

# INTRODUCTION

## 000. General Remarks

The dictionary presented in the following pages consists of two major divisions: a Klamath-English lexicon and an English-Klamath index.

In the Klamath-English portion the morphophonemic morph (whether of a mono- or a multi-allomorphic morpheme) is the basic unit of filing. Each morph is given in morphophonemic notation either with all relevant data (its class membership, meaning, examples, a list of any other morphs representing the same morpheme, plus whatever descriptive, cultural or etymological material the author was able to elicit), or else the entry may simply direct the reader to some other heading where this information will be found. Morphemic membership is thus indicated by cross-referencing and by a list of member morphs (i.e., morphophonemic allomorphs) under some arbitrarily chosen central heading. Main entries consist of one type of entity only, thus: the morphophonemic morph.

Examples given under main headings are of two types: (a) a morphophonemic "word" or construction of "words" with the corresponding representation in phonemic notation; or (b) an "example of usage," usually a complete utterance, in phonemic notation only. It may be noted that each example is thus a complete "word" or construction of "words"—there are no unfinished forms ending in hyphens, requiring a division into "stems" (or "themes," or "derivatives," etc.) versus "examples." Examples in the present work thus consist of two types of entities: morphophonemic "words" (or constructions of "words") with phonemic representations, and examples of utterances in phonemic notation only.

The English-Klamath section serves only as a semantic index to the Klamath-English lexicon. Each brief English gloss is followed either by a single Klamath morph in morphophonemic notation (i.e., a Klamath-English main entry), or else by a complete Klamath construction (either a "word" or a construction of "words"). Such constructions are also given only in morphophonemic notation and are followed by a reference to at least one constituent morph (a full morphemic analysis of each construction cannot be given for reasons of space.)

The following types of information have been specifically culled from the corpus and included in the dictionary:

- 1) Examples of verb forms with modal prefixes, intensive elements, locative-directive suffixes (though lack of space prevents a full listing of these for each stem), nominal forms, and occasional examples of aspectual and modal morphemes.
- 2) Noun forms with the distributive, diminutive, and augmentative affixes. Kinship nouns have been treated in greater detail, including possessive objective, verbal, and other affix forms wherever possible.
- 3) All compounds, kenning words, and such items as place names, personal names, basketry design elements, tribal names, cat's cradle figures, constellations, etc.
- 4) Fairly complete paradigms of the Pronouns, Demonstratives, Adjectives, and Locatives with frequent illustrative examples.
- 5) A larger number of utterances exemplifying the minor classes (Particles, Enclitics, Negatives, etc.). These have been taken from the Texts wherever possible and are given with Text references.
- 6) A few examples (usually between three and five) for each affix. Important affixes (e.g., the modal prefixes) have been more copiously illustrated.
- 7) Examples demonstrating the morphophonemic system outlined in Chapter Two of the Grammar. Where feasible, examples are given which will illustrate the reasons for the selection of a given morphophonemic notation for each morph.
- 8) Examples of "idioms." The term is used in a traditional sense to denote constructions having a semantic range radically different from their apparent one. This use of the term is necessarily quite impressionistic and serves more to draw the reader's attention to an interesting usage than to denote anything very precise.

The following types of information have been specifically omitted from the dictionary:

- 1) Almost ninety percent of the non-text utterances elicited during fieldwork.
- 2) Many verb forms containing instances of regular aspect and modal suffixes.
- 3) Noun forms with various regular affixes.
- 4) Intonation morphemes and juncture.
- 5) Interjections containing anomalous phonemic material, voice qualifiers, etc. These have been described in the Notes to the Texts.
- 6) Hesitation forms, uncompleted forms, and various dubious recordings for which no later clarification could be obtained.

## 010. The Klamath-English Section

## 011. Indentation

The unit of indentation in the Klamath-English section is approximately equal to four lower case letters.

As previously stated, main entries consist only of morphs in morpho-phonemic notation; these are not indented. A continuation under a main entry is indented one-third of the unit of indentation.

