she puts it away	?yé? čkʷâ:mah nū· (G.N.)
put arm around	sklpūyi, skrpūyi

put away	pú; čē· (SEY)
put down	čyô·, čwô·
put (set) it into water!	hã·yá·l mčó
put into	θčúr?i
put on ground (rug)	sčá:βi, ččá:βi
put on top	čá·hk čkwā·yi
put out	tmáči
put up	sčá

q

quail	?hmá
quake	?ín?ín
quick	wíłβi
be quick	β?ō·q...i
quiet	tní·βi, ktrī·βa
quiet! (interjection)	no, tū·?no
quiver n.	pàk·īrβčkwāyi
quiver v.	βlīwlīw?i

r

raccoon	nmâθ (a), nmāθ
radio	màthāym ?kwá:wi; màthāym swā·ri
raid	hʷà(·)čpā·
rain	kìβáwa
rainbow	kʷàsòčáča
raise (one's voice)	θpí:ri
rake	čmā·li v., tčmā:li v.; čmā:li n.
ramada	?wà.shyálβa
mountain range	wì·k?ā·mβa
rape	?lwē·nùm
rattle	βhá:, háč(·)i
rattles (snake)	βhá·?iča
snake rattles	?lwì.βhá·?iča
rawhide	qʷáktəyú·l
reach	čpé
read	sí, síβi, sí·βi, sí:βi
real	?hāni
really → rich; much	qyāti
recline	yáki
rectangular	yàlyál
red	(?)hʷáti; kʷàlsé(·)
red dirt	màt?hʷāta
red clay	(?)kʷára

reddish	kʷá1 ₂
red or fire ant	čmyúl
reed	?htá, ?t ^h á
reins	?hát syōmi, syó·mi
relative	tyúči, tyú·či
remove	ló(·)qi
repair	i(·)hā(·)ni
repeatedly scratching	?č?čθú·li
responsible	yà...pá(·βi)
you are responsible	mātβa yà·mpá:βk
for the earth	
rest	tní·βi; twī·mi
restaurant	?čmǎčò
revenge	čhāri
rib	čβsó·, čwsó· (SEY)
rich	pà·?čkwí·ya
rich person	pà·qyâta
ridge	k?āmβa; wì·km?érβa;
ridge of rocks	wì·čàlčá·l?e; wì·čàlčá·lle
rifle	kqʷáθ, qqʷâθ
right	k?hāna; βlwí
right hand	sàlk?hāni
right side	sàlk?hāni, sàlkhána, sàlkhānō
get on the right side	sàlkhānō mčkpā·
ring	sàltaḥkǎβi
rip	títi

rip cloth	pú·
ripe	má
ripened and dried by the sun	?àmanā
it ripples	βh ^w irh ^w ir ?īmi
rise (bread)	βh ^w ō·βi
rise (sun)	β?áli
rises	myá:yi
river	?hàk?āma, (?)hà(k)hě(·)la
river narrows	?hàhēla ktkūpa
road	?pá
road runner	tlpū
toast	síl?i, silli
rock n.	?wī·
light rock	wì·θk ^w āya
many rocks	wì·čkô·li
rock for building	wì·kāča
Prescott: brown rock (granite) pointing into water	?wī:k ^w áθa ksík?īta
ridge of rocks	wì·k?āmba
rock v.	qōri
rock back and forth	kà·rkká·rk
rocking chair: back and forth	?ì·way kà·rkkâ·rk?íčá
rock music: make instru- ment cry	?k ^h wāmīwo

roll v.t.	tmkʷiri
rolled up	kʷirβa
rolled up: cigarette	mkʷirβi
roll-your-own's	ʔú:βa ʔhmāli yō·ča
roll call	pà·ʔsī·tk
roof	čā·hè, čá·hè
rooster's sound	kakāra
root	ʔʔi·msmā·, cf. sinew, sleep, msmá: cf. medicine
rope n.	snáβa
rope v.	snāβa nyá·ki
rope made of cowhide	yū·l
rough sides (Pln)	kʔíla
round	klʔúlki, qrʔúrqi
round → beads	kʔúlki
round, bowl-like back	čəātβi
round (marbles)	qčʔóri
round (watermelon)	qčʔō·li
rub (an arm)	thànhā·ni
rub back and forth	hqīsqí·s
rub hard against	qīrqīri
rub in circles	čmàrmàri
rub straight	čyùti, ččyù·ti
ruler	hwà:lrāpa ččβliyi < lwí
run	βyāmi
fast person running	pà·(?)rāwa
it's rusty	nikwâyk ʔhwāti

