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AN EVALUATION OF ECONOMIC FACTORS IN COCHITI PUEBLO CULTURE CHANGE

UNIVERSITY OF NEW MEXICO ALBUQUERQUE

By

Charles H. Lange

A Dissertation

In partial fulfillment of the

Requirements for the Degree of

Doctor of Philosophy in Anthropology

The University of New Mexico
1951

ACCOUNTANCY

This dissertation, directed and approved by the candidate's committee, has been accepted by the Graduate Committee of the University of New Mexico in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

E. L. Castetter

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Dec. 6, 1950

DATE

AN EVALUATION OF ECONOMIC FACTORS IN COCHITI PUEBLO CULTURE CHANGE

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Sincere gratitude is expressed to my numerous friends at Cochiti Pueblo who aided my field-work and who remain anonymous here through their own choice.

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TABLE OF CONTENTS

	PAGE
INTRODUCTION	x
Statement of the problem	x
Approach to the problem	xii
Field procedure	xiii
CHAPTER	
I. GEOGRAPHICAL ENVIRONMENT	1
Topography	1
Geology	3
Terrain and soils	5
Climate	6
Life zones	8
II. HISTORICAL BACKGROUND	15
Spanish exploration period, 1540-1598	16
Spanish colonial period, 1598-1820	18
Mexican colonial period, 1820-1846	27
American period, 1846-1890	28
III. PROPERTY AND OWNERSHIP	32
General statements	32
Pueblo lands	34
Agricultural land ownership	38
Property and ownership withim the pueblo proper	46
IV. AGRICULTURAL ECONOMY	78
General statements	78

CHAPTER PAGE

Farming 78

Stock-raising 109

Food preparation and diet 125

V. NON-AGRICULTURAL ECONOMY 135

General statements 135

Hunting 135

Gathering 148

Fishing 158

Trading 161

Trading posts and stores 168

Handicraft and the tourist trade 172

Non-agricultural community work 201

Wage-earning within the pueblo 207

Wage-earning away from the pueblo 211

VI. SOCIAL ORGANIZATION 216

General statements 216

Social groupings based on kinship 217

Kinship terminology 233

Social groupings based on free association 236

VII. LIFE CYCLE 246

General statements 246

Birth 246

Naming 251

Puberty 258

Marriage 260

CHAPTER		PAGE
	Death	264
VIII.	CEREMONIAL ORGANIZATION	272
	General statements	272
	Secret societies	273
	Selected ceremonies	316
	The Catholic Church	345
IX.	POLITICAL ORGANIZATION	350
	General statements	350
	The annually selected officers	351
	The Council of Principales	370
	The United States Indian Service	376
X.	DISCUSSION AND SUMMARY	384
	General statements	384
	Economy and changes	386
	Social organization and changes	401
	Ceremonial organization and changes	408
	Political organization and changes	425
XI.	CONCLUSIONS	435
BIBLIOGRAPHY		441
APPENDICES		456
I.	CLIMATIC SUMMARY	457
II.	SELECTED 1776 CENSUS DATA	459
III.	1948 INDIVIDUAL WHEAT PAYMENTS TO COMMUNITY	460
IV.	COCHITI CROP ACREAGES AND YIELDS	461
IVa.	SELECTED TYPE FARMS	462

. . . . . .

. . . . . .

. . . . . .

APPENDICES PAGE

V. COCHITI NON-RESIDENTS AS OF AUGUST, 1948 466

VI. COCHITI CENSUS DATA 471

VII. COCHITI COMPARATIVE CLAN ROSTERS 472

VIII. COCHITI CLAN INTERMARRIAGES, 1897 and 1948 473

IX. COCHITI INTER-CLAN MARRIAGES 474

X. INTRACLAN MARRIAGE ROSTER 475

XI. COCHITI CLAN STRENGTHS: 1897 and 1948 476

XII. COCHITI KINSHIP TERMINOLOGY 477

XIII. 1948 MOIETY STRENGTH 482

XIV. 1948 INTER-MOIETY MARRIAGES 483

ALL-TIME INTER-MOIETY MARRIAGES 483

XV. 1948 CLAN STRENGTHS WITHIN MOIETIES 484

XVI. COCHITI BIRTHS, 1875-1947 485

XVII. DATES OF MARRIAGES AND FIRST BIRTHS 488

XVIII. COCHITI DEATHS, 1878-1947 490

XIX. COCHITI CACIQUE ROSTER 493

XX. COCHITI FLINT SOCIETY ROSTER 494

XXI. COCHITI SNAKE SOCIETY ROSTER 495

XXII. COCHITI GIANT SOCIETY ROSTER 496

XXIII. COCHITI SHĪ´KAME SOCIETY ROSTER 497

XXIV. COCHITI WOMEN'S SOCIETY ROSTER 498

XXV. COCHITI SHRŪ´TZĪ SOCIETY ROSTER 499

XXVI. COCHITI KATCHINA ROSTER 500

XXVII. COCHITI KŌ´SHARĪ SOCIETY ROSTER 501

XXVIII. COCHITI KWI´RĒNA SOCIETY ROSTER 505

APPENDICES PAGE

XXIX. COCHITI GOVERNORS AND LIEUTENANT GOVERNORS 508

XXX. COCHITI WAR CAPTAINS AND ASSISTANT WAR CAPTAINS . . 510

XXXI. COCHITI FISCALES AND LIEUTENANT FISCALES 511

XXXII. COCHITI ALGUACILITOS 512

XXXIII. COCHITI FISCALITOS 513

XXXIV. COCHITI COUNCIL OF PRINCIPALES, 1948 MEMBERSHIP . . 514

LISTS OF MAPS AND PLATES ix

LIST OF MAPS

MAP	PAGE
1. COCHITI AND VICINITY	2
2. LIFE ZONES OF COCHITI AND VICINITY	10
3. COCHITI PUEBLO, NEW MEXICO, FEBRUARY, 1947	51

LIST OF PLATES

PLATE	PAGE
I. COCHITI PUEBLO, FEBRUARY, 1947	
Air view from the southeast	517
II. COCHITI PUEBLO, FEBRUARY, 1947	
Air view from the northeast	519
III. COCHITI PUEBLO, FEBRUARY, 1947	
Air view from the southwest	521
IV. COCHITI PUEBLO, FEBRUARY, 1947	
Air view from the south	523

INTRODUCTION

Statement of the Problem

The fact that constant and continual changes occur in the culture of any society, regardless of time and space considerations, has long been recognized as a fundamental truth by anthropologists. Accepting this dynamic character of culture, the anthropologist asks precisely what has occurred that has caused the culture of any particular society to be as it is at the moment, or as it was found at any specific time in the past. Having learned the cultural situation at a given time and having determined the sequence of events culminating in this situation, the anthropologist has further interests. Why did these various events happen? Why did they take the forms that they did and exert the influences that they did? Finally, the anthropologist asks what relationships or applications these findings may have regarding any other society's culture.

In attempting to apply the above general remarks to the specific problem at hand, i. e., "What have been the effects of economic changes upon Cochiti Pueblo culture?," the following statements and questions have been formulated for development and elaboration in this dissertation.

The culture of Cochiti Pueblo, like that of any other society, has been continually changing. As in the vast majority of societies in the contemporary world, the rate of change at Cochiti has been progressively accelerated since the end of the Nineteenth Century. Changes of this period have been greater than at any previous time with the

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possible exception of the Spanish Colonial period.

What have been the actual changes within the experience or knowledge of living Cochiti Indians? What changes are indicated, explicitly or implicitly, by the published ethnographic data and the historical accounts? How have these cultural changes, recognized or unrecognized by the Cochiti themselves, been accounted for by the Cochiti or otherwise?

Cochiti culture, like that of other Southwestern Pueblo tribes, has always been, to the best of our knowledge, based on an agricultural economy. European contacts increased the number of species of plants and animals cared for, increased the number of acres cultivated by introducing better implements, but left the basic agricultural pattern essentially unchanged. Pueblo agricultural life has had strong ties with religion. In turn, religion has been intricately involved in the political and social organizations of these people.

Leadership and authority have been vested in groups of the older people, both men and women. Each group has had certain functions for the common good and powers to counteract divergent behavior of other groups or individuals, in or out of the particular culture. Thus, Pueblo Indians have traditionally presented an outward appearance of group solidarity.

Government schools (particularly boarding schools), off-reservation employment, more frequent extra-village marriages, greater economic independence which freed the individual from control of the pueblo authorities, and a greater appreciation of modern conveniences have served to detract from the old ways of life.

What happened in Cochiti culture as more individuals of the younger generations failed to adhere to the old ways? What happened upon the deaths of the older people who maintained these traditional modes of life? What were the compensations and adjustments made as old items in the culture disappeared? What were the reactions of the "Progressives" and the "Conservatives" to the replacement of old items by new items? How were persistent old items of culture revaluated in relation to these new items?

This dissertation attempts to develop answers to these questions and, in turn, to the primary problem posed, "What have been the effects of economic changes upon Cochiti Pueblo culture?"

Approach to the Problem

The general problem selected as the basis for this dissertation was formulated early in 1946. For the specific culture to be analyzed, several considerations recommended the Pueblo of Cochiti.

First, there existed a series of published ethnographic papers, including those by Father Noel Dumarest, Frederick Starr, Esther S. Goldfrank, and Ruth Benedict. The papers of Dumarest and Starr were based upon observations and studies made at the close of the last century. Benedict and Goldfrank did their field-work at Cochiti in the early 1920's. In addition, data on Cochiti were available in the works of E. S. Curtis, presenting material gathered during the first quarter of the present century. Of a less precise nature but nevertheless of considerable value were the writings of Bandelier, Lummis, and others for the late Nineteenth Century. Thus, available publications

provided an appreciable body of data for the end of the Nineteenth Century and again for the early 1920's, approximately a generation later. Field-work by the writer, conducted intermittently from 1946 through 1948, has furnished material for still another generation interval.

A second reason for selecting Cochiti was the need to work with a group which was large enough to provide a satisfactory range of data for analysis and yet small enough to give some assurance of a reasonably complete grasp of the culture in the available time. Cochiti, with a population in 1946 of about 350 people, seemed appropriate.

Finally, and of great importance, the people of Cochiti had had a friendly and cooperative reputation. This attitude was evident from the beginning when the project was approved by the United Pueblos Agency, and the field representative in 1946, Charles Peyne, introduced me to the Cochiti Governor and Lieutenant Governor. These two men proved very helpful in initiating my work with informants at the pueblo. Other officers of that year, as well as officers of 1947 and 1948, the years of my field-work, were all cordial and cooperative, as was true of the other people of Cochiti.

Field Procedure

Having outlined the reasons behind the selection of Cochiti as the culture to be analyzed for this problem, some explanation of the general field procedure is pertinent. This is undertaken with several groups of readers in mind. One is comprised of those who are interested in examining the procedure followed to satisfy themselves as to the

reliability of the new ethnographic material presented. Another group includes those who are interested in the procedure followed here in order to benefit from it in their own field experiences. A third group consists of those readers from Cochiti who will find their own culture recorded and analyzed.

A society of 350 persons is a relatively small community. In such a society, gossip, politics and similar activities play important roles. Despite the impression of unity gained by a stranger, pueblos, like other small communities, are commonly split into many factions. These factions arise from the innumerable and often unpredictable events in the course of daily living. The ethnographer must be aware of these factions and their implications. They provide data on the actual functioning of the cultural patterns. If ignored or misjudged, an offended faction can easily cause the ouster of an ethnographer from the community, with potentially damaging repercussions to others of his profession, as the factions momentarily unite against the intruder.

Published accounts provided society memberships and other personnel data. Although obsolete and incomplete, insight was thereby gained regarding possible factions in the ceremonial, political, social, and economic life. Informants were selected partially at random, especially in the early part of the field-work, and partially with the conscious intent of sampling as many Cochiti viewpoints as possible. Society members have attitudes which differ from those of non-society members; those who have established their residences away from the pueblo vary in their views from those who have remained at

home; servicemen constitute another group, although not as distinctly demarcated as was once anticipated; differences also occur in the views of the two sexes and in the views of the age groups within each sex. During the course of the field-work, more than forty Cochiti served in the capacity of what might be termed "major" informants. In addition, all men became known by sight and name, as did most women. Not as wide an aquaintance was achieved among the children.

In time, informants were contacted who were both willing and able to help. Contacts with others of less value as informants were maintained, partly to minimize jealousies and other forms of antagonism. Obvious relations were fostered with several individuals although they never consented to act as informants. This reduced the possibility of revealing the identities of those who did work with me and served to obscure the source of certain data so far as the Cochiti were concerned.[1] Even in the course of these forced relationships, chance remarks, often of a miscellaneous nature but occasionally of key significance, were obtained. These same contacts may also bear fruit in the future as attitudes change on what information is esoteric as contrasted with exoteric.

The interpretation of esoteric, or "secret," ranged greatly from one person to another. Very little was obtained that the writer

---

[1]Informants' data throughout the thesis should be taken to be true as of 1946-1948 unless specifically stated otherwise. Where widespread agreement was found among the Cochiti, no specific marking will be indicated. Elsewhere, numbers within the parentheses represent particular informants from whom the information was obtained. Actual names of these informants, at their request, are being kept in confidence by the writer.

considered in this category. Much was obtained that would be considered "secret" by at least some Cochiti in reference to an outsider. It was interesting to find that the concept of "secret" among the Cochiti, themselves, ranged beyond the expected society and non-society lines. Such events as the "Spring Dance" had been held in the kivas and, while formerly open to the public, as of 1947 could be witnessed only by the so-called "Conservatives," the "Progressives" being barred along with the Spanish-Americans, Anglos, and non-Cochiti Indians. Katchina dances, held in the hills northwest of the pueblo, could be seen by "Conservatives," whether they were from Cochiti or some other pueblo, while all others were barred from these ceremonies.

The "Conservatives" at Cochiti were those who believed in the powers of the cacique, in the knowledge of the medicine men, and in the authority of the war captains. This group was in contrast to the "Progressives" who obeyed only the governors, the fiscales, and the Council of Principales, except for those matters which the council assigned to the jurisdiction of the war captains.

Open recording of information was commonly used.[2] Informants

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[2]In the recording of native terms, the following phonetic symbols were employed. Vowels: a, as in English father; å, as in English hut; e, as in English met; ē, as in English fate; i, as in English pin; ī, as in English seen; ō, as in English note; u, as in English rule; ai, as in English mile; and au, as in English how. Consonants: ñ, as in Spanish ñ; d and t values varied in the same word spoken by different speakers, and a tendency was noted for this to be somewhat explosive in character; r and l values tended to blend in many words with some speakers emphasizing one or the other value and still others actually using a fused r and l.

Slighted enunciation has been indicated by exponent position, $b\bar{e}h\bar{i}^{ya}$. Accent, ´, indicated or otherwise, commonly fell on the first syllable.

generally displayed interest in having material recorded accurately rather than expressing reluctance when confronted by pen and paper. During the months of residence in the pueblo, both participating and non-participating techniques of observation were employed. Questions regarding details were sometimes asked and answered on the spot. In other instances, points were clarified later in informal conversations or in regular interrogation sessions.

Identical items were checked with various informants in order to cover a full range of viewpoints. Identical items were also discussed with the same person at different times to check accuracy and to expand on certain details which had been either intentionally or unintentionally omitted or obscured. Discrepancies were closely studied for indications of varying behavior patterns, or for cases of misinformation. In these instances, attempts were made to learn the motives behind such responses.

Some information was recorded in the presence of family, or other, groups. However, most information was obtained in private interviews where the informant was encouraged to refuse an answer or explanation rather than improvise. This approach proved highly satisfactory and resulted in a minimum of prevarication. Informants were also guaranteed anonymity for their individual protection and, equally important, for their peace of mind.

Cooperation varied from one informant to another. An appreciation of the value of having data recorded before it was forgotten was voiced by several. For some, this meant a willingness to help to the limit of their ability. Others, while expressing an equal sympathy for

the project, would not risk collaboration.

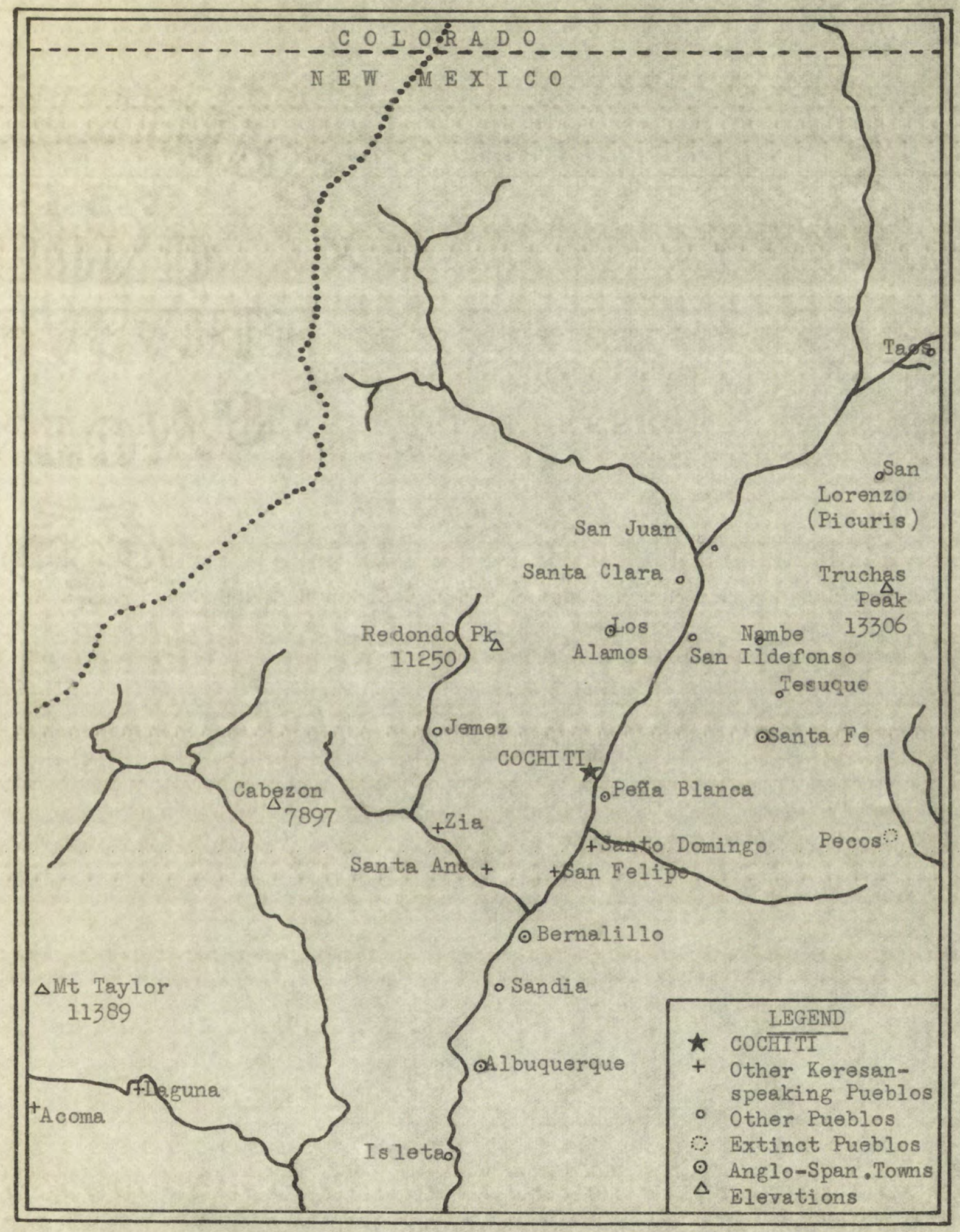
Of unexpected aid in refreshing memories of the old days and of the older generations were the records kept by the Franciscan Fathers at Peña Blanca. These records covered the period from 1845 to 1948, a span of years antedating the birth of the oldest living Cochiti by at least twenty years. Entries furnished names and dates for baptisms (with many births as well), marriages, and burials (or grave blessings). These records were made available for this study and were of great value in improving an informant's vague recollections with more precise details of past events and of the participants in specific activities. In addition, these records provided reliable data in the field of vital statistics, which are normally unavailable in ethnographic studies.

CHAPTER I

GEOGRAPHICAL ENVIRONMENT

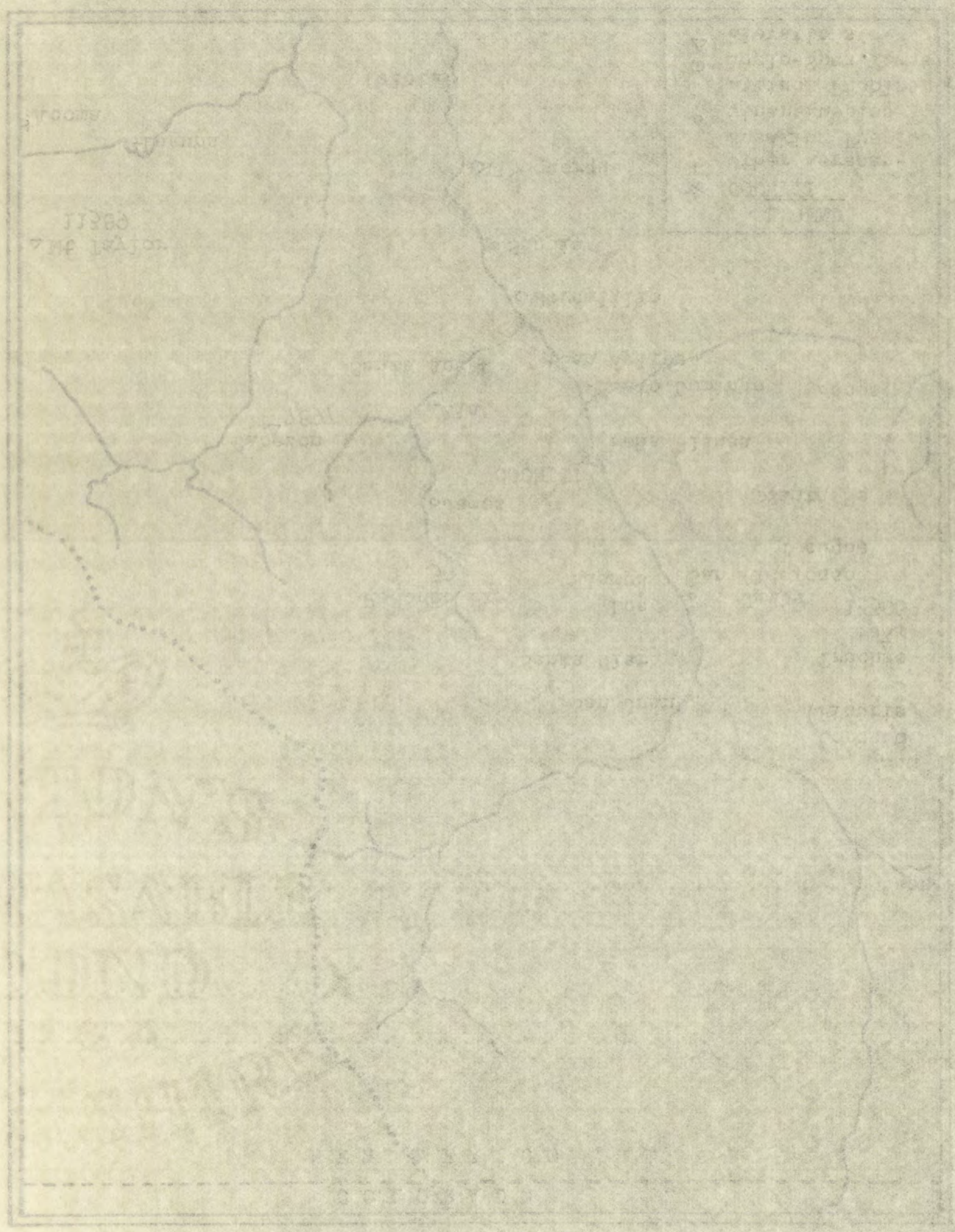
Topography

Cochiti (kō´tyĭt) in 1948 was the northernmost of the Keresan-speaking Pueblos of New Mexico. It lay on a low gravel terrace a half mile from the west bank of the Rio Grande some fifty miles north of Albuquerque. Ten miles south and on the opposite bank of the Rio Grande was Santo Domingo, the most conservative of the Keresan Pueblos. Five miles farther south and on the west bank of the Rio Grande was the Pueblo of San Felipe. Over the volcanic mesa to the west and situated on the east bank of the Jemez River were the Pueblos of Santa Ana and Zia. These five pueblos constituted the Eastern Keresan Pueblos as opposed to the Western Keresan Pueblos of Laguna and Acoma, sixty miles to the southwest. North of Cochiti were the Tewa-speaking Pueblos of San Ildefonso, Tesuque, Nambe, Santa Clara, and San Juan. Jemez, the only remaining Tewa-speaking Pueblo after the abandonment of Pecos early in the last century, lay west of Cochiti twenty-five miles across the Jemez Mountains. The Tiwa-speaking Pueblos of Sandia and Isleta lay some fifty miles south of Cochiti while San Lorenzo (until 1947 known as Picuris) and Taos were about eighty miles to the north. Thus, Cochiti occupied a central position among the Indian Pueblos of the Rio Grande, both in 1948 and in the past centuries when the extinct pueblos of the Galisteo Basin, the upper Pecos Valley, and other localities were flourishing. (See Map 1.)



MAP 1: COCHITI AND VICINITY

Scale 1:1,267,200; 1 Inch - 20 Miles



Geology[1]

West of the Rio Grande, the country rose quite sharply from the river valley. Mesas which formed the base of the Jemez Mountains sloped gently eastward and were cut by many canyons. These mesas were formed of rhyolitic tuff, with some fragmental material washed from the mountains above. The gently sloping mesas gave way to thick flows of rhyolite about eight miles from the river. Numerous canyons led into this rhyolite-covered area where steep walls as high as a thousand feet were found.

The oldest exposed rocks were impure sandstones, supposedly of Cretaceous origin. These could be seen only in restricted areas. Below this sandstone and intruded into the sandstone were masses of igneous rocks, monzonite, monzonite porphyry, and diorite porphyry. These two systems of rocks, sedimentary and igneous, were considerably eroded when covered by a deep flow of rhyolite. This extrusive was the most conspicuous rock of the region from the Rio Grande to the Jemez River.

A succession of rhyolitic flows, emanating from Pelado Peak about twenty miles northwest of Cochiti, had spread over the area and filled the old canyons, leaving gently sloping plains surrounding the volcanic vent for distances of ten to twenty-five miles. Subsequent

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[1] Ellis, Robert W., New Mexico Mineral Deposits, Except Fuels, Albuquerque, 1930, pp. 85-87, 94. Additional information may be found in Northrop, Stuart A., Minerals of New Mexico, Albuquerque, 1944.

erosion had trenched this plain, frequently exposing the substrata.

The rhyolite varied in type, both in coloration and in structure. The colors ranged from streaked reddish-black to pinks and light greys. In its structure, the formation ranged from massive, compact material to porous and almost pumiceous rocks. Brecciated phases occurred extensively as if the partially solidified flow had been disturbed and worked over by oncoming flows of magma, or hot muds, leaving fragments of the former cemented in the matrix of this magma.

The ores of the Cochiti region occurred in the mountains northwest of the pueblo and reservation. They consisted primarily of low grade deposits of gold and silver, in proportions of about three to one. These ores occurred in monzonite porphyry, in the fissure zones as vein deposits, and as replacements in the wall-rock or fractured portions of this. The main gangue was quartz although pyrite and sphalerite occurred in small amounts. The fissures did not extend up into the rhyolite, and it was supposed that the ores were deposited prior to the extrusion of the rhyolite.

East of Cochiti, approximately twenty miles across the Rio Grande, was the Cerrillos District. This consisted of low, isolated hills which long had been famous for their veins of turquoise. There were two deposits of turquoise in this district. The first was near the center of the Cerrillos Hills, and the second was five or six miles to the north, about a half mile east of the old highway. The second deposit was also in a cluster of base, low hills. The turquoise occurred in a much disintegrated monzonite porphyry as a filling of crevices and small openings.

Terrain and Soils

Probably the most influential single element in the natural landscape surrounding Cochiti was the Rio Grande, which flowed southward approximately a half mile east of the pueblo. Situated about six miles below the point where the Rio Grande emerged from White Rock Canyon, Cochiti stood at the head of the long, narrow river basin known as "The Middle Rio Grande Conservancy District."[2]

Cochiti, itself, had an elevation of approximately 6000' while the Jemez Range to the northwest reached heights of over 11,000'. To the northeast were the southern peaks (13,000'+) of the Sangre de Cristo Range which extended northward into Colorado. To the southeast, beyond the Galisteo drainage, lay the Sandia Mountains (10,692').

Soils of the area were of two types. The first was found on the mesa slopes bordering the main valley. The second type was found on the valley floor.

The soils of the mesa slopes had been swept by surface run-off from the higher altitudes and deposited on the lower slopes, or as alluvial fans extending onto the valley floor. These soils varied in color from grayish-brown or light brown to a reddish-brown, a reddish tint being commonly present. Subsoils, as deep as six feet, were similar to the surface material in texture and coloration. These soils were generally porous and very permeable.

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[2]Harper, Allan G., Andrew R. Cordova, and Kalervo Oberg, Man and Resources in the Middle Rio Grande Valley, Albuquerque, 1943.

Soils found on the floor of the valley were essentially sedimentary in nature and had been brought from the northern Rio Grande and Chama drainages when the water was high. Normally, sand and gravel underlay these soils. Especially in broader sectors of the valley, and prior to the construction of the irrigation canals, the channel of the Rio Grande shifted periodically. Valley soils varied appreciably in surface features and in profiles. Surface texture changed constantly due to overflows, wind action, and deposition. The subsoils ranged from sand and gravel to clay, the occurrence of all being sporadic and irregular. Former swamp areas were revealed in pockets of gray or bluish-black mud. Valley soils were dark brown to grayish-brown, normally reddish in tint, with little differentiation from the subsoils.

The bed of the river and the areas covered by periodic shifts in the channel consisted of a fine sand, or river wash, which had very little value in agricultural pursuits.[3]

Climate

No official weather data were available for the Pueblo of Cochiti, or the immediate vicinity. Data were available for the stations at Alamos Ranch, Frijoles Canyon, Santa Fe, and Albuquerque. (See Appendix I.) While distance in mileage was not great, differences

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[3]Bloodgood, Dean W., The Ground Water of Middle Rio Grande Valley and Its Relation to Drainage, State College, New Mexico, 1930, pp. 8-9. (More comprehensive treatment of soils may be found in United States Department of Agriculture, Soils and Men, Washington, 1938, under the specific headings: Capulin-Tucumcari, pp. 1089-90; McCammon-Deschutes, p. 1125; and Alluvial Soils of the Arid West, p. 1135.)

in elevations between these stations reduced their validity in comparative statements. Nevertheless, keeping these factors in mind, certain adjustments were made, and data were calculated with reasonable accuracy for Cochiti.[4]

The January average temperature was about 32° while the July average was about 70°. Maximum and minimum temperatures for the summer and winter ranged from about 98° to -12°. Agriculture was carried on with a normal growing season of approximately one hundred and eighty days, spaced between April 23 and October 20. Annual precipitation amounted to about twelve inches, of which approximately two-thirds of the total occurred between April and September. In reality, the greatest portion of this rainfall occurred from the middle of July to the middle of September. (See APPENDIX I.)

Father Morfi, 1782, described Cochiti as "surrounded on all four sides by ranges of hills which do not protect it from frequent and violent though not disastrous storms."[5] These same violent storms, rain or snow, were characteristic of the region in 1948. Storms often moved around Cochiti, striking Cañada, Peña Blanca, or Santo Domingo without touching Cochiti. Hail, lightning, and thunder were frequent in the summer months, accompanying sudden storms which quickly changed sandy arroyos to raging streams. Considerable damage to fields, crops,

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[4]United States Department of Agriculture, Climate and Man, Washington, 1941, pp. 1011, 1014-1015.

[5]Thomas, Alfred B., editor, Forgotten Frontiers, Norman, 1932, p. 99. (This account apparently was based on the description of the Cochiti area written by Friar Antonio Cavallero in 1779. [Biblioteca Nacional Archives, Mexico City, Legajo X, Document 59.])

ditches, roads, and houses often resulted.

From the large-scale maps accompanying two papers by Russell,[6] the following climatic data were apparent regarding Cochiti and the vicinity. In the twenty-year period, 1901-1920, Cochiti was at the northern tip of a narrow belt along the Rio Grande which experienced from ten to twenty desert years and twenty dry years. The area surrounding Cochiti, except on the south, experienced from zero to ten desert years and from ten to twenty dry years in the same time interval. Russell placed Cochiti, and the Rio Grande Valley south of Cochiti, in his BWhw climate. The surrounding area was included in his BWkw climate.[7]

Life Zones

Almost the entire Cochiti Reservation fell within the Upper Sonoran Life Zone. The extreme northwestern corner of the reser-

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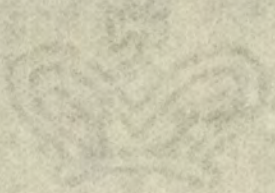
[6]Russell, Richard J., Dry Climates of the United States, I. Climatic Map, and Dry Climates of the United States, II. Frequency of Desert and Dry Years, 1901-1920, University of California Publications in Geography, Volume 5, Numbers 1 and 5, 1931-1932. Additional climatological data may be found in Dorroh, J. H., Jr., Certain Hydrologic and Climatic Characteristics of the Southwest, University of New Mexico Publications in Engineering, Number One, 1946.

[7]Russell, Dry Climates of the United States, I. Climatic Map, p. 41. In this discussion of climates, Russell based his study upon the work of Koeppen, Wladimir P., Die Klimate der Erde, Berlin, 1923, in which the climatic symbols were assigned the following values:

B - Dry Climate: centimeters of precipitation-mean annual temperature, C°, + 22 (wet winters) to 44 (wet summers).
W - Desert: classification as for B, but precipitation values, in centimeters-mean annual temperature, C°, + 11 (wet winters) to 22 (wet summers).
h - Hot type, mean January temperatures above 32°F.
k - Cold type, mean January temperatures below 32°F.
w - Summer precipitation, dry winter.


COPRASABEL
BOND
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vation fell within the Transition Zone, which included the Jemez Mountains except for the highest peaks. These areas were in the Canadian Life Zone. (See Map 2.)

Bailey, in his discussion of life zones,[8] noted that much of the Upper Sonoran Zone in the Rio Grande area was extremely arid, with annual precipitation of less than ten inches. However, as Cochiti lay on the perimeter of the Jemez Mountains where annual rainfall ranged from fourteen to twenty inches, the annual precipitation actually received in the vicinity of Cochiti was closer to twelve inches.

Bailey also pointed out that within the larger areas as they appeared on the map, there were localized variations which were caused by diversities in elevation, rainfall, latitude, and exposure to sunlight. The Transition Zone, for example, ranged between 7,000' and 8,500' on northeastern slopes and ranged between 8,000' and 9,500' on southwestern slopes, with further local variations in different mountains.

The Upper Sonoran Zone, according to Bailey's 1913 notes, was characterized by sparse vegetation, consisting of desert shrubs, cacti, yuccas, and short grasses. Good grazing was found in regions of level ground where the precipitation was absorbed or where surface water was dispersed as sheets of flood water. Steeper slopes, where the runoff was accelerated, were dry and barren. The higher fringes of

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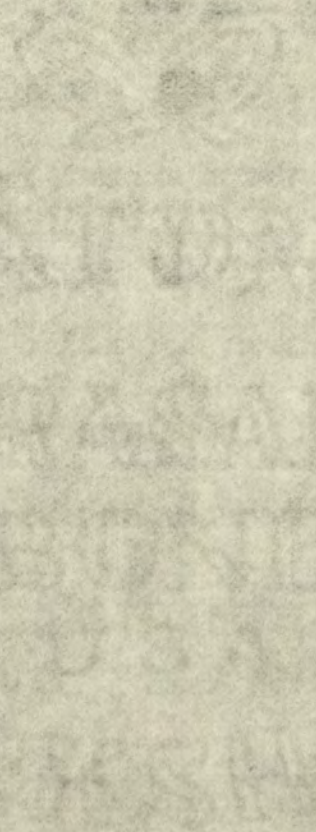
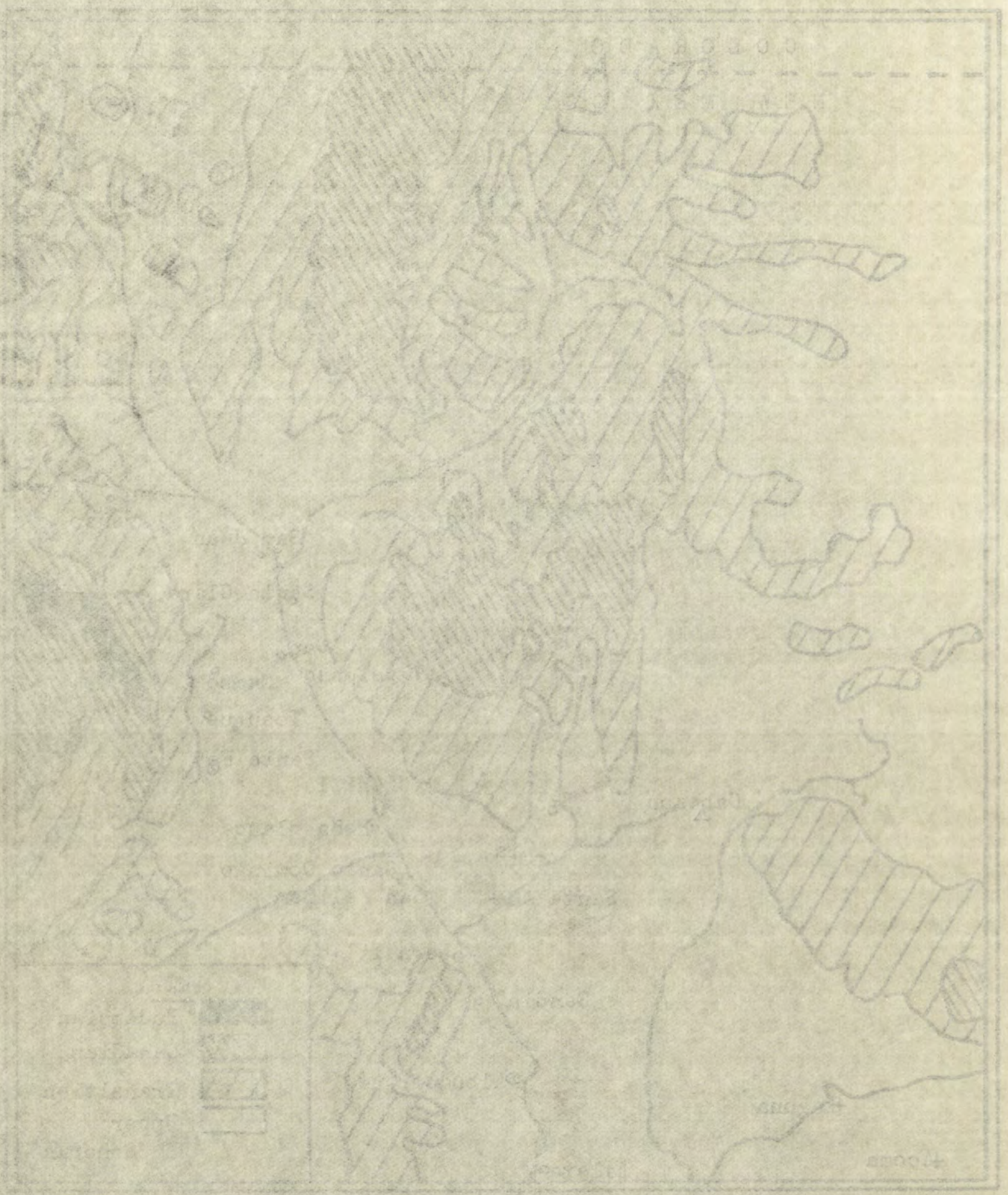
[8]Bailey, Vernon, Life Zones and Crop Zones of New Mexico, North America Fauna, Number 35, Bureau of Biological Survey, 1913, pp. 27-28, 41-46, 46-49. Additional data may be found in Bailey, Florence, Birds of New Mexico, Washington, 1928, and Merriam, C. Hart, Life Zones and Crop Zones of the United States, Bulletin Number 10, Biological Survey, 1898.



MAP 2: LIFE ZONES OF COCHITI AND VICINITY

ACCORDING TO BAILEY

Scale 1:1,267,200; 1 Inch - 20 Miles



this zone received greater precipitation, resulting in a scattered growth of junipers, piñons, and a better coverage of grasses.

Bailey observed that agriculture was rarely found in the Upper Sonoran Zone in the absence of irrigation. In the more arid areas, this condition proved to be somewhat of an advantage in that the moisture could be controlled almost completely through irrigation systems.[9] This observation appeared valid from that time to the time of the field-work. However, for the period just prior to Bailey's field studies, comments of several Cochiti indicated a different situation. Until approximately the turn of the century, dry farming was practiced with some success. Informants also mentioned repeatedly that as of the end of the last century, the plateau or tableland in the northeastern corner of the reservation and the surrounding region had fine stands of tall grass, "up to a horse's belly." Such statements indicate not so much an era of more ample rainfall as a better balance of precipitation, water table, and vegetation. This has been corroborated by studies of Bryan and others in connection with climatic cycles in the Southwest.[10] A somewhat different impression is gained from

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[9]Bailey, Life Zones, p. 28.

[10]Bryan, Kirk, Date of Channel Trenching (Arroyo Cutting) in the Arid Southwest, Science, Volume 62, 1925; Flood-water Farming, Geographical Review, Volume XIX, 1929; Pre-Columbian Agriculture in the Southwest, as Conditioned by Periods of Alluviation, Annals, Association of American Geographers, Volume 31, 1941. Additional papers on this topic include: Bailey, R. W., Epicycles of Erosion in the Valley of the Colorado Plateau Province, Journal of Geology, Volume 43, 1935; Douglass, A. E., Dating Pueblo Bonito and Other Ruins of the Southwest, National Geographic Society, Contributed Technical Papers, Pueblo Bonito Series, Number 1, 1935; Gregory, Herbert E., Geology of the Navaho Country, United States Geological Survey, Professional

Spanish reports and documents of the period 1777-1782.[11] Dry-farming, at least at Cañada de Cochiti, only eight miles northwest of Cochiti and receiving greater amounts of precipitation, experienced frequent crop failures when irrigation was not used. It is strange that in none of the documents regarding Cochiti was there any mention of fields other than those which were irrigated.

In describing the Upper Sonoran Life Zone, Bailey wrote as follows.[12]

> Excluding grasses, some of the most characteristic Upper Sonoran plants in open plains and valleys are cat's claw (Mimosa biuncifera), saltbush (Atriplex confertifolia and A. canescens), white sage (Eurotia lanata), rabbit brush (Chrysothamnus, Tetradymia, Chrysoma, and Gutierrezia), sagebrush (Artemesia), Ximemesia exauriculata, Spanish bayonet (Yucca baccata), Yucca glauca, bear grass (Nolina lindheimeriana), and many species of cactus. In the foothills and rough borders of the valleys the conspicuous vegetation consists of nut pine (Pinus edulis), junipers (Juniperus monosperma, J. pachyphloea, and J. scopulorum), live oaks (Quercus arizonica and Q. emoryi), sumacs (Schmaltzia trilobata and S. pumila), mountain mahogany (Cercocarpus parvifolus), silk tassel (Garrya goldmani and G. wrighti), mescal (Agave parryi) and several species of cactus.
>
> A few of the most characteristic Upper Sonoran birds of the Rio

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Paper, Number 93, 1917; Hack, John T., The Changing Physical Environment of the Hopi Indians of Arizona, Peabody Museum of American Archaeology and Ethnology, Harvard University Papers, Volume XXXV, Number 1, 1942; Huntington, Ellsworth, The Climatic Factor as Illustrated in Arid America, Carnegie Institution of Washington, Publication 192, 1914; Reagan, A. B., Recent Changes in the Plateau Region, Science, Volume 60, 1924; Schulman, E., Nineteen Centuries of Rainfall History in the Southwest, American Meteorological Society, Bulletin, Volume 19, 1938.

[11]Biblioteca Nacional, Legajo X, Documents 43, 59; Thomas, Forgotten Frontiers, p. 99.

[12]Bailey, Life Zones, p. 28.

Grande valley are Woodhouse's jay (Aphelocoma woodhousei), piñon jay (Cyanocephalus cyanocephalus), cañon towhee (Pipilo fuscus mesoleucus), lead-colored bush tit (Psaltriparus plumbeus), gray titmouse (Baeolophus inornatus griseus), and Montezuma horned lark (Otocoris alpestris occidentalis).

Its most characteristic animals are kangaroo rats (Perodipus montanus, P. longipes, and Dipodomys spectabilis), Apache pocket mouse (Perognathus apache), white-throated wood rat (Neotoma albigula), gray-tailed prairie dog, large spotted ground squirrel (Citellus spilosoma major), pale grasshopper mouse (Onychomys leucogaster melanophrys), big-eared and Rowley white-footed mice (Peromyscus truei and P. boylei rowleyi), Texas jack rabbit (Lepus californicus texianus), and cedar belt cottontail (Sylvilagus auduboni cedrophilus).

Immediately to the northwest of the Cochiti Reservation in the higher altitudes of the Jemez Mountains were the Transition and Canadian Zones. Both Life Zones played important roles in Cochiti culture because of the flora and fauna which the Indians utilized. For brevity, only the more important items in the biota of these regions have been included here.[13]

Various species of pine, spruce, and fir dominated the higher regions while junipers and piñons were found on the mesas. Along the Rio Grande and in the mountain canyons several species of cottonwood were common. Prominent animal forms included deer, antelope, puma or mountain lion, wild cat, bear, badger, coyote, wolf, fox, rabbit, skunk, and squirrel. Mountain sheep and elk were formerly present but never of great importance. Bison were rarely found in the immediate area and normally ranged east of the Pecos Valley. Principal birds were

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[13]Items listed here are from Bailey, Life Zones, pp. 43-46, 47-49. Other sources include Bailey, Birds of New Mexico; Benson, Lyman, and Robert A. Darrow, A Manual of Southwestern Desert Trees and Shrubs, Tucson, 1944; and Wooton, E. O., and P. C. Standley, Flora of New Mexico, Contributions from the United States National Herbarium, 1915.

the eagle, hawk, owl, turkey, duck, road runner, quail, meadowlark, and dove. The bull snake, king snake, and rattlesnake as well as a considerable range of small lizards, toads, and turtles also were native to the Cochiti area.

CHAPTER II

HISTORICAL BACKGROUND

Anyone interested in the contemporary life of the Southwestern Pueblo tribes cannot have failed to note innumerable evidences indicating their great heritage from the past. While modern items from European cultures have been introduced at a varying rate among the several pueblos, it can be safely stated that there has been no pueblo which has successfully combated the accelerated absorption of these items from European cultures. This has been true despite resistance to them by the conservative elements of almost every pueblo. Recently, these struggles have been accentuated.

Resistance to the introduction of elements from alien cultures has been a widespread phenomenon in many societies. However, the long-recognized pueblo characteristics, deeply ingrained conservatism, nativistic tendencies, and a relatively united front (at least when presented to the outside world), have made these introductions and their reverberations of special interest to many anthropologists.

It was noted early that myths, legends, and tribal traditions were unreliable as historical sources. This was especially true in regard to chronology, and it was frequently true of cultural data. To gain a further check, and a more reliable one, on the background of pueblo life prior to the researches of ethnographers of the last fifty years, ethnologists have turned to historical sources.

Historical references to Cochiti were disappointing in their brevity and generalities. Many travelers, because of Cochiti's posi-

tion across the Rio Grande from the principal routes, completely ignored Cochiti in their notes. If they mentioned it at all, they merely located it on their sketch maps or commented that so many leagues or miles from their present position there was a pueblo of Cochiti, or a mission, San Buenaventura de Cochiti. Others first encountered pueblos to the south, east, or west of Cochiti and simply noted that the people of Cochiti, or those of the entire Keresan area, were much like those previously described.

While these statements had some value, they were comparable to generalizations made by early ethnologists regarding all pueblos on the basis of investigations at one pueblo, usually one of the Hopi towns. More recent ethnographies of individual pueblos have revealed the inaccuracies of these inferences. Hence, in accumulating Cochiti data, general references to Rio Grande pueblos, and even to Keresan pueblos, were commonly discarded.

Spanish Exploration Period, 1540-1598

Following the winter of 1540-41 which was spent at Tiguex, the Coronado expedition sent six men to visit the Keres (Queres, Quiris, Quirix) Province. This first contact with the Keres was described very briefly; the main interest of the expedition was then concentrated on the pending search for Quivira. Castañeda, chronicler of the expedition, did not name the individual Keresan pueblos and merely commented on their similarity to previously described pueblo tribes.[1]

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[1]Bancroft, Herbert H., Arizona and New Mexico, 1530-1888, His-

Bandelier stated, nevertheless, that Cochiti (Cachiti, or Oo-tyi-ti) was one of the eight Keres pueblos mentioned by Castañeda.[2]

Following the discouraging reports from Coronado and his men, the region was undisturbed by the Spaniards for almost forty years. In 1581, an expedition under Fray Agustín Rodríguez and Captain Francisco Sanchez Chamuscado entered the pueblo country. According to the Gallegos account, the expedition reached the northern limits of the Tiguex territory by September 21, 1581, whereupon it "entered the lands of the Queres, visiting Santo Domingo, Cochiti, and other pueblos."[3] Cochiti was described as a pueblo of two hundred and thirty houses of two and three stories, and it was named "Medina de la Torre."[4]

In 1582, an expedition under Antonio de Espejo was organized to reenter the pueblo country, ostensibly to investigate the fate of missionaries left behind by the Rodríguez party. In Luxán's account of

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tory of the Pacific States of North America, Volume XII, 1888, p. 58; Hammond, George P., and Agapito Rey, Narratives of the Coronado Expedition, 1540-1542, Coronado Historical Series, Volume II, 1940, pp. 254, 259; Hodge, Frederick W., editor, The Narrative of the Expedition of Coronado, by Pedro de Castañeda, Original Narratives of Early American History, 1907, pp. 327-328, 352, 358-359; Winship, George P., The Journey of Coronado, 1540-1542, New York, 1904, pp. 62, 96, 106-107; Winship, George P., The Coronado Expedition, 1540-1542, Fourteenth Annual Report, Bureau of American Ethnology, Part I, 1896, pp. 503, 519, 524-525.

[2]Bandelier, Adolf F., The Gilded Man (El Dorado) and Other Pictures of the Spanish Occupancy of America, New York, 1893, p. 216.

[3]Hammond, George P., and Agapito Rey, The Gallegos Relation of the Rodríguez Expedition to New Mexico, Historical Society of New Mexico, Publications in History, Volume IV, 1927, pp. 4, 8.

[4]Ibid., p. 48.

the Espejo expedition Cochiti was briefly mentioned.

> . . . This pueblo was called Cachiti (Cochiti: Hammond and Rey). The people are very peaceful. They gave us maize, tortillas, turkeys, and pinole. We bartered very fine buffaloskins for sleigh bells and small iron articles.[5]

Upon the return to Chihuahua of the Espejo expedition in September, 1583, interest greatly increased in the northern frontier, or "New Mexico."[6]

Spanish Colonial Period, 1598-1820

Seventeenth Century. After long delays, a large expedition led by Don Juan de Oñate left Río de Conchos, February 8, 1598. With this expedition's arrival in New Mexico, the explorations characterizing the Sixteenth Century gave way to permanent colonies developed in the Seventeenth Century. Oñate received the submission of several tribes at Santo Domingo Pueblo in July, 1598, and he then went to San Juan where he established a permanent headquarters. Assemblies of tribal chiefs were held at which rods of office were distributed by the Spaniards; Franciscan missionaries were assigned parishes and sent into the pueblos. Sometime during the next year, Oñate moved his headquarters to Pueblo de San Gabriel where it remained as late as April, 1605. By the close of the Sixteenth Century, the Spaniards had suc-

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[5]Hammond, George P., and Agapito Rey, Expedition into New Mexico made by Antonio de Espejo, 1582-1583, as Revealed in the Journal of Diego Perez de Luxan, The Quivira Society, Volume I, 1929, p. 82.

[6]Hammond, George P., and Agapito Rey, New Mexico in 1602, The Quivira Society, Volume VIII, 1938, pp. 23-24.

ceeded in establishing permanent colonies in the area. European fruits and vegetables had been introduced; herds of livestock were being cared for and expanded.[7]

Oñate had designated Santo Domingo as the site of a convent° in 1598 although a mission was not established there until about 1604. It was probably erected by the commissary, Fray Juan de Escalona. Santo Domingo became the ecclesiastical capitol of the province upon the arrival in 1609 of Pedro de Peralta to succeed Oñate as governor in New Mexico. At this same time, the provincial capitol was moved to Santa Fe, although the custodians habitually made their headquarters at Santo Domingo.[8]

Throughout this period, references to Cochiti Pueblo were very meager. In 1614, Cochiti was mentioned as a visita of the Santo Domingo mission. Scholes and Bloom[9] stated that by 1637 "Cochiti had its

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[7]Bolton, Herbert E., Spanish Explorations in the Southwest, 1542-1706, Original Narratives of Early American History, 1916, pp. 202-203, 203, n. 1, 216-217; Hammond, George P., Don Juan de Oñate and the Founding of New Mexico, Historical Society of New Mexico, Publications in History, Volume II, 1927, pp. 98, 103; Hodge, Frederick W., George P. Hammond, and Agapito Rey, Fray Alonso de Benavides' Revised Memorial of 1634, Coronado Historical Series, Volume IV, 1945, pp. 60, 245, ed. note 68, 258, ed. note 77.

[8]Bolton, Herbert E., The Spanish Borderlands; A Chronicle of Old Florida and the Southwest, The Chronicles of America Series, Volume XXIII, 1921, p. 177; Hodge, Hammond, and Rey, Benavides' Revised Memorial, pp. 260-261, ed. note 77; Scholes, France V., and Lansing B. Bloom, Friar Personnel and Mission Chronology, 1598-1629, New Mexico Historical Review, Volume XIX, Number 4, Volume XX, Number 1, 1944-45, pp. 333-334.

[9]Scholes and Bloom, Friar Personnel, pp. 66, 333, 335; Scholes, France V., Documents for the History of the New Mexican Missions in the Seventeenth Century, New Mexico Historical Review, Volume IV, Number 1, 1929, p. 47.

own convent, with Fray Justo de Miranda as guardian." The status of Cochiti fluctuated thereafter, with periods when there was no resident friar in the pueblo, as in the 1640's and 1667 specifically.[10] The reference of 1667 is interesting as the first reference to the church at Cochiti by the name of San Buenaventura, its present day designation.

In 1680, the year of the Pueblo Revolt, Vetancurt wrote that Cochiti and the mission of San Buenaventura had a population of 300.[11]

The Pueblo Revolt and the de Vargas Reconquest. During the middle of the Seventeenth Century occasional mention was made of Cochiti as its people became implicated in the struggle between the Church and State for supremacy.[12] In the time of Governor Ugarte de la Concha, 1649-1653, a general conspiracy involving Indians of Isleta, Alameda, San Felipe, Cochiti, and Jemez, as well as some Apache groups was organized. The movement failed, and nine of the leaders were hung. The danger signal went unheeded by the Spanish, however, and the buildup toward the uprising of 1680 continued.[13]

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[10]Scholes, New Mexican Missions, pp. 47, 54-55; Scholes, France V., Personal Interview, December, 1946.

[11]Hodge, Hammond, and Rey, Benavides' Revised Memorial, p. 262, ed. note 77.

[12]See Scholes, France V., Church and State in New Mexico, 1610-1650, Historical Society of New Mexico, Publications in History, Volume VII, 1937, and Troublous Times in New Mexico, 1659-1670, Historical Society of New Mexico, Publications in History, Volume XI, 1942.

[13]Scholes, Church and State, p. 195. Also, Hackett, Charles W., editor, Historical Documents Relating to New Mexico, Nueva Vizcaya, and Approaches Thereto, to 1773, Collected by Adolf F. A. Bandelier and Fanny R. Bandelier, Carnegie Institution of Washington, Publication Number 330, Volume III, 1937, p. 182.

Although the Cochiti took an active part in the overthrow of Spanish rule in 1680, they remained in their pueblo for more than a year afterward. In 1681, the Spaniards made forays into Isleta and Cochiti and captured several Indians who had been prominent in the uprisings. However, nothing more was accomplished.[14] By 1683, the Cochiti had joined the San Felipe and Santo Domingo Indians, reinforced by others, in a retreat to the Potrero Viejo, northwest of Cochiti. During 1683, it was reported that all pueblos north of San Felipe had been reinhabited; but at the year's end, the Cochiti had again gone to the Potrero Viejo with allies from San Felipe and San Marcos.[15]

During the Governorship of Don Domingo Jironza Petris de Cruzate, 1683-86, 1689-91, the reconquest proceeded, and some damage was inflicted upon the rebels.[16] Cruzate was long credited with making a land grant to each pueblo in 1689, generally described as extending a league in each cardinal direction from the mission. These grants, after annexation by the United States, were demonstrated to have been forgeries.[17]

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[14]Leonard, Irving A., The Mercurio Volante of Don Carlos de Siguenza y Góngora, An Account of the First Expedition of Don Diego de Vargas into New Mexico in 1692, The Quivira Society, Volume III, 1932, pp. 57-58. For a full account of the Pueblo Revolt, see Hackett, Charles W., Revolt of the Pueblo Indians of New Mexico and Otermin's Attempted Reconquest, 1680-1682, Parts I and II, Coronado Historical Series, Volumes VIII and IX, 1942.

[15]Hodge, Hammond, and Rey, Benavides' Revised Memorial, p. 261, ed. note 77.

[16]Leonard, Mercurio Volante, p. 58.

[17]Twitchell, Ralph E., The Spanish Archives of New Mexico, Cedar Rapids, Iowa, 1914, Volume I, pp. 452-453, 469-471, 479.

In the fall of 1692, another expedition undertook the reconquest; this was led by Don Diego de Vargas Zapata Luján Ponce de León.[18] Vargas found the pueblos abandoned with the crops still in the fields. The Indians had fled to the mesas. Vargas spent considerable time in the field in 1692, summarizing his achievements in a letter to the Conde de Galve as follows.

> I passed over to the Keres tribes, attaining the good results of the reduction and reconquest of our holy faith and the royal crown of the said four pueblos of Pecos, the Keres of Cochiti and San Felipe on the mesa of La Cieneguilla, the Cerro Colorado, and the Jemez on the mesa of La Cañada. The said four pueblos are established at the said places, and they are of the district and kingdom of New Mexico and the villa of Santa Fe, the number of pueblos, including the villa, in which they have gathered, representing seventeen. Having achieved the said conquest, I went to join the camp at Mejia on the twenty-seventh of October.[19]

Vargas' confidence was unwarranted, however, as April, 1693, found him again in the field attacking La Cieneguilla to which the Indians, including the Cochiti, had returned.[20] By January 1, 1694, Santa Fe was reoccupied; only Pecos, Santa Ana, Zia, and San Felipe had kept their promises of 1692, and the remainder of the pueblos and other tribes were openly hostile. Sporadic raids prevented the Spaniards from planting their fields, and they gathered food supplies by

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[18]Leonard, Mercurio Volante, pp. 58-60.

[19]Espinosa, J. Manuel, First Expedition of Vargas into New Mexico, 1692, Coronado Historical Series, Volume X, 1940, p. 264.

[20]Hodge, Hammond, and Rey, Benavides' Revised Memorial, p. 261, ed. note 77.

concentrated forays against the pueblos.[21]

On June 4, 1696, the calm was broken by the open revolt of the Indians of Taos, Picuris, the Tewa villages, the Keresans of Cochiti and Santo Domingo, and Jemez. Five missionaries were killed, and the whole region was terrorized. Father Fray Alonzo de Cisneros, living at Cochiti, managed to escape death by fleeing to the still loyal Indians of San Felipe. Following this uprising of 1696, a declaration was made by Diego Ginome, cacique and native of Nambe, stating that a Spaniard had been heard to say in Cochiti in June, 1696, that the Governor had declared that all adult Indians of the Kingdom were to be killed. Only the boys were to be left. Hearing this new threat to their current grievances, the Pueblos seized the initiative and struck the first blow.[22]

By November 24, some semblance of order had been restored, and many rebels had returned to their pueblos. Some rebels from the fortress of La Cieneguilla, including Indians from Cochiti and Santo Domingo, moved westward and established a new pueblo, Cubero, four leagues north of Acoma. The name Laguna was applied to this pueblo after July 4, 1699.[23]

Eighteenth Century. Cochiti first appeared in the documents of

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[21]Espinosa, J. Manuel, Governor Vargas in Colorado, New Mexico Historical Review, Volume XI, Number 2, 1936, p. 180.

[22]Bancroft, Arizona and New Mexico, pp. 216-217; Hackett, Historical Documents, Volume III, p. 351.

[23]Hackett, Historical Documents, Volume III, p. 352.

the Eighteenth Century when Don Francisco Cuervo y Valdés, Governor ad interim, 1705-1707, established military outposts at Santa Fe, Santa Clara, La Cañada, Cochiti, Jemez, Bernalillo, and Laguna.[24]

At a meeting in Santa Fe, January 10, 1706, an appeal was sent to his Majesty the Viceroy, and the Royal Audiencia of Mexico City asking that Governor and Captain-General Cuervo be retained in office. Representatives of Santo Domingo, Jemez, Pecos, Cochiti, and the other pueblos spoke in that order. The Governor of Santo Domingo, Don Cristobal Coriz, was noted as the "principal war chief of the Queres nation."[25] The Governor of the pueblo of San Buenaventura de Cochiti, Don Luis Romero, was noted as speaking Castilian,[26] apparently not too frequent an occurrence at that time.

In 1706, Fray Juan Olvarez made the following declaration regarding Cochiti, then under the care of Fray Miguel Muñis.

> This mission has a broken bell without a clapper. (The Indians took all the clappers away, to make lances and knives.) There is one of the ornaments which his Majesty gave. The vials are a silver one, a glass one, and another of tin plate. The church is being built. This mission has about five hundred and twenty

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[24]Bancroft, Arizona and New Mexico, p. 228.

[25]This reference to a governor of a pueblo as a war chief is interesting in view of the usual separation of these offices. The title is also of interest because of the tendency of the pueblos to remain unaffiliated with one another. It would be interesting to know if the title reflected the critical times during which the Keres had recognized an individual as common leader, or if the title was simply a non-literal generalization on the part of the Spaniards in referring to a reputable warrior. See the more detailed discussion of these offices in CHAPTER IX, POLITICAL ORGANIZATION.

[26]Hackett, Historical Documents, Volume III, p. 369.

Indians. . . . It is called San Buenaventura de Cochiti.[27]

In 1744, Fray Miguel de Menchero, in a statement at Santa Barbara, May 10,[28] described Cochiti as eight leagues southwest of the capitol (Santa Fe) and consisting of over eighty Indian families and some ranches, with a resident friar in the mission.

One of the most lengthy descriptions pertaining to Cochiti, but consisting of data referring primarily to the mission there, was the report of the Visitador, Fray Francisco Atanacio Domínguez, who arrived in New Mexico in March, 1776. The following exerpts were taken from the Domínguez report.

Pueblo

. . . . . .

This situation (the landscape around Cochiti, C. L.) taken care of, there remains to say that the pueblo structures extend north from the church, arranged and fitted in adobe houses that form two small plazas with their four sections, all of them separated from each other; one lies to the east in relation to them, and the other to the west with some dwelling-quarters or a section in between facing to the south. The disposition of doors, the decoration and alignment, as in the rest of the pueblos by means of ladders and cois.

Its Lands and Crops

The entire mass of farmlands which this pueblo has extends to the east bank of the river, downstream on said river, spreading out across the width of the plain and downward until it joins those of the pueblo of Santo Domingo. Along the bank on which the pueblo lies are some milpas, and very few upstream on either bank to the north. All take the water of the aforesaid river for their

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[27]Hackett, Historical Documents, Volume III, p. 375.

[28]Ibid., p. 404.

irrigation by means of deep and wide acequias. There are some scattered small peach-trees.

The natives of this pueblo are Queres, which native language they speak as well as Castilian, but brokenly. As to their own particular customs, the same as those of Santo Domingo, and here is the

Census

116 Families. . . . . with persons 486[29]

Several other documents for this period provided census data:[30] in 1749, a census of Spanish Villas and Indian Missions of the Custodia of San Pablo revealed that Cochiti had thirty-five whites and five hundred and twenty-one Indians with a resident friar, Agustin de Yniesta.[31] In 1799, Cochiti, as one of the pueblos under the jurisdiction of Alameda, was noted as having a population of 505.[32]

In the years 1817 and 1818, reports showed Cochiti as one of the missions of the province, and in both years, Father Fray Juan Caballero Foril was noted as the resident friar.[33]

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[29]Chavez, Father Angelico, Unpublished Manuscript, a translation of the Domínguez report, Biblioteca Nacional, Legajo X, Document 43. (This is one of the first reports indicating that Santo Domingo was a larger pueblo than Cochiti. Cochiti was the larger during the initial Spanish contacts and probably remained so until the time of the Revolt. Through Cochiti losses during the Revolt, or a Tano influx into Santo Domingo about that time, or due to localized epidemics, or other reasons, Santo Domingo became the larger, at least momentarily.)

[30]For a summary of census data for Cochiti, see APPENDIX VI.

[31]Kelly, Henry W., Franciscan Missions of New Mexico, 1740-1760, New Mexico Historical Review, Volume XV, Number 4, 1940, pp. 362-363.

[32]Biblioteca Nacional, Legajo X, Document 74.

[33]Ibid., Documents 79 and 80.

Mexican Colonial Period, 1820-1846

A census compiled December 31, 1821, by Fr. Jose Pedro de Celis, Custodian, Santa Fe, showed the mission at Cochiti with a resident friar, and a total population of 698. Of these, 339 were Indian, 182 males and 157 females. In the same report, Santo Domingo and San Felipe were also shown with resident friars. Santo Domingo had an Indian population of 726, 358 males and 368 females. San Felipe had a total Indian population of 310, 170 males and 140 females.[34]

In 1822 and 1832, Cochiti was included in a roster of places having a judge and attorney and recognizing Santa Fe as the immediate superior in points of administration.[35]

Barreiro[36] noted that Pueblo Indian cultures were obviously dying out. This is of interest in light of current efforts of ethnologists, more than a century later, to learn as much as possible about pueblo culture toward which many have the same feelings.

For the Mexican Colonial Period, the comments of Barreiro gave some details of an ethnographic nature as did the notes found in the writings of Escudero.[37] Escudero, writing in 1840, gave a General

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[34]Bloom, Lansing B., New Mexico under Mexican Administration, 1821-1846, Old Santa Fe, Volume I, Number 1, p. 28, n. 43.

[35]Ibid., p. 146, n. 103; Bloom, Lansing B., Barreiro's Ojeada sobre Nuevo México, Historical Society of New Mexico, Publications in History, Volume V, 1928, p. 44.

[36]Carroll, H. Bailey, and J. Villasana Haggard, Three New Mexico Chronicles, The Quivira Society, Volume XI, 1942, p. 30.

[37]Ibid., p. 89.

Census of New Mexico. However, these figures were of little specific value since Escudero grouped the various pueblos, Cochiti being joined with Santo Domingo.

American Period, 1846-1890

On the map of Emory's journey from Fort Leavenworth to San Diego, 1846, (printed in 1848), Cochiti was shown as "Cuchiti." The route of travel ran from Santa Fe to Sieneguilla (Cieneguilla), to Algodones, and then south along the Rio Grande. The trail was shown some distance east of Santo Domingo Pueblo. In his journal, Emory gave an interesting description of the Indians of this pueblo greeting the column with a mock battle, on horseback and garbed in typically Plains Indian paraphernalia.[38]

Maps of the years immediately following, those by Lieutenants Abert and Peck,[39] Parke and Kern,[40] and Marcy,[41] either repeated Emory's "Cuchiti" or omitted any mention of its presence.

Among the papers of James S. Calhoun, Indian Agent, the entry for October 15, 1849, disclosed that Indians from Cochiti had come in to inform Governor Washington that they had killed three Apaches.

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[38] Emory, W. H., Notes on a Military Reconnoissance from Fort Leavenworth, in Missouri, to San Diego, in California, Executive Documents, Number 41, 30th Congress, 1st Session, Senate, 1848, pp. 37-38.

[39] Abel, Annie H., The Official Correspondence of James S. Calhoun while Indian Agent at Santa Fe and Superintendent of Indian Affairs in New Mexico, Office of Indian Affairs, 1915, Map 2.

[40] Ibid., Map 3.

[41] Ibid., Map 4.

These had been overtaken while driving off sheep, and the Cochiti also reported continual presence of Apaches in the mountains beyond the pueblo. They were having trouble with the Apaches driving off stock, killing the men, and capturing the women and children. "This Indian, in behalf of the people of Cochiti, asked for Munitions of War."[42]

Calhoun, in a letter to Commissioner Lea, February 16, 1851, gave a census of the pueblos which included Cochiti with 254; Santo Domingo, 666; San Felipe, 411; Santa Ana, 399; Santa Clara, 279; San Ildefonso, 139; Jemez, 365, and Zia, 124.[43]

On June 30, 1851, Calhoun reported to Commissioner Lea that the Pueblo Indians had held a council at the Superintendency during the past month. The meeting lasted the greater part of three days and was attended by Sandia, Santa Ana, San Felipe, Zia, Santo Domingo, and Cochiti, with San Ildefonso, Santa Clara, Tesuque, Nambe, San Juan, and Taos joining in the meeting later. Calhoun reported that not one of the pueblos wished to abandon the old customs and usages.

> . . . these people must be treated with the utmost delicacy, or bloody scenes will be witnessed in this Territory. A delicate induction will bring these people to any point you may desire, but it must be delicate, and protection must be afforded them.[44]

This was a theme repeatedly expounded by Calhoun, as evidenced by his report of October 15, 1849.

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[42]Abel, Official Correspondence, p. 50.

[43]Ibid., p. 294.

[44]Ibid., pp. 368-371.

On September 15, 1851, Calhoun, as Territorial Governor, wrote to Major E. H. Wingfield, Calhoun's successor as Agent. He reported Navaho depredations and killings near Cochiti a few days before, stating that Navahos could be seen daily along the Rio Grande.[45]

In the journal of John Ward, the following entry was made for Wednesday, October 6, 1852.

> Several Pueblo Indians here today all wanting to see the new Tata - they were all put off in consequence of the Governor being away - late in the evening a party of the Cochita (only instance of this spelling in the journal - Abel.) Indians came in dancing about town - they came in to pay the tithe to the Vicario. Expenses $1.00 John Ward[46]

Leaving the records of Calhoun's time, almost three decades passed before the journal of Lieutenant John G. Bourke furnished some relatively complete, and entertaining, descriptions of the pueblos in 1881. Bourke and his small party visited Cochiti on November 6, 1881. Bourke described the party's visit to the governor of the pueblo, details of several house interiors, the appearance of the pueblo including the church, the activities of the people, and other ethnographic details.[47] These observations were the most recent historical source material regarding Cochiti, and they provided the best ethnographic

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[45] Abel, Official Correspondence, p. 426.

[46] Abel, Annie H., Indian Affairs in New Mexico under the Administration of William Carr Lane, from the Journal of John Ward, New Mexico Historical Review, Volume XVI, Number 3, 1941, p. 215.

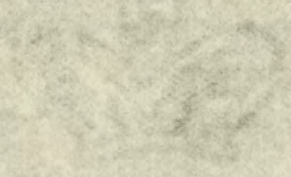
[47] Bloom, Lansing B., Bourke on the Southwest, New Mexico Historical Review, Volume XIII, Number 2, 1938, pp. 234-237.

data. Actually, Bourke's descriptions of Cochiti, as of 1881, might well be claimed by ethnologists as the earliest significant material for that pueblo.

For the ethnologist, the earlier historical accounts are far less gratifying. This is not to say that these accounts were not worth examining. While the information was limited and often too vague to be of great value, some light was shed upon the antiquity of various cultural elements. Elements found currently at Cochiti, flourishing or about to disappear, were mentioned in the historical accounts. Other elements have been lost by the contemporary culture. Continued study with informants of the oldest generation and the examination of additional historical sources may help complete our knowledge of the historical background of Cochiti.

Policies of Church and State during colonial times, personalities of administrators on the level of the pueblo and mission, and contacts with neighboring Spanish colonists cannot have failed to influence the culture of an Indian Pueblo such as Cochiti. The greater our knowledge of these and other factors, the better will be our interpretation of modern Cochiti culture.

Having briefly sketched the sequence and nature of the historical events relating to Cochiti, an examination of the culture of this pueblo follows. Its economic, social, religious, and political facets, as they existed in 1948, and their interrelationships have been analyzed. Changes indicated from comparisons of field notes with ethnographic and historical literature have provided the bases for evaluating the influence of economic factors in Cochiti culture changes.



CHAPTER III

PROPERTY AND OWNERSHIP

General Statements

Having oriented Cochiti in its geographical environment and having traced the historical background of this pueblo, the fundamental problem may now be considered. The wording of this problem, i. e., "What have been the effects of economic changes upon Cochiti Pueblo culture?," necessitates two preliminary comments.

First, as indicated in the INTRODUCTION of this dissertation, it is evident that changes have occurred in the economy of Cochiti Pueblo. The purpose of this and the following chapters is to describe the precise nature of these changes, as revealed in comparisons of historical accounts, ethnographic data, and the writer's unpublished field-notes. In the development of these chapters it should be remembered that economics, or any other facet of culture, may only artificially be separated from the cultural whole. Boas stated this viewpoint in his discussion of "The Aims of Anthropological Research."

> . . . On the contrary, we see that economics and the rest of culture interact as cause and effect, as effect and cause.
>
> Every attempt to deduce cultural forms from a single cause is doomed to failure, for the various expressions of culture are closely interrelated and one cannot be altered without having an effect upon all the others. Culture is integrated. It is true that the degree of integration is not always the same. . . .[1]

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[1]Boas, Franz, Race, Language and Culture, New York, 1940, p. 256.

In Benedict's words, much the same view was expressed.

> Economic behavior, family arrangements, religious rites and political objectives therefore become geared into one another. Changes in one area may occur more rapidly than in others and subject these other areas to great stress, but the stress itself arises from the need for consistency. . . .[2]

Secondly, when the integration of culture has been recognized, it then becomes safe to extract momentarily the economy, or economics, from the cultural whole for purposes of analysis. The interpretation of economy (economics, economic behavior) used here is based on the definitions of the dictionary.[3] Economy is the management, or ordering, of parts and functions in an organized system. It pertains to the affairs of a government or community with reference to its source of income, its expenditures, the development of its natural resources, and the like. Thus, it is concerned with the satisfaction of man's needs, in terms of physical survival.

In this study of Cochiti economy, emphasis has been placed on both the situation in 1948 and the changes which have occurred in the forms of real property, i. e., lands and buildings, in the types of economic activities pursued, how these activities were actually performed, by whom they were done, when and under what conditions the activities occurred, the disposition of the produce, and the values such as prestige that were associated with the production, distribu-

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[2]Benedict, Ruth, The Chrysanthemum and the Sword, Boston, 1946, p. 12.

[3]Webster's New International Dictionary of the English Language, Second Edition, Unabridged, Springfield, Massachusetts, 1934, p. 814.

tion, and consumption of available resources, both natural and domestic.

In organizing these data the economy of Cochiti Pueblo was divided into three parts: property and ownership, agricultural economy, and non-agricultural economy. Since the lands and buildings with their use and ownership concepts were fundamental to their life, these aspects of the economy are discussed in CHAPTER III. Agriculture, traditional basis of Cochiti Pueblo economy, is described in CHAPTER IV. The remainder of the economy is analyzed in CHAPTER V.

CHAPTER III on property and ownership includes a discussion of the following topics: Pueblo Lands, Agricultural Land Ownership, and Property and Ownership within the Pueblo Proper.

Pueblo Lands

Under this heading, the following phases have been elaborated: pueblo lands, their extent and utilization; range lands; and cultivated lands.

Extent and Utilization. Regarding land, Aberle wrote:

> . . . Land being the basis of Pueblo economy, to understand the Indian's relation to his soil is vital. The years of contention over boundaries, titles to grants, and legislation influence the Indian's habit of thought as well as his laws.
>
> Land in the eyes of the Indian is his most precious possession.[4]

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[4]Aberle, Sophie D., The Pueblo Indians of New Mexico: Their Land, Economy and Civil Organization, Memoir Number 70 of the American Anthropological Association, American Anthropologist, Volume 50, Number 4, Part 2, 1948, p. 5.

According to current United Pueblos Agency records,[5] the Cochiti Reservation comprised the original Spanish Grant, subsequently confirmed by the Mexican and United States Governments,[6] which totalled 22,763.31 acres.[7] In addition, the Cochiti Indians used 3,728.30 acres of land leased from the State of New Mexico (640.00 acres) and from the Public Domain Grazing Service (3,088.30 acres). Thus, the total land used by the Cochiti Indians amounted to 26,491.61 acres.