Examples are given both in morphophonemic and phonemic notation. They are indented one unit under each main entry heading and are ranked in rough alphabetical order. Where the morph of the main entry is also the first morph in each example further subrankings are required:

- 1) Sequences of the main entry morph plus different second-position morphs are ranked equally:

ab  
ac  
ad  
ae (etc.)

- 2) Sequences containing the same first two morphs plus some further morph or morphs are subranked in alphabetical order with the subranked forms being indented one further unit:

ab  
    abc  
    abd  
    abe  
    af (etc.)

- 3) In this way longer sequences sharing the same succession of morphs plus one or more different final morphs are subordinated under further subrankings:

ab  
    abc  
        abcd  
        abce  
            abcef  
    abg  
    ahi (etc.)

- 4) This pattern is broken to allow a closer grouping of certain useful morphological "sets": (a) Where two verb forms differ only in that one of them occurs with a modal prefix or with one of the two "intensives" {r} or {rr}, the complex form is indented two units under the simple form:

ab  
     qab  
     rab  
 ac (etc.)

(b) Where two Substantive or Residue forms differ only by the presence of the distributive, the diminutive, the augmentative, or a combination of the first with one of the latter two, the more complex form is likewise subranked two units under the simpler one:

ab  
     abx  
     aby  
 ac (etc.)

Note that these forms function also as examples and further examples may be subranked under them (e.g., a distributive-diminutive form may be subranked under a diminutive form and thus be indented two further units):

ab  
     abx  
         qabx  
         abxc  
 ad (etc.)

5) Continuations under any subranking are indented one-third of a unit.

Where the morph of the main entry is not the first morph in the example, a strict alphabetical ranking is observed (with certain exceptions to be noted below under Sec. 013):

ax  
 bx  
 cx (etc.)

Illustrative utterances ("examples of usage") are given in phonemic notation only and are indented three units beneath the example they are intended to illustrate:

ab  
     /...../.

## 012. Translations

Most translations of single forms are the author's abstractions from the raw data. Translations of longer items (e.g., place names) tend to be the informants' with some editing and rearranging by the author.

Translations of utterances (especially from the Texts) are mostly the informants', again with a certain amount of editing.

Literal translations are often supplied for kenning words, place names, proper names, cat's cradle figures, basketry design elements, etc. These are enclosed in quotation marks and are hyphenated to distinguish them from neighboring glosses and from the author's comments.

Verbal forms ending in {a} 23sv [indicative] have been translated by the English present tense. They could have been rendered equally well by the past tense.

As stated in Sec. 321 of the Grammar, verbal forms containing {re} 1pv [distributive] have a semantic range including distributive action upon a single object, single action upon distributive objects, or distributive action upon distributive objects. The meaning in any transitive verb is morphologically ambiguous but usually clear from context. With an intransitive verb {re} denotes distributive actors acting or a single actor acting distributively. All of these senses have been abbreviated in the dictionary to "d.": e.g., "d. run," "d. slay pl.," "d. eat," etc. The other possible meanings are understood.

Certain Klamath verb forms may be rendered in English either by transitive or intransitive glosses. ("Transitive" here indicates that the action is performed by an actor upon an object; "intransitive" includes "being in a state," "becoming or getting into a state," "acting under one's own volition," etc.) The difference is expressed by the presence or absence of a syntactic object in Klamath, by context, and by meaning. For example, <sup>v</sup>?aba·t̄na : /?aba·ta/ (literally "long-obj.-up-against-indicative") is rendered as "leans a long obj. against," "long obj. is up against," "long obj. goes up against," etc. There seems to be no over-all pattern to this phenomenon, some verb stems being translatable only as "transitive" (e.g., {lwel} 7Sv "kill pl."), others only as "intransitive" (e.g., {g<sup>v</sup>} 4S-v "go," {kci} 7S-v "crawl"), and a group (mainly "classificatory stems") which may be either "transitive" or "intransitive." Forms of the latter group are rendered as transitive, and the abbreviation "(intr. also)" is added at the end of the gloss.