sack	?hmál
sacred	sà?hāni; sà?rīyi, sà·?rī(yi)
sad	mòlyîβi, mòl?èyîβi, mòl?è...yí·
ocotillo: sad plant	?ì·kmī·yi, ?ì·kmyē·
saddle	čàčkwá·yi, čàčkwáya
saddle blanket	čpé·βi čàčkwā·yi
saguaro (cactus)	??ā
said by younger children to older ones (SEY)	?nō· (sg.), ?nô·ča (pl.)
salt	?θí·
Salt River	?hàka(?)nàča
salty	?θī·yi; θ?ēli, t?ēli
same	βlwí·βi
same, cf. right	nùβlwī
sand	(?)hàčwā
sand sinking to the bottom	hàčwá·nč hàyá·l yómkm
sandals	nhpò.kyû·la
San Francisco Peaks	wì:mún.kwá
sap	nāya
sated	tó·, čskwá
satisfied	kpâ·rβa
say	?í(·), ??í (I say), mí (you say), ?í (one says)

I'm just saying that	tú· yá ??ím
say it!	mí·ha
say it again!	mīyì
say yes!	?ē·mī
scalp n.	qwáwa
scar	myáya
scared	βerī...i
scatter	čwá·qi; čwá·wi
scissors	k ^h wàčmṛāyi (G.M.); k ^h wàčβṛāyi (W.G.)
scold	wà...mī·
scoop	hnú, hnó; h ^w ári
scoop out	hnú; hlúyi
scooped-out white: Pln	sàβkhlúyβa
scoop up	nē·
scorpion: out of shape	nīs.tkwálka, nì·s.tkwālka
scout	màtβó
scout < Spanish <u>soldado</u>	sultá:βa, sultá:wa (SEY)
scrape	i·khí; háθβi
scrape (hair off deerskin)	swī
scratch, cf. itch	(t)tmó·
scream for help	βqlá·, βqlā·qlā·?i
search	h ^w á·li, wá·li
blue-green seashell	hàlkrâ:pa
seashore	hàtáya kyáka
season	hwā·hm
seat	wáyi

one second	ɲà·tkāβka wɪlβk ʔsí·ti
see	ʔú·
I see a man	pà·hmí ʔʔú·(kʔyùm) (W.G.)
I saw him	ɲθáʔ ʔʔú·kʔyùɲ (W.G.)
seed	yáč
sell	saʔā·ri
semen	(β)ɲɲé·; ɲɲáya
send away	čyā·mi
send toward speaker	čyú·wi
separate (nuts from leaves)	hàmθī
separate seed	čβú·yi
sermon	pà·kwá:wo
set (sun)	ró·pi
set down	čyó, čwó
settle	ɲmāti
settle, settled	tɲí·βi
settle (as coffee grounds)	θhʷíla
sew	βnāmi, βná·m...ì; ʔčskʷíli
shadow	ʔsé, ʔsá·ya; tkβsá(·)
shake	čʔínʔí·ni, ʔínʔín
shake (a blanket)	čtiβtí·βi
shake to make something	wílwi·li
sit properly	
sharp	qʷíri
sharp; intelligent	pári
sharp, cracking noise	pàqpaq
shatter	θkʷā·yi, qʷāqi, kʷāki

shave	th ^w ári; čí·ri; háθβi
shawl	slām
shawl < <u>tápalo</u>	tā:plè
shed v.	θpí·li
sheep	?mú
shell v.	tpā; sh ^w á·ni
shield	kčβkō·βi; kkβkō·βi
shine	pá·; hàl+
shining	hàl?é
shirt	yúri
shoe	nhpō; nhpú
shoe a horse	?hát nhpōyo
shoe string	q ^w ákta yú·l
shoot	k ^v á·
shore	?hà.ktyûw(i)βa
opposite shore	?hà.hké·βa
short	čkróti
I am short	pač pà·čkrôtkm
shoulder (blade)	slmáka
shout	qāθi; βčár...ì, βčá·r...ì (at greater distance), βčá:r...ì (at even greater distance)
shovel	màtsapēyi n., màtsapé·yi v.; māt hnū v.; mātshyúki n.
I shovel	?māt ?hnū
shoves quickly	sqāmi