Of this total, 24,624.61 acres were non-irrigated range land of which a considerable portion was relatively barren hills cut by many sandy arroyos. Irrigation ditches served a total of 1,867.00 acres, of which only 630.00 acres were cultivated, and the remainder were used as pasturage.

Range Lands. Of the 26,491.61 acres used by the Cochiti Indians, 25,861.61 acres were devoted to grazing. All was non-irrigated range land except for 1,237 acres. A windmill and water-tank were located near the northwest corner of the reservation; at the western

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[5]Payne, Charles B., Annual Reports of Extension Work, United Pueblos Agency, Division of Extension and Industry, United Pueblos Agency, Albuquerque, 1946, pp. 1-2. Aberle, The Pueblo Indians, p. 84.

[6]Details of title history may be found in Brayer, Herbert O., Pueblo Indian Land Grants of the "Rio Abajo," New Mexico, Bulletin, Historical Series, Volume I, Number 1, University of New Mexico, 1939, and in Twitchell, Spanish Archives, Volume I, pp. 425-453, 469-471, 479.

[7]Agency notes indicated the official survey showed 23,218.22 acres less 451.61 acres of non-Indian private claims plus 3.30 acres for the Government School site. Not included were 149.88 acres which were in dispute with the Pueblo of Santo Domingo.

edge of the reservation near the road leading to Bear Canyon and over the Jemez Mountains were a second windmill and water-tank.

Stock feeding on the open range could get water at either of the tanks or from canals or the river, although in places fences barred the stock from these latter sources. The outer perimeter of the Cochiti Reservation was fenced, but there were no other fences except for those immediately enclosing and subdividing the cultivated acreage.

The United Pueblos Agency Field Supervisor's Report described the range as generally sandy, with small areas of alkali. Wind erosion was noted as slight over most of the area, and water erosion was light to moderate in those areas which had some coverage of grass. In the more elevated areas where scrub trees became dominant and grasses very sparse, water erosion was moderate to severe. Badland stages were reached in small areas in the northwestern portion of the reservation.[8]

Poisonous weeds, primarily loco weed (Astragalus mollissimus), were described in the Supervisor's Report as a medium infection, with losses moderate. Friar Antonio Cavallero, in 1779, reported that the meadows south of the pueblo were little used because of the damage to the animals that grazed on the plants there.[9]

Rodents, mainly kangaroo rats (Dipodomys and Perodipus spp.), were noted as a medium to heavy infection in the lighter soils, with moderate damage resulting. Predatory animals on the range consisted

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[8]Payne, Annual Report, p. 4.

[9]Biblioteca Nacional, Legajo X, Document 59.

of a few coyotes (Canis spp.) with slight damage from these animals.[10] Unmentioned in the report were bears and mountain lions. Informants agreed that these larger animals had been seldom, if ever, seen on the reservation in recent years. The few left in the region remained secluded in the mountains. (3, 45, 49, 70)

According to the Agency data, a total of 484 animals (354 cattle and 130 horses) were on the Cochiti range in 1943. This was noted as a one hundred per cent use of the range capacity.[11] Restriction of the range to a maximum capacity for each pueblo was begun during the 1930's as part of the government's policy of soil conservation and stock reduction and land improvement.[12]

Range land was owned in common and was available to any tribesman for such uses as cutting firewood, collecting wild plant products, obtaining adobe and rock for building, and similar purposes. Grazing rights were formerly open to any Cochiti Indian, but in 1948 they were limited under the direction of the governor. (1, 15, 44, 45)

Cultivated Lands. Cultivated lands in 1948 were completely "under" the irrigation system, as described in detail in the following chapter. Plots for dry-farming and flood-water farming, which were in common use prior to the last twenty years, were available but unsought following the construction of the irrigation canals of the Middle Rio Grande Conservancy District in the early 1930's. Cultivated tracts

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[10] Payne, Annual Report, p. 9.

[11] Ibid.

[12] For general discussion, see Aberle, The Pueblo Indians.

were owned in part by individuals and in part by the community, or pueblo.[13] (3, 45, 53)

Agricultural Land Ownership

Agricultural land ownership is considered under two headings: individual ownership, with various means of acquiring it, and communal ownership, with its various forms.

Individual Ownership. Individual ownership of agricultural land could be acquired in four different ways.

First, land was inherited from parents or siblings. Normally, land was divided equally regardless of the sex or age of the heirs. (1, 3, 15, 70) Stepchildren usually did not share in inheritance since they had already shared in the inheritance from their own parent. (44) On the other hand, adopted children shared as fully qualified heirs. (15)

Secondly, land could be acquired by trade or purchase. No official permission was required for such transactions among tribal members. (45, 53) Goldfrank's material confirmed this alternative.[14]

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[13] In the Domínguez report of 1776, it was stated "there are no individual landholders." [. . . y al mismo tpō no sean los individuos haciendados. . . .] (Biblioteca Nacional, Legajo X, Document 43.) The literal interpretation of this statement could indicate that the "homesteading" described in the following section was a Spanish introduction. On the other hand, this brief statement may have resulted from oversimplification of the situation at the time of the Domínguez visit.

[14] Goldfrank, Esther S., The Social and Ceremonial Organization of Cochiti, Memoirs of the American Anthropological Association, Number 33, 1927, p. 30

She pointed out that when leaving the village for a long time, or marrying and moving outside the pueblo, it was customary for a man to sell, give, or trade his property.

A third means of acquiring land was "homesteading." Once cleared, such land remained in the possession of the man and his heirs until they chose to dispose of it. Permission was obtained from the council and governor to clear a tract of land. This was frequently done prior to the construction of the irrigation canals by the Conservancy District. It also appeared to have been more common when dry-farming was less of a climatic risk. In 1948, there was essentially no suitable land below the canals for "homesteading." (40, 44, 45, 50, 53) As a result, all cultivated land was individually owned or belonged to the community. These latter holdings were administered by the Council of Principales through the governor and other officers.

The fourth means of acquiring land was to petition the governor for an idle plot, or to ask for a plot of certain size. The plot was given to the person, assuming his need was justified. It remained in his, or in his heirs', possession so long as it was used. "Used" normally meant the annual cultivation of the land, although it was permissible for the land to lie unused for several years. Apparently this period was flexible and determined by the demand for land. A surplus of good agricultural plots were available in 1948 although all were east of the river. Hence, plots were lying idle for longer periods without claims being made upon them. (3, 40, 45, 50, 53) If assigned land was no longer used, it reverted to the tribe for reassignment. In this respect assigned lands differed from those originally cleared, or

"homesteaded," by individuals. As noted, this latter type of holding remained the property of a person and his heirs. Since the canal construction the alternative of "homesteading" had disappeared, and lands were either inherited, purchased or traded, or assigned. (40, 44, 45, 49, 52, 70)

Current features of land holding agreed generally with observations for the early 1920's, the only period in the past for which published data were available. Goldfrank's impressions of property concepts pointed to older patterns in which clan holdings were more important.[15] Clan holdings actually consisted of the extension of family property through marriage with probably no clan ever owning a particular plot of land. Evidence for this pattern was seen in the reversion of a man's property after his death to his mother and his sisters, if there were no direct heirs. However, the practice of the widow inheriting property was becoming more common at that time. Goldfrank attributed this development to increasing contacts with Americans, to more frequent construction of houses by the men for themselves, and to the long-standing relations and intermarriages with Spanish-Americans. It appears doubtful that this development was recent, even at the time of Goldfrank's field studies in 1923. Regardless of age, it was apparent that this emphasis upon the family, at the expense of the clan, had continued.

Privately owned cultivated fields included some limited acreage

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[15]Goldfrank, Social and Ceremonial Organization, pp. 10-11, 27-30.

held by the Spanish-Americans living in the pueblo. This ownership was of long duration. Poore, the Indian Agent, in describing Cochiti as of 1890, noted that "Eight Mexican families dwell here and fraternize with the Indians. As long ago as 1820 the Mexicans acquired land here."[16] Study of the historical documents on Cochiti suggested that this condition may be older than Poore stated, dating perhaps from the Seventeenth Century as indicated in CHAPTER II. These holdings had been purchased gradually by the government for the tribe until in 1948 there was very little land in this class. Several acres were held by Leo Rael, one of the two storekeepers. Near the southern limit of the reservation, near Silo, another non-Indian rented an irrigated tract of about fifteen acres from Joe Melchior.

A 1940 analysis of land holdings, showed twenty-nine heads of families holding more than ten acres, three holding over forty acres, and fourteen families holding no land.[17] The 1944 Field Report indicated an estimated 22.6 acres of irrigated land as necessary for the support of a family of five.[18] Individuals checked in 1948 and 1948 had tracts ranging from nine to thirty acres. (See APPENDIX IVa.)

Regarding farm property ownership, one of the most obvious

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[16]Poore, Henry R., Condition of Sixteen New Mexican Indian Pueblos, 1890, Report on Indians Taxed and Indians Not Taxed in the United States (except Alaska) at the Eleventh Census: 1890, Department of the Interior, Census Office, 52nd Congress, 1st Session, House of Representatives, Misc. Doc. No. 340, Part 15, 1894, p. 429.

[17]United Pueblos Agency, United Pueblos Quarterly Bulletin, Volume I, Number 4, 1939-1940, p. 17.

[18]Payne, Annual Report, p. 8.

changes to the Indians was the great decrease in small ranch-houses, "ranchitos," on farms. Almost every family in the pueblo a generation ago and earlier occupied one of these "ranchitos" for extended periods, if not for the entire growing season. Poore, in his description as of 1890, commented that "Adobe houses of a single room are found where land is farmed at a distance from the pueblo."[19] In 1948, some women had their sets of grinding metates and bins at the ranch rather than in the pueblo. Also, special subterranean roasting ovens for green corn were found at the "ranchitos" but not in the pueblo. In 1948, "ranchitos" were used by only ten families[20] although three or four more were still standing.

Informants were unanimous in contrasting this situation to the "old days" (hama haikō), when most families left the pueblo either in the early spring or immediately after the July 14 Saint's Day (San Buenaventura) celebration. These people remained at their ranches until harvest time except for occasional trips to the pueblo for additional supplies or equipment or for the celebration of other Feast Days at Cochiti or the neighboring pueblos.

By 1948, the people had allowed the ranchhouses to fall in ruins and made the trek to and from the fields daily. A few kept

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[19]Poore, Sixteen New Mexico Indian Pueblos, p. 429. (Poore added that "A number of incidents were cited by the governor showing the various ways in which these houses had been gotten by Mexican neighbors.")

[20]Clofe Arquero, Ignacia Arquero, Juan Estevan Chalan, Joe Melchior (occupied by renter), Epifanio Pecos, Damasio Quintana, Jose Domingo Quintana, Jose Hilario Quintana, Joe Trujillo, and Juan Velasquez.

these houses as crude shelters where the farmer could stay while doing night irrigating or similar work. If not travelling by wagon, the people walked, "hitch-hiked" on some neighbor's wagon, or in a few cases "commuted" by bus. This last named means of transportation had been available since March, 1945. It enabled certain families with farms along the road from Cochiti to Peña Blanca to get on the bus about 7 a. m., ride to their farm for a nickel or a dime, work all day, and return to the pueblo when the bus returned that evening about 6:30 p. m. A few families preferred to remain on their ranches as it was more convenient to their principal occupation, farming, and also they preferred the more quiet and cool "ranchito" to the "hot, noisy, crowded pueblo." (3, 21, 45, 49)

Communal Ownership. Communally owned irrigated land fell into several categories. First, were fields reserved by the pueblo for the cacique, their religious leader. While these were spoken of as the fields of the cacique, they belonged to the community. (3, 44, 45, 50, 52)

When the pueblo had a resident priest in the mission, land was set aside for his support. These lands had reverted to the pueblo since this was no longer the situation and had not been for many years.

The extent of these lands set aside for the maintenance of the church and the resident priests was difficult to ascertain. In 1754, Father Trigo described the church lands as several fanegas of wheat and one cuartilla of maize, "whereby the father is assured he will

not have to go with a sack on his shoulder."[21]

In the Domínguez manuscript of 1776 these fields were described as four fine milpas of great fertility and supplied with water by an irrigation system. In addition, there was a small plot on the edge of the pueblo, near the convento, where garden produce was grown. The yield of the four milpas was described as eighty, or more, fanegas of wheat and seventy, or more, of maize.[22] By current standards of production of these pueblo farmers, this would mean the fields were divided into about eight acres of maize and about ten acres of wheat. Also, there was perhaps an acre, or a fraction therof, which was devoted to garden vegetables and cared for by the padre.

In 1817, the land which the pueblo furnished the resident priest comprised four suertes with a fifth suerte being used as a garden plot. The author of this document advocated one suerte for actual maintenance of the church building and its repairs instead of the priest keeping all produce for himself.[23] As illustrated by this document, the amount of land devoted to the maintenance of the church and the labor expended by the Indians upon this acreage resulted in many controversies between the priests and the Indians.

These tracts had reverted to the pueblo communal lands through

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[21]Hackett, Historical Documents, Volume III, p. 451. (Land set aside for the support of the Church and priests characterized the Seventeenth Century as well. See Scholes, Troublous Times, pp. 11-17, 25-26, et seq.)

[22]Biblioteca Nacional, Legajo X, Document 43.

[23]University of Texas Archives, W. B. Stephens Collection, Folder #1904, Document 2.

disuse; they lay unused until such time as they were assigned to some individual. (15, 44, 56)

Another source of community land consisted of acreage recently purchased by the government from non-Indians who had held land on the reservation, especially in the vicinity of Peña Blanca. A portion of this land was used as community pasture and was fenced and irrigated. (3, 13, 45, 49, 50, 53)

The remaining few acres were planted with fruit trees issued by the government. This planting took place about 1937. (40) The status of this orchard appeared somewhat confused in 1948. The land belonged to the pueblo and was communally irrigated while the trees, originally issued to the pueblo, had been reissued to specific families. However, ownership had become ephemeral due to the location of the orchard across the Rio Grande from the village and at the far edge of the reservation adjacent to Peña Blanca. Trees had been allowed to go untended with little or no spraying or pruning. What little fruit ripened was shared by the first discoverers, or raiders from Peña Blanca (often synonymous with the first), or birds. Owners got little, if any, and apparently were not greatly concerned over the loss. Families who valued the fruit found this orchard too inconvenient to use and too exposed to protect. (44, 45, 70) The orchard near Peña Blanca was intended to replace a community orchard located near the pueblo. This orchard had been uprooted and destroyed in the process of constructing the irrigation canal of the Middle Rio Grande Conservancy District in the early 1930's. Damages were paid the pueblo by the District and these funds used to start the new orchard. The new location

proved unsatisfactory, however, and the people depended primarily on trees planted along ditches on their farm acreages. (1, 3, 53)

Property and Ownership within the Pueblo Proper

In this section are descriptions of the site and town plan of Cochiti, Spanish-American holdings in the pueblo, privately owned real property, community owned real property, water rights, personal property, the church, and government school.

The Site and Town Plan. Cochiti had occupied its 1948 site for at least three hundred and fifty years, being noted there at the time of the Rodríguez-Chamuscado expedition in 1581.[24] The occupation of this site was interrupted only briefly during the turbulent years between the Revolt of 1680 and the Reconquest of 1696, as outlined in CHAPTER II.

Subsequent documentary sources including the first detailed

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[24]Hammond, George P., and Agapito Rey, The Gallegos Relation of the Rodríguez Expedition to New Mexico, Publications in History, Volume IV, Historical Society of New Mexico, 1927, p. 48; Mecham, J. Lloyd, The Second Spanish Expedition to New Mexico: An Account of the Chamuscado-Rodríguez Entrada of 1581-1582, New Mexico Historical Review, Volume I, Number 3, 1926, pp. 278-279. (This was almost twenty years earlier than the date usually cited. Hodge, Frederick W., Cochiti, Bulletin 30, Bureau of American Ethnology, Part I, 1907, p. 317, stated that Cochiti occupied essentially the same site as it did when Oñate first visited there at the end of the Sixteenth Century. Twitchell, Spanish Archives, Volume I, p. 471, stated, "The present village of Cochiti was occupied as early as 1598." Agreement with this statement was also found in Hodge, Hammond, and Rey, Benavides' Revised Memorial, p. 261, and in Bandelier, Adolf F., Final Report of Investigations among the Indians of the Southwestern United States, Carried on mainly in the years from 1880 to 1885, Parts I and II, Papers of the Archaeological Institute of America, American Series, Volumes III and IV, 1890 and 1892, Part II, p. 168.)

account by Domínguez, located Cochiti in the middle of the Rio Grande Valley, elevated in respect to the river, and surrounded by broad fertile plains.[25] After these descriptions of 1776 and 1779, there were no data for a century until Bourke and Strout visited the pueblo in 1881. These men described Cochiti as "built in a hollow in a rambling scattering kind of way, divided into four distinct villages, each with its own plaza. . . . Some of the houses are falling down and the pueblo has but little to say in its favor."[26] Bourke's notes differed from Strout's in recording only two plazas instead of four, although they agreed on four divisions of the pueblo. Bourke and Strout also observed that the houses were of one and two stories, the lower portions being of basalt blocks laid in mud, and the upper courses of adobes. Houses were entered both by ladders to roof entrances and by regular ground floor doors. Windows were of selenite. Ovens of stone and mud were observed both on roof-tops and on the ground, and house chimneys were constructed of adobe and pottery. (This undoubtedly referred to the practice still prevalent in Cochiti and other pueblos of placing a large olla, or water jar, with the bottom knocked out, as the top element in the chimney. As the adobe of the chimney weathered away, the pottery jar was exposed.) In addition to the various corrals, there were two estufas, or kivas, noted. The church was described as "very old and dilapidated; . . . The cross had fallen off from front of the Church and its whole appearance is strongly suggest-

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[25]Biblioteca Nacional, Legajo X, Documents 43 and 59.

[26]Bloom, Bourke on the Southwest, pp. 234-237.

ive of decrepitude and ruin."[27]

Details for a few years later, 1890, were available in Poore's report, excerpts from which follow.

> Cochiti has an extremely favorable site. It faces the river at a height of 25 feet and is surrounded on 3 sides by tillable plains. The buildings in town, 50 in number, are generally separated, not more than three dwellings being contiguous. The larger portion are of 1 story. . . .
>
> . . . The houses of the town are better built and more healthful than in many pueblos. Paneled doors, window sashes, and glass are generally used. Open antechambers for sleeping are noted. This is the most northern pueblo in which are to be seen inclosures, or yards, in front of houses. These are called corrals, and are used as such for horses in waiting for one or two hours. The fences are formed of cedar trunks driven in the earth at close intervals and bound together with telegraph wire, thongs of leather, and horsehair. The plaza is unusually large and the streets wide. The Catholic church is in good repair, the Mexican contingent taking a greater interest than the Indians in its ceremonials. . .[28]

Some limited data on the appearance of the pueblo for the first decade of this century were obtained from examining photographs by Vroman, Lummis, and others.[29] The greatest apparent changes occurred in the mission. A few two-storied houses were visible in these pictures, a change from 1948 when the only two-storied building in the pueblo

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[27]Bloom, Bourke on the Southwest, p. 235.

[28]Poore, Sixteen New Mexico Indian Pueblos, p. 429.

[29]Bandelier, Adolf F., The Delight Makers, New York, 1946, p. 140; Harrington, John P., The Ethnogeography of the Tewa Indians, 29th Annual Report, Bureau of American Ethnology, 1916, Plate 19a; Hodge, Hammond, and Rey, Benavides' Revised Memorial, Plates VIIIa and b; Kubler, George, The Religious Architecture of New Mexico in the Colonial Period and Since the American Occupation, Contributions of the Taylor Museum, 1940, Plate 121.

was the home and store of the Spanish trader, Leo Rael. The dominance of one-storied houses and cedar post corrals appeared essentially unchanged. In the picture used by Harrington, a fenced threshing floor was seen in the foreground (located southeast of the church), and the segmentation of the pueblo seemed much more obvious than it did in 1948.

No other data regarding the site and town plan of Cochiti were known until Goldfrank's opening paragraph in which it was stated that "On first entering the village one is impressed by its modernity, the new one-story buildings, the tin roofs, . . ."[30] Further details were lacking, and the remainder of the information in this chapter was obtained directly from informants. The data substantiated the meager material already cited and were valuable in adding many details for the last half-century or more.

Past descriptions of Cochiti fit the 1948 situation with perhaps one exception. It was difficult to visualize Strout's statement that Cochiti was located in a hollow, unless he was referring to the entire landscape including rather distant mountain ranges.

In the account by Poore, there was a statement that "Cochiti has no orchards, and no trees are to be seen here save the cottonwoods and willows on the sandy island of the river."[31] It is difficult to determine if Poore had the actual pueblo area in mind in this comment. A few trees in the older portions of the pueblo, around the plaza and the church, might well have been growing, although not large enough to be

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[30]Goldfrank, Social and Ceremonial Organization, p. 7.

[31]Poore, Sixteen New Mexico Indian Pueblos, p. 429.

obvious at the end of the last century. In 1948 the plaza had several fairly good sized trees along its western and northern edges. Other trees of fair size were scattered about the pueblo, and many small trees were watered and protected by different families.

In 1948, as in the past, the center of Cochiti was the plaza (Kakat^{che}). The series of houses surrounding the plaza on four sides, the two kivas to the north and northeast of the plaza, and the church off the southeast corner of the plaza constituted the heart, both literally and figuratively, of the pueblo. Additional plazas, and house groupings, mentioned in Bourke's description, were difficult to identify due to confusion in use of the terms plaza, streets, and open areas.

The Cochiti had only one plaza and claimed that is all they had ever had. Bourke's additional divisions and plazas probably included such groupings as the northeastern sector of the village and the several house blocks south of the church.

In the minds of living Cochiti the village was made up of six sectors, whose boundaries are shown on Map 3. The principal function of these sectors was to designate the district which each of the six fiscalitos and six alguacilitos, assistants to the officers, must cover in making official announcements to every pueblo household. The sectors were: 1. Round Mesa (Kōlashkule), 2. North Group (KĪtĪsatyå), 3. West Group (PōñĪsatyå), 4. South Group (KwĪsatyå), 5. East Group (HañĪsatyå), and 6. Plaza Group (Kakat^{che}). (44, 70)

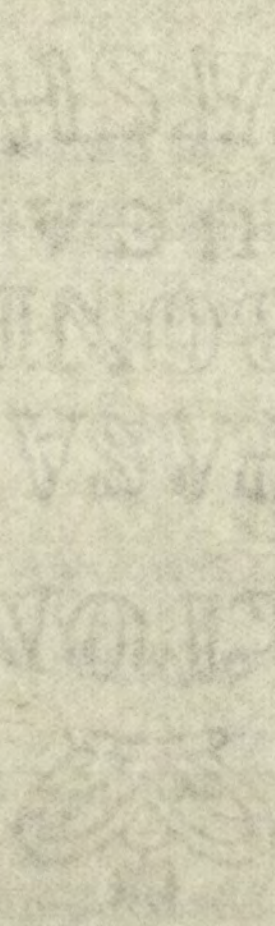
Minor designations, but apparently non-functional, were three subdivisions of the South Group. These were the Southwest Group (KwĪpōñĪsatyå), the Southeast Group (KwĪhañĪsatyå), and the Butterfly

Group (Po'laga). (44, 70)

In 1948, the pueblo was restricted on the eastern side by the canal and cultivated fields. However, there had been considerable expansion to the west and north, beginning about 1912. Locations with building dates of these newer house sites can be better appreciated by examining Map 3.

Aside from this recent expansion, the next most obvious feature was the almost complete lack of multiple storied buildings in the pueblo. No one recalled houses of more than two stories at Cochiti. In the block of old houses just south of Rael's store, the ruined walls of a former two-storied house could still be seen, and informants listed other houses which were two-storied. These were located in reference to occupied houses as of the summer of 1948, and, as shown on Map 3, almost all of them bordered on, or were near, the plaza. (3, 15, 25, 40, 49, 50, 52, 70) Older informants claimed that multiple stories made lower floors cooler in summer and warmer in winter. (25, 45, 50) "They look nice, too." (25)

No examples of selenite windows were found in Cochiti in 1948, although informants remembered them. Some had helped repair them, using a special white clay as caulking between the segments of selenite. (44) No ovens were seen on the house roofs, although almost every family had one or two in the yard. Other architectural features were in the normal pueblo range with the possible exception that was noted by Goldfrank, the galvanized iron roofs. These totalled about a dozen on houses and barns, or sheds. However, the fact that the church, which dominated the pueblo scene had a gabled, galvanized iron roof served to



emphasize the presence of this non-aboriginal feature. Other gabled, metal roofs were principally on buildings occupied, or formerly occupied, by Spanish-American families.

From the preceding data, it is apparent that there have been gradual changes in town plan and architectural features at Cochiti, namely, the abandonment of multiple-storied buildings and the increasing desire for greater space between houses. Such changes cannot be directly ascribed to economic factors but represent further evidence of long-standing influences of Spanish and Anglo cultures, both in the pueblo and in neighboring communities.

Spanish-American Holdings: Homes and Stores. Perhaps one of the most distinctive features of Cochiti Pueblo was that land and houses were still owned and occupied within the pueblo by Spanish-Americans. This occurred in few other pueblos in 1948.

As stated on page 41, these Spanish-Americans were believed by Poore to have come into the pueblo about 1820, although it is probable they settled even earlier. Cochiti informants claimed these people had been invited to the pueblo to help protect against Navaho and Apache raiders. Once in, they were unwilling to leave, and their presence had been the source of periodic conflicts through the years. (45, 70)

In 1948, there were only four Spanish families in the pueblo, Gallegos, Herrera, Rael, and Tafoya. Of these, all but the Herrera family were descendants of families of long residence in Cochiti. Other Spanish families formerly in the pueblo were the following: Hernandez,

Hurtado, Lucero, Pais, Rivera, Romero, and Salas. These moved ten or more years before either to Peña Blanca or Cuba, New Mexico. (65) The homes of the Herrera,[32] Tafoya, and Gallegos families were on the eastern peripheries of the village. The Rael home, adjoining their store, was more prominent because of its position and its two stories.

In spite of their small numbers, the Spanish-Americans figured conspicuously in 1948 Cochiti life since they operated the only two stores. The Rael store was situated on the only road passing through the pueblo, a location important for outside trade. The El Pueblo Bus Line passed its door, and mail was collected and distributed there although it was not an official post office.[33] It maintained the only gasoline pump and one of the two telephones in the village. A wide range of groceries, some dry goods, and a limited amount of cosmetics were carried.

The store of Luciano Gallegos was located near the eastern edge of the pueblo. While somewhat less obvious to the non-resident, it enjoyed almost equally good patronage by the Cochiti. As might be expected, families shifted from store to store as different stocks and brands fluctuated, as credits were extended or retracted, and as personal feelings vacillated.

Negotiations were begun in 1947 to exchange house sites which

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[32] In 1949, the Herrera house in the northeastern corner of the pueblo was purchased by a Cochiti, Clofe Arquero, thereby eliminating one more Spanish-American holding in the village.

[33] In 1947 Cochiti was on a Star Route of the Bernalillo Post Office while in 1948 it was on the Peña Blanca Star Route.

had been purchased from other Spanish families by Rael. Rael wished to keep his present home and store, but was willing to trade his other house sites and corrals for a greater acreage located at the southern periphery of the pueblo. The Cochiti officers were anxious to regain the various house lots, primarily in the vicinity of the Turquoise Kiva in the northeastern portion of the pueblo. They did not wish Rael to keep his house and store, nor did they want to meet his demands of acreage in exchange. (21, 45) Through 1948, no agreement had been reached in this matter.

Privately Owned Real Property. In 1948, this form of property included houses, house lots, barns, sheds, corrals, outdoor ovens, outdoor toilets, and two grinding mills. These properties were owned, exchanged through trade, gift, or purchase, and inherited in the same ways as were agricultural lands.

Sharing of these units, particularly houses, among several people resulted primarily from inheritance. If a house were left to multiple heirs, it was divided evenly among them on the basis of rooms. There were ordinarily more heirs than rooms, and in such cases, the division was made on the basis of so many vegas, or roof stringers, per heir. Later, one or more heirs could buy, trade, or receive by gift or by inheritance, in turn, the entire house. (3, 15, 20, 70)

Families often lived in the mother's house, especially if there was a step-father. There were also cases of families living in houses owned by children of one of the couple, or of children of close kin. From accounts of various informants, it seemed that houses, land, and similar property were inherited jointly with subsequent exchanges

among all heirs in order to leave certain ones with the type of property each preferred and enough of it to be usable. (1, 2, 3, 15, 16)

The typical house (kajrutē; older form: aihehē) consisted, in 1948, of foundations and lower courses of basalt and upper courses of adobes, with the entire wall plastered with adobe inside and out, as noted by Bourke and Strout. The inner walls were whitewashed with a special preparation of ground stone gathered in a canyon north of the pueblo. The lower quarter of the interior walls was usually finished with a reddish-brown wash, also made of ground stone found near the junction of the Rio Grande and Cañada de Cochiti. Roofs were supported by pealed pine vegas. Boards rested on the vegas and were covered with tar paper and adobe. Roof-tops were carefully hollowed, and in the center there was about a two inch pipe which drained this basin and protruded several feet from the walls. Leaky roofs were remedied by a few shovel-fulls of fresh adobe, by raking of the contours, and by cleaning the drainage pipe.

The roof and ceiling were essentially the same as in aboriginal times except for the metal drain-pipe, tar paper, and boards. In earlier days these functions were performed by wooden troughs and by layers of hewn wood, brush, and grass. A few houses still exhibited the older ceiling form although it was often concealed by cloth sheeting tacked across the vegas to prevent dust from drifting down.

Almost every house in Cochiti had one or more corner fireplaces, usually located near the door. A low adobe wall protruded into the room three or four feet, protecting the fire from the doorway drafts. In 1948, many houses also had a wood-burning range used both for cook-

ing and heating.

Newer houses were characterized by larger and more numerous windows which either slid or swung open. Screening on both doors and windows was becoming more common but was often poorly maintained.

Floors varied from wood planking on joists to packed adobe. A floor of either type was normally surfaced, more or less completely, with sheets of linoleum, frequently of several patterns and vintages. Preferences varied between the wood which was easier to clean and the adobe which was less apt to be inhabited by mice and other invaders such as bed-bugs. (3, 15, 16, 20, 24, 70)

In the summer a great deal of time was spent in the yards, especially by those who had shade trees. Others had ramadas, or sunshades, fashioned from pole frames covered with a liberal supply of cottonwood branches. Many constructed adobe windbreaks under these ramadas adjacent to the houses. There they cooked over open fires or on wood-ranges. (13, 16, 17, 23, 24, 27, 28)

Roughly half of the pueblo homes had single metates, ordinarily used for grinding chili, and a series of grinding bins for maize and wheat. Special ovens and equipment for making the traditional "paper bread" were becoming increasingly rare, with perhaps fewer than a dozen women still using them. (16, 17, 23, 27, 28)

Storerooms, barns, and sheds relieved the congestion of the houses, providing storage space for infrequently used items. Several were made of discarded railroad ties, obtained when the spur from Domingo Station to the Rio Grande north of Cochiti was torn up about twenty years before. In the storerooms were kept large pottery storage

jars, provisions, untanned hides, sections of tree trunks to be worked into drums, and similar items. Saddles, bridles, and harness were often hung in such places, especially in rooms that could be padlocked.

Many men had shelters in the corrals under which they kept their wagons and machinery. A common type of shelter was a platform of logs elevated six or eight feet from the ground and covered with hay. This served to protect the animals from the weather and also kept the hay out of reach of the animals. It also kept the hay convenient for feeding. A few corrals were of rough planking, but the majority were of combined barbed wire and cedar post construction.

While some houses still had enclosed yards in front, as described by Poore, their use as temporary stock corrals had ceased. As a result of health education there seemed to be a conscious effort to keep stock from the immediate vicinity of the houses. Young boys who left horses standing near a house were reprimanded and made to tie them at a more distant fence or post.

Outdoor toilets were scattered throughout the pueblo, commonly located away from the houses and near the corrals. These structures were built according to Indian Service specifications and, hence, were quite uniform. Floors were concrete, with wooden seats and side walls; roofs were corrugated iron sheeting. These appeared to have been kept in a state of good repair by the owners, many of whom kept theirs padlocked for private use. The house of Joe Herrera, being built in the summer of 1948, was to have the first bathroom with interior plumbing.

Almost every family possessed one or two outdoor ovens for both daily and Feast Day baking. Most breadstuffs were still made in these

domed, "beehive," ovens. They were three to five feet in height and about the same in base diameters. They were made of a special tuff gathered in the mountains northwest of the pueblo. Men who went into the hills for firewood were often accompanied by their wives who collected this material. When a new oven was made, the old one was torn down. Tuff was often salvaged and added to new blocks to make a larger oven. The oven floor was of packed adobe; the walls, about six inches thick, were plastered both inside and out. A small opening, about two inches in diameter, was left near the top for ventilation, and a doorway about eighteen inches high and wide was made at the base. Usually, the oven had a two foot square platform in front of it. The small vent was closed with a wet rag and corncob plug. The doorway was closed by a metal sheet covered with a dampened sack. Wood, and even more commonly, corncobs were used for fuel.

There were two grinding mills at Cochiti in 1948. Frank Chavez owned one which was engine-powered; because of the higher operating costs and fee, this mill was not patronized as much as the water-mill[34] owned by Cipriano Quintana, one of the oldest and most respected medi-

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[34]An evaluation of the efficiency of water-mills was found in comments of Bourke. "April 10, 1881, Palm Sunday. Two of the main acequias (ditches) crossed the road and near the bridges we saw Mexican flour mills; these were cottonwood log edifices, about 12 ft. square and 7 ft. high, built over the ditch to allow the water to turn a small turbine wheel. I should conjecture that in an emergency, under the stimulus of a Govt. contract, with a full complement of hands (that is to say a man smoking a cigarrito, a small boy scratching his nose, and a big dog scratching his ribs.) and serving full time, one of these mills could grind a bushel of wheat in a week; the ordinary output can't be over half that quantity." (Bloom, Bourke on the Southwest, pp. 299-300.)

cine men in the pueblo. The water mill was located near the pueblo at the edge of the bosque and was powered by excess water from the irrigation system. A small fee was charged for the milling, and it had been used for many years especially for grinding wheat. (2, 3, 15, 20, 53)

Community Owned Real Property. In the category of community owned real property were kivas, community houses, society houses, a house built for the government farmer who formerly resided in the pueblo, and a community corral.

The eastern kiva belonged to the Turquoise Moiety and was called Hanumã, or Shõame chĩkya. That of the Pumpkin Moiety was called Põnumã, or Dañi chĩkya. (3, 16, 48, 70) Informants agreed that the kivas had remained unchanged except for minor repairs. (3, 21, 25, 45, 49, 70) In this connection, Bourke's notes were interesting as they provided the earliest available kiva details.

> Two Estufas. 1st 12 paces in D. Circular, overground 8' deep, approached by a staircase of ten steps of undressed wood. Lower course are stone - upper of adobe; plastered within & without; whitewashed within. Roof supported by a horizontal pine beam, squared, 2' thick, under which are vertical struts of pine. - No hole in wall, no windows & no air Except down through ladder-hole. Green corn painted on walls. Ground very damp. Second Estufa - identical with first. Cross on wall.[35]

The kivas Bourke saw agreed in dimensions with those of 1948. While the stairway approaches on the outside were common in the Rio Grande Pueblos, it is of interest that this feature was also true in

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[35]Bloom, Bourke on the Southwest, p. 235.

Bourke's time. Kivas at Jemez and elsewhere in 1948 were entered by both outside and inside ladders. Cochiti kiva stairways were oriented in respect to the plaza, apparently for convenience. The ladder (wakōs) of each kiva projected well above the roof; the Turquoise ladder had a decorative cap while the Pumpkin ladder was undecorated. The ladders entered the kivas through rectangular roof openings which were oriented with their long axes on a north-south line. The protruding ladders pointed northward. Unlike Santo Domingo, Jemez, and elsewhere, the Cochiti kivas had no wall openings. The roof supports and struts were much the same as Bourke reported, except that instead of one large beam supported by pine struts, there were four additional beams in each kiva on which smaller timbers rested. These additional beams did not have supporting struts, or pillars. Informants agreed that the Pumpkin Kiva had no murals and had not had them for some time. The Turquoise Kiva had various rainbow and lightning designs as well as a few simple Kō'sharī figures on the walls. These were painted several years before by Joe Herrera, one of the younger artists in the pueblo and a kiva member. While the walls had been replastered since that time, the murals had been copied through the thin coating. Thus, the murals retained their general outline although changed in detail. (55, 70) Other informants stated that Tonita Peña, the mother of Joe Herrera and a well known artist in her own right, had also done some mural work for the Turquoise Kiva. (15, 16, 53) Bourke's notes indicated that both kivas had murals, but did not specify the designs.

For the July 14 Feast Day in 1947 and 1948 the two kivas were replastered and whitewashed both inside and out. This appeared to be

the traditional treatment of kivas for this particular celebration. The outer whitewash disappeared after one heavy rain. The gypsum for the whitewash was gathered by the war captains near La Bajada and was baked in an outdoor oven for twenty-four hours or more. It was then ground to a fine powder by the alguacilitos, and each kiva group was given enough to paint its kiva both inside and out. (15, 16, 17, 20, 21, 22, 24, 44, 53) This was done about a week prior to the Feast Day.

Neither kiva had a bench or seats around the wall. Bourke did not refer to any and no informant remembered any. Informants denied any knowledge of a sipapu in either kiva or in kivas elsewhere. (15, 25, 53)

Inside walls of the Pumpkin Kiva were white with no other markings except for a reddish-brown wainscoting about three and a half feet high. On either side of the ladder, the wainscoting changed to a small "stepped pattern" (⌐¬⌐¬).

The firebox, or pit, (Mōkatch, mountain lion) of both kivas was entirely above the floor level. It was about a foot high in front and about three feet high at the back where the edge was "stepped." It was approximately six feet long and three feet wide, duplicating the size of the roof entrance. The box walls were plastered with adobe and were about six inches thick. The firebox lay directly under the entrance way, and in climbing the ladder, one passed over the fire. Wood for the fire was kept in a pile beside a nearby corral; and when it was about to be used, it was placed on the kiva roof.

The community houses were extensively used. The Pumpkin House

was built in 1923, and the Turquoise House was built about 1938. Prior to their construction, large private homes were utilized for meetings, dance rehearsals, and similar occasions. (2, 3, 15, 49, 52, 53) The Turquoise House was the larger of the two and was commonly used when the entire pueblo, or the adult males, were called together, for example when the medicine men announced the officers of the coming year on the night of December 29. The Turquoise House was approximately twenty feet wide and sixty feet long. Each house consisted of two rooms, with a fireplace in the inner room. This was used for warmth and for heating drums prior to the dances. (44, 45, 55, 70) Furniture was limited to a row of wooden benches around the walls. In general appearance, these houses looked like ordinary residences.

Society houses constituted another form of community owned real property. Actual ownership in 1948 of the Giant (Shkōyō), Kwi´rēna-ShĪ´kame, and ShrutsĪ Houses was private. Since these society houses were privately owned, an explanation should be made for their inclusion under community property. Since the time of their loan to the societies, the upkeep of these buildings had been the responsibility of the pueblo. If the societies had insisted, the people would have had to build special houses for them. "One of these days, we will have to do that." (15)

The Giant House was the property of Cipriano Quintana, the Head Giant. The house shared by the Kwi´rēna and ShĪ´kame Societies had been loaned to them by Eleuterio Suina, stepfather of Eufrasio Suina, the Head ShĪ´kame and only member. He was also a member of Kwi´rēna. The ShrutsĪ House had been loaned to them by Estephanita Herrera, a

woman important in the Kō´sharī and native ceremonial life. The Kwi´-rēna- Shī´kame House was on the east side of the plaza, the Giant House was just beyond the plaza on the north side, and the Shrutzī House at the southern end of the pueblo, some distance from the plaza.

The Kō´sharī House, which was shared with the Flint Society, was located just beyond the southeast corner of the plaza at the rear of the church. This was their own house, built for them by the community on the site of the former two-storied Kō´sharī House. This last house was built about 1915 when Victoriano Cordero became cacique. Until that time the pueblo had built a new house for each new cacique. In 1915, they built this one house, as an "office," to be used by Victoriano and subsequent caciques. A distinguishing feature of this otherwise ordinary house was the screened opening at the top of the east wall, opening into the inner room. Informants did not admit any knowledge of details other than the fact that "this had to do with the cacique's work of watching the sun." (70)

The former Kwi´rēna-Shī´kame House was a two-storied building at the southwest corner of the plaza next to Luis Ortiz' storeroom. This house became so old that it was abandoned, and about 1933 the society moved into the house loaned them by Eleuterio Suina. (55)

The "house of the government farmer," a designation by which it was still known, was located at the edge of the pueblo in front of the church and beside the irrigation canal. It had two rooms and was covered with a gabled, iron roof. Since the office of government farmer had been discontinued by the Indian Service, the house was used by the pueblo for community purposes. One man suggested it as a possible

residence during our stay in the pueblo. Others quickly pointed out that it was not only in bad repair but was full of seed, tractor fuel and oil, spare machine parts, and similar community property. (2, 3, 15, 20, 38, 53)

A community corral was located northeast of the plaza. It was approximately a hundred feet square with a gate in the middle of the west side. It was constructed of vertical juniper stakes about five feet high, and it was kept in repair although seldom used. Formerly, the burro herd was brought in each night and placed in the corral by community herders. (49) The only attention paid to the corral during my residence in the pueblo was the brief ceremony there during the celebration of Santiago's Day (Patron Saint of the Horses) in 1948.

Water Rights. Nothing was found in historical documents or published literature regarding Cochiti water rights.

The total water supply for Cochiti irrigation was regulated by the Middle Rio Grande Conservancy District in 1948. The pueblo was the first community below the Cochiti Dam, built in the early 1930's by the Conservancy District. With the allotments controlled by the District, this position was not as advantageous as it might appear. However, there were occasions when Cochiti benefited from its location.

When water was turned into the Cochiti ditches from the canals, rights to it were determined largely on the principle of "first come, first served." This meant that fields located at the upper, or north, ends of the ditches and fields located immediately "under the ditch" were most desireable. (3, 15, 49)

Owners of fields at the bottom of the ditches, or farthest from the ditches laterally, were forced, in times when the water supply was low, to irrigate at night or at times when the demand for water was less. When difficulties arose, through either undue monopoly of the supply or carelessness in maintenance of gates or dikes, complaints were made to the governor. At Cochiti, the governor served as "Water Boss," a position which White found at Santa Ana to be a separate and important civil and sacerdotal office.[36]

Disputes over water rights were ordinarily settled by the governor. If his decision was questioned, an appeal was made to the Council of Principales. Lack of formal regulation of water rights was noted for other southwestern tribes. For the Havasupai, Spier stated:

> . . . There is no set regulation for the use of the water. The supply is large, the need is small, and apparently there is little friction over rights to its use. Yet quarrels have arisen from this source.[37]

For the Navaho, Hill commented as follows.

> . . . Where ditch irrigation was practiced, the person farthest upstream used what water he wanted and those below got what was left. In recent years water from irrigation systems built by communal labor or by the United States government is apportioned to the several land holders.[38]

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[36] White, Leslie A., The Pueblo of Santa Ana, New Mexico, American Anthropologist, Volume 44, Number 4, Part 2, 1942, pp. 105-106.

[37] Spier, Leslie, Havasupai Ethnography, Anthropological Papers, American Museum of Natural History, Volume XXIX, Part III, 1928, p. 102.

[38] Hill, W. W., The Agricultural and Hunting Methods of the Navaho Indians, Yale University Publications in Anthropology, Number 18, 1938, p. 23.

For San Ildefonso, Whitman reported that the governor "arbitrates questions concerning land and water rights -- the most fertile source of quarrels at San Ildefonso."[39]

Cushing recorded the Zuñi regulations on water use.

> . . . So limited is the supply of water during the dry months, that every householder keeps an account-stick hanging somewhere near the sky-hole. Every time he waters a set of his "earth-bins," he has to cut a notch in this account-stick; and as the latter is liable to inspection by the sub-chiefs any morning, he dares not, or rather does not, use more than his proper allowance of the water. . . .[40]

In regard to earlier concepts of water rights at Cochiti, it is likely that the "first come, first served" policy was the rule. Prior to the 1930 dam and canal construction, which resulted in a more reliable water supply, it is probable that this policy caused more frequent and bitter disputes than ordinarily occurred in 1948. It should be pointed out, however, that prior to the 1930 construction and as far back as the Cochiti could remember, there was less acreage irrigated from the Rio Grande. Many farmers cultivated tracts which depended upon arroyo flood-waters, ground seepage, or precipitation. These aspects of water utilization are discussed in CHAPTER IV.

Within the pueblo proper, in 1948, there was a water system designed to furnish an adequate supply of pure water for drinking and

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[39] Whitman, William, The Pueblo Indians of San Ildefonso, New York, 1947, p. 18.

[40] Cushing, Frank H., Zuñi Breadstuff, Indian Notes and Monographs, Volume VIII, Museum of the American Indian, Heye Foundation, New York, 1920, pp. 366-367.

general household use. Three wells, each with a windmill, and one with a gasoline pump, supplied water to several outdoor hydrants and to drinking troughs for stock. The government school had its own windmill and tank. Anyone noticing that the water pressure was low could turn on a mill, and anyone who observed a tank overflowing turned off the windmill. (3, 21, 70)

A few families had water piped to their houses, and several others had hydrants in their yards "and the pipes and things to have water in the house, but we just don't get around to putting them in." (16, 44, 45, 53)

For the most part this system was adequate for the needs of the pueblo. Again, this water was used on an unregulated basis of "first come, first served." Invariably, in the week or two before the annual Feast Day when demand on water for baking, plastering, and other work was heavy, the supply failed. This was in part due to the unusual demand and in part to the small storage tanks. During that time of the summer, wind was infrequent. To remedy this shortage, a gasoline engine and pump were installed in 1945 at the largest well, located west of the pueblo. This helped, but the real need was larger storage capacity in which a reserve could be accumulated. (3, 15, 20, 27, 28)

Major overhauls of the water system were supervised by engineers of the United Pueblos Agency, and this same office collected periodic water samples for laboratory analysis. The Cochiti prided themselves on their sanitary water system as contrasted with the open wells still used in San Felipe and elsewhere. "We can dance just as well and do other things even if we have these things." (15, 16, 44, 53)

Personal Property. Detailed descriptions of Cochiti household furnishings were seldom found in the literature. The following extracts were taken from Bourke's journal for 1881.

> Entered through roof by ladder - room 30' long x 15' broad, 7' high, lighted by two selenite windows. . . . Wooden images of Saints, abalone shells, ristras of chile - corn in ear or shelled - Batons of Office - young girl grinding wheat or corn-meal in metates. (This was the house of the governor. C. L.)
>
> . . . . . .
>
> Our room was 50' l. 20' w. 8' high - Walls, adobe whitewashed brown floor band 18" in height - Floor, packed clay. Ceiling, round peeled pine rafters, 6" thick, one ft. apart, covered with successive layers of twigs, hay, and clay. Three selenite windows on one side 2' square set on outside of wall, the 12 in. in thickness of which made a niche. Two fireplaces. - One door to enter 4' h. and 20" w. of pine plank nailed together. No lock. Door held to by buckskin string.
>
> In room, plenty of corn in ear, piled on floor, chile and pumpkins, crosses and Saint's pictures in tin frames, Onions, Gourd & Tortoise rattles.[41]

A decade later, notations of the Eickemeyers provided additional data. Notes were made on both Spanish and Indian homes which they visited.

> This Mexican room was very different from those in the Indian houses, resembling one that might be seen in the poorer quarters of any town. There was a rag carpet on the floor (the rooms in the Indian houses were not even boarded), and, besides several chairs and a table, there was a bedstead with a gaudy blanket of Mexican manufacture for a covering. The walls were covered with a cheap paper, and what struck us as being very peculiar were two frames, the faces of which were turned to the wall. They were looking-glasses, which in the case of a death in a family are always turned

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[41] Bloom, Bourke on the Southwest, p. 234.

toward the wall for one year.[42]

The Eickemeyers described an Indian home as follows.

> . . . In a house not far from the school were two squaws seated on the floor, . . . The room itself had a very neat appearance. The mattresses and blankets which had been used to sleep on, the night before, had been rolled up against a side wall and were being used as a settee. In front of this were several old buffalo skins with very little fur left on the surface, showing they had been trampled upon for many years. In the centre of the room, from the roof timbers, was suspended, by a raw-hide rope, a papoose cradle, in which was a sleeping baby. . . .
>
> On the walls of the room were bows and arrows, some in course of construction, while others looked as if they had been used in killing birds and rabbits, a sport of which the Indian boy is very fond. They all handle the bow and arrow with great skill. The familiar Winchester and a belt of cartridges, together with little trinkets, such as beadwork necklaces, medicine bags and eagle feathers, hung on wooden pegs on the wall. Along one side of the room a long pole was suspended from the ceiling by a rope at each end, and over it hung the bright-colored, zigzag-designed blankets which are obtained by trading shell bead-work with the Navajoes. The black squaw dresses, also of Navajoe manufacture, and buckskin leggings, and moccasins covered with beadwork and colored with ochre, were hung over one end of this pole. From the ceiling were suspended ten or eleven drums, which the Indian considers sacred.[43]

The above description was applicable to most Indian homes until approximately 1940. Beginning just before the war and gaining momentum with each passing year, furniture from American culture had been acquired.

Furniture in most homes in 1948 consisted of one or two double beds, perhaps a cot or porch swing which could be used as a cot, a small table or two, a table for eating, several straight chairs, and a

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[42]Eickemeyer, Carl, and Lilian W. Eickemeyer, Among the Pueblo Indians, New York, 1895, pp. 91-92.

[43]Ibid., pp. 97-98.

few stools and benches. Occasionally, there was a rocking chair. Many had dressers or wardrobes in which clothing and other articles were stored. Generally, one or more steamer trunks were seen. Mirrors were hung on the wall, attached to dressers, or sometimes plastered into the surface of the wall. These, framed religious pictures, and other framed pictures were commonly bordered with a miscellaneous collection of family snapshots. While they were fond of snapshots, and some of them had cameras, they were seldom seen taking pictures. Favorites of post-war years were pictures of servicemen and of service units of which different individuals were members.

The great majority of the houses still had the long pole noted by the Eickemeyers. This was of pealed pine and extended almost the complete length of an average-sized room. It was usually suspended with baling-wire from the vegas, hanging at about head height. Wire replaced the rawhide of former times. On the poles were hung extra bedding, Navaho blankets, mantas, sashes, and similar items.

In sharp contrast to this survival were the Singer Sewing Machines seen in almost every home. Dry goods were one of the preferred items of trade, and materials were made into dresses, shirts, trousers, and other clothing by the women. While not common, battery radio sets were owned and maintained by several families. Audiences, especially the younger people, listened with considerable enthusiasm to news, weather, sports, and Spanish music programs. (13, 15, 20, 24, 53)

Lighting in the houses ranged from candles to a variety of kerosene wick and mantle lamps. Coleman lamps were valued, but were not popular because the white gasoline was difficult to obtain and to

guard from impurities. A few women had Coleman irons although most used sets of solid flatirons which were heated on woodstoves.

Laundry equipment and facilities had changed from former times when washing was done along the river banks or irrigation ditches. With hydrants scattered through the pueblo, and in some cases with outlets actually in the homes, washing was done with wash-boards in the yards. An even more recent development was the patronage of the "Serve Yourself" type of laundry in Bernalillo, Santa Fe, or Albuquerque.[44] (13, 16, 18)

Babies were still cradled as the Bickemeyers described. The cradle was a sturdy hoop, generally of oak, with the inside of the hoop filled with interlaced rawhide. Meshes were about two or three inches. The baby was placed on the cradle, wrapped in blankets. The whole bundle was then lashed to the cradle which was given a gentle push from time to time by passers-by.

In contrast to the survival of the cradle were the "strollers" in which babies were occasionally seen being pushed through the pueblo streets. By far the most common was the traditional carrier, the blanket, which held the child high on the shoulders.

Teams of horses and wagons were still used for travel between the pueblo and fields, mountains, neighboring pueblos, and nearby towns. A few wagons were only a year or two old. Most of them were

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[44] Still greater changes can be expected in the near future in household appliances. After several years of delays, the pueblo was finally wired for electricity in the fall of 1949. By August, 1950, all but about a half dozen homes were using electricity. (44, 70)

older and weather-beaten, with boards chipped, chewed, and worn from usage.

Most harness was several years old and repaired with splices of rawhide and baling wire. Saddles ranged from a few new ones to those showing long years of wear. They were kept either in sheds, or suspended by the horn from a tree in the yard. Wagon repairs, such as new spokes, boxes, or beds, were normally accomplished at home, utilizing portions of discarded wagons. Some metal work was done in simple forging. One young man, Joe H. Quintana, had a welding and machine shop in 1946, located in a corral and shed behind the Pumpkin Community House. By October, 1947, however, his trade had diminished to the point where the venture had been abandoned.

In 1947, Geronimo Quintana was the only person in the pueblo who owned a passenger car, a 1935 Chevrolet coach. During the winter of 1947-1948 this car was sold. Truck owners in 1948 included Juan Rosario Melchior who owned a Chevrolet pickup, Frank Chavez, son of Cipriano, a two-ton Chevrolet, Selviano Quintana, a two-ton Chevrolet, and Jose H. Quintana, a two-ton Chevrolet. A two-ton truck was also owned by Rael. (44, 45, 70)

Informants stated that before the war several others in the pueblo owned cars and trucks. However, these older models were sold when gasoline rationing was begun. Since the war, the cost of cars had precluded their purchase. The service of the El Pueblo Bus Line, which began in March, 1945, had lessened the need for cars as daily service was provided to either Santa Fe or Albuquerque. More bulky produce was transported by one of the Cochiti truck owners. Early in

1948, the community purchased a truck to transport goods to market and to serve other purposes discussed later. With such facilities available as the bus and community truck, it is unlikely that there will be many more cars and trucks in the pueblo.

Other personal property, such as agricultural implements, utensils used in preparing food, arts and crafts products, and similar items are discussed in later chapters.

The Church. Since the arrival of the Franciscan Fathers at the beginning of Spanish explorations and colonization, Cochiti had had only the one church. The building and its equipment were considered by the Indians as their property, and the priest who said the Mass and performed other duties, as well as the Spanish-American families who joined in the worship, were present at the pleasure of the pueblo. (17, 45, 49, 53, 55) This feeling of possession has been noted for other pueblos. In his monograph on Santa Ana, White stated, "But their Catholic church, i. e., the one in their pueblo, belongs to them."[45] In a footnote to this statement, White continued this discussion of pueblo churches.

> The Indians claim that the church buildings, church lands, and church paraphernalia, as property, belong to them. A former Superintendent of Pueblos, Leo Crane, declares that the church at Acoma is the property of the Catholic church, "the title resting in the Archbishop of the diocese," Desert Drums, p. 130. The archbishop of Santa Fe is of the opinion that church buildings and the lands upon which they rest in the pueblos belong to the Catholic church (letter from Supt. S. D. Aberle, United Pueblos Agency, to the present writer, under date of Nov. 22, 1938). The writer has gone to some pains to discover who really does own the churches and

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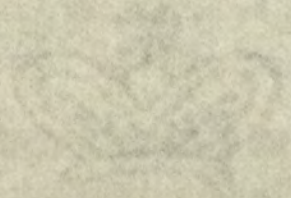
[45] White, Santa Ana, p. 61.



> lands in the pueblos, but with little success. But the fact remains that the Indians believe and insist that it is they who own them. As Crane put it, "The Acomas retain very peculiar ideas concerning their mission church," - that is, they think they own it whereas Crane declares they do not (loc. cit.). There is nothing "very peculiar" about the ideas of the Acomas on this subject; they are held by all of the Keresan pueblos and in all probability by other pueblos as well.[46]

The church at Cochiti was the largest building in the pueblo and was located off the southeast corner of the plaza. Its three-foot thick adobe walls stood about thirty-five feet in height, and the overall length of the building was about one hundred and thirty feet. As of 1890, Poore described the Cochiti church as follows, "The Catholic church is in good repair, the Mexican contingent taking a greater interest than the Indians in its ceremonials."[47]

In 1912, repairs were made on the church and the gabled, galvanized iron roof was added with the small cupola containing the bell. In 1948, there was some feeling that this should all be removed, and the original flat roof and typical facade of the colonial missions should be restored. (26) Thus far, the necessary funds and the interest in this work had not materialized.

In the church, there were no benches or seats, other than a low adobe bench along both the north and south walls. In winter there were two wood stoves for heating. The altar, at the west end of the nave, was separated from the remainder of the church by a low wooden railing, and the altar was raised in respect to the main floor. Re-

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[46] White, Santa Ana, p. 61, f. n. 133.

[47] Poore, Sixteen New Mexico Indian Pueblos, p. 429.

ligious pictures decorated the walls, and there were statues of San Buenaventura and other religious figures. Over the entrance at the east end, there was a balcony, the choir loft, equipped with an organ.

One of the rooms south of the nave was used by the priest for changing vestments and storing equipment. The easternmost room was now used by the pueblo as a storage spot for community property, housing the threshing machine in 1948. Supplies of firewood were furnished the church by the people under the supervision of the Fiscales and their helpers, the Fiscalitos. (2, 3, 15, 20, 53)

The Campo Santo, or churchyard, was the burial ground until about 1910. Since then, as this area was so crowded, most burials were made in the newer Campo Santo located a half-mile west of the pueblo, just north of the Bear Canyon road. A person could be buried in the churchyard, but it happened very rarely. (45, 70)

Another building in the pueblo associated with the Catholic church was the Morada of the Penitentes. This one-roomed house, windowless, was on the south side of the southernmost block of houses in the pueblo. While this was the property of the Penitentes who were Spanish-Americans for the most part, one Cochiti man, Antonio Montoya, who withdrew from the Ko'sharī Society to become a Penitente, had belonged to this group. In 1948, no Cochiti belonged, and with the movement of most Spanish families away from the pueblo, the Cochiti Morada was little used. Active participants joined with their comrades at Peña Blanca. However, the wooden crosses which marked the "stations" of the Penitente ritual could still be seen on several knolls south of the pueblo. (16, 44, 45, 70)

The Government School. School buildings were conspicuous by their absence throughout the historical and ethnographic literature. The exception to this was the detailed description of the school and its activities as directed by the teacher, Mrs. Grozier, provided by the Eickemeyers' account of 1894.[48]

This same building was the earliest school remembered by my informants. In 1948, this building included the homes of Damasio Quintana and Alvin Arquero, whose grandfather, Juan Arquero, had built it near the end of the last century.

In 1912, a Day School was built by the government at the western end of a tract of a little more than three acres. In the 1920's a second unit was built. This included shower rooms which were available to the people of the village on certain days throughout the year. The school buildings included residences for the two teachers and classrooms and playground facilities for the first six grades. Equipment included a windmill and well and a telephone. The buildings also provided a base for government doctors, dentists, and nurses who visited the pueblo periodically. They further provided facilities for night meetings and moving pictures sponsored by the Indian Service in adult education programs of general information but with emphases on health measures, home economics, and agricultural methods.

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[48] Eickemeyer, Among the Pueblo Indians, pp. 76-90.

CHAPTER IV

AGRICULTURAL ECONOMY

General Statements

Among southwestern pueblo tribes, agriculture was the basic subsistence economy. This was true at Cochiti in 1948. However, the relative importance of agriculture had diminished with the increasing emphasis upon non-agricultural economic pursuits. The latter are treated separately in CHAPTER V.

In this chapter, changes in the agricultural economy are described. Cochiti Pueblo had changed, as CHAPTER III indicated, more in outward appearance than in principles and concepts of property ownership. More numerous and, in some instances, more profound changes had occurred in agricultural practices. The precise nature of these changes and, where discernible, their effects are described. Topics included in this discussion are organized under three headings: Farming, Stock-raising, and Food Preparation and Diet.

Farming

"Farming" refers here to the cultivated lands of the pueblo with a consideration of the following topics: dry farming, flood-water farming, irrigation farming, community farm labor, agricultural machinery and implements, agricultural produce, food preparation, and diet.

Dry Farming. Payne, in his 1944 report, spoke of dry farming

as negligible.[1] Data gained from informants indicated "negligible" meant no dry-farming since the early 1930's. (3, 44, 49, 50, 70) Several informants pointed out dry-farming tracts which were used during the last century and dry-farming methods may be hypothesized for earlier centuries during periods in which precipitation, water table, and vegetation were more favorably balanced. (See page 11.) Of great importance in terminating dry-farming practices was the construction of irrigation facilities.[2]

No references to dry-farming were found in historical data. Father Morfi's notes, 1782, stated that no irrigation was practiced at Cañada, eight miles northwest of Cochiti and at a higher elevation. He further commented that the settlers there were exposed to "frequent famines."[3] These notes of Father Morfi appear to have been based upon the Domínguez report of 1776,[4] and, if so, they contain a misstatement. Domínguez noted that Cañada had a very limited stream that generally failed, making scanty harvests regular occurrences. Nevertheless this was ditch irrigation as long as the stream flowed, and it is significant that rainfall seldom permitted dry-farming at Cañada.

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[1]Payne, Annual Report, p. 8.

[2]The possibility of dry-farming at Cochiti at the present time is demonstrated in such sources as Evans, Morris, New Mexico Dry-Farming Areas, Agricultural Experiment Station, Bulletin 320, State College, New Mexico, 1945, pp. 5-6, and Linney, Charles E., Fabian Garcia, and E. C. Hollinger, Climate as It Affects Crops and Ranges in New Mexico, Agricultural Experiment Station, Bulletin 182, State College, New Mexico, 1930, pp. 53-54.

[3]Thomas, Forgotten Frontiers, p. 99.

[4]Biblioteca Nacional, Legajo X, Document 43.

At Cochiti, intermittent dry periods made dry-farming hazardous at best. Corn, beans, pumpkins, and watermelons were said to have been the principal dry-farm crops. (49, 50, 70)

Flood-water Farming. Flood-water farming was appreciably more important at Cochiti than dry-farming. However, flood-water techniques had been largely abandoned by the end of the last century. A few continued the practice until about 1930. (49, 50, 53)

Abandonment of these fields was caused by several factors. One was a damaging flood which washed them out and made their repair too costly. (50) Dating this flood proved futile, but it may well have coincided with the dam and canal construction in the early 1930's, obviously another contributing factor in the decreased value of the tracts.

Flood-water practices described for Hopi,[5] Zuñi,[6] Navaho,[7] and Pima and Papago[8] testify to the former widespread practice of this method.[9] Unpublished studies of the Rio Grande Valley above the confluence of the Rio Conchos revealed similar flood-water practices

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[5]Hack, Changing Environment, pp. 26-31.

[6]Roberts, Frank H. H., Jr., Archaeological Remains in the Whitewater District of Eastern Arizona, Part I, House Types, Bulletin 121, Bureau of American Ethnology, 1939, pp. 14, 172; Cushing, Zuñi Breadstuff, pp. 160-166.

[7]Hill, Agricultural and Hunting Methods, pp. 20, 24-25.

[8]Castetter, Edward F., and Willis H. Bell, Pima and Papago Indian Agriculture, Inter-Americana Studies I, School of Inter-American Affairs, University of New Mexico, 1942, see Index under "Flood-water Farming."

[9]Bryan, Kirk, Flood-water Farming, pp. 444-456.

during archaeological and historic times. The inhabitants were finally forced to abandon the area when precipitation fell below the necessary minimum.[10] Specific data for the upper Rio Grande are inadequate although evidence presented by Bryan for the entire southwest suggested the former presence of flood-water farming in that area.

Informants cited tracts formerly farmed in this way, locating them at the mouths of arroyos, primarily west of the pueblo. Diversion structures of logs, rocks, and brush were used to spread the water over the fields.[11] Some of the best fields farmed by flood-water methods were at the mouth of the "Long Arroyo," northwest of the pueblo, and at "Watermelon Farm," southwest of the pueblo. (49) As in dry-farming, the principal crops in flood-water fields were corn, beans, pumpkins, and watermelons. (40, 44, 49, 50, 70)

Historical sources stated that Cochiti fields were irrigated.[12] No specific mention of flood-water methods was found, but it is likely that a reasonable portion of the "irrigated fields" received water from flood sources rather than ditches. Documents mentioned ditch

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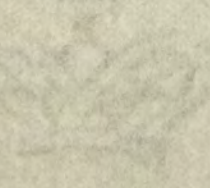
[10]Kelley, J. Charles, Personal Interview, October, 1948.

[11]Strout, who accompanied Bourke in 1881, noted without specifying irrigation or the lack of it, "Their fields are on the E. side of the Rio Grande." (Bloom, Bourke on the Southwest, p. 237) This statement was erroneous. Documents already cited (Biblioteca Nacional, Legajo X, Documents 43 and 59) and informants repeatedly mentioned fields on both sides of the river. Strout's statement may have been an inaccuracy of oversimplification or a result of his route possibly having circumvented fields west of the river.

[12]Biblioteca Nacional, Legajo X, Documents 43 and 59; Walpole, N. S., Report of Agent for Pueblo Agency, Santa Fe, August 10, 1899, Annual Report of Department of Interior, 1899, p. 246.



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systems and frequent failures of the water supply.[13] These sources may be interpreted as referring to either flood-water or ditch supply. While the Rio Grande usually contained water, it was likely that during certain periods the water level dropped to a point where it was difficult to convey water in the ditch system.

Goldfrank's notes confirmed that "in former times" planting was done "at the foot of the mountains so that the crops might get as much moisture as possible. Digging sticks made out of oak and a wood called d^{y}ap^{uc} were used. Corn, melons, pumpkins, and beans were grown."[14]

In 1890, Poore observed "small patches of 1.5 to 2 acres are planted in corn" on an island in the river a little below the pueblo.[15] There was a strong probability that such fields, on low ground, had a high enough water table that, with the periodic inundations of the island, no irrigation was necessary.

Irrigation Farming. This section is concerned with the use of actual ditch systems. Technically, flood-water methods may be considered irrigation, but the separation of the two allows a clearer analysis to be made.[16]

No archaeological evidence of ditch irrigation was found in the Cochiti area. The Domínguez report of 1776[17] and the report of Friar

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[13]Biblioteca Nacional, Legajo X, Documents 43 and 59.

[14]Goldfrank, Social and Ceremonial Organization, p. 92.

[15]Poore, Sixteen New Mexico Indian Pueblos, p. 429.

[16]For further data, see Bryan, Flood-water Farming, p. 444.

[17]Biblioteca Nacional, Legajo X, Document 43.

Antonio Cavallero,[18] 1779, mentioned fields irrigated by deep and wide ditches west of the river, above and below the pueblo. In his annual report for 1899, N. S. Walpole, Indian Agent, described the irrigation system of Cochiti as equal to those of its neighbors.[19]

Informants agreed that as a result of the construction of the dam and canals in the early 1930's the total acreage of irrigated land had been appreciably increased. In 1948, two main canals, one on each side of the river, led from the Conservancy District dam, approximately three miles north of the village. These canals also supplied the fields of Peña Blanca, Sile, Santo Domingo Pueblo, San Felipe Pueblo, and Algodones. From these canals, Cochiti community ditches brought water to subsidiary ditches supplying each field. (3, 15, 40) Above the head of the western Cochiti ditch and below the dam, water was taken directly from the canal for a limited acreage. (49, 53, 65)

During 1947 and 1948, irrigation was hampered by the water shortage in the upper Rio Grande watershed. The Middle Rio Grande Conservancy District allowed Cochiti to use water only on certain days of each week. (3, 15, 38, 58)

In 1948, all crops were planted in irrigated fields (630 acres). Exceptions were a very few, small vegetable gardens in the house yards. These were watered from the pueblo drinking-water system, a practice that caused considerable ill-feeling, especially during periods of water shortage. (3, 15, 17)

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[18] Biblioteca Nacional, Legajo X, Document 59.

[19] Walpole, Report of Agent, p. 246.

Fields west of the river were preferred since they could be reached without crossing the river. The most highly considered locations were directly below the canals as the discussion on water rights indicated. In 1948, there was considerable unused acreage under the Cochiti ditches. (3, 15, 49, 50, 70)

Changes in farming methods may be summarized as follows. Dry-farming was never widespread but was probably done aboriginally and during historic times as late as 1930. Flood-water farming was practiced concurrently on a much wider scale, the fields being concentrated in alluvial fans of arroyos. It is conceivable that fields close to the Rio Grande were also aboriginally farmed by flood-water methods. Diversion structures used in this method would be scarcely distinguishable from those used to force water into the crude ditch system.

In historic times, flood-water techniques continued near the foothills while along the river the use of European implements enabled an improved ditch system to be employed. This situation continued until the early 1930's when the Middle Rio Grande Conservancy District dam and canals permitted sufficient expansion of irrigated acreage to cause the abandonment of the less reliable dry-farm and flood-water tracts. Further changes instigated by the Conservancy District's installations included the increased size of individual land holdings, an associated interest in utilizing agricultural machinery to a greater extent, a shift from diversified crops to cash crops, and less interest in keeping the land free from weeds than formerly. These changes will be elaborated in subsequent sections.

Community Farm Labor. Since the cultivated land was dependent

upon the irrigation system, each farmer was subject to duty in the annual ditch cleaning. The 1948 procedure was essentially the same as at any time in the past. At Cochiti, unlike Santo Domingo[20] or Santa Ana,[21] there was no regular ditch boss, or mayor domo. Each year the governor, usually late in February or early in March when the frost was out of the ground, named a temporary ditch boss. (2, 3, 45) Under the direction of the ditch boss, to whom the governor had delegated his authority, the community ditches were cleaned. The day for this work was selected by the governor and his officers; the fiscalitos, or governor's helpers, informed all property owners of the time and place to report for work.

The men started at the eastern ditch, working from the head as far south as the community pasture near Peña Blanca. Then the western ditch was cleaned, working from the head to the old water-mill of Cipriano Quintana just below the pueblo. (3, 70) The canals were maintained by the Conservancy District, not the pueblo. The ditch boss decided when the ditches had been properly cleaned and had authority to send the fiscalitos to bring any absentees to the job. Anyone not excused by the governor had to work or pay the pueblo. For many years the payment was one dollar. (2, 15)

The increasing awareness of monetary values at Cochiti was illustrated in the following incident regarding community ditch labor. ?

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[20] White, Leslie A., The Pueblo of Santo Domingo, New Mexico, Memoirs of the American Anthropological Association, Number 43, 1935, p. 45.

[21] White, Santa Ana, pp. 105-106.

In the spring of 1948 all men living in Santa Fe were called home by the officers for a meeting. This meeting was concerned with water rights, as was a similar meeting called in 1946. The 1948 meeting was attended by the officers of 1946, 1947, and 1948. The Santa Fe men were informed they should pay $8.00 for the ditch cleaning, or work on the ditch themselves. Some of the men agreed to pay the $8.00, while others refused. Those who agreed did so with the motive of keeping peace in the pueblo. Others felt that so long as their lands were lying unused, there should be no assessment. They also stated that if anyone wanted to use these lands, they would be willing to have them do so. For this use, they wanted no rental, but the tenant would have to work on the ditch, or pay. The owners, however, refused to pay. The 1948 governor, Juan Jose Suina, threatened to confiscate these tracts for the pueblo. The Santa Fe men pointed out that this was impossible since the tracts were privately owned lands and not "on loan" from the pueblo. This opinion prevailed, and the matter was dropped although some feeling remained, especially since the entire council had not been called to this meeting as the Santa Fe men insisted they should have been. (48, 53)

If a man did not wish to work on the ditch, he could send a substitute. Ordinarily, this man was from outside the pueblo since all local men were busy with the ditch work or were unable to be there. Spanish-Americans who had fields at Cochiti joined in community work and were subject to the same penalties. (15, 49, 70) Poore, writing as of 1890, noted:

Eight Mexican families dwell here and fraternize with the

> Indians. As long ago as 1820 the Mexicans acquired land here. They are regarded as under the jurisdiction of the pueblo, and perform communal work upon irrigating ditches and roads by command of the governor of the tribe.[22]

Additional community work occurred whenever flash-floods damaged the irrigation system. Again, adult males were called upon to make the repairs. (3, 45)

Another communal project was the care of the cacique's fields. Since the cacique was considered to be too occupied with his religious duties in behalf of the people to attend his fields, the men of the pueblo plowed, planted, cultivated, and harvested them. "If the people can't do this work, they should go pretty soon for a load of wood for the cacique." (2) The cacique's acreage was formerly greater and furnished his complete support. In 1948, the tract amounted to about two acres which were devoted to blue corn. The same tract was used year after year, and the same crop was grown, with no rotation or fertilization. Apparently, the annual plowing and cultivation, together with some increment from the irrigation waters, maintained a satisfactory yield. (1, 2, 38, 44, 45) In 1946, the cacique's fields yielded six wagon-loads of blue corn. (2) This blue corn was used by the cacique for prayer meal, paper bread, and for other more or less sacred purposes. Sometimes, it was used to care for needy families in the pueblo, "children of the cacique." (1, 2, 3, 15)

The practice of the cacique (Marcelo Quintana, a relatively young man who became cacique in December, 1946, at the age of forty-two

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[22]Poore, Sixteen New Mexico Indian Pueblos, p. 429.

years) working his own fields for the support of his own family and having only his official needs cared for by the community was a recent development. Dumarest stated that hunts for the benefit of the cacique were organized, "and lands are cultivated for his maintenance."[23] The implication was that these lands, with the hunts, constituted his entire maintenance, personal and ceremonial. Goldfrank merely stated, "Only blue corn is planted for the cacique."[24] A statement of White regarding Santa Ana may solve the apparent dilemma here. "The women of the pueblo, in turn, would have to supply him with his food, already prepared; . . ."[25]

White's data for Santo Domingo[26] and Santa Ana[27] further indicated that the old Keresan pattern was one of complete community support for their religious leader. This was well expressed by White regarding San Felipe. "The fields of the cacique are planted, tended, and harvested by the people of the pueblo under the direction of the Tsi°'yak °' ya." This was the war captain. White added, "This does not mean that the cacique is treated like a king. Indeed, he lives like any other man, except that he does not work his fields."[28]

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[23]Dumarest, Father Noel, Notes on Cochiti, New Mexico, Edited by Elsie C. Parsons, Memoirs of the American Anthropological Association, Volume VI, Number 3, 1919, p. 197.

[24]Goldfrank, Social and Ceremonial Organization, p. 93.

[25]White, Santa Ana, p. 97.

[26]White, Santo Domingo, p. 35.

[27]White, Santa Ana, pp. 97-98.

[28]White, Leslie A., The Pueblo of San Felipe, Memoirs of the American Antrhopological Association, Number 38, 1932, p. 14.

At Cochiti in 1948, the cacique raised an appreciable portion of his own food. This was but one of several indications, to be brought out in later discussions, that the cacique's concentration upon religious affairs was disintegrating.

Work on the cacique's fields, since it pertained to the religious head of the pueblo, came under the jurisdiction of the war captains. These two men decided upon the times for work, issued the call once in the plaza and once in the area near the Turquoise Kiva on the preceding evening, and sent the alguacilitos to inform each family. The war captains also excused those whose personal affairs prevented participation. (3, 45, 49, 70)

Another phase of community farm labor disappeared with the discontinuance of a resident priest. An effort to date and identify the last resident priest proved futile. In Culin's Preface to Father Dumarest's "Notes on Cochiti," mention was made of a collection of objects "which Father Dumarest had secured during his residence in Cochiti."[29] This may well have been a slight inaccuracy, with Dumarest actually having lived in Peña Blanca, several miles distant, but having maintained close contact with the pueblo, especially during the epidemics of mountain fever and malaria, "Los Frios," in the late 1890's. This seems probable since none of the older informants could recall a resident priest in Cochiti. (17, 50, 70)

When Cochiti had a resident priest, land was set aside for his support. This was worked by the people in the same manner as the acre-

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[29]Dumarest, Notes on Cochiti, p. 139.

age set aside for the cacique, with the exception that work on this tract was supervised by the two fiscales. (3, 53) In three documents dated 1817,[30] considerable tension was revealed regarding acreage furnished the church and labor expended upon it. Also the subject of simultaneous complaint were the number of household servants demanded by the padres and the manner in which they were treated. The names of the fiscales, Lazaro Coris and Joaquin, appeared several times. These officers were caught between their people and the demands of their positions in which they were responsible for maintenance of the church and the priests.

In a letter from Father Trigo, addressed to the Very Reverend Father Procurador General Fray Jose Miguel de Los Rios and dated July 23, 1754, was the following description of the mission at Cochiti.

> Crossing the river at the foregoing mission, (Santo Domingo, Ed.) and travelling to the west, one soon arrives at this one, for the journey is not quite four leagues. On the banks of the river it has fine melon patches, and its Indians are good workers. They (sow several) fanegas of wheat and one cuartilla of corn, whereby the father is assured that he will not have to go with a sack on his shoulder. They pay no obventions, but they give to the convent two servants for the cell, a bell-ringer, a porter, a cook, the necessary wood which they bring in carts, and two women to grind the wheat.[31]

Still another form of community farm labor was cooperation by relatives of varying degrees, whose only compensation consisted of food while working and the reassuring knowledge that relatives would perform

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[30] University of Texas Archives, W. B. Stephens Collection, Folder #1904.

[31] Hackett, Historical Documents, Volume III, p. 451.

reciprocal services.