### 013. Alphabetical Order

The order of the alphabet followed in the Klamath-English section is as follows:

e v ' ? a a b č č d d e e é g g h i i j k k l L í  
m M m̄ n N n̄ n o p p q q r r s t t w W w y Y y · ø

This order has been abrogated in the following cases:

- 1) Where the distributive, diminutive, augmentative (or a combination of the first with one of the latter two) have been placed directly beneath a simple noun (and indented two units; cf. Sec. 011).
- 2) Where forms containing a modal prefix ({re}, {se}, {hes}, {sne} and {s}) have been placed under a verb form and indented two units; cf. Sec. 011. Where no corresponding simple form is listed, forms containing these prefixes have been filed under the following stem rather than under the prefix.
- 3) Where forms containing one of the "intensive" morphemes {r} or {rr} have been placed under a corresponding simple form (and indented two units; cf. Sec. 011). Where no corresponding simple form is listed, {r} and {rr} have been ignored in the alphabeticization: e.g., č̣aryamna has been filed as though it were č̣ayamna.
- 4) Where examples containing one of the "intensive" morphemes {rér} or {ré·r} have been alphabetically listed under the following stem rather than under r. E.g., rérrábka before rábka.
- 5) Where a nominative form has been placed under a Substantive main entry first for clarity's sake: e.g., bloksyb "grandfather" before blokša "grandfather [o]."

#### 014. Sources

Three of the sources listed in the short bibliography accompanying the Grammar have been quoted often enough to require abbreviation:

- 1) Barrett for: Barrett, Samuel A., "The Material Culture of the Klamath Lake and Modoc Indians of Northeastern California and Southern Oregon," University of California Publications in American Archaeology and Ethnology, vol. 5, no. 4, 1910.
- 2) Gatschet for: Gatschet, Albert Samuel, "The Klamath Indians of Southwestern Oregon," Contributions to North American Ethnology, vol. II, pts. 1 and 2, Washington, 1890.
- 3) Spier for: Spier, Leslie, "Klamath Ethnography," University of California Publications in American Archaeology and Ethnology, vol. 30, Berkeley, 1930.

Other sources are indicated only by the author's name and the date of publication: e.g., Curtin, 1912 for: Curtin, Jeremiah, "Myths of the Modocs," Boston, 1912. A Klamath bibliography is included with the Grammar.

## 015. Identification of Plants and Animals

The author has had to depend mainly upon previous researchers for what little animal and plant taxonomy he has included in the dictionary. Some plant identification was carried out with the help of a local botanist (the author borrowed this kind person's identified collection of local plant specimens and had Mrs. Lizzie Kirk identify them in Klamath). However, the majority of plant and animal names included in the dictionary are from Gatschet (1890), Coville (1897 and 1902), and Spier (1930). The author himself admits to almost no knowledge of biological taxonomy and thus must depend upon these sources almost entirely. When the sources differ over what seems to be the same animal or plant, the author can do no more than to quote both (or even all three!).

## 020. The English-Klamath Section

It is not necessary to add much to the brief description of this section given above in Sec. 000: a brief index to the Klamath-English section, directing the reader either to (a) a main Klamath entry under which a given gloss may be found, or (b) to a construction of Klamath morphs with at least one component stem morph identified. All Klamath items are given in morphophonemic notation only (with one exception: see under "eclipse"), and an abbreviated identification of the class of each main entry morph is also given.

## 021. Translations

English glosses have been given in verbal form only for many Klamath items which may occur either with nominal or verbal affixes (similar, semantically, to that English class containing items that function both as nouns and verbs, such as "fish," "rain," etc. Thus, under the English entry "thunder, to" one finds *lmen*, and under this main entry in the Klamath-English section one finds forms like *lmena* : /lmena/ "thunders" and *lmenys* : /lmeys/ "thunder." Where the English noun and verb differ in form, however, both have been listed: e.g., "clothe" and "clothing," "shady, be" and "shadow." At times it has been necessary to construct an English verbal form to cover the Klamath meaning, and the expected English noun form will be found there: e.g., "shirt, wear."