show	wíwò
come and show	myúwk mwī·wò
show v.t.	tʔū·βi (sg.), tʔū:βči (pl.)
shut	tʔámβa
shut eyes	θpáqβi
shut up!	mṛāθki
elder sibling	wāka (sg.), wá·ka (pl.)
sick	ʔčrǎβi
sickness	ʔčhnūβa, ʔčhnōβa
side	qnwī·
sides almost come together	wì·kṭkūpa
(at the) side of mountain	wì·hohā·hm
sift	čβû·yi; čθāčʔi; hāmsī, hāmθī
be silent	náθki
silver	wì·ṛmsāβa
sinew, cf. medicine, root	mśmá:, mįśmá·
sing	swá·ri
sink into the water	ʔhá·βl ró·pi
(elder) sister (man speaking)	čmsī
mother's younger sister	míra, nmī; nō·, nō·ča (pl.)
mother's older sister	wīsa (sg.), wī·sa (pl.)
sit	tṛē·βi; βná(·)ṛʔi; wá
I'm going to sit here	yák ʔwāha βnū·km, yák/ṛθák
	ʔwā ʔnū:
I'm just sitting here	tú· ʔsβóβk (ṛ)βák ʔwá·km
waiting	

many sitting	?wā?yó
situated (found in Plns)	kwá·ha
six, cf. lean	tspē, tspáya
skewer	s?ōni
skin	θpíla; má:t; nmiya
skirt	βhé
skirt of squaw dress	θčéqβa, tčéqβa
skull	pà·hū·
Skull Valley	pà·qwāwa kyō
skunk	kh ^w íwa; sǎkmāka, skmāka
sky	myā·.khtí·la
sleep	smá:, smá·
I want to go to sleep	?smā:?k ^w ál
sleeve	θurī:
slender	pòqβóq
long ago you were	tú· mpóqβóq qnimá·
slender	
slender (like a rope)	mēra
slide down	βhēr ^h ēr?i
slight rise in land	kpāpa
the slim one (Prn)	pà·kpōqβóqa
slippery	kkiski
slow	hiθú·li
small ditch	kčūlki; qyúrqi
(small) level field	tná·kβa
small opening	θβriya
a small person	pà·qé·či

smallpox	čh ^w āpi
(s)mash	sčyōqi
smear	čhāni
smear meat	q ^w ákta čhāni
smell v.i.	sáhi, šáhi
smell v.t.	h ^w í
smell like cold blood, grease, or wet hair	msíwi
smells bad	q ^w āēpi βmá:kwé·?i
smile	βčkwá:r...i
smoke	?òh ^w áya
smoke v.t.	tk ^w ári
they smoke a pipe	?mhlù·?ū·βa tk ^w árči
smoke hole	?òh ^w á(·)yč?ǎl?ó·; ?òh ^w àyyammó
smooth; naked	hàlwári
smooth cliff → Four Peaks	wì·kčāsa
smother	yá:βa twāmi
snake	?lwǐ
snapped shut	βtāβsik
sneeze	hamčíθki, hāmčī(·)θki
snore	smlōhi, smló·hi
he doesn't snore	ṛūč βkē smlōha ?ūmkm
snout, nasal mucus	hāmθí(:)la
snow	pákka
that is so	?ēmī
sock	ṛhṛō yá:l wīnβi
wear socks	ṛá·l wīnβi

soda	th ^w ɔ̄βi tmyū·li
soft	θū:nβi; hāmθī
soft: "when you touch it, it goes in"	βθk ^w á:mk ^w á:mʔi, βθk ^w á:mk ^w á·m...i
soften (buckskin)	k ^w ínči
soften ground	(?)ʔi·nū·, ʔʔi:nú·
soldier < Spanish <u>soldado</u>	sultá:βa, sultá:wa (SEY)
some other time	kàβyû·čm
something	ʔk ^w ē·
something dead (a lump from a bite)	βhmá(·)mkʔi
something which shoots → gun, rifle	hpú
son	humē (sg.), hučmāya (pl.), homé·ča (pl.)
son (man speaking)	naʔkōra, ʔkúra, kórʔè? (vocative)
son's child	ʔāwa (sg.), ʔâ·wa (pl.)
father's brother's son	mī·ka
soon	ʔi·nka
sore n.	lē·qβa
my read end is sore	klmā: lē·qβi, cf. klmē:
be sorrowful	wàmyē·
sorry	mòlyiβi, mòlʔèyiβi, mól ʔè...yí·
sotol, cf. poppy	ʔqñū·ra
soul	syàpê·βi

soup	qwākta ṛhāya
soupy (thick liquid with something in it)	lī·pi, lī:pi
sour	θ?ēli, t?ēli
sour → orange	θ?ēla
source	hápáqa
sow seed	?kʷè·yáč hʷáli
sparks from lightning	βràβráβ?i, wráβi
speak	kwā·wi, kʷāwi
he's speaking un-pleasantly	hnū·βo kwā·wkm
you (pl.) may speak.	māčβči mkwá:wča (W.G.)
it's your turn to speak.	
speak angrily	kwá·w hnū(km)
are you (dual) speaking?	mčkwà:wβé
spend	wí·ri
spicy	tē·qi; ?hā·, ?hā:ki
spider	nī·sa, nī(:)s?sa (G.M.); màtkwē· (W.G.)
spinal column	silôka
spine	hitát (G.M.), hi·t ^h át (W.G.)
spinning	kʷirkʷír
spirit	myé, míyi
spit	čtúhi, hàčtúhi
splash	cámčāki
spleen	čmwá·θa