Goldfrank discussed this in connection with her clan data.

> The clans are again important when they are called upon as a whole by an individual to assist in his planting, harvesting, plastering, house building, grinding. He visits the oldest member of his own clan, or he may appeal to one of greater or lesser strength depending upon the work to be done. He approaches the oldest member with cornmeal in a husk, a regular pattern of invitation. This is distributed to the other clan when asking their aid. In return for the help given, the clan members receive their food, during the work time, from the person who has asked for their assistance. Individuals, societies, and estufas, not only clans, may be asked by an individual to aid him in his work, and in all cases, the pay remains the same.[32]

In 1948, reciprocal labor among relatives, clan members, still existed, although changes were apparent. The use of cornmeal in making the request for services had almost completely disappeared at Cochiti. Similarly, the feeling among clan members, as noted by Goldfrank in the early 1920's, had diminished. Among the children and the younger generation of parents it was noticeably lacking. In general, it seemed this form of labor was asked by an individual in a rather matter of fact way and was asked of close relatives, i. e., brothers, sons, sons-in-law, grandparents, grandchildren, and uncles on both the maternal and paternal sides of the family. In other words, any one or all of the relatives in the sense of Anglo-American usage could be called upon. Normally they served cheerfully with the knowledge that reciprocal help was forthcoming. Friends could be called upon, but commonly there were sufficient relatives. (44, 45, 53)

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[32]Goldfrank, Social and Ceremonial Organization, p. 9.

Agricultural Machinery and Implements. In reporting on Cochiti in 1899, the Agent, N. S. Walpole, commented that farming methods were "of the crudest, having been in vogue for the past two hundred years."[33] Walpole's elaboration is of interest here.

> While the Indians are ready to make use of modern improvements when the same are offered them, they are not sufficiently cognizant of the advantages offered thereby to provide themselves with them.
>
> . . . . . .
>
> It is in harvesting and threshing their grain that the most antiquated methods prevail, wheat and oats being harvested with the old reaping hook, which has been in use for thousands of years. Thrashing is done on a thrashing floor, in precisely the same manner as among the peoples of three thousand years ago, viz, by driving animals over it until the grain is tramped out of the straw. In the process it becomes mixed with all manner of foreign substances, which have to be picked out with the fingers or washed in water from a ditch.[34]

Walpole concluded by pointing out that grain harvested in this manner did not command a high price when sold and recommended machines for Cochiti and several other pueblos.

In the decades since Walpole wrote, the Cochiti had progressed to the point of not only appreciating agricultural machinery but taking an active part in securing at least some machines for their use. This was particularly true of community-owned equipment but also of privately owned items.

Stock were used for threshing prior to, and in a few instances

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[33] Walpole, Report of Agent, p. 246.

[34] Ibid.

after, 1916 when the first threshing machine was purchased by the pueblo. This machine was used until 1934 at which time the pueblo bought a second thresher and sold the first one to Frank Chavez who was still using it occasionally. In 1947, a combine harvester was purchased by the pueblo. The old thresher was kept since some individuals felt the combine "wasted" considerable grain, missing some heads and knocking kernels out before the blades could cut others. The combine harvester was also more expensive to use. Many farmers did not have their fields or approaches leveled or regular enough to enable the tractor and combine to work. In 1947, three or four men used the old thresher, but in 1948, everyone used the combine harvester. "The combine is faster, easier, and just better all the way 'round." (3, 15, 17, 20, 29, 38, 40, 44, 45, 49, 50, 53, 59, 60)

This is another illustration of what Holmes had reference to when he wrote, "The Cochiti Indians, well known to New Mexicans for their picturesque dances, thrift, industry and use of modern machinery, . . ."[35] Walpole's remarks indicated this attitude toward machinery was of considerable age at Cochiti.[36] This fact separated Cochiti from several neighboring pueblos. Densmore was told at Santo Domingo that "All the Indian needs is the wind to blow away the chaff." Threshing machines were no good as they wasted the wheat, and "they might forget

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[35]Holmes, Jack D., Carrying Water to the Indians, New Mexico Magazine, Volume 10, June, 1932, p. 22.

[36]Walpole, Report of Agent, p. 246.

something."[37] In 1948, Santo Domingo finally yielded to the advantages of a threshing machine, but it had not yet acknowledged the superiority of the combine harvester. Similar reluctance to accept agricultural machinery was noted in data on Jemez,[38] Taos,[39] and Zuñi.[40]

In 1947, Philip Cooka (a Hopi married into Cochiti) and Pancracio Chalan (a GI) formed the combine harvester crew. In 1948, these duties were performed by Eleuterio Cordero (a GI) and Fernando Cordero (1947 Lieutenant-Governor). When Eleuterio returned to his regular job in a sawmill near Grants, New Mexico, Philip Cooka replaced him. In each instance, the crew was composed of a member of each kiva, or moiety; Philip and Eleuterio belonged to the Turquoise Kiva and Pancracio and Fernando to the Pumpkin. Whether this was accidental or planned could not be determined but the latter is suspected.

Each farmer paid every sixth sack (100 pounds) to the community for the use of the combine.[41] This was calculated by whole or half sacks, and in 1948 the community collected about 128 sacks, valued at $576.00. This indicated the 1948 yield for the entire pueblo was 775 sacks. This represented a return of between three and four sacks for each sack planted and was considered a normal and fair return by in-

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[37]Densmore, Frances, Music of Santo Domingo Pueblo, New Mexico, Southwest Museum Papers, Number 12, Los Angeles, 1938, p. 119.

[38]Parsons, Elsie C., The Pueblo of Jemez, New Haven, 1925, pp. 15, 63.

[39]Parsons, Elsie C., Pueblo Indian Religion, Volumes I and II, Ethnological Series, University of Chicago, 1939, p. 18.

[40]Ibid., p. 19.

[41]If a man used the threshing machine, he paid every sixteenth bushel to the community. (40)

formants. (20, 59, 70) One individual planted seven sacks on about five acres of land. The yield was twenty sacks of which three were paid the community. This was considered a good crop.[42] (38)

One informant expressed a common reaction to the failure of the older boys who had received mechanical arts training at the government schools to use the pueblo machinery. "All these boys go off to school, learn about tractors and other machines, and when the council says, 'O. K., you run it for us,' the boys all get scared and won't do it. What good is all this training?" (71)

This attitude overlooked the more probable reason for this reluctance. In 1947 and 1948, the council informed everyone that the combine crew would begin at the southern end of the reservation. The crew would work northward, cross the river, and end up at the southern edge of the reservation on that side. Each wheat farmer had to be ready for his turn, or he was bypassed. At the end of the circuit, the crew retraced these routes and harvested those fields which had been skipped.[43] Discontent arose over the sequence of the crew's moves, and crew members were subjected to considerable criticism. (3, 6, 15, 16, 19, 20, 38, 49)

Probably, the older boys were not so much unwilling to display their mechanical knowledge as they were unwilling to subject themselves

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[42] See APPENDIX III for a list of payments made to the community for the use of the combine harvester in 1948.

[43] In 1947, the crew began in the east and finished in the west, while in 1948 the route was reversed. This was done to avoid leaving the same fields until the last since this delay resulted in excess loss of the over-ripe grain to the farmers.

to the constant bickering of the farmers. Even the older men who ran the combine found these incessant arguments difficult to bear. (15, 20, 29, 59)

The old harvesting implement, the hand sickle, was still used to clean corners and other areas missed by the combine harvester. The handfulls of grain were tossed onto the feeder belt as the machine circled the field. This "cleanup" work provided opportunity for older men to inform younger ones about the hard times of their youths and how easy life had become. "Long ago we cut all day with the sickle; at night we crawled home on our hands and knees." (6, 38, 49)

The Cochiti were aware that despite their use of modern machinery, they were still poor farmers. They realized that their fields were irregular in shape, improperly leveled; that field corners and bands between holdings lay fallow and increased weed growth. They also knew that failure to plow after harvest encouraged the maturation of weeds and their spread. Yet, few took any steps to remedy these short-comings. (6, 38, 49)

In 1948, the pueblo owned a thresher, a combine harvester, a hay-baler, and two tractors. In the spring of 1948, the pueblo added a Chevrolet stake-bed two-and-a-half ton truck to aid in transporting produce from the fields.

While surveys of pueblo property are subject to considerable suspicion due to evasive answers by the Indians, duplication in reporting, joint ownerships, and shifts in ownership, the following estimates are cited to afford some idea of the amount of agricultural machinery owned and used. According to the census of 1940, there were eighty-

nine family heads with estimated property as follows: fifty persons owned eighty-five plows; twelve had harrows; fifty men owned sets of harness, some having two sets; forty-five had wagons; fifteen had mowing machines; and eight owned hay-rakes. By reciprocal loans between siblings and other close relatives, this equipment quite adequately served the pueblo.[44]

Other agricultural implements included hoes, rakes, long-handled shovels, square-nosed spades, sickles, and scythes. Such implements as wooden shovels and hoes, digging sticks, or dibbles, were known to the Cochiti in 1948 only through hearsay. Goldfrank stated, "Digging sticks made out of oak and a wood called dYap^{uc} were used."[45] It is probable that twenty-five years ago Goldfrank was successful in finding individuals who had had first-hand experience with these tools. Several informants, averaging about sixty years of age, believed that these implements had been used by their fathers. (3, 40, 45, 70)

One man, born in the early 1880's, remembered seeing as a youth the use of oxen and the old Spanish wooden plow. (52) Bourke provided further data regarding wooden plows. "The agricultural implements - the plows and harrows - were of the most ridiculously primitive description and the simple fact that they were in use spoke of the fertility of the soil."[46] Another informant, born in the early 1880's, remembered his father using oxen and a wooden plow but had only heard

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[44]United Pueblos, Quarterly Bulletin, Vol. 1, No. 4, p. 17.

[45]Goldfrank, Social and Ceremonial Organization, p. 92.

[46]Bloom, Bourke on the Southwest, p. 300.

his father tell of digging sticks. (50) No informant could recall wooden-wheeled carts, or carretas. They unanimously agreed that the present-day iron-rimmed, wooden-spoked wheels were all they remembered.

However, in Bourke's account of his visit to Cochiti in 1881, there were "old & new carts" mentioned.[47] Again, in the notes of Strout, who accompanied Bourke, "Old & new style carts"[48] were recorded. Either these carts, as distinguished from wagons mentioned elsewhere by Bourke, had all but disappeared from Cochiti culture in 1881, or the memories of the Cochiti fell short in this respect.

In contrast to this lack of knowledge was the rather widespread first-hand experience with Spanish threshing methods. Informants born in the early 1900's could relate personal experiences in threshing on adobe floors with livestock. (1, 2, 3, 6, 49, 53, 60)

Several informants believed this was one of the principal reasons for keeping as many horses as they formerly owned. These were kept on the range until after the Feast Day on July 14th when the herders brought them in to thresh wheat and other grains. Adobe and water were carried to a flat and windy spot. A hard-packed oval floor roughly twenty yards in diameter was prepared, and a fence was erected around it. Formerly, this consisted of a few stakes between which a single strand of rawhide or rope was strung. Blankets were hung over this, forming an enclosure. In later years, enclosures were made of stakes and wire. After piling sheaves of grain on the floor, animals,

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[47] Bloom, Bourke on the Southwest, pp. 234-237.

[48] Ibid., p. 237.

almost always horses, were driven round and round. The grain was winnowed by throwing it into the air. (1, 2, 6, 15, 38, 49)

Agricultural Produce. Two major groups of crops were grown at Cochiti. First were those known aboriginally; second were those of Spanish provenience. While some crops grown were of relatively recent introduction, most had been introduced by the early Seventeenth Century.[49]

In pre-Spanish times, the basic agricultural crops were maize, or corn (Zea Mays), pumpkins (Cucurbita moschata and, possibly, C. Pepo), gourds (Lagenaria siceraria), beans (Phaseolus vulgaris), and cotton (Gossypium hopi Lewton). Of these, maize had retained its position of long-standing as the most important crop. As indicated in APPENDIX IV, maize acreage was almost half of the total cultivated. Also indicated in APPENDIX IV is the high rate of yield per acre of maize, a primary factor in the importance placed upon it by Cochiti and American Indian agricultural tribes in general.

Types of maize grown in 1948 included yellow, blue, white, red, and variegated. Of these, yellow corn was by far the most common. Occasionally, pop corn was raised, but it was easier to buy this from neighboring Spanish-Americans or in the stores. A few men tried hybrid corn, importing seed from Iowa and Illinois. However, the annual re-

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[49]Summary statements on plant introductions may be found in Brand, Donald D., The Origin and Early Distribution of New World Cultivated Plants, Agricultural History, Volume 13, Number 2, 1939, pp. 109-117; Castetter and Bell, Pima and Papago, CHAPTERS III-IV; Hill, Agricultural and Hunting Methods, pp. 48-51; Whiting, Alfred F., Ethnobotany of the Hopi, Bulletin 15, Museum of Northern Arizona, 1939.

newal and high cost made this unpopular. There was some feeling that seed from the Mid-west was not adapted to the particular farming conditions and climate of Cochiti. About 1940, one of the more progressive farmers succeeded in raising a good crop (after failing the previous year). This brought numerous requests for seed by people who did not understand the nature of hybrid corn. It placed him in the uncomfortable position of being disliked for not selling his seed or being accused of witchcraft when the seed failed to mature. He decided to keep the seed and to attempt to explain why. (82)

Maize was also an important forage crop. Stalks were left in the fields, and stock turned in to graze. Stalks were also cut and piled in the corrals for winter feed. One informant stated it was only since 1925 that the council permitted farmers to top the corn for fodder. Until this date the old people had objected to the practice of cutting green tassels and top portions of the stalks for stock-feed. By waiting until fall when the corn had dried, much of the fodder value was lost. This loss was accepted by the older people who considered as sacrilege any tampering with the natural growth cycle of the sacred corn plants. (49)

Men, sometimes assisted by the women, still picked corn by hand before the stalks were cut. Ears were thrown into wagons and brought to the pueblo where they were husked, generally by the women, and placed in sheds or storerooms. Kernels were removed by rubbing one ear against another. Several families used small hand-mills which speeded up the work.

Some families departed from the old custom whereby produce

brought into the house became the property of the women. (50) Many still observed this policy, and, in such cases, a person desiring to buy corn, or other produce, already in the storerooms dealt with the woman of the house. It was she who decided if any was for sale and at what price. (3, 45, 49, 53)

Ethnographic source material on various crops and their handling was limited. Dumarest merely commented that early in life the men assumed the heavy labors of the fields in which work they were unrivaled. Women did the grinding and cooking.[50] Goldfrank's notes added some details of former agricultural practices. In regular planting, done ordinarily by the men, small mounds were made in the fields and seeds placed in them. Planting was begun on the edge of the field, and the planter worked in a diminishing spiral, finishing at the center. Goldfrank did not state whether movement was clockwise or counterclockwise. She stated that men worked in the fields, both men and women did the husking, and the women did the drying and storing. In storing, the corn was stacked in a storeroom.[51]

By 1948, Goldfrank's comments were applicable with a few exceptions. Corn was planted in rows without prepared mounds. Most families kept the husked ears of corn in bins in sheds.

Pumpkins of several types were grown. These were usually planted in hills scattered through the cornfields. (3) The most common type was the large, dark and light green striped form (C. moschata).

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[50] Dumarest, Notes on Cochiti, p. 146.

[51] Goldfrank, Social and Ceremonial Organization, pp. 92-94.

(15, 53) Bourke noted pumpkins only, while in Strout's notes both pumpkins and squashes were mentioned.[52]

Like pumpkins, gourds (Lagenaria siceraria) were grown in hills scattered through the cornfields. They were not eaten but were utilized for dance rattles, pottery scrapers, ladles, and dippers. Metal containers have largely replaced gourd ladles and dippers. Gourds were still used to make pottery scrapers, rattles, and parts of masks. (44, 70)

Beans, almost all of the kidney or pinto type (Phaseolus vulgaris), were raised by nearly every farmer. They were of secondary importance as indicated in APPENDIX IV. "Bean patches" in a few cases amounted to as much as two-acre fields; most were much smaller, and in a few instances beans were planted with other crops.

Informants claimed never to have seen cotton grown at Cochiti, although several understood that it was formerly grown there. "It must have been a long time ago now." (6, 50, 53) One informant, about fifty-five years old, stated that cotton was grown in his father's time on a very limited scale. (44) Another man, about sixty-five years old, claimed his grandfather had grown cotton. (2) It was used for string in tying prayersticks, in making katchina masks, and for other ceremonial purposes. Commercial string and absorbent cotton were used for such purposes in 1948. (44, 70)

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[52]Bloom, Bourke on the Southwest, pp. 234, 236. (True squashes, [Cucurbita maxima], were unknown to aboriginal southwestern Indians. Where present today, they are rather recent introductions. Brand, New World Cultivated Plants, p. 116; Castetter and Bell, Pima and Papago, p. 102.)

Cochiti was near the northernmost limit of possible cotton cultivation. Bandelier's statement indicated this,[53] and a more recent survey of the literature on cotton cultivation by Jones verified it.[54]

While the historical accounts of the Coronado expedition,[55] the Espejo expedition,[56] and other Spanish ventures into the area commented frequently on clothing and presents of cotton mantas, they were not precise in designating the cotton growers. The only source to state definitely that the Cochiti raised cotton was the letter from Fray Cayetano Fore, Custodian, written September 1, 1794.[57] In this letter he described how the Cochiti planted limited quantities of cotton each spring. He noted that planting was common in most pueblos of this nation (the Keres). He further stated that the Cochiti wove mantas and jackets of wool and cotton which they used for clothing and also traded to the Spanish and neighboring Indians.

Another plant was tobacco (Nicotiana sp.). There is no evidence of its aboriginal cultivation by pueblo and adjacent tribes. In 1948, tobacco (Nicotiana attenuata)[58] (ha´mē) was grown by Marcelo Quintana,

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[53]Bandelier, Final Report, Part I, p. 345.

[54]Jones, Volney H., A Summary of Data on Aboriginal Cotton in the Southwest, Bulletin, University of New Mexico, Number 296, Anthropological Series, Volume I, Number 5, 1936, p. 51.

[55]Hammond and Rey, Narratives, pp. 286, 300; Winship, Journey of Coronado, pp. 200, 229; Winship, The Coronado Expedition, pp. 573, 587.

[56]Bolton, Spanish Explorations, p. 180.

[57]Biblioteca Nacional, Legajo X, Document 70.

[58]Identified by Dr. Edward F. Castetter, December, 1949.

Vicente Romero, Diego Romero, Cipriano Quintana, Damasio Quintana, Cresencio Pecos, Cresencia Quintana, and Clemencia Quintana. (3, 15, 33, 49, 54) Santiago Quintana, "Old Man Guerro," deceased, also raised tobacco. (70) These individuals all grew tobacco for many years and, in each case, belonged to a society or were closely related to a society member. The tobacco plots were small, never more than a fraction of an acre. The tobacco was used for ceremonial purposes, gifts, a little for trading purposes, and occasionally for smoking. This last was seldom done except by oldsters who liked strong tobacco. (2, 3, 44, 49)

Informants claimed that seed had been in the hands of the above families for many years. They also stated that most smokers mixed it with another plant,[59] found in the mountains in order to diminish its strength.[60] (1, 2, 15, 20, 44, 45, 50)

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[59]This was believed by Dr. E. F. Castetter probably to have been manzanita.

[60]Several points were investigated in the hope of obtaining data regarding queries on tobacco and "punche" raised by White. (White, Leslie A., Nicotiana rustica Cultivated by Pueblo Indians, Science, Volume 94, 1941; White, Leslie A., Punche: Tobacco in New Mexico History, New Mexico Historical Review, Volume XVIII, Number 4, 1943; White, Leslie A., Further Data on the Cultivation of Tobacco among the Pueblo Indians, Science, Volume 96, 1942.) In these papers White described tobacco (Nicotiana rustica) found at Ranchitos, the farming community of Santa Ana, in 1934. Later he found that between 1925 and 1931, N. rustica had been distributed among the Spanish-Americans and Indians of the Rio Grande Valley near Albuquerque. (White, Punche: Tobacco in New Mexico History, p. 387.) Cochiti informants insisted that plants being raised were in their possession long before this distribution. (3, 15, 54)

White pointed out that some species of tobacco, particularly N. attenuata and N. trigonophylla, were indigenous to the pueblo region. He also pointed out that pipes had been found archaeologically in this region. (White, Punche: Tobacco in New Mexico History, p. 387.)

Wheat was the most popular field crop introduced by the Spanish. Alfalfa, a later introduction, was also popular. Oats, Kaffir corn, and other crops introduced by the Spaniards and later peoples were grown but not as extensively. Other non-aboriginal crops included chili, watermelons, muskmelons, and such garden vegetables as onions, cabbages, peas, carrotts, turnips, havas (horse peas), and garbanzas (a larger pea).

White hastened to add, however, along with Castetter (Castetter, Edward F., Early Tobacco Utilization and Cultivation in the American Southwest, American Anthropologist, Volume 45, Number 2, 1943, pp. 320-325.) and Jones, (Jones, Volney H., Was Tobacco Smoked in the Pueblo Region in Pre-Spanish Times? American Antiquity, Volume 9, Number 4, 1944, pp. 451-456.) that the presence of pipes in aboriginal times and tobacco in historic times did not warrant the conclusion that tobacco (Nicotiana sp.) was smoked in the prehistoric period.

White referred to the distinction made between "real tobacco" and "punche" in connection with the establishment and enforcement of the Royal Tobacco Monopoly in 1767 when the planting of punche was prohibited and the people were ordered to buy tobacco. The term "mata" was also used and apparently referred to any one of the wild plants smoked by the Indians. (White, Punche: Tobacco in New Mexico History, p. 389.) This monopoly was protested by the New Mexicans, as was shown in statements of Pino, (Bloom, Lansing B., New Mexico under Mexican Administration, 1821-1846, Old Santa Fe, Volume I, Numbers 1, 2, and 3, 1913-1914, p. 40.) who mentioned raising "a poor grade of tobacco known as punche." Bourke, in writing of his visit to Taos in 1881, spoke of their gathering "bunchi" on the mountain tops and also of their fondness for tobacco. (Bloom, Bourke on the Southwest, p. 49.) This distinction was made again in connection with his visit to Cochiti. Bourke mentioned his driver secured "a dime's worth of Bunchi, - or native Tobacco." (Bloom, Bourke on the Southwest, p. 376.)

In manuscripts pertaining to Cochiti, additional data were found regarding punche and tobacco and distinguishing between them. In a letter dated January 8, 1769, Friar Miguel Gomes Cayuela stated that the government tobacco monopoly would never work at Cochiti. The people there, although the monopoly had been explained to them, simply "do not have much regard for what they call tobacco of Castilla." They gathered, without planting, an herb called "punche." In conclusion, Cayuela said that even without punche, the people were poverty-stricken in the area, and they engaged in a barter subsistence economy rather than using coined money so that they could not pay any tobacco tax. (Biblioteca Nacional, Legajo X, Document 30.)

With the recent succession of dry years, alfalfa had become increasingly important, constituting the second largest acreage. It supplemented the inadequate open range, and it was also valuable as a cash crop. This use of alfalfa purely as an income-producing crop was another shift away from the earlier subsistence farming economy. Alfalfa fields were also used as fall pasturage following the final (usually the third but sometimes the fourth) cutting. The value of alfalfa as a revitalizer for the soil was likewise recognized by the Cochiti. (44, 45, 53, 60, 70)

Of the food crops, wheat acreage was second only to that of maize. This was almost entirely spring wheat. In planting, informants stated that the seed was broadcasted, "just covering the field with no particular plan to it." (1, 2, 3, 44) The wheat harvest occurred immediately after the July 14th Feast Day.

Following threshing, wheat and other small grains were winnowed. Sacks of grain were brought home by wagon, and they were dumped in a room, or shed, usually on a large canvas. Within a few days, the woman took the grain into the open and placed it on a packed, clean ground-surface, or a tarpaulin. Next, she took a large Apache basket, or wash-basin, full of grain, held it over her head, and allowed the kernels to fall slowly to the canvas. The wind blew away the chaff.

Again, in a second manuscript, dated 1817, and listing a series of complaints against the resident priest, Friar Mariano Sanchez Vergara, the use of this native plant, punche, was mentioned. The father of a newborn child offered Friar Sanchez a new serape and a bundle of "tobacco of the land," for the baptism. The friar refused, demanding twelve reales ($1.50) for this baptism. (University of Texas Archives, W. B. Stephens Collection, Folder #1904, Document 3.)

This process was repeated until the grain was free of alien particles. Next, the grain was washed, either in the river or ditches. This was formerly done with a yucca basket, loosely woven and of local manufacture. In 1948, these same baskets were sometimes used, but washing was done in tubs of water at home. After washing and drying, the grain was placed in sacks or bins in storage rooms until needed for food or seed. (3, 16, 17, 27, 38, 58)

Garden plots were located in corners of irrigated fields. They ranged to about an acre in size. Almost every family had a garden which was normally tended by the woman and children. Melons, chili, cabbages, onions, beets, string beans, peas, havas, garbanzas, and similar vegetables were grown in these plots. (1, 2, 3, 16, 17, 33, 34, 45, 53)

As indicated in APPENDIX IV, maize, alfalfa, and wheat acreage comprised 526 of a total of 630 cultivated acres. Other crops accounted for the remainder, with a limited acreage which lay fallow. While land was rested in this way, the normal method was to plant alfalfa and leave it for a few years. Most fallow land constituted surplus acreage.[61]

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[61] This surplus of cultivated land at Cochiti was interesting in light of Aberle's statement. "In a few villages there is a small amount of unassigned farming land which can be given landless families, but this is not the rule. When new farming land is made available by the Federal Government, the land is turned over to the Governor and the Council to distribute. Since the demand for land far exceeds the amount to be distributed, the Governor usually turns to the Federal Government for some plan to insure a fair distribution. The old custom of distribution on the basis of need or request is inadequate to meet the pressure of the new situation." (Aberle, The Pueblo Indians, p. 22.)

Fruit trees were popular and highly valued in spite of their apparent neglect. Peaches and apples were most common with plums, apricots, and cherries less numerous. There were many grapevines, but their yield was of relatively small value. Many trees were located along the ditches. In spite of private ownership, numerous passers-by, mostly children but also adults, helped themselves liberally. Apparently this lack of regard for private ownership of fruit trees had not changed greatly in the last half century. The Eickemeyers, in 1894, passed by the community orchard (the one destroyed during the construction of the Conservancy District canal in 1932), and they noted shelters elevated on poles in the corners of the orchard. It was explained that the owners occupied the shelters during the fruit season to protect their produce from both humans and birds.[62]

Some fruit was dried, and a considerable quantity canned. On the other hand, much was consumed fresh, and still more simply rotted on the ground. (3, 45, 49, 53)

In concluding this section on produce, the difficulty of obtaining reliable statistics should be emphasized.[63] The Indians, them-

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[62]Eickemeyer, Among the Pueblo Indians, p. 59.

[63]Concurrence with this view was well expressed by White, Santa Ana, p. 46. "We have some figures on amount of land cultivated and quantity of crops grown at Santa Ana. We do not believe that they are very accurate, however. It is very difficult to collect statistics among the pueblos. As agent John Ward observed in 1864: 'It is impossible to arrive at anything like a correct estimate of the quantity [of crops grown]. The utmost these farmers can do is tell the number of carrita (cart) loads which they have gathered from the field, and carritas being, as you are aware, of different dimensions, and quite a variety of shapes. No one ever thinks about measuring his crops.' (Report of the Commissioner of Indian Affairs for 1864, p. 193) The same sort of situation prevails today. Nevertheless, we present the following data for what they may be worth."

selves, were not concerned with accurately measured records of field production. Tracts were generally irregular in outline, and acreages were rough approximations. Yields were vaguely stated, intentionally or otherwise. Such figures as the grain harvest were reasonably accurate as these data were kept by the threshing crew, and standard containers (100 lb. sacks) were used. For other crops, such as maize, alfalfa (except when baled), pumpkins, beans, and the like, harvests were measured, if at all, in terms of wagonloads, filled to varying degrees. Box-fulls, basket-fulls, and other fluctuating units were also quoted. "Loads" as often as not indicated "trips" from field to storeroom, a feature that introduced variables. Again, storerooms and bins were of varying capacities.

Attempts to improve the accuracy of these statistics would undoubtedly necessitate such a prolonged and intensive study that the principal result would be the aroused antagonism of most families. Cash sales of standard quantities and increased use of hay-balers and combine harvesters will facilitate the gathering of these data. However, as long as the agricultural economy remains so dominantly one of subsistence and barter, production statistics will remain inaccurate. Nevertheless, the Agency figures presented in APPENDIX IV are believed to have some value in indicating the relative importance of crops.

Stock-raising

Livestock raising was not as universally practiced at Cochiti as was farming, but its aggregate income compared favorably with it. According to United Pueblos Agency figures for 1942, total pueblo

sources of income listed $6,069.00 for stock-raising as against $8,060.00 for crop agriculture.[64] These statistics are subject to the same suspicion and criticism as mentioned on pages 108-109. However, they do indicate the relative importance of these two economic endeavors.

In this section on stock-raising, the following topics are discussed: Fence-rider, cattle and oxen, horses and mules, burros, sheep and goats, pigs, rabbits, and poultry.

Fence-rider. The position of fence-rider was a recent innovation, beginning in the autumn of 1946. Prior to that time, it was the responsibility of those people who had stock to care for the reservation fences. The fence-rider was chosen by the council. He rode fence six days a week in the summer months and once or twice a week during the winter. His duties included maintenance of the fence surrounding the reservation. Normal procedure was to ride the north half one day and the south half the following day. Sundays, the rider did not work. He repaired any breaks he could, and if the damage was too extensive, the governor sent a community work crew. The rider watched the condition of the stock and looked for signs of predatory animals, rustlers,[65] fires, or any other unusual happenings. (3, 15, 20, 42, 70)

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[64] Payne, Annual Report, p. 11.

[65] Thieves, working at night with small trucks, had stolen some Cochiti cattle. A few attempts had been made to intercept these raids. However, the Indians had to ride horseback, or walk, to establish their positions. This was not entered into with enthusiasm, and the patience of the men at the roadblocks appeared to have been less than that of the thieves. No interceptions had been made thus far. (20, 24, 69)

Cattle and Oxen. Cochiti used a community brand for their cattle (and also horses). Individual ownership was indicated by supplementary brands, or more commonly, by ear-marks. In 1948, Joe Melchior was the largest cattle owner in the pueblo and served as community brand inspector at cattle sales. He spent most of his time on the range rather than in the fields. Other owners alternated in helping Melchior move cattle from one portion of the range to another. Normally, individual owners and whatever relatives were needed searched for their particular animals and drove them into the corrals when they were wanted. (1, 44, 45, 49, 53)

Individual handling of cattle stood in contrast to the community herding of horses and may have risen from the fact that a relatively small portion of the pueblo were cattle owners. This difference, however, existed about the turn of the century, when there were more cattle and cattle-owners in the pueblo. Even then, the individual owners divided herding duties, usually rotating on a weekly basis as did the horse and burro herders. However, there was one difference between these herding duties. Only cattle-owners shared the work of herding, while in the case of the horse and burro herds, all older boys and men were called upon. Before the reservation was fenced, cattle were driven into the pueblo and placed in corrals every night. (49, 53)

In 1948, Cochiti had five community owned bulls which ran with the herd. Remaining cattle were individually owned but were handled as one herd. The herd normally totalled about three hundred animals and ranged between two hundred and fifty and three hundred and fifty

head, depending upon the season. (1, 44, 45)

Cattle were primarily a source of cash income, although some were butchered for domestic use for Feast Days, weddings, and similar occasions. Due to their inability to preserve large amounts of fresh meat in the warm months, most preferred to sell the animals and use the money to buy what meat was needed. Hides were valued for moccasins, especially with the decline in the number of deer killed each year, and for drumheads. Since drummaking became an important economic pursuit at Cochiti, the local supply of hides was inadequate. Drummakers went to other pueblos or towns to purchase them, normally paying about two dollars per hide. (3, 62, 70)

Milk cows were not as common as they once were. This decrease was explained as due to lack of feed. (1) In Bourke's journal, he mentioned buying two gallons of milk, "very pure rich stuff - the old woman asked 45¢, a very reasonable price."[66] In 1948, there were about a half-dozen cows that were milked regularly. This milk was used raw by the owners or sold to neighbors. The cows were tested by the government and seemed to be of fair quality. No great effort was made to feed them specially, however, and milk was not greatly valued by most. Canned milk seemed to satisfy what little desire the majority of the pueblo had for milk.

Perhaps one of the greatest shifts from the past so far as cattle raising was concerned, was the complete disappearance of oxen.

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[66]Bloom, Bourke on the Southwest, p. 234.

Bourke and Strout noted them,[67] and several informants, about sixty years old, had personally worked with oxen in the fields. (50, 52) Men in their fifties clearly remembered them in the pueblo and saw oxen used in the field work, but they had been too young to do such work themselves. (15, 44, 49, 53) No reason could be learned for the complete shift to horses, but it was apparently related to, or at least was contemporary with, the replacement of Spanish plows with American plows, and the adoption of harrows, farm wagons, and other equipment. Oxen likewise disappeared from surrounding agricultural villages at about this time. Whether this can be explained as a disappearing market, or supply, or the reverse, as a disappearing demand, could not be ascertained.

Horses. While horses were fewer than cattle in number, totalling less than two hundred head, they were more highly regarded by most Cochiti. Very few families were without at least one team. Most horses were of a light draft type, serving as dual purpose animals, being used both in harness and for riding. While there were not many exceptionally fine horses in the pueblo, neither were there many that were particularly old, worn out, or in other ways useless. Stock reduction programs in connection with soil conservation and range programs had undoubtedly had their effect.

A few men had unusually powerful teams, such as those of Frank Chávez, Fernando Cordero, and Pablo Trujillo. On days of chicken

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[67] Bloom, Bourke on the Southwest, p. 236.

pulls (gallos), Santiago's Day, community hunts, and similar occasions, the young men of the pueblo turned out with their saddle horses. Some boys had horses upon which they expended a great deal of energy; most simply saddled up what was at hand and joined the crowd. In general, it seemed that traditions of a "foot people" still held. Horses were used in field work and were valued for this. However, there were only a few individuals who exhibited obvious pride in their animals.

From an economic viewpoint, horses were easier to obtain than to keep. Pasturage was limited but sufficient in summer. In winter, however, horses often had to be fed hay, and it was this cost, except for those who raised enough alfalfa, which caused hardship. Many younger men depended upon teams of their parents, or of their wives' parents.

Informants agreed that most people broke their own animals. Most Cochiti did this by considerable handling for varying periods prior to the actual breaking. Breaking was usually done at the age of three. However, "sometimes a man gets busy and forgets - then with those older horses, he has a tough time." (3) After the horse was accustomed to being handled by people and wearing portions of harness, i. e., halters, bridles, saddles, dragging ropes, and the like for several days, the change to actual use was not great. A few animals which proved more difficult to handle were given to a younger man recognized as a good rider or handler. Horses which could not be broken were killed as enough gentle horses were available. Most horses were not shod since the ground travelled was soft. When shoes were needed, the owner usually did the work himself. Shoes were normally put on cold with the hoof trimmed and filed to fit properly. (44, 45)

Old and wild horses were killed, generally by cutting the throat. They were carefully skinned. Hides were valuable for drum heads. In the summer of 1948, a horse died from a neck injury. The family offered the hide to Marcelo Quintana, the cacique, if he would skin it. With the aid of one or two of the young boys who gathered around, the skinning was completed. The carcass was dragged by a team to a nearby arroyo near the edge of the pueblo where it was left for "the dogs and the coyotes." One of the boys cut some steaks to feed his own dog, and the rest of the carcass was left untouched. No attempt was made to salvage the tail for use in ceremonial costumes. From one remark made at the time, it seemed that some might have taken a choice cut of meat for their own use if it had not been for the growth at the animal's neck.

Mules were not popular at Cochiti, and never more than a few teams were in use at any time. In 1948, only one man had a team of mules. (3, 45)

Another change in recent years was the shift from communal herding of the horses to private pasturage or individual responsibility for the welfare of these animals on the open range. A herd of over three hundred horses was formerly guarded by the men and young boys of the pueblo. (50, 65) Herding was done on a rotating plan, under supervision of the war captains and alguacilitos. The war captains chose the weekly shifts of personnel who served under the alguacilitos who also rotated. Selection was made in order of residence with no consideration of moiety or clan affiliations. The herd remained on the range throughout most of the year. Favorite pastures were near

Bear Head Peak, Cañada, and Frijoles Cañon, all north and west of the pueblo. Late in June, the horses were brought to a community pasture near Peña Blanca where they were kept until after the threshing. The war captain issued the call to drive in the horses, and many people participated in the roundup. Herders did their best to guard all the animals, but there were no damages paid if one were lost. (3, 49, 50, 65)

Attempts to date the cessation of community horse-herding at Cochiti were not very successful. Dumarest and Goldfrank did not mention this work in discussions of officers and their duties. Informants, about sixty years of age, herded as young boys in their teens. They declined to assign a fixed date as to the discontinuance of herding, although it would seem to have ceased early in this century. At the same time they claimed that at Santo Domingo the war captains and their helpers supervised communal horse-herding in 1948.[68] (44, 45, 49, 50, 52, 53)

One of the favorite Cochiti "true-stories" of earlier times involved a trip taken to California toward the end of the last century. It was made by Santiago Quintana ("Old Man Guerro"), his father-in-law, Juan Jose Garcia, and a third man, Ha-rō. This trip took a month with horses and burros. They remained on the west coast for a year or more, earning good money at herding, cooking, and other jobs. When they re-

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[68] White, Santo Domingo, p. 41. White found horse-herding on a community basis, as of 1933. It was supervised by the war captains and their helpers. In White, Santa Ana, p. 105, horse-herding is discussed in the present tense, as of 1942.

turned, they had fine saddles, silver-studded bridles, and good horses, racers, "the best around the pueblo for a long time." These were the favorite horses in rooster-pulls, races, and other events. (45, 49, 70)

As of about 1895, the Bickemeyers commented on horses at Cochiti as follows.

> The Pueblos get most of their horses from the Navajoes, who make a special business of horse-raising and travel from village to village with droves of Indian ponies or cayuses, which they trade for beads that the Pueblo Indians make in great quantities. Four of these strings of beads will buy a horse. Five dollars will also buy a horse; but strange to say, five dollars will not buy the beads.[69]

In 1948, as with other goods, the value of horses had greatly increased. Good draft and saddle animals cost over a hundred dollars, with young and unbroken, or older, animals ranging from fifty to seventy five dollars. "Horses purchased for less than thirty-five dollars probably aren't worth much unless it's a young colt." (20, 44, 45, 53)

Burros. One of the outstanding, and somewhat surprising, aspects of stock-raising was the complete absence of burros in Cochiti in 1948. Repeatedly in their accounts of earlier herding days, trading trips, wood-gathering, and other activities of their youth, informants spoke of great numbers of burros. Bourke noted horses "in abundance" and burros which may give some indication of their relative importance as of 1880-1881, or simply may indicate what happened to be

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[69] Bickemeyer, Among the Pueblo Indians, pp. 96-97.

visible at the time.[70] A decade later the Eickemeyers remarked as follows.

> . . ., there came toward us into the pueblo a large bunch of burros driven by two Indians, who were bringing the animals into the village corral for the night. Raising burros is one of the principal occupations of the Indians in Cochiti. The animals are herded together, and each person owning any in the bunch has a special day assigned on which it is his duty to care for the lot. The horses are cared for in the same way.[71]

One informant estimated that in 1910, or thereabouts, there were over two hundred burros, over three hundred horses, and even more cattle at Cochiti. Contrary to the Eickemeyers' statement on herding duties which held true for cattle only, every man, whether he owned burros or not, helped in the herding just as he did in the herding of horses. Every night they were driven into the pueblo corral located just north of Ramon Herrera's 1948 home where the community still had a corral. (49, 65, 70) While herding burros, the boys had great fun riding them, playing gallo and other games. Their job was to keep the burros from straying and from getting into the fields of the Spaniards at Peña Blanca. If any were lost, no one paid damages; everyone did his best to prevent losses, however. (49)

Burros were preferred to horses for long trips. This was true in spite of the fact that a particular trip was described to the Eickemeyers as "Three days with burros and one day with a horse."[72] Burros

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[70]Bloom, Bourke on the Southwest, p. 235.

[71]Eickemeyer, Among the Pueblo Indians, p. 96.

[72]Ibid., p. 54.

could be ridden; they carried food and blankets, and needed little care. The Indians did not mind walking. Horses were too difficult to care for on a long trip to the Estancia Valley salt lakes or to the Zuñi, Hopi, and Navaho Reservations. (15, 25, 50)

Informants were not able to date the disappearance of burros from the pueblo. Presumably it was twenty, or more, years ago. Causes for their disappearance were not determined but may have been a combination of reduction in range forage, a steady increase in the use of horses for draft purposes on the farms and in wagon transportation on the roads, and discontinuance of trips by foot and burro for salt gathering, trading, and wood-gathering. Horse-drawn wagons, and in more recent years, automobiles, trucks, and bus service, had become the normal modes of transportation for extended travel.

Sheep and Goats. The pueblo people adopted sheep-raising and the use of wool from the Spaniards. The men, the traditional pueblo weavers, shifted their medium and continued their work. In early Spanish accounts, weaving, especially of the manta, and general sheep-raising were mentioned as prominent in pueblo industry.[73] Bourke noted both sheep and goats on his visit to Cochiti,[74] but Strout, who accompanied him, noted "no sheep or goats."[75] The Eickemeyers saw herds of

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[73]Biblioteca Nacional, Legajo X, Document 70. (See pages 102-103 regarding cotton and wool.)

[74]Bloom, Bourke on the Southwest, p. 235.

[75]Ibid., p. 236.

both sheep and goats in 1894.[76]

It was surprising to find that some of my first informants claimed there were neither sheep nor goats raised at Cochiti. Later, at least two men were found, who each had about a dozen sheep and were expanding their flocks. They put them in pens each night to protect them from coyotes and did not feel it was safe to allow them to roam the open range.

Those who raised sheep felt they were worthwhile from the standpoint of both wool and meat. However, most said they did not have sufficient private pastures for the sheep; they did not want to let them roam on the range untended; they could not afford to hire herders; and they did not want their own children and other family members to spend their efforts in this way.

In the papers of Indian Agent Calhoun an entry dated October 15, 1849, mentioned the Cochiti killing three Apache of a band which had raided the sheepherders in the mountains beyond Cochiti.[77]

Cochiti men had worked as herders for some time for different owners of large herds in this portion of New Mexico. One such individual was Isidro Cordero, the oldest person at Cochiti in 1948. He had spent so much time away from the pueblo in his youth and later years herding sheep in the Estancia Valley and Pecos River country, that several persons claimed he was poorly informed on Cochiti life. Despite his age and activities in the Kō'sharī Society and in native

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[76]Eickemeyer, Among the Pueblo Indians, p. 102.

[77]Abel, Official Correspondence, p. 50.

ceremonials, they claimed that he spoke Spanish better than Keresan. (3, 15, 18, 49, 70)

Still others, such as Juan E. Chalan, went as far as Bakersfield, California, each winter during the agricultural off-season to herd sheep. This practice may have resulted from the trip made by Santiago Quintana and others (see pages 116-117) who stayed several years herding and cooking on California sheep ranches. (49) Juan continued to go to Bakersfield as late as 1947 when his son-in-law, Joe H. Quintana, gave up his non-lucrative welding and machine business in the pueblo and took Juan's place in California. (3, 6, 15)

Pigs. Pigs were noted by Bourke and Strout in 1881.[78] Agency figures indicated between seventy-five and one hundred pigs were kept at Cochiti. About one-third of the families owned at least one pig, with several families owning two or three. They were kept in small pens around the perimeter of the village, usually in or near the family's corral. Feed for the pigs consisted of table scraps, sacks of wormy or bruised fruit, and bundles of tall grass cut along the irrigation ditches. There was plenty of food for these animals, and their hides and meat and especially the lard were greatly prized. Sometimes, one family helped feed another's sow in return for one or more of the shoats. In this way, more and more people were acquiring pigs. (1, 2, 3, 15, 22, 38)

Rabbits. One or two older boys tried raising rabbits for meat

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[78]Bloom, Bourke on the Southwest, pp. 235-236.

and pelts. The pens were inadequate, and the rabbits often burrowed under and escaped. Also, coyotes and dogs occasionally broke in and killed the rabbits. Thus far, it seemed this potentially rewarding enterprise had not been successful.

Poultry. Poultry was raised in a rather haphazard fashion. Bourke noted chickens while Strout observed both chickens and turkeys were raised.[79] In 1948, chickens were the most common fowl although a few turkeys were also raised.

Chickens were generally hatched by hens who hid a nest in or near the corral sheds and ranch-houses. Some families sent away to hatcheries for young chicks and raised these in improvised incubators. They were kept in wired enclosures which were heated at night by kerosene lamps and similar devices. Considerable interest was shown in the chicks. However, as they matured and their appetites increased, they were turned out to forage for themselves. As their range expanded, they were rounded up with increasing carelessness until they were almost completely ignored. It was at this point that coyotes, "both two-legged and four," entered, and the chicken business soon ceased until another year.

In 1947, we moved our flock of about a dozen hens to our home in the pueblo, and later hatched chicks. These were kept strictly enclosed and were fed laying mash, corn purchased from the Cochiti, and table scraps. Several women came repeatedly to buy eggs, and even

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79Bloom, Bourke on the Southwest, pp. 235-236.

young children came, apparently of their own initiative. It was obvious that with proper care and feeding, a flock of chickens would have been a remunerative small business in the pueblo. When such was suggested, it was always pointed out that the coyotes were bad, or that other difficulties were too great to make such an enterprise profitable. When we left the pueblo, our chickens were eagerly sought by several families. On our return the following Christmas, most had already disappeared.

In addition to losses from coyotes or other mishaps, another aspect of Cochiti culture, namely, the Rooster Pulls, or gallos, depleated the supply of roosters. Gallos were held on several Catholic Feast Day celebrations of the summer months, and on each such occasion two to six roosters were dismembered by the riders.

There were very few turkeys. In 1946, informants stated there were no turkeys in the pueblo. (1, 44) In 1947 and 1948, an older woman had a hen or two, a cock, and two or three young birds. They wandered freely among the corrals, roosting each night in a corral near the owner's house. Feathers which fell from these birds were picked up by whomever found them and saved for use on dance costumes. Other feathers for such purposes were obtained from wild turkeys, or turkey farms, outside friends, and similar sources. Turkeys, both wild and domesticated, were and had been eaten, at least in theory.[80]

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[80]The question of whether or not the Pueblo tribes ate turkeys is an old one. Gunn, John M., Schat-chen: History, Traditions, and Narratives of the Queres Indians of Laguna and Acoma, Albuquerque, 1917, p. 26; Hoebel, E. Adamson, Man in the Primitive World, New York, 1949, pp. 113-114; Hough, Walter, The Hopi Indian Collection in the

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Since turkeys were of much greater value, especially in the ritual use of their feathers, it was much more usual to eat chickens. (50, 52, 70) Agency figures reported a total of more than one hundred turkeys, but in two summers of residence and in frequent visits to Cochiti, no more than a dozen were seen at any one time by the writer.

United States National Museum, Proceedings of the United States National Museum, Volume 54, Number 2235, Washington, 1918, p. 238; and Whitman, San Ildefonso, p. 401, all stated turkey was not eaten by the Pueblo Indians.

Parsons, Elsie C., Taos Pueblo, General Series in Anthropology, Number 2, Menasha, 1936, p. 23, stated that Taos and Isleta were the only pueblos to eat domestic as well as wild turkey. Parsons, Pueblo Indian Religion, p. 22, stated that Taos men ate turkey but that south of Taos the turkey was a ritual bird and was not eaten even in times of famine. Elsewhere, Parsons commented, "The important idea of domesticating or breeding for food was not conceived by the early Pueblo. (Otherwise, would they not have readily bred rabbits?)" (Ibid., p. 29) Hewett, Edgar L., and Bertha P. Dutton, The Pueblo Indian World, Albuquerque, 1945, p. 113, expressed uncertainty as to whether the caged (domesticated) turkey was eaten.

Several considerations must be remembered in this discussion. First is the difficulty of projecting present day practices into the early historic period and into the prehistoric era with any degree of assurance. Secondly, there has not been a consistent, conscientious effort to investigate possible distinctions by the Indians between the wild and domesticated forms of turkeys in the uses made of each. Finally, there appears to have been a misconception built up through the years, based upon an error in translation in one of Bandelier's papers. In his Outline of the Documentary History of the Zuñi Tribe, Journal of American Ethnology and Archaeology, Volume 3, Boston, 1892, p. 48, Bandelier made the following translation from the "Relacion del Suceso:" "The latter (fowl of Mexico, i. e., turkey, C. L.) they keep for feathers rather than to eat, because they make pelts of them, as they have no cotton." In the original Spanish, this passage reads, ". . . y estos las tienen más para la pluma que para comer, porqué hacen della pellones, á causa que no tienen ningún algodón." Instead of negating eating, as Bandelier translated, the meaning is rather one of preference of use for feathers over use for food. Because of Bandelier's reputation in regard to studies of Southwestern tribes and Spanish documentary sources, it is believed that this error has been perpetuated by at least some writers. Judging from the confused and contradictory statements which are cited in the first paragraphs of this footnote, a fresh and complete study of wild and domesticated turkey useages in different pueblos through the years is warranted.

Food Preparation and Diet

Food Preparation. Paralleling the mixture of aboriginal and European forms of produce was the blending of old and new methods of preparing foods.

Corn was ground, or used in whole kernel form. From cornmeal, a wide range of breadstuff was made. This included the tortilla, a flat, round pancake-like disk which was rolled out and then cooked on the top of a wood-burning cook-stove. Formerly, these were cooked on heated, flat stones. Probably the major changes in tortilla preparation were the method of cooking and the increasing use of wheat flour, rather than corn. Cornmeal was still the basis for the famous "paper bread" (mat'sIn), the Cochiti "newspaper," or "Indian newspaper." In 1948, most of it was made of blue corn and water, which was lightly smeared over a special stone heated to a high temperature. "Lots of the young girls won't make this anymore. They don't know how very good, and they burn their hands. But they all like to eat it." (17) A favorite form of paper bread was made from red corn and milk. This resulted in a reddish-buff bread, not as crisp or brittle as that made from blue corn and water. This reddish type was the "wyavi de leche" (guayave de leche) described by Bourke.[81] Not many women had equipment to make paper-bread in 1948, and some had not made any for several years. Perhaps a dozen women furnished paper-bread for various celebrations, usually the blue, but for special occasions, the red. They

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[81]Bloom, Bourke on the Southwest, pp. 234-235.

took great pride in the fact that others expected them to furnish this bread.

With greater use of prepared wheat flour, the women were making more elaborate breads, cakes, and dried-fruit pies, or tarts. These were normally made for Feast Days and similar occasions. Tortillas supplied every-day breadstuff needs to supplement chili stew.

Chili and maize were still prepared in the traditional manner, being ground with the mano, usually the two-handed type, and the flat metate. Often chili metates had legs in the Mexican fashion, or were detached flat slabs, generally of basalt. Corn metates, in contrast, were more commonly of sandstone and were arranged in sets of three or four, ranging from coarse to fine, and generally arranged in a series of floor bins. Bin walls were formed of planks of about two by ten inch dimensions. Individual bins were about two feet long and about a foot and a half wide. The series was arranged with the metates side by side and sloping away from the grinder's position. Bins were placed directly against a house-wall, or far enough from this wall so women could brace their feet against it as they knelt to grind.

Grinding was considered hard work although women were happy to own a set of metates. Frequently, a younger married woman had to go to the home of her mother, her husband's mother, or her aunt, to do her grinding. Often several close relatives joined in a grinding "bee." At such times the women assisted each other, enjoying the comradeship of their labors.

Frequently, young children were seen prior to Feast Days carrying, or pulling in coaster-wagons, baskets of corn to be ground at a

relative's house where a Feast was to be celebrated. More often these children brought meal already ground. This was presented to the woman of the house who passed it to a relative or did the baking herself.

Large bread jars and ollas, many of old Cochiti manufacture, but also of Zia and other pueblos, were treasured possessions of the women. Certain ones were considered particularly good for making the bread rise. (23, 27, 28) When a large quantity of dough had risen, it was kneaded into loaves and carried outside to the domed oven. Some ovens were no longer used except for emergencies. If possible, the women liked to go to certain houses to use an oven of greater capacity or which heated better, i. e., the fire drew well and the walls held the heat longer and more evenly. (16, 17, 23, 27, 28) In the ovens, fires were made with wood and, more often, with corn-cobs. When properly heated, the stone slab, section of iron roofing, or flattened washtub, which covered the doorway, was removed. Embers were raked out with brooms of stout twigs, or a similar implement. Next, the floor of the oven was swabbed out with a wet rag on the end of a pole, and the temperature tested with a sprinkling of cornmeal. Then the bread was quickly deposited in the oven with a long, flat-bladed wooden paddle. This same paddle was used to remove the loaves after baking. When filled to capacity, the door of the oven was blocked, often with the aid of a gunny-sack which had been dampened. These ovens appeared early in Spanish times and have been a part of the pueblo landscape ever since. Despite their simple construction and similarity, observation showed that each pueblo, Santo Domingo, San Felipe, Cochiti, and others, had its distinctive form. On one the

dome was more pointed; on another, rounded; the doorways differed slightly in outline; and there were other slight, yet significant distinctions.

Observations regarding manos and metates, made during residence in the pueblo, may have archaeological value. It appeared that there were about six manos for each metate. Also, an explanation was found for the innumerable "hammerstones" of a miscellaneous, but obviously worked, nature that characterize most pueblo archaeological sites. Hammerstones were still used at Cochiti for "sharpening up" the grinding stones, especially the manos. Grinding was commonly preceded by pecking sharper surfaces on the implements.

In daily food preparation, modern wood-ranges were commonly used. In winter, they acted as cook-stoves and also supplemented the corner fireplaces in heating the houses. Some families had no stove except the corner fireplace in which cooking was done on rock or iron supports, as in campfire cooking. In warm months, cook-stoves were moved outside under a porch or ramada. In some cases, small windbreaks of adobe were built to protect the fires for outdoor cooking. Ranges were used for top-of-the-stove cooking, warming canned goods, and also heating the clothes-irons. Range ovens were used to bake cakes, pies, and other items which had been added to the aboriginal diet. Ovens were also used for preliminary drying, or baking, of pottery pieces. The breadstuff acquired from European culture was generally reserved for special occasions although young girls liked to exhibit abilities learned in home economics classes at boarding schools.

Warm weather did not prevent the use of such popular innovations

as Jello and comparable products despite the lack of refrigeration. Bowls of these foods were placed in the "wells" of the water-system overnight. In the morning, they were firm. Some families, in an emergency, used the kerosene refrigerator at Rael's store for this.

Meat of cattle, sheep, or deer was "jerked," or sun-dried, in the same way that meat had been cured by generations of ancestors. Swarms of flies around the meat appeared to have been of little more concern than in the past. Much of the freshly butchered meat, animal as well as fowl, went immediately into stews, often at the time of the numerous Feast Days and other celebrations.

Aside from the increasing popularity of wheat flour, the greatest changes in food preparation were seen in the increased reliance on the multitudinous commercially-prepared foods. Much of the wheat flour used in 1948 was purchased in fifty and one hundred pound sacks in the stores. Bakery rolls, cookies, doughnuts, bread, and cakes were likewise becoming more common. Participants in the tribal ceremonies, traditionally rewarded with local breadstuff, were given presents of Uneeda, National Biscuit Company, and other packaged brands.

Home canning, done frequently with the aid of the schoolteachers in the government school kitchen, accounted for approximately three thousand quarts of fruits and vegetables per year. There was a growing dependence upon these canned goods as well as upon the still greater variety of canned goods carried by the stores.

Diet. A consideration of the diet revealed several things. First was the almost complete lack of detailed information specifically

on Cochiti diet, or on the diet of any other pueblo.[82] Generalized statements for the pueblos existed in the literature, and it was felt that for the particular topic of diet these statements were applicable to Cochiti.

The paucity of information can be blamed on lack of interest. Perhaps some of it has been due to the unwillingness on the part of the Indians to bother, or to permit others to bother, with precise measurements and weights of the many foodstuffs consumed over a span of years. In examining various writers' comments on diet, several complete and yet compact statements were encountered. Poore's summary, as of 1890, was one of the best.

> The diet of these Indians is largely vegetable, fresh meat being regarded as a great luxury, and eaten perhaps on an average of once in 3 weeks. Strips of dried flesh appear more frequently in stew of beans and red peppers. Goat flesh, beef, and mutton are easily cured, and after slight drying in the sun may be kept for an indefinite period. Peaches and apples are dried and stored for winter use. Muskmelons are peeled, cleaned, and hung upon the branches of young cottonwood trees which the owners of all melon patches cut in groves to surround their summer lodges. All branches unable to support the weight of a melon are removed, and on the dry racks thus formed the surplus of this much prized fruit is preserved. Corn is converted into meal or roasted green and eaten as a vegetable. Tortillas are made of flour partially leavened with sour dough, a heavy flapjack cooked with copper plates. Beans and stews are eaten with scoops; scoop and frijoles disappear together. The scoop is an article called guayave, made of thin corn meal, cooked upon hot rocks, resembling brown paper, and plastic enough to be rolled up and used as a scoop; an advance upon fingers, but a degree below pewter. Coffee is universally used and seldom without sugar. Wine is made at Jemez, Santa Ana, Sandia, and Isleta.

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[82] Among the better sources on pueblo diet are portions of Cushing, Zuñi Breadstuff and the article, Hawley, Florence, Michel Pijoan, and C. A. Elkin, An Inquiry into Food Economy and Body Economy in Zia Pueblo, American Anthropologist, Volume 45, Number 4, Part I, 1943.

> No statistics of quantity could be obtained. With fruit in its season, the above is the bill of fare to be found in the pueblos. . . .[83]

Items listed by Poore were still characteristic of Cochiti diet in 1948. However, deviations were apparent. The shifts primarily involved items which could be obtained from the trading posts and stores as commercially prepared commodities.

In the daily diet through the year, families ate a constant menu of chili stews, tortillas, and coffee. Stews were composed primarily of corn, potatoes, onions, beans, and other vegetables. Very little meat was used although bones were cooked with the stew for additional flavor. Chili, generally red but also green, was the standard flavoring. Stews, regardless of their composition, were commonly referred to as "chili." Although the most common use of fresh vegetables was in stews, they were occasionally served as individual dishes, especially green corn on the cob. Peas were often served raw and in their pods. Individuals helped themselves and shelled their own, much as we serve nuts.

Fruits were eaten both fresh and preserved. Watermelons, muskmelons, pumpkins, and squashes were eaten fresh or stored for winter consumption. Muskmelons were also eaten after they had been cut and dried in the sun. They were considered candy. Chili was likewise used both fresh and dried. Beans were used primarily in stews, either fresh or dried. (16, 17, 23, 27, 33, 34)

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[83]Poore, Sixteen New Mexico Indian Pueblos, p. 437.

Dietary changes were most evident in meals served on Feast Days and for other celebrations. While traditional foods such as paper-bread, tortillas, and the inevitable chili stews were on the tables along with coffee, they were all but overshadowed by an imposing array of cakes, cookies, puddings, Jello, various bottled drinks such as Coca-Cola, fruit and potato salads, and varieties of hard candies. For the late arrivals to these meals, it was the every-day chili stew, often minus the pieces of meat once present, tortillas, and coffee that were left.

As long as they could remember, Cochiti families had eaten three meals per day. The schedule was very flexible, with considerable fluctuation to allow for the work of different individuals. Morning and evening meals normally were eaten with all members of the household present. Individuals who had personal business elsewhere could eat alone, before or after the others. Lunch was the smallest meal of the day, often consisting of coffee, bread or tortillas, and perhaps stew. Lunch in the field consisted of bread or tortillas, fresh fruit in season from nearby trees, and water carried in a glass vinegar jug wrapped in a wet burlap bag to keep it cool.

Parsons' comments are of interest here.

> Pueblos are light eaters. A tortilla or fragments of wafer-bread, or a little wheat bread, sometimes with a meat stew with hominy, beans, and coffee, make a meal, and formerly there were only two meals a day, a late breakfast after several hours of work and an early supper.[84]

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[84]Parsons, Pueblo Indian Religion, p. 23.

Meals for children were the same as for adults except for smaller portions. Eating between meals was common with crackers, store-cookies, paper-bread, candy, and fresh fruit frequently in evidence.

Visitors were commonly offered a cup of coffee, with canned milk and sugar, and a plate of tortillas or bread. If close to meal time, they were urged to remain and eat with the family. At such occasions, a can of fruit, or some similar extra dish, was usually opened. Sliced watermelons were served in bowls, or the whole melon was placed on the table, each person serving himself. While Parson's statement that these people were light eaters was generally valid, it must also be remembered that many individuals visited homes of relatives on their way to and from fields and at each home they were usually offered food.

As mentioned, there was a general lack of meat in the daily diet. Other protein foods, such as eggs, were likewise below the normal expectancy. Beans were the most common protein. Fresh vegetables and fruits supplied vitamins, but the greatest part of the Cochiti diet was composed of starches, breadstuffs and corn, supplemented by potatoes and rice.

Very little of the 1948 food was derived from the aboriginal pursuits of hunting, gathering, and fishing. In the last few decades many more non-Indians hunted in the deer and turkey country of the Jemez Mountains. Antelope and buffalo ranges had been supplanted by cattle and sheep ranches. Hunting seasons outside the Cochiti Reservation had contributed to the disappearance of wild game from the

Indian diet.

Gathering of wild plant products had also diminished. Some families, especially those residing on "ranchitos" during the summer months, still gathered wild plants for "teas" and for table-greens. A good piñon nut year was welcome, but there had not been such a year in almost a decade.

Boys and a few of the men occasionally fished but the total catch was negligible in the economy.

Hunting, gathering, and fishing activities are discussed in detail at the beginning of CHAPTER V. The almost complete disappearance of these formerly important food-producing activities and the increasing dependence upon commercially prepared foodstuffs constituted basic changes in Cochiti economy. That the agricultural economy was slowly shifting to income-producing crops and that the non-agricultural economy was expanding, particularly in those activities which yielded greater cash remuneration, were clear evidences of economic changes.

CHAPTER V

NON-AGRICULTURAL ECONOMY

General Statements

While agriculture has been the basis of Cochiti economy, various non-agricultural phases have been important. In this heterogeneous grouping, basic changes have occurred in the relative emphasis of each specific pursuit. Changes included the almost complete disappearance of hunting, gathering, and fishing, which formerly were important supplements to agricultural in the subsistence economy. Other pursuits, many associated with the cash economy of Anglo-American culture, have become increasingly popular in recent decades.

This chapter is concerned with the whole of non-agricultural pursuits and describes the activities involved, the individuals who participated and under what conditions, and the attitudes of the participants and of others regarding the participants. Consideration is also taken of the rise or decline in importance of each activity with some evaluation of what this change has meant in Cochiti culture.

Specific topics included in this chapter are: Hunting; Gathering; Fishing; Trading; Trading Posts and Stores; Handicraft and the Tourist Trade; Non-agricultural Community Work; Community Licenses and Fees; and Wage-earning, both within and away from the pueblo.

Hunting

Hunting has traditionally been among the more popular aspects

of American Indian life. In general, southwestern pueblo tribes have been pictured as primarily farming peoples. Considering their present economy, this exclusion, or at least minimizing, of hunting might be warranted. In considering pueblo economy in past centuries, however, one gains the impression that the importance of agriculture in relation to hunting has been overemphasized. From literature on Cochiti and other pueblo tribes and from opinions of Cochiti informants, it seemed probable that a half-century ago would have found an important hunting complex at Cochiti. A century or more ago might have found a hunting complex that was a strong competitor with agriculture for man-hours, efforts expended, thoughts, and cultural values of such pueblo people as the Cochiti. Goldfrank noted, "Now very few people hunt at all, but formerly the animals were a much desired food, and there was an elaborate ritual."[1]

In discussing hunting, a division has been made between communal and individual hunting. This distinction again emphasizes changes which occurred from former times when most hunting was of the communal type. In 1948, hunting was an individual activity except for periodic

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[1]Goldfrank, Social and Ceremonial Organization, p. 85. (An example of the formerly significant role played by hunting in pueblo culture was found in White, Leslie, New Material from Acoma, Bulletin 136, Bureau of American Ethnology, 1943, pp. 335-337. In 1887, a party of seventy-four hunters, four cooks, and eight herders for the burros went on a hunting expedition to the area near present-day Datil, in the Plains of San Augustine. 744 antelope were killed; one man killed thirty-four on the first day. The meat was jerked, and before they could return to Acoma, additional burros had to be sent for to carry the meat back to the pueblo. Two weeks or more were spent on this one trip, time of year undesignated, and a supply of meat for a considerable period was obtained.)

rabbit hunts.

Communal Hunting. In discussing hunting, Curtis commented as follows, "Hunting was usually a communal undertaking, and the rabbit-drive may still be observed."[2]

Communal rabbit hunts were still held in 1948 for the cacique, and there were also communal rabbit hunts which were not for the cacique. Those for the cacique were led by the war captains who decided upon the time. They were assisted by either Kwi´rēna or Kō´sharī, depending upon whose year it was.[3] A hunt for the cacique was held in late summer, "just before corn picking time," (August) and another in early spring. Only men participated in hunts for the cacique, and all game was given to the cacique at the end of the hunt. Since he did not accompany the hunters, they brought the day's bag to his house where the war captains presented it to him. Rabbits were either shot or clubbed with sticks of oak, one end of which was a bulbous knot. There were some flat, longer, throwing sticks, but the knobbed-end type was more popular. (2, 15, 44, 49, 53)

In addition to these two hunts, two more were held annually for the entire pueblo. Men, women, and children engaged in these, which were also directed by the war captains. After the converging drive reduced the area, rabbits were either shot or clubbed. The women ran

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[2]Curtis, Edward S., The North American Indian, Volume XVI, Norwood, Massachusetts, 1926, p. 74.

[3]For hunt details see Goldfrank, Social and Ceremonial Organization, pp. 84-91, and Curtis, The American Indian, Volume XVI, pp. 74-76.

after the rabbits, and the first to reach one got it whether or not her husband or any other relative killed it. Each woman kept what she collected, usually four or five. One hunt was held after corn-picking time, and the other in November.

In 1948, game was not as abundant as formerly. This was especially true south of the pueblo in the area adjacent to the Santo Domingo Grant. The Santo Domingo appeared more enthusiastic in their hunting efforts, and if they could not locate game on their own reservation, they had no qualms about hunting on Cochiti land. The Cochiti seemed powerless to do more than complain. (3, 70)

Rabbits killed were used only as meat except for limited use of the fur in decorating ceremonial equipment. This, again, was in sharp contrast to former times when not only the meat of these animals was valued but also the pelts. These were cut into strips and woven into blankets, such as described by the early Spanish explorers.[4]

Until the disappearance of big game at the end of the past century, communal hunts were the normal mode of hunting deer, antelope, buffalo, elk, and mountain sheep. Occasionally in drives, or surrounds, a bear or mountain lion was included in the catch. (2, 3, 53)

Communal hunts were held under the direction of the war captains. Announcement of the hunt was made four days ahead of time, and all hunters turned out. Bows and arrows, iron-pointed spears, and, in later years, firearms were used. While war captains directed the hunt, i. e., determined the day and time and selected the place, the actual

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[4]Hammond and Rey, Narratives, pp. 252, 309.

success of the hunt depended upon the hunt chief, the Head (nawaiya) of the Hunting Society (the Shaiyak). According to Curtis,[5] this man was also known as "Cougar Man" (Múḳats^{a}-hátstse). The Hunting Society had ceremonial control over game and hunting.

Parsons observed portions of a communal hunt and made the following comments.

> . . . In October, 1913, I happened to be passing through Cochiti the day of a hunt, and, at a distance,[1] I saw the start and the gay homecoming. Riding into town about 9 a.m. we passed about an eighth of a mile to the northeast of the town an elderly man sitting at prayer before a small fire. An hour or so later, in this locality, the hunters, men and women, gathered together and I heard singing. At sunset they returned. About an eighth of a mile to the northwest of the town, a group of men gathered together for a few minutes. The women in two's and three's came in on foot, laughing and talking and carrying the game - rabbits, small rodents, and quail. I was told that the woman first to reach a hunter after he had made a kill became the recipient.[6]

In a footnote to the above comments, Parsons added further comments.

> [1]I was not allowed to join the hunt. "They would only let you go," said my guide from Santa Clara, "if you told them you were the daughter of the Cacique of Santa Clara." Seeing me look interested, he straightway repented of even that slight reference to custom or local joke, and withheld explanation. - Ed.
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> A like practice is or was followed at Laguna, I infer from an account of a communal hunt recorded by Dr. Boas. "'When somebody kills a rabbit for you women, you will have to run for it.' Thus says the head war captain" before the hunters start out. - Ed.[7]

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[5]Curtis, The American Indian, Volume XVI, p. 74.

[6]Dumarest, Notes on Cochiti, p. 206.

[7]Ibid.

Even in Curtis' time, the Hunting Society had disappeared from Cochiti, and its functions had been taken over by the ShĪ´kame Society with the Head ShĪ´kame serving as "Cougar Man." Goldfrank's data, of about the same time as those of Curtis, read as follows.

> Lastly, there is the Hunting Society whose membership in Cochiti is identical with that of the Cikame society. The officers of the Cikame society are called by the same name as the supernaturals in charge of the hunt (caiak, djaikatse, dreikatse).
> . . .
>
> Just how the Hunting society became identical with the Cikame I did not learn. I believe that, as in the other villages, the Hunting society was originally independent. Today practically no one hunts, although my informant was able to give me many details of former days, and with the lessening of interest and falling off of membership, perhaps the functions and ritual were assumed by the Cikame.[8]

It would seem more accurate to state that when the last Shaiyak died, Shaiyak functions were simply assumed by the ShĪ´kame with no idea of duplicating memberships. (15, 44, 49, 50, 70) For several years prior to 1948, Eufrasio Suina had been Head and sole member of the ShĪ´kame Society.

In material collected by Goldfrank and in data from my informants, no mention was made of the ShĪ´kame Head, in his role of "Cougar Man" for communal hunts. Curtis' material stated that he, or a ShĪ´-kame shaman, took the part of "Cougar Man" on communal hunts for big game as well as for rabbits.[9] This last was interesting in light of Dumarest's comments that "For shikarne chaiani, rabbit meat is also a

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[8]Goldfrank, Social and Ceremonial Organization, pp. 46-47.

[9]Curtis, The American Indian, Volume XVI, pp. 74, 76.

poison."[10]

On communal hunts, men were stationed at intervals, and at a given signal they converged. Just north of Cochiti Dam was a box canyon which opened into the Rio Grande Valley from the east. This was formerly used as a trap for antelope and deer which were impounded and slaughtered. Pit traps for mountain sheep could still be seen on a high mesa top just north of Cañada de Cochiti. The pits were located where the mesa top reduced to a narrow trail with very high and steep walls on either side. Traps in the trail were covered with grass matting and dust, and hunters drove the sheep onto the mesa and into the traps. Pits were never equipped with sharp stakes in the bottom, and hunters shot the animals that fell into them. (44, 49)

The Cochiti formerly went into the upper Pecos drainage to hunt buffalo. Occasionally, they found buffalo in the Estancia Valley. On hunts held east of the Pecos, the Cochiti joined hunters from Santo Domingo and the Tewa Pueblos. This was done for mutual protection against the Comanche, Jicarilla, and Mescalero. Trips were made on horseback. The weapons used were bows and arrows, iron spears, and rifles although they did not have many of these last-named weapons. (44, 49, 50) One informant was of the opinion that communal hunting disappeared when the Indians acquired firearms in fair numbers. (2)

Deer, antelope, and buffalo were hunted for meat and hides which were used for cloaks or blankets, for leggings and shirts in the form commonly found among the Plains tribes, and for moccassins, and drum-

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[10]Dumarest, Notes on Cochiti, p. 189.

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heads. Hoofs were used for rattles; horns for implements and ceremonial costumes. (3, 15, 25, 49)

During any hunt, men always watched for mountain lions, bears, and eagles. All three were considered to have almost human attributes, the lion and bear being especially associated with the powers of the medicine societies. Bear and lion fetishes were "strong medicine." Shamans often wore bear paws on their forearms, and necklaces of lion, bear, and eagle claws were considered powerful parts of shamans' equipment as were eagle feathers and eagle down.[11] If one of these animals was seen, the hunters attempted to kill it. When a lion, bear, or eagle was shot, everyone rushed forward to touch it, "with his hand or a gun, stick, or anything like that." (15) The first one to touch the body took possession of it. This might have been the one who actually killed it, but it was often another person. The second man who touched the body entered into a new relationship with the first. They became brothers, Satyumshē, using the same term as blood brothers used. They assumed all responsibilities, duties, and obligations existing between blood brothers and this relationship lasted for the remainder of their lives. Another aspect was that both men became eligible for membership in the Warriors Society, or Ōmpī. They joined the Warriors Society with exactly the same status and prestige as did a scalper of an enemy. (3, 15, 49, 53) This was comparable to Santa Ana where men who had scalped an enemy or killed a bear, lion, or

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[11]Details of preparing these items for use of the shaman and their actual use may be found in Dumarest, Notes on Cochiti, pp. 157, 158, 161, 163, and in Goldfrank, Social and Ceremonial Organization, p. 86.

eagle were eligible for the Warriors Society, Opi. White believed that Santa Ana and Cochiti were the only Keresan Pueblos who had this dual means of gaining eligibility to the Warriors Society.[12]

At Santa Ana some animal killers had perpetuated the Warriors Society, but at Cochiti the Warriors Society had been extinct for almost half a century. When one of the before-mentioned animals of prey was killed, the first two men to touch the body still entered into the brother relationship for the rest of their lives, but there was no longer any society for them to join. No one could recall the last person at Cochiti who had killed a bear. (3, 15, 25, 49, 50, 52, 70) Two men, Juan Jose Suina and Lorenzo Herrera, elderly leaders of the Pumpkin Kiva, were believed by one informant to have entered into this brother relationship a few years before. Someone at Cochiti had trapped an eagle and had given it to Juan Jose. It was uncertain whether Lorenzo had been called or had happened to come along at that moment. (53) Two other "brothers" were Miguel Ortiz, who trapped a mountain lion, and Sebastian Urina, who was second to touch it. (25)

While most informants knew how Jemez and Hopi Indians caught eagles, they were unanimous in their statements that the Cochiti had seldom done this.[13] A few had been successful in their attempts in the "old days." A small, deep pit was made where the hunter concealed him-

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[12]White, Santa Ana, p. 132.

[13]Dumarest, Notes on Cochiti, pp. 193-194, gave a detailed account of the Jemez Eagle Shamans' methods of capturing eagles but made no mention of Cochiti. The inference confirmed informants' ideas that few Cochiti indulged in this dangerous enterprise.

self under a cover of reeds. A live, or freshly-killed, small game animal was fastened to the pit or a captive eagle was tied to a near-by bush. As the eagle descended, the hunter seized its feet, tied them, and pulled it into the pit. The diameter of the pit was quite small to prevent the eagle from getting full use of its wings. "This was very dangerous business." Usually, eagles were killed with a lucky shot, caught in a steel trap, or young birds were taken from the nest and brought home and raised in log cages. They were prized for their feathers. (15, 44, 49, 50, 70) Most informants could not remember a captive eagle at the pueblo, but one believed that the last Head of the Warriors Society, or nawaiya, whose name he could not recall, had a log cage of eagles on his roof. (44)

In discussing wild animals and hunting, frequent mention was made of damage done by coyotes on the "ranchitos" and even around corrals bordering the pueblo. Informants were asked if there were ever any communal hunts to get rid of these coyotes. Apparently the idea had never occurred to them, or there was an undiscovered reason why this was not done. The reply was always that when someone lost enough to these raiders, he took it upon himself to keep an armed watch for a few days until he either killed or frightened the coyotes away. (3, 15, 49, 53)

Individual Hunting. With the advent of rifles and gradual disappearance of big game, communal hunting lapsed. By 1948, three or four relatives or friends went hunting together with no attention paid to control, direction, or guidance by any of the ceremonial societies

of the pueblo.[14] With the great increase of non-Indian hunters in the Jemez country and the decrease in the quantity of game, many gave up hunting. Men singled out, somewhat reluctantly, by informants as "good hunters" included Juan Jose Suina, Jose Domingo Quintana, Santiago Romero, Joe Trujillo, Clofe Arquero, Nestor Herrera, Frank Herrera, Celso Montoya, Delphine Quintana, and Alvin Arquero. Several of these individuals claimed they had not hunted for several years. "Don't have time any more," "Too old," and other reasons were given although the real reason appeared to have been that there was too little game and too many hunters to make it worthwhile.