## 030. Abbreviations and Symbols

The following abbreviations and symbols have been employed in this dictionary:

cf.	compare
d.	distributive. See Sec. 012 above.
<u>idiom</u>	idiom. See Sec. 000 above.
(intr. also)	Intransitive also. See Sec. 012 above.
[n]	nominative
[o]	objective
obj.	object
objs.	objects
pl.	plural
Sec.	Section
sg.	singular
sle	see last entry
sne	see next entry
sp.	species
spp.	species (pl.)
[. . .]	Glosses which are technical grammatical terms rather than actual translations of the Klamath item are enclosed in brackets: e.g., [distributive]. The gloss [unknown meaning] is also enclosed in this kind of bracket.
/ . . . /	Diagonal slashes enclose phonemic material.
{ . . . }	Braces enclose a morphophonemic morph arbitrarily selected to represent the morpheme of which it is one (or the only) allomorph.
. . . . .	Klamath material not enclosed in brackets of any kind is in morphophonemic notation.
:	Between two Klamath sequences (the latter being in / . . . /), the colon signifies "is represented by." See Sec. 201 of the Grammar for a discussion of this symbol.
*	Hypothetical or nonoccurring forms are preceded by an asterisk.

Sources are abbreviated as given above under Sec. 014.

Informants' comments and alternant forms are usually marked in the dictionary by their initials. The author's first informants, Mr. and Mrs.



Grover Pompey, are usually given as "Pompeys." Others are (as in the Grammar):

AC	Mrs. Amanda Cowan
RD	Mr. Robert David
LK	Mrs. Lizzie Kirk
BL	Mr. Billet Lobert
PO	Mrs. Pansy Ohles

Other informants are either not quoted at all or are quoted rarely by their last names.

The position, status, External Distribution Class, and (to some extent) the distribution of each morpheme is given under each main entry in the Klamath-English section and also in somewhat curtailed form under the English-Klamath entries. The system of symbols employed is discussed in Sec. 302 of the Grammar and also in each subsequent chapter under "Symbolization." It will be useful to repeat this material here:

1) An Arabic numeral at the left of the formula indicates the position class within the External Distribution Class (EDC): e.g., 1pv = "a member of the first position class, a prefix, within the EDC Verb." This numeral has been omitted throughout the English-Klamath section, only the following information being given:

2) The symbols to the right of the position class numeral include: "p" = "prefix," "s" = "suffix," and "S" = "stem." The permitted distribution of various types of stems are roughly indicated by a preceding or following hyphen or by a preceding + symbol:

"S" = a morpheme which may occur as an independent stem in the corpus. Verbal stems are counted as "S" if they occur directly before a modal or substantival suffix (Classes 23sv or 24sv); members of other EDCs are counted as "S" only if they may occur directly before juncture.

"S-" = a morpheme which belongs to the stem complex but which must always occur with some following stem or affix. As noted above, verbal stems occurring with Classes 23sv or 24sv are counted as "S" rather than "S-."

"-S" = a morpheme belonging to the stem complex which may occur only after some other stem. Note that items occurring only after prefixes are counted as "S," "S-," etc.

"-S-" = a morpheme belonging to the stem complex which may occur only preceded by some stem morpheme and followed by another stem morpheme or an affix.

"+S" = a morpheme belonging to the stem complex which may either occur directly after juncture (or after prefixes) or after another stem morpheme.

- 3) Small letters to the right of the preceding symbols indicate the External Distribution Class of the morpheme. These are:

v = Verb

n = Noun

p = Pronoun

d = Demonstrative

a = Adjective

l = Locative

r = Residue. This EDC is divided into the following syntactic subclasses:

rp = Particle

re = Enclitic

rt = Temporal

rn = Negative

ri = Interrogative-Indefinite

rm = Adverbial Modifier

ra = Adverb

- 4) Further syntactic suborders of the Particles and of the Enclitics are indicated by an Arabic numeral after the EDC symbol: e.g., 2Srp6 = "a member of the second position class, a stem, within the EDC 'Residue,' (suborder) 'Particle,' (sub-suborder) 'sixth syntactic position class.'"

