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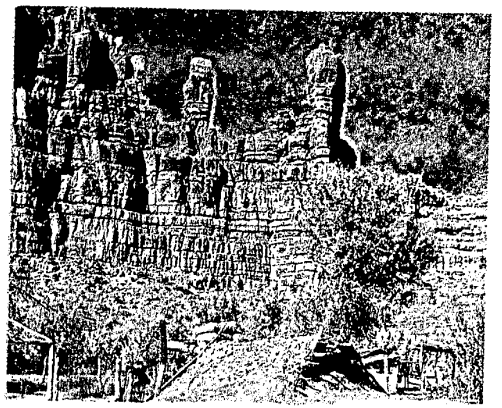
Havasupai Habitat



A. F. Whiting's Ethnography of a Traditional Indian Culture

Steven A. Weber & P. David Seaman
(my former student)
Editors

To Peter Whiteley
with appreciation
Dave Seaman
7-11-85

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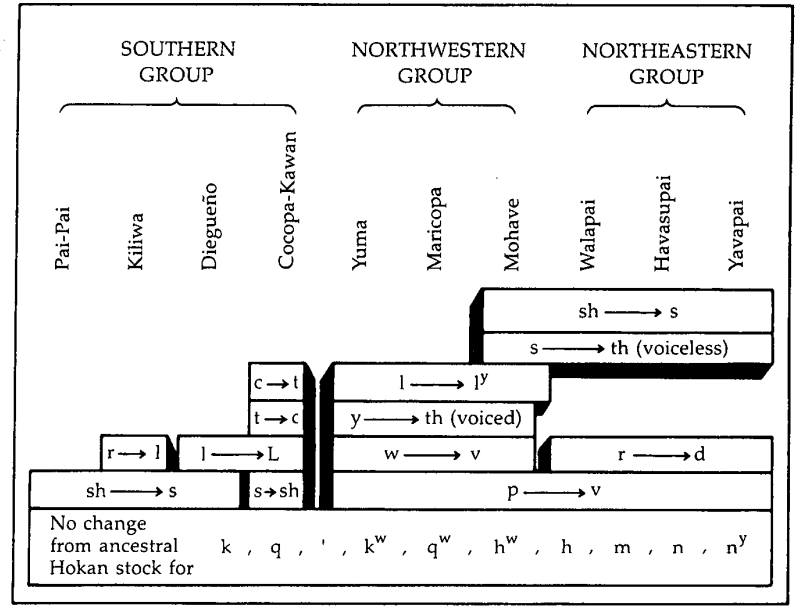
2. The Ways of Words

The language of the Havasupai evolved from an ancestral Hokan stock. It is, with some minor exceptions, identical to the language of the Walapai and is apparently only slightly divergent from that of the Yavapai. Although in phonetic structure Havasupai also closely resembles the lowland Yuman languages (such as Mohave, for example), and the number of cognates is very high, Havasupai speakers cannot understand any of those languages. Havasupai, thus, forms—along with the dialects of the Walapai and Yavapai—a northeastern group of Yuman languages.

Whiting did not claim to be a linguist, although his field notes include thousands of pages of careful linguistic work for several American Indian languages. Before his death in 1978, Whiting had been discussing ideas for updating his linguistic work in Havasupai and Hopi with one of the editors of this book. Thus, the information on the Havasupai language presented in this chapter consists primarily of early notes which Whiting was in the process of revising. More recent information on the nature and status of the Havasupai language can be obtained from the reports of linguistic investigators such as Seiden (1963), Redden (1966a, 1966b, 1976a, 1976b, 1977), Winter (1957, 1967), Kozlowski (1972, 1976a, 1976b), Voegelin and Voegelin (1977), and others mentioned in the bibliography.