When men hunted (Several claimed never to have hunted except for a few rabbit drives.), they generally went into the Jemez Mountains where the Cochiti had hunted for generations. Despite trucks and other transportation to areas of more plentiful game, there was little interest in hunting elsewhere. "We know the Jemez country" seemed to express their attitude. (2, 3, 15, 49)

As nearly as could be determined from informants, the maximum bag of all hunters for any year seldom amounted to more than a half-

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[14]This decline in the ceremonial aspects of hunting was by no means a recent thing. Goldfrank, in the early 1920's, commented that, "My informant, one of the younger men in the village, knew of no prayer-stick deposited before the hunt, no building of a large fire, no use of cornmeal circle around the corral, nor the offering of beads before the hunt. . . ." (Social and Ceremonial Organization, p. 85, f.n. 37.) The disappearance of hunting ritual and of the true Hunters Society, the Shaiyak, had apparently been recent enough that Goldfrank and Curtis were able to find informants who knew how these things were done. A generation later, the details of procedure had almost entirely disappeared. Accounts of people represented as "knowing all about that" were pitched on a level of broad generalizations, intentionally perhaps, but apparently not.

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dozen bucks.[15] While there was no hunting season on the reservation, deer were rarely seen at that altitude in the warmer months. Only when hunters drove them from the higher ranges in the fall were deer occasionally seen on the reservation. (1, 2)

Farmers shot rabbits near their fields although this appeared to have been done more to protect crops than to obtain food.

Skunks and blue foxes were formerly hunted both communally and by individuals. Sporadic hunting of skunks still occurred as they were valued for their fur which was made into anklets for dance costumes.[16] Blue fox skins were worn as pendant skins at the back of men's dance kilts. These foxes, too, were becoming scarce, and people valued these skins increasingly. (20, 45, 58)

Hawks, ducks, and other birds whose feathers were part of specific costumes were hunted as opportunities presented themselves. Feathers were stored carefully in special wooden boxes and were reused repeatedly. (3, 45, 49, 50)

Bears and mountain lions were increasingly rare. Some individuals said that if they saw one while hunting deer, they did not think they would bother to kill one, "there is too much ceremony with

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[15] Payne, Annual Report, p. 7, listed four deer killed in 1942. For the fall seasons of 1946, 1947, and 1948, informants could think of only two, five, and four deer killed in each of these years. (1, 2, 3, 15, 49, 50, 70)

[16] Bourke described the male dance costume at Santo Domingo in the August 4 Feast Day Dance of 1881 as including moccasins trimmed with goat hair. (Bourke, John G., The Snake Dance of the Moquis of Arizona . . . with an account of the Tablet Dance of the Pueblo of Santo Domingo, New York, 1884, p. 38.

something like that." (47, 48) This was a strange statement when considered with the apparent lack of ritual knowledge. Perhaps, it signified a reluctance to start something they did not know how to finish, or it may have been an easy rationalization of why they no longer hunted these relatively scarce animals.

The 1948 hunting picture at Cochiti can be characterized as follows. A small minority of the men still engaged in big game hunting, although the majority participated only in rabbit hunts, held either for the cacique or for the people themselves. Other small game, such as pack rats, were seldom hunted and were generally allowed to escape from rabbit-drives, in contrast to what Parsons had observed.[17] Good hunters had a certain amount of prestige, but this was merely stated as "he always gets a buck" rather than with any desire to emulate the particular hunter. Hunting stories were among the favorites,[18] and

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[17]See page 139.

[18]One of these stories told by several informants was about a trip into the upper Pecos drainage to hunt buffalo and antelope at the water holes and salt beds there. While details varied slightly from one informant to another, this appears to be the same story related in Curtis, The American Indian, Volume XVI, p. 77, where a date of about 1868 is assigned. About a dozen men under the war captains with three or four alguacilitos went out to hunt for the cacique. Pack burros were taken on this hunt, and hunters took their stations in small pits dug around the edge of a salt lake where high grass helped conceal them. The herd of antelope repeatedly returned, and the men killed many of them, cutting the flesh into strips and drying it on poles. Then some mounted Mescaleros attacked. Some Cochiti were killed, but they succeeded in driving off the Apache. They returned home without delay. (25, 49, 50)

Another hunting story tells how the party had succeeded in getting their meat and were ready to return. Two of the men wanted to remain behind and do some more hunting. One of these was a witch who belonged to a society of bad people. The others did not know this. The next day these two men ran into some Mescaleros who surrounded them.

animal or hunting dances of the winter ceremonial season were favorites with both young and old people. Aside from these attitudes and some slight nostalgia over good times on the hunting trails, the Cochiti had resigned themselves to the passing of their hunting activities.

Gathering

Gathering paralleled hunting in the decline of its importance at Cochiti. This decline was not as complete as in the case of hunting due to continued use of certain items which were accessible and satisfactory. Gathering differed from hunting in being on an individual, or group, basis and not on a communal basis. Gathering was done with no ritual, or control by officers or societies of the pueblo. Because of these basic distinctions from hunting, data on gathering are organized as a roster of items utilized by the Cochiti. Time did not permit expansion of these data into a complete ethnogeological or ethnobotanical study, but sufficient data were obtained to provide general outlines of the gathering phases of Cochiti economics and to indicate the importance of these activities in the total economy.

Salt. Salt was formerly procured from Estancia Valley salt

The two men thought "No more home to Cochiti." They were smart though and swift runners. The witch ran but was killed. Before he died, he said, "This is our place here." The other man ran away although he was wounded by an arrow. He managed to get into a sheepherders' camp. The herders were frightened, but they bandaged his wounds, took care of him, and gave him fresh clothes. "This took place over around San Pedros, east of Cochiti, not as far as the Pecos. Buffalo moved up and down the Pecos and swung all over the country. Hunters hung around the water holes and salt beds." (49)

lakes, almost one hundred miles southeast of Cochiti. Informants believed that the last trips were made about sixty years before. Older informants remembered parties leaving and returning, but no informant was found who had actually been on a trip. It was the unanimous opinion that permission did not have to be obtained from anyone such as the war captain. Any older man, who had been on previous trips and knew how, announced that he was going for salt. Any man was welcome to join these parties that went out almost monthly. (50) Only men could gather salt, and women did not go on the trips "because the men went into the lakes naked." (25) Burros were taken to carry salt home, and a party consisted of ten or twenty men. On arrival at the salt lakes, they prepared to enter the water. First, they removed all clothing and jewelry. "If someone forgot something, he must throw it in the lake." They took off their woven hair-ties. "They went in just like they were born." Informants disagreed on whether the hair was allowed to flow free, or whether it was tied with amole or yucca. The men used amole baskets, woven loosely so that the water would drain out, leaving the salt. These were the same baskets as were used for washing wheat. (25, 49, 50)

While working in the lakes, no one spoke, laughed, smiled, or made any noise. Baskets were carried to the shore and emptied into sacks. No one could look back as he left the lake. (25, 49, 50)

Trips for salt took one or two weeks. During this time no food, sex, or other tabus were observed either by the men or by members of their families who had remained at home. (25, 49, 50, 70)

Salt trips were always to Estancia, never to Zuñi or elsewhere.

"Since the lakes became private property and were fenced, the Indians do not go any more. If they went now, they would have to pay for the salt. It is easier to buy the salt from the stores." (2) The same informant readily admitted many Indians preferred native salt if some were given to them, but neither the desire nor need to obtain it was seen in recent years.

Salt was used as flavoring in cooking. Ceremonial uses were unknown although one informant volunteered the opinion that "Now the young women, all the young people, don't know nothin'. In the old days when going on a trip, to town or to another pueblo, the mother would put salt in her mouth and then spit it lightly all over the body of her young baby. Then no harm would come to the baby while they were away from Cochiti. Today, the babies are often sick when they come home, and their mothers can't understand why this is. They just don't know these things." (25)

These data agreed very closely with information gathered by Goldfrank.

> . . . The gathering of salt, a partly economic, partly religious ceremony, is not in charge of a clan, such as the Parrot clan at Laguna, but while retaining some of its ritualistic character and religious setting may be undertaken at Cochiti by an individual as leader regardless of his clan affiliations. Salt is gathered at Salt Place, mina teka, a lake to the southeast of the pueblo on the other side of the San Pedro Mountains. Anyone knowing where the lake is might lead an expedition. Here, as at Laguna, there is a Salt Woman, who must be propitiated, so no one laughs or talks while getting the salt, and all move slowly from the lake when they have obtained it. The men go in naked and do not wear jewelry. If they did, it would have to be sacrificed to the Salt Woman. It is not a place of divination here as it is at Laguna. Today expeditions are practically never made, the salt being bought at

the store.[19]

Turquoise. Turquoise had been valued at Cochiti for many generations. Traditions still existed of its being quarried in the Cerrillos Hills, east of the pueblo. One of the last attempts to mine turquoise was made by Natividad Arquero, Cipriano Quintana, Marcial Quintana, and Antonio Trujillo, early in this century. They went to the Cerrillos Mines to obtain turquoise although this was private property and hence, illegal. While in the tunnel, the four men were captured by the owners and received prison sentences. (25)

In 1948, turquoise was obtained through trade. (15, 40, 71) Its use is discussed with silversmithing.

Gypsum. Gypsum was quarried near La Bajada and other nearby areas. It was baked, ground to powder, and used to paint interior house walls at any time and kiva inside and outside walls prior to the Feast Day Dance, July 14. (21, 45)

Adobe. While a large part of the alluvial plain in which the pueblo was located was adobe, there were certain areas where "good adobe" was obtained. "This kind sticks better." (45) Teams and wagons were driven to particular arroyo cuts, and the adobe was hauled to the pueblo for making bricks, plastering, and other purposes. (15, 17)

Ceramic Clays. There were also beds of highly valued pottery

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[19]Goldfrank, Social and Ceremonial Organization, p. 9.

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clay. Some families attempted to keep these sources secret. Deposits were near the mouth of Cañada de Cochiti and on slopes of the big mesa and east of Peña Blanca. Formerly, clay was obtained from a cave near Santo Domingo, but the Santo Domingo boarded up this cave and locked the entrance. They hoped to sell clay to the Cochiti, but the latter merely located new beds. (16, 33)

Miscellaneous Rocks and Minerals. The Cochiti also gathered a reddish sandstone near the mouth of Cañada de Cochiti. This formed the base of the reddish paint used on the lower portion of interior house walls. Basalt and tuff were obtained in canyons above Cochiti for building. Basalt was used in lower courses of house walls. It was also used for grinding implements, especially metates on which chili was ground. Discussed under ceremonial objects in a later chapter are various effigies, both animal and human, likewise made from basalt. The lighter tuff was used in construction of domed outdoor ovens. Such building materials were salvaged and reused when old structures were demolished.

Outcrops of yellow and red ochres, green malachite, and other minerals were exploited for pigments used in painting ceremonial items. A white, chalk-like stone was used in storage boxes to keep moths from damaging feathers. (17, 27, 28, 32, 38, 45) No specimen of this material was obtained for identification.

Piñon. (Pinus edulis.) The Cochiti were very fond of piñon nuts. Piñons grew in the higher area in the northwestern corner of the reservation and in the National Forest beyond. In recent years

the dry cycle had resulted in poor harvests. When there was a good one, most people went into the hills in their wagons. They gathered what had fallen and spread canvas and blankets to catch nuts when the trees were shaken. Nuts were roasted and eaten through the winter. A few people acquired a surplus and sold it, but no one had done this for several years. Piñon wood was used for fuel although not as extensively as juniper. (1, 2, 3)

Juniper. (Juniperus monosperma.) Though seldom mentioned in the literature, the economic importance of juniper (erroneously but popularly known as red cedar) should be recognized. Juniper was utilized in great quantities.

Its greatest use was for firewood. While a few families used kerosene stoves, the great majority used wood-ranges and corner fireplaces. Paper, corncobs, pine, and cottonwood were used as fuel, but not in the quantities that juniper was. Each house had its pile of firewood, chopping block and axe. One of the most familiar sounds in the pueblo, both winter and summer, was that of the wood-choppers at work. Days off from field work and other tasks were spent in the mountains gathering firewood. Dead wood of any kind on the reservation belonged to the finder, but no living trees were supposed to be cut on the reservation. For many years, the Cochiti had had to go on into the National Forest for fuel.

Juniper was also utilized in corral fences and fence posts. In former times and in some cases even yet, juniper berries were eaten. (2, 3, 15, 49)

Pine. (Pinus ponderosa.) Western yellow, or ponderosa, pine trees no longer grew on the reservation and had not for many years. Roof vegas were cut on the National Forest with permission of the ranger who marked the trees to be taken. These were purchased for a nominal fee. Formerly, the Cochiti cut many vegas on the Cañada de Cochiti Grant; the present owner did not allow this. Vegas were often cut in the fall, piled in a somewhat secluded spot, and allowed to dry for a year. They were lighter then and did not require as many trips with a team and wagon. (15) Pine was used for firewood, and pine boughs were used in ceremonial paraphernalia. (3, 15)

Spruce. (Picea spp.) Spruce grew at higher elevations in the Jemez Range and was used by the Cochiti primarily for ceremonial purposes. Many katchina masks were fringed with spruce twigs. The pole used in the corn dances was of spruce. Pine or other woods were not capable of withstanding the strain when the pole was shaken over the dancers. (3) In former times wagons were used to collect pine and spruce boughs. By 1948, if a truck could be found for a faster trip, it was used. (44, 53)

Cottonwood. (Populus spp.) In the Cochiti area there were two types of cottonwoods, the valley cottonwood (Populus wizlizeni) along the river banks and the mountain cottonwood (P. angustifolia) in the canyons above Cochiti. Both were used for firewood, mostly in the form of driftwood that was easily collected along the banks of the Rio Grande. Boughs, often saplings, were cut to form sunshades and arbors

during the summer months. Of the two, the mountain type was more highly valued. This was the wood used for drums. When mountain cottonwoods die, their centers rot away, making the hollowing process much easier for the drum-makers. Since a large proportion of the men made drums, this meant considerable man-hours were spent going to the mountain canyons in search of dead cottonwoods. Occasionally, a tree was girdled to kill it, but usually they searched for one that had been dead for some time. Log sections were cut in lengths of about ten feet and loaded on wagons to be taken to the village. Cottonwood logs were seen in many corral sheds and storerooms seasoning until the owner had time to work them. Log sections varied in diameter from three or four inches for small souvenir drums to two feet or more for the large dance drums. (3, 15, 16, 17, 25, 62)

Mountain Mahogany. (Cercocarpus parvifolius.) This shrub was found in the mountains above Cochiti and was of value primarily for its roots. These were utilized to produce a reddish-brown dye used for dyeing moccasins and leggings. (21, 44, 45)

Rocky Mountain Bee Weed. (Cleome serrulata.) Several informants stated this plant was the source of the black paint, guaco, used in decoration of the characteristic black-on-cream Cochiti pottery. This black paint was also used in painting ceremonial objects and the participants. When young, the plant was used for greens, being boiled or fried. Seeds were also eaten in the form of cakes or gruel. (3, 16, 17, 28, 45, 49, 53)

Yucca. (Yucca baccata and Y. glauca.) These yuccas were impor-

tant plants. Robbins, Harrington, and Freire-Marreco quoted as follows from the notes of Bandelier regarding the use of yucca at Cochiti in 1882.

> Fishing was done in former times with long nets made of threads of palmilla ancha (Yucca baccata), which were stretched across the river, weighed down by stones, and kept floating by gourds and inflated skins. . . . The thread of the palmilla ancha was prepared as follows: In May or June, the governor sent out men to cut the leaves of the plants and gather them in 'hands.' They dug a hole in the ground and kindled a large fire in it; after the ground had become thoroughly heated, the embers and ashes were cleared out and the leaves placed in carefully, covered with brush, then with stones, and finally with a layer of earth. On the top of this another large fire was built and left burning over night; the leaves were thus well baked. Then the 'hands' were carried to the pueblo, and as the leaves became very sweet, the boys chewed them up, extracting the fiber, ha-tyañi-go-gowen, which they carefully laid aside, each bundle by itself, returning it to the house where it belonged. That fiber was twisted into thread, and strips of netting made of it, which were handed to the officers and then the whole net made. It was thus to all intents and purposes a communal enterprise, and the proceeds were enjoyed in common. Fruits of the Yucca baccata are still eaten. The women went together to gather the fruit in September and October, baking it until the skin could be taken off and the fiber removed, then threw it into caxetes and mixed it thoroughly, boiling it alternately, until it came down to a firm jelly or paste. It was then spread into large cakes about 1 inch thick, and left to dry on hanging scaffolds, changing it from time to time until it was perfectly dry. It was then cut into squares (or, at Acoma and Laguna, rolled into loaves) and preserved. In spring it was eaten in various ways, as paste, or dissolved in water and drunk, or tortillas and guayabes were dipped into the solution, thus using it like molasses or syrup.[20]

While their usage was not as extensive as formerly, considerable use was still made of them. The fruit of Y. baccata, also known as soapweed, or datil, was preferred. It was used raw, cooked, or

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[20]Robbins, Wilfred W., John P. Harrington, and Barbara Freire-Marreco, Ethnobotany of the Tewa Indians, Bulletin 55, Bureau of American Ethnology, 1916, p. 51.

dried as a conserve. Y. glauca, also known as soapweed or amole, was valued more for its leaves and roots than for its fruit. Leaves were used in making wide, flat baskets which were used in washing grain and were formerly used in gathering salt. Amole roots were pulverized and used as a shampoo. Many still used this traditional shampoo, and a few families customarily threw amole roots to the crowd which gathered for a gallo, or present-throwing, on one of the Feast Days. These gifts were as eagerly sought as others thrown from the roofs. (13, 17, 44)

Miscellaneous Uncultivated Plants.[21] A wide range of native plants had been used by the Cochiti as food, medicine, raw materials for crafts such as basketry, and other purposes. A partial roster of these plants included pigweed (Amaranthus spp.) as greens, lambsquarter (Chenopodium spp.) as greens, saltbush (Atriplex spp.) as flavoring and greens, sunflower (Helianthus anuus), seeds for flour and juice for medicine applied to open cuts, wild pea (Lathyrus decaphyllus P.) entire seed-pod was eaten, prickly pear cactus (Opuntia spp.) stems and fruit eaten, wild celery (Phellopterus bulbosus), purslane (Portulaca oleracea) as greens, oak(Quercus utahensis) acorns for making flour and the wood for implements in former times, dock (Rumex spp.)

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[21]A more complete study of uncultivated plant uses by the people of Cochiti and other pueblos may be found in Castetter, Edward F., Uncultivated Native Plants Used as Sources of Food, Ethnobiological Studies in the American Southwest: 1, University of New Mexico Bulletin, Whole Number 266, 1935; Robbins, Harrington, and Freire-Marreco, Ethnobotany of the Tewa; Jones, Volney H., A Native Southwestern Tea Plant, El Palacio, Volume XLIX, Number 12, 1942.

as greens, Indian tea (Thelesperma spp.) as a beverage, and various fruits and berries growing in the Jemez Mountains. (3, 13, 18, 23, 24, 27, 28, 45, 49)

At Cochiti, plants were being utilized by a steadily decreasing number of families. This finding agreed with Castetter's remarks.

> There can be no doubt, however, that since the coming of the Spaniards the use of native plants among the natives of the Southwest is declining, but the rate of decline varies greatly with the tribes, families, and individuals.[22]

The greatest usage at present occurred among those families living on "ranchitos" during the summer months. There the people were closer to native wild plants, and store commodities were less accessible.

Fishing

Generalized references to fish in the Rio Grande were found in early Spanish sources, but Bandelier's description of the Cochiti Indians fishing in White Rock Cañon, a few miles north of the pueblo, was the first specific reference to fishing by this tribe.

> . . . Large nets, made of yucca fibre, were dragged up stream by two parties of men, holding the ends on each bank. The shallowest portions of the river were selected, in order to allow a man to walk behind the net in the middle of the stream. In this manner portions of the river were almost despoiled of fish. The same improvidence prevailed as in hunting, and the useful animals were gradually killed off. After each fishing expedition, the product was divided among the clans pro rata, and a part set aside for the highest religious officers and for the communal stores.[23]

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[22] Castetter, Uncultivated Native Plants, p. 8.

[23] Bandelier, Final Report, Part II, p. 149. (See also the quotation from Bandelier's notes on page 156.)

One other reference to fishing was found in Dumarest's notes on "Occupations." "Fish are blocked up in little bights and caught in a sarape or blanket or by a fork or even by hand."[24]

These statements were interesting in relation to information regarding fishing that could be learned in 1948. Informants under fifty years of age had essentially no knowledge of communal fishing at Cochiti. Older informants had vague recollections of it but questioned the implications of Bandelier's descriptions. They recalled seeing the fiber fishing-nets hanging on the walls of the war captain's home. They agreed with the inference from this fact that the war captains were in charge of the use of these nets. They believed, however, that fishing was done voluntarily under the leadership of the war captains, "or maybe anyone else that they let borrow the nets." (25, 52, 70) They believed that whatever was caught in the nets was divided among men who had done the work and that each of these could do as he pleased with his share. Informants were skeptical of fish being divided on a clan basis. No one had any idea of the kinds, sizes, or numbers of fish caught. (1, 2, 3, 15, 25, 49, 50, 52, 53) Instead of fishing in White Rock Cañon, as Bandelier described, one man thought that nets were used in the river just east of the pueblo, "or anywhere they thought there would be fish." (50)

In analyzing these data, one wonders if Bandelier's observations made in the early 1880's represented approximately the final use of nets in a communal manner, as inferred from his statement "the product

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[24]Dumarest, Notes on Cochiti, p. 146.

was divided among the clans pro rata, and a part set aside for the highest religious officers and for the communal stores." Communal fishing was reconstructed as paralleling hunting procedures in which the community worked under the war captains' leadership and the game either given to the cacique or divided among the participating families. In the informants' opinions, fishing was done either voluntarily under the war captains or independently of them, although these officers retained the role of caretakers of the community nets.

By Dumarest's time, more than a decade later, no mention was made of the nets.[25] Communal fishing may have disintegrated rapidly once the authoritative control of the war captains was breached, and net maintenance was neglected. In its place, fishermen were described as using sarapes, blankets, forks (hayforks, probably), and even their hands. All of these items imply individual or small group activity.

In 1948, fishing was engaged in by very few men and boys, sometimes in small groups but more often in pairs, or alone. Their catch was seldom impressive, a fact which undoubtedly tended to reduce the enthusiasm of others. Hayforks, small nets, and ordinary hook-and-line with worms and insects were used. No evidence of fish-poisoning was found. When asked, informants usually stated that they liked fish although not as well as other meats. (1, 2, 3, 15, 18, 20, 21, 44, 70) "Sometimes we sell fish to the Spanish people at Peña Blanca." (25)

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[25] One informant said that he had seen the nets at Cochiti "a long time ago." He also volunteered the observation that the people at Santo Domingo still had their fishing nets and occasionally used them. (25)

Trading

Trading was an important part of Cochiti economics. Bandelier, writing in 1890, remarked, "It may be said that no two tribes were ever so hostile as never to trade, or so intimately connected in friendship as never to fight each other."[26]

Curtis described the rather extensive travels of the Cochiti, generally for purposes of trading. He stated that they went on trading journeys as far west as the Hopi towns and in company with the Hopi went to the Havasupai to trade for deerskins. Northward, the Cochiti went as far as Taos, and eastward into Oklahoma, or Indian Territory. Both in the north and east, bread and cornmeal were traded for horses and buffalo hides with the Comanches and other Plains tribes. Southward, they ranged as far as the plains of central New Mexico, principally to hunt antelope but also to trade. Curtis also told of an informant's father who traveled to Sonora to buy horses. According to another story, three men once went to Mexico City to inquire about a land grant. In 1875 Santiago Quintana and two others went on foot to California by way of Prescott and the Gila River. They visited and worked in San Luis Obispo, Bakersfield, and Los Angeles, returning three years later with horses. Curtis observed that these longer journeys were exceptional.[27]

Trading data from the Eickemeyers in 1894 were likewise of

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[26]Bandelier, Final Report, Part I, p. 36.

[27]Curtis, The American Indian, Volume XVI, pp. 73-74.

value in adding time perspective to this particular phase of economics.

> The Pueblos get most of their horses from the Navajoes, who make a special business of horse-raising and travel from village to village with droves of Indian ponies or cayuses, which they trade for beads that the Pueblo Indians make in great quantities. Four of these strings of beads will buy a horse. Five dollars will also buy a horse; but, strange to say, five dollars will not buy the beads. This method of financiering was quite contrary to any we had ever heard of, but it seemed to suit the Indians, who place a much higher value on beads than they do on money. This is probably owing to the fact that to manufacture them necessitates a great deal of tedious and hard labor.[28]
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> . . . . . .
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> The Indian is very reluctant to sell these drums. In fact, we could not buy one at any price, although we tried at several places. When an Indian will not sell his blankets, pottery, beadwork, or dance costumes, it shows he has plenty to eat and is thoroughly prosperous.[29]

In light of data obtained from informants as well as from personal observations, these references and citations of one and two generations ago revealed several interesting features. As noted by Bandelier, despite long-standing hostilities with the Apache, Navaho, Comanche, and different pueblo tribes, the Cochiti have maintained trading relations with these tribes into present times, except for the more distant Comanche. (3, 15)

As one would expect, distances covered on trading journeys had expanded as means of transportation had improved. Trains, busses, trucks, and cars facilitated these changes, perhaps not so much in actual radius of travel but certainly in the frequency of the trips.

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[28]Eickemeyer, Among the Pueblo Indians, pp. 96-97.

[29]Ibid., p. 101.

Another contributing factor in expanding travel was the increasing number of fairs, expositions, and such celebrations which encouraged Indians from many tribes to participate. Santa Fe, Albuquerque, Gallup, Window Rock, Flagstaff, Prescott, Los Angeles, San Francisco, and Chicago had all been visited by some Cochiti who attended these events for purposes of presenting tribal ceremonies, "seeing the country," and even more vital to them, meeting old and new friends from other tribes and areas with the chance to trade with these people. (3, 15, 16, 17, 20, 28, 42, 55, 62)

In addition to these opportunities, created principally by non-Indians, there was the continual sequence of ceremonies at neighboring pueblos. The El Pueblo Bus Line, the community truck, and privately owned trucks, pick-ups, and, for the shorter trips, teams and wagons were loaded with families attending various celebrations. People looked forward to such days to see the dances, to renew old friendships, as a change from the normal routine of daily life, and as an economic enterprise. If a person could not go on a certain trip, he often sent his wares with a relative who made as good trades or sales as possible. Personal arrangements were made, sometimes a "commission" being paid, other times perhaps a gift, or merely an expression of thanks. If the trading was poor, it was accepted as unfortunate. (13, 15) While sales to the many tourists were anticipated, there was also a good deal of interest in trading bread, corn, fruit, drums, jewelry, cloth, skins, and almost any other form of property with other Indians. From Indians, favorite items of trade were: blankets, jewelry, basketry, pottery wares (especially water-tight vessels from Zia, Acoma, and

Zuñi), olivella, abalone, and other shells which came from the Pacific Coast and other areas beyond the bounds of normal Cochiti travel.[30]

For days prior to ceremonies, people were busily occupied in preparing jewelry, drums, curios, agricultural produce, and breadstuff for trading purposes. Families sought space on vehicles leaving first for at least one member. These individuals were carefully instructed to secure the optimum location to display wares, "under a certain ramada, or porch," "under a particular tree," or "in the shadow of the church," and other proven locations where crowds passed by. (16, 20, 27, 45)

Some ceremonies were recognized as better for trading than others. Usually this was determined by the nature of the celebration itself and, even more, by the variety of tribes which attended. Trading at the Navaho Fair at Window Rock was considered good, but Window Rock was too far for many to go. The Jemez Feast Day, November 12, provided an opportunity to trade nearer home with the Navaho and Apache. The Laguna Feast Day, September 19, was an even better opportunity to contact Navaho and exchange chili, watermelons, and especially bread for turquoise, silver, blankets, and saddles. (15, 44, 53)

In visiting other pueblos someone in the party always contacted a friend, or relative, at whose house all were welcome and where trading could be done. "We always go to their house." (15, 16, 17, 20,

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[30]Further data on trading may be found in Brand, Donald D., Prehistoric Trade in the Southwest, New Mexico Business Review, Volume 4, Number 4, 1935, pp. 202-209; and Brand, Donald D., Aboriginal Trade Routes for Sea Shells in the Southwest, Yearbook of the Association of Pacific Coast Geographers, Volume 4, 1938, pp. 3-10.

44, 49, 70) Friends were the result of boarding-school acquaintances, or they may have resulted from inter-family friendships which had existed for several generations. Other cases included families which had, or had had, intermarriage with a Cochiti family. While written from the viewpoint of Navaho trading practices, Hill's comments are of interest here.

> The institution of "friend" existed among the Pueblos, though this relationship appears to have been defined less rigidly and was more ephemeral than among the Ute. Pueblo "friends" traded with the Navaho. They also acted as agents; sometimes they furnished a room in which the goods were displayed. They were consulted from time to time during trading negotiations with other Pueblo. If a Navaho considered he had obtained a fair bargain he returned to the same family at a later date; if not, a new relationship would be entered into and another friend secured.[31]

Trading was actively practiced in periods between ceremonies and other special occasions. During our few months of residence in Cochiti, Hopi and Santo Domingo men stopped at our house. Two Zuñi men were given rides between Santo Domingo and Cochiti and were later encountered in a Cochiti home as these traders made their visits. Later, informants commented that these same men and others came every year to Cochiti to trade. The Zuñi were trading jewelry as was the Santo Domingo. The Hopi had woven belts for fifteen dollars and mantas for eighty-five dollars as well as dance kilts at an undetermined price. Cochiti friends believed that these were about standard post-war prices. (20, 24, 28, 45, 53)

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[31] Hill, W. W., Navaho Trading and Trading Ritual: a Study of Cultural Dynamics, Southwestern Journal of Anthropology, Volume 4, Number 4, 1948, p. 390.

The preceding discussion creates an impression that trading and widespread travel were essentially universal among the Cochiti. Actually, this was true of the majority. However, there were some individuals who did little or no trading, and there were others who had not been to several pueblos, or to various ceremonies, or other celebrations.

Older descriptions of Cochiti trading made repeated reference to horse trading. By 1948, emphasis was still placed by the Cochiti on offering bread, corn, and similar agricultural produce, but desired objects had changed from horses to jewelry, meat, and blankets. Possible reasons for this change were that horses cost too much to keep and there was no need for great numbers of them. Actually, with grazing controls there was a tendency away from accumulating wealth in the form of stock. On the other hand, meat was always welcomed as a relief from the normal vegetarian pueblo diet. Turquoise, jewelry, blankets, hides, and similar items were easier to store and handle, and with development of the tourist trade throughout the State of New Mexico, these goods could be readily converted to cash, which was of increasing importance to the Indians. (1, 2, 3, 15, 16, 17, 38, 49, 62, 70)

The Bickemeyers' observations of the preference of beads to money was interesting in light of 1948 trading practices. Much inter-Indian trading was still of the barter type although a considerable number of cash transactions were made. Non-Indians sometimes bartered, usually to the advantage of the Indians, but the common form of exchange involved cash. Access to town was easy enough to make money

satisfactory. Occasionally, items were bartered to better advantage than was true in cash transactions. When the individual had specific immediate need for an item, such as a carpenter's tool, or certain calibres of ammunition, he would overpay in order to save a trip to town. Generally, values were well-known and if a suitable exchange could not be arranged, the individual borrowed what he needed from a relative until such time as he could go to town and obtain the item at standard prices. In most cases, the Indian had the advantage of being able to wait for a suitable exchange, or trade. Non-Indians were often under a time handicap or were influenced by immediate desires, all of which was well understood by the Indians.

Trade was carried on among the Cochiti, themselves, either by barter or purchase. While this was usually on a person-to-person basis, as was other trading, there were occasions when one member of a family acted in behalf of the actual owner of certain goods. (16, 20, 24, 44)

Another aspect of trading was the attempt to monopolize a trading opportunity until it had been exhausted. Then, an attempt was made to control the news of the possible trade by giving relatives the news first or urging the trader to visit the relative's home next. (16, 20, 24, 27, 33, 34)

The Bickemeyers' unsuccessful efforts to obtain a drum from the Cochiti despite several attempts were interesting. In 1948, the sale of drums, for which Cochiti was especially famous, was one of their important sources of income. This was derived both from a great assortment of drums made for the tourist trade and from large, ceremonial dance drums sought by other pueblos.

Informants seemed strangely unwilling to give any series of comparative values for trade commodities.[32] "You just have to take your things around and see what someone will offer you for them. Sometimes you can do real well, and other times nobody wants anything." (15, 16) Several informants volunteered that they would buy blankets or jewelry for me from other Indians at different ceremonials. "Navahos always stick the white people for lots of money." (15, 16, 20, 24, 44)

Hill encountered much the same situation among the Navaho and made the following comments. "Informants were generally unwilling to quote prices or were quick to point out that they applied only to a single case. Published reports give little concrete material on this subject."[33]

Trading Posts and Stores

The first mention of trading posts or stores in Cochiti Pueblo was found in the Eickemeyers' observations.

> . . . There are two of these stores in the pueblo, both kept by Mexicans, who supply the villagers with groceries, canned goods, cheap calico, harness, and other articles, which are always bought

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[32] In Bloom, Lansing B., The Vargas Encomienda, New Mexico Historical Review, Volume XIV, Number 4, 1939, p. 395, f.n. 72 were provided some comparative values for the end of the Seventeenth Century: payments of the Indians to the encomenderos were on the basis of one peso equaling one buffalo hide, or one buckskin, or one cotton blanket, or one thick blanket, or one thin blanket, or one fanega of corn. A thin blanket, painted in colors, was worth two pesos.

[33] Hill, Navaho Trading, p. 379. (Comparative data are offered on pages 379-382 for various Southwestern tribes.)

> in small quantities, for no one, Indian, or Mexican, has much money with which to purchase these luxuries, as they are considered.[34]

Informants supplied the remainder of data in this section. In 1948, there were also two stores, and both were operated by Spanish-Americans. While dates for the establishment of these two stores were not ascertained exactly, it was probable that the two stories mentioned by the Eickemeyers were operated by the same families in 1948.

Luciano Gallegos had operated a store at Cochiti continuously since 1893 except for a few years early in this century when he worked for the railroad. The Gallegos store was in the same location and buildings that it had occupied from its beginning. (65)

From about 1895 to 1916 a store was operated by Juan Jose Romero, the grandfather of Leo Rael, in the house block south of the church in which Joe Melchior was living in 1948. From 1900 to 1923, Jose A. Rivera had a store in the 1948 location of the Rael store. In 1923, Leo Rael married Rivera's daughter and at the same time took over the operation of the store. Since 1923, the store building and home had been rebuilt once with an addition in 1947-1948 of home-made pumice-cement blocks. (65)

In addition to these stores operated by the Spanish-Americans, there had been a few stores operated by the Cochiti. One was that of Santiago Quintana (Cyrus Dixon), located in the house block known as "Butterfly Group." A second was that of Marcial Quintana which ceased

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[34]Eickemeyer, Among the Pueblo Indians, p. 95.

operation about 1924 when too much credit had been extended and a disagreement arose over a check. The case was handled by Juan de Jesus Pancho (John Dixon), a more or less self-appointed judge, who was a leader of the "Progressive" faction and was backed to some extent by Indian Service officials. The case went against Marcial who was one of the "Conservative" leaders, and subsequently the store was abandoned. (45, 53, 65)

Shortly before the United States entered World War II, a loan was made by the Cochiti Council of Principales to Lawrence Chavez who wanted to start a store. Informants believed that this money was still on deposit at the Agency to the credit of this Indian. They felt that if the store should be started by this young Cochiti man and if a good selection of goods with fair prices were offered, it would prove very popular with the Cochiti people. Not only would additional competition be welcomed, but the possibility that a strong Indian-owned store might drive out the Spanish storekeepers and their families was pointed out by several. Others felt that a new store would not alter the situation appreciably and might only create ill-feelings among the Indians, themselves. In 1948, people were relatively united against the Spanish-American traders although they had little alternative other than trading with them. (15, 16, 42, 44, 52, 70)

Changes in the storekeeping business of the past twenty-five and fifty years consisted primarily of a shift from an almost exclusive barter system to one of cash sales, although some credit was extended, with or without pawn. In former years, people were far more dependent upon local stores. With increased motor transportation and particular-

ly the service of the El Pueblo Bus Line, inaugurated in March, 1945, this was no longer true. Another setback to local stores was the community truck acquired in 1948. This made trips into town periodically and gave people additional opportunities to trade outside the pueblo.

Local storekeepers maintained that these events had hurt their business less than one would have anticipated. They pointed out that trading with the stores in Peña Blanca, Bernalillo, Santa Fe, and Albuquerque was concentrated on various luxury commodities which were not handled by the Cochiti stores. Lines of essential goods, sugar, salt, coffee, flour, and other foodstuff, were still purchased from pueblo stores. While this may have been true to some extent, numerous rides on the bus and community truck and continued observation of the daily bus travel and other modes of travel indicated otherwise. Large boxes, cartons, and sacks of groceries and other supplies were brought into pueblo homes by passengers returning from town. In a year's aggregate, these purchases could not help but have been felt in the trade of local storekeepers.

Trading posts in Santa Fe, Albuquerque, and elsewhere had exerted considerable influence on pueblos such as Cochiti. Traders and curators of various museums encouraged production of better items of arts and crafts by paying higher prices for superior work and refusing to handle poorly made products. Traders had also been active in obtaining raw materials which enabled the pueblo craftsmen to continue a high standard of work.

Handicraft and the Tourist Trade

The wording of this section's heading is an indication of the changes that have occurred in this economic phase of Cochiti culture. In pre-European times, the Cochiti made whatever items they needed, or obtained them through trade with other tribes. For many years after the arrival of the Spaniards and others in the Southwest this pattern continued without extensive change. As indicated in the preceding section, the local stores provided until recently essentially luxury items and the Cochiti continued on a barter economy to a great extent.

In recent years, more discernible in perhaps the last generation, there had been an increased interest in money. Cash income had enabled the Cochiti to buy items ready-made and in many instances made of materials superior to those which they had access to, or were capable of handling, at home.

However, instead of resulting in the disappearance of handicraft, there had been a continuation of these industries, although with some reshuffling of materials and forms. This continuation and, in some cases, amplification reflected the steady rise of the tourist business in New Mexico and the entire Southwest. United Pueblos Agency figures for 1942 indicated income from arts and crafts as $2,563.00. This ranked arts and crafts fourth behind stock-raising, agriculture, and labor, in ascending order.[35] A greater range of products and activities were considered in this section than were considered in the

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[35]Payne, Annual Report, p. 11.

Agency report. While many of the items were for home consumption and did not bring in income, thus making their evaluation difficult, they were important in the Cochiti economy since they eliminated the need of obtaining them through trade or purchase.

Included in this section are the following: pottery, basketry, weaving, hides and pelts, beadwork, jewelry, wooden objects, stone objects, drums, and paintings.

Pottery. In the introductory remarks to "The Pottery of Pecos," Kidder wrote as follows.

> Like all Pueblo Indians, the Pecos were diligent potters. Their way of life required the use of many vessels for cooking and serving food and for carrying and storing water, and their supply of these fragile utensils naturally needed constant replenishment. So throughout the centuries the making of pottery never ceased; the potter's art was never at a standstill; styles grew and changed, new wares developed or were introduced and old ones dropped out of use.[36]

While the great majority of household utensils were of modern manufacture and obtained from outside sources, pottery made by the Cochiti and other pueblos was still extensively used. This was particularly true of large storage jars, which were handed down from mother to daughter and highly prized. Smaller bowls were used for chili; "chili tastes better out of one of these dishes." (28, 45) In many, grease had penetrated the bowl walls and served to make them more water-proof. Cochiti pottery, while fairly well made and often water-

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[36]Kidder, Alfred V., The Pottery of Pecos, Two volumes, New Haven, 1931, 1936, Volume I, p. 3.

tight, was admitted by the Cochiti to be inferior to many Zia water jars. A few families still used pottery water "buckets" in preference to metal pails.[37] "The pottery keeps water lots cooler, and it tastes better." (23, 38)

Cochiti pottery was traditionally black-on-cream, often combined with brick-red surfaces on the outside bottoms and complete interiors of bowls and ollas. Leaf and geometric designs predominated, many finished products being similar in design to Santo Domingo wares.[38]

Women generally decorated the pottery although a few men were recognized as capable and willing to assist. Some men, like Fernando Cordero, often made patterns on paper, some of them copied from sherds of prehistoric wares found in the vicinity. These were borrowed and copied by several potters related to this man. Favorite designs were kept in notebooks so they could be remembered. (16, 20, 24, 27)

One of the few descriptions of early Cochiti pottery-making was

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[37]Reference to Cochiti women filling pottery jars with water and carrying them on their heads were found in Eickemeyer, Among the Pueblo Indians, p. 59, and in Lummis, Charles F., The Land of Poco Tiempo, New York, 1928, p. 258.

[38]Good discussions of pottery from Cochiti and adjacent pueblos can be found in Chapman, Kenneth F., The Pottery of Santo Domingo Pueblo, Memoirs of the Laboratory of Anthropology, Volume I, Santa Fe, 1936; Chapman, Kenneth F., Pueblo Indian Pottery of the Post-Spanish Period, Laboratory of Anthropology, General Series, Bulletin 4, Santa Fe, 1938; Guthe, Carl E., Pueblo Pottery Making; A Study at the Village of San Ildefonso, New Haven, 1925; Mera, H. P., The "Rain Bird" in Pueblo Design, Memoirs of the Laboratory of Anthropology, Volume II, Santa Fe, 1937; Mera, H. P., Style Trends of Pueblo Pottery, Memoirs of the Laboratory of Anthropology, Volume IV, Santa Fe, 1939.

given by the Eickemeyers.

> At another house three squaws were making pottery in their skilful although crude way, by working the clay into shape by hand, guided only by the eye. The jars, after being rubbed and worked into shape, are allowed to dry slowly before baking, which is done in the bake oven in front of the house. These ovens are made of stone and adobe mortar and resemble in shape the old beehive. Many of the jars were artisitically decorated with odd conventional designs, and one which we purchased had on the inside two broods of game chickens and two game-cocks. The rooster figured quite prominently on much of the pottery, probably owing to the fondness the people have for the game of "gallo."[39]

Special clay beds were visited with teams and wagons, and clay was brought home where it was sifted and stored until needed. Men helped in gathering clay, but women did the actual pottery making. Temper was ground tuff or fine sand. Pottery was made during the warm period of the year. During the cold months, it did not dry as well, and firing was not as successful. (16, 17, 23, 27, 33, 34)

"Potteries," as the Cochiti called them, were made both at home in the pueblo and in the ranchhouses. Usually they were made indoors where freshly formed vessels could be dried slowly and evenly, away from drafts. The base was molded in the hand and coils of clay added in concentric circles. Gourd fragments were used to scrape and thin the walls; smooth pebbles were used to polish the surface. Next, the slips of cream and brick-red were added, and the black designs painted over the cream but not the red.

Before final firing, pottery was sometimes heated in the oven of a wood-range. This was done to reduce the chance of cracking. (16)

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[39]Eickemeyer, Among the Pueblo Indians, pp. 101-102.

Firing was usually done early in the morning to escape the heat of the day. This was for the comfort of the workers, not for any technical reason. Vessels were placed in a makeshift oven, made with a frame, or shell, of sheets of iron roofing, or flattened washtubs, wire mesh, and other items. Fuel, usually manure which was obtained from a corral, but sometimes corncobs, was heaped over the frame. The frame and fuel could not touch the pottery or it would result in smudging. Contrary to the Eickemeyers, outdoor baking ovens were never used for firing pottery. Some women were more experienced in firing, and some were considered to have better luck. These were sought by other pottery makers to help in firing. (16, 17, 18, 23, 27, 28)

Most pottery made at Cochiti in 1948 was intended for the tourist trade. This resulted in smaller pieces, which could be more easily transported or shipped, and which were much easier to make. Eccentric pieces were becoming more common, i. e., such items as ash trays in the shape of small adobe houses and outdoor ovens. Animal effigies, often as small coin banks, were also being made in answer to demands of various trading posts. Normally, these eccentric forms were made in the traditional black, cream, and brick-red colors.

Very few women felt capable of making large jars and ollas. Some of this resulted from an unwillingness to do the work necessary for a large vessel. It was easier to earn money in other ways and buy a large vessel from another person, either at Cochiti or another pueblo. (33, 34)

In 1948, informants stated that only the following women were able to produce large pottery pieces successfully: Stefanita Herrera,

Teresita Chavez Romero, Ascencion Chavez Benada,[40] and Agrapina Ortiz Quintana.[41] The last two women had not made any large pieces for a number of years. (16, 17, 18, 23, 27, 28, 33, 34)

Pottery making was learned by the children "if they wanted to." Small boys played at modelling the clay as well as their sisters. However, as this was women's work, it was not long before boys lost interest.

Several informants stated that pottery making had declined at Cochiti because it was too much work for the return received. After the labor of gathering and preparing the clays, the forming of the vessel itself, and the finishing and decoration, the piece could then be spoiled during firing. If the firing went well, there was yet the problem of transporting fragile wares to a trading post. "Other things, like beadwork and drums, are a lot easier and you get more money for them." (16, 20, 24, 44, 70)

Basketry. Basketry was still made by a few individuals. Juan

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[40]This woman did some pottery firing in October, 1933, for the technical observations of Anna O. Shepard, (Pottery of Pecos, Volume II, p. 457.)

[41]An interesting account of a large olla made by this woman was told by an informant. The family was living on their "ranchito" at the time, several years before. Agrapina made this especially large and fine olla inside the ranchhouse in order that it would dry better and to prevent any damage to it from the rain. When it was at last ready for firing, they found that it was too large to be taken out through the door. After considerable talking her husband, Marcial, was persuaded to remove some of the adobes and the timbers constituting the door jamb. The firing was conducted successfully, the ranchhouse was repaired, and the olla, which was still used in this family, frequently reminded them of this comic episode. (18)

Jose Suina, Santiago Cordero and his wife, Damesia, and Cipriano Quintana and his wife, Clemencia, were named as the only persons who were still active weavers. All baskets were wide, shallow, and loosely woven. Materials used were the long leaves of the amole, or soapweed, (Yucca glauca), and a rod of willow, bound in a hoop, served as the rim foundation. Long yucca leaves were soaked in water to make them pliable. Next they were laid on a flat surface, usually a house floor. They were interwoven at right angles to one another in a simple twill. The weaver commonly stood on the finished portion to hold the elements in place while he completed the remainder. Finally, the hoop was incorporated with the yucca leaves being bent upward to form the basin of the basket. The leaves were tied around the rim and trimmed off evenly to form a simple decorative fringe on the outside. The baskets were never painted or dyed. They varied in diameter from ten to thirty inches, normally about twenty. They were six or eight inches deep.

This was the only basketry form ever made by the Cochiti people according to informants. In 1948, many had the sturdier, more tightly woven Apache "wedding" baskets which were used a great deal. Cochiti baskets were used for washing grain primarily, but also as containers for bread, fruit, and other items. In former times, these baskets were used for gathering salt from the lakes, the loose weave permitting the water to drain out. (3, 13, 16, 45, 49, 53, 83)

Weaving. The art of weaving had all but vanished from Cochiti. In 1948 Stefanita Herrera did excellent weaving, but very little of it. Juan Velasquez, a native of San Felipe who married into Cochiti in 1924,

was the only male weaver and was a very good craftsman.

The great decline in weaving among pueblo people, in general, was interesting in view of the great numbers of mantas, and other articles, first of cotton and buffalo and dog hair, and in post-Spanish times of wool, that were mentioned in documentary sources. Fray Cayetano Fore, in 1794, commented as follows regarding Cochiti.

> . . . The industry of the Indians of this nation is limited to weaving, and they make mantas of wool and cotton with which they clothe their women. They sell them to those of other nations, which although they are able to weave them, they do not, either through laziness, or because they have no wool, or they are unable to raise sheep as these do. Also, they sell them to the genizaros for their wives who use them the same way. They weave and also make wide capes, which they call "Cotones," with which they dress themselves.[42]

In describing Navaho weaving, Matthews made the following comments regarding the decline of pueblo weaving.

> The superiority of the Navajo to the Pueblo work results not only from a constant advance of the weaver's art among the former, but from a constant deterioration of it among the latter. The chief cause of this deterioration is that the Pueblos find it more remunerative to buy, at least the finer serapes, from the Navajos, and give their time to other pursuits, than to manufacture for themselves; they are nearer the white settlements and can get better prices for their produce; they give more attention to agriculture; they have within their country, mines of turquoise which the Navajos prize, and they have no trouble in procuring whisky, which some of the Navajos prize even more than gems. Consequently, while the wilder Indian has incentives to improve his art, the more advanced has many temptations to abandon it altogether. In some pueblos the skill of the loom has been almost forgotten. A growing fondness for European clothing has also had its influence, no doubt.[43]

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[42] Biblioteca Nacional, Legajo X, Document 70.

[43] Matthews, Washington, Navajo Weavers, 3rd Annual Report, Bureau of American Ethnology, 1884, p. 375.

Articles woven at Cochiti in 1948 consisted entirely of women's belts, narrow garters, and hair-ties. Cochiti informants blamed the decrease in weaving on the high price of yarn. (44, 70)

Simple looms with either continuous or discontinuous warps were utilized in weaving.[44] Matthews, writing about 1882, said that he had been told by Bandelier that the Indians at Cochiti "make the narrow garters and hair-bands after the manner of the Zuñis, and the broad belts after the manner of the Navajos."[45] As described in Matthews' and Spier's descriptions, this means that the smaller and, especially, the shorter articles were made on warps which could not be moved, each end being secured to the beam, or bar. Longer belts were made on warp elements which formed complete circles around two beams. In this way, the weaver of a long belt could keep his working point within convenient reach by rotating the warp as the work progressed. In his discussion of Zuñi weaving, Spier noted that long belts were made by a "tubular weaving" process, referring to the continuous warps. He cautioned that this technique should not be confused with belt loom weaving which simply refers to the method of securing one end of the loom to the weaver's waist, or his knees, with the tautness of the warp adjusted by the weaver's forward or backward movements. Spier felt that Zuñi weavers were tending to prefer upright looms to belt looms and that Hopi weavers had a similar preference. At Cochiti, Spier found

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[44] For discussions of weaving techniques, see Spier, Leslie, Zuñi Weaving Technique, American Anthropologist, Volume 26, Number 1, 1924, pp. 64-85, and Matthews, Navajo Weavers.

[45] Matthews, Navajo Weavers, p. 391.

that the belt loom was known but, as in the cases of these other pueblos, the upright loom was preferred.[46] This preference was confirmed by informants. (21, 44, 70)

The great number of dance kilts, mantas, sashes, belts, hair-ties, and knitted leggings which, except for the belts and hair-ties, were restricted to ceremonial uses, were carefully kept by the owners. It was well recognized by the Cochiti that there were few weavers continuing this art. It was increasingly difficult to find these items, and prices were steadily rising. Primary sources of woven articles in 1948 were Hopi and Zuñi Indians who capitalized on their virtual monopoly. (20, 24, 44, 45, 53)

Hides and Pelts. Hides and pelts were still valued by the Cochiti, but their use was limited to ceremonial garments, moccasins, leggings, and drum-heads. Historical accounts frequently mentioned buffalo and deer hides used for robes and other articles of clothing. When the Eickemeyers visited in one Cochiti house in 1894, they saw on the floor "several old buffalo skins with very little fur left on the surface, showing they had been trampled upon for many years."[47]

Hides of various animals were prepared in similar manner. The hide was slit up the belly and removed in one piece; the hide of the head, tail, and lower limbs was not removed. After removal, the hide was put in a large bucket and soaked in a mixture of brains, or some-

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[46] Spier, Zuñi Weaving Technique, pp. 74-77.

[47] Eickemeyer, Among the Pueblo Indians, p. 97.

times of oak bark and roots. Then the hide was thrown over a log and allowed to dry partially. Next, a blunt draw-shave, or similar beaming tool, was used to scrape off the hair. If it did not come off readily, it was put back to soak again. When the hair was removed, the hide was rubbed with brains to soften it. This was done when the hide was intended for leggings or moccasin-uppers. For moccasin soles and drum-heads, this last step was unnecessary. (21, 32, 44, 45)

Adult moccasins were sold in 1948 for about six dollars per pair, nine or ten dollars if leggings were desired. Many women had moccasins with detachable leggings which they considered more convenient. For reasons of comfort, leggings were seldom worn in the homes. For ceremonial dances or other special occasions, leggings were put on and, when carefully wrapped, looked the same as the old-fashioned long, attached type.

Since deerskins were scarce, most moccasins and leggings were made of cowhide. Drum-heads were cowhide, horsehide, or sometimes burrohide. Formerly, deerskins were used for drum-heads and were still used when obtainable. Hides were often blackened by applying liquid shoe polish after the head was on the drum. Moccasins and leggings were either left white or stained reddish-brown, with the dye made from roots of mountain mahogany. Both colors were used by men and women, personal preference determining which color was used. For dances and special occasions, soles of the white moccasins were often painted with shoe-blacking. Soles of red moccasins were generally left as they were, white or light tan. Tendon from the legs and spinal area of deer, or cattle, was used in sewing. Moccasins were fastened either

with thongs or silver buttons. Moccasins were seldom beaded.

At dances, anklets, or ankle-guards, of skunk-skin were used. These were separate, being made of half a skunk-skin, and were tied over the moccasins around the ankle. As mentioned in footnote 16, page 146, Bourke, in 1881, observed Santo Domingo dancers in moccasins trimmed with goat's hair. It would be interesting to know if this observation was accurate (most of Bourke's are considered valid), and if so, how long ago skunk-skins began to be used for this purpose, and why. While the observations made by Bourke were for Santo Domingo, that pueblo and Cochiti have been so similar in their cultures that it is likely the two shared common experiences in this particular feature.

In 1948, most men, women, and especially children wore shoes purchased from stores. High-heeled cowboy boots, saddle shoes, and street shoes and boots were commonly worn. Unlike Santo Domingo,[48] the Cochiti approved of heeled footgear.

Beadwork. Beadwork was done by many women at Cochiti. Leather bags, decorated with both beads and tinklers made from pieces of tin cans, ("Condensed milk cans are better; they have a prettier sound." [16]), were made, both for ceremonial usage and the tourist trade. Belts and a few vests and gloves were beaded for similar purposes. Favorite designs included flags, flowers, Indian profiles with war-bonnets, horses, bows and arrows, and geometric patterns.

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[48] White, Santo Domingo, p. 23.

The most prevalent form of beadwork was the lapel ornament. Scraps of dyed leather were obtained from trading posts. These were cut and sewed in numerous patterns and decorated with beads. Drums, horseshoes, butterflies, rabbit's feet, miniature moccasins, sombreros, and Plains-like cradle boards and papooses were among the forms made. Each was attached to a small safety pin, and cards of various assortments were seen in practically all trading posts. Women spent hours of their free time sitting together under a ramada, talking and doing beadwork. Different colored beads were purchased by the tube. They were usually placed in a shallow dish, and the women picked out different colors as they needed them. Some cut out leather pieces with small scissors while others assembled them and put on the beads. This was a year around industry, receiving special emphasis before the Santa Fe Fiesta early in September and before each week end's trip to Santa Fe or Albuquerque. Some trinkets were sold individually, selling for about twenty-five cents. Many were sold at half this price in lots of a hundred, or several hundred, on orders from trading posts. (13, 16, 18, 23, 24, 27, 28)

Jewelry. Silver pieces were the most outstanding form of jewelry manufactured at Cochiti. An attempt to fix a date of origin for this work was not very successful.

According to Adair,[49] silverwork was first done at Isleta in 1879, at Santo Domingo about 1893, at Santa Ana about 1890, at Santa

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[49] Adair, John, The Navajo and Pueblo Silversmiths, Norman, Oklahoma, 1944, p. 194.

Clara about 1880, and at San Ildefonso about 1930, with no date offered for Cochiti. One informant was of the opinion that a Navaho had been brought into Cochiti to teach silversmithing although he could not remember the date. (50) Another stated there were no silversmiths in Cochiti in 1910, but he could not remember how soon after that the trade was started, nor by whom. (45) They concurred in the belief that silver was not worked in Cochiti prior to this century. (38, 40, 44, 45, 47, 50, 70, 71)

According to other informants, Reyes D. Suina was the first man at Cochiti to do silversmithing, beginning in 1918. The following year he was joined by Rosendo Trujillo, and in 1929 by Salvador Arquero. (55, 64) After several years, a number of others took up the art. Others working silver in 1948 were Alfred Herrera and Selviano Quintana. These two derived their entire livelihood from this occupation. Part-time workers included: Geronimo Quintana, Solomon Suina, Cresencio Suina, Aloysius Pecos, Juan Estevan Chavez, and Jose Maria Suina. Celestino Quintana did silverwork for a trading post in Santa Fe. Two women, Reyecita Ortiz Bowannie, formerly married to a Zuñi man and Maria Crucita Quintana were the only women at Cochiti who had done silverwork. Informants said the older smiths learned their trade from Mr. Gant, a trader in Santa Fe, for whom a number of the Cochiti still worked. Younger boys were learning the trade at the Indian Schools, but several older smiths did not feel they were being taught correctly. (3, 15, 20, 38, 40, 50, 55, 70)

Adair had the following to say about Cochiti silversmiths and their work, as of 1945.

> At Cochiti there are five smiths who do work for a company in Santa Fe and bring their work into town periodically. Joe Quintana is one of the most successful of these smiths. He reported that he had made $1,000 from working silver during the last year, working at his bench from nine to ten hours a day. In design the silver made in this pueblo is Navajo in type.[50]

In 1948 there were two Joe Quintanas at Cochiti. One was Jose Adolfo Quintana, who was still in service; the other was Jose Hilario Quintana, a brother of the cacique. This man operated a welding business in 1947 in the pueblo, and in 1948 he had gone to Bakersfield, California, to work for the same people that his father-in-law, Juan Estevan Chalan, had herded sheep for every winter for many years. It was this second Joe Quintana to whom Adair referred. It was interesting that with the income he had reported to Adair, $1,000, he had subsequently tried a welding business and then had given that up to work in California away from the pueblo and his family. Incomes of other silversmiths were not obtained.

Most Cochiti silversmiths, who worked at home, did contract jobs for trading posts. The trader furnished a bench and some tools, although most owned the greater portion of their equipment. Traders gave the smiths an order for so many rings, bracelets, or, occasionally, other items, of specific patterns. Stones of turquoise or petrified wood, were sometimes mounted, or the silver was sent to the trader who had others working stones and mounting them. The trader knew just how much silver was allotted, and the same amount in finished

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[50] Adair, Navajo and Pueblo Silversmiths, p. 208.

products, with scraps, had to be returned. In recent years a greater variety of articles, spoons, pins, cigarette cases, and flasks, were made. In addition to silver, copper articles were being produced. (38, 40, 47, 71)

Concluding remarks of Adair's study are summarized here. They are pertinent in emphasizing the conformity of certain aspects of Cochiti silverworking with those of other eastern pueblos and in pointing out still other features of Cochiti silversmithing which deviated from patterns in neighboring pueblos.

Silversmithing in the eastern pueblos was a thriving trade from 1880 to 1900, with a decrease in the number of smiths during the next twenty years. "About 1920 many young men took up the craft, but they did not learn it from the older smiths in the pueblos. For the next ten years the population of smiths increased."[51] In this time span, Cochiti apparently escaped the Nineteenth Century surge, but it did join in the development about 1920 with a Santa Fe trader instigating the movement.

> . . . As more tourists flocked to the Southwest, the demand for "tourist silver" increased. This steadily growing market created a demand for more and more smiths. The returned students in the pueblos were quick to realize that here was a trade which did not require long years of professional training, and the craft could be carried on in the pueblo, or one could get a job at one of the bench-shops in Santa Fe or Albuquerque. The owners of these bench-shops found that it was difficult to keep Navajo smiths on the job. They would continually run off to the reservation to attend a squaw-dance or a Yeibichai. Therefore, the shop owners began to hire Pueblo boys.

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[51]Adair, Navajo and Pueblo Silversmiths, p. 188.

> We find a complete break in the tradition of pueblo silversmithing. The smith of fifty years ago worked in the pueblo and made jewelry of fine design for the residents of his village. His craft was but a part-time occupation.
>
> The modern pueblo smith, for the most part, makes silver in the bench-shops of the near-by cities. The silver which he makes is sold to the white man and is apt to be light in weight and stereotyped in design. For him the craft has become a full-time factory worker's job.
>
> Thus we see that silversmithing, although a comparatively recently acquired craft among the Navajo and Pueblo Indians, is nevertheless of importance in their culture and their economy.[52]

While the increase in the number of smiths was evident at Cochiti, the pueblo had not experienced the general break in the tradition of pueblo silversmithing which Adair described. Most Cochiti smiths continued the trade as a part-time home craft. Two smiths worked full-time while remaining in the pueblo. Perfecto Herrera and several others from Cochiti were working in Santa Fe bench-shops. Another man, Celestino Quintana, was working silver in Santa Fe and also clerking, thus being excluded from the concept of a bench-shop worker which Adair had in mind.[53]

Also in the category of jewelry were the shell and soft, white-stone beads made into necklaces, pendants, bandoliers, and wristlets by the Cochiti. In 1939, Lucinda Cordero Suina of Cochiti was awarded

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[52]Adair, Navajo and Pueblo Silversmiths, pp. 188-189.

[53]Such shops as Gant's in Santa Fe and Maisel's and Bell's in Albuquerque employed many Indian workers with specialized skills. Work was organized on an "assembly line" basis for the purpose of mass production. No Cochiti was employed in the Albuquerque bench-shops in 1948.

a First Prize at the New Mexico State Fair for her shell bead work.[54]

The Eickemeyers described the manufacture of shell beads at Cochiti as follows. "They are made of shells obtained from the traders, and are strung after holes have been bored in them with hand drills, then all together are ground in a circular form with a stone used for the purpose."[55]

Beads of shell and stone were made in 1948 in the same way as described by the Eickemeyers. A hand, or pump, drill was used to bore individual beads after which they were strung on wire and ground down evenly on a fine-grained slab of sandstone. (15, 40, 44, 53)

By trade, purchase, or gift from white friends, the Cochiti acquired such shells as abalone and olivella which enhanced their ceremonial paraphernalia.

Necklaces of corn kernels and other seeds were almost exclusively for the tourist trade, although occasionally necklaces or bandoliers of these materials were seen on dancers.

Wooden Objects. Wood working while not as common as formerly was still practiced at Cochiti. This included the repair of implements by making new handles, generally of oak. Rabbit sticks were made although they included little work other than stripping bark from the handle area. Stirring sticks for large cooking vessels and bread paddles were also made, usually of pine. Normally, these were undeco-

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[54]United Pueblos, Quarterly Bulletin, Vol. I, No.1, p. 39.

[55]Eickemeyer, Among the Pueblo Indians, p. 97.

rated though occasionally a stepped design was carved on the edges of the blades of the stirring sticks. The Eickemeyers saw "saddles made in the pueblo, similar to our roping saddles, having pommels and rolls."[56] None of my informants remembered anyone making saddles at Cochiti, other than crude pack saddles for burros. Bows and arrows, formerly of utilitarian value, were made in 1948 almost entirely for ceremonial equipment. They were used in the "Comanche" dance and by some chorus members in hunting, or animal, dances. In contrast, were the observations of the Eickemeyers.

> . . . On the walls of the room were bows and arrows, some in course of construction, while others looked as if they had been used in killing birds and rabbits, a sport of which the Indian boy is fond. They all handle the bow and arrow with great skill.[57]

Dumarest noted in connection with cures by medicine-men that "The invalid will have placed behind his head a bow and arrow, the proper means with which to frighten witches. They are the weapons of masewa, and masewa fights against witches."[58]

Boys at boarding schools were taught furniture making. Simple tables, chairs, stools, and chests were evident results of this training. Many families had well-constructed small wooden boxes with sliding, grooved covers in which their ceremonial feathers were stored. (19, 44, 45)

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[56]Eickemeyer, Among the Pueblo Indians, p. 95.

[57]Ibid., p. 98.

[58]Dumarest, Notes on Cochiti, pp. 152-153. (Masewa is the War Captain.)

Ceremonial offerings and katchina images of wood were rarely seen at Cochiti, and it was very difficult to obtain data on them. Dumarest described and illustrated a few prayer offerings and carved, painted figures of wood.[59] These objects were placed in shrines near the pueblo. They formed part of the equipment of medicine men and were given to women who wished to become pregnant or to others for various magical purposes.

Goldfrank described finding several prayer-sticks under a bush outside the pueblo and mentioned several others. Her informants could not identify them, stating that they were the business of the medicine men.[60] On a walk through the hills northwest of the pueblo, the writer found two sticks along the trail, apparently washed down from some higher point and badly weathered. Farther on, in the vicinity of the White Cliffs (Ga'ash kuna), where katchina ceremonies were still held, several more badly weathered offerings were seen.[61] Informants were unable to identify these, using the same explanation given Goldfrank, "Those are made by the medicine men, and none of the others know about such things." (47, 52, 70) While Goldfrank mentioned offerings seen

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[59] Dumarest, Notes on Cochiti, pp. 141-143, 152, Plate VI.

[60] Goldfrank, Social and Ceremonial Organization, pp. 68-69.

[61] One was a thin, willow rod bound in a hoop with sinew and about six inches in diameter, undecorated; another type was a slender stick with two eagle feathers attached to one end, the entire length a little more than one foot; several looked like miniature knobbed rabbit sticks, about five inches long with a small feather attached to the knobbed end; a fourth type was a stick about six inches long and a half-inch in diameter. The bark was left except for an inch at either end, one of which was tapered to a blunt point. There was a groove around the middle where a feather was attached with a cotton cord. All of the sticks were too badly weathered to learn more precise details.

at shrines in the hills, usually simple circles of small boulders with an opening toward the east, she also noted the practice of burying offerings at shrines.[62] Informants were of the opinion that almost all offerings were buried, another reason for the non-society members' lack of knowledge on the subject. (3, 45, 47, 52, 70)

Bourke observed carved images of Saints, or Santos, on walls of Cochiti houses.[63] Few of these were ever made by the Cochiti; in 1948, prints of Saints and general religious subjects were far more prevalent. No katchina dolls were seen in homes, aside from a few of Hopi manufacture which some families used for wall decorations. Informants believed a few families probably had some of these wooden figures but that they were kept from sight of any stranger who might happen into the home. (3, 16, 17, 45, 53) No one at Cochiti made katchina dolls in 1948, "haven't for a long time." (3, 16, 17, 20, 21, 24, 28, 45)

Stone Objects. Utilitarian objects of stone consisted primarily of grinding tools, metates and manos. The Eickemeyers saw ". . . many stone implements such as spear, arrow, axe heads, and old mortars and pestles cut out of lava."[64] Informants were unanimous in declaring that they had never seen stone axes used, although one roof, or ceiling, was pointed out as made of pine slabs hewn with a stone axe. (16, 44) Manos and metates were used, and hammerstones were used to sharpen

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[62] Goldfrank, Social and Ceremonial Organization, p. 68.

[63] Bloom, Bourke on the Southwest, p. 234.

[64] Eickemeyer, Among the Pueblo Indians, p. 95.

these implements. Mortars and pestles seen by the Eickemeyers were most likely metates and manos as the other forms were not known among the Cochiti except for small mortars and pestles obtained from the Spanish.

Regarding stone objects of a ceremonial nature, the following notations of the Eickemeyers are pertinent.

> . . . She had in a store-room, back of the living room, some small images of lava or malpais which she wanted to sell. They had been made, she said, by her husband and son, who chopped them out of the porous stone with a small hatchet. They represented the black bear, dogs, swans and geese, which are still worshipped by some of the old women of the pueblo, who generally keep them in hiding in the back room of their houses, though sometimes they are seen on the little mantles over the fireplaces.[65]

Dumarest mentioned and illustrated several objects cut from basalt and similar materials. Some were anthropomorphic in nature, and one or two were identified as kopershtaia, tribal dieties.[66] Dumarest also illustrated several animal forms, apparently bears and mountain lions.[67] Stone fetishes were described as used by the medicine men by both Goldfrank[68] and Curtis.[69]

In the house in which we lived, under the hood, or warming oven, of the wood-range, there was a small lion-like figure of basalt, very

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[65]Eickemeyer, Among the Pueblo Indians, pp. 94-95.

[66]Dumarest, Notes on Cochiti, pp. 210-211, p. 219.

[67]Ibid., p. 160.

[68]Goldfrank, Social and Ceremonial Organization, pp. 69-70, 86.

[69]Curtis, The American Indian, Volume XVI, p. 160.

similar to one pictured by Dumarest.[70] Inquiry concerning it was answered by, "It's just a lion, maybe." Whether this statement was indicative of the object's significance in 1948 with this "conservative" family, or whether it was intended to discourage conversation regarding a sacred object, was not determined.

Drums. Among traders, many tourists, and other Southwestern tribes, Cochiti was perhaps best known for its drums. This fame developed both from drums made for the tourist trade and from those used at Cochiti. Drums like these latter were obtained by other tribes for use in their own ceremonies. In comparison, comments of the Eickemeyers again provided interesting data in time perspective.

> . . . From the ceiling were suspended ten or eleven drums, which the Indians consider sacred.
>
> The beating of the drum is not an uncommon sound at any hour of the night in the pueblo, whether at a sacred meeting in the estufa or a gathering in the plaza. The Indian is very reluctant to sell these drums. In fact, we could not buy one at any price, although we tried at several places.[71]

In attempting to date the transition from attitudes encountered by the Eickemeyers, one informant explained that in 1926 a small drum, perhaps a toy, was taken to Rael's store and sold for fifteen cents. This was prior to a secret dance, and the person needed money for some purchase. The drum was shown by Rael to a wholesaler as an example of Cochiti craftwork, and, as a result, an order was given Rael for a

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[70]Dumarest, Notes on Cochiti, p. 160.

[71]Eickemeyer, Among the Pueblo Indians, pp. 100-101.

hundred, or more, like it. Thus began the tourist trade in drums at Cochiti. (65)

Drums for the tourist trade were essentially the same as those for domestic use. The principal difference was that those the Indians used were usually of the large size; a few were medium-sized. All drums were referred to by the same term, ōya'pōmpōtz. Drum-sticks were ō'patz. The old, commercial snare-drum used on the Feast Day and to accompany the little horse which appeared on Santiago's Day was called ōya'pīnitz. (3, 15, 48, 49, 53) One informant stated that these were the only terms used to refer to drums, no other terms nor personal names being applied. (25) Another informant claimed that large drums used for dances were also referred to as Paiyát yama, a term meaning "youth," "young gentleman," "master," or similar honorary concepts.[72] (55) Confirmation and elaboration of this point, of considerable ceremonial significance was not obtained.

An informant, about sixty years old, remembered seeing a single-headed, flat drum. "These were used by the Cochiti for their 'Comanche Dances.'" The stick used was the hoop-stick. This informant claimed the Cochiti also used a basket-drum, made of buckskin stretched tightly over an Apache basket, with the same hoop-stick beater. "This makes a quieter, dull sound, not like our drums now." (49) All informants, several of whom had seen Navaho and Apache pottery, or water,

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[72]The term "Paiyát yama" was also applied to the long pole carried in the "Corn Dances." It was likewise the name of a mythological hero youth. Further discussion of this occurs in connection with the "Tablita Dance" under CHAPTER VIII, CEREMONIAL ORGANIZATION.

drums, denied their use at Cochiti.

Among the drum-makers at Cochiti, Lorenzo Herrera, Marcelo Quintana, Pablo Trujillo, and Santiago Herrera were recognized by the Cochiti as outstanding. Others included Epitacio Arquero, Eufrasio Suina, Juan Jose Suina, Jose Rey Suina, Fernando Cordero, Santiago Cordero, Ramon Herrera, Lorenzo Cordero, Eleuterio Cordero, and Juan Velasquez. At one time or another, most Cochiti men had manufactured drums although not all were still active. Women often painted sides and heads and occasionally mounted drum-heads. (15, 20, 21, 24, 44, 49)

Mountain cottonwood, or aspen, was used for drum sides. Heads were of cow, or horse, hide, rarely deer. The Eickemeyers stated heads were made of sheepskin,[73] but informants doubted this. Formerly, burro-hides were occasionally used. Well-made drums had one head of flank-hide and the other of thicker hide from the back of the animal. This difference in head thicknesses caused the drum to have "two voices." Dance drums were made this way, but few bothered with drums destined for commercial purposes. (62)

Some drums were undecorated, but most, either for the tourist trade or for dance purposes, were painted on the sides. Heads were blackened with shoe polish. Tourist drums were generally painted with poster paints while more permanent native pigments were used for dance drums. (16, 27, 44, 45, 49, 55)

At the Golden Gate International Exposition, twenty-one Cochiti

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[73] Eickemeyer, Among the Pueblo Indians, p. 67.

drums, dated their use at Cochiti.

Among the drum-makers at Cochiti, Lorenzo Hurtado, Quintana, Pablo Trujillo, and Santiago Herrera were recognized by the Cochiti as outstanding. Others included Epifanio Lujano, Antonio Suina, Juan José Suina, Jose Ray Suina, Fernando Montoya, Bautista Cordero, Ramon Herrera, Lorenzo Cordero, Estanislao Cordero, and [illegible] leagues. At one time or another, most Cochiti men had participated drums although not all were still active. Cochiti drums were made and occasionally mounted drum-heads. (15, 20, 21, 28, 48, 49)

Horsetail cottonwood, or aspen, was used for drum shells. Hides were of cow, or horse, hide, rarely deer. The Kolomeyers stated hides were made of sheepskin,[72] but informants doubted this. Formerly, hides were occasionally used. Soil-made drums had one head of [illegible] hide and the other of thicker hide from the back of the animal. This difference in head thickness caused the drum to have "the voice." Some drums were made this way, but few participated in drums destined for commercial purposes. (62)

Some drums were undecorated, but most, either for [illegible] trade or for dance purposes, were painted on the rims. Heads were bleached with shoe polish. Tourist drums were generally painted with poster paints while more permanent native pigments were used for dance drums. (16, 27, 41, 45, 49, 58)

At the Cochiti Indian Reservation, Pueblo

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[72] Kolomeyer, Among the Pueblo Indians, p. 67.

Indians were reported to have made total sales of $254.25, primarily from drums. (This was second high to an income of $282.55 for twenty-eight Indians of Santa Clara Pueblo.) "A drum-maker from Cochiti who has won several prizes for his products received the largest amount, $135.70, of all Pueblo contributors."[74]

At the 1939 New Mexico State Fair, "Fernando Cordero illustrated for spectators the process of drum-making from seasoned aspen block to finished product."[75] Elsewhere in the same bulletin it was noted that a drum of Eleuterio Cordero of Cochiti was awarded First Prize.[76] At the 1940 Fair, Lorenzo Herrera, Lieutenant Governor of Cochiti, demonstrated drum-making,[77] and Jose Rey Suina received First Prize for his drum.[78] Several Cochiti had demonstrated drum-making at these and other expositions of Indian arts and crafts. Cochiti drum-makers consistently monopolized awards in this particular craft.

Drum-making was done the year around, with more men working during the winter season when they were free from farm work. Drums were generally made in groups, i. e., several log sections were hollowed, smoothed, and shaped; next, the heads were put on the whole group; and finally, all were painted at one time. (62) Drum-stick heads were built up with layers of hide; cloth was often substituted

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[74] United Pueblos, Quarterly Bulletin, Vol. I, No. 2, p. 15.

[75] Ibid., Vol. I, No.1, p. 7.

[76] Ibid., p. 39.

[77] Ibid., Vol. II, No. 1, p. 3.

[78] Ibid., p. 6.

on those destined for tourists. (23, 32)

Large dance drums were sold for thirty to sixty dollars or more. Drums about ten inches in diameter and eighteen inches high sold for six to ten dollars.

Informants claimed that when they saw Cochiti drums used at other pueblos, they could recognize them by general shape, method of attaching heads, and modes of painting. If colors on a drum faded, they were repainted but always in the original shades and patterns. Two informants stated that Cochiti dance drums were recovered when the heads were worn out, (25, 53), but all other informants claimed that worn out drums were "retired" to the front room of the Kwi´rēna House on the plaza. They were kept there, and on dance days they were brought out, warmed up, and fed the same as drums which were to be used in dances. (44, 49, 55, 62) No information on the number of drums stored in the Kwi´rēna House was obtained. Each moiety, or kiva, owned several drums used by that group. They were kept in different individual's homes, hanging from the ceiling, as noted by the Eickemeyers.[79] Aside from these moiety drums kept by the regular drummers of each moiety, no explanation was found for moiety ceremonial drums being kept by others who were not drummers.[80] (3, 20, 21, 25, 44, 45, 49, 52, 53, 70)

Painting. Watercolor and oil paintings were among the more recent forms of art among pueblo and other Southwestern tribes. Dut-

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[79]Eickemeyer, Among the Pueblo Indians, pp. 100-101.

[80]Data on the usage of the drums at Cochiti, and their care, is included in CHAPTER VIII, CEREMONIAL ORGANIZATION.

ton[81] and Tanner and Forbes[82] placed the beginnings of this craft at the end of the last century, when two Hopi, at Fewkes' suggestion, began drawing katchinas. Chapman and Hewett were also instrumental in developing hidden talents they found among various New Mexico Indians. Much of the original impetus occurred at San Ildefonso about 1910.[83]

At Cochiti, one of the most famous painters was Tonita Peña, who was born at San Ildefonso in 1894. Shortly thereafter, with the death of her parents, she went to Cochiti to live with a sister of her mother's. She married Juan Rosario Chavez in 1908, at the age of fourteen years. Thus, when the development of art was occurring at San Ildefonso, Tonita was already living at Cochiti although retaining some contact with her original pueblo. For many years she was one of the few women artists, and her artistic development was largely an independent one. Tanner and Forbes characterized her work as follows.