#### 040. To the General Reader

##### 041. Use of the Dictionary

Many times during the course of fieldwork the author's Klamath friends and informants expressed the hope that the Grammar and Dictionary might be of use to them as a guide for writing Klamath and also as an instruction book for younger Klamaths wishing to learn the language. Local historians and persons interested in American Indian life also expressed interest. Unfortunately, a descriptive grammar is not a teaching grammar, and the author feels that while serving the needs of his fellow linguists, he has failed to serve the needs of his informants and other friends in the Klamath area. Descriptive linguistics becomes more and more a case of "the few talking to the fewer," and this process will become increasingly evident as the technical analysis of language progresses. Just as no layman can hope to pick up a technical medical textbook or engineering manual and easily read through it, so

no layman can expect to glean much from a modern technical grammar. A descriptive grammar and lexicon are simply the bare bones and framework of the language laid out upon the specialist's dissecting table; it remains for the language teacher (in conjunction with the descriptive linguist) to construct a working teaching grammar with the information presented all in easily assimilable order together with drills and exercises for learning.

In spite of this, the author feels that the present dictionary (though possibly not the Grammar) can serve a useful purpose for others besides specialists. If the following comments are kept in mind, the reader should be able to look up words, pronounce sentences from the Texts, and get a general idea of the workings of the language.

For practical purposes, only the material between diagonal slashes (/ . . /) can be pronounced. This material is written in a "phonemic" alphabet. Each symbol represents a sound or group of closely similar sounds which must be written separately in order to show the difference between words. There are thus no digraphs, no "silent letters," etc. The specialist can read this alphabet by mastering the detailed description of Klamath phonetics and phonemics in Chapter One of the Grammar. An approximately correct pronunciation is possible, however, if the reader will consult the Pronunciation Key which follows.

Other Klamath material is written in a special notation ("morphophonemics"), which groups recurrent sound alternations together under cover symbols (e.g., r, d; see Sec. 043). This notation can be directly "read" only if one has mastered the complex system described in Chapter Two of the Grammar. For this reason the Klamath-English section contains both notations. Each word under a main entry is given first in morphophonemic writing and then in phonemics. The English-Klamath section, however, gives Klamath forms only in morphophonemic form that cannot be directly pronounced. The general reader should look under the Klamath-English main entry given after the English meaning, find the proper form and pronounce the material between / . . / according to the Pronunciation Key.

The general reader will also be unused to seeing main entries in terms of "meaningful pieces" (morphs) rather than in terms of "words." Yet this is the most economical way of handling the language—a dictionary of "words" would run to many large volumes! It is more useful to list entries in terms of "meaningful pieces" since these are the building blocks for words. These pieces are "morphs," and morphs having a similar form and the same meaning are grouped together into a unit called a "morpheme." Some morphemes (or rather their representative morphs)

occur as "words": e.g., /časga:y/ "weasel." Others are smaller than words: e.g., /ka:y/ meaning "up high" in forms like /honka:ya/ "flies up high," /naka:ya/ "hangs a flat object up high," and /slaka:ya/ "hangs a clothlike object up high." A glance through the dictionary reveals ka:yi', and the reader is directed to aka:yi' where the full entry is given. Likewise, forms meaning "fly" are found under hon, forms meaning "act on a flat object" under n<sup>e</sup>, etc. Finding the meaning of a Klamath form is thus possible if one looks up the various component parts.

Forms in the Texts are all in phonemic notation (though the diagonal slashes are not written), and these can thus be pronounced with the aid of the Pronunciation Key. Looking up a form from the Texts should not generally be too difficult, but in many cases the difference between phonemic and morphophonemic writing will render it quite difficult: e.g., /sidallagyank/ "pl. having run together" (Texts, 20.27). Only a detailed knowledge of the structure of the morphophonemic system would reveal that this is morphophonemically sedinlgiank and is thus likely to be filed under din. Klamath structure renders this difficulty almost insurmountable.