split	tká·βi; čipā, čp ^h ā; sčáqi
split open v.i.	táqβi
spoiling	tʔéli
spoon	k ^{hw} àčāyi; k ^{hw} àčmāyi
spot v.	sūri
spotted	nú(·)ri
spotless	tθāmi
spread	tīθi
spreading	yàryár
spring	hàpáqa
hot springs	hàkmwé·
springtime	mwé·mi, mwé·mʔi
spring up	βrī·tʔi, βrīti
sprinkle	čàčā·či, čám sū·si
sprout	pāqi, tpāqi; čpā, čpā·
spurs: little kicks	ʔhàtqqāmi
spy n.	màtβó
squash	sčyōqi v., léqi v.
squash v.	hamtē
squeak, squeal	tsìtsí
squeeze	θk ^w ī·
squint	θβrīrβi
squirrel	hmīra
squirt	βsū·sβi ʔī·wo
I'm squirting something	βsū·sβi ʔī·wo
squirted on	čàčāčʔi
stab, cf. shove	βqāmi

stacked: on top of one another → book (pages)	hičhič
stagnant	hpú ₂
stagnant: not flowing	?há:nč βkè hé·la ?úmkm
stand object against	pémi
stand up	βsk ^w í(·)
stand up	tkē·βi
star	hàm(m)sī·
stay	howā·βk
stay overnight	smāmi
steal	kčī:či, kčī·čβi
steam	muθāya
steep	??ī:li
stem (on pipe)	k?īr?īra
step down	kčí
step into (trousers)	mk ^v ú·li, mkyú·li
step it up!	mkčīči myā·mi
step on	čákčī, čakčé, čakčīči; ččá·yi
stick v.	pá
stick in	sčúlβa
stick out tongue	lē·kò(·)
sticks up	sê·lβi
sticky	qê(·), qāya
it's sticky	βqêqê?ī
still	póqi; t ⁿ í·βi
still (water)	q ^w íni

sting v.	sá
stinger	pà·sāyi
stingy	wà...hāβi, čwàhāβa
stink	sáhi, šáhi
stink bug	čknāna, čqnāna
stir	sq ^w ár?i; swáni
stirred up (+ diarrhea)	sq ^w ár?i, sq ^w á:r(?)i
stirrups	knī·li
stomach	thkō·, tk ^h ō·, takō·; βnúna (W.G.), mnû(·)na (G.M.)
stop!	t?īni; ?i?, ?ī (interjection)
stop it!	mt?īni
stop up	t?āmi
store	?čkhē:βčò; sa?â(·)ra
storm: wind is strong	màthā·yč θipīrβi
story	?k ^w è·knâ·βča
straight	čmìrmīri, mìrmīri
straightedge	hwà:lrāpa ččβlīyi < lwí
straight line	kqī(·)βa
stranger	?pà·hkâ:ya (G.M.), pà·hkāya, pâ:k ^h âya (W.G.)
stream	(?)hà(k)hě(·)la
strengthen	θpí·rβi, θipí:rβi
stretch v.	k ^w īwi
strike	(pà·)pēqi; ?â·βi
strike with a club	??ī:βm pà· ?ā:βči, ??ī:βm pà·?ā:βči

strike	h ^w àyā·
enemy strikes	čh ^w á·βč h ^w àyá·wi
string	?ú·li
striped skunk	sək ^m āka, sk ^m āka
strong	θpíri, θipí:rβi, θpí:rβi
he's strong	θpī·rβkm, nθáč pà·θipī·rβč yùm
they are strong	nθáčβč pà·θipī:rβč yùčm
stubborn, going one's own way, like a bouncing ball	tólka
stupid	k ^w è·spó ?úmi
stutter (cannot speak)	kwā·w ?wāri
suck	číci; čθpáli ₂
suck blood	čθēqi
sugar	myú(·)la
commit suicide	nēhβi
summer	(?)nà·(?)rū·yi, ?nà: ?rūyi, ?nā·βm ?rū·yi, nà: ?rú·yi
summit	wi·kt?ōrβa
sun	?nā: (G.M.), ?nā· (W.G.), ?nā· (G.N.)
sun is shining	nā·č pā:, (?)nā(·)č pā(·)
one is burnt by the sun	?nā:βm pīli
sunlight	nā·č pā
sun-up	?nā·č?āli
sun rising	nà:β?ālkì
east: sun comes out	nā·č?ālò·