Evolution of Phonemes in Yuman Languages

YUMAN LANGUAGES

Kroeber (1943) has noted that Havasupai tends to resemble Paipai of Baja California, probably because intermediate languages tend to develop a series of phonetic shifts which make them sound different even when the basic vocabulary and grammar remain largely unchanged. Although Paipai and the northeastern Yuman languages have remained relatively undifferentiated, they are linguistically, as well as geographically, at opposite ends of the group. Paipai exhibits only one change from the ancestral Hokan stock, which it shares with Kiliwa and Diegueño. Diegueño, in turn, shares a change with the relatively specialized Cocopa-Kawan language. These southern Yuman languages (with one exception) share no changes with Yuma, Maricopa, and Mohave, which form a

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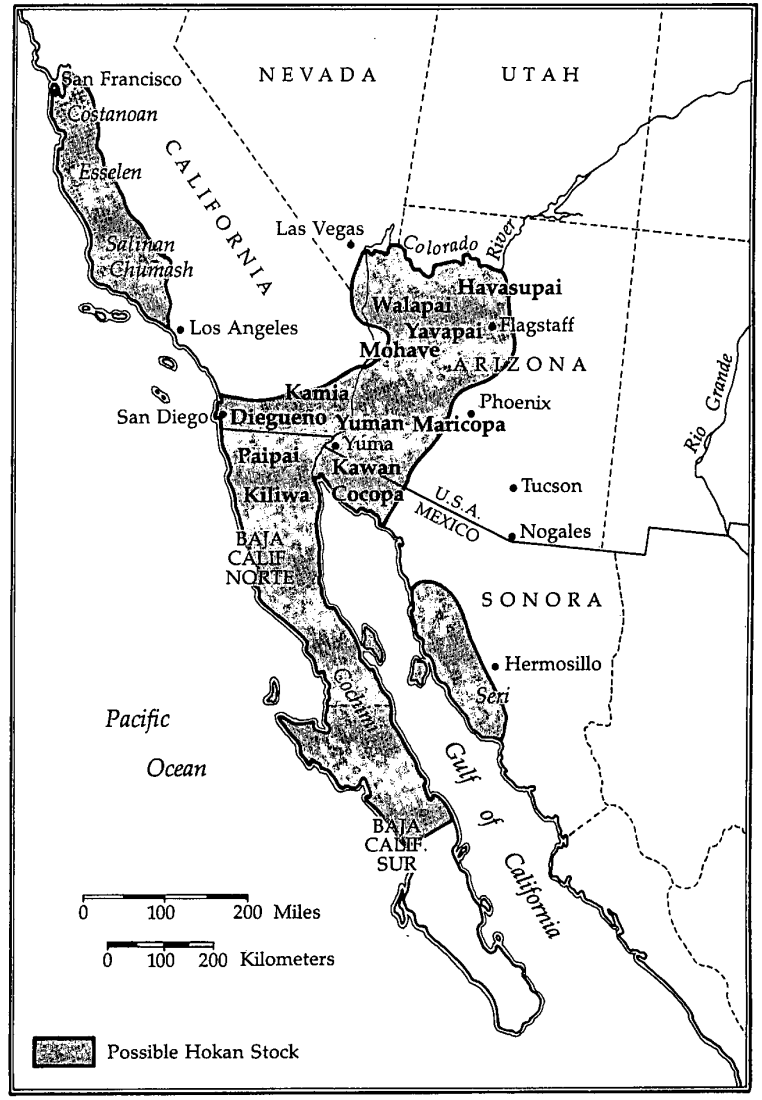
closely allied (northwestern) group along the lower Colorado and adjacent Gila river. The Walapai-Havasupai-Yavapai (northeastern) languages do not share all of these specializations, but they have participated in some of them. There also appears to be a case of independent development which occurs in Cocopa-Kawan, in Mohave, and in the northeastern group. In these languages what appears to have been an ancestral *sh* has become *s*. Among the Mohave and the northeastern group this change is apparently related to the change of *s* into *th*. There is no corresponding change in Cocopa-Kawan, but there is a parallel *sh* to *s* shift in the other southern Yuman languages. Thus, throughout the southern group, the ancestral distinction between *s* and *sh* has been neutralized. These shifts, considered together with the widely separated geographic gap, would seem to indicate independent parallel developments.

The basic resemblances between Paipai and the northeastern group of Yuman languages can be attributed to the fact that they are both marginal and both relatively close to the patterns of their ancestral Hokan stock. Also for this reason, Havasupai tends to show, as well as any of the Yuman languages, relationships with other languages of the Hokan stock. The interrelationships within this larger group have not been worked out in detail in a satisfactory manner. This is particularly true of the southern members of the group. The northern Hokan languages—including Karok, Shasta-Achomawi, Chimariko, Yana and Pomo (all of California)—have been examined in some detail, and their interrelationships are fairly clear (Sapir 1917). The relationships between Yuman and the southern Californian Chumash, Esselen, Salinan, and possibly Costanoan, are not as well understood, due, in part, to the fact that they are now largely extinct and the data are limited. Cochimi, which was spoken in several closely allied dialects in Baja California, and Seri (along the coast of Sonora), together with Chontal (Tequistlatecan) of Oaxaca, are obviously allied with the Hokan group in some way. Cochimi appears to be closer than either of the others to unspecialized Yuman, but the data are



Distribution of Yuman languages from Hokan stock. Languages more closely related to Havasupai are shown in boldface type. Some other possible Hokan relatives are shown in italic type.