For a Klamath speaker to look up a form from his own spoken pronunciation is even more difficult, since he must first master the phonemic alphabet and know which of his sounds are represented by which of the author's symbols. English spelling habits are also likely to interfere here. Perhaps the best way would be to look up the English meaning in the English-Klamath section, and, if it is there, check under the Klamath-English main entry.

#### 042. Pronunciation Key

The following descriptions of Klamath sounds are only approximate. If possible, the reader should check each sound with a Klamath speaker.

The phonemic alphabet includes the following symbols:

? a b č ċ d e g ĝ h i ĵ k k' l L l' m M m'  
n N n' o p p' q q' r s t t' w W w' y Y y' .

Other symbols include: (space between words), comma, period, question mark, exclamation point, and dash. E.g., , . ? ! -

(1) /p t č k/ are approximately the English sounds heard in "pin," "tin," "chin," "kin." Klamath examples: /peč/ "foot," /togi/ "horn," /čew/ "antelope," /kay/ "rabbit."

(2) /b d ĵ g/ are pronounced by younger Klamaths like the initial sounds in "bin," "din," "gyp," "go." Older Klamaths tend to pronounce

them that way between vowels, but at the beginning of a word they are voiceless-unaspirated—rather like the "p," "t," etc. of French, or like the "p," "t," etc. in English "spin," "stint." Klamath examples: /bis/ "bile," /dot/ "tooth," /jɔyʒiks/ "strawberry," /gena/ "goes."

(3) /q/ is a k-like sound pronounced farther back than /k/. It is similar to Classical Arabic "qaf." Klamath examples: /qis/ "salmon spear," /qyoqs/ "Indian doctor."

(4) /g/ is the voiceless-unaspirated (or voiced) counterpart of /q/. It sounds like a "hard g" pronounced far back in the mouth. It is similar to the modern Persian pronunciation of "qaf." Klamath examples: /goge/ "river," /gome/ "cave."

(5) /ʔ/ is the glottal stop. In English this sound occurs mainly between a word ending in a vowel and a following word beginning with a vowel (e.g., "the elephant"). In cockney dialect one hears this sound in words like "bottle." Klamath examples: /ʔols/ "grey hair," /gaʔa:k/ "long ago," /kolʔa/ "sp. of seagull," /pʔomjip/ "cousin."

(6) /p̣ f̣ č̣ ḳ q̣/ are "glottalized consonants" and are common to most American Indian languages of the Northwest Coast. They are produced by shutting the glottis (i.e., making a glottal stop) and, while it is shut, forcing the air out of the mouth at one of the positions of articulation. In effect, this is something like holding a glottal stop and forcing the mouth air out to say /p/, /t/, /č/, /k/ or /q/ at the same time. Practice with a Klamath is essential. Klamath examples are /p̣an/ "eats," /ṭapaq/ "leaf," /č̣oleks/ "meat," /ḳaystis/ "door" and /q̣ay/ "no."

(7) /m n l r w y/ are similar to the English sounds written with the same symbols. /w/ and /y/ are, however, always consonantal. /r/ is found only in one or two English loanwords. Klamath examples: /maksa/ "basket," /ni/ "I," /loq/ "grizzly bear," /priča/ "preacher," /waʔi/ "knife," /yaʔs/ "willows."

(8) /M N L W Y/ are similar to the preceding sounds but are voiceless. To an English-speaking person they sound as though they had an "h" before them: "hm," "hn," etc. /W/ and /Y/ thus approximate the initial sounds in "where" and "Hugh." Klamath examples: /q̣iMač̣/ "ant," /Naʔs/ "one," /Las/ "wing, feather," /WakWaks/ "steam," /YoqYaqs/ "armpit."

(9) /ṃ ṇ ḷ ṛ ẉ ỵ/ are similar to the sounds described under (7) also, but they are glottalized. This takes the form of a glottal stop immediately before the consonant: "ʔm," "ʔn," etc. Klamath examples: /ṃoka:k/ "baby," /ṇos/ "head," /ḷakḷak/ "China brant," /ẉas/ "coyote," /ỵaỵna/ "mountain."