watch, clock: sun	nà:βtâθtâ?iĉa
ticking	
sun rises slowly	nā·(ĉ)β?â:li
sun is hot	nâ:βĉ ?rū·yi
day: sun sits	nā:wâ
sundown	nâ·mârβi, nâ·βmârβi; ?nâ·rôpi
Sunday	?wâ.s?âmi
sunflower	(?)qâta
Superstition Mountain	wî·kĉsâwa
surprised	βθrī·?iĉi
jump in surprise	βθrīy?i
survey	ĉĉβlī·ĉi
surveyor	?mâtĉĉβlī·ĉa
suspect	θirī·
I suspect	nŋú ?θirī·km
suspended (fig.) → pleasant	yâ·swârβi
swaddled	kʷârβĉkm
swallow	nâlqi
soap swallower	?βò·n ĉnâ·lqa
swallow water	?hâ nâlq?ó
swap	tìβahkē·βi
swarm of bees	θmpò·k?ūlka
swayback	wâθēqma
sweat	n?ó
I'm sweating	n?òkkʷá
sweep	sĉī
sweet	myú:li

sweeten	tmyū·li
sweet mixture	thlɪ(·)βa
swell	?ā·li
swell up	βhmá(·)mkʔi, β(h)má(·)mkʔi
swim	?hà...θpú·yi, ?hàčá:βk yáki, ?hàčá·βk yáki
many swim	pà·lá·wk ?hàθpū:yi
swing	čwāyi, čwá(·)yβi; qōri
swing in hand	hʷi·si
swollen	?ā·li
sycamore	?i·tá·sa

t

table	kʷè·shyâra; ??i·shyārβa
the bread is on the table	??i·shyārβa myāla čā·nk wākm
tail	βhē
take	yó ₃
take apart	nî·mi
takes apart and throws away	nî·mk yûk wīmi
take apart (in order to do again)	spūmi
take the bad away from me!	kʷè·qʌēβha pà·mtyē·mo
take care	hʷī·sβi
take care of	wē
take off your clothes!	mwīβi mhrūyi
take out	oʔāli
take out (many horses)	čβlwâ·qi
talk	kwâ·wi, kwā·wi
tall	hmí
tall, slender person	pà·kʷú·lk pōqpōqʔi
tame	ihā·ni; plē·mi, plē:mi
taraiso	čmhó(·)βa
tarantula	mpū·klʔūt
tasteless (like water)	θâ·mi
tasty	mṛē, mṛāya

legs are taut	snāβa kβhnāβk nāli
teach by doing	wíwo
teach by saying	?íwò
I'm teaching him to	kwā·w ??íwòk
speak	
tear v.	títi
tease	čr?ū·yi
teddybear cholla	hū·?úli
tell	kná·βi
temple (part of face)	qnwī·
ten	βwá:βi
tender (body, corn)	β(ə)hā:wi
tent	kskē·βa ?wâ
termite	?òmčāq
testicles	hmá, hmá·, hamá:, hmá·ya, wəhmā (SEY)
thankful	r...yē(·)
thank you	?àrə?yê·km
we thank you	?àrə?yá:ikm
Thanksgiving	?yá·s θōiči kwā·hm
that	nθá-; nú-
that's all for now	nβlwīθm ?nō ?píra
that is so	nùβyú·
that one	nnú-
it's that way, that's the	nùβyū
way it is	
there	nβé?; nβúk; nθál, θál, hál

over there	ɾθē? (G.M.), ɾul (ɾ)βé?
the one over there	ɾwē?
thermos bottle	hàčáyí
they (pronoun)	ɾθáčβ-
thick	tīni; ??ē, ??áyí (pl.)
thick feet	mītína
thief	?čkčīčβa
thigh	hi·wíl
thin	θēqi
thing	kʷé·ɾò
thingamajig	?kʷé·yi
think	wà...sī·βi, cf. count, read; θrī; nâsi
third-born	pà·βàkπέβk
thirsty	yà(·)krú(·)mpî, héβmpî (SEY)
are you thirsty?	yàmrūβē?
this	βyá-; ɾβá-
thorn	tát
thorny	?tát ^h a
thousand	θâ(·)wβa
thrash	tkʷāni
thread < <u>hilo</u>	??í:la
three	hmúki
throat	ɾàlqčô·
throw away	wīmi
throw down (a log)	hʷíلمي
throw	tâ·βk < tâhβk