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TABLE 2.1
Linguistic Description of Havasupai Consonants

	Labial	Apical	Velar	Glottal
Stops:	p	t d	k q	'
Labialized:			k^w q^w	h^w
Fricatives:	f v	th s		h
Laterals:		l	k^l q^l	
Affricate:		c		
Nasals:	m	n n^y		
Semi-vowels:	w	y		

very weak and not well analyzed. Until a concentrated analysis is completed for this problem, the relationships between these various languages will remain in doubt. Because of its relative conservatism within the Yuman group, Havasupai is an important source of comparative data for such a study. It does, however, have certain specialized phonetic changes and its own peculiarities of vocabulary and, probably, of grammar. It cannot be taken as a pure example of the ancestral form of the various Yuman languages, though it may approximate it more than many of the others, especially the adjacent northeastern Yuman group of Mohave-Yuma-Maricopa on the lower Colorado River.

PHONETICS

Consonants

About two dozen consonant sounds might be distinguished by non-natives trying to record Havasupai speech phonetically. Table 2.1 is a linguistic description of these consonants. The raised letters of the International Phonetic Alphabet shown in Table 2.1 have been lowered to standard position in the text (Parts I and II) of this book. A few of the IPA distinctions shown in the table are finer than those recorded by some linguists. An attempt has been made to record the native terms in a way that would be understandable if the sounds were

repeated to a Havasupai speaker. Table 2.2 is a pronunciation guide for Havasupai consonants showing both the orthographic symbol used in the text and the closest equivalent English sound of the symbol.

Vowels

The distinction between long and short vowels is important in Havasupai. Long vowels are stressed, more clearly enunciated, held longer, and are usually at a slightly higher pitch than short vowels. In addition, some vowels actually change sound when they are shortened. All these distinctions can only be approximated with English examples (Table 2.3).

Other Phonetic Features

The distinction between *i* and *y* is at times difficult to determine. Probably there is little, if any, phonetic difference. There are situations where Havasupai *y* is cognate with Maricopa and Yuma *th*. In such cases it is clear that the Havasupai should be read *y* and not *i*. The validity of the diphthong *ai* is in doubt. It is possible that it should always be considered as *ay* or *ayi*.

The Havasupai *a* is subject to several modifications. Initial unstressed *a* is often weakly pronounced and difficult to hear. It is dropped in long words when the stress is not near the beginning of the word, as in *'apa'a* "man." The *a* before *ny, l, y* or *i* frequently is pronounced as if it were *i* or *e*:

halo'o becomes *helo'o* "rabbit"
anya-ca becomes *inyaca* or *-enyaca* "black"
**ta–yace* becomes *ti–yace* (cf. Maricopa *ta–thic*) "corn"

The *w* is likely to absorb an adjacent *a*; thus *u* plus *va* becomes *u-wa*. The *m* tends to change an adjacent *a*, rendering

* A linguistic term in this chapter preceded by an asterisk is either a reconstructed form or a portion of a longer form.

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TABLE 2.2
Pronunciation Guide for Havasupai Consonants