(10) /s/ is similar to English "s" (as in "sin") in the speech of younger speakers. Older Klamaths tend to pronounce it as a blade-alveolar spirant which gives it a sound somewhat similar to English "sh" (as in "shin"). Klamath examples: /som/ "mouth," /se'sas/ "name."

(11) /h/ is similar to English "h" (as in "hot"). Klamath examples: /ho·t/ "that one (remote)," /hemkanks/ "language," /hiswaqs/ "man."

Klamath vowels have more fine shades of difference than the consonants but may be divided into "short" vowels and "long" vowels. The latter are written by a vowel followed by :: e.g., /e·/, /a·/, /i·/, /o·/. Short and long vowels differ not only in duration but in quality.

(12) /i/ is fairly close to the "i" of "pin." Klamath examples: /bis/ "bile," /čikas/ "bird," /q'is/ "rattlesnake."

(13) /e/ is approximately the same as the vowel of "set," "den," etc. Klamath examples: /peč/ "foot," /nep/ "hand."

(14) /a/ approximates the "u" of "but," the "o" of "son," etc. Klamath examples: /nkas/ "stomach," /bambam/ "drum."

(15) /o/ represents a range of vowels extending from the "u" of "put" to almost the "aw" in "law." It is usually somewhere near the "pure o" of various Continental languages. Klamath examples: /tmo/ "grouse," /boqs/ "camas root," /loq/ "grizzly bear," /loloqs/ "fire."

(16) /i·/ is approximately the "i" of "machine." Klamath examples: /ni·s/ "neck," /pipi·ks/ "bracelet."

(17) /e·/ is similar to the "a" of "cat." Klamath examples: /be·p/ "daughter," /ge·/ "this one (proximate)."

(18) /a·/ is approximately the "a" of "father," though older people pronounce it farther back—approximately the British "a" in "father." Klamath examples: /Na·s/ "one," /la·p/ "two," /ba·go·ls/ "muledeer."

(19) /o·/ is much like the "oa" of "boat," though some pronounce it higher, almost approximating the vowel of "boot." Klamath examples: /lo·q/ "seed," /čo·ks/ "leg."

"Diphthongs" are not separate entities in the author's script, though sequences of a vowel plus /w/ or /y/ abound: /qiw/ "anus," /čew/ "antelope," /spawtis/ "poison," /čey/ "buttocks," /may/ "tule," /goykaga/ "escapes." Long vowels plus /w/ or /y/ are less frequent.

/, . ! ? - / indicate intonation contours rather than just "punctuation." These are too complex to be discussed profitably here.

#### 043. Klamath Morphophonemes

The morphophonemes include the items listed as phonemes plus eleven new elements. The significant groups are (1) consonants, (2) vowels, (3)

junctural elements, and (4) the length phoneme plus two new categories: (5) the category of semivowels which contains all those morphophonemes having phonemic representations both as vowels and as consonants; (6) the category of suprasegments which contains only the new items  $\|^{v}\|$  and  $\|^{e}\|$ . The list of morphophonemes then is as follows:

Consonants:	p, t, č, k, q, ʔ, b, d, ʃ, g, ǵ, p̣, ṭ, č̣, ḳ, q̣, s, h, m, n, ṃ, ṇ, M, N, l, ḷ, L, ' , <u>d</u> , <u>n</u> , <u>ṇ</u> , <u>r</u>
Semivowels:	o, i, w, y, ẉ, ỵ, W, Y
Vowels:	e, a, <u>i</u> , <u>e</u> , <u>é</u> , <u>a</u>
Junctures: and Contours:	. , ! ? # (written as a space in phonemic transcriptions)
Length:	· (raised dot)
Suprasegments:	v, e

Total: fifty-four morphophonemes.

Since the Klamath-English section contains both the morphophonemic and the phonemic notation, the general reader can readily use the Dictionary by referring to the phonemic notation (the material between / . . . /), which he can pronounce according to the Pronunciation Key (see Sec. 042).