> Charm of hand work and accuracy of reproduction are combined in the several paintings of Cochiti pottery by Tonita Peña. The same clean line-work is carried over to her paintings of dance figures. No grounds appear in any of the examples of this Collection, as is also characteristic of the artist in question. Her work reveals a delicacy of figure, fine detail, a softness of line. Flat colors predominate, with an occasional bit of shading or modeling suggested in simple line-work. As is true of several of these artists, Tonita Peña reveals certain little traits in facial treatment which generally may be noted in her paintings. For example, both men and women are thick-lipped, the men particularly have long straight noses, and there is a vertical line between the mouth and

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[81] Dutton, Bertha P., New Mexico Indians, Pocket Handbook, New Mexico Association of Indian Affairs, Santa Fe, 1948, pp. 52-56.

[82] Tanner, Clara Lee, and Anne Forbes, Indian Arts Fund Collection of Paintings, El Palacio, Volume 55, Number 12, 1948, pp. 365-367.

[83] Ibid., pp. 373-375.

cheek.[84]

Tonita stated that there had been little objection at Cochiti to her painting dance figures. There was trouble during a year in which her third husband, Epitacio Arquero, was Governor. He pointed out that she was drawing only those dancers which could be seen by any outsider, and that it was no more harmful for her to do this than it was for others to make their pottery and sell it. This reasoning apparently satisfied the objectors. Since that time, she painted only figures of an exoteric nature. Examples of her work included murals at the La Fonda Hotel in Santa Fe and several items in the New Mexico Art Museum in Santa Fe.

Possibly because of the example of Tonita and because of encouragement from museum personnel and Indian School officials, others at Cochiti became well known in art circles. Among the younger painters were Joe H. Herrera, the son of Tonita Peña, Teodoro Suina, Cipriana Romero Guerrero, Bob Chavez, Andrew Trujillo, and Victor Herrera. In 1940, Ben Quintana of Cochiti won the Youth Administration Prize of $1,000 in competition with more than fifty thousand contestants.[85] In this same contest, Cipriana Romero Guerrero won Third Prize. (38)

Some art work was done in school, but the greatest part was done at home, generally as part-time work although two or three people devoted most of their time to painting. Work was done almost entirely

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[84]Tanner and Forbes, Indian Arts Fund, pp. 365-377.

[85]Dutton, New Mexico Indians, pp. 54-55. (Ben Quintana was killed in the Battle of Leyte near the end of World War II.)

with casein watercolors on high grade art paper obtained from traders, the museum, or schools. Subjects included dancers, group ceremonials, scenes from daily life, and many animals, especially horses, rabbits, deer, and bear. Traditional styles, omitting horizons and perspective, were followed by most artists.

One artist, Joe Herrera, on his return from overseas duty in World War II, took up residence in Santa Fe, close to his market. Apparently confident of his reputation and to avoid high city rents, he was building a home in 1948 at Cochiti, close to that of his mother, Tonita Peña. When the house was completed, he planned to move back to the pueblo. He intended to devote his entire time to art work, except for his duties as a member of the Kwi´rēna Society and the Turquoise Kiva.

Several informants stated that formerly, in school and elsewhere, they had enjoyed painting or drawing. Several had considerable talent and expressed hopes of painting again, perhaps attracted by the relative success of other artists. (45, 52, 53, 62) Individuals, when sitting idly talking with a group of men, often amused themselves and any nearby children by drawing horses, eagles, and similar figures in the smoothed-off adobe ground.

Non-Agricultural Community Work

Non-agricultural communal tasks had greatly decreased in recent years. These included church repairs, cleaning up, raking, sweeping, and hauling of debris prior to the annual Feast Day, repairs of roads, bridges, and other communal works, the repair or construction of

houses for the several societies which functioned for the common good, and the renovation of kivas and community houses prior to the annual Feast Day. Such work was non-income producing, but it was of economic significance in making further demands upon the time and labor of the people.

The war captains, assisted by Kō´sharī or Kwi´rēna members, depending upon the year, supervised the annual village cleanup and renovation of the kivas and community houses. Each family cleaned up its own yard and deposited the debris in a pile along the roadways, or if there was a great amount, the individual family hauled it to a distant arroyo. Then pueblo members raked the streets and roadways while a number of teams and wagons were recruited to haul the accumulations of debris. The plaza was not only raked, but swept. Prior to winter dances, shovels and push-boards were used to remove the snow. Again, this was communal labor under direction of the war captains. As in other matters, there appeared to be a growing laxity on the part of certain people to join in this labor, while the usual public-spirited group of "old faithfuls" helped repeatedly. Officialdom seemed to be yielding to this trend, except for extreme cases of malingering when public opinion could be depended upon to support whatever disciplinary action was taken. (44, 45, 49, 70)

If a society needed more adequate quarters for their functions, they could request a new house of the governor and council. "Then the people would have to build it for them." Such work was done under the supervision of the governor and war captain, in consultation with society members. (3, 44, 45)

Moiety work, as on a kiva or community house, was recruited by the kiva head, with close cooperation of the war captain, or the assistant war captain, who was a member of that moiety. The head man of the Pumpkin Kiva was Juan Estevan Chalan, a member of the Kwi´rēna Society, as he should have been. He was known as "Pumpkin Father" (DaÑī nahwa). Some discontent was voiced among Pumpkin members when Juan formerly went to Bakersfield each winter, leaving the kiva in the care of Lorenzo Herrera, a highly respected member of the Pumpkin Kiva but a member of the Kō´sharī Society instead of the Kwi´rēna. The Turquoise Head was Lorenzo Cordero, who was known, by virtue of his position, as "Toad" (Pa´lak). He was a member of Kō´sharī as he should have been to hold this position. (3, 45, 70)

Road work and similar tasks were engaged in under the direction of the governor and his lieutenant. The two fiscales also helped in these activities, and, in turn, they were assisted by the governor and his lieutenant in supervising the upkeep of the church. (15, 20, 49) In 1948, the care of the church consisted of replastering in preparation for the annual Feast Day and constructing the temporary booth, or shrine, in the plaza for the statue of the Patron Saint. The fiscales also kept the church grounds cleaned, and they secured a supply of firewood during the winter for heating the church during Masses. (3, 20, 45, 52, 53)

In the Domínguez report of 1776,[86] the convento staff at Cochiti included a weekly shift of herders for the sheep, cattle, chick-

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[86]Biblioteca Nacional, Legajo X, Document 43.

ens, pigs, and horses of the priests. In addition there were, as permanent positions, one fiscal mayor, three assistants, eight sacristans, a head sacristan, eight cooks, and four bakers. Service was rotated in such a way that each week there were one fiscal, two sacristans, two cooks with two boys to carry water, and a baker on duty. It was also noted that the pueblo furnished all necessities for the maintenance of the mission.

In former times, when a resident priest was in the pueblo, this community effort necessary for his support created additional work and constituted the bases for many protests of abuses by the friars.[87]

Another form of community labor was the operation of a ferry boat which facilitated travel between Cochiti and Peña Blanca. This work had been discontinued following the construction of the bridge, but the older Cochiti men could remember serving as crew members in their youth.

The ferry was operated under supervision of the governor by crews of three men who changed daily. One man poled, or paddled, on each side while the third man guided the ferry from the stern. The ferry was large enough to transport a wagon and team. Sometimes, the owners preferred to unhitch and drive their teams through the water. The Cochiti rode free while others were charged a toll which went into the tribal fund. The ferry operated until late spring when the water

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[87] These controversies appear frequently in such papers as Scholes, Troublous Times, and in documentary collections such as Folder #1904, W. B. Stephens Collection, University of Texas Archives, cited elsewhere in this dissertation.

was low, and the river could easily be forded.[88] (40, 50, 53, 59)

Formerly, there was also a footbridge across the river. This was washed out annually and sometimes oftener. It was maintained by community labor. (3, 50) One informant, about sixty years old, said he could not recall this bridge and did not believe it was used after about 1900.[89] (49)

Community Licenses and Fees. The tribal treasury benefitted from licenses and fees which were sold by the governor and other officers, or by the council as a whole. These licenses and fees were sold to outsiders who wished to conduct various business ventures on the reservation. They provided income for the treasury, the funds of which were spent for the good of the community on machinery and other equipment deemed necessary. (20, 21, 44, 45, 53, 54, 63)

A few years before, a lease was sold to a company to mine pumice

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[88] A second ferry was run at one time by Juan de Jesus Pancho (John Dixon), a Carlisle student. This, too, carried teams and wagons, sheep, travelers, and supplies from Peña Blanca to Cochiti or to the mining communities in the mountains northwest of Cochiti. (3, 70)

A third ferry, privately owned, was operated by a white man by the name of Armstrong. This was approximately where the present Cochiti Dam is located. It was used primarily for traffic between the mines near Bland and the railroad at Domingo Station, or Wallace. (3)

[89] Formerly, there were two highway bridges, one near the present southern limits of the village and a second near the mouth of the Santa Fe arroyo. This was close to the ford used as a short-cut between the ranches east of the river and the pueblo. Most people used this crossing in preference to the highway bridge farther to the north except for periods when rains or irrigation controls caused a rise in the river level.

The 1948 steel bridge, with overhead girders, replaced an old wooden bridge at the same site. This was close to the spot where the Santa Barbara Tie and Pole Company had a spur railroad terminus. (49, 53)

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in the northwestern corner of the reservation. Several such mines already were operating on the adjacent National Forest lands. Before operations began, the lease was cancelled by the council for some unstated reason. No lease had been granted for mining pumice since that time. (3, 45, 53)

Another form of license, or permit, was issued by the governor to proprietors of numerous concessions operated in the pueblo on feast days. No stand was operated by a Cochiti. There were several proprietors who made a continual round of pueblo feast days and fiestas of Spanish-American communities of New Mexico. Fees varied from year to year, depending upon the general economic situation, the moods of officials and council members, and to a great extent upon whether the particular feast day fell on a week end which meant a larger crowd, and, hence, the possibility of charging a higher fee. Years when the feast day was on a week end, the smaller stands were joined by entire carnival units, complete with ferris wheels and other attractions. In 1947, local Spanish traders arranged a baile, or Spanish dance, the night before, and of, the Feast Day. For this, they made a board platform, or dance floor, and erected a large, open-sided tent over it. They paid a fee of $25 for this. In 1948, a similar request was met with the council's demand of a fee of $50, and the baile was given up. Very likely, the council had such a result in mind in asking this fee since the Feast Day was not on a week end. (3, 15, 20, 21, 45)

At the 1948 Feast Day, cars were charged twenty-five cents for parking in the pueblo, unless the owners were friends of some specific family and parked in that yard. This was the first time a charge had

been made for parking. (20, 42, 54) In 1947, during the dancing, a visiting Kwi´rēna from San Ildefonso who participated, took a collection from among the spectators. Informants said afterward that several Cochiti had not liked this action as a collection had never been made before at their pueblo (although they received the money which was collected). (3, 23, 27, 44, 45) It may have been that the 1948 charge for parking was a compromise measure; it resulted in revenue for the pueblo and yet was not connected with the ceremony as such.

In other pueblos, San Felipe, Santo Domingo, and some Tewa villages, the practice of taking a collection from spectators, generally from non-Indians, had been in force for several years. Parking charges were also commonly made to provide tribal revenues.

While many pueblos charged for photography, the Cochiti normally did not, unless it was commercial work in which case the governor set an arbitrary fee. Individuals could take pictures with the permission of the governor, or, in his absence, another officer. Pictures of individuals were matters of private arrangement. Most ceremonies could not be photographed, sketched, or noted. A few exceptions to this occurred during the Christmas dancing season when there were dances "that aren't our own, like the Laguna, or Hopi, or Zuñi dances." As these were ceremonies, permission to photograph them had to be obtained from the war captain, not the governor. When such permission was granted, it was ordinarily without any fee. (20, 44, 45, 53)

Wage-earning within the Pueblo

There were occasional opportunities to work for wages within

the pueblo, or reservation. However, over a period of years, income from these sources was relatively negligible.

Among the Cochiti who resided in the pueblo, agriculture was the basic economic effort. In this work, labor was done by the owner of the field, or livestock; when additional help was required, members of the immediate or extended family were called to help. Payment for such services invariably took the form of reciprocal aid. This same principle of reciprocal aid had been practiced in the non-agricultural economy as well. House repair, or building, was a joint project shared in by members of a family. (23, 32, 38, 45)

While this traditional mode of operation was generally in force, cash wages paid to non-related workers were not unknown. An example of this was the group of men employed in building a house for Joe H. Herrera, the artist, in 1948. Joe's stepfather, Epitacio Arquero, was the foreman. He was assisted by Lorenzo Cordero who was unrelated except that his wife, Priciliana Roybal, was born in San Ildefonso as was Joe's mother, Tonita Peña. However, the two women were not related, other than by the fact that all San Ildefonso people had been arbitrarily placed in the Oak Clan upon their arrival in Cochiti, regardless of their clan affiliations at San Ildefonso. (3, 16, 17, 45, 55, 70) The third workman was Nicanor Cordero for whom no relationship with the owner of the new house was found. Although the wages paid were not learned, it was understood that payment was on a cash basis. (17, 45, 55)

Before the above workers were hired, an attempt had been made to get Jose Rey Suina, another unrelated man, to construct the house.

He had had considerable experience and was recognized as an excellent builder. Jose Rey had said that he was too busy with his farming, drum-making, and other work to undertake this job despite the cash wages paid. (3, 32, 38, 45, 55)

Traders occasionally hired part-time labor. While some cash wages were paid, a large part was paid in extended credits, again a form of barter, services for supplies. Several Cochiti men worked during construction of an addition to Rael's store in the summer of 1947. Among others, Alcario Montoya and Diego Arquero worked there, partly for cash wages and partly for trade at the store. (20, 44, 45)

Similar part-time work was obtainable on projects such as bridge repairs carried on by the State Highway Department north of the pueblo in the summer of 1947. Foremen and some workers were regular employees of the Highway Department, and intermittent employment was available to the men and older boys of Cochiti. Such jobs were popular as they allowed the workers to remain at home, and the pay was relatively high. (47)

In 1931-1932 many Cochiti were employed on the construction projects of the Middle Rio Grande Conservancy District. (40, 53) This included the construction of the Cochiti Dam, a few miles north of the pueblo, and the irrigation canals on each side of the river.

Since the original construction, part-time jobs were available with the Conservancy District. While this agency had repair crews, maintenance personnel, and ditch-riders, there was periodic need for men to repair minor washouts and cut weeds along the canal edges. One ditch-rider was regularly Clofe Arquero, a Cochiti; his part-time help-

ers were invariably men from Santo Domingo or Spanish-Americans from Peña Blanca. The reason for this was that the Cochiti were usually busy with their farms, craftwork, and other work, and they did not care to take employment. (15, 44, 45)

With the acquisition of the community combine harvester wage-earning opportunities for a crew of two were provided for approximately a month each summer. In 1948, each crew-member was paid $2.00 per day plus a half sack of wheat. Harvesting began about mid-July and lasted several weeks, with time off for Sundays and the Feast Days of neighboring pueblos. Thus, each crew-member received about $60.00 in cash and fifteen sacks of wheat from the community. (20, 59)

The community also hired a fence-rider whom they paid $45.00 per month. Fernando Cordero was appointed the first rider in 1946. However, he was selected Lieutenant Governor for 1947 and had to give up this position. He was replaced by Pablo Trujillo. In 1948, Pablo was selected Fiscale Teniente and had to relinquish the rider's job. He was succeeded, in turn, by Fernando. While nothing could be learned specifically, it was interesting that this work, as in the case of the combine crew-members, had been allocated evenly between the two kivas. Fernando belonged to the Pumpkin Kiva, and Pablo, to the Turquoise. If the rider was unable to work, he was responsible for his substitute. The pay for this person was a matter of personal agreement between the two individuals. (3, 19, 20, 42)

In the summer of 1948, Alvin Arquero was employed by the United States Public Health Service of the Federal Security Agency. He was foreman of several crews which worked all summer in various pueblos

spraying corrals, outdoor toilets, and houses to control flies. At Cochiti, he was assisted by Patricio Cordero.

Occasionally, Geronimo Quintana served as a substitute bus driver for Fidel Ansera, owner of the El Pueblo Bus Line.

Wage-earning away from the Pueblo

Through the years there had been a tendency for a few Cochiti to seek employment away from the pueblo. The case of Santiago Quintana, "Old Man Guerro," and his two companions spending several years on the west coast has been mentioned.[90] Since that time, Juan E. Chalan had spent many winters near Bakersfield, California, where he was employed on a large sheep ranch. Isidro Cordero had spent so much time away from the pueblo herding sheep in the Estancia area that he was said to speak better Spanish than he did Keresan.[91]

In World War I, no Cochiti was in service. (44) In contrast, thirty-three served in World War II. Several individuals worked throughout the war years, or until the time they entered service, in various war industries, particularly on the west coast. The social and other effects of these experiences are discussed later in appropriate chapters; economically, the war years resulted in an appreciable increase in cash income for the pueblo as a whole. This was derived from industrial pay, service pay, and allotment checks sent to the dependents of the servicemen. Isabel Chavez Montoya, a lieutenant in

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[90] See page 161.

[91] See page 120.

the Army Nursing Corps, was the only woman in service.[92] Of thirty-two Cochiti men, twenty-two saw overseas duty, twelve in Europe and ten in the Pacific. Nineteen were in the army; seven were in the navy; four were in the air corps; and two were in the marine corps. The highest rank attained was that of sergeant (Stephen Herrera, Aloysius Pecos, and Juan Perez) and its naval equivalent, seaman third-class (Pancracio Chalan and Francisco Chavez). Three died in the war: Jose Salvador Romero, in Europe; Alfonso Perez, in a Japanese prison camp following Bataan; and Ben Quintana, in the Battle of Leyte. Ben was awarded the Silver Star posthumously. (15, 44, 49, 58, 70)

Of thirty veterans returning, fourteen were in the pueblo while sixteen resided elsewhere. As indicated in the roster of people living away from Cochiti, APPENDIX V, five veterans reenlisted. Of the eleven others who were living away, the majority were individuals who had already left the pueblo prior to military service. Thus, in these cases no great change was indicated by their wage-earning away from the village.

The importance of wage-earning away from Cochiti was probably

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[92]The following Cochiti were in service: Alvin Arquero, Nestor Arquero, Santiago Benada, Pancracio Chalan, Francisco Chavez, Jose Vivian Chavez, Juan Manuel Chavez, Lorenzo Chavez, Eleuterio Cordero, Jose Domingo Herrera, Jose Hilario Herrera, Justino Herrera, Lorenzo Herrera, Perfecto Herrera, Stephen Herrera, Juan R. Melchior, Isabel Chavez Montoya, Antonio Naranjo, Aloysius Pecos, Jose Dolores Pecos, Alfonso Perez, Juan Perez, Benigno Quintana, Delphine Quintana, Jose Adolfo Quintana, Jose Salvador Romero, Santiago Romero, Jose Maria Suina, Jose Solomon Suina, Octavio Suina, Teodoro Suina, and Onofre Trujillo.

Cochiti Spanish-American servicemen were: Eloy Gallegos, Ramon Lucero, and Polito Rael.

best emphasized in the single statement that in 1942[93] labor (most of this can be taken as off-reservation employment) was the primary source of Cochiti income, amounting to $20,214.49. The second highest income was amassed in agriculture ($8,060.00), and the third highest was in stock-raising ($6,069.00). Allowing for the considerable home consumption which was known to take place with agricultural and stock produce, the overwhelming importance of outside wage-earning was apparent. Keeping in mind the general difficulties of securing data of this sort in the form of accurate statistics, these figures were very likely below the actual income, thus making the importance of this economic phase even greater than it appeared. The importance of this form of employment which automatically removed an appreciable portion of the Cochiti tribe from the home village cannot be underestimated in its effects throughout Cochiti culture.

As of the summer of 1948, a complete census of Cochiti was taken and an effort was made to ascertain the whereabouts of every person on the tribal roll. While it was obvious that such a listing could be accurate only as of the moment it was compiled, it was clear evidence of the considerable part that wage-earning away from the pueblo played in the total Cochiti economy. Subsequent repetitions of such a list should add still more valuable comparative data. Comparable data for other pueblos are not known to exist although they are hoped for in cross-pueblo studies of the economies of these tribes.

An analysis of APPENDIX V, the roster of individuals whose

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[93]Payne, Annual Report, p. 11.

regular residence was away from Cochiti, showed that of a total population of 423, there were 110 individuals (26.0%) who did not normally enter into the life of the pueblo. Of the 110, there were two confined in hospitals; thirty-three men and thirty women were gainfully employed; and forty-five were members of families whose head was so employed. Of the 110 away from the pueblo, sixty-two resided in Santa Fe and nineteen in Albuquerque, both within sixty miles of Cochiti. Twenty-nine persons lived in other places, ranging as far away as Washington, D. C., New York City, Wisconsin Dells, Denver, California, and Japan.

Three-fourths of the absentees were residing in Santa Fe, Albuquerque, and elsewhere in New Mexico where the return to Cochiti was a trip of but a few hours. Each week end saw the return of a few people for short visits. July 14, Christmas, and Easter were times when most absentees returned for the day at least, and some for several days. Not as many returned for other celebrations, the lesser feast days, or native ceremonies.

Returning absentees rarely participated in actual ceremonies. Most were interested spectators, and some were hardly that, simply coming home to see relatives and friends and apparently holding themselves aloof from native aspects of celebrations. Some tended to show more interest in the Spanish baile and similar activities. It was interesting that many absentees had married not only non-Cochiti, but in several cases, non-Indians.

Economically, the exodus of these individuals from the pueblo had had several effects. Less demand for agricultural lands resulted.

Working conditions and employer-employee relationships were outside the control of pueblo officials. Community labor projects and tribal offices had to be borne by fewer individuals. If families seriously needed financial aid, these absentee wage-earners were most likely to help. Pueblo residents visiting in city homes of these individuals became envious of various conveniences and wanted the same, or comparable, improvements in their pueblo homes. The power of money was emphasized in many situations, causing those in the pueblo to shift their efforts from subsistence, all-purpose agriculture to fewer, selected crops that could provide cash income. In some cases, agricultural pursuits had been forsaken for commercial arts and crafts, and for wage-earning.

CHAPTER VI

SOCIAL ORGANIZATION

General Statements

The next facet of Cochiti culture to be considered is social organization. As in the case of economics, emphasis is placed on the changes that have occurred. In considering social organization, it must be remembered that the isolating of such a facet of culture is an arbitrary procedure. Although culture is an integrated entity, the several parts may be temporarily isolated from their context for purposes of analysis. The procedure followed in this analysis of Cochiti social organization is well summarized in a statement by Herskovits.

> Social organization includes the institutions that determine the position of men and women in society, and thus channel their personal relationships. The category is customarily subdivided into two broad classes of institutions - those that grow out of kinship, and those that result from the free association of individuals. Kinship structures include the family and its extension into broader relationship groupings such as the clan. The association of individuals who are not kin gives rise to a wide range of forms that vary from blood brotherhood and institutionalized friendship to secret and non-secret "societies" of various kinds. Age-groupings, though more often than not informal in character, can play important roles in societies where they hold the formal position of age-grades.[1]

"Secret societies," mentioned by Herskovits as a part of those groups formed by free association, are considered in CHAPTER VIII.

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[1]Herskovits, Melville J., Man and His Works, New York, 1948, p. 289.

CEREMONIAL ORGANIZATION. With that exception, this chapter follows the general outline of the statement by Herskovits. Topics considered in this chapter are: Social Groupings Based on Kinship, Kinship Terminology, and Social Groupings Based on Free Association.

Social Groupings Based on Kinship

Family. Among the Cochiti, the conjugal family was the primary social unit. Aside from mythological families,[2] the Cochiti maintained that they had always been a monogamous people. (16, 44, 45, 70) This belief agreed with the published literature on Cochiti and other pueblos. Time perspective was difficult to achieve, but the indications were that separations and subsequent remarriages, other than those where death had occurred, were frowned upon by the Cochiti. "Brittle monogamy," referring to the rather easy separation and remarriage in western pueblos, such as Zuñi,[3] was deterred by the strong influence of Catholicism at Cochiti. In speaking of marriage procedure, Dumarest showed this situation to have been true at the end of the last century[4] as well as in 1948.

Parsons summarized conditions in western and eastern pueblos in stating, "In the East, where Catholic influence counts against for-

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[2]Benedict, Ruth, Tales of the Cochiti Indians, Bulletin 98, Bureau of American Ethnology, 1931, pp. 60-62, and elsewhere.

[3]Kroeber, Alfred L., Zuñi Kin and Clan, Anthropological Papers, American Museum of Natural History, Volume XVIII, Part II, 1917, p. 90; Parsons, Pueblo Indian Religion, p. 42.

[4]Dumarest, Notes on Cochiti, pp. 148-149.

mal remarriage, there are probably a larger number of clandestine relations, both in and out of marriage."[5]

As of August, 1948, at which time a census of Cochiti gave a total population of 423, there were ninety-three households, composed of family groups. These normally included the head of the house, his wife and their children. Variants included one or two grandparents, paternal or maternal, stepchildren, grandchildren, siblings of either parent, or children of siblings of either parent.

Of the 423 persons, there were 217 males and 206 females.[6] The average family, or household, size was 4.55 with a range from one to ten members and including no more than three generations in any house.

Further analysis of the population and family data revealed that 110 persons were not living in the pueblo. Of the 313 living in the village, the average sized family, or household, was 4.96, with sixty-three families being counted.

In gathering data on kinship terminology and in remarks made by numerous informants, it was clear that the Cochiti family, both in its use of native terminology and of adopted Spanish and English terminology and in the conceptual shifts accompanying these usages, had become increasingly closer to the neighboring non-Indian family. This change was emphasized in the contrast between the present discussion of one subsection devoted to a consideration of the family and the published

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[5]Parsons, Pueblo Indian Religion, p. 42.

[6]Census data through the years have been compiled and are presented in APPENDIX VI.

literature on Cochiti which all but ignored the family while emphasizing discussions of clan and moiety. At the same time, accounts of the clan were essentially unanimous in pointing out the declining significance of clan structure at Cochiti. It was evident that as this decline had continued, the family had become increasingly important. When a steadily growing proportion of the Cochiti were being educated outside the pueblo, were finding employment away from the village, and were marrying individuals who had no kinship affiliations which fitted into the traditional structure of the tribe, it was not surprising that this change in emphasis had occurred. Specific changes are discussed under both "Clan" and "Kinship Terminology."

Clan. Cochiti clans were essentially kinship groups, being matrilineal, exogamous, and tending to be matrilocal in early months after marriage. They were named, for the most part, after plants, animals, and natural phenomena such as the sun, water, and turquoise. No ideas of "totemic" relationships were involved, and no tabus of food or other usages were observed. There appeared to have been no clan rituals or officers other than an adoption ceremony which had almost disappeared, and some slight feeling that the oldest woman was the clan "head." This "head-ship" was completely non-functional aside from slight prestige, slight in that very few Cochiti knew what clans were still extant in the pueblo. There was little interest in clan personnel or structure. (13, 16, 18, 25, 28, 44, 45, 49, 52, 70)

The earliest clan (hanō, meaning people) listing for Cochiti was that obtained by Bourke in 1881. Bourke noted that the governor was

very reluctant to discuss "Janos," but he succeeded in getting the following list from the lieutenant-governor: Macaw, Melon, Eagle, Sun, Water, Oak, Antelope, Badger, Corn, Bear, Turkey, Coyote, and neither Snake nor Frog present.[7]

Another roster of Cochiti clans was compiled by Bandelier, as of about 1882 although it was not published until 1890. Included were the following: Sun, Water, Cottonwood, Turquoise, Panther, Bear, Calabash, Mexican Sage, Coyote, Corn, Scrub-oak, Fire, and Ivy. This was recognized by Bandelier as probably incomplete since his census was only partial.[8]

On September 28, 1897, a complete census of Cochiti was taken by Starr and the following data on clans were obtained.

> Eleven clans exist today at Cochiti according to this census. Their English names in the order given above are calabash, scrub-oak, water, cottonwood, coyote, Mexican sage, sun, ivy, turquoise, sage (Shipewe), maize. Comparing this list with the one given by Bandelier we fail to find three that he names - panther, bear, fire. On the other hand he fails to name one that occurs here - probably "Shipewe" - "a kind of sage." Santiago Quintana says he does not think there has been a clan of the panther, or of the bear; at all events there have been no such within his memory. He has known several that have died within that period - viz.: Kūtz (wood), Hā-kū-ni (fire) and Kīr-shrā (elk).[9]

Dumarest, at the end of the Nineteenth Century, did not compile

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[7]Bloom, Bourke on the Southwest, p. 235. (As recorded by Bourke these clans were, in order: Huacamayo [Si-Shawati], Melon [Ish-hanni], Eagle, Sol, Agua, Encina, Verenda, Tejon, Maiz, Oso, Turkey, and Coyote.)

[8]Bandelier, Final Report, Part I, p. 273.

[9]Starr, Frederick, A Study of the Census of the Pueblo of Cochiti, Davenport Academy of Sciences, Proceedings, Volume VII, 1899, pp. 42-43.

a clan roster, but his notes mentioned the Sun, Water, Fire, Eagle, Antelope, and Rattlesnake clans.[10]

Hodge, writing in 1906, listed the following clans for Cochiti: Sun, Water, Cottonwood, Turquoise, Mountain Lion, Bear, Calabash, Coyote, Oak, Corn, and Fire. He listed as extinct: Eagle, Turkey, Antelope, Dance-kilt, and Reindeer (?). (Elk - C. L.) In addition, Hodge noted that Bandelier named Ivy and Mexican Sage as present.[11]

In the early 1920's, Goldfrank made the following statements regarding Cochiti clans.

> The clans existing at Cochiti today are Oak, Cottonwood, Corn, Coyote, Turquoise, Ivy, Squash, Cipewe, Sage, Water. The Sun clan, mentioned by Starr in his census, has since become extinct, the last surviving male having died in August, 1921.[12]

Cochiti data gathered for Curtis revealed that, as of 1924, the following clans existed at Cochiti: Sun, Turquoise, Water, Shipewe, Ear-corn, Eagle, Scrub-oak, Sage, Coyote, Cottonwood, Squash, and Mustard.[13] Information indicated that the Ear-corn (Corn - C. L.) clan was very near extinction, having only two members, therein agreeing with Goldfrank's findings. Curtis felt that the clan Bandelier recorded as Ivy should have been the Mustard Clan. However, Bandelier's Ivy was later confirmed by both Starr in 1897 and Goldfrank in 1923, as

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[10]Dumarest, Notes on Cochiti.

[11]Hodge, Cochiti, p. 318.

[12]Goldfrank, Social and Ceremonial Organization, p. 15.

[13]Curtis, The American Indian, Volume XVI, pp. 85-86.

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[10]Hamerel, Notes on Cocolli.

[11]Hodge, Cocolli, p. 316.

[12]Goldfrank, Social and Ceremonial Organization, p. 15.

[13]Curtis, The American Indian, Volume XVI, pp. 85-86.

well as by the present author's data for 1947-1948. (No other source listed Mustard as a Cochiti clan, although White listed it for Santo Domingo[14] and Hodge for San Felipe.[15]) Curtis listed the Fire, Elk, Turkey, Antelope, and Cougar Clans as extinct. The fact that he did not include Sun as extinct indicated that the lists were compiled for Curtis prior to 1920 in view of Goldfrank's notation on that clan. The Bear and Rattlesnake Clans were denied by his informants as ever having been at Cochiti. Curtis corrected Hodge's Dance-kilt Clan as being the Sage Clan; "Ẍaspa" (the wide, white cotton belt) being confused with "Waspa" (sage).

In 1947-1948, informants listed the following clans: Antelope, Bear, Corn, Cottonwood, Coyote, Dove, Ivy, Oak, Pumpkin, Red Shell, Sage, Shĭpewe, Sun, Turkey, Turquoise, and Water.[16] Of these, the Dove, Sun, and Turkey Clans were extinct. The Dove had been represented only by Juan Bautisto and Lorenzo Valencia, two brothers, natives of San Felipe, who married into Cochiti. Of the 1947-1948 clans, the Antelope was represented by Ivan Lewis, an Acoma man married into Cochiti, the Bear was represented by Philip Cocka, a Hopi, who had married into the tribe, and the Red Shell was represented by Juan Velasquez, another San Felipe man who had married into Cochiti. (16, 44,

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[14] White, Santo Domingo, p. 71.

[15] Hodge, Frederick W., San Felipe, Bulletin 30, Bureau of American Ethnology, Part II, 1907, p. 433.

[16] Native names of these clans in the same sequence were: Kutz, Kō-hai-ō, Ya·ak, HĬtranĬ, Shrutzuna, Huk'a, TsĬ, HapañĬ, DañĬ, Yarch, Huashpa, Shĭpewe, Ōshatsh, TsĬna, Shōame, and Tzitz.

45, 70)

Efforts to determine the true names of clans were only partially successful. Corn was correct rather than Ear-corn; Cottonwood referred to the species which grew along the river "HItranI" rather than to the mountain cottonwood, or aspen, "HI'ash kulI." Coyote was the correct clan name; "Shrutzuna" was coyote rather than fox, the skin of which was used in many dance costumes. The fox was designated as "Blue Fox," or "Kwirshka^she Shrutzuna."[17] Pumpkin was used consistently by my informants in preference to Squash, which has been the frequent designation of both the clan and the moiety among pueblo tribes. From an ethnobotanical viewpoint, "Pumpkin" would appear to be the more accurate designation.[18] All other clans mentioned in the ethnographic accounts were checked with informants. With the exceptions of the Dove, Sun, and Turkey Clans which were listed as extinct, informants denied knowledge of any clans at Cochiti other than those they named as present. They also excluded those brought in from other pueblos by the three men now living in Cochiti (Antelope, Bear, and Red Shell). In gathering this list of clans, it was interesting that three of the four informants needed prompting before a complete list could be made.[19] Here again was clear evidence of the decline of clans in the conscious-

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[17]Bourke raised this same question regarding the Coyote Clan at Jemez, concluding, apparently erroneously, that it must have actually been Fox. (Bloom, Bourke on the Southwest, p. 223.)

[18]This opinion is also held by Dr. Donald D. Brand, Personal Interview, November, 1947.

[19]Rosters of clans gathered by the different investigators for Cochiti are presented in APPENDIX VII to facilitate comparisons.

ness of the Cochiti as a tribe. Several other informants stated they knew little or nothing about clans and preferred to talk about other topics. This, it should be pointed out, was not the reluctance to discuss clans which was noted by Bourke; rather, it was a lack of interest in clans and clan affiliations. The Cochiti admitted that knowledge of clan membership was restricted to a few people over fifty years old. Some of this older group and almost all of the younger generations did not even know their own clan. (16, 18, 44, 45, 49, 52, 70)

The decline in clan significance was not a particularly new development, but it had become accelerated in recent years. Dumarest, at the end of the Nineteenth Century, recognized that clan exogamy was breached occasionally.[20] Starr, in his complete census of 1897, noted four intra-clan marriages. These occurred in the Cottonwood and Ivy Clans, two endogamous marriages in each. Actually, the Ivy cases were due to an error in recording. In each instance, the wives, Lupita Archibeque and Maria Ignacia Archibeque, sisters, were members of the Water Clan. (44, 53) Starr's comments were still pertinent.

> Several times in the tables . . . we observe a striking fact, the marriage of members of the same clan. Such a thing was not tolerated under the old system. . . . The sanction of the new creed has here broken down the ancient barrier. Membership in one clan is not necessarily relationship so close as to fall under the ban of the Church of Rome. The Indian yields to the church decision and to inclination and the wedding takes place.[21]

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[20] Dumarest, Notes on Cochiti, p. 147.

[21] Starr, Census of Cochiti, pp. 43-44.

In the partial census made by Goldfrank, additional deviations from strict clan exogamy were noted. Goldfrank summarized her findings as follows.

> Clan exogamy is still an all important feature of the social organization. I have noted a number of cases of intermarriage within the clan, as has also Professor Starr. From these few cases it is hard to determine whether they are the result of the lessening of clan feeling or merely the accidents that are bound to occur in any community. . . . On the whole, I believe, the villagers are very conscious of the exogamic law and very anxious to adhere to it.[22]

Curtis merely commented that Cochiti clans were exogamous and matrilineal, and, "The rule of exogamy is in abeyance."[23]

Data gathered in 1947-1948 indicated a continuation of the conditions reported by earlier investigators.[24] Occasional breaches of clan exogamy appeared to be what Goldfrank termed "merely the accidents that are bound to occur in any community." In an effort to obtain material from as long ago as possible, the records kept by the Franciscan Fathers at Peña Blanca were examined. Marriages recorded there were then checked with informants for clan affiliations. Birth records provided the ages of these individuals who were involved in the intra-clan marriages. In this way a list was compiled. (See APPENDIX X.)

This list included sixteen marriages between members of the same clans. Of the sixteen marriages all but one were recorded by the

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[22] Goldfrank, Social and Ceremonial Organization, p. 12.

[23] Curtis, The American Indian, Volume XVI, p. 86.

[24] Inter-clan marriages for 1897 and for 1948 are shown in APPENDIX VIII for comparative purposes.

priests at Peña Blanca. This one marriage occurred earlier than any other marriage listed here. It was also true that the church records were quite incomplete as of that time. As of 1948, there were records of 428 marriages including an estimated fifty between a Cochiti and a non-Cochiti.[25] Of the 379 marriages involving two Cochiti, clan affiliations for both man and woman were known for 195 marriages. It was obvious that sixteen known breaches of clan exogamy constituted a small proportion (8.2%) of the total marriages for which both persons' clan was known. These intra-clan marriages had occurred at intervals varying from three to thirteen years, with no obvious clustering at any particular period.

A consideration of personnel involved in the sixteen intra-clan marriages revealed several interesting facts. Seven occurred in the Oak Clan; five in the Cottonwood; three in the Sage; and one in the Water Clan. The Sage marriages occurred between 1904 and 1915 in unbroken sequence. Intra-clan marriages between 1918 and 1947 had been exclusively Oak affairs broken only by one Cottonwood marriage in 1929. The other four Cottonwood marriages comprised all endogamous marriages between about 1857 and 1892, except for the Water marriage in 1874.

Of the seven Oak marriages, two involved women from San Ildefonso who had joined the Oak Clan upon their arrival in Cochiti. Two involved sons of two other women from San Ildefonso who also had joined the Oak people. Thus, relationships in these cases were obviously

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[25] APPENDIX IX presents a compilation of all known marriages among the Cochiti. These were analyzed for intra-clan and inter-clan marriages.

quite distant. Two other Oak marriages involved daughters of families recognized as "Progressives." The husbands in these cases were brothers and veterans. Both participated in ceremonials with the "Conservatives," and the two marriages occurred in the post-war years, 1945 and 1947.

Of the five Cottonwood marriages, that of about 1857 involved the parents of Ignacia Montoya who in 1892 also married within her clan. Her husband was Juan Pedro Melchior who became a leader in the swing away from the old ways, the "progressive" movement. In turn, his son, Joe Melchior, had been one of the "Progressives" for many years, and it was his daughter, Caroline, a member of the Oak Clan through her mother who came to Cochiti from San Ildefonso, who married another Oak, Jose Dolores Pecos, in 1947.

While the foregoing paragraphs indicate that it was the members of the "Progressives" who had been involved in intra-clan marriages, this view was not supported by the evidence. Cleto Urina was a Kwi´-rēna Society member; Lucia Romero was Kwi´rēna; Jose Nicanor Cordero had been Head ShrutzĪ for many years; Diego Arquero was a member of the Principales and was active in ceremonies of the Turquoise Kiva; Miguel Ortiz and his wife, Zeferina Quirena, were both Kwi´rēna; Manuel Ortiz was Head ShĪ´kame and a member of Kwi´rēna; his wife, Victoria Martinez was Kō´sharĪ; Pasqual Suina was active in Pumpkin Kiva ceremonies, serving as a drummer until his death; Salvador Arquero was a member of the Principales and an active participant in Pumpkin Kiva ceremonies; Ricardo Chavez joined the Kō´sharĪ shortly before his death; Damasio Quintana and his wife, Cresencia Arquero, were both active members of

the Turquoise Kiva; and Aloysius Pecos and Jose Dolores Pecos were both active in the Pumpkin Kiva.

In view of these data, it seemed that Starr's observation, "The Indian yields to the church decision and to inclination and the wedding takes place.", with Goldfrank's "On the whole, I believe, the villagers are very conscious of the exogamic law and very anxious to adhere to it.", quite accurately summarized 1948 clan attitudes. If any modifications were warranted, they were first in Starr's feeling of the complete impossibility of such marriages "under the old system" and second in the emphasis with which Goldfrank said the Cochiti regard clan exogamy. While there were ever fewer individuals who knew clan affiliations of others in the pueblo, there were still enough whose attitudes were respected, that clan exogamy was the common practice. Deviations were not appreciably more prevalent in 1948 than they had been at any time in the past so far as was indicated in the marriage records available.[26]

Another factor to be considered was the basic matter of numerical strength of various clans with the effects of these numerical strengths on the potential choice of marriage mate open to an individual. A comparison of clan strengths as noted by Starr and as determined for 1948 is contained in APPENDIX XI.

Keeping in mind the dates of the intra-clan marriages, Starr's view that these had occurred within the larger clans where it was possible to have endogamous marriages and still not violate Catholic mar-

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[26]See APPENDIX IX.

riage laws was confirmed by figures computed by Starr and the present writer. Following the influx of San Ildefonso people about 1910 and their joining the Oak Clan at Cochiti, the Oak Clan had a notable increase with the result that it had been the largest of Cochiti clans for many years. In 1948, the Cottonwood Clan, with the second highest number of intra-clan marriages, was the third largest clan. However, at the time that most of these marriages occurred, the Cottonwood was the largest clan in the pueblo. The second largest clan in 1948, the Sage, had had the third most frequent intra-clan marriages, and the Water Clan, fourth largest in 1948 although not as large formerly, had had one intra-clan marriage.

Goldfrank was told that at Santo Domingo, in addition to the rule of clan exogamy, there were rules against marriage between members of the Turquoise and Pumpkin Clans. Her informant denied that such a rule existed at Cochiti, although Goldfrank found no such marriage at the time of her stay at Cochiti. She did find one instance of such a marriage in Starr's census,[27] but a subsequent checking with an informant of the present writer indicated that Starr's identification was erroneous, the man actually being Oak (HapañT) instead of Pumpkin (DañT). (3) As indicated in APPENDIX IX, no marriage was on record between the Turquoise and the Pumpkin Clans at Cochiti.

Goldfrank commented further on clan marriage.

> . . . I noted upwards of one hundred and fifty names with clans, and from these it would seem that there is no objection to marriage

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[27] Goldfrank, Social and Ceremonial Organization, p. 9.

> into any of the clans, except one's own. However, often preferences arose in families and we find several members of one family marrying related members of another clan, or a man picking his second wife from the clan to which his first wife belonged. This is, however, unconnected with any idea of levirate or sororate, but rather is as occurs in our own culture, is the result of a previous intimate relation with a certain family.[28]

In examining family records accumulated through a study of the church records for Cochiti, ample supporting evidence of Goldfrank's views was found. It was clear that there was some tendency for two clans to become intertwined in succeeding generation marriages. However, there was, as Goldfrank noted, no evidence of a sororate nor a levirate in any form. Likewise, there was no tendency for preferred marriages between certain clans. Further, there was no restriction against marrying into the clan of one's father, despite the matrilineal system, such as White found at Santa Ana. White says, "Marriage into the father's clan was said to be 'all right if she (he) is not too close to you,' by most of the informants. One informant said, 'they ought not to do it but some of them do.'"[29]

In her other remarks concerning Cochiti clans Goldfrank pointed out that at Cochiti the clans, in contrast to those of the western pueblos, had little or nothing to do with ceremonial life. She believed that the degeneration of the clan had perhaps been hastened by the influence of "the newer Mexican and white influence." In her investigations she found that clans were still functioning in ceremonial cures.

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[28]Goldfrank, Social and Ceremonial Organization, p. 13.

[29]White, Santa Ana, p. 153.

In cases of persistent, but not virulent, illnesses, a woman of a strong clan was chosen as a ceremonial mother. Usually, her husband, normally of a second clan, became the ceremonial father. In this way, the patient was adopted into two clans, although he was under no restrictions in the case of either clan when marriage was involved. This was done to obtain greater security for the individual with less expense than if a medicine man were called. The ceremony involved was the same as that when an actual clan adoption was made although in this second case, relations were essentially severed with the original clan. Goldfrank listed eight individuals who had been ceremonially adopted into other clans.[30] My informants were aware of some of these ceremonial adoptions listed by Goldfrank but could think of no others to add to the list. (3, 16, 45, 70) From this it was apparent that ceremonial adoption among the clans had essentially ceased in Cochiti life.

Other clan ceremonialism, as noted by Goldfrank, was practically non-existent. Kick-stick races had moved from clan participation to an event in which the two kiva groups, or moieties, took part. Also, "There is no direct relation between clan and society membership, but there is a tendency for members of a family to affiliate with the same society."[31] These observations still held true at Cochiti, as is shown in the discussion of CHAPTER VIII, CEREMONIAL ORGANIZATION.

The following statement of Goldfrank has already been commented upon in the chapters on economics. "The clans are again important

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[30]Goldfrank, Social and Ceremonial Organization, pp. 8, 118.

[31]Ibid., p. 10.

when they are called upon as a whole by an individual to assist in his planting, harvesting, plastering, house building, grinding."[32] Briefly, a shift had taken place that again was in accordance with the increasing similarity to Spanish and Anglo family structure at the same time that clan importance had faded. When projects mentioned by Goldfrank were to take place, it was no longer the members of a clan, but rather the members of the extended family that cooperated and with whom cooperation was reciprocally expected. In addition to one's own parents, siblings, or grandparents, this family, in its extended form, often included padrinos acquired in the Catholic rites of baptism and marriage. The padrinos may or may not have been the same in these ceremonies, and while often the padrinos were selected from members of the family, and even from the same clan, this was by no means a prerequisite. In this regard, it was interesting to speculate on whether the Spanish and Catholic role of padrino had slowly but surely displaced clan roles of responsibility, mutual aid, and similar obligations.

Summarizing the data on clans, it was evident that clan exogamy was still largely adhered to by the Cochiti. However, a steadily rising proportion of the Cochiti had no knowledge of, and generally little interest in, their clan structure. Older individuals, who did know, had sufficient influence to maintain clan exogamy except for a few cases which had apparently been true for many decades, possibly centuries. More profound changes, currently not much more than indicated,

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[32]Goldfrank, Social and Ceremonial Organization, p. 9.

were to be expected. These will arise after the deaths of the old people who have insisted on traditional clan exogamy and to an even greater extent will result from the growing tendency of Cochiti men to marry women whose clans have not existed at Cochiti, or, as in the cases of several others, to marry women who had no clans and, hence, their children had no clans. Thus, in future marriages, the incest rules of Catholicism will be the determinants of marriages rather than tribal customs. As outside employment is sought in preference to economic effort within the pueblo, and as outside formal education is sought in preparation for this employment, more contacts will be made with non-Cochiti people. Clan rules of marriage, and clans, themselves, will hold continually less significance for the Cochiti.

Kinship Terminology

In his "Havasupai Ethnography," Spier opened his discussion of kinship with the following observations.

> The individual is oriented among his tribesmen by his relationships. His family is for him a group of kinsmen; beyond them are more distant relatives and in the outer circle the unrelated members of the tribe.
>
> To the question who are kinsmen the answer comes patly enough, blood relatives, but blood relatives are always a group defined by arbitrary limits.[33]

The contrasts between Havasupai and Cochiti kinship structures, patrilineal versus matrilineal, polygamous versus monogamous, and

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[33]Spier, Havasupai Ethnography, p. 213.

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[73]Boyer, Marquard Bible Study, p. 213.

family versus family, clan, and moiety, do not negate the pertinence of Spier's comments in regard to Cochiti social organization and kinship terminology.

A kinship system, as an arbitrarily conceived part of culture, can, and does, change. With the changes discussed in the economic phases of Cochiti culture, and with the changes that have occurred in the family and clan concepts of the Cochiti people, changes in kinship terminology and in its usage were not surprising.

Kinship terms had been compiled by Goldfrank in the early 1920's, by Curtis about 1924, and by Parsons whose paper in 1932 was based almost entirely upon Goldfrank's data.[34] The present writer gathered additional data in 1947-1948, the terms being gathered with a minimum of consultation with the published data. APPENDIX XII provides a comparison of data from these several recordings showing changes which occurred in the last twenty-five years.

The first change that should be pointed out is only partially apparent from the data in APPENDIX XII. In attempts to obtain terminology from informants less than fifty years old, it was difficult to get terms for relatives beyond the range of the immediate family, the parents, grandparents, and children. Terms for the more distant relatives were unknown, "I get all mixed up on that because we just use Spanish or English now." (48, 55, 58) Thus, the greatest portion of the 1947-1948 terminology was obtained from informants over fifty years

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[34] Goldfrank, Social and Ceremonial Organization, pp. 18-24, 121-128; Curtis, The American Indian, Volume XVI, pp. 255-256; Parsons, E. C., Kinship Nomenclature of the Pueblo Indians, American Anthropologist, Volume 34, Number 3, 1932, TABLE I.

old. After analyzing the 1947-1948 data, Eggan commented as follows.

> In general, my guess is that Cochiti once had a kinship structure based on the matrilineal lineage and household, but that it has been the most acculturated toward Tewa and/or Spanish patterns.[35]

Evidences of the transition referred to by Eggan were seen in the use of Spanish terms, such as "bisavuelo," and a hybrid term, such as "momo avuelo." Change was likewise evident when one noted the tendency in 1948 to reduce the number of terms used in reference to certain relatives, such as uncles, aunts, and cousins. In the reduction of terms, the most common method had been the expansion of one term to include several others which were formerly differentiated. Some of this may have developed through a traditional mode of address in which, for example, any man older than the speaker was addressed as "momo," and similarly, "papa" was used when an older woman was concerned. These had changed from terms of respect, which they still were, to terms actually used in the kinship structure. Spanish and Anglo influences, accompanying the decline of the clan structure, showed two effects. One was the retraction of kinship terms referring to more distant clan relatives; the other was the simplification, or expansion, of clan terminology to include the father's relatives.

In summary, it was evident from APPENDIX XII and even more obvious from conversations with Cochiti of various generations that changes in the kinship structure were occurring. The nature of these

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[35]Eggan, Dr. Fred, Personal Communication, March 15, 1949.

changes was much as one would have anticipated in light of changes already noted in the social organization as evidenced in the family and the clan.

Social Groupings Based on Free Association

Moieties. One would normally expect moieties to be included in the first section of this chapter with groupings based on kinship.[36] At Cochiti, the two moieties, or kiva groups, Pumpkin (Daʔī) and Turquoise (Shōame), had both social and ceremonial qualities. Ceremonial aspects are discussed in CHAPTER VIII. As social groupings, the two moieties, as was true of the series of clans, formerly included all members of the tribe as well as those people who had married into Cochiti and were participating in the native ceremonial life. Most informants could give the kiva group, or "side," to which any person in the pueblo belonged, a different situation than that which characterized clan affiliations.

However, in analyzing the moiety affiliations of the entire population, it was evident that kinship was not the automatic determining factor that it was in the case of clans. Several features were involved in kiva membership. First, a person belonged to the kiva of his father. This applied to both males and females with the exception of women who transferred to their husband's kiva at the time of mar-

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[36] Lowie, Robert H., An Introduction to Cultural Anthropology, New York, 1940, p. 547, defined a moiety as "one of two intermarrying exogamous tribal halves, either undivided or comprising lesser clans. Sometimes the term is applied to the clearly defined half of a tribe irrespective of marriage regulations."

riage, an act which was impossible under the clan concepts. Still another feature, differing from clan organization, allowed a man to change his "side" if various personal difficulties with members of his present kiva made his membership unpleasant. As difficulties passed, the man could shift back to his original kiva. In these changes, he ordinarily took his wife and children with him. However, as the children, especially the sons, became older, they might or might not have followed a shift to the other "side." (1, 2, 3, 16, 17, 42, 45, 48, 52, 53, 55)

Shifting from one kiva to the other, and then possibly back again, had to be done each time with the permission of the kiva heads and the war captains. This was largely a matter of formality, and permission was rarely, if ever, denied. Here was additional justification for considering the moieties in this section on groups based on free association rather than with groups based on kinship.

Another point demonstrated this basic distinction between clans and moieties in the minds of the Cochiti. Every Cochiti was a member of a clan; in contrast, a considerable number of the Cochiti were said not to belong to either kiva. In spite of this non-membership, or lack of participation, almost anyone could still give the kiva to which these persons had formerly belonged. There were two vaguely differentiated groups of these. First were those who had left the pueblo and were inactive because of their current residence. "They don't dance any more." Many were young adults who "don't have costumes any more" and who, for similar reasons, no longer participated in pueblo ceremonials. Informants were not unanimous in declaring

such individuals as non-members, some preferred to call them "inactive." This distinguished them from the second group, members of the so-called "progressive" faction, who not only "don't dance" but no longer acknowledged the authority of the war captains as it pertained to native ceremonials. Many of these resided in the pueblo but had withdrawn from all activities associated with the kivas and other aspects of native religion. (1, 2, 3, 14, 15, 48, 49, 52, 55, 70)

As shown in APPENDIX XIII, the numerical strengths of the moieties roughly divided the pueblo population in half, 219 in the Pumpkin and 204 in the Turquoise. This dual division need not have been balanced; it happened that in 1948 at Cochiti it was true. However, when one considered the further analysis of these two groups, the large proportion of "Progressives" currently withdrawn from the Pumpkin Moiety had greatly reduced the actual strength of this group. This was particularly significant in ceremonial and political matters, as is elaborated in the chapters on these subjects.

APPENDIX XIV indicates the 1948 inter-marriages between the moieties and subdivisions of each. This included "aliens," i. e., non-Cochiti, who had married into the pueblo and adopted several attitudes toward the moieties. Some had joined the moiety which paralleled the one belonged to in their own pueblo; others, coming from tribes with no moieties, had joined the moiety of their wives; and others, with or without previous affiliations, had never joined either Cochiti group. Informants disagreed on the exogamous or endogamous nature of the kiva groups. Several concluded that there was no rule of either procedure of which they had ever heard. This was brought out also in

APPENDIX XIV where an analysis is presented of all marriages for which the moiety of both the husband and wife could be learned. Considered in twenty-five year periods, there was no appreciable shift between endogamous and exogamous marriages in the moieties.

Starr, in making his census at Cochiti in 1897, showed considerable concern with clan organization and, yet, made no mention of the two kiva groups.[37] Dumarest provided little more in the way of data on these organizations, simply noting that there were two, the Turquoise and the Squash, and designating them as estufas (kivas) with ceremonial functions. In his discussion of marriage, only the clans were briefly mentioned.[38]

Curtis provided better comparative data from a quarter of a century ago. He stated that there were two "religio-social parties:" "Ṭáh'itits^{a}," Squashes, who met in the Pó'na'ni-chí'tya (West-inside kiva) and the "Sychoeminatits^{a}," Turquoises, who met in Há'nani-chí'tya (East-inside kiva). Curtis claimed that these were said to have been endogamous, but this principle was abandoned when the population declined appreciably. To support this, some Cochiti told Curtis that certain clans were once entirely within one or the other moiety. A generation ago, Curtis found that in the Turquoise Kiva there were most of the Sun, Turquoise, Water, and Shīpewe people while in the Pumpkin Kiva there were most of the Corn, Eagle, Ivy, Sage, Cottonwood, and Pumpkin, with the Coyote about evenly divided. Further data of

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[37] Starr, Census of Cochiti.

[38] Dumarest, Notes on Cochiti, pp. 171, 184, f.n. 6, 206.

Curtis indicated that a woman transferred to the moiety of her husband upon marriage and, upon his death, she returned to her own group. Transfers from one group to another were allowed by the war captains after consulting with the kiva heads; this was done to prevent discord.[39]

Data showed approximately as many marriages in 1948 between the moieties as within them. (See APPENDIX XIV.) APPENDIX XV gives a list of clan strengths within each moiety as of 1948. Whatever tendency certain clans had to concentrate within either moiety had been dissipated, as one would have expected when moiety endogamy, if it ever existed, was abandoned.

Informants believed the statement that a widow returned to her own kiva was unwarranted by actual cases. While some women did, there were others who did not. Transfers because of, or to avoid, discord were still made, occasionally with subsequent transfers. It would be interesting to know if more transfers had occurred in families where exogamous marriages provided greater familiarity with the other kiva group. Indications in 1948 were that it made little difference, but more complete data might change this conclusion.

Goldfrank's material on moieties, gathered at about the same time, generally confirmed that of Curtis.

> Sons belong to the estufa of their fathers; wives to that of their husbands. However, membership may be changed due to a quarrel. The clans represented in my list for Turquoise estufa are Fox, Squash, Sage, Turquoise, Oak, Cipewe, Water, and Cottonwood.

39Curtis, The American Indian, Volume XVI, p. 86.

> In the Squash estufa are found Sage, Turquoise, Oak, Water, Cottonwood, Ivy, and Corn. These lists made no attempt at completeness and are merely an indication of the type of membership found and the lack of correlation between clan and estufa membership.[40]

In attempting to gain some perspective in time of changes at Cochiti and to place Cochiti with the contemporary Keresan neighbors with respect to the moiety organization, the following remarks of White were helpful.

> . . . Santa Ana again appears as unique: at no other Keresan pueblo does kiva membership depend upon clan affiliation so far as we know. At Santo Domingo, San Felipe, Cochiti and Acoma a child joins the kiva of his father. The situation at Laguna and Sia is not clear, but we are reasonably sure that kiva membership is not determined by clan affiliation.[41]

White offered no explanation of this although in further discussion of the problem, he cited Bandelier's statement, "All the inhabitants of the pueblo, grouped by kins [clans], belong to one or the other estufa, one set of kins meeting at the calabash [kiva], the other at the turquoise."[42] Elsewhere, Bandelier again stated that the clans "assort themselves respectively in these two meeting places," the estufas that "are named after two of the most prominent clans: the Turquoise, Shyuamo, and the Calabash, or Gourd, Tanyi."[43]

No other source nor any informant gave any impression that the

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[40] Goldfrank, Social and Ceremonial Organization, p. 115.

[41] White, Santa Ana, p. 142.

[42] Ibid.

[43] Bandelier, Final Report, Part I, p. 301.

Turquoise Clan and Turquoise Kiva and the Pumpkin Clan and Pumpkin Kiva had any special relationship.

Age Groups. Aside from the general tribal initiation of boys, normally held every four years, into the katchina cult, as is described in CHAPTER VIII, age groups had never been a part of Cochiti culture so far as known. Once the boys had been initiated, they were undifferentiated from all others who had undergone the initiation rites previously. Secret societies for either male or female members provided the only other groupings although membership was not based on age, and only partially on sex, as is brought out in CHAPTER VIII.

While not a formal group, the younger men of Cochiti had been bound for many years by an interest in the pueblo baseball team. During the summer, this activity was a focal point in the life of the entire pueblo. From informants' accounts and from numerous old photographs of these teams, it was apparent that the interest went back to the beginning of the present century. As far as could be determined, the baseball team had always been a pueblo affair, with no consideration made of clan, kiva, society, or political faction. In 1947, enthusiasm became so great that two teams were formed, and there was some talk of a third team, "so anyone who wants to can play and not just sit on the bench." (19, 20, 24) In 1947, the first team was called the "Redskins," and the players wore regular uniforms complete with the name of the team and numbers. Two managers, Cipriano Chavez and Rosendo Trujillo, both "Progressives," were in charge. Twelve players comprised the team: Fernando Cordero, captain, Alvin Arquero,

Bob Chavez, Alfred Herrera, Antonio Naranjo, Dolores Pecos, Santiago Benada, Loreto Herrera, Stephen Herrera, Cresencio Suina, Teodor Suina, and Andrew Trujillo. Of these, the first six were of the Pumpkin Kiva, and the last six were of the Turquoise. Seven of the players were veterans: Alvin Arquero, Bob Chavez, Antonio Naranjo, Dolores Pecos, Santiago Benada, Stephen Herrera, and Teodor Suina. All players with the exception of Bob Chavez were customarily dancers in native ceremonies.

In 1947, the second team, known as the "Silversmiths," was also equipped with regular uniforms. This team was composed mainly of younger boys who preferred to play with this team than serve as substitutes on the first team. In addition, there were some older men who did not care to practice enough to play with the first team and yet desired to play ball. One of these was the cacique, Marcelo Quintana, formerly a well-respected pitcher for the pueblo's first team. Several times during the summer of 1947 (the first baseball season after Marcelo was named cacique) Marcelo pitched several innings for the second team. Each time, he was received with enthusiasm by the crowd composed of a good representation of the Cochiti populace, including all ages, both sexes, medicine men and "Progressives." In 1948, when one informant was asked if Marcelo was pitching again that year, the reply was that some of the "old people" had made objections to Marcelo's playing ball on the grounds that it was not proper for the cacique to do such things, and so Marcelo no longer played although he continued to watch the games. (19, 20, 24, 44, 45, 53)

A potential age group that had thus far failed to materialize

was the group of war veterans at Cochiti. In talking with veterans and others in the pueblo, several reasons for this failure became evident. In the pueblos where strong veteran feeling existed, such as Santo Domingo with its own American Legion Post, there was a greater cleavage between ideas and attitudes of the younger men, mainly veterans, and the older men who were in positions of authority in the tribe. At Cochiti, as evidenced by the general interest and widespread participation either as players or spectators in the ball games, there were fewer of these conflicting attitudes. Stated positively, at Cochiti the two groups had more common interests. Also, in Cochiti, the division between the "Conservatives" and the "Progressives" had occurred more than a quarter of a century earlier. While there were still ill-feelings regarding certain phases of the disputes, in general there was no active bitterness on either side and a tolerant attitude was held by most members of the two groups. Veterans who did not return to the pueblo after the war were primarily those who had left the pueblo prior to the war. Those who did return to village life had adjusted to it with very little apparent conflict. Those such as Bob Chavez, working in Santa Fe, and Stephen Herrera, stationed at the Albuquerque air base after his reenlistment, returned to the pueblo almost every week end to play ball with the "Redskins." Several Cochiti volunteered the opinion that Santo Domingo would have had much less trouble with its boys if the officers had encouraged them to play ball and engage in similar activities rather than forbidding them to do so. (3, 15, 49, 53, 70)

In recent years, the ball players had become almost a "club" in

the pueblo, using a house where Alvin Arquero lived alone as their headquarters. They stored their equipment there; they met there to discuss their schedule and other matters; and they used the house as a general clubroom. The El Pueblo Bus Line owner, Fidel Ansera, living in nearby Silo, made extra Sunday trips for a nominal charge to transport the players and their supporters. Several council members felt that in the future the pueblo should use the community truck for this purpose. Money for equipment, transportation, and other expenses was raised by selling soft drinks at the games, raffling watermelons, and conducting similar fund raising ventures. (19, 20, 44, 45, 70)

It was evident that groups based on free association, as conceived by Herskovits, were very weakly developed in Cochiti culture. Exceptions to this statement were the moiety, or kiva, groups discussed in this chapter and the several secret societies. These societies, due to their basic functions, are discussed in the chapter dealing with ceremonial activities where religious aspects of the two kiva organizations are also discussed. Non-ceremonial and non-political groups, whose functions were essentially social, resulted from informal associations between individuals united by kinship or common interests. The development of the individual as a member of Cochiti social organization is elaborated in the following chapter, LIFE CYCLE.

CHAPTER VII

LIFE CYCLE

General Statements

Each culture attempts to mold the lives of its members, encouraging certain modes of behavior, tolerating others, and banning still others. This is a learning process which continues throughout the life span of every individual member of the society, or participant in the culture. Involved in this individual life cycle are certain exceptional times, commonly referred to as "crises."

In this chapter, only those "crises" are considered which were commonly experienced by the majority of the Cochiti. Emphasis is again placed on changes and the nature of such shifts in the stages of development of the individual. Topics discussed are: Birth, Naming, Puberty, Marriage, and Death.

Birth

Attitudes regarding pregnancy and birth had changed somewhat in the last twenty-five, or fifty, years at Cochiti. In the discussions of Dumarest,[1] and Goldfrank,[2] there was general agreement in details. Briefly summarized, the place of the medicine men and general magical procedures, of a sympathetic type, was conspicuous. Dumarest said that pregnant women and those who desired a child received carved wooden

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[1]Dumarest, Notes on Cochiti, pp. 141-144.

[2]Goldfrank, Social and Ceremonial Organization, pp. 76-78.

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Birth

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[1]Dumarest, Notes on Cochiti, pp. 341-344.

[2]Goldfrank, Social and Ceremonial Organization, pp. 74-75.

images from the shĭwanna, or katchinas.[3] Goldfrank's informants claimed to have never seen these dolls but knew that members of the Curdzi (Shrutzĭ - C. L.) Society, in their retreats, were supposed to make them. However, "in recent years, the members were very lazy and none had been made during their retreats, so that they were no longer given away at the dances."[4] In cases of ultra-conservative families, some magical practices mentioned by Goldfrank were still followed. (3, 17, 45) These included keeping a perfect ear of blue corn in the house during pregnancy, and at the first labor pains the shoes, stockings, belt, and jewelry were removed, and the woman loosened her hair in order that the child could descend more rapidly.[5] At the time of birth a woman sat, or knelt with her legs spread, or lay on a bed. A midwife, or the girl's mother, washed the baby with warm water and a soapstone. Midwives, of whom Lucinda Suina and Stephanita Herrera were the most in demand, often assisted at births; the medicine men frequently arrived too late. "It's just like in the hospital where the nurses help if the doctor doesn't come." If the birth was at all difficult, a medicine man was called. (48, 53)

Goldfrank claimed that a Giant shaman was the preferred medicine man at birth.[6] This was not confirmed by informants who said that the choice of medicine man was a matter of family preference. (16, 48, 49)

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[3] Dumarest, Notes on Cochiti, p. 141.

[4] Goldfrank, Social and Ceremonial Organization, p. 76.

[5] Ibid.

[6] Ibid.

In recent years an increasing number of confinements were in hospitals, usually in Santa Fe. "It's easier on the mothers that way, and the babies get a better start." (48, 70) Further change was the increased use of visiting government nurses and doctors who periodically examined pregnant women and the children.

While based on church baptism records at Peña Blanca and, hence, incomplete, APPENDIX XVI gives some idea of the frequency of births in different years with the proportion of males and females indicated. It was virtually impossible to gather reliable statistics on the number of miscarriages although it was certain that there was a fairly high percentage of these cases. However, the annual totals provided some indication of birthrate changes which could not be obtained from informants. The annual total of births varied from six to twenty-seven, with an average of fifteen. No year since 1900 had had over nineteen births while several years prior to this date had had over twenty. Low totals of six and seven occurred in 1943, 1919, and 1901. The 1943 low was undoubtedly because of the war period in which many younger adults were away from the pueblo, either in service or in war industry. In some cases, families accompanied these people, and babies born during that time were baptised elsewhere although some births had been reported to Peña Blanca. The 1919 low reflected the nationwide influenza epidemics of 1917-1918, and the 1901 low was a result of a severe epidemic of "Los Frios," which swept the pueblo in 1900. (16, 17, 44, 45, 49, 65, 70)

Another point revealed in APPENDIX XVI was the incidence of twinning. No informant could recall multiple births other than twins.

In the seventy-three years for which the record extended, with a total birth record of 1,098, there had been twelve pairs of twins. This was an incidence of one to 91.5 as compared with a normal human incidence of one in eighty-five cases.[7] Of the twelve cases, an analysis of the personnel involved showed the following genealogical facts. Twins were born in 1897 to Natividad Arquero and Juanita Chavez; in 1899, twins were born to Santiago Quintana and Cresencia Arquero, a sister of Natividad. Twins were born in 1932 to Pablo Trujillo and Felipita Herrera, and in 1945 twins were born to Josephine Trujillo. Pablo and Josephine were children of Antonio Chavez Trujillo and Estanislado Trujillo who had different mothers but the same father, Jose Antonio Trujillo. The twins of Pablo Trujillo and Felipita Herrera, born in 1932, were also related to twins born in 1946 to Santiago Herrera, a brother of Felipita, and Rosaria Suina. Additional relationships between the known pairs of twins could probably have been established with more complete family data. The above instances demonstrated the known tendency of twins to appear more frequently in certain lineages.

The incidence of illegitimate children had increased somewhat in the last decade although the rate of incidence of the current century was below that of the last century. Several factors may have been involved in these trends. One was the increasing awareness of Anglo cultural attitudes combined with a growing interest in following these attitudes.

Sanchez, United States Indian Agent, in a report to the Commis-

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[7]Romer, Alfred S., Man and the Vertebrates, Chicago, 1941, p. 382.

sioner of Indian Affairs, described Cochiti in 1883 as "filthy and immoral," commenting on the general variance of cultural attitudes found among the pueblos of the Rio Grande and those of his own culture.[8]

An examination of the ninety-seven cases of illegitimate children indicated the following. Seventeen mothers had had thirty-six of these children, with the highest number being three in two instances. A tendency to repeat was found in several families, ranging from mother to daughter to granddaughter to cases of a mother and two daughters or two and three sisters being noted. The average age in sixty-five cases where the mother's age was known was 20.8 years, the range extending from fourteen to thirty-six and the mode being sixteen years. Within this range, there were no instances for the ages of twenty-eight through thirty, with the majority of the cases occurring in the years below this gap. An explanation for the gap may be that the greatest incidence was prior to marriage. In the early thirties there was an increase in the number of illegitimates among women who had lost their husbands and had not as yet remarried.

While there was considerable attempt made in 1948 to conform to Catholic law and general Anglo attitudes on extra-, and pre-, marital sexual relations, the traditional Cochiti attitude of nondiscrimination toward children born from such relations had been maintained.

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[8]Sanchez, Pedro, Report to Commissioner of Indian Affairs, Santa Fe, August 8, 1883, Pueblos in New Mexico, Report on Indians Taxed and Indians Not Taxed in the United States (except Alaska) at the Eleventh Census: 1890, Department of the Interior, Census Office, 1st Session, 52nd Congress, Miscellaneous Documents of House, 1891-92, Volume 50, Part 6, Washington, 1895, p. 414.

On the bases of their personalities and abilities these children were accepted as playmates by other children and as normal peers by other adolescents. As adults, if their experience and conduct warranted it, they were placed in prominent positions in the ceremonial and political life of the pueblo. So far as could be observed, a similar lack of discrimination existed regarding the parents.

The incidence of illegitimate births, 1875-1947, is shown in APPENDIX XVI. The continued frequence was evidence of little change in attitude among the Cochiti. Lack of change was also demonstrated in APPENDIX XVII, which provides a comparison of marriage dates with dates of birth for first-born children.

Naming

Indian Names. On the fourth day after birth, the godfather (kanarshtĪa) came to the house just before dawn. Members of the family and others remained inside while the godfather took the child outdoors as the sun appeared on the horizon. He presented the child to the sun and gave it an Indian name. Usually this man was a medicine man, ordinarily the same one who had helped in the birth. (48, 53)

Published data indicated several variations in procedure. According to Dumarest, both a godfather (kanarshtĪa) and a godmother (kanaia) took the baby, with the woman carrying it and the man naming the child as the sun appeared.[9] Curtis was told that only the godparents go out with the child while all others remained in the house. The

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[9]Dumarest, Notes on Cochiti, pp. 143-144.

godmother held the child, and the godfather bestowed the name.[10] Goldfrank stated that everyone, except the mother, accompanied the godparents. The shaman often gave the child several names, "although only the first one is commonly used."[11]

My informants stated that names, other than the one given by the shaman, were given by people who came to the house after the birth had occurred. The name used was the one which was easiest to remember or which appealed most to the family and other relatives. This may not have been the one given by the medicine-man. The name of a deceased relative, often a grandparent, could be selected or that of a bird or animal, "or may be just sounds that don't mean anything." (48, 70) This last category seemed more plausible in view of informants' statements that the name used was the easiest to remember. In examining the names listed by Starr and according to informants, the ending "-tiwa" was a common masculine suffix while "-utz" was frequently used as a feminine suffix. (3, 45, 52, 70) Curtis also noted the "-tiwa" masculine suffix with the added remark that the same was true at Zuñi and Hopi.[12] Informants' statements regarding meaningless names were substantiated by Starr's findings. "Surprisingly few of the Indian names are significant; it is certain that some which are significant have not been translated, but it is equally sure that a large number

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[10]Curtis, The American Indian, Volume XVI, p. 77.

[11]Goldfrank, Social and Ceremonial Organization, p. 49.

[12]Curtis, The American Indian, Volume XVI, p. 77.

of them are today 'simply names.'"[13] Starr's wording, "a large number of them are today 'simply names.'" was interesting since statements of the same nature were made by my informants. The unsolved question was whether these names were, and had always been, meaningless combinations of sounds or whether the names represented archaic linguistic survivals, the meanings of which had been lost to living Cochiti. In the opinions of informants, the answer was that the names never had meaning. (3, 45, 53)

As Goldfrank stated, personal names were not used in direct address.[14] Some informants thought there was a tendency to do this in 1948. If asked for, however, Indian names were given without hesitation, the same situation that Goldfrank found. The increasing tendency to use personal names, as indicated in the section on kinship terms, involved names of Spanish type, not native. In former times, members of a clan greeted one another with "a'haitō, Hapaffī!" (Hello, Oak!"). Only a few of the Oak Clan, the largest in the pueblo, continued this custom in 1948. (25, 45, 52) Teknonymy existed, as Goldfrank noted,[15] although it, too, was replaced to a considerable extent by direct use of Spanish names. Still another form of reference was the practice of saying that an object belonged "to that man who lives over there," or "to that family," when the house or land of these individuals happened to be in view of the speaker. Whether this was a common form of refer-

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[13] Starr, Census of Cochiti, p. 42.

[14] Goldfrank, Social and Ceremonial Organization, p. 22.

[15] Ibid.

ence among themselves, or occurred as an evasive technique when speaking with an outsider was not determined.

Spanish Names. In addition to an Indian name, all Cochiti had Spanish names which were used increasingly among themselves, and almost exclusively when dealing with outsiders. These names were given at the time of baptism. When the child was to be baptized (There was no set time for this event although it was usually within a week or two following birth.), the padrinos chosen by the parents came to the house for the baby. The woman carried the child to the church where the padrinos presented the child to the priest for baptism. Most padrinos asked the parents if they had selected a name for the child. Often they had chosen a name, frequently in honor of one of the padrinos. If they had made no selection, they asked the padrinos to choose a name. "It is really the say of the padrinos; but if they are polite, they ask the parents first." (70)

Padrinos may have been the same individuals who served, or would serve, as godparents in bestowing the Indian name on the child. The sequence in naming was variable, depending on when the priest came to the pueblo and on the health of the baby. Padrinos were ordinarily a married couple who were considered outstanding persons and who could be depended upon to supervise and augment the parents' raising of the child. In 1948, the person who had served most often as a padrino was Cipriano Quintana, second oldest man in the pueblo and Head of the Giant Medicine Society. Informants insisted that Cipriano had been chosen as padrino (together with his first and second wives) because

of the general respect with which he (they) was regarded in the village. The fact that he was Head Giant, or even a member of that society (in view of Goldfrank's notes), was considered coincidental. Informants conceded that being a medicine man may have influenced his selection in some cases, but the fact that he was Giant had no particular bearing. (25, 44, 45, 53)

In cases of illegitimate children, there was a tendency to pick padrinos closely related to the mother. Her parents, her mother and brother, sister and brother, grandparents, or padrinos were normally selected.

Clan and moiety affiliations had little bearing on the choice of padrinos. Selections appeared to have been based on family relationships rather than clan or moiety.

It was noted in examining the baptism records of the church that names of the padrinos had often been used, revealing a possible reason for the choice of padrinos. Whether these cases were causes or effects was undetermined. There was also a tendency to use the names of departed relatives, as was noted with the Indian names. Another interesting point was the re-use of a name for a subsequent child in cases where the first bearer of the name had died, especially where death had occurred very early in life.

Surnames at Cochiti were also of interest. In 1948, they were almost entirely Spanish. According to Starr's census, this condition also existed at the end of the last century.[16] This was likewise ap-

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[16]Starr, Census of Cochiti.

of the general response with which he (they) was greeted in the village. The fact that he was dead (dazed, or even murdered in the city (in view of Cofer-Appleby's order), was completely inconsiderable. Deformants connected that baby's mutilation was only here and there solemnized in some cases, but the fact that it was part of particular bearing. (23, 14, 15, 23)

In cases of illegitimate children, there was a tendency to pick partners closely related to the mother. Her parents, her mother and brother, sister and brother, grandparents, or relations were normally selected.

Clan and nobody affiliations had little bearing on the choice of partners. Selections appeared to have been based on family prestige rather than clan or nobility.