throw toward speaker	táhki
throw from speaker	táhmi
throwing out rays	qʷàəpü· ?íkí
thrown away + garbage	βčāmʔè
thumb	sàlkʂtē·, sàlkotē· (SEY)
Thumb Butte	wi:kyànyána
thunder sounds	βʔū·k, βʔū:βʔū:ʔík, βʔū·ʔū·lk
tick n.	hàtmāča
tickle	qòčqóčča, qòčqóč čā
tickles v.i.	ə̀uriə̀u·ri
tie	tíri; čəpáli ₁ , kəpáli, qəpáli
tie around an object	klkvōβi
tie around → jail	klkvōyi
tie up	kəpálβi, qəpálβi
tight	kβháβi
tighten	kβhnāβi, kβnāβi; snáβi
till	(màt)ṛū·
time, season	kwā·hm
time moves	hihûli
what time is it?	ṛā:kəβlwī yi
tire n, cf. walk	βōyi
tired	tláhβi, βláhʔi; βpí·
I'm tired	βláhəʔi
he's tired	ṛṛūč βpī(·)km
he's tired from chopping	ṛṛūč ʔčkvátk βpī·km
wood	
toast: browned bread	myàltaʔkʷā·əβa

tobacco	ʔū:βa
today	(?)nÁ:βm
it's cold today	nÁ:βm mûni
it's hot today	nā:βm ʔrū·yi
give us bread today	nÁ:βm myāla pà·mʔē
toe	mihθá·ča, mihθī:ča (pl.)
toes: small things sticking out	miksâ·rβa
tomato < <u>tomate</u>	tomá·ta
tombstone	pá·pí spúk wó(k) sčá:βa
tomorrow	nyē·k kθó, yē·kòw
tongue	himpāl (G.M.), hipāl (W.G.)
tonight	kīhipā:čm
Tonto: dirty-eyed enemy	ʔhʷáyò.qāya
too much	tkʷílβi
tooth	yó· ₄
top	tʔórβa; čā·hè; hórβa
hilltop	màthō·rβa, màthōrhōra
big, flat top	yàlyál, yàlʔyál
on top	čá·ʔhe, čá:βk, čá:hk, čá·pe
handkerchief on top: John Charger (folk etymology)	ʔpáŋ čàčā·či
put on top	čá·hk čkwā·yi
water thrown on top	ʔhàkča·čβa
tortilla	myà(·)lčráprá·pa
touch	tpáθi

toward	yími
he's going toward it	ɲθá yīm̩k yá·mk
toy	kʷè·rē, ?kʷèrāya
trachea	mlqīɲ màthāy yá·m?ō
track	yūwò
track v.	misī
small trail	ɲà·krūyrūya
trail v.	misī
transparent	sōlsōli
transplant	kʷyūčk hʷáli
→ transplant, checkers	thíɲi
move around	
trap	?óni; s?ōni
trash	kʷè·qlvá·yβa βčám?e
tree	?wíla, ?iwíla; ??í·
branch: comes away from	?i:tβkʷála
tree	
tribe	?wáčmīča
tripe	thkō· (G.M.), tk ^h ō· (W.G.), tako· (G.N.)
trot	βmōrmōr?i
trousers	mikʷúl, mkʷúl, mkyúl
turkey	?yá·s
turn (car, horse) in motion	sihʷī:ni
turn food in pan	skʷāyi
turn off	tmáči
turn off (appliance)	skʷi(·)ni

turn it off!	msk ^w ink mtmāč̣i
turn over	tih ^w ini
turned over	tih ^w inβi
turquoise	khàβsū(w)a
turtle	kpít
twilight: ground becomes visible	mátč̣ β?ū·β?i, mātč̣ β?ú·βi
twined	k ^w írβa
two	hwáki
two men	pà·hmí·βm hh ^w áki, pà·hmí·βm ?h ^w áki
two go	(a)pē·mi, (a-)pē·mi
two to four in the after- noon	nà·βyū·si
two people passing across (Prn m.)	ktkā(·)ma, ktkā:ma

u

ugh!	ʔlá? (interjection)
ugly person	tū· pà·lā·yi
uncertain	tūya, tū·yi
uncover	čq ^w āti
under	yá·l
understand	yà...?ē(·)βi
undo	ló(·)qi
unfold	h ^w írβi
unsure	tūya, tū·yi
untamed	wàsīβi
untie	hrú(·)yi
upper back	sàlmâka
upstream	myá·l
urinate	θŭči
urine	θû·ča
use v.	tú· nyú·č(o)k
use up	wí·ri

vagina	wé
valley	màtčkmī·ya
vegetable	?kʷè·hʷál.kmáča
vein	hʷàt.kθūra
Verde Valley	màt.kʷāmβaha
very	tū·; qyāti
very far	kūrm
very lovely	?èyî·βi
very much	qyāti
very round → butte, mesa	yànyán
village	wàyâma
vinagrillo (plant species)	hmaŋ.kyō
violin: rub back and forth	hqīsqí·s, kʷè·hqīshqís(?)ča
virgin	hčāŋ, hčā:ra (pl.) (G.M.), hčă·ra (pl.) (W.G.)
visceral sack	mnûna wâyi
become visible	β?ú·βi
visit	wà?âmi (sg.), wà?âmči (pl.)
vomit	yóqi