Orthographic Symbol	Approximate Equivalent Sound in English
c	As in *ch*urch; oftentimes voiced, as in *j*erk
d	As in *d*ell; sometimes with a trilled variation
f	Almost as in *f*un; a closer approximation is the Spanish bilabial *f*, as in *f*iesta; probably the same phoneme as *v*
h	As in *h*appy; somewhat stronger than in English, but apparently not as marked as in other Yuman languages
hw	As in northeastern U.S. English *wh*ich or *wh*ere (contrast *w*itch and *w*ear)
k	As in *k*ill; often pronounced *g*, as in *g*ill
kl	As in *cl*ean (*k* with an *l* release); or as in *gl*ean (*g* with an *l* release)
kw	As in *qu*een; often pronounced *gw* in Havasupai
l	As in *l*ip; rarely, voiceless *L*, as in softly spoken p*l*ay
m	As in *m*iss; the sound may be held longer in some situations
n	As in *n*o
ny	Almost as in ca*ny*on or pi*ny*on; similar to Spanish *cañon*
p	As in *p*it; rarely, *b* as in *b*it
q	Almost as in *c*aught (a *k*-sound, but pronounced farther back in the mouth); sometimes this sound is of very short duration
ql	Almost as the *kl* in *cl*ean (see above), but pronounced farther back in the mouth (*q* with an *l* release)
qw	Almost as the *kw* in *qu*een (see above) but pronounced farther back in the mouth
s	As in *s*hip; rarely, if ever, *z*, as in zero
t	As in *t*ell; sometimes the sound is of very short duration, and is positioned a little farther back in the mouth than a regular English *t*
th	As in *th*ere or *th*ing (the voicing varies)
v	Almost as in *v*ery; a closer approximation is the Spanish bilabial *v*, as in *v*enir
w	As in *w*in
y	As in *y*e or *y*es; (consonantal *i*)
'	Glottal stop (contrast the sounds of "a nice man" and "an ice man"

NOTE: The raised orthography of the IPA system has been lowered to standard position in this table and throughout the text of this book.

TABLE 2.3
Havasupai Vowel Sounds

Orthographic Symbol of Long Vowel	Equivalent Sound in English	Orthographic Symbol of Short Vowel	Equivalent Sound in English
ii	As in p*ie*ce	i	As in p*i*th
ee	As in b*e*d	e	As in b*e*t
aa	As in f*a*ther	a	As in p*a*t
oo	As in *o*dd	o	As in *o*tter
uu	As in t*oo*	u	As in p*u*t

it indistinct. The *m* may also be long: *ammalaka* "woodrat," *ammha'a* "gourd," *hammanya* "child." In general, *-i-* will apparently absorb a preceding *a*; thus *ka* plus *i* gives *ki*. For example, **-ka-nya-wa-i-va* "shut up in his house" becomes *-ki-ny-we-va*.

When words are said in isolation, they naturally tend to become exaggerated. With requests for constant repeating and precision, long sounds—especially long vowels—tend to pulsate and even to break up into two seemingly distinct syllables. In Yuma the end of the sentence often has a repeated vowel; in Havasupai all words spoken in isolation—as in a list—seem to be treated in this exaggerated fashion. When a stressed vowel is final, it is followed by a glottal stop and an echo of the vowel. This may be reduced to a whisper or a mere syllabic pulsating of the vowel. Such repeated vowels are not retained when a word is compounded with a following word. An unstressed final vowel is not repeated in this manner, except in the case of a few borrowed words.

Most (but certainly not all) Havasupai words follow a consonant-vowel pattern of *CVCV*, *CV'V*, *CVCV'V*, or *CVCVCVCV*. Consonantal clusters do occur, usually with only two consonants, rarely with three. These clusters usually contain *s*, *n*, *l*, or *m*. Groups of two or more complete stops apparently do not occur, with the possible exception of a glottal stop followed by another consonant stop (such as *p*, *t*, or *k*).

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The second part of this book is made up of Whiting's ethnographical information on Havasupai culture, grouped into four subject areas: weather and astronomy; minerals, metals, and rocks; animals; and plants. In the following chapters each term is defined, written phonetically, and its usage or Havasupai knowledge of it described. The information presented is based on the informants' knowledge of the item in question.

Within their categories, the lists on weather and astronomy (Chapter 11) and on minerals, metals, and rocks (Chapter 12) are presented alphabetically (except for the section on fixed stars, which is arranged in calendar order). Lists of animals (Chapter 13) and plants (Chapter 14) are grouped into their respective taxonomic sequences and are arranged alphabetically within their categories. Some final identifications are at the class or order level, while others are at the family, genus, or species levels. The last taxonomic category of the identified plant or animal depend upon Havasupai identification and usage. At times the Havasupai differentiated between the species of some plants and animals, while at other times they grouped everything into one larger category with a single term.

As in Part I, an asterisk has been used before the scientific name of a plant or animal to indicate an introduced or domesticated species. An asterisk in front of a Havasupai term indicates that it is either a reconstructed form or a portion of a longer form.