It was noted in examining the typical records of this observation that some of the partners had often been used, involving a certain degree of difficulty (in view of Cofer-Appleby's order), was completely inconsiderable. Inform

parent in records of the Franciscan Fathers. Strangely enough, however, in the years prior to 1875, it was much less apparent. Names were recorded as "Juana Maria Natural,"[17] or even more commonly as "Jose Antonio N-," or merely "Jose Domingo." From these entries it seemed that while first names, baptismal names, were in general use prior to 1875, the use of surnames was not as well established. This may have been partly due to the unfamiliarity of priests with men and women of the several pueblos and towns of which they had charge. Some of this was also undoubtedly explained by periodic changes which the Indians made in their names, especially the surnames. This habit was revealed in working out genealogical data from the church records with the aid of several informants.

Starr noted that male members of a family used the surname "Arcero" and female members, "Arcera."[18] In 1948, these people used the standardized "Arquero," Spanish for "Archer." Informants also stated that in their early years, boys of a family used the name "Chiquiuitero," from "Chiquichuitero," or "Basketmaker." Girls of the same family used the surname "Panocha," the name of a sweet pudding made of fermented grain. (3, 15, 44, 70)

Surname changes were also found in such cases as Santiago Quintana where one of the bearers of the name became Santiago Melchior in order to avoid confusion. In similar fashion, Natividad Arquero be-

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[17]"Natural" also referred to illegitimates, i. e., natural child, although in most of these cases, it seemed that the parent's surnames were unknown, if, indeed, they existed.

[18]Starr, Census of Cochiti, p. 42.

came Natividad Quintana. A reversal of this practice occurred when Juan de Jesus Pancho and Santiago Quintana, while attending Carlisle and after their return to Cochiti, were known respectively as John Dixon and Cyrus Dixon. Isidro Cordero, who went to Carlisle with these two men, retained his original name.

Several Cochiti surnames revealed implications of inter-pueblo migrations. The Pecos family was said to have come originally from Pecos Pueblo although no concept of the chronology involved could be ascertained. Such a movement was plausible enough, despite linguistic difficulties, although the final survivors of Pecos appeared to have gone as a unit to their linguistic kinsmen at Jemez Pueblo.[19] While there were no Moquinos living at Cochiti in 1948, there were several during the latter half of the last century. They were originally from Hopi, as the name indicated. Again, chronology was lacking, but one suggestion was found in documents translated and edited by Thomas.[20] According to this source, the Moquinos may well have arrived in Cochiti (and other pueblos of the Rio Grande) about 1780.

The Anglicizing of Spanish personal names and surnames was becoming more prevalent as the people had increased contact with Anglo-American culture. While many of these were used as nicknames, others were used almost exclusively in signatures and by others in the pueblo. Francisco changed to Frank; Juan, to John; Jose, to Joe; Florencia, to

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[19] Bloom, Bourke on the Southwest, p. 231; Parsons, Pueblo of Jemez, pp. 3-4.

[20] Thomas, Forgotten Frontiers, pp. 242-245.

Florence; Helena, to Helen. A few non-Spanish names were found in the baptism records, especially in recent years, but the great majority were Spanish. The fact that Indian names were still important was seen in several cases where informants could think of the Indian name, but not the Spanish name, at least not immediately. In speaking of others, especially in cases of older people being spoken of by younger ones, it was very common to use the English "Mr." or "Mrs." with the Spanish names.

Puberty

Unlike many American Indian tribes, the Cochiti took little notice of puberty in the case of either a girl or a boy.

Girls' Puberty. Goldfrank had the following data on girls' puberty.

> There is no ceremony when the girl arrives at adolescence. She is told about menstruation before it occurs and boys are also informed of this function in women. After the arrival of menstruation, the girl does not play as freely with the boys as formerly.[21]

My informants stated that they knew of no formal recognition of the beginning of a girl's menstruation. They also said that the Cochiti had never made formal recognition of a woman's reaching the menopause. (45, 49, 52, 53)

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[21]Goldfrank, Social and Ceremonial Organization, p. 83.

Boys' Puberty. No tribal, nor any other, ceremony marked a boy's reaching puberty. At four year intervals, an initiation of boys into the Katchina, or shĪwanna, Society of the tribe was held. However, the ages of the boys being initiated depended on the desires of the boys, their families, and tribal authorities. In former times, boys were inducted into the Katchina Society and its secrets at an earlier age. There followed a time when, for reasons of security against the loss of tribal secrets, initiations were postponed for the boys who were going to attend the various boarding schools. These boys joined upon their return to the pueblo. In 1948, an increasing number of boys were not interested in joining the Katchina Society when they did return to the pueblo. With this development, the Katchina Cult, closely allied with the ShrutzĪ Society, had become less of a universal tribal male activity. It was comparable to other secret societies, the medicine societies, in which only a portion of the male population participated. Thus, while the katchina initiation was never an actual puberty rite, it had lost its universal aspects among the males of the pueblo. (44, 45, 48, 49, 55)

Goldfrank was told that all male members of the pueblo joined the Katchina Society, but that they varied in age at the time of their initiation.[22] Curtis stated that all boys, when about thirteen or fourteen years old, joined this society.[23] Dumarest was told that the initiation occurred whenever the boy was considered capable of keeping

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[22]Goldfrank, Social and Ceremonial Organization, p. 57.

[23]Curtis, The American Indian, Volume XVI, p. 86.

the secrets from the women and uninitiated children.[24] An initiation described by Dumarest was believed by Goldfrank to pertain to the warrior group, a society which had become extinct about the time Dumarest was at Cochiti, or earlier.[25]

Membership in the Katchina Society in 1948 was gained much the same as that in other secret societies. It could be pledged during an illness, or other time of crisis, or it could be sought by a man or young man. The attitude of the Cochiti, as a whole, seemed to be that membership in the Katchina Society, or one of the medicine societies, had to come as a voluntary move on the part of the individual. Formerly, some limited recruiting was done by the war captains. However, this ceased after several who had been urged to join became unhappy and bitter with their subsequent duties, obligations, and restrictions. (44, 45, 48, 49, 52, 53, 55, 60, 70)

Marriage

It has already been pointed out in the discussion of clans that marriage among the Cochiti was monogamous. This characteristic had been constant for the Cochiti and other pueblo peoples as far back as we have records. Marriage had been based on the principle of clan exogamy for as long as we have knowledge although there appeared to have been a few endogamous clan marriages steadily through the years. As indicated in the discussion of moieties, there appeared to be some evi-

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[24] Dumarest, Notes on Cochiti, p. 146.

[25] Goldfrank, Social and Ceremonial Organization, p. 58.

dence of moiety endogamy. However, this, if true at any time, appeared to have disintegrated some time ago. Goldfrank found that residence was formerly entirely matrilocal for a brief period following marriage.[26] A tendency toward matrilocal residence for a short time after marriage continued in 1948 although residence with the husband's parents or at an independent dwelling, usually belonging to the husband, was becoming more common.

Curtis was told that soon after puberty the father told his son to look for a wife. If the son could not find one, his father helped. The matter was discussed with the girl's parents, and a price, such as an unusual shell or a pair of moccasins, was agreed upon. If necessary, the girl's family persuaded her to accept the boy. If the arrangement was satisfactory, other presents followed through a period of "trial" for the suitor. Sometimes, several boys competed, with the girl finally taking the favorite as her husband.[27]

Goldfrank's data were comparable with the exception that the extended family of each prospective mate was involved in the negotiations. (This was confirmed as a former practice by 70.) She added that a wedding feast was prepared, each family preparing one. First, the girl's family went to the boy's house, and later all went to the girl's. "Today this is considered as a preliminary ceremony to the church wedding, but formerly these exchanges sanctioned the marriage."[28]

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[26]Goldfrank, Social and Ceremonial Organization, p. 84.

[27]Curtis, The American Indian, Volume XVI, p. 88.

[28]Goldfrank, Social and Ceremonial Organization, p. 84.

Father Dumarest's notes described the marriage procedure more as it was observed in 1948.[29] After the wedding Mass had been said in the church by the priest, the wedding party went to the home of the bride where the wedding feast was held. No separate feast was provided by the boy's family who, instead, helped the girl's family. The couple, the padrinos, the priest, and closest relatives and special friends were seated at the table first. The girl's mother supervised the feast, and her father acted as principal host, greeting all guests at the door. It appeared that the parents were usually so involved in preparing the feast that they could not go to the church. This was interpreted as some indication of the relative importance of the church ritual and of the feast in the minds of these Indians. As the first people finished eating, they moved to chairs and benches around the main room of the house where the guests came to congratulate the couple, the padrinos, and the parents before eating. Presents were given to the couple, and the characteristic embrace of greeting occurred.

After the majority of the guests had eaten, the padrinos and older, respected tribesmen, often kinsmen, made rather lengthy speeches, concentrating on advice to the newly-weds. Informants said that the feast and speech-making comprised the wedding prior to the time when church weddings became the rule. (3, 15, 17, 53) A double wedding in 1947 was interesting in that the grooms wore business suits while the brides were garbed in traditional pueblo clothing. Also in 1947, a couple was married with the groom in a business suit and the

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[29]Dumarest, Notes on Cochiti, pp. 150-151.

bride in a flowing white dress and veil.

Padrinos at time of marriage were often the same who had served as baptismal padrinos for one of the couple. Sometimes, the padrinos were of the same generation as the couple although they were more commonly chosen from the parental generation. Similarity in clan or kiva affiliation was common but by no means the rule. Again, where similarity was found, it was more likely due to family relationships, or common society memberships, or political grounds, than it was to clan or moiety affiliations. (3, 16, 17, 25, 45, 53)

In 1948, all Cochiti marriages but one had been performed in a Catholic Church, either in the pueblo, or in some other pueblo or city. In a reference to the one exception, who had been married by a justice of the peace, as man and wife, a twelve-year old girl volunteered the observation that this woman was not the man's wife, "he just lives with her." (30) In spite of this deviation from the norm, the couple and their children played prominent roles in the life of the pueblo and, aside from a few who obviously disapproved of their marriage, they were well regarded by the others. The statement was made by several that "We are all good Catholics here at Cochiti." On this basis, divorces were not recognized although there were several individuals at Cochiti who were separated from their mates, almost all of them having been non-Cochiti men.

An investigation was made of the ages of the men and women of Cochiti at the time of their marriage. This was based on records of the church at Peña Blanca. It would have been valuable to know if numerous missing marriage records were due to accidents of recording

on the part of the priests, a failure to forward to Peña Blanca the records of marriages away from the pueblo, or due to marriages outside the church - either civil or according to native rites alone. While the data were incomplete, there appeared several points worthy of note.

Contrary to the impression gained from various sources, the majority of the marriages of the last century did not involve particularly young individuals. Some instances did occur in the early church records. No cases of brides under seventeen years old were noted after 1910. Ages prior to 1910 dropped to thirteen, with a considerable number ranging from seventeen to twenty-one. For the grooms, eighteen was the youngest age recorded since 1910. Before this date, the age dropped to sixteen. This was exceptional, however, with the majority about twenty. Correlation of ages of marriage mates was variable. Instances ran the full gamut from equal ages to either the husband or the wife being as much as twenty-five years older than the mate.

From the marriage records it was also apparent that remarriage was preferable to the status of widow or widower. While a few individuals never remarried, the great majority did, some as many as two or three times. Adults of either sex who never married were unusual.

Transvestites were known to the Cochiti from contacts with the Zuñi although there had been no transvestites at Cochiti. The Cochiti word for transvestite was "kō´kwēma." (53)

Death

When a person died, a woman (wife, sister, daughter, mother) washed the hair, and the family dressed the body in the person's best

clothes. A medicine man, who could be from any of the societies, was called in to prepare the body for burial. (53) He sprinkled herbs on the face, and corn pollen was placed in the mouth of the deceased. (48) Another informant stated that corn-meal was placed in the mouth. (70) No face painting was practiced. (48) The medicine man massaged the body, whispered, and then removed "something" (i. e., the soul) from the body. This "something" was placed in a corner of the room where it remained for four days before it was sent to wēnima. (53)

After the body had been prepared, the medicine man sewed it in a blanket. A few people wanted to be buried in plank caskets, but the majority, especially the older people, preferred burial in a blanket. Next, the body was placed on a wagon. The burial took place in the morning if the death occurred during the night; if not, it occurred later the same day. Formerly, the body was placed on a house ladder. If the deceased was a small child, the sacristan carried the body in his arms. The six fiscalitos served as pall-bearers and dug the grave at a spot designated by the sacristan. The graves were dug on an east-west axis, and the body was oriented with the head toward the west. Actual burial was accomplished by the sacristan, or his assistant. It was interesting to note that, while in 1948 the sacristan (Alfred Herrera) was not a society member, the sacristan until 1947 (Alcario Montoya) and the sacristan who served before him (Mariano Chavez) from the beginning of the century until 1917, were both members of Kō'sharī. The position of assistant sacristan, held from its beginning by Francisco Chavez, was a relatively new one. It was created because the regular sacristan, Alcario Montoya, was absent from the pueblo many

times in his role of interpreter for the All-Pueblo Council and as a Kó'sharī member participating in rituals at other pueblos. (48, 53)

Unless the priest happened to be in the pueblo at the time of a death, he was not called upon to administer the last sacraments nor to officiate at the burial. However, on his next visit to the pueblo, he was normally asked to bless the grave. (26, 39, 44, 70)

The Campo Santo, or cemetery, used in 1948 was located at the edge of the hills a half-mile west of the pueblo. Miguel Ortiz was said to have been the first person buried there, at about the turn of the century. This was after the severe epidemics of "Los Frios," mountain fever, and malaria which plagued Cochiti in the 1890's and early 1900's. At that time, the numerous deaths in the village, sometimes five or six in a day, filled the Campo Santo immediately in front of the church, and the new burial ground west of the pueblo was consecrated. Like the Indians, the Spanish families at Cochiti had used both Campo Santos. (65, 70)

The Campo Santo was arranged in north-south rows of graves that were used in the order of death. There were no family burial plots, and there was no segregation of the sexes. Most graves were marked by simple, white, wooden crosses, the legends of many no longer legible. When the churchyard was the only Campo Santo, the sexes were segregated, the males south and the females north of the mid-line. (3, 15, 70)

While most burials were made in the Campo Santo west of the pueblo, an occasional burial was still made in the original one. One informant stated that this was usually done in case of the sacristan's death. (44) However, in December, 1946, Trinidad Melchior Montoya,

the wife of Alcario Montoya, sacristan at the time, died. She had been a very prominent woman in the secret societies and ceremonial life of the pueblo. Before death, she requested that she be buried beside her mother in the north side of the old Campo Santo. Alcario took her request to the 1946 Fiscales, Nestor Herrera and Pablo Trujillo, and it was approved. This was explained as due to her understandable wish, and it had nothing to do with her own importance or the position of her husband. (44, 45, 53) "Anyone else could do it, but most of them don't care. Both places are Campo Santos." (26)

In comparing the published data regarding death with 1948 practices, it was evident that there had been only slight changes. Dumarest commented upon the rapid burial after death, the body having first been visited by relatives and friends who threw corn-meal in the mouth of the dead as preparation for a four day journey to shipapu, in the north. (This was followed by a subsequent journey to wēnima, in the west, where the good people, i. e., sinless, went directly after death.) After the grave had been dug, the body was carried to it on a house ladder. The major differences between the Indian and non-Indian burials at Cochiti were the Indians' practice of burying without the assistance of a priest and without a coffin, according to Dumarest.[30]

Goldfrank again had a more rigidly patterned procedure which was denied by my informants. She stated that certain medicine men were summoned in specific instances. If the deceased was a Kō´sharī, a Flint shaman was called; a Shī´kame was called for a Kwi´rēna; and a

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[30]Dumarest, Notes on Cochiti, pp. 166-174.

Giant shaman was called for anyone else. A shaman was painted with red ochre by the attending medicine man. Others were sprinkled only with corn-meal and corn pollen. The shaman removed the soul of the dead person, and it remained in the house four days.[31]

According to Curtis, "Although the mortuary customs are described in the present tense, burial at the present time is from the church. Nevertheless, the rites of the 'day when the dead person is sent away' are still usually observed."[32] This duplication of 1948 practices indicated that the abandonment of native burial rites had been in slow progress for several decades, primarily under the influence of the Catholic Church. However, even in 1948 among the "Conservatives," the medicine men prepared bodies for burial and four days later sent souls on their journey from the pueblo to wēnima.

Regarding post-mortem practices, Curtis commented as follows.

> Widows and bereaved parents used to neglect their personal appearance, neither washing their faces nor combing their hair, and the names of the dead were not spoken for about a year. Those who handled the corpse bathed afterwards, but not ritualistically.[33]

In 1946, Trinidad Montoya's death occurred on December 23. The regularly scheduled Christmas dances were held on the 25th, but the dances scheduled for December 26 were cancelled. Dances on the following three days were held as previously scheduled.

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[31]Goldfrank, Social and Ceremonial Organization, pp. 65-66.

[32]Curtis, The American Indian, Volume XVI, p. 83, f. n. 3.

[33]Ibid., p. 84.

Of the records kept by the Franciscan Fathers at Peña Blanca, those of deaths were the most incomplete. One priest explained this deficiency as due to the increasing number of the Cochiti who were dying away from the pueblo, as in the government hospitals. As a result, many of these deaths were never entered in the Peña Blanca records. (39)

Another explanation may have been in the Cochiti view of the obvious and more tangible immediate life in which the values of baptism were more tangible and real. Having been baptized and facing the intangible life after death, the Catholic rituals of death and burial did not appear as urgent to the Cochiti.

APPENDIX XVIII provides data on annual death rates and life expectancy, 1878 through 1947. An obvious point was the high rate of infant mortality from 1890 through 1930. Prior to this time, the smaller number of infant and total deaths could be explained by incomplete recording of these events. Since 1930, the effects of improved health services and educational policies of the Indian Service were apparent.

In the course of the individual's life cycle, as seen in the preceding pages, changes had occurred. They were perhaps less noticeable in the life cycle than in other phases of Cochiti culture. However, the nature of these changes closely paralleled that of other cultural changes in the constant inroads made by Spanish and Anglo culture on the Indian way of life. In the life cycle this was most manifest in the increasing prominence of Catholicism in the critical periods of life. Of these, baptism was especially important. This was followed

by marriage and, to a lesser extent, by death and burial rites. These were changes, as it has been pointed out, which had been progressing slowly through the past decades. The evidence showed little indication of radical shifts or sudden changes. At the same time as the shifts away from native culture were occurring, it should be emphasized that much of the native culture and viewpoint was retained by the Cochiti. This retention was seen in the medicine man's aid being sought in birth, in naming, in the native portion of the wedding ceremony, and in death. Economically, payments of corn-meal, foodstuffs, jewelry, and other presents to the medicine men were paralleled by payments, usually of a monetary nature, to the priests for the various services of the church.[34] A blending of these two cultural currents, the native Cochiti patterns and the Spanish-Anglo ways of life,[35] was

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[34]According to one of the Franciscan Fathers, fees were set throughout the Diocese by the Archbishop in Santa Fe. The people at Cochiti were expected to pay the same fees as any others in the Diocese. "This is a policy aimed at preparing the Indians to become full citizens with the same privileges and obligations as other people have." For births, marriages, and deaths the people made an offering of whatever they could afford, usually fifty cents or a dollar. If the family could not pay anything, the service was performed by the priest anyway. One dollar was charged for a regular Mass; two dollars for a special Mass; and five dollars for a high Mass. Banns were announced three times prior to marriage although dispensations could be obtained for one, two, and five dollars, respectively (the last, only with permission of the Archbishop). (37)

White was told the following at Santa Ana. "The Catholic priest charges a fee for performing the ritual of baptism: fifty cents for an adult, twenty-five cents for a baby. He also charges for performing a marriage ceremony, the maximum charge being about $3.00. Priests do not always charge fees for these services; 'If one doesn't want to, he doesn't.' But if he does wish to receive money for a service he does not hesitate to ask for it." (White, Santa Ana, p. 64)

[35]Actually, the influences of Spanish and Anglo cultures should be subdivided into independent factors. However, for the point being

apparent throughout the several stages of the life cycle. A similar coalescence was particularly noticeable in the ceremonial life of these people, an analysis of which constitutes the basis for the following chapter, CEREMONIAL ORGANIZATION.

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made here, the intrusion of native Cochiti culture by alien cultures derived from Western European culture, it appeared advisable not to divide them.

CHAPTER VIII

CEREMONIAL ORGANIZATION

General Statements

The preceding chapters on economics and social organization, while stressing the integration of culture, emphasized changes which occurred in Cochiti culture. Ceremonial organization provides additional illustrative material on both the integration of culture and the changes that are manifest in it. Again, for purposes of analysis, this phase of the culture is momentarily and arbitrarily isolated. In general terms, a few fundamental considerations should be mentioned before discussing the complex details of ceremonial organization. Parsons made the following pertinent comments.

> However differentiated, all the Pueblos have a well-developed ceremonial life. The Pueblo genius tends strongly toward group rather than individual experience, and this tendency makes for ritual rather than mysticism. Pueblos outchurch the most rigid churchmen. Consequently, of all aspects of their life, their ceremonialism has attracted most attention and inspired most interest in most observers, . . .[1]

Elsewhere, Parsons further characterized pueblo ceremonialism, or religion.

> Thus in all aspects Pueblo religion is far from a system external to the rest of life. What the outsider from another age or culture calls religion is felt by the insider as an integral part of his life. Description of religious complexes or particulars as borrowed or disintegrated or marginal is also the outsider's

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[1]Parsons, Pueblo Indian Religion, pp. xii-xiii.

> classification. To those concerned, a religious fragment, indeed any social fragment, may be as vital and significant, be it loan or survival, as any self-developed or intact unit. In the pueblos, a dance horse is as sacred as a dance deer, and dancing in honor of their saint seems to the townspeople quite as much their own costumbre as dancing kachina.[2]

No attempt was made to present a complete study and analysis of all phases of Cochiti ceremonial life. Certain aspects were selected which were believed to illustrate clearly the character of their ceremonialism and the nature of the changes that had occurred. These selected phases were divided under several headings to facilitate their discussion. Topics, in order of their consideration, are: Secret Societies, Selected Ceremonies, and The Catholic Church.

Secret Societies

Secret societies formed the basis for Cochiti ceremonialism. Native ceremonialism occurring beyond the influence, or even the control, of these societies was essentially non-existent. Even the extra-Mass celebration of various Catholic Feast Days was supervised to a great degree by the secret societies of the pueblo. Society personnel were concerned with preparing for the public portions of ceremonies and often were performers in them, either alone or together with non-society members. The preparations, themselves, were normally done in seclusion and were of concern to society members exclusively. Activities of these various societies were conceived as for the common good of the pueblo for the most part; some ceremonies, such as cures, oc-

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[2]Parsons, Pueblo Indian Religion, p. xi.

curred for the direct benefit of a particular individual.

Secret societies, as considered here, comprised two major divisions: the medicine, or curing, societies and the non-medicine societies. White made the following evaluation of Keresan medicine societies.

> The three major functions, then, of the medicine societies are the curing of disease, retreats for rain, and the selection of pueblo officers, of which the first is most fundamental. In former times, no doubt, war functions were as important as retreats, or perhaps more important, at least as far as the Flint society was concerned. The medicine-men are really secondary at solstices; although they carry much of the burden, it is really the cacique who is in charge. The assistance of the medicine-men at masked dances is, too, a rather minor function, as well as their custody of masks.[3]

Functions of the non-medicine societies overlapped to a considerable extent those of medicine societies. Part of this overlap appeared to have been of long standing. Other overlaps resulted from readjustments made when certain societies became extinct and others assumed at least a portion of their former functions.

As medicine societies, the following are discussed: Flint, Snake, Fire, Fō´shai-afīī, Giant, and Shī´kame. Included in non-medicine societies are the following groups: Warriors, Tubajī, Hunters, Thundercloud (or Thunder), Women's, Shrutzī, Katchina, Kō´sharī, Kwírēna, Pumpkin Kiva, and Turquoise Kiva.

Flint Medicine Society. The Flint medicine men, hírshtīaffī

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[3] White, Leslie A., A Comparative Study of Keresan Medicine Societies, 23rd International Congress of Americanists Proceedings, New York, 1930, p. 618.

chai-añī, ranked at the top of the several groups of medicine men; in fact the Flint Society, in the minds of the Cochiti people appeared as the outstanding medicine society. A fundamental reason for this feeling was the fact that the society head, hírshtīañī nawaiya, was also the cacique (ká-sīk). The cacique was the religious head of the pueblo.

The cacique had several names, or titles, among the Cochiti. He was the Flint Headman, hírshtīañī nawaiya; chief, hō´chañī; mother, yaya; and shtōya-mōñī. This last term was also applied to a sacred stone kept by the cacique, and this stone was also referred to as "yaya," according to Curtis.[4] The cacique, as was also true of the Giant and Shī´kame heads, was known as tshrai-katse. There was some feeling that the cacique was the father of his people as well as the mother. This feeling had perhaps developed since the disappearance of the nēhīa who was more commonly referred to as "father," as pointed out in the discussion of the Warriors' Society. (2, 3, 48, 49, 52, 53)

The power and influence of the cacique varied with the individual. In cases of strong-willed and able persons this power approached the absolute. While the cacique at Cochiti in 1948 was by no means an absolute ruler, he still wielded great influence among the "Conservatives" of the tribe.

Goldfrank stated that only a Kō´sharī member could ever become the Flint Head,[5] and according to her data the Flint Head was a dif-

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[4]Curtis, The American Indian, Volume XVI, p. 88.

[5]Goldfrank, Social and Ceremonial Organization, p. 43.

ferent person than the cacique. My informants insisted that the cacique and Flint Head were the same man. (3, 15, 70) She also stated that the feeling current at the time of her field studies that all Flint shamans must also be Kō´sharī undoubtedly stemmed from the fact that the Flint Head had to be Kō´sharī. If this had been the case, the shift to the 1948 situation where a Flint member did not need to be Kō´sharī was interesting. White merely commented that there was a very close relationship between the Flint and Kō´sharī societies. He stated that at San Felipe all Flint members were also Kō´sharī, but the reverse was not true. At Santo Domingo, the memberships "are said to be identical." At Cochiti, "practically the same relationship prevails."[6] Curtis stated that the head of the Flint Society at Cochiti was the cacique.[7]

Dumarest said the cacique was the Flint shaman who had been a member the longest time. At the point of death, he named his successor, but he was bound to name the man who had been a member the next longest time after himself.[8] My informants confirmed this, and in light of these statements the succession of caciques in December, 1946, was interesting.

The rule of succession going to the member with the next longest term of membership was broken in 1946 when Victoriano Cordero, the cacique, died on December 12, and Marcelo Quintana became cacique on

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[6]White, Keresan Medicine Societies, p. 612.

[7]Curtis, The American Indian, Volume XVI, p. 84.

[8]Dumarest, Notes on Cochiti, p. 196.

December 18. When Victoriano became ill shortly before his death, he named Marcelo as cacique pro tem. This was not according to the Cochiti rule since the appointee should have been Juanito Trujillo, who had been a Flint member longer than Marcelo. One informant stated that Juanito had been asked to be the cacique pro tem and to succeed Victoriano in case he should die. Juanito was said to have refused on the grounds that he was an old man (sixty-four at the time) and a widower with no one to care for him. (52) Other informants had not heard that; they merely commented that it should have been Juanito and that they did not understand why it had not turned out that way. (16, 20, 44, 45, 49)

Another case of confusion in the succession of caciques occurred early in this century, according to one informant. Guadalupe Romero, the cacique, died about 1905. He wanted a man by the name of Kō´haiō (Bear) to succeed him. (This was the same man mentioned later as one of the last Warriors at Cochiti.) However, Kō´haiō was bypassed, probably because he was not a medicine man, and Antonio Suina became cacique. It was interesting that the cacique should even have considered a man who was not properly qualified by being a member of the Flint Society. Nevertheless, the informant claimed that it was at this time that many of the old pueblo secrets were lost forever. Additional losses occurred in the intra-pueblo dispute between "Conservatives" and "Progressives" in the early 1920's. (65)

An attempt to compile a roster of caciques (See APPENDIX XIX.) with their terms in office was only partially successful. (3, 15, 25, 70) A rather striking revelation is contained in this roster. Because

of strong affiliations among the Kō´sharī, Flint, and Turquoise Kiva memberships, it had often been assumed that a cacique should be a member of the Turquoise Kiva. From the roster, it was apparent that not only was a Pumpkin Kiva man permitted to become cacique, but at Cochiti, three of the five caciques that were remembered there had been Pumpkin Kiva people. The shift to the Turquoise Kiva appeared to have been a recent development, not only in caciques but in the entire membership of the Flint Society, as the roster (APPENDIX XX) showed. The ramifications of the shift in headship of the Flint Society is discussed in greater detail in the chapter on political organization where it is shown that the balance between the two moiety groups, the Pumpkin and Turquoise, became badly upset in the last thirty, or more, years.

In the past, the pueblo built a new house for each cacique when he took office. This home contained living quarters for the cacique and his family as well as a room set aside for his official functions as religious leader of his tribe. Antonio Suina was the last cacique for whom a house was specifically constructed; this house, just west of the Turquoise Kiva, was still used as a residence by descendants of this man. When Victoriano Cordero became cacique, the pueblo built the present "office" for him, close to his own home. This was never used as a residence. The "office" comprised the eastern half of the Kō´sharī house. It was entered through the western room which was used by Kō´sharī members. In 1948, the cacique kept his own residence but used the "office" for ceremonial requirements. The cacique's duties as an observer of the sun and its marches north and south on the east-

ern horizon were revealed by the framed aperture high on the eastern wall of this house. Informants could, or would, not give any details of these sun observations except that they were still made by the cacique at certain times of the year. (44, 45, 53)

Traditionally, the cacique was the one to care for the jar of scalps taken by Cochiti warriors. He fed the scalps periodically and saw that they caused no harm to his people. This function brought the cacique into close contact with the Warriors' Society, or Ōmpĭ. This group, as is discussed later in this chapter, had been extinct since about 1880, or 1890. Information pertaining to feeding the scalps varied. According to one informant, the cacique still fed the scalps (52); according to another, the previous cacique was the last to do this (49); a third stated that a still earlier cacique had been the last (70); a fourth denied any knowledge of the subject (25). This last statement was made by an individual who was probably the best qualified of any of the informants asked about this matter. Hence, the reply was taken as showing a complete unwillingness to discuss the matter, at least with an outsider, and also as a possible indication that certain phases of caring for the scalps still remained.

Bandelier said that the cacique was the great medicine man of war. He had "Yerba del Manso" (Anemopsis californica), pulverized leaves and stems, which strengthened his warriors and struck terror in the hearts of the enemy. He painted warriors to make them terrible and also invulnerable. He was a powerful doctor, and in war the cacique tended the wounded as a surgeon and nurse.[9]

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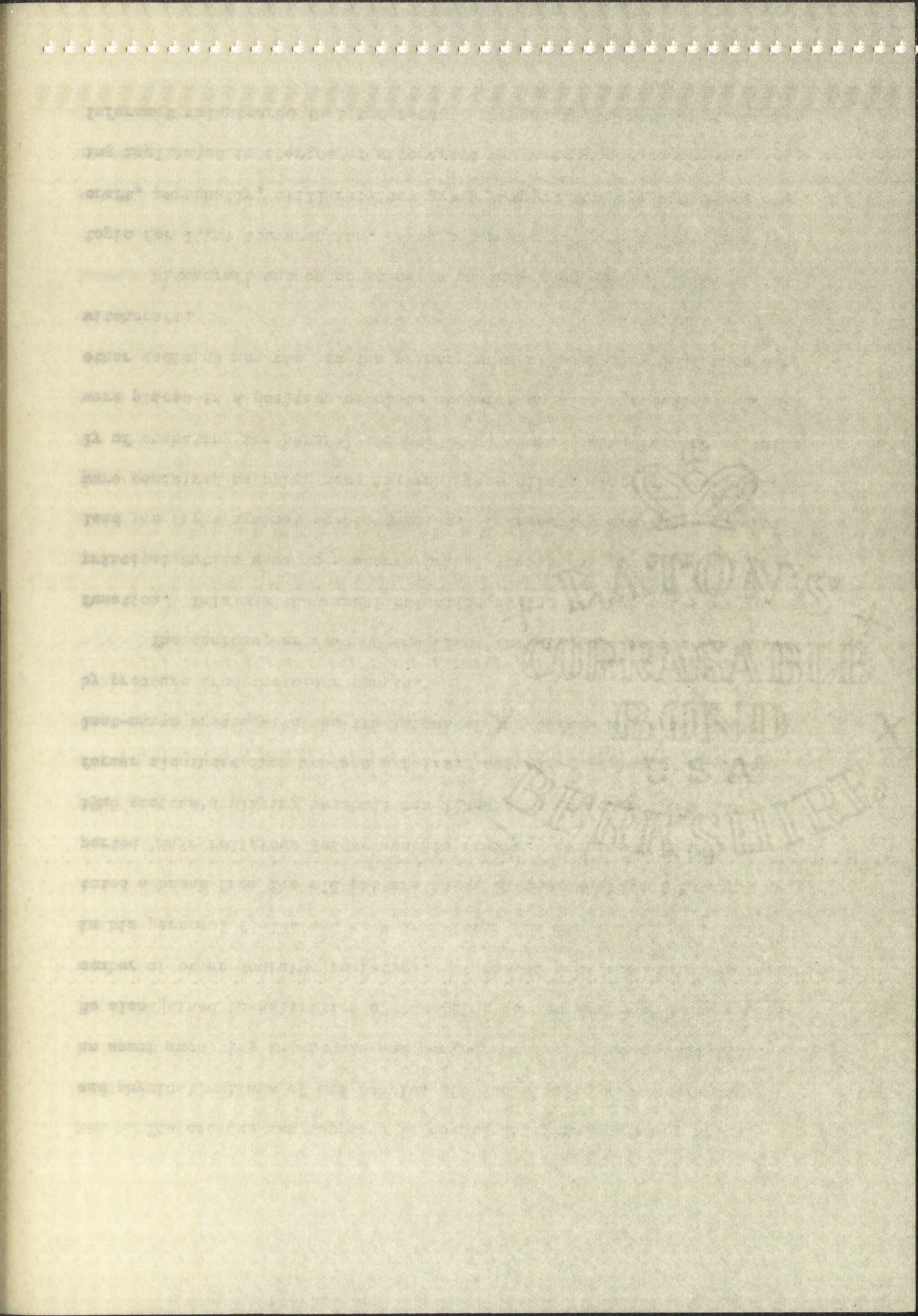
[9]Bandelier, Final Report, Part I, pp. 281-282.

The cacique was supposed to devote his time to the spiritual and physical welfare of his people. In addition to sun observations, he spent much time in rituals and periods of fasting and meditation. He also joined in activities of the Flint Society and was an ex officio member of other medicine societies. It seemed that the cacique's work in his personal fields and as a drum-maker for commercial trade constituted a break from the old pattern in which the pueblo completely supported their religious leader and his family. As already noted, the 1948 cacique's playing baseball was likewise a departure from the former aloofness from mundane affairs. According to informants, this last-named breach with the traditions of the office had been corrected by pressure from the older people.

The cacique, as Head of the Flint Society, had another important function. This was the annual selection of the two war captains whose principal duties were to preserve tribal traditions and secrets and to lead the fight against pueblo enemies. In recent years these enemies were conceived as being more internal than alien. They consisted largely of combating the harmful efforts of witches. Thus, the war captains were placed in a position of close cooperation with the cacique and all other medicine men who had the primary duty of combating ills caused by witchcraft.

Witchcraft was by no means an extinct phenomenon. It was not a topic for light conversation. Even those who did not believe in witchcraft, personally, still retained great respect for the dangers of being implicated in charges of witchcraft by those who did believe. One informant volunteered that the recent increase in the pueblo population



was due to a better cacique, "with better thoughts and more awake to the doings of the bad people, kánat-yaiya. In earlier times most children died very young; the bad people, lots of them Spanish, were to blame. Now there are fewer Spanish, a better cacique (present one had been in office only two years, C. L.), and things are lots better here." (62)

Although no cacique had ever been deposed from his life-time position, informants stated that he could be removed by the war captains and the council. Also, the war captains, although selected by the cacique, had the power to punish the cacique for breaches in the good conduct of his office. (44, 45) No cases of such punishments could be learned from informants.

Caciques, according to Bandelier, were considered ad interim until capable of assuming office. Their "education" was conducted by various assistants, other medicine men, and the war captain. "At Cochiti, until two years ago, (1888, C. L.) there was but a cacique ad interim. Now the 'legitimate' chief penitent has succeeded, but there is no trace of the two assistants."[10]

The three caciques, of whom Bandelier wrote, were not the three society heads mentioned in the discussions here. Unless Bandelier was in error on the personnel of these positions, they constituted another case of disappearing religious officers since that time.

If a man had been a member of the council prior to becoming cacique, he gave up his position in the council upon assuming office.

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[10]Bandelier, Final Report, Part I, pp. 280, 282.

Bandelier said that the cacique opened the council meetings with a speech, or more properly, a prayer. Normally, the cacique then retired and did not listen to or engage in the discussions. Occasionally, the cacique remained and presented his views.[11] Informants stated that he did not attend council meetings, not even to open them. If he happened to have personal knowledge of a problem under discussion, he was called to present this information. When finished, he again left, as it "wasn't right for the cacique to hear arguments or sarcasm." (3, 15)

It seemed that in conceptions of past conditions of secret societies of various tribes, there had been a tendency to envisage rather large and comprehensive memberships in these societies, in contrast to the limited memberships found now. So far as Cochiti was concerned, such notions of past large memberships were erroneous. Dumarest recorded a membership in the Flint Society of "five or six" at the end of the last century.[12] In 1924, Curtis found only one member of the Flint Society, the cacique himself.[13] Goldfrank, for about the same time, listed Victoriano Cordero, the cacique, and Jose Domingo Chalan, "about to be initiated."[14] During 1947-1948 Marcelo Quintana, the cacique, and Juanito Trujillo were the only members of the Flint Society. (3, 15)

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[11]Bandelier, Final Report, Part I, p. 282.

[12]Dumarest, Notes on Cochiti, p. 187.

[13]Curtis, The American Indian, Volume XVI, p. 87.

[14]Goldfrank, Social and Ceremonial Organization, p. 117.

Members of the Flint Society did not belong to any particular clan or kiva. Goldfrank was told that "At present only Koshari may become members of the Flint Society;" but she called attention to two exceptions that she found. One, Antonio Trujillo, was a Flint member for years before he sought membership in the Kō´sharī Society immediately before his death. (My informants believed he never actually joined the Kō´sharī. [3, 45] C. L.) Luis Romero joined Kō´sharī after he had become a Flint shaman. Goldfrank commented, "Although this procedure was tolerated, it was not considered orthodox."[15] Informants, in their compilation of an all-time[16] membership roster of the Flint Society, also pointed out several men who had been Flint but not Kō´sharī. They did not feel that this was wrong although they admitted it was somewhat unusual. (3, 15, 70)

An all-time roster of Flint members (See APPENDIX XX.) was compiled with the aid of several informants. It was regretted that more complete data on these individuals could not be obtained in order to uncover possible clues to the type, or types, of individuals from whom the caciques had been selected.

Informants stated that Flint (and other) medicine men were primarily doctors, curing illnesses, setting fractures, and helping the people combat witchcraft. In their retreats, they helped bring the

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[15] Goldfrank, Social and Ceremonial Organization, p. 43.

[16] In this, and subsequent, rosters mentioned in this chapter and arranged in the APPENDICES, "all-time" should be understood as meaning all members, living or deceased, of whom any informant had any recollection.

rain and made prayersticks for the Kō´sharī. Flint shamans, like others, were called in case of birth or death. Informants said that any shaman might be called on any type of case, but that generally those of the Flint Society were considered particularly effective. (25, 44, 53, 55) Dumarest stated that Flint shamans were especially able in cases of wounds,[17] a feature which correlated with Bandelier's remarks on the abilities of the cacique, the Flint Head, where wounds of warriors were concerned.[18]

According to informants, women were ineligible for the Flint Society. When in retreat, members of the Flint Society were waited upon by women of the Kō´sharī Society whose close connections with the Flint Society have been mentioned. (3, 45, 70) Dumarest claimed, "But to all curing societies women may be admitted. Because of timidity, however, they rarely apply." Dumarest mentioned one woman doctor but neglected to specify to which society she belonged.[19]

Snake Medicine Society. The Snake medicine men, Shruwe chaiafi, were extinct at Cochiti. Goldfrank stated that the membership of the Snake Society had to come from men who were Flint, and she further pointed out that initiation into one ordinarily involved initiation into the other, as well as into the Fire Society.[20]

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[17]Dumarest, Notes on Cochiti, p. 188.

[18]See page 279.

[19]Dumarest, Notes on Cochiti, p. 189.

[20]Goldfrank, Social and Ceremonial Organization, p. 42.

In view of these statements, it was somewhat surprising to find that the Snake Society had become extinct with the death of the former cacique, Victoriano Cordero. Why the remaining Flint shamans, Marcelo Quintana and Juanito Trujillo, in view of the supposedly simultaneous initiation rites, had never joined the Snake Society was an unsolved problem. (44, 45, 53)

Perhaps this was not as unusual as it first appeared. In examining the all-time membership roster (APPENDIX XXI) as compiled by informants, the Snake roster was appreciably shorter than that of the Flint. It was also interesting to note that the last named of the three Snake shamans, Jose Montoya, was not included in the list of Flint medicine men.

The Snake Society had been considered a "degree" within the Flint Society in ethnographic accounts. Curtis felt that formerly it was perhaps completely independent of the Flint and that a reduction in numbers brought about their absorption by the Flint Society.[21] Numerical strength of the Snake Society, or "degree," was provided in none of the accounts.

Dumarest stated that the Snake Society was considered most proficient in the treatment of rattlesnake bites and bites by poisonous animals.[22]

Fire Medicine Society. The Fire medicine men, Ha´kanĪ chai-aĥi,

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[21]Curtis, The American Indian, Volume XVI, p. 88.

[22]Dumarest, Notes on Cochiti, p. 188.

constituted another "degree" within the Flint Society. Like the Snake Society, the Fire Society had become extinct at Cochiti. Informants did not agree in when this had occurred, an interesting commentary on the awareness of the functions of these societies in the life of the pueblo. Some informants stated that Victoriano Cordero was the last member of the Fire Society. (15, 44) Others claimed that Victoriano, while he had been both Flint and Snake, had never gone through the initiation rites of the Fire Society. (52, 70) Little was learned from the published data on the Fire Society, and the membership roster was very brief, including only Antonio Suina and Victoriano as a doubtful member. Since data on these men are given in the short Snake roster (APPENDIX XXI), they are not repeated separately.

Specialties of the Fire Society were the treatment of burns and fevers. In other respects they were similar to the other medicine societies in their functions. (3, 70) Curtis claimed they did such tricks as extinguishing fire in their mouths.[23]

Pó'shai-añī Medicine Society. While White discussed the Flint, Snake, and Fire Societies,[24] he made no mention of the Pó'shai-añī medicine men, Pó'shai-añī chai-añī. In the ethnographic data on Cochiti, this group was mentioned only by Curtis. He stated that this group was the highest of the three "degrees," Snake, Fire, and Pó'shai-añī, within the Flint Society. Members of this were assistants and

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[23] Curtis, The American Indian, Volume XVI, pp. 87-88.

[24] White, Keresan Medicine Societies.

understudies to the head, the cacique. He also referred to them as "Whipper Shamans."[25]

No data on this society were learned from any informant, but a reference to the same term, "Pō´shai-afī," was obtained from one informant. In discussing the celebration of Santiago's Day, July 25, 1948, and the appearance of "The Little Horse," he stated that the horse was also called "yaya," or "mother," and "Káwaiō sántīak" by the people. In addition, there was another name for the horse which was known to very few of the Cochiti, themselves, "Pō´shai-afī." (52) This term was known among the Santo Domingo as the name "Poshaiyanyi," a deity who fought a series of contests with the Christian God long ago, defeating Him in each phase of the contest.[26] The term, "Bocaiyanyi," was used at Santa Ana to designate one of the two "horses" that appeared on Santiago's Day and Saint Anne's Day, July 25 and July 26, respectively.[27] No reference to a Pō´shai-afī Society in any other Keresan Pueblo was found.

Giant Medicine Society. Next to the Flint Society, the Giant Society was the most important Cochiti medicine society in 1948. There were two Giant medicine men, Shkōyō chai-afī, at Cochiti: Cipriano Quintana, Head, and Vicente Suina. Dumarest noted six or seven members at the end of the last century.[28] Curtis stated that there were four

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[25]Curtis, The American Indian, Volume XVI, pp. 87-88.

[26]White, Santo Domingo, pp. 178-179.

[27]White, Santa Ana, pp. 256-263.

[28]Dumarest, Notes on Cochiti, p. 187.

Giant shamans in 1924.[29] Goldfrank likewise noted four.[30] An all-time roster of Giant members appears in APPENDIX XXII. In this roster were included two women who had belonged to the Giant Society: Priciliana Roybal Cordero, still living, and Trinidad Melchior Montoya, who died in 1946. These were the only women named by informants as actually belonging to a medicine society. This was probably an outcome of their membership in the Thundercloud Society, which was limited to women. This society was especially close to the Giant Society, meeting in the same house, although informants stated that it also had connections with the Flint and ShT´kame medicine societies. It was not connected with the ShrutzT Society. (15, 45, 70) This exclusion may have stemmed from the close association of the ShrutzT Society with the Katchina Cult which was restricted to male members. However, as listed in the roster of the ShrutzT Society (APPENDIX XXV), Lucia Romero was a member of that society.

Dumarest stated that Giant shamans specialized in the treatment of fevers.[31] Curtis simply designated them as healers.[32] Goldfrank, in several instances, said that Giant shamans were preferred in cases of child-birth and death,[33] although my informants claimed to know of no such preference. (44, 45, 52, 55, 70) Bandelier's data were diver-

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[29]Curtis, The American Indian, Volume XVI, p. 87.

[30]Goldfrank, Social and Ceremonial Organization, p. 117.

[31]Dumarest, Notes on Cochiti, p. 188.

[32]Curtis, The American Indian, Volume XVI, p. 87.

[33]Goldfrank, Social and Ceremonial Organization, pp. 49, 76.

gent here, stating that the Giant Society was concerned with the hunt (rather than the ShĪ'kame group).[34] In view of unanimity among other sources, it appeared Bandelier was in error.

The Head Giant, also known by the terms "tshrai-katse" and "Shkōyō nawaiya," was spoken of as an "assistant to the cacique," or as "the cacique's right hand." This was also true at the time of the investigations of Goldfrank[35] and Curtis,[36] but according to Dumarest the Giant Head was the second assistant to the cacique rather than the first.[37] My informants felt that this was in error, as the 1948 arrangement had always been true so far as they knew. (25, 44, 45, 70)

It was interesting that in spite of the concept of assistant cacique, or "right hand," if the cacique was ill or momentarily incapacitated, it was the next man in line within the Flint Society and not the Giant or ShĪ'kame Heads who became acting cacique. (3) This was explained as consistent with the need that the cacique have the special knowledge of the Flint members and that the other society heads had to continue in their proper offices in order to maintain the balance necessary in the ceremonial life of the pueblo.

The Giant Head, as is discussed in CHAPTER IX, was the one who chose the governor and lieutenant governor each year.

ShĪ'kame Medicine Society. There was only one ShĪ'kame medicine

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[34] Bandelier, Final Report, Part I, p. 280.

[35] Goldfrank, Social and Ceremonial Organization, p. 41.

[36] Curtis, The American Indian, Volume XVI, p. 84.

[37] Dumarest, Notes on Cochiti, p. 197.

man in 1948, Eufrasio Suina. Dumarest stated there were five or six at the end of the last century.[38] Curtis said there were four in 1924,[39] while Goldfrank named three.[40] Informants compiled an all-time roster of nine Shī´kame medicine men. (See APPENDIX XXIII.)

Informants stated that this society had an entirely male membership and that women could not belong to it. The society was aided in its retreats by Kwi´rēna women, but they were excluded from society secrets. As shown in the roster, all members of Shī´kame were also Kwi´rēna members; informants insisted that this was not a necessity, however. The two societies were very close and used the same house. A member of one society could not enter while the other society was in retreat unless he was also a member of the second group. (44, 70)

Dumarest stated that the Shī´kame Head was the first assistant to the cacique,[41] but all other published data and my informants claimed that he was the second assistant, the first being the Giant Head. Dumarest did not give the special abilities of this group of shamans, but he did comment on certain food restrictions observed only by these men.

> Shikarne chaiani are much afraid of a medical plant called shietretse wawa (medicine), in Spanish osha. They believe they will fall ill from its very smell. To eat it would be death. For a like reason shikarne chaiani keep from eating wako, a plant which

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[38] Dumarest, Notes on Cochiti, p. 187.

[39] Curtis, The American Indian, Volume XVI, p. 87.

[40] Goldfrank, Social and Ceremonial Organization, p. 117.

[41] Dumarest, Notes on Cochiti, p. 197.

> is eaten when young after it is cut up like spinach and boiled. For shikarne chaiani, rabbit meat is also a poison. Nothing edible is abstained from by irshtoani or by schkoio chaiani.[42]

As Parsons indicated in an editorial note to the above quoted statement, "wako" (also spelled guaco) was the Rocky Mountain bee plant, tabus of which, along with jack-rabbit meat, "are also observed by the shikani-kurena cheani of Laguna and by the shi'wanakwe of Zuñi."[43] Use of the Rocky Mountain bee plant and of rabbit meat, in connection with the ShĪ'kame's assuming duties of the extinct Hunters Society was noted on page 140.

Bandelier stated that the ShĪ'kame Head was the leader of the medicine shamans and that the Giant Head was the head hunt shaman.[44] This reversed the 1948 situation and, unless it was merely an error in recording, was an unexplained case of shift in emphasis by these two medicine societies.

As Head of the third most important medicine society in the pueblo, the ShĪ'kame Head or ShĪ'kame nawaiya, the third tshrai-katse, also shared in the selection of the secular officers. The Head ShĪ'kame was the person who selected the fiscale and assistant fiscale.

In addition to the normal duties of a medicine society, i. e., curing, weather control, and some direction of masked dances, the ShĪ'kame had taken over duties formerly exercised by the Hunters Society. In spite of this added responsibility, the ShĪ'kame was represented by

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[42]Dumarest, Notes on Cochiti, p. 197.

[43]Ibid., p. 189, f. n. 1.

[44]Bandelier, Final Report, Part I, p. 280.

only one man in 1948.

In the section on the Flint Society, it was pointed out that Snake, Fire, and possibly Pō´shai-aⁿī constituted "degrees" within the Flint Society, or did so until they became extinct. Similarly, according to Curtis, the Shī´kame Society was said to include a "degree" called "Mūkat^{sa}," or "Cougar." Curtis felt that this was simply because of the absorption of duties of the Hunters Society by the Shī´-kame, including the role of Cougar Man in the communal hunts.[45] None of my informants knew of any such degree within the Shī´kame Society.

Warriors Society. The Warriors Society, Ōmpī, had been extinct for many years at Cochiti. Bandelier said that he witnessed an Ōmpī Scalp Dance although he did not date the event.[46] Very likely, it was about 1885. One of my informants, born in the late 1880's, remembered seeing a Scalp Dance of the Ōmpī, when he was a small boy, stating that the dancers came out of the Turquoise Kiva. He could not remember any details, however. (15)

The Warriors Society was composed of men who had taken an enemy scalp. It was also composed of those who had counted coup, either first or second, on a mountain lion, bear, or eagle, as described in connection with hunting. The two men who touched one of these animals of prey, that were considered almost human, entered into a brother relationship and also were eligible for the Warriors Society. A few "brothers" were known in the pueblo, but the society had disappeared.

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[45] Curtis, The American Indian, Volume XVI, p. 88.

[46] Bandelier, Final Report, Part I, p. 300.

(25, 44, 45, 53) Bandelier's remarks suggested that this animal killer type of Ōmpĭ may have been compensation as the actual man killers began to disappear. He also noted that this indicated the high regard of the Cochiti for these animals,[47] a fact that may have had much greater antiquity and would also negate the idea that the animal killer Ōmpĭ were a type of substitute.

The Head of the Warriors Society was called nēhĭa. He was the warrior who had taken the most scalps. Dumarest stated that the nēhĭa, or "war priest," was second in the hierarchy, ranking below the cacique. He also stated that this office was shared by two of the principales. It was a life office with the nēhĭa naming his successor, as in the case of the cacique. He was chosen from men who were not shamans. Dumarest described this office as follows.

> The nahia is chosen for his intelligence and his memory, for he is both advisor to the Cacique and guardian of traditions unknown in part even to the principales and sometimes even to the Cacique. He is also counsellor to masewa. He supervises the principales, the chaiani, the shiwanna. He is chief and organizer of secret dances. He maintains the customs. Like the Cacique he is called yaya, for by his fasting and prayers he too brings rain. This office of paramount authority was created when the people left shipapu for the south. Masewa called a meeting and asked for an adjutant to serve him when he went to war. The nahia is the same as masewa and oyoyawa.[48]

In editorial notes, Parsons commented that elsewhere Dumarest referred to the "nahia" as "hotshani," a general Keresan term for chief. Likewise, she pointed out that the "nahia" was the older bro-

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[47] Bandelier, Final Report, Part I, p. 300.

[48] Dumarest, Notes on Cochiti, pp. 198-199.

ther and the assistant was the younger brother, emulating the Twin War Gods, Masewa and Oyoyawa.[49]

Subsequently, Dumarest added the following.

> To the office of nahia is sometimes added the office of the head of the matalotes (taiawa), men who have killed one or more Navajo and brought back the scalps or who have killed at least some mountain lions or bears. The head of the organization is he who has the greatest number of kills to his credit. The head of the matalotes is the leader in the war dances. The Cacique is not necessarily matalote, but he has the right in the war dances to assign each dancer his malinche or female partner. Recently, at Cochiti, this right was usurped by the nahia who is also head of the matalotes. He was on his way to fetch to the dance one of the women he had chosen when the Cacique met him and had him make the poor woman change from her dance dress and give it over to the woman the Cacique himself had chosen. The episode made considerable noise.[50]

Curtis did not mention the position of nēhīa, but Goldfrank found considerable information although it did not agree with much of that found by Dumarest.

> . . . Today there no longer exists the office of nahia, a life position and formerly the highest official in the tribe. Dumarest has made some notes on this office, which was still flourishing in his time. However, there is one discrepancy between his data and mine. According to him the cacique is the head religious officer of the village, the nahia under him. According to my informant the nahia, a member of the ompi[c] (warriors or those who have scalped a Navajo) was designated by his predecessor and installed by the cacique, but thereafter was the superior officer of the village although the one was primarily war chief, the other religious head of the village. The same procedure is followed in the case of the war captain and cacique today.[51]

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[49] Dumarest, Notes on Cochiti, p. 199.

[50] Ibid., pp. 199-200.

[51] Goldfrank, Social and Ceremonial Organization, p. 39.

White's data on the office of nēhĪa, or nahia, at Santo Domingo provided little information[52] for the solution of discrepancies in Dumarest's and Goldfrank's comments. It may be that Dumarest and Goldfrank, with some elaboration, could have reached agreement on this point. One difficulty appeared to arise from their attempts to rank the office of nēhĪa in relation to that of cacique. Actually, there was a strong possibility that no such ranking occurred in the minds of the Cochiti although one of my informants stated that the nēhĪa was the most powerful man in the pueblo, wielding more influence than the cacique. (44) In the segmented, yet overlapping, responsibilities of the several pueblo officials, it was probably that in matters concerning war, the nēhĪa had ultimate control. In discussing the cacique, page 279, the close connection of the cacique with war was mentioned. However, this was an association of "medicine," i. e., making his own warriors invulnerable, striking terror by magic in the enemy, and treating wounds (curing). The cacique was not concerned with war as an armed combatant. He and other medicine men were the highest authorities in matters of general welfare of the people, such as weather control and curing. A common reluctance of most informants to rate these offices was interpreted as a clue to the individual realms of responsibility of each of these pueblo officers. Parsons noted: ". . . the general Pueblo attitude is that the chief of a ceremony being performed is paramount or general chief for the time being."[53]

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[52] White, Santo Domingo, pp. 39-40.

[53] Parsons, Pueblo Indian Religion, p. 144.

An even more obscure point was the relationship of the nēhĪa and the two war captains who in 1948 functioned as both religious and civil officers. Considerable speculation has been made on the origin of the offices of war captains. Clear evidence on whether these officers were of native, or Spanish, origin is lacking. Parsons felt that the war captains could be traced to Spanish origin in the Decree of 1621.[54] She stated that just as the governor and his staff became the "mouthpiece and executive" for the cacique, the war captains and their staff "functioned similarly" for the war chief, or nēhĪa.[55] Aberle, in writing on the war chief, commented as follows.

> War Chief, a term not found in the colonial Spanish villages, is used consistently in this paper to designate a man chosen each year who may have civil as well as religious duties. Within the pueblo, though this officer is ordinarily called War Chief, he may be called War Captain, Hunt Chief, Outside Chief, etc. The differences in title are significant of the differences in the actual position of the War Chiefs in different villages. In no other position does their exist the degree of inconsistency between the idea of the officer's duties and the duties he actually performs.[56]

White claimed that, "The war chiefs, formerly military officers and leaders, are today the most important (in fact, but not in theory) officers in Santa Ana."[57]

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[54]This decree, arising from the conflict between Church and State, gave ultimate authority to the State and included instructions that each pueblo should choose, without interference by the Spanish authorities, various civil officials every January 1. (Scholes, Church and State, pp. 78-79.)

[55]Parsons, Pueblo Indian Religion, pp. 1125-1126.

[56]Aberle, The Pueblo Indians, p. 38.

[57]White, Santa Ana, p. 104.

The last Ōmpī was a man who became eligible for membership when he had killed a bear. (52) Another Ōmpī was Jose Ortiz, father of Miguel Ortiz, who died late in the last century. This man also belonged to the Shrutzī Society. (44) Jose Maria Quintana was an Ōmpī nawaiya, born about 1850 and of the Turquoise Clan. (52) According to Starr, the Indian name of this man was Hakaya-tiwa.[58] An older informant recalled five members of the Ōmpī Society by their Indian names, but he could not recall their Spanish names. These men were: Kō´haiō, Yēma, Stait-yana, Kīma-tīwa, and Káwa-tīwa. (25) The first man, whose name meant Bear, was the sume person mentioned as the proposed successor to Guadalupe Romero as cacique but rejected in favor of Antonio Suina. (See page 277.) The second man was listed by Starr as Juan de Jesus Patagordo.[59] Kīma-tīwa was listed as Jose Cordero, Corn Clan,[60] (Turquoise Kiva); the other names were not identified.

Informants unanimously declared that no native rites were performed when the young men left for service during World War II. Likewise, there was no ceremonial reception of the boys returning from service. Masses were said in the church in behalf of certain servicemen, but otherwise nothing of a ceremonial nature was associated with war service. "All that went with the Ōmpī, and now nobody knows about such things." (48, 49, 55, 58, 70)

Tubajī Society. No data on this society could be learned from

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[58] Starr, Census of Cochiti, p. 34.

[59] Ibid.

[60] Ibid., p. 40.

informants. Dumarest claimed that the society existed only for purposes of divination. It was more active in winter than in summer. The members' appearance in the village in a body signified a snowfall. They also performed magical rites in the kiva, although Dumarest did not designate which kiva. He described performances in the kivas where the scarecrows of the fields were made to speak, sometimes revealing good or bad behavior on the part of various individuals.[61]

Goldfrank was told that the cacique, Victoriano Cordero, was a member of "Tubahi, a curing society that functioned formerly," but she was unable to get any elaboration of this.[62] My informants knew nothing about this society or its membership.

Hunters (Hunting) Society. The Hunters (Hunting), or Shai-yak, Society had been extinct at Cochiti for many years. Bandelier, in a general statement on this society in the Keresan Pueblos, commented, "They are fast dying out, however, and have almost disappeared in several villages."[63] Dumarest failed to mention this society, and Goldfrank did not obtain a membership roster for it. My informants, likewise, failed to recall any members, signifying that it had become extinct sometime before the end of the last century. Curtis said it was extinct.[64]

Goldfrank collected some data on this society, writing in the present tense although, as noted, the society was probably already ex-

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[61]Dumarest, Notes on Cochiti, pp. 194-195.

[62]Goldfrank, Social and Ceremonial Organization, p. 40, f.n.12.

[63]Bandelier, Final Report, Part I, p. 276.

[64]Curtis, The American Indian, Volume XVI, p. 87.

tinct.

> Lastly, there is the Hunting society whose membership in Cochiti is identical with that of the Cikame society. The officers of the Cikame society are called by the same name as the supernaturals in charge of the hunt (caiak, djaikatse, dreikatse). . . .
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> . . . . . .
>
> Just how the Hunting society became identical with the Cikame I did not learn. I believe that, as in the other villages, the Hunting society was originally independent. Today practically no one hunts, although my informant was able to give me many details of former days, and with the lessening of interest and the falling off of membership, perhaps the functions and ritual were assumed by the Cikame.[65]

As already pointed out, Bandelier stated that the Giant Society, rather than the ShĬ´kame, was concerned with hunting and controlling the animals. If this was not in error, it was interesting that when the Hunters, or Shai-yak, became extinct, their functions were absorbed by the ShĬ´kame instead of the Giant. Overlapping memberships could have played a role in this transition although without a membership roster for the Shai-yak, there was no way of knowing the actual circumstances. Goldfrank's idea of identical memberships in the ShĬ´kame and the Hunters Societies did not appear valid. There seemed to have been a transfer of functions from the one society to the other, perhaps simply by default, but there was no evidence of duplicate memberships.

Thundercloud Society. The Thundercloud, or Thunder, ShĬ´wanna, Society has already been mentioned in its association with the Giant

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[65]Goldfrank, Social and Ceremonial Organization, pp. 46-47.

Society. It was composed of women only and had its closest association with the Giant, although it also had relationships with the Flint and ShI'kame. (3) In 1948, there was only one member, Priciliana Roybal Cordero. Personal data were given for her in connection with her membership in the Giant Society, APPENDIX XXII. Trinidad Melchior Montoya was also a member of this society until her death in 1946. Her personal data have also been given in connection with her Giant Society membership. The only other member informants could recall was Ignacia Archibeque Herrera. She was of the Water Clan and Pumpkin Kiva, and she was born February 5, 1860. Her death was unrecorded. In compiling an all-time roster of members, only two other names were added. (See APPENDIX XXIV.)

Informants insisted that this society had had no connection with scalps or war. The principal function of this group was ceremonial grinding of prayer meal for the cacique. (44, 70) According to Curtis,[66] these women invited other women, recognized as skillful grinders, to bring corn and aid in grinding it for the cacique. Curtis called this group a "pseudo-society," probably due to its lack of more rigid organization. However, it had a society head, and its membership was recognized in the pueblo.

Shrutzi Society. This society was represented in 1948 by two members, Jose Nicanor Cordero, Head, and Guadalupe Ortiz. An all-time roster of this society included eleven names. (See APPENDIX XXV.)

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[66]Curtis, The American Indian, Volume XVI, p. 88.

Informants claimed that "ShrutzĪ" was a difficult word to translate. It referred to those who did not belong to either Kō´sharĪ or Kwi´rēna; ShrutzĪ members were sometimes referred to as "raw," in contrast to the members of Kō´sharĪ and Kwi´rēna who were "cooked," or "roasted." (3, 15)

The ShrutzĪ Society cared for katchina masks and other paraphernalia. For this, they had been loaned a house by Stephanita Herrera, a Kō´sharĪ and active participant in native ceremonials. This house was located on the south side of the house block just south of the church. (44, 45) The ShrutzĪ prepared equipment for katchina dances. These dances were held at intervals throughout the year, but there were none during the summers of 1947 and 1948. (3, 45, 70) It appeared that the ShrutzĪ Society and the closely affiliated Katchina Society were slowly losing their former prominence. As mentioned previously in connection with making dolls and other paraphernalia, Goldfrank was told by informants that the ShrutzĪ were too lazy and were not doing their jobs well.[67]

Dumarest stated that the "nahia (shreutse-nswaia)" was the head of the crudos, i. e., the uninitiated.[68] Curtis recorded this society as the "Siusti" and pointed out that the term society was applicable to neither the Siusti nor the ShĪ´wanna, or Katchinas.[69] He called the society head "nawaya," as other headmen, and stated that the head kept

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[67]Goldfrank, Social and Ceremonial Organization, p. 76.

[68]Dumarest, Notes on Cochiti, p. 199.

[69]Curtis, The American Indian, Volume XVI, pp. 87-88.

and maintained the katchina masks. Goldfrank added still another spelling, "Curdzi."[70] However, in Goldfrank's phonetic recording "c" had the value of "sh;" thus, it was quite close to the recording used in this discussion.

Goldfrank's impression was that the ShrutzĪ Society was related to the Giant in much the same manner as the Kō´sharĪ was to the Flint and Kwi´rēna was to the ShĪ´kame.

> The relation between the Curdzi and the Giant society is less apparent but no less real. Some Curdzi do join the Giant society, but upon so doing, they must relinquish their membership in the Curdzi society, as a Curdzi may not join any other organization. The Curdzi and Giant societies have their respective houses. However, it is the Giant society that fashions prayer sticks for the Curdzi, as these may only be made by members of the curing societies. The Curdzi go into retreat on the first night of the retreats of the Giant society and both groups visit the chief Curdzi shrine, "the house of Ganadyani."[71]

Her data agreed generally with those obtained from my informants. A few exceptions occurred. Twenty-five years before, the house of the ShrutzĪ Head was too small to keep the katchina paraphernalia, and the Giant Head consented to keep it for him. In 1948, with the loan of a house, the ShrutzĪ again had direct charge of the paraphernalia. Goldfrank also stated that because of close association between the ShrutzĪ and the katchinas, there were no female members. However, as the roster indicates, Lucia Romero Montoya was once a member. While admittedly unusual, the situation could exist. (3, 15, 53)

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[70] Goldfrank, Social and Ceremonial Organization, pp. 44-45.

[71] Ibid., p. 44.

Dumarest's notes were both interesting and confusing here. He appeared to distinguish between the "nahia" (Head of the Warriors) and the "shreutse-nawaia" (Shrutzi Head). He then stated that the "nahia (shreutse-nawaia) was the head of the crudos."[72] This seemed to imply that the Warrior Head was also the Shrutzĭ Head which meant he was in charge of the katchinas. If so, this added still another function to the former office of nēhĭa and indicated further change and adjustment when this office became extinct. Again, it may simply have been a careless use of the term "nahia."

Katchina Society. At Cochiti the term "katchina" was used interchangeably with "Shĭ'wanna" in designating the cult of masked impersonations of tribal deities. Curtis felt that the word "society" was not properly applied to the katchinas. In certain respects he was probably correct, but in the same sense that certain of the other societies were linked, the linkage of the Katchina Society to the Shrutzĭ Society justified the term.

Formerly, all adult males joined the Katchina Society. Every four years, initiations were held, as noted in CHAPTER VII. As mentioned, the Katchina Society had become much more of a secret society than a manifestation of general adult male status. As a society, the members were initiated under the direction of the Shrutzĭ and the war captains. In 1948, the initiates included a smaller proportion of the boys than ever before, and the number was steadily declining. Belong-

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[72]Dumarest, Notes on Cochiti, pp. 198-199.

ing to the society involved only the periodic masked impersonation of katchinas as dictated by the Shrutzĭ Head and the war captains. (3, 45, 48, 49, 53)

For almost fifty years, katchina ceremonies had usually been held away from the pueblo at a spot called "White Hills," gá-ash-kōna. Performances took place just south of the saddle between these two white peaks about a mile northwest of the pueblo. Alguacilitos patrolled the horizon and kept all outsiders from viewing these masked rituals. "Outsiders" in 1948 included not only all non-Indians, but Indians from tribes that did not have katchinas, and Cochiti who belonged to the "Progressives," thereby signifying a lack of belief in these supernaturals. Occasionally during the winter, there were katchina dances in the kivas, with the dancers dressing in a nearby house and moving rapidly through the deserted streets under cover of darkness. (48, 55, 70)

Formerly, there were more katchina dances in the kivas. The majority of the dances were held in the plaza rather than in the hills. This was when the plaza was almost completely enclosed, and several houses were two-storied. By guarding the narrow entrance passages, it was relatively easy to keep the Spanish residents of Cochiti and any other unwelcome individuals from viewing the rites. Some years prior to 1948, the pueblo and plaza had become too open and too difficult to guard, and the ceremonies had consequently been shifted to the nearby hills. (53, 55, 70)

Informants believed that all katchinas known at the end of the last century could be correctly impersonated today, both in costume

and in behavior. They admitted that many katchinas had not been seen for almost that long, but they hastened to point out that it was difficult to declare certain katchinas extinct since they had never been characterized regularly. (3, 15, 48, 49, 70)

A list of katchinas was compiled with the help of informants. (See APPENDIX XXVI.) In parentheses after each is the corresponding name recorded by Goldfrank, whose brief descriptions of costumes were confirmed by my informants. The fact that this roster added nothing to that compiled by Goldfrank[73] and actually omitted five katchinas listed by her indicated the Katchina Society was declining. This was also evident in informants' statements concerning the longer intervals between katchina ceremonies. With many ceremonies on an irregular schedule, it seemed increasingly easy to allow performances to slip by unobserved. However, as mentioned, both as a matter of tribal pride and as an actual fact, there could be no denying the validity of the Cochiti view that katchinas could not be properly designated as extinct simply because the particular impersonation had not been made in recent years.

Kō´sharĭ Society. The Kō´sharĭ Society was one of the more widely known Pueblo Indian societies. At Cochiti it was especially famous due to Bandelier's book, The Delight Makers, which was a synonym for the society members. Of major concern to the Kō´sharĭ were weather control, fertility of the animal and plant worlds, and, related to these two functions, the supervision and direction of many cere-

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[73] Goldfrank, Social and Ceremonial Organization, pp. 111-113.

monies. (55) Dumarest said,

> The koshare are chaiani at a certain age. In their cures they do not suck. Their only method is 'the brushing way.' The invalid is the only witness of the ceremony; nobody is admitted. The invalid becomes an entremesero [clown].[74]

It may be that the obligation of joining the society following a cure, a feature unassociated with the medicine societies, had caused people to cease having the Kō´sharī affect cures. At any rate, my informants claimed that as of 1948 neither the Kō´sharī nor Kwi´rēna performed cures. (3, 15, 45, 55, 70) White believed these two societies did not cure at Santo Domingo, San Felipe, or Zia.[75]

At Cochiti much ceremonial control was exercised on an annual alternation basis with the Kwi´rēna Society. In certain cases the rotation was one of direct supervision, with the other group playing a minor role of assistance. In other matters, this rotation was an exclusive function of either society as they alternated in their turns. (55)

As mentioned, members of both societies were referred to as "roasted," or "cooked," in contrast to Shrutzī members and all non-society members who were "raw." (15, 70)

The society head, or nawaiya, assigned duties to other members on such occasions as the annual Feast Day Corn Dance. Certain members were selected as side dancers while others were placed in the choruses or in other roles. (55)

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[74]Dumarest, Notes on Cochiti, p. 191.

[75]White, Santo Domingo, p. 54.

Every few years the Kō´sharĭ held a public dance. This was usually associated with initiation rites held at irregular intervals. In this ceremony the Kō´sharĭ were painted according to their grades within the society. Some had black and white stripes; some, black circles; others, yellow and blue. (55) The significance of such grades within the Kō´sharĭ Society was not determined; the very existence of such grading in this society was new information.

Membership in the Kō´sharĭ was open to both sexes. Males were the principal participants, however, with the women acting more as food preparers and cooks during retreats and other functions of the male membership. In 1948, there were eight males and five females who were active members and all-time rosters included twenty-five males and twenty-one females. (See APPENDIX XXVII.)

In her clan discussion, Goldfrank noted, "There is no direct relation between clan and society membership, but there is a tendency for members of a family to affiliate with the same society."[76] This was well substantiated by the Kō´sharĭ roster as well as by those for other societies. In cases where society affiliations differed within a family, as between man and wife, it was frequently a result of later, i. e., second or third marriages.

The Kō´sharĭ shared a house with the Flint Society. It was located near the southeast corner of the plaza, and when the Kō´sharĭ were "busy" in the house, it could be entered only by those Flint who were also Kō´sharĭ. (70)

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[76] Goldfrank, Social and Ceremonial Organization, p. 10.

Goldfrank referred to the Kō´sharī as a "managing society" for the Turquoise Kiva.[77] Lorenzo Cordero, Kō´sharī, was Head of the Turquoise Kiva, and as such was called "Toad," (Pa´-lak). As Kiva Head he designated who was to sing in the chorus, who was to dance, and who was to be excused from participation. While there were older Kō´sharī members than Lorenzo, they were all members of the Pumpkin Kiva with the exceptions of Isidro Cordero, the oldest man in the pueblo and too feeble to take the responsibility, and Juanito Trujillo and Marcelo Quintana, both Flint medicine men and hence ineligible. (3, 16, 53) Thus the relationship of the Kō´sharī to the Turquoise Kiva was maintained as it should have been. In this matter, it was interesting to note that several Kō´sharī were Pumpkin Kiva members, a situation that was unexpected but which appeared to have been true for many years. The Head, together with the war captains, was responsible for upkeep of the kiva structure and for proper execution of the moiety ceremonials.

At Santo Domingo, White found the use of "Crusti Koshairi" and "Crusti Quiraina." These were non-members who were selected to impersonate real Kō´sharī and Kwi´rēna during such ceremonies as the August 4 Feast Day Dance.[78] Informants claimed that this practice was not followed at Cochiti. Only true members of either society functioned as such. While unwilling to predict, they did admit that such a move might develop at Cochiti if the membership of either society should

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[77] Goldfrank, Social and Ceremonial Organization, pp. 37, 42-43.

[78] White, Santo Domingo, pp. 53-54.

decrease noticeably.

Kwi´rēna Society. The Kwi´rēna Society was the counterpart of the Kō´sharī in its relationship to the Pumpkin Kiva. The Pumpkin Head, with the same duties in relation to that kiva, was called "Pumpkin Father," or Dañī nawaiya. In 1948, the head was Juan Estevan Chalan, a member of the Kwi´rēna, which was proper. However, during his regular absences from the pueblo each winter to work in California, the kiva had been left in charge of Lorenzo Herrera, a Kō´sharī. This practice was objected to by many Pumpkin Kiva members who felt that a Kō´sharī should not exercise this authority. In recent years Juan had not gone to California, and the matter was dropped. Here again, instead of the Kwi´rēna Society being composed of personnel from the Pumpkin Kiva, all but Juan were from the Turquoise Kiva, a point which could cause conflict when a new Pumpkin Kiva Head had to be named.[79] In 1948, the Kwi´rēna Society Head was Vicente Romero of the Turquoise Kiva. He was also Headman at the time of Goldfrank's stay at Cochiti. (3, 15, 55, 70)

While the Kwi´rēna Society was the "equal" of the Kō´sharī and commonly shared duties of ceremonial management with that group, there

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[79] Word was received by the writer that Juan Estevan Chalan had died August 11, 1949. On a visit to Cochiti in the summer of 1950, it was learned that Pablo Trujillo, a Kwi´rēna member, had assumed the Headship of the Pumpkin Kiva. To do this, Pablo had transferred from the Turquoise Kiva to the Pumpkin. It was interesting to note that in his earlier years Pablo had at one time belonged to the Pumpkin Kiva. While the real reasons for Pablo's selection were not learned, the episode provided a valuable example of the constant adjustments necessary to keep the pueblo ceremonial structure in balance.

were fundamental differences. The Kō´sharī were normally considered a clown society, often referred to as Entremeceros. While the Kwi´rēna Society was referred to in the literature as a "clown society," this aspect of official behavior was consistently denied for the Kwi´rēna by all informants. Again, the Kwi´rēna did not paint their bodies in any way nor did they wear unusual costumes such as the Kō´sharī. "Kwi´rēna always wear their nicest clothes when they dance or do other work." (55, 70) Their distinguishing mark was a tuft of sparrow-hawk feathers tied in their hair. The sparrow-hawk was closely associated with the Kwi´rēna although no details of this relationship could be learned. (55) White noted the same distinctive feature for other Keresan Kwi´rēna.[80]

As mentioned, the Kwi´rēna was associated with the ShĪ´kame Society just as the Kō´sharī was linked with the Flint Society. The Kwi´rēna and ShĪ´kame Societies shared a house on the eastern side of the plaza. Again, when one society was working, only those members of the other society who belonged to the functioning society could enter the house. Like the Kō´sharī, the Kwi´rēna Society was not concerned with curing or witchcraft, but concentrated upon weather control, fertility, and supervision of ceremonies directed at the first two goals. (48, 55, 70)

The Kwi´rēns had both male and female members; in 1948, there were eight males and seven females active in this society. All-time rosters of the men and women members included twenty-one males and

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[80]White, Santa Ana, p. 130.

fifteen females. (See APPENDIX XXVIII.)