w

wag	riwriw
wagon	??i·βóča
wait	sβó
wait for me!	msβōka
I'm just sitting here	tú· ?sβóβk (n)βák ?wâ·km
waiting	
wait!	?i·nka; nō, tū· ?nō
walk	βó·
I was walking	tú· ?βó·km
I got here walking	tú· ?βó·k ?βá·km
walking stick (insect)	(?)čh ^w à.kknā·ma
wall	wàksčìβa
walnut	čūrka
walnut spreading: Pln	čūrka kayā1βa
want	-í:/yí·, ?í·, yí·, -k wàl...yí·, k ^w àl...yí·; hná:qi
I want to eat	k ^w è· ?θōk ^w àl ?ikm, k ^w è·?θók wàl?í·km
do you want to eat?	k ^w è·mθōk wàlmí·yé?
I want money	wī· ?hná:qi
war	?čh ^w á, ?čh ^w ā·yi
warrior	pà·(h)čh ^w â
(war) bonnet	pūraksē·1βa
warm	mwé
wash	čθú(·)li

wash repeatedly	ʔčʔčóú·li
wash oneself	ʔháθpǔ·yi
wash + spotless	tθkʷí·li
watch: "sun ticking"	nà:βtáθtáθʔīčá
water	ʔhā
Montezuma Well: water	ʔhàkθkʷáyβa
broken up	
water coming out	ʔhàčʔáalka
water thrown on top	ʔhàkčá·čβa
bubbling water (Pln)	ʔhàkyā·ča
crk. near Miller	
Valley	
good water	ʔhàʔhána
gray water	ʔhàpmθáβa
ocean: much water lying	ʔhàʔtáya kyâk
salty water	ʔhàkʔθí·
shallow water	ʔhàhtī:ri
still water	ʔhàqʷini, ʔhàʔqʷini
still-water ditch	ʔhàsqí·ri
the water is clear	ʔhá:βč sólsóli
the water is deep	ʔhá(·βč) ʔʔé
the water isn't deep	háʔʔé ʔúmi
the water is dirty	ʔhá:βč ʔmáti
the water is muddy	ʔhá·n qnú·km
the water is placid	ʔhá·n tú·θwé·km
water recedes	ʔhàrú·βkm

the water reflects, cf.	?há·nč hálwárkm, ?há·nč
smooth	hálwári
water ripples	?há·βč māk1 βh ^w írβh ^w írβa ?ími
the water rises	?há·βč myá·yekm
water is stagnant	?hàwáyí
I drink water	?há ?θí:, ?há ?θí·
drink water!	(?)hà mθí(·)
body of water	?hàhpǔ
Date Creek Tolkapayas:	?há:há·βk ksčúlβa ?pá·ča
cottonwood sticking	
in the water	
dip in water	hànē·ka
float; swim (lie on	?hàčá:βk yáki, ?hàčá·βk yáki
top of the water)	
jump into the water	?há·l βčópuk k?ími
land of water (Pln)	?hàkmáta
put (lay) it into water!	há·yá·l mčí·
put (set) it into water!	há·yá·l mčó
sink into the water	?há·βl ró·pi
Chinese: speaking in	hàlkwâwa
water	
water's edge	?hàktyúw(i)βa
waterfall: flowing	?hàhòlhòl?íča
downward	
watermelon	?čkmtú
waterpot	?hàčâyí; swâ·; hmát

watersnake, cf. mēra	hànmē(·)ra
slender	
wave v. → flag	sʔōnča
we (multiple plural)	náčβ-
we (two) go away	(?)nāč ʔapē·mi
we got here	ʔi·kéθwi
weak	θū:nβi
wear clothes	wí·βi, ʔkʷé·βm wí·βi, (?)kʷè:wí·βi
wear socks	nā·l wínβi
weather is nice, no wind (breeze)	màthāya pé·mi ʔhāni
weave	púβi; kwí·
weeds sprout out	ʔiwīl tpáqi
weed v.	(?)ʔi·nū·, ʔʔi:nú·
weed out	ʔiwīl lū·βi
one week < <u>domingo</u>	tù·mīnka ʔsíti, tú· mīnka ʔsí·ti
weigh	sháβi
he weighs a lot	nūč tū·nmm nōk shāβkm
well n.	ʔhàhʷálβa, hàhʷálβa
well-done	má
west	nà·rô(·)pò
Western Yavapai	tòlkʔpáya, tùlkʔpáya
be wet	púli
wetten	tpūli
what?	káβ; hʷiʔi