11. Weather and Astronomy

The information in this chapter was obtained with the aid of Dr. C. O. Lampland and Mr. Henry Giclas, who were both on the staff of the Lowell Observatory in 1941. Since the time the data presented here were collected, Spier (1955) has provided an extensive discussion on comparative native astronomy and calendar concepts,* and the reader is directed to his work for further information.

WEATHER AND DIRECTION CONCEPTS

Weather patterns in the area inhabited by the Havasupai often include violent storms. It is not surprising, therefore, that their weather terminology incorporated specific terms for these conditions (Table 11.1). Direction concepts (Table 11.2) referred to vague, indefinite spaces. The presence of the root *-vi-* in most of the direction terms clearly indicates the nature of these concepts. They were not directions from a given point, nor were they used in "giving directions." Such instructions were given in terms of known geographic features, not in terms of "north," "south," "east," or "west."

The term for south apparently originally meant "downriver." Along the Colorado River, where the Yuma and Mohave live, this

* Whiting agreed with Spier, who felt that ethnographers were not sufficiently well acquainted with the stars to make adequate recordings of native observations. More data are needed about weather and astronomy than those presented by Spier in 1955 or in this chapter.

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TABLE 11.1
Weather Concepts

Havasupai Term	English Translation
'akwii'i'	cloud
'akwii'ka	a cloudy sky, "having clouds"
'akwiimacika	rain, "cloud falling in pieces"
vuu'u	to thunder
vuu'uk	thunder (noun), "that which thunders"
matahaiya	wind (noun)
vitha'a	fog, mist; "air-white"
vitaca	lightning
vitavika	lightning
hanapac	snow
paka'acimacika	to be snowing, "snow falling"
thapaka	ice
athapaci	hail, "ice fragments"
'inyacpaka	sunshine, "sun fragments"

would also have been "south." When the Maricopa, who formerly lived in this same situation, moved to the Gila, which flows west, they retained the original meaning of the term. The Havasupai seem to have lost this meaning, for here "downriver" would be north or west. This strong indication of a former residence upon the Colorado River is of great significance.

THE SUN AND THE MOON

The Sun "Sun" *'Inyaa'a'*

Sun was once a man. The Abert's squirrel, *'imuqwethita'*, however, was smarter than Sun. In the course of their adventures, Sun deviated from his usual path, burning nearly everything on the surface of the earth.

The Moon "Moon" *Halaa'a*

The moon was said to be a disk chipped out of ice. Some said it was the face of a woman. Others said that the markings on the surface were a man (or a woman?), *hala'aapa'* "man in the moon," sitting under a cottonwood tree. A myth concerning the moon was recorded by Spier (1928).

TABLE 11.2
Direction Concepts

Havasupai Term	English Translation
vi'i	region, space (literally, "air")
**vi-ka*	space, a region without a specific location (literally, "that which has air")
mata'-vika	north
kawe-vika	south (cf. Maricopa *kave* "down-river" or "west")
nya-ca'a'lo've	east (literally "place where the sun is trying to be" or "sun-rising place")
nya-to'po-vi	west (literally, "sun-setting place")
imiyaa	sky (literally, "above")

MOVING STARS AND PLANETS

Evening Star "Large Star" *Hamasi'kuvete'e'*

At various times several planets were called by this name; they were all considered to be one star.

Morning Star "Lazy Star" *Hamasi'kithulva*

At various times different planets played this role. The morning star was considered lazy because the other stars had been shining all night, but this one shone for just a short while early in the morning.

THE FIXED STARS

Star "Star" *Hamasi'i'*

The Havasupai distinguished between the fixed stars and the more obvious moving stars, or planets. They recognized several star clusters, many of which were important in determining the calendar (see Chapter 9; Table 9.2). Knowledge of the stars appeared to be general throughout the group and was not the specialized knowledge of the chiefs, as was the sun calendar. Many stars played a part in mythology, and, undoubtedly, every child knew the personalities associated with the more important stars. In 1941 there was no indication that these mythical personalities were still active, for there was no personification of the stars in daily life. They were not addressed

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specifically in prayers, although they were sometimes included in the totality of nature which the Havasupai addressed from time to time.

Certain stars were important in judging time, not only within the year, but also within the period of a single night.

Milky Way — — — *Yemtava*

No translation was obtained for this term. The Walapai equivalents, *icil-camnyunaca* "(women) traveling to get shells" and *thava-nyuunyace* "dust trail" are suggestive, but not conclusive, cognate materials (Spier 1955).