Pumpkin Kiva. The Pumpkin Kiva has already been discussed as a unit of social organization based on free association and as a ceremonial unit under the direction of the Kwi'rēna Society. Certain ceremonial features remain to be elaborated. Curtis referred to the Pumpkin (and Turquoise) Kiva as a "religio-social party." He said that the Pumpkins met in the "West-inside Kiva," P̣ona-ni-chit-ya. "The kivas play no part in masked dances, but in other dances either one kiva party has charge or both divisions participate as such."[81] Goldfrank, in locating the two kivas at Cochiti, reversed them.[82]

Since the time of Curtis' field studies, the Pumpkin Kiva people had built a community house in addition to their kiva. Through the year, this house was used much more than the kiva itself. In years prior to the community house, private homes with large rooms were used rather than the kiva. Size did not seem to be of particular significance in this failure to use the kiva, and more complete data are needed here.

In addition to the Pumpkin "Father," Juan Estevan Chalan, there was also the position of "mayorli" in the kiva organization. This was derived from the Spanish mayor; Lorenzo Herrera had served in this capacity for many years. In native terms, this position was called gyá-ya-ju-nī which meant "in the middle," referring to this man's

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[81] Curtis, The American Indian, Volume XVI, p. 86.

[82] Goldfrank, Social and Ceremonial Organization, p. 47.

place in the center of the chorus that sang for dances. He was the song leader, supervising words, melodies, dancers' movements, and similar details. In this, he worked in close cooperation with the kiva head who decided on the duties of kiva members. Around the mayorli were grouped the principal assistants who, in 1948, were Juan Jose Suina, Fernando Cordero, Clofe Arquero, and Salvador Arquero.

Chorus members were usually men who were also members of the Council of Principales. Thus, it was generally considered a greater honor to be in the chorus than in the dance line. Exceptions were made, however, in cases of men who had ability in singing, in remembering words and melodies, or in composing songs. (20, 44)

For dances, the Cochiti used Hopi, Navaho, Zuñi, Santo Domingo, and other tribal songs. When this was done, such a song was used for a complete "round," or phase, of the dance and not just as intermittent lines or words. In many songs, the singing was mere humming, or intoning meaningless "words." For example, the Buffalo Dance songs were almost entirely melody with no true words. In special dance songs, melodies were never changed but the words were rearranged each year. In certain dances, neither the melodies nor the words could be changed. Any kiva member could contribute new words or melodies, although most came from the mayorli or his principal helpers. (3, 20)

To obtain new songs, a person went to another pueblo or tribe and memorized songs that he heard there. This was not considered stealing, and the song was equally as valuable as one which was consciously taught by another tribe or composed by the Cochiti themselves. No payment, as such, was involved in teaching songs to another

tribe; "any tribe is happy to teach another and is pleased to hear their songs sung at another village."[83] (44) However, when a song was specifically taught to a person upon request, it was customary to give a present to the teacher. This was voluntary, and it was not done in the sense of a formal business agreement according to informants. (3, 70)

When a person desired a certain part in a dance that had only a few performers, he could request it of the kiva head. He was tested for the desired part unless there was no question of his ability or lack of it. The principal men of the kiva decided who was to perform. Almost all ceremonies were preceded by four nights of practice in the community house of the particular participants. Dancers were taught and rehearsed their roles while the chorus and drummers practiced the songs. (20, 45)

Sometimes a kiva leader asked a person, possibly a relative, if he desired to perform a certain role and urged his participation in many cases. Sometimes the person asked would comply; other times he would reject the proposal on grounds that the steps were too difficult to learn or that he was a poor dancer or some similar excuse. (20, 38, 45)

After a dance was over, the performers changed clothing and returned home. Then the people brought presents of food, jewelry, and other items, thanked them for their performance and congratulated them. (34)

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[83]Curtis obtained data from Santo Domingo which did not agree with this general exoteric attitude regarding the exchanges of songs.

Among the important positions in kiva ceremonial organization were the drummers. Each kiva supposedly had four. The Pumpkin Kiva had had only three, Juan Estevan Chalan, Epifanio Pecos, and Pasqual Suina, until the winter of 1947 when Pasqual died, leaving only two drummers. A fourth drummer had been Lorenzo Herrera, but he had given up these duties since becoming mayorli.

Drummers assumed that role as a result of a vow, and they normally continued as drummers for the remainder of their lives. (83) Men who carried the banner, or pole, in the Tablita Dances were not as rigidly assigned; carriers were named each year by the kiva head. While this was an honor, it had less prestige than the role of drummer. (15, 53)

Most drummers kept their drums at home, covered with a cloth and suspended from the vegas. Some drums were kept at homes of non-drummers. The reason for this was not learned although it may have been that deceased members of these families had been drummers. Drums used for practice were not used in ceremonies. (49, 70)

Informants claimed to know nothing of a practice attributed to Santo Domingo by Curtis. This was the suspension of a small block of wood within a drum. This was attached in such a way that it rested against one drum-head but not the other, thereby giving a difference in tone to the two heads.[84] At Cochiti, the drum-heads had different tones, one higher than the other, but this was achieved by using different thicknesses of hide on the two heads. (45, 62, 70)

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[84]Curtis, The American Indian, Volume XVI, p. 169.

Drummers prayed for power and success at a spot near White Rock Canyon, north of Cochiti, "where the current and rapids sound like drums." (83)

Turquoise Kiva. Data presented for the Pumpkin Kiva applied generally to the Turquoise Kiva. A few differences merit discussion. First, the kiva head, as mentioned, was not called Turquoise Father as one would have expected from the Pumpkin data, but "Toad" (Pa'-lak). Reasons for this could not be learned; "that's just the way it is, that's all." For the Turquoise Kiva the Head was Lorenzo Cordero, a Kō'sharT member. The mayorli was Luis Ortiz whose principal helpers were Diego Arquero, Epitacio Arquero, and Santiago Cordero. Due to Luis' poor health in recent years, his duties had been taken over to some extent by Santiago Cordero.

Another point was that in all ceremonies in which the two kivas participated, the Turquoise side was the first to appear. This was true of Tablita Dances, various hunting dances, and all other ceremonies with no known exceptions. Reasons for this precedence were again summarized by "That's the way it has always been." (3, 45, 49)

As indicated in the discussion of social organization, the Turquoise Kiva was considerably larger than the Pumpkin so far as active personnel was concerned. While the Pumpkin people were actually more numerous, many had become "Progressives" and did not participate in the ceremonial aspects of the kiva organization.

An interesting development had taken place, partially as a result of this numerical inequality. This was the desire of certain

individuals to "help the other side," usually in a Tablita Dance, especially that of July 14. This could be done by either group although it was generally the Turquoise people who "went over" to the Pumpkin side to dance or sing in the chorus. Permission of the war captains and kiva heads had to be obtained, but this was seldom, if ever, refused. Following the specific ceremony, the people reverted to their own kivas. (13, 18, 45, 70)

Drummers for the Turquoise Kiva in 1948 were Epitacio Arquero, Geronimo Quintana, Pablo Trujillo,[85] and Eleuterio Suina.

Selected Ceremonies

Ceremonial aspects have frequently been cited as among the more stable features of pueblo culture. Despite this, comparisons of published data with my field-notes indicated numerous changes within the last half century. The statement of Parsons, quoted earlier in this chapter, to the effect that in the Pueblo Indian's mind there were no distinctions made between native and adopted European and other rituals, was only partially substantiated. While ceremonies, or portions of ceremonies, known to have been adopted from alien cultures were often considered very sacred, shades of distinction remained between them and traditional Cochiti ceremonial elements. Regardless of origin, most of the ceremonial complex at Cochiti retained aboriginal emphases on rain and fertility. Rites of the secret societies were closely guarded tribal secrets, kept from the non-believing Cochiti as

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[85] With the move of Pablo to the Pumpkin Kiva to become Pumpkin Father (See page 309.) each kiva again had three drummers.

well as from outsiders. In the series of Christmas dances, as mentioned, native hunting and other dances could not be photographed but certain dances recently imported from Hopi, Laguna, and elsewhere, could be.

The task of recognizing and evaluating actual changes in Cochiti ceremonial organization was surrounded by difficulties. The greatest difficulty stemmed from the esoteric nature of this phase of culture; additional handicaps arose from past secrecy resulting in a paucity of published details. The fact that virtually every conversation on religion, aside from simple declaratory statements of observed overt behavior and exoteric paraphernalia, was met with evasion, claims of ignorance, and similar responses indicated that there were esoteric aspects of ceremonialism still in existence in appreciable amounts. Close observation revealed that existing societies were meeting regularly in 1948. Also, it must be remembered that actual, or alleged, ignorance of these ceremonial matters on the part of several informants did not warrant the conclusion that such matters were no longer a part of the culture. To further complicate matters, the irregularity in the appearances and occurrences of figures and rituals in the ceremonial calendar made it difficult to pronounce many aspects irrevocably defunct.

While the above statements support the concepts of cultural continuity and the Pueblo ability to perpetuate ceremonial practices, it was equally true that Cochiti ceremonial organization had changed. Evidence, while incomplete, indicated an increased rate of change; new elements had replaced the old, or where the old continued, they were

more like a hollow shell of overt ritual and no longer essential to the well-being of the pueblo. While never large, the societies were weakened by the death of each older member. Younger members were increasingly fewer and appeared less capable of continuing the activities of their group. Also, a constantly diminishing proportion of the pueblo was interested in whether or not the societies functioned properly. Much of this disinterest could be attributed to such developments as non-agricultural economic activities, such as silver-working; wage-earning; health programs of the Indian Service; teachings of the Catholic Church; and the Middle Rio Grande Conservancy District's improvements; all had contributed to the freeing of the Cochiti from reliance on the societies' efforts relating to weather control, curing, and fertility.

Informants expressed the opinion on several occasions that the secret society members did not know as much as their predecessors. Such attitudes were true, to some extent. Also to be remembered was the fact that adult informants were evaluating this alleged decadence with mature judgments rather than with their youthful impressions.

Acknowledging the difficulty of evaluating ceremonial changes and the lack of success in recording esoteric ceremonial details, it was still apparent that changes had occurred, were occurring, and in the future would occur with compounded intensity. With each death of an individual society member, a continually diminishing portion of the core of this native religion remained. Much that did exist, did so only as an outer shell, appealing to a continually shrinking portion of the pueblo. Barring some unforeseen event, the decline appeared

certain to continue. The final disappearance, however, of this ceremonialism was, on the other hand, nowhere in sight. The merger of native ceremonialism with Catholicism served to perpetuate at least some features of it. If for no other reason than a tribal pride in folklore and tradition, rather than religion, the continuation of these rites, or portions of them, could be anticipated for many years in the future.

To illustrate changes in specific phases of ceremonial life, certain components have been selected for discussion here. These include: agricultural ceremonialism, and three ceremonies typifying the blending of the native and introduced, i. e., Catholic, religions: the Spring Dance, the Tablita Dance, and the celebration of Santiago's Day.

Agricultural Ceremonialism. Numerous references have been made in the literature stressing the close interrelationships between pueblo agriculture and religion. This association was commented upon by Forde in reference to the Hopi.

> In the more elaborate ceremonies several motives are inextricably interwoven, but the needs of agriculture and the hazards of the environment feature prominently in many of them. There are rites for every stage in cultivation; ceremonial activities throughout the year have nearly always some reference to agricultural prosperity, while corn is used symbolically at every turn.[86]

Forde's remarks were generally applicable to Cochiti in past

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[86] Forde, C. Daryll, Habitat, Economy, and Society, New York, 1937, p. 243.

times but were less pertinent as of 1948. To the extent that the secret societies had maintained their former practices, the concern of these groups had continued to be with agricultural matters, i. e., weather control and fertility. However, as mentioned, there was little doubt that the societies' functioning was of less vital concern to more Cochiti than ever before. Accompanying this disinterest were the less frequent activities of the societies and their gradual simplification. To the "Conservatives," it was undoubtedly of considerable concern whether or not the societies were functioning properly; to the increasing number of "Progressives" it made little difference. However, phases of both community and personal rituals were still practiced.

A few days before the spring ditch cleaning began, members of the three medicine societies, Flint, Giant, and Shĭ'kame, united in a purification, or blessing, ceremony at the heads of the two Cochiti ditches. In this ritual they were alone, carefully guarded at a distance by the war captains and alguacilitos, so non-society members were ignorant of these details. Informants were unable to state whether the governor and officers picked the day for ditch cleaning according to a ritual schedule of the societies or if the societies operated flexibly after the day had been set by the secular officers. (44, 45, 53, 70)

Goldfrank was told that sometime before the filling of the ditches, in February or March, the Flint shamans placed a bunch of feathers on each side of the head of the ditch, sprinkling corn meal four times, and praying for successful crops. The Giant shamans

placed theirs in the middle section of the ditches; the Cikame (Shī'-kame) placed theirs at the lower ends. The feathers were washed away when the water entered. A set of four featherstcks was also placed in the middle of the ditches although it was not specified by whom. The discrepancies with Goldfrank's notes[87] may have resulted from the better knowledge of her informants. On the other hand, they may well have illustrated the simplification of agricultural rituals in the intervening quarter-century.

Even at Goldfrank's time of inquiry there were no prayersticks or meal used in dedicating the fields, either at planting or at any other point in the agricultural season. However, she did state that women carried corn seed to the cacique prior to planting. He sprinkled medicine water on it, and later the women sprinkled corn meal upon the seed. As mentioned, planting was begun on the edge of the field, and the planter worked in a diminishing spiral, finishing at the center. In storing corn, four ears were not husked. One was placed in each corner of the stack; collectively, the four ears were called "the mothers." The remainder of the corn was husked and stacked on top of these four. In entering the room in which the corn was stored, it was necessary for one to remove his shoes. Also, yucca roots were never stored near corn or wheat, as it was believed that the grain would disappear as rapidly as the foam of the yucca.[88]

By 1948, changes, all emphasizing the loss of agricultural cere-

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[87] Goldfrank, Social and Ceremonial Organization, pp. 91-92.

[88] Ibid., pp. 92-94.

monialism, were apparent. Corn was planted in rows without prepared mounds, and throughout the pueblo less blue corn, the type most closely associated with ritual, was being grown. Corn was frequently stored in bins in sheds without using "mothers" and ignoring the proximity of yucca roots. Some older people still removed their shoes upon entering a storeroom, but almost no one observed this when entering a shed. (15, 27, 52, 53, 70)

Spring Dance. The Spring Dance, ō-wē, was held each year late in February, or early in March, when the irrigation ditches were opened for use. It was performed to assure good crops in the coming growing season and was held in the two kivas. (3, 53)

Both men and women danced. Members of each kiva danced in their own kiva and later danced in the other. Costumes were very simple; "everyone wears his nicest clothing." For men, this was European clothing with the inevitable headband. For women, it was the traditional pueblo woman's manta, buckskin leggings, and woven sashes. Goldfrank described eagle feathers in the men's headbands,[89] but by 1948 this practice had been discontinued in most cases. (70)

For this dance, the entire pueblo assembled in their respective kivas. For many years Spanish-Americans, Anglos, and non-Cochiti Indians were permitted in the kivas. In the spring of 1947, this practice was stopped by several older Pumpkin Kiva members, acting on the grounds that the pueblo was increasing in population and the outsiders

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[89] Goldfrank, Social and Ceremonial Organization, p. 107.

made it too crowded in the kivas. In the case of the Pumpkin Kiva, the ban was extended to include the Cochiti "Progressives," the great majority of whom formerly belonged to the Pumpkin side. Ironically, these Pumpkin "Progressives" were still admitted, in fact, were invited to the ceremonies in the Turquoise Kiva. (20, 44, 45, 52, 53, 55, 70)

Goldfrank stated that the Spring Dance was followed by a feast, and after four days the dance was repeated.[90] Informants claimed to know nothing of this repetition, then or at any time in the past. Goldfrank credited Parsons with the claim that the Spring Dance at Cochiti had been borrowed from Jemez where it was known as "su´we´e" dance.[91] White described an essentially identical ceremony, "ao-wɛ," or "o-wɛ," at Santa Ana.[92] He did not mention the ceremony in his Santo Domingo report.

Tablita Dance. While the term "Corn Dance" was commonly applied to this ceremony, it was actually a misnomer. Informants claimed that "Tablita Dance" was a better term for it, the name being derived from the thin wooden head-boards worn by the women. That these tablitas had special significance was indicated in a statement of one informant made in 1948. When asked if he and his wife would like their pictures taken in their dance paraphernalia, he replied that he would be happy to do it but that the officers did not want the women to have

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[90] Goldfrank, Social and Ceremonial Organization, p. 107.

[91] Ibid.

[92] White, Santa Ana, p. 243.

pictures taken while wearing tablitas. (3) In 1947, pictures had been taken of both men and women with no hesitation at the time, but apparently there had been repercussions.

Poore described a Tablita Dance as of 1890. While probably based upon the Santo Domingo ceremony, the description was generally applicable to Cochiti.

> The tablita or corn dance has for its purpose supplication for rain. Most of the choruses chanted by the attendant musicians are invocations to the clouds. The tablet worn by the women upon their heads is figured with the scalloped lines of cumulus clouds, and on either side and between them a bolt of lightning. In common with many of the old Indian rites among the Pueblos, this also has been utilized by the Catholic church and made to serve for the support of a church ritual. Early in the day mass is said in the church and a sermon preached. The body of the congregation at these services is usually composed of visiting Mexicans, the Indians maintaining an indifferent and fluctuating attendance. Throughout the village meanwhile active preparations are in progress for the dance. Feasting and bartering are at their height. Every door is open and food spread, and a welcome ready for any comer. The religious services being ended, unrestrained freedom is proclaimed by the irregular discharge of a dozen muzzle-loading army rifles, and immediately after the statue of the patron saint, a relic of early Spanish art, is hurried at quickstep, to the notes of a violin, from the temporary booth, which in Santo Domingo, serves in place of the church, to a shrine formed of green boughs and lined with blankets set up in the plaza. Here it is deposited amid another volley from the muzzle loaders, and the assembly disperses.[93]

Another description, also as of about 1890, was in an account by Lummis.[94] Again the participation of the Spanish, or Mexican, people in the Catholic aspects of the Feast Day celebration was emphasized. The gathering of Indians from all nearby pueblos and some from the

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[93] Poore, Sixteen New Mexico Indian Pueblos, p. 437.

[94] Lummis, Land of Poco Tiempo, pp. 257-270.

more distant ones was also mentioned. Lummis stated that the first dance of the day was held in front of the church in honor of the priest who was a spectator. A chorus of a dozen men and a single drummer accompanied the dancers. At the head of two columns of alternating male and female dancers was a man carrying a long pole and attached banner, "the holy Flag of the Sun." "The banner is a priceless bit of work in beaded buckskin, bearing, with its pole, the general shape of a giant feather, and fringed and tufted at sides and top with eagle feathers."[95]

Lummis described the costumes in considerable detail, and he noted the arrangement of the dancers in "a long row by pairs - first two women and then two men - . . ." He also noted that the women danced barefooted while the men wore moccasins. Along the rows of dancers he noted three Kō´sharī men "who were the most important characters of the day." In the second group of dancers (the other moiety), he noted the tablita tops being arched rather than serrated, commenting that this was the only distinctive feature between the two groups. Also mentioned in Lummis' account was a pool of water in the plaza where Kō´sharī members engaged in lengthy antics to amuse the crowd.

Lummis stated that a cedar booth was in the plaza, giving shelter to "the gracious lady of the day, San Buena Ventura, in paint and plaster." Two Mexicans "with a tub of alleged lemonade, and a Santo Domingo Indian with a big box of apricots the size and flavor of a musty dried prune" were also noted. He further observed that little

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[95]Lummis, Land of Poco Tiempo, p. 260.

business was done by these vendors except with the visiting Spaniards.[96]

> . . . For two hours a furious sand-storm has been sweeping down the valley, nearly blinding everybody but the performers. The dance would be kept up till sunset, but at three o'clock it begins to rain emphatically, and though eyes are no object, all that feast-day finery is, and the dance ends in short order.[97]

As supplementary activities to the principal event, the Tablita Dance, Lummis observed a gallo, or rooster pull, engaged in by the Spanish visitors. Simultaneously, some Indians engaged in a struggle along the river banks where they were in pursuit of a greased pig, with which one man finally succeeded in escaping to his home. In conclusion, Lummis commented on the Spanish people moving across the Rio Grande to Peña Blanca where a baile was held that night under the stars.[98]

These notes contained several variations from the celebration of recent Feast Days of San Buenaventura. First, Lummis' error in referring to the Patron Saint as a "gracious lady" should be corrected. San Buenaventura was male and was considered a famous doctor in addition to his religious activities. The church at Cochiti had honored San Buenaventura as its patron since at least 1667 and probably earlier.[99] In 1794, there was a reference to the Cochiti church as

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[96]Lummis, Land of Poco Tiempo, pp. 260-266.

[97]Ibid., p. 269.

[98]Ibid., pp. 269-270.

[99]Scholes, New Mexican Missions, pp. 54-55.

"Nuestro Señor Doctor San Buenaventura de Cochiti."[100]

In his arrangement of personnel in the dance lines, Lummis differed from current practices of placing a man at the head of each line. This lead man was the head of the dancers in his line, in instances such as the Tablita Dance where the line was composed of both sexes. In cases of all male dancers, the lead dancer was placed in the middle of the line. (44, 49, 70) This was probably another error in the account by Lummis, since informants claimed dance lines had been headed by men for as long as they could remember.

The fact that women should dance barefooted was still recognized by the Cochiti, but the practice had not been followed due to the recent growth of sand-burrs in the area in front of the churchyard where the first portion of the dance was held. In 1947, the first two women in the Turquoise dance lines, Juanita Trujillo and Agrapina Quintana, began dancing barefooted, but after a few moments they were forced to drop out until someone brought moccasins from their homes. In later rounds of the dance in the plaza, a few women took off their moccasins, but the great majority left them on throughout the day. In 1948, there was no attempt made to dance barefooted.

Lummis' statement that the Kō´sharī were the most important persons of the day was questionable. Every other year at Cochiti, the Kō´sharī, as an organization, took no part in the Feast Day celebration, alternating these functions with the Kwi´rēna Society. Generally speaking, it would seem a mistake to designate any person, or group,

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[100]Biblioteca Nacional, Legajo X, Document 82.

as the most important participants in this ceremony. "Everyone has something to do." (15, 44, 49)

Using the remarks of White in his study of Santa Ana Pueblo, an attempt was made to learn more about the pole and banner that were used in the Tablita Dance. As White pointed out, in spite of the prominence of this bit of paraphernalia in the Eastern Pueblos, extremely little was known about it.[101] Efforts to obtain data on this at Cochiti emphasized White's evaluation. From the reluctance to discuss the subject, it may be inferred that this was a very sacred object. It appeared to share the honors of the day with the Patron Saint, and, in the Indians' minds, undoubtedly surpassed the Patron Saint in importance.

At Santa Ana, White was given the name "kastotcoma" for this decorated pole.[102] At Cochiti, several names were obtained for it. One informant replied, when asked, "Oh, that's a hard name," referring to pronunciation. After a brief pause, he said, "Pan^{yo}" (a version of Spanish bandero, banner, perhaps).[103] (50) A more common term given by several informants was "ka-arsh-tĪ-truma." (44, 45, 48, 52, 53) Still another term applied to the decorated pole was "Pai-yat-yama." (44, 70)

The use of this term "Pai-yat-yama" for the decorated pole was

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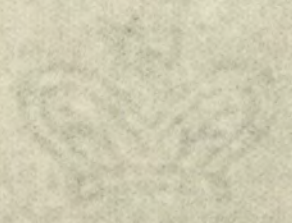
[101] White, Santa Ana, pp. 343-345.

[102] Ibid.

[103] In the Spanish, an even closer connection might be found in the word baño, meaning bath. With frequent references in Spanish journals to the kivas as estufas, and the associated sweatbaths, it is possible that some derivation of this meaning was applied to the pole which belonged to each kiva.



interesting in light of other usages of the term. "Pai-yat-yama" was also used in reference to dance drums of the pueblo. It was never used for the small, tourist type of drum. (55) This use was denied by several informants, but in such a manner that the negation could be interpreted as an attempt not to divulge this information. Curtis listed several personal names for Santo Domingo drums, with the first listed being "Paiyatyama."[104] My informants consistently denied that drums had specific personal names at Cochiti. The term was used by Benedict as the name of a youthful, mythological culture hero of the Cochiti, "Payatamu."[105] Informants said that some boys were given this as a personal name. It meant youth, or master, i. e., young gentleman. (44, 45, 48, 55, 53) At other pueblos, such as Zuñi, "Paiyatyama" was a legendary culture hero, always a youthful representation when appearing as a katchina.[106]

While Cochiti informants claimed the poles used by each kiva, and in other pueblos, had always been decorated as they were in 1948, Bourke illustrated a pole from Santo Domingo with the sash wrapped around the pole as a kilt,[107] rather than extended at full length along the pole as all forms were in 1948. If this kilt arrangement was formerly true at Cochiti also, the assembled pole would be that

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[104] Curtis, The American Indian, Volume XVI, p. 168.

[105] Benedict, Tales of the Cochiti, pp. 71, 86.

[106] Bunzel, Ruth L., Zuñi Katcinas, 47th Annual Report, Bureau of American Ethnology, Washington, 1932, p. 1016, Plate 37b.

[107] Bourke, Snake Dance of the Moquis, Plate IV.

much closer to a representation of a person, or a katchina. The description by Lummis of this banner, "a priceless bit of work in beaded buckskin," was likewise intriguing as informants and the published data mentioned only an embroidered cotton dance sash.

Informants said the pole was assembled new each time it was used. After the ceremony, the pole was dissembled, and the parts were returned to those who had loaned them. These included the parrot and eagle feathers, the round, or ovoid, blue sphere fashioned of wood, or perhaps formerly of gourd, the foxskin, and the sash. The pole, itself, was of spruce, the tree which the people ascended in their emergence myth, and which informants insisted was the only wood resilient enough to withstand the strain of being shaken over the heads of the dancers. For the Pumpkin Kiva, Lorenzo Herrera and Nestor Herrera decorated the pole and also the tablitas. "They know how." These same functions were performed for the Turquoise Kiva by Santiago Cordero and Lorenzo Suina. (3, 15, 55, 70)

The break-up of ceremonies when the rain began, as recorded by Lummis,[108] was interesting in its contrast to current practices. In 1948, it was considered a very successful dance if rain fell during the ceremony or soon afterward. If it fell during the dancing, there was no idea of stopping, and dancers seemed to continue with renewed vigor. (15, 44, 49, 53)

Lummis' statement that the first dance of each moiety was held in front of the churchyard was still true in 1948. However, his state-

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[108] Lummis, Land of Poco Tiempo, p. 269.

ment that the first dance was in honor of the priest and was witnessed by him marked a change from the 1948 practice. Informants stated that the first round was done in front of the church as an old custom, but they did not feel it was out of respect for the priest. (48, 49, 55)

Following the Mass, there was a procession in which the priest marched. The procession escorted the image of the Patron Saint from the church to the plaza where a temporary shelter of evergreen or cottonwood boughs had been erected. After the procession, the priest usually left the pueblo. Other priests and nuns were observed later among the spectators, but the priest serving Cochiti seldom stayed. (44, 48, 53)

At Cochiti, the Kō´sharĭ and Kwi´rēna Societies alternated each year in supervising the July 14 celebration as they did in other rites. This supervision involved gathering dancers for rehearsals, directing the pueblo-wide clean-up prior to the Feast Day, and performing important ceremonial roles during the dance. The two groups never appeared the same year, each with its affiliated kiva group, as was the Santo Domingo custom. As pointed out, the society members who appeared on these occasions at Cochiti were full-fledged members and not non-members dressed to portray society members. Frequently, members of these societies from other pueblos participated in the Cochiti dances. Reciprocally, Cochiti society members participated in celebrations of other pueblos. This was also true of non-society members who danced or sang in the choruses at other pueblos. For many years, one of the Cochiti Turquoise Kiva lines had been led annually by a man from Isleta Pueblo who had vowed during an illness that if he recover-

ed, he would "dance for Cochiti every Feast Day." Such vows had been made by others, more often for shorter periods of time. This participation was with permission of the war captains and kiva heads. (44, 45, 48, 49, 52, 53, 55)

Connections at Cochiti were particularly strong between Kwi´-rēna there and Kwi´rēna of the Tewa Pueblos, especially those of Tesuque, Nambe, and San Ildefonso. One of the Tesuque Kwi´rēna members regularly appeared in the Cochiti July 14 dance. (44, 55)

In preparation for the July 14 Feast Day, the choruses began practicing about June 15. For about two weeks, they met in their respective community houses every evening and worked out words and melodies. After July 1, practices were held every other evening until the last four evenings before the Feast Day. In these last four practices the choruses met in their kivas with the dancers also present. At these sessions, the correct order of the dancers was irrelevant, and various movements of the lines were not rehearsed. Smaller children, especially boys who had not danced before, were given extra drill at home by their families. On the day of the dance, various dance formations and movements were shown and explained to the men before each round. "The girls don't need to know this; all they do is follow the boys." (20, 24)

In 1948, it was noted that the dancing was at a faster tempo than was customarily practiced in Rio Grande Tablita Dances. Several informants confirmed this observation, saying that the boys, i. e., young men, "wanted to step it up." They also used more intricate dance movements. This appeared to be especially characteristic of the

dancing of the Pumpkin Kiva group.[109]

In addition to July 14, the Tablita Dance was performed on three other days of the year. These were January 1 when the dance honored the new officers; Easter Sunday; and May 3, or Santa Cruz, Holy Cross, Day. On these occasions, old songs were used instead of the new ones required for July 14. Practices were held on the preceding four evenings only. A meeting of the two kiva heads and the war captains was held, and the number of songs to be sung by each side was agreed upon. It was supposed to be eight, but this was no longer true. The two kivas sang the same number of songs; in 1947, for example, each kiva sang seven songs for Feast Day. (Each dance round was accompanied by one song.) Formerly, each side sang four songs, and after an intermission they sang four more. By 1948, each side danced only twice or perhaps four times for the Tablita Dances other than the one on Feast Day. (3, 15, 44, 48, 49, 70)

The kiva structures were used only for the July 14 Tablita Dance. The decorated pole was used only on July 14 and January 1. The Kō´sharĭ or Kwi´rēna acted as side dancers only on July 14; on January 1 and Easter, members of the choruses urged their respective dancers along and made any necessary repairs in the dance paraphernalia. On May 3, the side dancers were the six fiscalitos who were called the "River Men," or "Avuelos," or "Grandfathers." (20, 21, 45, 70)

In any Tablita Dance, aiya-shtiō-kutz, there were three major

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[109]This increase in tempo and in line movement was also noted by Dr. Fred Eggan who compared the Cochiti dancing in 1948 as being more like that of the Hopi villages than like the other eastern pueblos.

divisions. The first was the beginning phase in which the two lines entered with the two leaders side by side and behind the pole carrier. This was termed "hawē-na-ai-ya." The next phase was when the two lines faced each other with the leader of one line opposite the tail of the other line. This was "aiya-shtiō-kutz." The third phase was the breaking up of the two lines into several segments that joined with segments of the other line in forming circles and other formations as they wove back and forth between the original lines, moving at a somewhat faster tempo. This was "yō-raⁿī." (48, 70)

A final difference in the Feast Day as described by Lummis was the complete absence of a gallo, a pig chase, or any other such diversion. The concessions had greatly expanded with an occasional "Spanish Dance," or baile, included, especially if the July 14 dance fell on a week end. However, this dance was never held simultaneously with the Tablita Dance. It was limited to the evening before and the evening of Feast Day, and it was patronized primarily by the Spanish-Americans. Some younger Cochiti, particularly the boys, attended, but more often than not, they were voluntary spectators. (44, 45, 53, 58)

Much remains to be known about the Tablita Dance in the entire Rio Grande Pueblo area. As at Cochiti, it is held almost entirely in association with Catholic Feast Days, both major and minor, so far as specific pueblos are concerned. While it was a public ceremony, in contrast to the Rio Grande katchina rites, there were elements of the Tablita Dance, the pole and probably the tablitas, themselves, which were considered very sacred. The accuracy of Poore's statements that the ceremony was an ancient native rite which the church had taken

over for its own designs is difficult to evaluate. The fact that the celebration represents a merger of native and Catholic rites cannot be disputed.

Santiago's Day. Santiago's Day was celebrated at Cochiti on July 25, in combination with Santa Ana's Day. This latter day was formerly celebrated on the proper day, July 26, but with fewer Anas in the pueblo and with the major Feast Day of Santa Ana Pueblo on July 26, the two celebrations had been merged at Cochiti.

In many respects the celebration of Santiago's Day duplicated those of other saint's days. On the evening preceding Santiago's Day, there were bonfires in front of the celebrants' homes. Fireworks, rockets, firecrackers, and guns were fired. Following Mass and feasts at homes of the Santiagos, Diegos, and Anas, gallo was played, foot-races were held, and presents were thrown from the roofs of the principal celebrants.

Most important of all these elements of the Cochiti celebration was the characterization of Santiago, or the "Little Horse." This masked impersonation was absent in 1947 and 1946, possibly 1945. It was done in 1948. The failure to appear was explained as due to the people not asking for him soon enough in the particular year. The "Little Horse" consisted of a dummy horse body worn by a man, "Santiago," who appeared as the rider. The horse's head was very small, about equal to that of a fox terrier, and at Cochiti was always white. Behind Santiago was the rump of the horse, complete with a white tail. From the body of the horse a white sheet and gaily colored shawl hung

down to conceal the lower portion although the man's legs were much in evidence as he danced. Santiago, himself, was dressed in a black stovepipe hat and black swallowtail coat. He carried a long, thin sword in his right hand. His face, except for the eyes and forehead, was covered by a black scarf. A long braid of hair, decorated with bright ribbons, hung down his back. In 1948, this was false hair as the impersonator, Lorenzo Cordero, had short hair. On his feet were regular dance moccasins complete with skunkskin anklets. His steps mimicked the prancing of a spirited steed, and he was accompanied by the snare drum, ō-ya-pĪnutz. In 1948, the drummer was Octavio Suina, an alguacilito, but not a Kō´sharĪ member. This had always been an all-Kō´sharĪ affair, and, until senility prevented it, the drumming had been done by Isidro Cordero. Why another Kō´sharĪ had not replaced Isidro was not explained.

In addition to "Little Horse" and "Santiago," this impersonation was referred to by the Cochiti as "Our Mother." (65) Other names were "káwaiyō sán-tĪak" (48) and a very esoteric name, "Po´shai-aĦĪ." (52) This last term has been discussed earlier in this chapter as a reported degree within the Flint Society.

Informants stated that this impersonation took a long time to prepare. If the people wanted it, they had to express their wishes to the war captains about Easter. In turn, the war captains conveyed the requests to the Kō´sharĪ Society whose function it was to supervise Santiago's Day. This was never alternated with the Kwi´rēna. (20, 24, 34)

On the evening of July 24, 1948, considerable laughter and gen-

eral noise were heard in the plaza. On investigation, most of the pueblo was found to be present, ranged around the edges. In the middle of the plaza, a ramada of cottonwood boughs had been erected, and a table and benches had been placed under it. Seated at the table were the war captains, the fiscales, and the lieutenant governor (the governor was absent from the pueblo at the time). There were also the Giant Society Head and Octavio Suina, an alguacilito, who had been chosen to serve as drummer.

In addition, two Kō´sharī men were present, dressed as old men, viejos, with sheepskin wigs and beards, blackened faces, and large straw hats. One was seated under the ramada while the other stood in the middle of the plaza, reading from a blank sheet of paper.

> Dear Mr. Governor Juan Jose Suina and Governor Tenyet Jerry Quintana: I am Tony Tootsie and this is my compadre, Albert Einstein. We have traveled 5,000 miles and have eighteen miles left to go. Our feet are nothing but blisters. We have had a lot of work and a lot of trouble for you, and tomorrow the "horse" is going to come. Everyone must obey us and be nice to us. We have had a lot of work to get ready. The war captain said to me, "Tomorrow, you are in charge of the pueblo." I said, "O. K." Everyone must be nice to us. We need lots of food and a place to sleep. We are not married. If you don't like my partner, here I am. The "Little Horse" needs a place to sleep. He is just fifteen years old. I am fifteen and a half years old. Any girl who will sleep with the "Little Horse" raise your hand. (He raised his right hand, but no one else did. C. L.) If you will sleep with me, raise both hands. Be nice to us tomorrow, and everyone obey. No drunkeness allowed. Everybody have a good time tomorrow. That's all.

Then the second viejo came forward and also read from a blank sheet of paper.

> Dear Mr. Governor Juan Jose Suina and Teniente Jerry Quintana: Tomorrow is a big day. The "Little Horse" is coming. Everyone be

> good to us. We have had lots of work to bring the "Little Horse." Everyone get dressed up. All you girls put on your lipstick. Come alone -- we don't want to see your boy-friends. Everyone have a good time. No one, Mexicans, Indians, or no one else, should take pictures of the "Little Horse." He will come about 7:30 in the morning. Get up at five o'clock, everyone, and be ready. That's all.

While the above versions are accurate in general detail and theme, the actual speeches were somewhat longer. They were accompanied by constant laughter from the steadily increasing audience. That evening, there were fireworks, bonfires, and on several houses luminarios burned. Drumming was heard for the third consecutive night.

The next morning all boys and young men were busily saddling and decorating their horses. Soon after seven o'clock, the two war captains walked northwestward from the village past the Pumpkin Kiva. A large group followed them, and the horsemen trailed a short distance behind. The officers walked to the northern edge of the pueblo and sat down to wait for the "Little Horse." Soon drumming was heard in an arroyo a half mile north, and at a signal all the horsemen rode out and circled Santiago who had appeared in the company of the drummer and two viejos. At the edge of the village, the people gathered around this party, pushing coins into the hand of Santiago and pinning bright ribbons at the neck of the "Little Horse." Meanwhile, the horsemen circled and whooped. The war captains were joined by the cacique who remained close to the "Little Horse," the Kwi´rēna Head, and the Shī´kame Head. Several women next approached and sprinkled cornmeal on the horse and placed coins in the neck of the horse, apparently in some form of container concealed there. From the arroyo,

the party moved past the Pumpkin Kiva and on to Rael's store where they turned eastward toward the church. Then by a swift move, apparently through the side entrance of the church, Santiago and the viejos eluded the crowd. The church bell clanged wildly at this moment, and the people gathered around the yard but made no effort to enter. Suddenly, there was a second clanging of the bell, and the party emerged from the front of the church and was again joined by the crowd. From the church, all moved to the community corral, which the leading characters entered. These, led by the war captains, circled the corral four times, moving clockwise. The captains and others sprinkled meal (?) as they walked. Two horses were in the corral (Animals were seldom kept there any more.), and several men kept them from escaping as the party made their rounds. After this, Santiago and an attendant entered the Kō´sharī house while the other principals returned to the ramada in the plaza. The remainder of the morning was spent in feasting at various homes, and no further activities occurred in the plaza.

During the afternoon, Santiago came out of the Kō´sharī house periodically, each time making four rounds, counterclockwise, of the plaza. He was accompanied by the cacique and three viejos whose chief function was to prevent him from dashing away as he continually threatened to do. His steps varied from tiny prances to a long-gaited waltz-like step, interspersed with quick darting runs at which the viejos raised their walking sticks and shouted, "Whoa!" and "Whoa, Baby!"

As the dancers made their rounds of the plaza, people, both Indian and Spanish-Americans, came forward and placed ribbons around the neck of the "Little Horse," put coins in the container at his neck,

and sometimes placed offerings of food and other items in the hand of Santiago. These last were quickly transferred to the cacique.

In addition to the offerings, several families, all Indians, brought their young sons, ranging from several months to about five years in age, to the "horse" and put them on its back behind Santiago. The younger ones were held by their fathers while the older ones were left alone, hanging to Santiago's shoulders. Santiago darted back and forth, attempting to buck off the extra load. These attempts were met with cries of "Whoa!" and "Steady, Baby!" from the attending viejos. No one was thrown, and all but one or two of the smaller ones appeared to enjoy their experience.

On his last appearance (fourth?) in the plaza, Santiago was met by the usual group of helpers. Suddenly, the cacique took Santiago's sword, which was replaced with a rooster with which Santiago chased the three viejos and anyone else that he could reach. The oldest viejo (and oldest man in the pueblo), Isidro Cordero, was caught and was knocked flat when Santiago struck him with the rooster. He picked himself up promptly, and the fun went on. One of the alguacilitos rode his pinto into the plaza where he sparred with Santiago for a time. After a few minutes, he succeeded in taking the rooster from Santiago and galloped out of the plaza with all the other riders at his heels. In the meantime, Santiago, sword in hand again, entered the Kō´sharī house and was not seen again.

Just before the rooster pull began, the viejos, who had claimed the evening before that the war captains had transferred their authority to them for the day (as Kō´sharī), were interrupted in their banter with

some women in the crowd by the war captains. These officers told them to get on with their business, thereby asserting their ultimate control of this ceremonial, as in the case of all others.

The gallo and footraces were held south of the church, and at the conclusion of these events, the crowd gathered to go from house to house to scramble for presents from the Santiagos, Diegos, and Anas. The first house visited was the Kō'sharī-Flint house, where Kō'sharī women gathered on the roof and threw presents in honor of Santiago, himself. From there, the crowd made its way to a dozen or more houses before the day's festivities were concluded.

Informants stated that Santiago always rode a white horse at Cochiti whereas at Santo Domingo there were two horses, one black and one brown. (20, 21, 34)

In concluding this discussion of ceremonials and changes found therein, it is pertinent to indicate that there was considerable difficulty in obtaining definite data. Early and reliable recorded accounts were virtually non-existent, and from pride, many informants insisted there had been no ceremonial changes. However, several informants provided data which proved to be an almost hopeless maze of conflicting detail but which disproved the feeling of others that no changes had occurred. These data on Santiago's Day are included here to emphasize the need for rechecking information with numerous informants before reliable reconstructions of older ceremonies can be made.

Goldfrank gave a brief account of the festivities of Santiago's Day.

> . . . The Flint society to restore the equilibrium has adopted

> a horse, surely a recent innovation. The stuffed horse's head is carefully fed by the cacique, as a member of the Flint Society, and is ridden by him or a Koshari on St. James's Day, July 25. Three Koshari helpers of the cacique attend the "Horse Saint" (gawaya santiak). One of the attendants plays a drum and the populace is encouraged to throw coins. This dance is followed by a rooster pull. The rider of the horse is the first to carry the rooster. The whole get-up of the horse and rider who wears a high hat and long black coat give the ceremony a strong Mexican tang. In olden times a tree and squirrel were brought down from the mountains and placed in the plaza, but this is no longer done and my informant added, "They don't know how to do their sacred things any more."[110]

Several attempts were made to obtain an account of this former celebration. Goldfrank's version corresponded closely with the 1948 procedure except that informants claimed it was a Kō´sharĭ affair rather than Flint. (20, 44, 45, 70) Her remarks on the "olden times" indicated considerable change for which more data were sought. It seemed safe to state that "olden times" signified a time almost beyond the first-hand experience of any Cochiti living in 1948.

The only other reference to the use of fir trees and squirrels in Cochiti ceremonies was found in a description of the "Cochiti Ancient Hunting Dance" by Applegate. Excerpts from this description follow.

> . . . In January 1929 they performed one of these dramas which they call, "Ancient Hunting Dance." This is an interpretative dance that is seldom given, and it is performed by several of the different clans of the pueblo, taking place in the old plaza . . .
>
> . . . . . .
>
> . . . My father used to tell me that long time ago the Indians brought trees from the mountains when they gave this dance and set

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[110]Goldfrank, Social and Ceremonial Organization, p. 46.

> them up in the plaza like a woods and that one of the trees always had squirrels and birds in it, and the Indians, who were dressed as eagles, deer, hunters, and grandfather spirits, danced among the trees, but there are not so many of us now and we do not bring trees from the mountains any more. . . .[111]

Recollections of various informants achieved little unanimity. One version was that Santiago formerly came from an arroyo north of the pueblo as he did in 1948. This informant doubted another account in which Santiago came across the river from the sharp peak referred to as La Titia. When Santiago reached the arroyo by the Pumpkin Kiva, the riders swung to the west and came up behind him. Having reached the arroyo, Santiago flew[112] across the arroyo and reached the church before any horseman could catch him. From the church he went to the Turquoise Kiva, but he did not use the steps. He again flew to the roof and then entered the kiva. He started down once but came up again. He tried again and came back up. The third time (not the fourth!) he was successful and disappeared into the kiva without using the ladder.

There was no recollection of large pines or squirrels on Santiago's Day, but rather an association of these items with Reyes Day, January 6, which agreed with Applegate's description. Four large evergreens, possibly firs, were brought from the mountains in wagons. They were concealed in the arroyo north of the pueblo. At dusk, the war

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[111] Applegate, Frank G., Indian Stories from the Pueblos, Philadelphia, 1929, pp. 117-118.

[112] The informant's use of the word "flew" to describe the movement of Santiago across the arroyo and then later in entering the kiva was challenged for clarification. He insisted that Santiago "flew" a few feet above the ground, never touching it nor using the steps or ladder of the kiva.

captains told everyone to remain indoors and to keep their windows covered. In the morning, four large fir trees were in the plaza with live squirrels in their tops. The squirrels remained in the treetops without any sort of leash. After this they had certain animal dances just as they still had. Trees and squirrels appeared only on Reyes Day.[113] (65)

Another informant insisted that the "Little Horse" came, not on Santiago's Day, but in connection with bringing in horses for the grain threshing. If the "horse" appeared on Santiago's Day, he did not come again that same year. It was only with his appearance at threshing time that the pine trees and squirrels had appeared in the plaza. (25)

According to the grandmother of another informant (a person about sixty-five years old), the impersonator of Santiago had to fast for one year prior to the dance. Fasting involved continence, not food restrictions. If the fast was maintained faithfully, then the man and horse had power to help the pueblo. Otherwise, they had no power. This informant recalled that in his childhood the horse came in September and did not appear each year. (52)

Another informant, about sixty years old, had heard of the trees and squirrels in connection with Santiago's Day. However, he had not seen them himself and believed this custom had been lost by the time

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[113] While the point was not checked, the writer has observed that for many Cochiti dances, particularly hunting dances, an evergreen tree from two to four feet high is often placed at each end of the plaza. This has been observed at Cochiti, Santo Domingo, Jemez, and elsewhere, and may represent a survival of the former use of more numerous and larger trees.

of his early childhood. (70)

Another informant, about sixty-five years old, claimed that the impersonator of Santiago went to a shrine near the top of La Titia where he fasted four days before the celebration. He took a candle to burn. On the night before the dance, he was joined by other Kō´sharī who were to play important roles in the ceremony. That morning the people rode almost to La Titia to meet Santiago and escorted him to the pueblo. They returned to the village, crossing the river on the ferry. (50)

The Catholic Church

In analyzing the ceremonial, or religious, life of the Cochiti, it was apparent that approximately three hundred years of influence of the Catholic Church had had effects sometimes of a relatively superficial nature and sometimes of a more profound character.

The superficial nature of much of Catholicism and the simultaneous decline of native religion were both noted in 1890 among the Zia by Stevenson.

> Thus the railroad, the merchant, and the cowboy, without this purpose in view, are effecting a change which is slowly closing, leaf by leaf, the record of the religious beliefs and practices of the pueblo Indians. With the Sia this record book is being more rapidly closed, but from a different cause. It is not due to the Christianizing of these Indians, for they have nothing of Protestantism among them, and though professedly Catholic, they await only the departure of the priest to return to their sacred ceremonials. The Catholic priest baptizes the infant, but the child has previously received the baptismal rite of its ancestors. The Catholic priest marries the betrothed, but they have been previously united according to their ancestral rites. The Romish priest holds mass that the dead may enter heaven, but prayers have already been offered that the soul may be received by Sus-sis-tin-na-ko

> (their creator) into the lower world whence it came. As an entirety these people are devotees to their religion and its observances, and yet with but few exceptions, they go through their rituals having but vague understanding of their origin or meaning. Each shadow on the dial brings nearer to a close the lives of those upon whose minds are graven the traditions, mythology, and folklore as indelibly as are the pictographs and monochromes upon the rocky walls.[114]

More profound influence of the Catholic Church was probably first felt in the attempt to suppress native ceremonials, particularly those in which the masked supernaturals, or katchinas, appeared. The result was that the Katchina Cult was driven underground, but definitely not out of existence. An already well-developed faculty for keeping rituals secret even from their own people who did not belong to a particular society was readily transferred to the concealment of these rites which were attacked by Europeans as being both pagan and immoral.

A combining of various native celebrations with the calendar of the Catholic Church accompanied this suppression, or attempted suppression, of the katchinas. Ceremonies described in the preceding section exemplified this merger. While there had been a tendency to stress winter ceremonials that were generally of a purer native ceremonial nature, the series of summer celebrations associated with the Catholic Feast Days were also important to the Cochiti people. At Cochiti the following Saint's Days were celebrated with pueblo-wide ceremonies beyond the strictly Catholic observances which applied to some other days.

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[114] Stevenson, Matilda C., The Sia, 11th Annual Report, Bureau of American Ethnology, 1894, p. 15.

January 1. New Year's Day, Feast of the Circumcision, Mass, Tablita Dance for the newly installed officers.

January 6. Kings' Day, Reyes Day, Day of Epiphany, Twelfth Night, Mass, ordinarily an animal dance, quite often an eagle dance in which the two eagles had to be impersonated by medicine men.

Easter. Mass, Tablita Dance after kick-stick races; also kick-stick races on three days following Easter, making four in all, with the races going in each cardinal direction on succeeding days: north, west, south, and east, in that order.

May 3. Holy Cross, Santa Cruz, Day, Mass, Tablita Dance for which the side dancers were the "River Men," the six fiscalitos.

June 13. San Antonio's Day, Mass, feasting, footraces, and present throwing.

June 24. San Juan's Day, Mass, feasting, rooster pulls, footraces, and present throwing.

June 29. San Pedro and San Pablo's Day, Mass, feasting, rooster pulls, footraces, and present throwing. Sometimes, a baseball game.

July 14. San Buenaventura's Day, Mass, Tablita Dance in honor of the pueblo's Patron Saint.

July 25. Santiago's Day, Mass, feasting, rooster pulls, footraces, and present throwing. Possible appearance of Santiago impersonation, the "Little Horse." Celebration also of Santa Ana's Day, actually July 26.

August 10. San Lorenzo's Day, Mass, feasting, rooster pulls, footraces, and present throwing. Until 1948, celebration considerably curtailed to discourage Santo Domingo men from coming due to numerous fights that resulted.

November 1. All Souls' Day, Mass, offerings of food to the dead.

December 13. Celebration of Guadalupe's Day which was actually December 12. Since this was Patron of Peña Blanca church, the priests were busy there and did not come to Cochiti until the next day.

December 25. Christmas, Mass, feasting, dancing by both kivas; dancing continued four days after Christmas; these were primarily dances borrowed from the outside and were performed more for recreational than for sacred purposes.

In addition to these observances of church ceremonial events, the Cochiti participated, generally only as spectators, in the feast days of other tribes. The Taos celebration in September, Laguna in September, Jemez in November, San Felipe in May, Santa Ana in July, Santo Domingo in August, Zia in August, and similar events were well-known to the Cochiti and were well attended. While these events were Catholic dates, their celebration was of a mixed nature with Indian aspects much in evidence. In their visits to other pueblos on various feast days, the Cochiti rarely entered the churches although they sometimes marched in the procession which escorted the image of the saint to the plaza where the dancing occurred.

At Cochiti, some participated in the procession to and from the church as the saint's image was moved; others, the "Progressives," attended Mass, marched, and then were only spectators in the remainder of the ceremonies. "Progressives" and "Conservatives" alike joined in rooster pulls, footraces, and present throwing. Spanish-Americans of the village and vicinity played in the rooster pulls and in the present throwing, but they did not run in the races nor join in the dancing.

An exception to this was the celebration of Reyes Day, January 6, 1947. This was celebrated in the evening by groups of young dancers who performed in the homes of the new officers, sometimes in those of the retiring officers, and in homes where a Reyes or Rey lived. In 1947, there was a group of three older girls dressed as eagle dancers (actually, eagle dancers were always males) and accompanied on the drum by a Cochiti man. Two of the three girls were daughters of the Spanish-American trader, Leo Rael. Informants stated that these girls

spoke Cochiti better than some of their own young people. They expressed unanimous approval of the performances of these dancers. However, they pointed out that Spanish-Americans did not participate in Tablita Dances, hunting dances, and similar ceremonies. (3, 45, 48, 55, 70)

Attendance of Mass appeared quite general among the Cochiti, the people being segregated according to sex as was customary in missions of the southwest. Women and small children sat on the floor along the north wall while the men and older boys sat along the south wall and stood across the back of the church under the choir loft. People came and went with little apparent regard for the progress of the Mass. The choir at Cochiti was well thought of by the people and the priests. It was trained by Juan Chavez, a Cochiti, who for a time had studied for the priesthood but had been forced to give it up due to poor health. Both Indians and Spanish-Americans sang in the choir. In addition to the Spanish-Americans and "Progressives," many "Conservatives" were very regular in their attendance of Mass and other rites of the Church.

CHAPTER IX

POLITICAL ORGANIZATION

General Statements

At Cochiti, political organization was an important factor, or influence, in the lives both of the pueblo residents and of those who dwelled away from the village more or less permanently. Conversely, the feelings of the people were of direct concern to the officers who constituted the tribal governing personnel. In governing, Cochiti officers were guided by no written laws, or a constitution, as were the people of Santa Clara and Isleta. Instead, problems were met by the officers and the council on the basis of innumerable "regulations," comprising a body of common law. This body of unwritten, yet efficacious, law was both rigid and flexible as the situation demanded, a generality remarked upon by Hoebel.

> . . . Law exists in order to channel behavior so that conflicts of interest do not come to overt clash. It comes into existence to clear up the muddle when interests do clash. New decisions are ideally so shaped as to determine which interests best accord with the accepted standards of what is good for the society.[1]

As Aberle indicated, nothing was known of pueblo civil organization, or government, in the pre-Spanish era. "Compared to the present-day civil organization, the pre-Spanish administration must have been considerably smaller and simpler, corresponding to the aboriginal

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[1]Hoebel, Man in the Primitive World, pp. 370-371.

economy."[2] Parsons was of the opinion that pre-Spanish political organization involved a town chief (cacique) and a war chief (outside chief), both of whose duties were primarily religious and only secondarily civil.[3] As Aberle[4] and others have noted, present day pueblo offices known to have been set up by the Spanish may well have been redesignated native offices. On the other hand, they may have been complete innovations, in part if not in entirety. Regardless of whether or not the secular officers were wholly or partially native in origin, the influence of the religious leaders in secular matters had been and, in most pueblos, remained very strong.

Cochiti political organization can best be analyzed by considering its several components. In the order of their discussion, these are: The Annually Selected Officers, the Council of Principales, and the United States Indian Service.

The Annually Selected Officers

Six major secular officers and twelve assistants were appointed each year by the religious headmen as described in the next section. The assistants were selected from among the younger men of the pueblo. The six major officers, governor and lieutenant, war captain and lieutenant, and fiscale and lieutenant, were chosen by the heads of the three medicine societies as described in the preceding chapter.

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[2]Aberle, The Pueblo Indians, p. 24.

[3]Parsons, Pueblo Indian Religion, pp. 1125-1126.

[4]Aberle, The Pueblo Indians, p. 24.

Ordinarily, replacements were selected although the same men were sometimes retained. If one officer was retained, it was customary to return the entire group of major officers to office. They could be retained only two consecutive years after which they had to be given at least one year's freedom from public office. This provided them an opportunity to regain their feet economically. Since officers served without compensation, numerous meetings and other duties took much time from efforts to support their families. In recognition of this hardship, major officers and their assistants, chosen later by the council, were selected from individual households so that no household in any year suffered the economic loss of two of its adult males. A few officers had suggested that the officers be paid on a monetary basis, or at least be provided with community assistance in the same way that the cacique and, formerly, the resident priest were aided. However, no action had been taken. (3)

According to pueblo "regulations," the three head officers were picked from one kiva, and the three lieutenants, or "tenyets" (tenientes), were chosen from the other kiva. The following year, unless the same men were returned to office, the head offices and lieutenancies were alternated between the kivas. Formerly, according to Goldfrank[5] and my informants, the division of offices between kivas was on a somewhat different basis. The governor and war captain were picked from opposite kivas, with their lieutenants also alternated. The fiscales under this former system were of the same kivas as the governors. (2,

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[5]Goldfrank, Social and Ceremonial Organization, p. 26.

25, 52)

As is evident in the officer rosters listed in various APPENDICES, this alternation, as it was supposedly practiced, was not followed. According to several informants representing both kivas, the monopoly of the head offices by members of the Turquoise Kiva began many years ago when all three head medicine men were of the Turquoise Kiva. This coincided with the "Progressive"-"Conservative" split in which the greater portion of the "Progressives" were members of the Pumpkin Kiva. One Turquoise member stated that the reason the Pumpkins were not given the head offices was that they were drinking too heavily. (45) Other informants claimed the lack of balance was brought about only because of the personal bias of the head shamans.[6]

After their installation on January 1, the officers were called by the governor to their first meeting that same evening. After a brief session, they met with the entire Council of Principales. Subsequent meetings were called as required; Sunday evening meetings, often with the council, occurred regularly.

At the first meeting of the new officers and the council, six alguacilitos and six fiscalitos were selected from among the young men. These helpers were chosen as assistants to the major officers, the al-

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[6]This emphasis upon the Turquoise Kiva's recent monopoly of senior offices was interesting in light of an observation by Dumarest, that at the end of the last century the governor was Jose Hilario Montoya, and that he had served in that capacity "for almost ten years." (Dumarest, Notes on Cochiti, p. 200, f. n. 3.) The inference seemed quite clear that this man, a member of the Pumpkin Kiva, held this office for the "almost ten years" consecutively. This point was noted too late to ask informants about it, but it was interesting that no Turquoise Kiva informant mentioned it as a balancing factor for their resented monopoly.

guacilitos helping the war captains and the fiscalitos assisting the governors and the fiscales. To be an alguacilito was considered a greater honor than to be a fiscalito.

Assuming that these assistants proved themselves conscientious and capable workers, they were eventually chosen for the major offices. Alguacilitos moved up to the position of war captain; fiscalitos became either governor or fiscale. Ordinarily, when a young man had begun in one of these lines, e. g., from alguacilito to war captain, he was not picked for the other. In recent years, this "regulation" was not followed, and considerable interchange occurred.

Installation of Secular Officers. Six major secular officers were selected each year by the medicine society headmen. The governor and his lieutenant were selected by the Giant Head; the war captain and his lieutenant, by the Flint Head (cacique); and the fiscale and his lieutenant, by the ShT'kame Head.[7] (3, 15, 25, 53)

The ceremonies of installing these officers extended almost a week. According to one informant, the incumbent officers went to the cacique on the night of December 26 and informed him that they had worked hard during the past year, that their personal affairs had suffered from lack of attention, and requested him to replace them.[8] (44) Another informant did not believe the officers asked to be relieved.

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[7]Dumarest's statement that the cacique nominated all these officers appeared to have been an error of over-simplification. (Dumarest, Notes on Cochiti, p. 197.)

[8]This request to be relieved from office conformed to the practice found at Santa Ana Pueblo by White. (White, Santa Ana, p. 110.)

(70) However, the cacique (the Head Flint shaman) called the Giant Head, his "right hand," and the Shĭ'kame Head, his "left hand," to a meeting. At that time, the three head shamans selected the six major officers for the coming year. (44, 45, 49, 70)

On the night of December 29, after the Christmas season dances had been completed, the adult males of the pueblo gathered in the Turquoise Community House. The cacique then announced the new war captains, followed in turn by the Giant Head's announcement of the new governors, and the Shĭ'kame Head's revelation of the new fiscales. Frequently, there was a discussion of the selections, and sometimes a nominee made a feeble attempt to escape this selection. However, this was largely routine, and informants claimed to know of no case where an irrevocable refusal had been made, a clear indication of the influences of the religious leaders in a nominally secular matter.[9] (3, 15, 20, 25, 48, 49, 50, 52, 53)

On January 1, the officers of the preceding year brought their canes, symbols of their respective offices, to the church where they were placed on the altar. During the Mass the canes were blessed by the priest and taken by the incoming officers. (If the priest was unable to come to the pueblo January 1, the cane blessing occurred during the January 6 Mass. [53]) From the time the new officials took the

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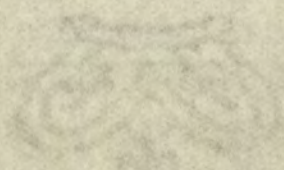
[9]Goldfrank stated that this meeting was attended by the council members and head medicine men (Social and Ceremonial Organization, p. 25), but my informants insisted this meeting at which the new officers were named had always been attended by all adult males of the tribe, whether belonging to the council or medicine societies or not. (3, 25, 70) Data of Curtis agreed with those gained from my informants on this point. (Curtis, The American Indian, Volume XVI, p. 85.)



canes, they held authority.

Following the Mass, the people gathered around the churchyard, or if the weather was disagreeable, they remained inside the church. The cacique spoke first, followed by the retiring governor and, in turn, the new governor. As they made various points to the assembled people, agreement was voiced repeatedly by the other new officers standing nearby. In the speeches, informants commented that the officers often used "big words," although not particularly archaic, and frequently the younger people missed the full significance of the talks.[10] (25, 44, 49)

After the speeches, the people returned home, and shortly after this, they went to the houses of the new officers where feasts were served. Upon entering the home of a new officer, people first congratulated him, shaking his hand and speaking to him. This, in cases of relationship or close friendship, was commonly accompanied by an embrace. In speaking, both spontaneous words of congratulation and what appeared to be a more stereotyped form of speech, or prayer, were observed. After this, the people turned to where the officer's official cane was leaning against the wall. Ordinarily it rested on the floor upon a small Navaho blanket, surrounded by baskets of native bread and bowls of chili. There was also a bowl of meal from which each person took a pinch and sprinkled it on the cane, with or without a brief comment. They were then seated at the feast table where they

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[10]Goldfrank, Social and Ceremonial Organization, p. 26, stated that all new officers spoke at this time. This was no longer true.

lingered to talk if others were not waiting. From this home, the people moved to homes of the other officers and repeated the procedure.

There was no set order in which to visit the new officers' homes. The sequence was influenced by the degree of relationship involved, the proximity as neighbors, and the order of location in the pueblo. While more people visited the new officers' homes than was the case in visits celebrating the saints' days, by no means a complete pueblo roster visited each officer's home. (3, 16, 23, 45, 53)

That evening the governor called the new officers to a brief meeting, after which they met with the Council of Principales. (15, 44)

The annually selected officers are considered here individually in order to outline their principal functions and to analyze rosters of men who have filled these positions. In order, these officials are: governor and lieutenant governor, war captain and lieutenant war captain, fiscale and lieutenant fiscale, alguacilitos, and fiscalitos.

Governor and Lieutenant Governor. A governor, dá-pōp, and a lieutenant governor, dá-pōp tenyet, were selected each year by the Giant Society Head. The governor invariably had served previously in the capacity of lieutenant governor, or as a fiscale, having earlier demonstrated as a fiscalito that he was a satisfactory public servant. The lieutenant governor was quite often a younger man, frequently with no prior public service other than one or more terms as a fiscalito. He moved up to governor after several experiences as lieutenant or as one of the fiscales and as the group of men from whom the governors

were chosen became reduced by old age and death.

Governors were chosen without regard for clan affiliations. They could be members of Kō´sharī, Kwi´rēna, or any other society except a medicine society.[11]

Some older men were concerned over the failure of the head medicine men to observe the "regulation" that alguacilitos should become war captains and fiscalitos should become either governors or fiscales. However, a point even more bitterly resented was the failure to observe the annual alternation of the head offices between the kivas. From 1920 to 1946, the only years in which there had been a governor from the Pumpkin Kiva were 1927 and 1937 when Alcario Montoya, a member of Kō´sharī and also sacristan, was selected.[12] Opposition to the monopoly of the Turquoise Kiva became so strong, mounting through the years under the leadership of Lorenzo Herrera and others, that finally, in 1946, Clofe Arquero was chosen as governor from the Pumpkin Kiva. In 1947, Juan Jose Trujillo, Turquoise Kiva succeeded him, and in 1948

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[11]There was some disagreement on this point regarding all major offices. However, in 1948, of the five living members of the three medicine societies, the only one who had belonged to the council (thereby indicating one-time service as a major officer) was Marcelo Quintana, the cacique. Many years before, Marcelo served as lieutenant fiscale and apparently joined the Flint Society subsequently. When he became cacique in 1946, Marcelo withdrew from the council. (3, 20, 45, 70)

[12]Goldfrank stated that as of her stay, during the early 1920's, Alcario had already served several terms as governor and had represented the pueblo in Washington, D. C., in a vain effort to have John Dixon, "Progressive" and self-styled "judge" removed. (Goldfrank, Social and Ceremonial Organization, pp. 30-31.) Dumarest noted that Jose Hilario Montoya (father of Alcario) was governor of Cochiti for "almost ten years." (Dumarest, Notes on Cochiti, p. 200, f. n. 3.)

Juan Jose Suina, another Pumpkin man, was selected.[13] This indicated that the system of annual rotation had been resumed to the apparent satisfaction of all.

Duties of the governor and his lieutenant were primarily civil. As mentioned, these offices, and the associated duties, were believed by some pueblo specialists to have been introduced by the Spanish. Outsiders were referred to the governor, or in his absence, the lieutenant, if they wanted to take pictures around the pueblo,[14] sell various commodities to the people, or erect concession stands for any of the ceremonial days or fiestas. The people developed the idea, primarily to shift criticism from themselves, of answering many requests for aid or cooperation of different forms with the question, "Does the governor know about this?" If not, proceedings were halted until such permission had been obtained. The governor, or his lieutenant, made decisions upon the basis of precedent. In the absence of both governors, either the fiscales or the war captains were consulted with decisions made on the same basis. If none of these officers was present, which rarely occurred, a decision was postponed until the return of a major officer. Nothing was considered so urgent that it had to be settled in any other manner. (20, 44, 45)

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[13] In 1949, there was again a Turquoise governor, Jose Domingo Quintana, and in 1950 the governorship reverted to the Pumpkin side, Salvador Arquero serving his first term after several lieutenancies.

[14] For ceremonial subjects, photographers were referred to the war captains who administered ceremonial matters. For photographs of individuals, permission had to be obtained from each person, the governor having no authority to speak for them. (3, 45, 49)

If the problem had never arisen before, the governor refused to decide or to allow his fellow officers to share in a decision. Instead, a meeting was called of the Council of Principales where the matter was discussed and a decision reached. If the council could not reach a unanimous decision, the problem reverted to the six officers. They made a decision, thereby establishing a precedent to be followed in the future. (15)

It was also the governor's duty to work with Indian Service officials, primarily those of the United Pueblos Agency. While anyone could talk to the agency field representative, it was customary to channel questions and requests through the governor. (20, 44, 45) The governor was the spokesman for the pueblo in dealing with government education and health officials. While he worked in close cooperation with his lieutenant, it was the governor to whom mail was addressed and whom these individuals called upon for help and consultation. (15) If the children of pueblo families became involved in trouble at boarding school, the governor investigated.

The increasingly frequent offers to participate in such events as the Gallup Ceremonials were directed to the governor who ordinarily presented them to the entire council for consideration. The governor was called in to arbitrate disputes which arose between individuals and families within and, often, outside the pueblo. He decided upon punishment which often took the form of whipping by a fiscalito. The governor consulted with other officers and sometimes the entire council, depending upon the importance of the matter and the amount of precedent existing. (16, 44, 45, 48, 53)

Dumarest said that the governor "has the church built and repaired and he keeps in good repair the estufa or ceremonial room."[15] Informants claimed this was completely erroneous since fiscales were responsible for the church, although assisted by the governors; the war captains, together with the kiva heads, were responsible for the upkeep of the kiva structures. (3, 15, 25, 48, 53) Dumarest also said that the governor assigned work at the time of communal planting for the cacique,[16] but informants disagreed. If the planting was for the cacique, the war captains and either the Kō´sharī or Kwi´rēna members supervised. When work was done for the resident priest, fiscales directed it. (3, 45, 70)

The Eickemeyers made the following observations on labor assignments made by the governor (the morning of June 25, 1894).

> At sunrise the following morning the governor called loudly from his position in the center of the pueblo, assigning to the men assembled in the doorways the work they were to perform that day. As the different names were called the owners disappeared within the houses to prepare for the work allotted to them, and hurried to the scene of action to do their share of the labor.[17]

According to notes of Bandelier on the use of yucca in making the community fishing net as of 1882, "In May or June, the governor sent out men to cut the leaves of the plants and gather them in 'hands.' . . ."[18]

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[15]Dumarest, Notes on Cochiti, p. 200.

[16]Ibid.

[17]Eickemeyer, Among the Pueblo Indians, p. 76.

[18]Robbins, Harrington, and Freire-Marreco, Ethnobotany of the Tewa, p. 51.

Formerly, the governor had charge of the community work on the ferry across the Rio Grande. (44) The governor determined punishments, sometimes after consulting with other officers of the council. In turn, the governor could be punished or removed from office, as was true of any other officer, for misconduct. (3, 15, 44)

As with religious officers, the kiva balance of the secular officers was maintained. If a governor, or any other officer, died in office or was removed, the medicine men chose his successor from the same kiva. This man usually had served previously in that particular office. All other officers remained in the status quo in order to continue the balance of kiva representation and to provide the full complement of fellow-officials with whom consultation could be held. (3, 49, 53)

APPENDIX XXIX lists the governors and lieutenants for years for which data could be obtained, with their ages at the time of assuming office and their clan and kiva affiliations.

War Captain and Lieutenant War Captain. The war captain (sī'at yōyō, also masēwa) and the lieutenant, or assistant, war captain (sī'at yōyō tenyet, also ōyōyēwa) were selected by the cacique.[19] Curtis stated that the assistant war captain was less of an assistant than a colleague, the two officers working together.[20] This observation was confirmed both by my informants and by my observations during the pro-

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[19]One informant expressed great surprise when told that masēwa and ōyōyēwa were terms commonly found in the published literature. "Those names are very secret." (52)

[20]Curtis, The American Indian, Volume XVI, p. 85.

gress of ceremonies and other events. As previously stated, it was the war captains who called the cacique to task for failing in his ceremonial duties. The war captains were chiefly concerned with the ceremonial life of the pueblo. They had control of personnel shifts from kiva to kiva and similar changes, even of a temporary nature. This control also involved direct leadership and supervision of certain rituals and communal hunts for the cacique and the people. It likewise involved the protection of those who were engaged in ceremonial rites for the common good. Thus, the war captains guarded the retreats of the medicine men so that no harm could befall them during these activities. Goldfrank classified the war captains as secular officers chiefly because of their annual replacement and regular membership in the council, as well as their mode of nomination.[21]

There was some uncertainty as to how the war captains and the war chief, or nēhĪa, had divided their functions in former times. Whether the war captains had assumed former duties of the now-extinct office of nēhĪa upon the disappearance of the Warriors Society was difficult to ascertain. The war captains were active in leading Cochiti warriors against enemies such as the Navaho during the Spanish era. In this, their functions appeared to have overlapped with those of the nēhĪa. With the disappearance of both the armed enemies of the tribe and the Warriors Society (and nēhĪa), the war captains continued to lead the fight against enemies of the pueblo. (3, 15, 14, 70)

Pueblo enemies in 1948 were of two major categories. First,

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[21]Goldfrank, Social and Ceremonial Organization, pp. 24-25.

there were numerous witches that the Indians believed caused harm. Medicine men were the leaders in rebuffing efforts of witches, and the war captains protected medicine men while they performed such community benefits. Secondly, war captains contended with other enemies who would destroy the way of life of the people of Cochiti. These included both outsiders and native Cochiti. It was felt that everything good was to be gained by following the old ways of life. Native religious ceremonies, societies, and attitudes were the best guarantee for a successful and happy life. By failure to adhere to the old ways, by completely substituting the Catholic faith for native theology, and adopting other alien (variously interpreted) elements of culture, the Cochiti, specifically the "Progressives," were injuring themselves and also the entire pueblo. (53)

However, as a leading member of the "Conservatives" once pointed out, the officers (and people) of Cochiti were "more reasonable" than the Santo Domingo. For example, the Cochiti felt that equally good and efficacious ceremonies could be given if the community drinking system was protected by covered wells and frequent testing. They saw no inconsistency in this merging of the old and the new. (3, 45, 53)

It was the duty of the war captains, who changed each year, or at least after two years in office, to supervise the various societies in the proper execution of their public functions. The fact that these temporary and, to a considerable extent, secular officers held such responsible positions in the ceremonial life was considered evidence of their aboriginal importance by Parsons and others. They referred to the war captains as "outside chiefs." (See page 351.)

Among the "Conservatives," there was no doubt that the word of the war captains outweighed that of the governors. Among the "Progressives," however, the reverse was true; in fact, it was the failure to acknowledge the authority of the war captains in their supervision of native ceremonialism that denoted a member of the "Progressives" as much as any other single factor.

Divulgence of tribal secrets or similar acts which were deemed detrimental to the common good came under the jurisdiction of the war captains who could call for support from the Council of Principales. The former punished directly or delegated these duties to the alguacilitos.[22]

Informants stated that formerly the war captains were active in recruiting new members to perpetuate the various societies in the pueblo. However, several new members soon became discontented with the duties and responsibilities of membership, the long hours of fasting and other activities during retreats, the relative confinement to the pueblo during society activities, and other hardships. By 1948, rather than have members who were unhappy in their roles, there appeared to be a widespread attitude in the pueblo that, important as the societies were, it was better for them to become extinct than to be

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[22]Informants were most reluctant to discuss details of punishment although whipping was acknowledged. "Standing in the circle," stocks, and hanging by the wrists, as mentioned in the literature, could not be associated with the current practices, perhaps an admission that these techniques were still employed. For these practices, see Curtis, The American Indian, Volume XVI, pp. 77-82, 85; Dumarest, Notes on Cochiti, pp. 200-202; and Goldfrank, Social and Ceremonial Organization, pp. 96, 98.

composed of members who were unwilling to perform their functions with the proper "feelings." Consequently, there was little, if any, recruiting of society members by the war captains or anyone else. (48, 52, 53, 55)

In describing Cochiti officers, Dumarest stated that "the foremost is the captain of war (tsia to io), the masewa."[23] He mentioned the captain of war as the guardian of customs and where the customs were not carried out, the war captains inflicted punishment. In these duties the war captain and his lieutenant worked together. Curtis described the war captains as formerly life-officers who had changed to annual appointees. He listed their titles as "tsa tyo-hochaffi" ("country chief") or "tsiyatyuyo" ("go in advance"). Curtis also mentioned that the titles "Masēwa" and "Ōyōyēwa" were taken from legendary war leaders and were used ceremonially.[24] Curtis listed the following duties of the war captains: to maintain order, to inaugurate and direct communal hunts, to announce ceremonies, and to guard esoteric participants in rites. Formerly, he said that the war captains decided when it was necessary to choose a new location for the village, and repelled enemies.[25]

APPENDIX XXX provides a roster of the war captains and the lieutenants from 1920 through 1948. Again, the Turquoise Kiva monopoly of the senior offices is apparent.

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[23] Dumarest, Notes on Cochiti, p. 200.

[24] Curtis, The American Indian, Volume XVI, p. 84.

[25] Ibid., p. 85.

Fiscale and Lieutenant Fiscale.[26] The fiscale (pirsh-kalĪ, also pirsh-kalĪ mayorĪ) and lieutenant fiscale (pirsh-kalĪ tenyet, or teniente) were selected each year by the ShĪ'kame Head. The primary duties of these men were in connection with the church. They were responsible for its upkeep, its heating in winter, the maintenance of an adequate supply of firewood, designating spots in the Campo Santo for new graves, assisting the governors in supervising civil community work such as ditch-cleaning, and the supervision of the work of the fiscalitos in their church duties.

After Mass, the people paused inside the church to listen to the fiscale who delivered a short sermon, primarily concerned with general behavior. If the fiscale was absent from the pueblo, this was done by the lieutenant, or if both were absent, the governor or some other officer delivered this sermon.

Dumarest stated that "the office of fiscal appears to be a recent institution. The fiscals were originally the servants of the priest when there was a priest in every pueblo."[27] He further said that the head fiscale, as of the end of the last century, still had charge of church repairs, cultivating the priest's lands, and irrigating the fields. He also harvested for the priest, looked after his

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[26]In correct Spanish, this title would be "Fiscal" rather than Fiscale. However, in actual usage, the final "e" was added at Cochiti and apparently elsewhere in the Rio Grande Pueblos, as evidenced by the discussion on Santa Ana. (White, Santa Ana, pp. 108, 173-178.) At Santo Domingo, White found the term "Bickari," which was closer to the Cochiti "Pirsh-kalĪ." (White, Santo Domingo, pp. 44-45.)

[27]Dumarest, Notes on Cochiti, p. 202.

horses and fed him when in the village.

A roster of fiscales and their lieutenants is in APPENDIX XXXI, again illustrating the long-standing monopoly of the senior office by the Turquoise Kiva members.

Alguacilitos. Six alguacilitos, gō-at-chī-nī, were selected by the Council of Principales at its first meeting of the year on the night of January 1. Three alguacilitos had to be chosen from each kiva. Although being an alguacilito had greater prestige than being a fiscalito, this fact was not sufficient to make the position greatly desired.