what did you see?	kʷéβθa mʔū·ʔ
whatever may happen	hàpēya
whatever you say	kʷé·kàβyūča kàβnmīwa
what time is it?	nā: kàβlwīyi
wheel	mpára
wheel, cf. walk	βōyi
when	...kθó(·)
when?	kànyúmē?
where	βkéʔ; kāβ kū·čk(?)è (SEY)
which?	kʷéβθa, (?)kʷé·θ
whine	βqanā·k
whinnies	hāhāʔi
whip n.	qʷākta yū·l ʔhāt sāqi
whip	séqi
whipper (Prn. m.)	wàséqma
whirlwind	màthikʷīra
whiskey	(?)hàráβa
whistle	čihūhi
white	(n)msáβi
whiten	tmsá·βi
white clay or dirt	màthē:
white oak	tník
who?	βká
the whole body	mā:t hiθkyētk
my whole body	naʔmā:t ʔiθyē·tk, nàʔmā:t ʔiθkyētk
whooping cough	ʔòhβsē·rʔiča

why?	kaβyúm(?)ē?
wickiup	(?)wàmpūrβa
wide	čká·mi; θk ^w á·βi
wide area	mátk čkā·mi; mátk čká:ma
wide earth	màtkī(·)la
wide-spread	màtkhθī:la
widow	?sá, ?sáyi
wife	lwá
wife's father	βlhē nī·
wife's mother	qm ^w í·rma nī·
wild	wàsīβi
wild boar	θiwθí·wa (SEY), mh ^w à·ksutáta ?q ^w ārkpáya
willow	?yó:, ?yó·
win	tk ^w í:li; hi·pínβi
wind n.	màt(:)háya, màthá:ya, màthāya
wind is breezy	màthāy yū·si
wind is howling	màthā·yč yá:wi
wind is still	màthā·yč q ^w íni
storm: wind is strong	màthā·yč θipīrβi
wind goes X	màthāyč β?ú:k
wind's sound	β?ú:k
windy	màthē
weather is nice, no wind	màthāya pé·mi ?hāni
window: metal, like water	(?)k ^h wà sùlsūla ?hàθí·ya, (?)k ^h wà sùlsōla ?hàθí·yi

wine	?hà?hwáta
wing	wála
wink	βmāč(β)...i; θpáqβi
winter	?č ^h ú·ri
witch doctor	pà·tpúyi
without ambition	θú:lβi
wolf	(?)hàt(?)k ^w īla
woman	βqī (sg.), pqī (sg.), βqū·ya (pl.), pqū·ya (pl.); msī
wonderful	wàypê·mβi
wood	??í·
gather wood	??ī· tkāββi
they light the wood	??ī: tq ^w ātōi
hit with wood	?ì·pà·?āβi
firewood	??ì:tq ^w ātča
greasewood	?imθí(·)
kindling wood	?ì·θmāqa
wooden chair	?ì·wāyi
wooden cross	??ì·ksīβa hwé·βa
wood rattle	??ī·tâpstâps?īča, ??ì·tâpstâps?īča
wood rat	(?)mālka
work < <u>trabajar</u>	thàrhā·r?i
world	mátk kčká:ma, mátk čká:ma, mátk čkā·mi
worm	??ì·la, ??ī:la
worn out	nkwāyi (W.G.), nkwāyi (G.M.)

wrap	tmk ^w iri
wrestle	čik ^w f·θβi
wring (out)	θk ^w i·
wrinkled	?k ^w îpa, θk ^w îpi
wrist	θβrī·; sàlqrwí:sò (SEY)
write	tnú(·)ri

y

Yaqui	yá·ke
yard: around the house	?wá ?wyá:wò
Yavapai	yàβ?pé, yàβ(?)páya
yawn v., cf. gallop	βčákwā·k?i?i
year	?č ^h úra
yeast	thwó·βi
yell	βčár...ì, βčá·ri (yell at greater distance), βčá:ri (yell at even greater distance)
yellow, cf. brown	(?)qwáθa
yellow palo verde	čmkwīla
California yellow poppy	hàntú·ra, hàṅqtūra
(Prn)	
yes	?ê?
yesterday	(?)nâ:hm
yesterday (SEY)	tne·
yonder	núl (n)βê?
you	má:-, má·-
young	hiβmû
younger cousin	kina (sg.), knā· (sg.), kí·na (pl.)
younger sibling	kêla (sg.), ké·la (pl.)
yucca	mnāt
yucca fruit	?nâβa tāβsa