STAR CLUSTERS

The following information on Havasupai knowledge of constellations is arranged in seasonal order, beginning with spring, through summer, fall, and winter. The last star cluster described, *helopaavaca*, was visible during the entire year.

Hyades "Wives of the Bat" *Heca'a'*

Visible from July until May. General descriptions and diagrams showing the position of this constellation relative to Orion make identification absolutely certain. The Walapai and the Maricopa also recognized a similar group by this name (usually identified in the literature as the Pleiades).

This was one of the few star clusters which the Havasupai did not apparently mention in their mythology. They stated that the Walapai and the Yavapai had stories about these stars, but that they themselves did not. The appearance of these stars, said by S.J. to be the wives of the bat, marked the month *kavotasapeka* (ca. July).

Orion "Bighorn Sheep" *Amu'u'*

Visible from mid-July or early August until May. The association of bighorn sheep with the constellation Orion was widespread in this area. The three stars of the belt were variously identified as a flock of bighorn sheep (*amu'u'*) or as an antelope, a deer, and a bighorn sheep. They were being ambushed by the star Rigel, who was known as Wolf Man (*hatakwila*). Orion's sword was identified as an arrow. The sheep were being chased into the ambush by Coyote Man (Betelgeuse). The appearance of this star cluster marked the month *kavo-pawaca* (August).

The Tail of Leo "Hand" *Sal*

First visible in August, these stars were described as a circular group, with one star in the palm and one for each finger. There seem to be three possible identifications: Corona, Auriga, and the tail of Leo. This star cluster marked the month *sal-ciola*, which immediately follows August. The terms for this group of stars were loosely applied, and there was a distinct implication that this group appeared about September. This time of appearance would eliminate Auriga as a possibility, since it rises before, not after, Orion, the marker of the preceding month. Corona rises in November, which would be too late, if the Havasupai month sequence has any validity. Furthermore, there seems to be another name for Corona. The tail of the constellation Leo appears at the right time and matches the description of the cluster. Similar information comes from the Walapai (Kroeber 1935).

This star cluster was considered to be a very important group, as it marked the beginning of the year for the Havasupai. There was a general tendency to suggest that it appeared in November, which may be, in part, its confusion with Corona. It may also have been linked with the difficulties of adjusting the lunar cycle to the solar year. This was the period, at the end of one year and the beginning of another, when a disharmony in the lunar and solar cycles would have had to be adjusted. Such an adjustment would have been necessary about once every three years.

Corona Borealis "Hoop" *Tavacuta*

Although this constellation appears in November, is was not associated with the Havasupai calendar month for November, *hala'apa'kinueeva*. It was named after the hoop of the hoop-and-pole game.

Spica, Arcturus, Denebola (?) "The Horn" *Muqwawa*

"The Horn" was said to consist of three bright stars at a considerable distance from each other. It was not considered to be an important group, and little information could be obtained other than that it preceded *'ipe'e'* (Scorpio). Eliminating stars which are known to have been part of some other Havasupai cluster, and searching the sky to the west of Scorpio, we find Spica and Arcturus and, perhaps, Denebola as possible candidates.

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STUDIES IN THE ATHAPASKAN LANGUAGES

BY

HARRY HOIJER AND OTHERS

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PREFACE

The papers in this volume are the result of an intensive seminar on the Athapaskan languages of North America which was held in August, 1958, at the Summer Institute of Linguistics on the campus of the University of Oklahoma. We are greatly indebted to the Wenner-Gren Foundation for Anthropological Research for financial assistance which made the seminar possible, and to the Summer Institute of Linguistics which provided the seminar with the facilities necessary to its work.

The contributors to the volume are: William E. Bittle, assistant professor of anthropology, University of Oklahoma; William Davidson, Northern Canada Evangelical Mission; Faye Edgerton, Summer Institute of Linguistics; L. W. Elford, Northern Canada Evangelical Mission; Faith Hill, Summer Institute of Linguistics; Harry Hoijer, professor of anthropology, University of California, Los Angeles; Philip G. Howard, a Protestant missionary working independently in northwestern Canada; Janet Joël, research assistant at the University of California, Los Angeles; and Murray Richardson, Northern Canada Evangelical Mission.

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Harry Hoijer

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