As in the case of the fiscalitos, the roster of alguacilitos, APPENDIX XXXII, shows a trend toward older individuals. While persons selected for these positions were referred to as "young boys," by informants, the roster reveals several middle-aged adults. This appeared to be a shift that was not yet obvious to the Cochiti. It had resulted primarily from the continuous search for new, or potential, officer material. Fewer young men exhibited interest in serving as officers. This was because they were unsympathetic to the old way of life and because they did not care to bind themselves to a career in which their opportunities for economic advancement would suffer. Some boys, if they were chosen, intentionally failed to do well or to work enthusiastically, thereby avoiding the possibility of being selected again.

As helpers of the war captains, the alguacilitos were frequently called upon to protect the medicine men and the pueblo at large from the evils of witchcraft and from ill effects of other intruders.

Whenever a society met, the alguacilitos, singly or in pairs, took turns guarding the society house. They sat on the roof where they could see anyone who approached and prevent their interference.

Alguacilitos acted as messengers for the war captains and aided in many lesser tasks. They helped grind gypsum from which plaster for the kivas was made each Feast Day; they gathered roosters and presents for the gallo games and footraces on various saints' days; they directed the footraces. They patroled the katchina dances or any other ceremonies which were closed to certain people. Alguacilitos assisted the war captains in detecting breaches of tribal secrets or any other activities considered dangerous to the community welfare.

Dumarest mentioned a "head alguacil" who "obeys both the governor and the war captain." He also mentioned his "teniente."[28] These positions were unknown to my informants who claimed the six alguacilitos had never been ranked and said there had been no other officers of the same name. (3, 15, 44, 48, 53)

Fiscalitos. Six fiscalitos, pirsh-kalĬ gō-at-chĬ-nĬ, were named by the Council of Principales at the meeting of January 1. These assistants to the governors and fiscales did not have the prestige accorded the alguacilitos, and it was not necessary that three of them be selected from each kiva. In actual practice, however, it had been customary to follow this equal representation. (3, 15, 45, 53)

Fiscalitos, like the alguacilitos, were quite often older than the common term of reference to them, "young boys," implied. Reasons

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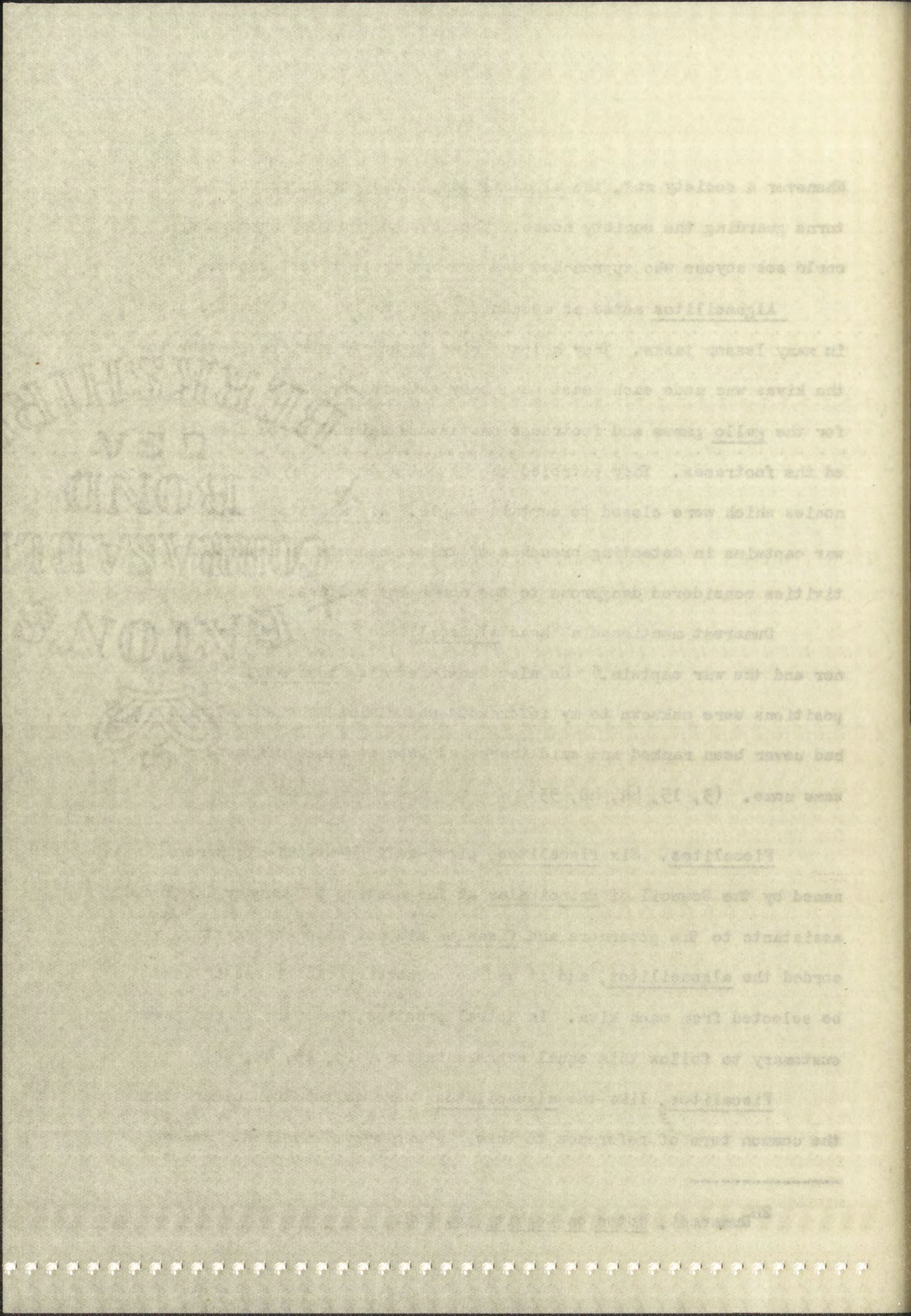
[28] Dumarest, Notes on Cochiti, p. 202.



given for a similar situation regarding the alguacilitos were applicable to this development here. APPENDIX XXXIII provides a roster of the recent fiscalitos.

Duties included running errands for both the governors and the fiscales, making announcements for these officers, helping with the maintenance of the church, being responsible for the ringing of the church bell,[29] digging graves and acting as pall-bearers, and helping keep order in the pueblo.

The Council of Principales

The Council of Principales was composed of all men who had served, or were serving, as one of the six major officers of the pueblo. Membership in the council was for life. While a man could be ousted for malconduct, this had seldom, if ever, occurred. Some individuals had ceased attending although theoretically they were still members. These included a few "Progressives" who became affiliated with that faction after having served as officers as young men. If a council member became cacique, he withdrew his membership.

According to several informants, the fiscalitos announced council meetings to the "Progressives" when instructed by the more liberal governors. Other governors did not bother to invite them to meetings

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[29]The first bell announced the time for Mass was approaching; the second bell announced the priest's arrival in the pueblo; the third bell signified the Mass was beginning. The bell was also rung on the evening prior to a Mass, for other church activities, and for a few special occasions when it served as a signal. In practically all instances, "ringing the bell" resembled a frenzied alarm much more than anything else.

which they had boycotted for many years. (52, 70)

The antiquity of the council was unknown. Since its members were composed of present and past officers, it might be supposed that the council's origins were identical with those of the various offices. However, a council selected by other criteria may well have existed earlier. Nevertheless, the importance of the council should not be underestimated. The authority of a council decision was all-powerful so far as tribal members were concerned, whether living in the pueblo or away from it, and so far as non-tribal members who wished to deal with the tribe or members of the tribe were concerned.

The importance of the council appeared to have been slighted in published data on Cochiti. Dumarest merely referred to their endorsing nominations of new officers and mentioned them only briefly elsewhere.[30] Curtis, likewise, devoted little attention to them.[31] Goldfrank provided more complete data regarding the nomination (selection) of new officers. ". . . The power of the principales is purely nominal as they always accept the names offered them by the nominating groups."[32] Elsewhere, Goldfrank commented as follows.

> It is difficult to state just how much power rests with the principales. Although their action with regard to nominations is merely one of ratification, still they, no doubt, influence the nominating committees and keep them from presenting candidates who would be rejected. Their influence in other directions seems similar to this. They are essentially a body of consultants, the gov-

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[30] Dumarest, Notes on Cochiti, pp. 198-199.

[31] Curtis, The American Indian, Volume XVI, p. 85.

[32] Goldfrank, Social and Ceremonial Organization, p. 25.

ernor bringing various civil matters before them such as land renting and at times punishments and fines. They are informed by the war captains when a person seeks adoption by one of the clans or when a witch is to be tried. However, their sanction is of great importance, since they are honored members of the community, and it is doubtful whether the governor or war captain would act in direct opposition to their expressed will.

There is no connection between society membership and membership in the principales, a member of any society being eligible for any office, although, for the most part, only members of non-curing societies are represented. Nevertheless, a person belonging to no society may also be elected to office.[33]

Meetings were normally called by the governor although anyone could request the governor to call a meeting to discuss a problem. Non-members occasionally spoke at meetings to present information unknown to members, and families of a member whose house was being used, ordinarily one of the current officers, could sit in an adjacent room and listen. After the governor announced the reason for the meeting, members were free to express themselves. Member after member spoke until everyone had had an opportunity to express his opinion. If the council was unanimous, the matter was settled. If there was disagreement, opposing views were voiced until unanimity of opinion was reached. Decisions of the council were traditionally unanimous, and normally the minority eventually acceded. If this failed, another meeting was scheduled for further discussion. If an immediate decision had to be reached, and neither side conceded its position, the matter was referred to the governor and other officers who then made the decision.

Thus, the council acted as a legislative and as a judiciary

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[33]Goldfrank, Social and Ceremonial Organization, p. 27.

body. Occasionally it assumed executive functions of government although this was usually left to the current officers.

Council meetings were held usually in the home of the governor, but if this was not large enough, the home of another officer was used. Sometimes, the Turquoise Community House was used. Kivas were never used. "They are sacred, like churches. People musn't argue and use sarcasm and hard words in a kiva, so the council never meets there." (44)

Curtis mentioned the "principales grandes," composed of the heads of the medicine societies and the heads of the Kō´sharī, Kwi´rēna, and Shrutzī societies.[34] This group no longer functioned at Cochiti, and some informants doubted that these society heads ever constituted a formal organization of any sort. (3, 15, 70)

While not a member of the council, the sacristan should be mentioned here since this position was filled by a life-time appointment by the council. Sacristans in the past had been Mariano Chavez, from late in the last century until his death in 1917, and Alcario Montoya, who succeeded Mariano and remained in office until he resigned in 1947. These two men were council members and Kō´sharī members as well. The 1948 sacristan, Alfred Herrera, was neither a council member nor a society member. (3, 53)

Beginning with Alcario Montoya's tenure, which he combined with duties as interpreter for the All-Pueblo Council and as a Kō´sharī member, an assistant sacristan, Francisco Chavez, a "Progressive," was

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[34]Curtis, The American Indian, Volume XVI, p. 85.

named. (3, 53)

The duties of the sacristan were more closely associated with the services of the church than with the physical structure of the church which was the concern of the fiscales. The sacristan assisted the priest in his preparations and in serving the Mass. He occasionally substituted for the priest in baptisms and burials. In former times, the sacristan also performed marriages, but in this and in almost all other services other than emergency baptisms, modern means of transportation and improved roads enabled the priest to keep a more dependable schedule of visits to the pueblo, thereby making it unnecessary for the sacristan to perform these rites. (3, 50, 62, 70)

Dumarest stated that "the sacristan is appointed for life, but he has no stick of office and is not considered an officer. However, he is over the fiscals."[35] This evaluation of relative ranking was undoubtedly still valid so long as matters of church services were directly concerned. Otherwise, the fiscales, as major pueblo officers, wielded greater authority. In return for his services to the community, the sacristan was excused from community work. (45, 62, 70)

Like his predecessors, the sacristan in 1948 was a "Conservative," which appeared strange in view of the relationship between the sacristan and Catholicism. It was not strange, however, when one remembered that it was the Council of Principales, a completely "conservative" body, that made the appointment.[36]

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[35]Dumarest, Notes on Cochiti, p. 202.

[36]However, assistant sacristan Francisco Chavez, a "Progressive," had been offered the position of sacristan but declined because of age.

Another official at Cochiti was the secretary-treasurer, appointed by the Council of Principales from among its membership. This office was held on an annual basis, and it was begun about the turn of the century when it was realized that it was necessary to have a literate person to keep records, accounts, and carry on the correspondence necessary in conducting tribal business.

Santiago Quintana (Cyrus Dixon) was the first man to hold this office, or perhaps more accurately, was the first to perform this role. Since that time, Salvador Arquero, Alcario Montoya, Celestino Quintana, Eleuterio Suina, and Juan Jose Trujillo had all served. (40)

Other offices such as fence rider, cattle brand inspector, and community truck driver have been mentioned. These officials were appointed by the Council of Principales. Of these, the only appointment held by a "Progressive" was that of Jose Melchior, cattle brand inspector. This man had the largest private herd of cattle in the pueblo. (1, 3, 45, 53, 70)

Most council members attended meetings faithfully. All but six of the thirty-four members, as of 1948, APPENDIX XXXIV, were considered by informants to have a reasonably good command of the English language. Of these six, all had served as war captain or lieutenant war captain with the exception of one who had held several terms as governor within the last decade. The appointment of a governor who was unable to comprehend English, when such ability was of prime importance in that office, was somewhat baffling to the writer and also to several informants.

The United States Indian Service

Analysis of the years of interrelationships between the Cochiti, through their officers, and the supervising agency for the United States Government involved a lengthy and complex account that can only be summarized here. Cochiti, like other tribes, had been administered by some understanding and intelligent officials and by some who were not.

Following passage of the Indian Reorganization Act in 1934, the Federal Government set up the United Pueblos Agency in Albuquerque in 1935.[37] Prior to this time, Cochiti had been shifted from the administration of the Northern Agency in Santa Fe to the Southern Agency in Albuquerque and back again to Santa Fe. Under the United Pueblos Agency, Cochiti had had more stable administration with less interference in tribal internal affairs than had previously been the case. (1, 15, 44, 45, 48, 49, 53, 70)

Aberle listed four basic objectives of the United Pueblos Agency. These were: 1. to assist the Indians in becoming self-supporting tribes; 2. to give the Indians the opportunity for better education; 3. to assist interested Indians or cooperatives in establishing businesses; and 4. to vest a recognized power in the governors and councils of the tribes so they could conduct their own businesses legally as could any other municipality. Aberle further stated that in the

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[37]A detailed, yet summarized, statement of this Act and a description of the United Pueblos Agency can be found in Aberle, The Pueblo Indians, pp. 54-60.

execution of these objectives, goals had had to be interpreted in terms of the dominant Anglo culture. Thus, monetary considerations had displaced communal cooperative values. Incentives for group action had disappeared when individuals and smaller groups began to accumulate private savings. Thus, certain vested interests had formed which were alien to traditional cultural patterns.

> Recognition of the person as primarily an individual rather than primarily a member of the community, which had for long been creeping into Pueblo thinking, was accelerated by the program of the Federal Government.[38]

Since 1935, the United Pueblos Agency had created several divisions: Education, Health, Construction (which included Irrigation, Civilian Conservation Corps of the Indian Bureau, and Roads), Forestry, Range, Law Enforcement, and Land Use.[39]

The basic objectives listed by Aberle and the divisions created within the agency illustrate the emphasis placed upon economic improvements by the Federal Government. Objectives and divisions in almost every case were directly, or indirectly, concerned with advancing the economic status of the Pueblo Indians. In each pueblo, the Government officials worked through the secular officers, the principal reason for including the several government services in this section of the present chapter, POLITICAL ORGANIZATION. In considering economics and other phases of pueblo culture, past and present, the impact of Indian

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[38]Aberle, The Pueblo Indians, p. 57.

[39]Ibid.

Service activities and policies has been too often ignored or minimized to the detriment of the study.

The economic and other advantages of the governmental services were steadily becoming more obvious to the Cochiti. This was true of educational services perhaps more than of any other. Appreciation of the advantages of education were of long standing, as evidenced in remarks by Pedro Sanchez, Indian Agent, in 1883,[40] in the observations of the Eickemeyers in 1894,[41] and by the agent's report for 1899.[42]

Various sources were unanimously agreed that Cochiti had been fortunate in the caliber of teachers who had taught there, and, in turn, the Cochiti had been among the most cooperative in the educational program. In 1948, the Cochiti day-school consisted of six grades, handled by two teachers. These women were important not only in their class-room work but in their extra-curricular contacts with the adults of the pueblo.

As representatives of the United Pueblos Agency, the teachers, through the governor, arranged evening meetings in the school, sometimes with films and sometimes with speakers on farming methods and machinery, preserving methods, and other modern techniques, usually aimed at the economic and health betterment of the people. Teachers demonstrated, and they also assisted the women in preserving fruits and vegetables with pressure cookers and similar improved methods.

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[40] Sanchez, Report, p. 414.

[41] Eickemeyer, Among the Pueblo Indians, pp. 76-89.

[42] Walpole, Annual Report, p. 247.

School kitchens were used for much of this. School shower rooms were available to the people on certain days each week.

Coordinated with the day-school program were the periodic visits of the government nurse, doctor, and dentist who examined school children, pre-school children, and adults. Spanish-Americans in the pueblo could take advantage of this health service although their children had to attend school elsewhere. The latter resulted from protests by some Cochiti women. (27, 45, 48, 65, 70)

A great improvement, both in operation and personnel, was found in the 1948 system of Extension Service field representatives who visited the pueblo each week. These men were primarily agricultural consultants. They assisted in procuring better seed and better breeding stock. They helped with the acquisition, use, and maintenance of agricultural machinery. The Cochiti were much more satisfied with this service than with that of the former resident "government farmer." These men were often deficient in technical and other training, and the Cochiti claimed they had taught the "farmer" more than they had learned from him. (2, 44, 45, 70)

Other technical experts were sent by the United Pueblos Agency to assist the pueblo officials. The water system with its covered wells, wind-mills, and gasoline pump was supervised and regularly tested by these men.

A long-standing economic problem at Cochiti had been disputes over land ownership with the Spanish-Americans. The Federal Government was active in helping the Indians regain clear titles. This problem of land ownership appeared repeatedly in the archive documents

and literature. While Cochiti had little contested land remaining in 1948, there were still house lots in the pueblo that were claimed as the property of Spanish-Americans. The Cochiti insisted that these lots had been given only as loans in return for Spanish settlers' aid in rebuffing Navaho and other raiders. (3, 15, 20, 21, 65)

In the summer of 1947, a party of agency engineers surveyed various house lots in the pueblo as part of the preparatory stages in the proposed trading of land between the pueblo and Leo Rael, a local trader (Spanish-American). The trade was still pending as late as January, 1949, an indication of agency policies of helping with technical assistance when asked, but allowing the Cochiti, through their officers, to reach their own decisions.

Road building and maintenance had improved in recent years, particularly in the post-war years with the beginning of the El Pueblo Bus Line. The following statement of road construction policy is pertinent here.

> The Indian Service has refused to construct or authorize the construction on reservations of tourist roads which would mean the exploitation of Indian life and culture. Moreover, the Service does not approve of road construction into wilderness areas which will better serve the Indians and the public if unmolested. But the Service does seek to build reasonably good roads for reservation use. The day-school program, especially, hinges upon roads adequate for daily bus service; and the health program, in attempting to reach out into Indian communities, depends on passable roads. We are resisting pressure to build roads of more costly and elaborate type than present or prospective use can justify.[43]

Aside from periodic misadministration, Cochiti was most serious-

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[43] Payne, Annual Report, p. 223.

ly disturbed by governmental interference in internal affairs during the first quarter of the century. Beginning as a dispute over the jurisdiction of the secular officers, the ramifications of this intra-pueblo conflict to all phases of Cochiti culture illustrate the inter-relationships of these phases. Also, the major features of this controversy are essential to an understanding of the last few decades, the present, and the future of this pueblo.

About the beginning of this century, three Cochiti went to Carlisle, the first of their tribe to receive such education. Two, Juan de Jesus Pancho and Santiago Quintana, returned to the pueblo with the adopted names of John Dixon and Cyrus Dixon, respectively, although they were not closely related. (3, 15, 48, 49, 53)

With Juan Pedro Melchior, a Shrutzi member, these two became leaders of the "Progressive" faction. This group believed the old Indian ways, best exemplified by the native religion led by the cacique, medicine men, and war captains, were detrimental to the future welfare of all. They advocated acceptance of the white man's culture in every feasible manner. They wanted to abolish the traditional pueblo officers and replace them with judges, sheriffs, and other officials found in Anglo government. They likewise insisted upon a strict interpretation of Catholicism in which native ceremonies would no longer be tolerated. About 1920, they received encouragement from Father Jerome Hesse, the Franciscan then serving Cochiti.[44] The first "Pro-

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[44]Father Jerome left Cochiti soon after the most intense portion of this controversy, having been strongly identified with the "Progressive" faction. It was with somewhat mixed feelings that the Cochiti

gressives" were joined by the Chavez brothers, Cipriano, Francisco, Juan Estevan, and Natividad, Jose Melchior, Rosendo Trujillo, Abenicio Trujillo, Juan Pancho, and others, almost all of whom happened to be members of the Pumpkin Kiva. (15, 48, 70)

Refusing to recognize the authority of the regular pueblo officials, John Dixon became "judge" about 1921. This encroachment on the governor's power was resisted by the "Conservatives," among whom Marcial Quintana was a leader. Much tension arose in the factions' struggle for supremacy. Alcario Montoya and Juan Jose Trujillo of Cochiti, along with representatives from other pueblos, went to Washington, D. C., to have John Dixon removed as "judge." Washington officials, however, took the side of their local representatives who supported Dixon in an effort to break the power of the traditional secular and religious leaders. It was rumored that John Dixon was on the government payroll specifically for this purpose. The "Conservatives" fought back with what means they had, one of the most effective being the economic weapon of confiscating agricultural lands of the "Progressives." The fact that some of these lands had been "homesteaded" and as such, according to pueblo custom, the community could not reclaim them, did not deter the "Conservatives" from attempting to do so. (1, 2, 44, 45, 48, 49, 52, 53, 65, 70)

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learned that he had been transferred back to Pena Blanca in the summer of 1948 to take charge of the parish although not to work with Cochiti directly. In dealing with the Cochiti, the common attitude of the Franciscans was that the people had been told the proper behavior for members of the Catholic faith. Having been informed, the failure to comply rested strictly with the Indians and not with the priests.

During the 1920's, the overt antagonisms slowly subsided. The "judgeships" were abolished by the government in 1923, and early in 1925, the most active leader of the "Progressives," John Dixon, died. Within the next decade, Cyrus Dixon and Juan Pedro Melchior also died. Other "Progressives" continued, for the most part, to live in the pueblo. While there were still deep-seated resentments on both sides, these feelings were seldom openly expressed. "Progressives," in 1948, recognized the authority of governors, fiscales, and other secular officials. They did not recognize the authority of the war captains, nor the powers of the cacique, the medicine men, the katchinas, and other manifestations of the native religion. (25, 44, 45, 48, 49, 52, 53, 55, 65, 83)

As mentioned, members of both factions cooperated in agricultural community work, except on the cacique's fields; they both helped maintain the church, build roads, and shared in other activities of this type. Members of both factions played baseball together on the pueblo teams, and the two groups had been further merged through several intermarriages. Having assumed this general tolerance of the other's stand, the people of Cochiti had been able to cooperate in taking advantage of what they desired from the services offered by the more enlightened administration afforded by the United Pueblos Agency.

CHAPTER X

DISCUSSION AND SUMMARY

General Statements

The fact that changes in one phase of culture have reperoussions in other phases has been indicated in the preceding chapters. A more complete consideration of the significance of these changes and their ramifications throughout the culture has been reserved for the present chapter where a better integrated discussion and summary are possible. Here the aggregate of changes in Cochiti culture are analyzed and weighed in an attempt to evaluate the influence of economic changes in the total changes revealed in this study of Cochiti Pueblo culture change.

An evaluation of the precise character of these changes and their ramifications is a prime objective of this discussion. For purposes of clarification, it should be emphasized that the approach to this evaluation has been made from as unbiased a view as possible. That there have been changes in the Cochiti economy has been demonstrated in the chapters dealing with various aspects of the economy. Precise designations of cause and effect are impossible to make in certain instances. In others, the influence of economic change is readily apparent; in still others, it is less evident or direct, and in some cases, completely lacking.

No attempt is made here to plead a case for "economic determinism." This philosophy was commonly traced back to the writings of

Engels,[1] Marx,[2] and, in turn, to Morgan in his Ancient Society.[3] Actually, it reached its extreme form in the writings of such men as Seligman, who stated, "all social life is nothing but a reflex of the economic life."[4] An answer to this statement is the following comment by Boas.

> Undoubtedly the interrelation between economics and other aspects of culture is much more immediate than that between geographical environment and culture. Still it is not possible to explain every feature of cultural life as determined by economic status. We do not see how art styles, the form of ritual or the special form of religious belief could possibly be derived from economic forces. On the contrary, we see that economics and the rest of culture interact as cause and effect, as effect and cause.[5]

This chapter summarizes the changes apparent in the economic,

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[1]Engels, Frederick, The Origin of the Family, Private Property, and the State, in the Light of the Researches of Lewis H. Morgan, New York, 1942.

[2]Marx, Karl, Capital, London, 1938.

[3]Morgan, Lewis H., Ancient Society, Chicago, 1877, pp. 9-12.

[4]Seligman, Edwin R. A., The Economic Interpretation of History, New York, 1902, p. 382.

[5]Boas, Race, Language and Culture, p. 256. Much the same view was expressed by Kroeber. "For a generation American anthropologists have given less and less attention to environmental factors. In part this represents a healthy reaction against the older naïve view that culture could be 'explained' or derived from the environment. . . . However, such facts are also of consequence in their relation to culture, since every culture is conditioned by its subsistence basis. The culminations of culture obviously rest on a certain degree of economic surplus, for instance. Such a surplus will not explain why the lines in a given art are curved instead of straight, or why a people derives the origin of mankind from below ground rather than from the sky. But it may help to explain why Haida art is esthetically richer than Kwakiutl, or Pueblo ritual more complex than Navasupai. . . ." (Kroeber, Alfred L., Cultural and Natural Areas of Native North America, Berkeley, California, 1939, p. 3.)

social, ceremonial, and political phases of Cochiti culture. In describing ramifications of these changes, cross-references and necessary repetition emphasize the interrelationships of these components of the total culture.

Economy and Changes

Property and Ownership. The Cochiti, in 1948, controlled the same amount of land that they had held through the years under the governments of the United States, Mexico, and Spain. The reservation, roughly divided by the Rio Grande, included over 26,000 acres of which 630 acres were irrigated and the remainder were open range. The Cochiti had had difficulties in regaining their lands from outsiders. These were primarily Spanish-Americans, descendants of families given land by the Cochiti in return for assistance against other Indian raiders. The Cochiti claimed these lands had been loaned; the Spanish-Americans maintained they had been outright gifts of fields and house lots. By 1948, the Cochiti had finally, with the aid of the United States Government, recovered most of their land.

While range lands were owned in common, cultivated fields were owned by individuals, or the tribe. Fields could be "homesteaded," or assigned for use by the tribe. "Homesteaded" fields were retained by the owner whether they were in use or not. By 1948, all land "under the ditches" was owned communally or individually; acquiring land by "homesteading" was no longer feasible due to the adequate supply of irrigated land. So long as the assigned lands were being used, they could be disposed of as the owner chose, i. e., sold, traded, given,

or bequeathed, with the one restriction that the new owner must be a Cochiti. There was no evidence of clan ownership of lands.

One of the changes most apparent to the Cochiti, themselves, was the great reduction in the number of "ranchitos," small houses located at the fields. Very few families continued the custom of living at the "ranchito" for the agricultural season. Reasons for this change were not very apparent although several factors had contributed to it. Cash crops, such as alfalfa and wheat, required less constant care; an increasing proportion of the food came from the trading posts and continued residence in the pueblo was more convenient; pickups, the community truck, and the El Pueblo Bus Line permitted farmers to commute to their farms.

Lands formerly devoted to support of the resident priest had reverted to the pueblo for reassignment. The acreage reserved for the cacique's support had been reduced. Whether this was cause or effect could not be determined, but it was evident that the cacique in 1948 was less dependent upon the pueblo for his subsistence than his predecessors had been. The "cacique's fields," two acres designated as such by the pueblo, were devoted to blue corn used ritually by him.

A community orchard, inconveniently located near Peña Blanca, was largely ignored in preference to individually owned trees in the cultivated holdings of the farmers. While there was no marked change as of 1948, a gradual shift was apparent.

Water rights were interpreted as formerly, the "first come, first served" policy making those fields at the top of the ditches the most valued. Position of the fields, both in respect to the ditches

and to their location east or west of the river, was an important consideration in attempts of some to consolidate their scattered holdings. Water rights within the pueblo paralleled those for the fields. The installation of covered wells and a system of pipes and hydrants in the pueblo constituted changes.

Property holdings in the pueblo were retained under the same concepts as formerly; the physical appearance of the buildings had changed somewhat, primarily in the addition of gabled, corrugated iron roofs on a few houses. Other changes in physical appearance of real property were primarily attributable to health education by the Indian Service; uniform, improved outdoor toilets; more windows in the houses; greater use of screens on both windows and doors; and corrals and pens placed farther from the houses were all evidences of an increased appreciation of health standards.

Community property such as the kivas remained unchanged; a community house for the Pumpkin Kiva people built in 1923 and one for the Turquoise people in 1938 were additions of the last generation and were used extensively; only the Flint-Kō´sharĪ Societies owned their house -- the other society houses were looms, a fact which possibly signified the decreasing regard among the people for these societies; the community corral, while in good repair, was rarely used, a contrast to its former nightly use for the burro herd.

Items of personal property, such as house furnishings and clothing revealed much greater evidence of change than did real property. Even here such survivals as the long pole "wardrobe" remained. News of the electrification of the pueblo in 1949 aroused considerable

speculation on the ramifications of this important change.

Church property had changed in outward appearance only by the addition of the gabled, iron roof of the church and the shift of the Campo Santo from the churchyard to a plot a mile to the west.

Since 1912, Cochiti had had a day-school, and in recent years greatly expanded facilities and services of the school and staff made this an increasingly important factor in pueblo life. More details of this shift are mentioned under the discussion of the Indian Service.

Thus, in summarizing property and ownership, it can be stated that changes up to 1948 had been largely in outward appearance and in total, these had not been great. Changes in principles and concepts of property and ownership were even less apparent.

Agricultural Economy. Agriculture, in 1948, retained its traditional position as the basis of the subsistence economy. However, in the total economy, agriculture, including both farming and stock-raising, had diminished in its relative importance when compared with the non-agricultural economy. Changes in agricultural practices were more numerous and more profound than in property and ownership.

Dry farming, practiced until about 1930 when the Middle Rio Grande Conservancy District built a dam above Cochiti and installed improved canals, was no longer present. While still possible so far as climatic conditions were concerned, it was no longer feasible. Flood-water farming was also abandoned about 1930, likewise due to the surplus acreage "under the ditches." With all farming in 1948 of the irrigated type, certain changes were apparent, some already accomplish-

ed and others evolving. Individual tracts were becoming larger due to consolidations mentioned in discussing ownership. Reasons for this change were found in the greater interest in and appreciation of agricultural machinery; in the conscious shift by some farmers from the former diversified farming to a few cash crops this was also evident. Accompanying this change from intensive cultivation of small tracts was the lack of careful weeding and general care of the fields, as noted by several informants. Whether this was an actual deterioration of former practices or an increasing awareness of their neglect of proper practices was difficult to judge.

Community agricultural labor was a duty in 1948 as it had been in the past. However, as more individuals lived permanently away from the pueblo or no longer farmed despite continued residence there, the work of maintaining the ditches was an increasing burden on the farmers. While it was true that the number of men available for community work in 1948 was comparable to that of the period prior to 1930, the amount of work had expanded with the enlargement of the irrigation system. Both "Conservatives" and "Progressives" worked on the ditch, but only the "Conservatives" worked on the cacique's fields. However, the acreage involved had been reduced, perhaps proportionately more than the labor force. Release from additional community labor obligations came with the abandonment of the fields set aside for support of the resident priest. According to Dumarest's notes, cited on pages 367-368, such labor continued under the direction of the fiscales even after there had been no resident priest, but the date of abandoning this acreage and the associated labor could not be determined. Thus, while the

total amount of community labor done by each farmer remained essentially unchanged, the fact that those in non-agricultural pursuits did not participate made the burden seem greater to the farmers.

Formerly, considerable agricultural labor was asked of fellow clan members, but this was no longer true in 1948. In the past quarter century, reciprocal labor had shifted from clansmen to relatives of another order, i. e., bilateral relatives reckoned according to Spanish or Anglo kinship terminology and of a closer nature than formerly. Formal ritual procedures had been abandoned, and services were asked and granted with no other compensation than perhaps a meal or two and the confidence that similar services could be obtained reciprocally in the future.

The Cochiti had demonstrated an interest in agricultural machinery for many years. Corral threshing remained only briefly after a thresher had been purchased in 1916; a second was bought in 1934, and a combine harvester, in 1947. Objections to such innovations were commonly overcome by practical demonstrations in the course of one or two seasons, an attitude which distinguished Cochiti from such neighboring pueblos as Santo Domingo and Jemez. This utilization of machinery, as mentioned, had repercussions in the location, size, and outline of the fields. By exchange and purchase, farmers were increasing acreages of individual fields; irregularities in shape were being straightened out to utilize machinery more efficiently; approaches to the fields were being cleared and improved. Such steps were unnecessary prior to the use of tractors, combine harvesters, and similar machines.

Little change was evident in the crops grown in 1948. Aborigi-

nal crops, maize, pumpkins, beans, gourds, and possibly tobacco, were still grown. Gourds and tobacco were of small quantitative importance, and cotton had not been grown for almost a century. Crops introduced by Europeans, wheat, alfalfa, oats, chili, watermelons, muskmelons, and many garden vegetables, were well established. However, changes were occurring in the relative importance of these crops. Maize continued to be the most common crop, comprising over half of the total cultivated acreage. However, it was being grown more and more as a forage crop and less for human consumption. Wheat, the third crop in acreage, was becoming more popular; it was ground into flour at the pueblo or in town or sold as a cash crop. Alfalfa, the second in acreage, was being grown to rebuild the soil in the sequence of crop rotation and was grown by many farmers for feed. In numerous instances, it was used as a cash crop, a distinct departure from former agricultural practices.

The statement of Aberle on page 107 regarding general land shortage among the pueblo tribes did not apply to Cochiti; between fifty and a hundred acres lay fallow and unassigned to any individual nor were they utilized by the community. With the increased use of machinery permitting the cultivation of greater total acreages by individuals and with the greater interest in cash crops, the failure to apply for additional acreage indicated that commercial agriculture was still in an incipient stage. How far the traditional pattern of community controlled diversified farming could be manipulated to permit an agricultural life yielding monetary profits was not yet apparent.

While the number of animals raised by the Cochiti were recog-

nized by all as smaller than the former totals, primarily due to the stock reduction and range improvement programs of the Indian Service, stock-raising was an important economic pursuit. In 1942,[6] income from stock had been $6,069, as compared with $8,060 from various crops. Cattle and horses were the most important animals in 1948; both were allowed to roam the fenced range with owners finding their animals when they needed them. This was a change from former communal herding of horses; formerly burros were herded communally, but in 1948 none of these animals were present. Oxen had also disappeared from Cochiti, being replaced by horses and tractors. Sheep were few in comparison with former times although several farmers were expanding their flocks. The number of pigs was limited by the garbage supply supplemented with grass and surplus or spoiled fruit. Chickens were raised from either settings or hatchery chicks, but seldom matured into profitable flocks. A few turkeys and rabbits were raised but were of little economic importance.

Food preparation and diet again demonstrated a combination of the old and new. Much flour was still ground on the traditional metates, especially corn; on the other hand, there was increased dependence upon the commercial wheat flour sold at the trading posts and stores in nearby Anglo communities. Dome-shaped outdoor ovens were used for most breadstuff except for cakes, pies, and similar items which school girls were taught to make in wood range ovens. Home canning was becoming more prevalent with the aid of the school teachers

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[6]These and other 1942 data cited in this chapter were obtained from Payne, Annual Report, pp. 8-11.

and other Indian Service personnel. Dependence upon commercially canned goods was increasing in proportion to the shift of individual families to a cash economy. In most instances, the daily diet remained unchanged; corn, beans, chili, and coffee were most common. There was little meat. For feasts, this combination was supplemented with items all but lost from the culture and those newly acquired. These included the traditional paper bread, made by very few women in 1948, and Jello, fruit salads, cakes, pies, bottled soft drinks, and similar things. Feast-day stews were supplemented by meat: chicken, mutton, beef, or venison in season. Considerable meat was purchased from city markets; only occasionally were their own animals butchered. Lack of refrigeration facilities made it advisable for the Cochiti to sell their own animals and buy the specific quantities of meat as they needed them. A significant change was seen in the relatively small amount which was derived from hunting and gathering pursuits.

In summarizing changes in the agricultural economy, the most important was the shift from diversified, subsistence agriculture toward cash crops. Machinery had speeded the work up sufficiently to provide additional time for other types of activity. Fenced ranges and a fence rider had freed the young men from traditional herding duties, again making additional man-hours available for other work. In turn, conversion of produce to cash was necessary in order to purchase parts and fuel for the machines which the Cochiti did not produce. The expanding cattle business was primarily for income, with the meat consumed being obtained from markets. Time formerly devoted to agricultural community labor was increasingly turned, in 1948, to personally

remunerative labor. In diet, changes were essentially a reflection of the shift from subsistence farming to cash crops and to other economic activities which gave a monetary return. This was used for the purchase of staples and other foodstuffs from trading posts and stores in neighboring towns. Other innovations in the diet, such as home canned foods, resulted from the extension program of the Indian Service.

Non-agricultural Economy. This miscellaneous grouping included: hunting, gathering, fishing, trading posts and stores, handicrafts and the tourist trade, non-agricultural community labor, community licenses and fees, and wage-earning within and away from the pueblo. Shifts in relative importance of these activities constituted the most profound changes in the economy. Invariably the shifts reflected the trend toward monetarily rewarding activities and away from those of a strictly subsistent nature.

Hunting, which formerly was undoubtedly of greater importance in pueblo culture than has been generally acknowledged, was of relatively minor significance in 1948. Communal hunting of big game animals no longer occurred, and the Hunters Society had disappeared, its duties performed by the ShĪ´kame Society, which in 1948 had only one member. Communal rabbit hunts were still held under the direction of the war captains; two were held for the cacique and two for the people each year. Formerly, prestige was gained from killing a bear, lion, or eagle, and a "brother" status was attained by the first two to touch the body. In 1948, most hunters considered the rituals involved too inconvenient. The two men had also been eligible for Ōmpī membership,

but the Ompī, or Warriors Society, had disappeared toward the end of the last century. Firearms and the increasing number of sportsmen in the Cochiti territory were blamed for the lack of game and the declining interest in hunting.

Total gathering of natural resources had declined much less than hunting. Such materials as juniper, adobe, building stone, pine, and cottonwood were plentiful, easily obtained, and functionally satisfactory for building, heating, and handicrafts. Use of native wild food plants had declined except for some continued utilization by the few families occupying "ranchitos." Gathering, in contrast to hunting, had been essentially an individual occupation with little or no ritual or control by the officers. The outstanding exception was the gathering of salt in which there was considerable ritual; however, salt gathering had been abandoned in favor of commercial salt more than a generation earlier.

Fishing was never of great importance in Cochiti economy although, judging from the former communally owned large nets controlled by the war captains, it undoubtedly had once been of greater significance than it was in 1948.

Trading with other southwestern tribes was a long established economic activity. However, by 1948, with the improved transportation provided by several private trucks, the community truck, and the El Pueblo Bus Line and with the increasing number of ceremonies, fairs, and other exhibitions, the Cochiti, as a tribe, were trading more and at greater distances than ever before. Articles traded included bread, corn, and other foodstuffs together with a variety of handicrafts,

among which drums, jewelry, pottery, and beaded items were most prominent. Few Cochiti were exclusively traders, but almost all participated to some extent. Cash transactions were slowly replacing barter; handicrafts for the tourist trade were consequently replacing products of appeal to Indians.

In 1942, income from handicrafts ranked fourth behind that from stock-raising, farming, and labor. Drums were a favorite tourist item. Among the leading articles were water color and oil paintings of dancers and other figures. As the fame of Tonita Peña, Joe Herrera, and others grew, more Cochiti were becoming interested in art on a full-time basis.

Two trading posts in 1948 were operated by the same Spanish-American families who had operated them for more than half a century. In the meantime, two other stores operated for short periods by Cochiti Indians had been abandoned as failures. In 1948, a loan had been made by the tribe to one of the Cochiti for purposes of opening a store in the pueblo. At that time, no further action had been taken, and the venture was viewed with mixed feelings by the Cochiti. Some felt that the move was unwise, the antagonisms then directed at the Spanish traders would be shifted to this Indian and new dissention would arise among the people. Others favored it, believing that a successful, Indian-operated business would force the Spanish traders out of the pueblo.

Non-agricultural community work, church maintenance, general cleaning of the pueblo for the annual feast, and repair of moiety community houses and society houses, continued as in the past. "Progressives" worked only on the church and general clean-up, leaving the kiva and society work to the "Conservatives." Among both groups, there was

an increased tendency to find excuses for not participating, thus leaving this work to the same faithful group who shared most community responsibilities. Labor and time formerly expended in maintaining the resident priest and operating the ferry were no longer demanded.

The tribal treasury, responsible for the maintenance and replacement of communal machinery, was augmented by revenue from licenses and fees. Concessions at various celebrations, parking privileges, commercial photography, and other enterprises were assessed, partly for the revenue and partly as a means of controlling these activities.

Wage work was periodic and of variable economic importance. Nothing comparable to the income derived from the Cochiti Dam construction in the early 1930's had been experienced before or since. Temporary employment was occasionally obtained from highway construction, Indian Service projects, storekeepers, operation of community machinery, and from other Indians for such activities as house-building. Several Cochiti had all but abandoned farming and were ordinarily available for assorted odd jobs.

While there had been a long established practice of working for wages away from the pueblo, the numbers engaged in this employment in 1948 constituted a far greater proportion of the tribe than at any prior period. In 1942, labor both at the pueblo and away yielded an income of over $20,000, as compared with a total of over $14,000 from farming and stock-raising. During World War II, thirty-three Cochiti were in service, with income resulting from their pay and allowances paid their dependents. Following the war, of the thirty who returned, fourteen were living in the pueblo while sixteen remained away. Actu-

ally this constituted little change as it reflected very closely the residence of these individuals prior to the war period. A significant change from former times was seen in the fact that in 1948 there were 110 (26.0%) of the total population of 423 who lived away. Of these 110, eighty-one lived within a hundred miles of the pueblo, and twenty-nine lived farther away. Those living nearby often returned for feast days and other occasions, primarily for social reasons.

The economic effect of these absentee members of the tribe was probably more profound than that of any other group. Demand for irrigated acreage was decreased, and an actual surplus of land resulted, as mentioned. These people were employed by individuals beyond the influence of any economic sanctions or reprisals which the pueblo officials could effect. Thus, these individuals and their families were free to ignore the dictates of the tribal religious hierarchy and their "conservative" secular officers. Disapproval of practices of these officers could be expressed without fear of punitive action, a basic change from the former domination of these officials. Community projects were borne by a smaller proportion of people. While this labor force was approximately as large as it had been in the past, the psychological factor of having non-participants simultaneously able to advance themselves economically had a demoralizing effect on a basic pattern of communal aid. Ramifications of this change reached far into other aspects of Cochiti culture and contributed to changes there.

When pueblo residents visited other Cochiti living in Anglo cities, they were impressed with modern conveniences and appliances. In some cases these were adopted for use in the pueblo, or the desire

for them at least was created. Again, advantages of wage-earning in the modern world were emphasized. In answer to this desire, agricultural pursuits were shifted to cash crops; more time was spent in income-producing handicrafts; or a complete break was made with the traditional agricultural pattern, and remunerative employment was sought.

In a study of the economy of all Pueblo Indians of New Mexico, Aberle summaraized her findings as follows.

> The aboriginal pattern was an economy primarily for subsistence. It was useless to raise more corn than your family could consume or store for future use, because there was no market for it. You shared with your neighbor when he was hungry and he in turn helped you when you needed food. Without money, security lay in a system of social obligation.
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> During the historic period, because of the institution of the trader, the Indians passed through the credit system before they reached a cash economy. Even as late as 1934, credit, not sale, was the usual Indian habit. . . . This delay in the use of cash was probably the most important factor in preserving the older form of their organization. Without the common denominator of cash, the relation between their produce and income was difficult to compare with the same figures outside the reservation.[7]

Aberle continued with a characterization of the more recent years in general Pueblo Indian economy.

> Cash, during the thirties and forties, was obtained through wages and by the sale of animals and farm products. Cash in hand and the spending of compensation money has taught the Indian the value of the dollar. In those villages where contact with the outside made the handling of money necessary, the offices of Secretary and Treasurer have been added to the civil government. Official Chauffeur was introduced as a result of the possession of adequate funds to buy a community car. Cash supplied the security once found in social obligations, and it has demanded a more centralized organization with an emphasis on mercantile transactions rather

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[7]Aberle, The Pueblo Indians, p. 17.

> than on tribal rituals to keep together people no longer dependent on each other for the necessities of life.[8]

Conforming to the general pattern of change outlined by Aberle, the supplementing of agriculture with other economic pursuits and the shifts within the agricultural activities, themselves, all revealed an increasing desire of the Cochiti to abandon their former economy of subsistence and barter, and credit, in favor of one in which monetary values were dominant. What were the effects of these economic changes on the remainder of Cochiti culture? What portions of other cultural aspects were outmoded and discarded? What replacements or compensations accompanied these developments in Cochiti culture? The discussion now turns to a consideration of these queries.

Social Organization and Changes

Cochiti social organization in 1948 revealed several changes when compared with that of earlier periods. These changes are discussed in the following sequence: kinship institutions, kinship terminology, free association institutions, and crises of the life cycle.

Kinship Institutions. Monogamous families were the basis of Cochiti social organization in 1948, and the population of 423 was divided into ninety-three households including three generations at most. Of this total, 313 actually resided permanently in the pueblo, grouped in sixty-three households averaging 4.96 members. As mentioned in the

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[8]Aberle, The Pueblo Indians, p. 64.

discussion of wage-earning, the large percentage of absentee tribesmen constituted an important change from the past. While the number of residents compared favorably with past census figures (APPENDIX VI), the psychological effect of these absentee wage-earners was considerable. Some had married Anglos or Spanish-Americans who had little interest or sympathy with Cochiti social organization or culture. Children of these marriages invariably failed to participate in the pueblo culture. In cases where an Indian from another tribe had married a Cochiti, the couple and their children were sometimes lost to the Cochiti culture although there were cases where this was not true. The writer's data confirmed Goldfrank's findings that the Cochiti clan system was declining. Only those fifty years old or more were aware of clan affiliations of their fellow tribesmen, and in many cases even these older people had very limited knowledge. Most younger people did not even know their own clan. Undoubtedly, the increasing proportion of their relatives without any clan membership was a contributing factor to this lack of interest.

Clan exogamy was still commonly practiced despite this ignorance of clan affiliations. This was partially explained by the respect paid the opinions of older people who knew clan affiliations; there was also the possibility that the explanation lay in the law of averages operating in conjunction with Catholic rules of incest which automatically had the effect of barring certain intra-clan marriages. Analysis of the marriage records of the Franciscan Fathers and other genealogical data revealed that clan exogamy had been breached in a few cases for many years. These instances were directly correlated with clans

having greater numerical strengths wherein marriage was possible without breaching Catholic incest laws. Endogamous marriages were evenly divided between "Conservative" and "Progressive" couples, with recent intermarriages between the two groups as well.

Clan religious activity had disappeared almost entirely; some memory remained of clan curing and adoption ceremonies as of a generation earlier. As noted on page 230, Goldfrank explained this decline as due to the long association with the Spanish-Americans in Cochiti. Kick-stick races, formerly run competitively between the clans, had shifted to competition between the Turquoise and Pumpkin Kivas.

Reciprocal labor obligations formerly shared by clan members had shifted to members of the conjugal family. Other obligations formerly shared by clansmen had been absorbed primarily by the padrinos who participated in baptisms and weddings. Padrinos were selected not for clan affiliations but for such qualities as wealth, wisdom, and exemplary living.

Kinship Terminology. Paralleling the decline of the clan system in the consciousness of the people, and a ramification of this development, was the decline in knowledge regarding kinship terminology. In 1948, Spanish and English terms of kinship were extensively replacing native terms. Where native terminology was retained, classificatory terms most comparable to Spanish or English terms were being used to replace former descriptive, or specific, terms necessary under the former clan system. At the same time, these classificatory terms began to be applied to relatives of the father.

Free Association Institutions. Most prominent of this group were the two kiva groups, or moieties, the Turquoise and the Pumpkin. As described on page 239, Starr failed to mention these, and Dumarest only briefly referred to them. Curtis stated that they were formerly endogamous while Goldfrank noted that there was no correlation between clans and kivas. In 1948, moiety membership could be changed with permission of the kiva heads and war captains (No case of denial was known.), and affiliations of all tribesmen, including the inactive "Progressives," were generally known in contrast to the ignorance of clan data. In totals, the Pumpkins outnumbered the Turquoise people, 219 to 204; however, since almost all "Progressives" had come from the Pumpkin side, the active Turquoise membership was greater, 176 to 113. A possible explanation of this was suspected in the constantly more stringent ceremonial and general behavior standards maintained by Pumpkin "Conservatives." The Turquoise people, in holding a more tolerant view, appeared to maintain a greater enthusiasm and loyalty, especially among the younger people.

In earlier times, all older boys had been initiated at four year intervals into the Katchina Cult; in 1948, this approximation of age groups no longer existed. From a form of age group, the Katchina Cult had become a free association group. An increasingly smaller proportion of the boys was initiated, and the procedure simply paralleled that of joining any other secret society. In 1948, older boys and young men were united in common interest in pueblo baseball teams. A house was used as a headquarters and clubroom, with baseball being the focal

interest regardless of social, ceremonial, or political affiliations. An interesting mixture of native and Anglo culture was seen here. Supporters for the teams were found in every conceivable pueblo faction, a contrast to Santo Domingo Pueblo where conservative leaders banned baseball. However, at Cochiti there remained active guardians of the old life as was evidenced in the effective ban placed on the cacique's continued playing after he had been installed as the tribal religious leader.

Crises of the Life Cycle. Several changes had occurred in the crises periods of the individual life cycle. While certain changes could be attributed to influences of the absentee wage-earning group, they reflected to an even greater extent the influence of Catholicism and the educational and health programs of the Indian Service.

Native mid-wives and medicine men continued to officiate at births although the proportion of Cochiti babies born in hospitals was steadily increasing. In births away from the pueblo traditional naming ceremonies conducted by medicine men were often foregone; whether the birth occurred in the pueblo or in the hospital, Catholic rites of baptism were held. In this way, children always had their padrinos but frequently lacked this initial association with the medicine men. The fact that the favorite padrino, as of 1948, was also the Giant Medicine Society Head was an interesting coincidence; informants insisted this was due to the man's personal popularity and status, not to his official capacity.

In ordinary use of names, Spanish names seemed most common. It

was noted that certain older informants frequently could recall a particular person's Indian name but not his Spanish, indicating that the native names were still important, at least among the older people. Teknonymy was often used, although there was no reluctance to use personal names. Surnames appeared to be much more stable than in past years, reflecting a growing realization of advantages of a steady name for government and church records and for purposes of employment.

Puberty had never received a great deal of attention; with the passing of the universal initiation of boys into the Katchina Cult, puberty rites could be considered non-existent.

In 1948, only one couple had married outside the Catholic Church. In the usual marriage procedure, a feast was served by the bride's parents following the Nuptial Mass. After the feast, advisory speeches were given by the padrino and prominent men of the pueblo. Informants claimed that this feast and advising had been essentially the native wedding ceremony. Their importance in 1948 was indicated by the fact that the bride's parents and, often, other members of the immediate family were usually too busy with preparations for the feast to take time to attend the Mass. This was true of both "Conservative" and "Progressive" families. As mentioned, Catholic rules of incest were of greater concern in 1948 than was the rule of clan exogamy.

Ages at marriage revealed little change throughout the span of the Church records; individuals under twenty were becoming less common and the modal ages of both brides and grooms were advancing within the twenties. Men were usually older than their brides, generally of approximately the same age, however; some differences of as much as

twenty-five years were noted. Failure to marry was rare, and the great majority remarried following the death of a spouse. Numerous instances of three and four spouses were noted.

At death, the medicine men maintained much of their former prominence, and the influence of Catholicism was correspondingly weakest. Except for the "Progressives," medicine men were invariably called to prepare the body for burial and care for the spirit; on the other hand, the priest was often not called until later when he merely blessed the grave. In any case, the sacristan and the fiscales supervised burial in the Campo Santo. The sacristan who began his duties in 1947 was the first man in several decades to hold this important Catholic position and not hold concurrent membership in the Kō´sharī Society.

Death records revealed a high rate of infant mortality in the period, 1890-1930. Prior to this period, the records were not sufficiently complete to determine the rate, but it surely must have been at least comparable. Since 1930, steadily improving health services offered by the Indian Service, together with the increased willingness of the Cochiti to take advantage of these services, could be credited with the decline in infant mortality and the betterment of general health services.

The explanation of changes in social organization lay in economic changes, influence of the Catholic Church, and the effects of Indian Service educational and health programs. Economic changes, centering in the shift toward a cash economy and including psychological effects of the absentee wage-earners, had contributed to the impending disappearance of the clan organization. While Catholicism

also played a role, it had not had too great an effect despite several centuries of contact. Shifts in kinship terminology reflected the decline of the clans and also the influence of the long years of contact with Catholicism and the resident Spanish-Americans. Free association institutions, such as the kiva groups, retained their strength except for the withdrawal of the "Progressives." This development, as will be shown, was primarily the result of education, Catholicism, and, indirectly, economic factors. Life cycle changes were more directly attributable to influences of Catholicism and recent programs of the Indian Service. The fact that the Cochiti had been so amenable to the Indian Service health and education programs was at least partially explained by their realization of the economic advantages therein.

Ceremonial Organization and Changes

Changes in the ceremonial life at Cochiti during the past seventy-five years had occurred at a constantly accelerating rate and were perhaps even more discernible than changes in the social organization. Despite this fact, specific data on ceremonial changes were not as plentiful as might be expected. A partial explanation of this lay in the fact that many people, even among the "Conservatives," had little knowledge concerning various ceremonial activities. These were controlled by the secret societies whose memberships had suffered loss of numbers, some to the point of extinction. There were steadily fewer qualified persons who could state that a certain individual was performing his ritual duties satisfactorily or that a society was continuing its proper functions.

Further difficulties in analysis arose in distinguishing manifestations of several known contributing cultures. The core of Cochiti religion was assumed to have been of mixed, but unknown, Indian origins as of the time of Spanish exploration and colonization. Since then there had been accretions to this core of Spanish and Catholic items as well as those from numerous tribes of the greater southwest. Some admixtures were recognized by the Cochiti, themselves; others had lost their original source and had been incorporated into Cochiti ceremonialism as their own.

Attempts to designate these accretions are made in discussing the changes apparent in 1948 under the following headings: secret societies, selected ceremonies, and the Catholic Church.

Secret Societies. Before examining specific changes in the general grouping of the medicine and other secret societies, it was advantageous to analyze the functions of these societies. Remarks of Wedgewood were pertinent.

> Before going any further it will be as well to distinguish here between two distinct types of function which a secret society may fulfill: between what we may call the "ostensible" or "manifest" function, and the "latent" or "underlying" function. In saying that every secret society has some function to perform, it is meant that every one has some latent function. Of this the members and the outside world alike are in general entirely oblivious, and they may only become aware of its existence when, through some rude shock (often the powerful interference of an immigrant people of different culture and masterful manner), the secret society is destroyed, and the stability of the community suffers as a result. . . .[9]

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[9]Wedgewood, Camilla H., The Nature and Functions of Secret Societies, Oceania, Volume I, 1930, pp. 129-130.

Secret societies at Cochiti, with their ostensible and latent functions, had experienced changes simultaneously with other portions of the ceremonial organization as well as with other aspects of the culture.

As mentioned in discussing secret societies, the limited memberships of these groups in 1948 did not constitute a great change. Membership quotas compiled by Dumarest for the end of the last century and by Curtis and Goldfrank for a generation ago, together with rosters of all members, both living and dead, known to informants, indicated that total memberships in the different societies were never large. Real change had come in that 1948 memberships were composed of individuals who were then of the parent generation and in many cases of the grandparent generation. Members from the younger generations were few, and judging from attitudes prevalent in all generations, there appeared little chance of an appreciable increase in society memberships.

With passing years and continued failure of new members to appear, the societies were becoming numerically weaker. Although details were difficult to obtain, numerical decreases in society memberships must have seriously hampered their proper, traditional functioning. Informants commented that medicine men of 1948 did not possess the knowledge and abilities of their predecessors. Several societies, the Warriors, the Hunters, the Snake, the Fire, and probably others had completely disappeared. Their functions had been absorbed by continuing societies in some instances, and, in others, their functions had been lost to the community.

Among existing societies, including those that had taken over

functions of extinct groups, the Shī´kame and Thundercloud Societies had only one member each. The Giant and Shrutzī Societies had two members each, in both cases the membership being comprised of an old man and a young man. Concensus of opinion indicated that in each society the younger member, who would carry on the functions of the society upon the death of the elder member, was not qualified to assume this responsibility properly. The Flint Society also had two members, both adult males. The younger of the two, in his forties, was the cacique, and barring unforeseen events, the chance of the pueblo's having a qualified religious leader for many more years was good.

As mentioned, the practice of the 1948 cacique's supporting himself and his family by farming and craft work, such as drum making, constituted a distinct change from former times when the cacique was supported entirely by the community. While the reason for this change could not be determined, it was probably economic. Either people were too busy with their own work to spend greater amounts of time in his support (in view of the general decline of his prestige), or the cacique was anxious to live at a higher level than his predecessors and the people were either willing or forced to let him achieve this goal.

In 1948 there was a total of five members in the three medicine societies. The traditional ostensible functions of these medicine men had been treatment of diseases, weather control, combating pueblo enemies, both raiders and witches, and annual selection of the six major secular officers. Latent functions had consisted of guaranteeing the general welfare of the people and exercising the ultimate authority in governing the people. By their annual selection of officials who in

turn became members of the council, the medicine men had been able to provide an inherently conservative governing body which protected the status quo in tribal culture. When asked if the currently small number of medicine men did not worry them, informants replied that it was not proper to recruit society members. The desire to join these societies had to come from the person, himself. Formerly, when members had been urged to join against their will, their subsequent dissatisfaction had worked to the detriment of the societies. As to what might happen when any or all societies should disappear, informants occasionally expressed regret over such an eventuality, but they were more inclined to feel that societies, as part of the "old times," might better disappear with them.

In looking for reasons behind the decline of the medicine and other secret societies and the lack of concern over this change, the partial influence of economic changes was apparent. To those who had shifted away from almost complete dependence upon agriculture, the proper functioning of these societies, including seasonal ceremonies in which non-society members also participated in exercising weather control, was of much less vital importance than formerly. With wages and crafts producing income which enabled a person to buy foodstuffs and other necessities in stores, the occurrence of floods, drouths, and early or late frosts was immaterial. Briefly, to a silversmith working at his bench indoors day after day, the weather was of minor importance.

Richards emphasized the close relationship between agriculture and the climatic seasons among the Bantu peoples of South Africa.

> . . . Cultivation is the most seasonal of activities and provides the rhythm for the working year -- a rhythm which I am inclined to believe acts as a sort of stimulus in itself under the monotonous conditions of primitive village life.[10]

Richards also pointed out, "Moreover, among most Bantu peoples the chief events of the agricultural year are marked by important religious festivals. Thus the natural rhythm of seasonal change is ceremonially emphasized."[11]

Thus, at Cochiti it was not surprising to note that with the steadily declining emphasis upon agricultural activities, there was a decline in importance of secret societies and numerous ceremonials where weather control and allied objectives were paramount.

Other contributing factors to the increasing indifference regarding native religion were formal education and general acquaintance with surrounding Anglo culture. As Redfield found in Yucatan, "The city man, it was learned, as a result of schooling, travel, and propaganda, looked with disfavor or contempt upon the shaman-priest."[12] For the men who had remained farmers, school and extension service instruction and demonstrations had proved repeatedly that proper seeds correctly planted in well tended fields could produce good harvests if adequate and timely moisture, most easily the irrigation water, was available. In all this, the Cochiti were increasingly aware that dis-

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[10]Richards, Audrey, Hunger and Work in a Savage Community, Glencoe, Illinois, 1948, p. 100.

[11]Ibid., p. 101.

[12]Redfield, Robert, The Folk Culture of Yucatan, Chicago, 1941, p. 142.

turbing factors such as violent winds, hail, and summer drouths or cloudbursts, were products of natural phenomena over which medicine men were powerless. A few maintained that if the medicine men were handling their functions satisfactorily, i. e., as formerly, these catastrophic events could have been avoided. This group was rapidly disappearing in Cochiti culture. For those who still farmed, the pueblo's position immediately below the Cochiti Dam and the improved canals of the Middle Rio Grande Conservancy District were chiefly responsible for reducing agricultural risks and causing better crops.

Education of both a formal and informal nature had further served to reduce the prestige of the medicine men in another of the fundamental functions of the shamans, that of curing and combating the ill-effects of witchcraft. Through educational programs both in the schools and on the adult level, the true nature of many diseases and various physical disabilities was understood by a greater proportion of the Cochiti than ever before. The fact that several young women had become graduate nurses and experiences of servicemen had aided in the acceptance of modern medical knowledge by most Cochiti. As would be expected, faith in the white man's medicine and doctors was not as yet absolute, but great progress had been made.

Catholicism had also served to undermine the essential nature of the medicine men in regard to the crises of the life cycle, as has been noted. Faith in the curing and other powers of the medicine men had been shaken by the teachings of the Church, and the people were shifting their allegiance.

Witchcraft was still present at Cochiti in considerable force,

both among the Indians and the resident and neighboring Spanish-Americans. This was seen in the rare mention of the subject by the Cochiti, and then, with noticeable reluctance.[13] There were two reasons for this. First, there were the older people, and a few of the younger ones, who actually believed, without reservation, in witchcraft. Second, there were those who did not personally believe in it but who found themselves in the situation of having to acquiesce to the feelings of those who did. Increasing numbers of the Cochiti were in this second group where they had to suppress their personal feelings until such time as the first group disappeared or lost control. If the non-believers revolted against the whole complex of witchcraft, they faced charges of being involved in witchcraft themselves. Since the charges and trials were exclusively in the hands of the "Conservatives," the Council of Principales, war captains, and others, such risks were not worth taking. A feeling of allowing such things to run their course dominated.

Medicine societies remained important since the three society

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[13]A comparable situation is described by Kluckhohn and Leighton for the Navaho. "Witchcraft is a subject which most Navahos are unwilling to discuss, sometimes even to mention, before whites. This is in part because they anticipate ridicule or violent disapproval if they confess such a belief, in part because of their own intrinsic fear and dislike of talking about such an unpleasant subject. Consequently, some whites live for years in the Navaho country with only a vague awareness that Navahos suspect others as witches, gossip about them, hold trials, and occasionally carry out 'executions.'" (Kluckhohn, Clyde, and Dorothea Leighton, The Navaho, Cambridge, 1948, pp. 128-129.) An earlier and more detailed account of this situation can be found in Kluckhohn, Clyde, Navaho Witchcraft, Papers of the Peabody Museum of American Archaeology and Ethnology, Harvard University, Volume XXII, 1944, pp. 9-12.

heads selected the officers of the pueblo each year. These men were chosen from the "Conservatives," men who could be relied upon to perpetuate the old ways wherever possible. Following selection, officers became life-time members of the Council of Principales. As the number of men who exhibited both governing qualities and "conservative" sentiments gradually diminished, the society heads turned increasingly to men who were already Principales to serve again.

It will be interesting to learn in a few years what compensations will have been made for the complete disappearance of one or more of these societies. The remaining societies could continue their present functions regarding weather control, and the remaining shamans could carry on the fight against the witches. But the question of who will carry on perhaps the most important remaining function of the medicine societies, that of selecting the pueblo officers, is unanswered. This question is not merely one of a substitute absorbing additional duties, but rather of keeping the traditional balance among the qualified medicine societies and avoiding a concentration of these powers.

In addition to being an "ostensible" function by Wedgewood's definition, nomination of officers was also a "latent" function in that it was the mechanism by which the shamans exercised their very important duty of guaranteeing the welfare of the pueblo and directing the governing of the tribe in the manner which they considered desireable. In this sense, the nominating function was considered the most important of the functions exercised by these societies in 1948.

In the non-medicine societies changes were likewise evident. There were two, TubajĪ and Fō´shai-afīī, mentioned in earlier ethno-

graphic data that were no longer remembered by the Cochiti. The ShrutzĪ Society and the closely associated Katchina Society, or Cult, were mentioned as examples of continual change. A generation ago, the Cochiti complained to Goldfrank that ShrutzĪ members had become lazy and were no longer doing their ceremonial work properly. It was interesting that at that time and at no time since had the war captains been able to improve this situation. Informants stated that the old man who was head in 1948 knew all about the society and katchinas, but the younger member knew very little. At the same time they claimed that for a particular ceremony, if the ShrutzĪ Head stated that a specific characterization should be dressed and behave in certain ways, his opinion outweighed those of the war captains.

What will happen when the younger man, as the new head some day, insists upon an inaccurate performance will be interesting to observe. While he could yet learn the necessary details, the indications were that he would not. As stated before, the 1948 status of the katchina performances at Cochiti was difficult to evaluate due to the irregular schedule of these impersonations. Again, irregularity of performances increased the chances of unconscious change. ShrutzĪ members and war captains could easily forget details of costume and behavior, and the chances were equally good that the pueblo at large would fail to detect these discrepancies. In this way, honest opinions of no known changes could be adhered to by numerous informants and only careful checking with earlier recorded descriptions would reveal shifts. As pointed out, my informants completely failed to recall five of a total of twenty-five katchinas recorded by Goldfrank a generation earlier,

possibly an indication of still further, but unrealized, changes. The changes were again generally attributable to economic changes, education, and Catholicism.

The two societies which appeared strongest in 1948 at Cochiti were the Kō´sharī and the Kwi´rēna. Their activities occurred regularly and seemingly conformed to their traditional patterns. A great factor in this continuation had undoubtedly been the relatively large memberships in both societies. This was true of both male and female memberships. However, even here there appeared to be possible trouble ahead. The Kō´sharī Society was closely related to the Turquoise Kiva while the Kwi´rēna Society had its affiliations with the Pumpkin Kiva. While there were no rules that society members had to come from the associated kiva, there was a definite feeling that the kiva head, who had to be a kiva member, should also be a member of the associated society. This had been the situation until 1948 except for several winters when the Pumpkin Kiva was left in charge of Lorenzo Herrera, a Kō´sharī, by the actual head, Juan Estevan Chalan, a Kwi´rēna member as he should have been.

While this situation had been rectified by Juan's residence in Cochiti the past few winters, thereby avoiding the issue, examination of the 1948 rosters of both the Kō´sharī and Kwi´rēna Societies indicated future trouble. Of the eight active Kō´sharī male members, there were four from each kiva. However, the Turquoise members included the cacique, a second Flint shaman, the oldest living man of the tribe (too feeble to take the responsibility of being kiva head), and the kiva head. If anything should happen to this man, the head-

ship would be assumed by one of the four Pumpkin Kiva members, which would not be satisfactory to many in the pueblo. In the Kwi´rēna Society, there were eight active males. However, only the Pumpkin Kiva Head, Juan Estevan Chalan, belonged to the Pumpkin Kiva. The solution of this problem, as noted on page 309, was revealed following the death of this man in 1949. Another Kwi´rēna member, Pablo Trujillo, changed from the Turquoise to the Pumpkin Kiva (of which he had once been a member) and became Pumpkin Kiva Head. Such a solution could be forecast for the Kō´sharī Society as well.

Reasons for the lack of new members in both medicine and non-medicine societies from among the pueblo population at large, and particularly from among the young people, were again found in education and, to a greater extent, in economics. Many younger people did not believe in the activities and purposes of the societies. However, even before the era of more general education, the societies had been boycotted by many for essentially economic reasons. Society retreats consumed considerable time in the course of a year. An interested member found it difficult to obtain permanent outside employment and retain active membership. Those who remained in the pueblo lost many work days due to society functions. Unwillingness to serve in these activities and to undergo the fasts and other physical hardships constituted a major reason for not joining these secret societies. Educational influences, particularly those associated with years spent away from the pueblo in boarding schools at the ages at which children formerly joined these societies and were impressed with their functions, had also reduced the interest in belonging to these societies.

The influence of Catholicism in weakening the role of these societies has been described.

With their 1948 numerical strengths, the future of the Kō´sharī and Kwi´rēna Societies appeared more assured than that of other societies. The functions of these two societies were also in their favor. While they were becoming less vital to the welfare of the people in matters of weather control for the same reasons cited for the three medicine societies, their functions as what Goldfrank referred to as "managing societies" guaranteed their continuance for some time to come. Each society was directly responsible for the direction of ceremonial activities of one kiva group. The two societies shared in annual rotation the direction of the principal Feast Day celebration as well as other ceremonies.

Selected Ceremonies. While many native ceremonies, emphasizing rain and fertility, had lost much of their former significance due to economic changes, educational enlightenment, and influence of the Catholic Church, it must be remembered that these same ceremonies retained great attraction for the Cochiti. The future of these seemed assured for many years to come, partly as a survival of beliefs and sentiments accompanying their former vital nature in the all-important agricultural economy of the pueblo, partly as manifestations of the entire religious heritage, and partly as dramatic pageantry which had not only esthetic appeal to the Cochiti but had economic value in its appeal to the tourists and other outside visitors. As the managing groups for much of this tribal ceremonialism, the future of the Kō´-

sharī and Kwi´rēna likewise appeared assured, as mentioned. As Wedgewood indicated in her comments regarding secret societies, functions may change. It was quite likely that in the future, both the societies and the ceremonies would lose much of their esoteric and deeper religious significance. At the same time, the outward manifestations would continue as tribal folklore, or pageantry, when all other bases would have been lost.

Several levels of acculturation were apparent in ceremonial life. Of the native ceremonies, the katchina dances and rites of the medicine societies continued, with some divergence of opinions as to the degree of change involved. These remained strictly esoteric, the performances being closed even to the "Progressives" among the Cochiti. The perpetuation of these rituals, despite efforts to eradicate them by the Church, was due to a great extent to the traditional pattern of secrecy which surrounded these and other ceremonials. Ceremonies such as the Spring Dance, Tablita Dance, and various animal dances had been incorporated with the Catholic calendar and had both esoteric and exoteric phases. Still others were acquired from neighboring tribes or those contacted at the Gallup Ceremonials and elsewhere and were considered recreational. With truly native rites declining as the controlling societies declined, it seemed that these ceremonies were doomed either to extinction or to a transference to the semi-exoteric nature of those ceremonies already linked with Catholicism. While Catholicism had been a contributing factor in the downfall of native religion, it was true that by tolerating the merging of certain rites with the Church calendar, these same ceremonies were being perpetuated.

The Catholic Church. A factor which was likely to contribute to the longevity of many native ceremonies among the Cochiti was their very close identification with the Catholic Church calendar. As Parsons pointed out so well, the "Little Horse" of the Santiago's Day observances was differentiated only slightly, if at all, from the eagles, or buffalos, portrayed in the more strictly native ceremonies.[14] Every third year, the January 6, or Kings' Day, Dance had to include an Eagle Dance presented by the Turquoise Kiva. It was equally imperative that the two eagles be impersonated by medicine men. On other occasions, any man could impersonate the eagles, but on January 6, a Catholic celebration, it was the medicine men, fundamental in the native religion, who had to take part. Other instances illustrating the merger of native religious concepts with those of Catholicism have been cited.

Considerable interest developed through a shifting of Franciscan personnel at Peña Blanca in the summer of 1948. The three priests who came together at that time found they agreed on certain policies, somewhat to their mutual surprise. As revealed by informants, the newly agreed upon policies were announced to the Cochiti by one of the priests at a Mass occurring shortly thereafter. Briefly, he told the Cochiti that if they wanted to dance (i. e., participate in native ceremonies), they could do so -- but if they did, they had to stay away from the Church. If they wanted to come to church and be good Catholics, that was much better, but it was impossible to be both a

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[14]Parsons, Pueblo Indian Religion, p. xi.

good Catholic and a participant in the native religion.

Informants' reactions to this announcement were most revealing. Their feelings were that the priest had no business saying such things. It was his business to serve the Mass, and "not to scold the people." If he had made that statement at Santo Domingo, they felt he would have been ejected from the pueblo. At Cochiti, the people were more "easy-going" and thought, or hoped, the subject would not be mentioned again. The principal reaction was that the priest had over-stepped his rights in speaking as he had.

While it was too early to observe the results of this newly announced policy, it was interesting to contemplate its effects. With a nucleus of various societies still active, though admittedly at a considerably reduced tempo, one wondered if this announcement might not precipitate a nativistic revival when an attempt was made to enforce it. As indicated, many Cochiti in 1948 were not affiliated with any society, and their participation in Tablita Dances and other ceremonies could be construed either as a sign of their native sympathies or as their way of honoring a particular element in Catholicism. Aside from the minority who had actually broken with the native religious life, the "Progressives," the great majority of the pueblo could at best be designated as only superficially Catholic. It will be interesting to observe the reactions to the new policy which, in effect, eliminated the middle ground of compromise. It was certain that some would join the "Progressives," and it was at least possible, if not probable, that the same policy would drive others to align themselves with the secret societies, even to the extent of joining them. Thus, in the long term

view, it appeared that a premature move could have a revitalizing, rather than an eliminating, effect upon native religious activities among the Cochiti.

In summarizing ceremonial changes, principal causes were shown to have been economic changes, educational enlightenment, the Catholic Church, and long-standing contacts with Spanish and Anglo cultures. Such functions of the secret societies as curing, promoting fertility, weather control, and protection against witchcraft had been reduced by the above causes which had resulted in the loss of prestige and power of these societies. Only the power of the medicine societies to nominate the secular officers retained its former importance. Other secret societies appeared to be maintaining their greatest strength as managers of ceremonials which were becoming more exoteric as folk pageantry and were losing their former importance as esoteric religious events.

Cochiti ceremonies ranged from strictly esoteric native rites to those which were more recent and recreational in nature. The same reasons that were responsible for the decline of the secret societies were also contributors to the simultaneous decline of the associated ceremonies. In fact, the very decline of the societies weakened the regard for such ceremonies. Other ceremonies were both attacked by the Church and perpetuated by the toleration of these rites on the calendar of the Church. As mentioned, reversal of this attitude of tolerance by a new priest at Cochiti in 1948 held interesting developments for the future of native ceremonialism and Catholicism which have not yet made themselves manifest.

Political Organization and Changes

Annually Selected Officers. While Cochiti government lay ultimately in the hands of the medicine men, the actual functions of government were performed by major, minor, and special officers and the Council of Principales. Major officers were selected annually by the three medicine society heads and consisted of the following: governor and lieutenant governor, war captain and lieutenant war captain, and fiscale and lieutenant fiscale. Minor officers were chosen annually by the council. They included six fiscalitos, helpers of the governors and fiscales, and six alguacilitos, who had somewhat greater prestige as assistants to the war captains. Special officers were likewise appointed by the council and included the treasurer, sacristan and assistant sacristan, fence rider, brand inspector, and truck driver. The Council of Principales was composed of the six major officers and all others who had once served as a major officer. Membership in the council was for life.

Changes in Cochiti political organization were evident in the gradual creation of additional special officers; functions of these positions revealed the nature of the changes. While the office of sacristan was as old as the Catholic Church in Cochiti, the position of assistant sacristan was much more recent. It was created to help a former sacristan who served as an interpreter for the All-Pueblo Council during the 1920's. At that time, he accompanied delegations sent to Washington to present Pueblo Indian views primarily concerning threats to pueblo lands, direct blows to the basic economy of the

pueblos as of that time.

The positions of brand inspector and fence rider resulted from the delegation of powers of the governor and council to these men. The improving livestock industry had necessitated the creation of these offices. Again, the appointments of an official community truck driver and of other men to operate community farm machinery were ramifications of economic changes.

The creation of the office of treasurer, who also acted as secretary, and who was chosen by the council from its membership, was further recognition of the need for pueblo representatives who could capably handle business affairs with the outside world. Increasing contact with Anglo culture placed continually greater responsibilities and prestige upon the pueblo treasurer.

Changes were occurring in the minor offices of the pueblo, those of the fiscalitos and alguacilitos. These will probably be more significant in the future than they were in 1948. While data were available for too few years to constitute an adequate sample, an interesting development was indicated. Theoretically, at least, these assistants of the major officers were chosen from among older boys or young men who had not yet served as a major officer. This was considered a trial in public office, with those who served satisfactorily being later chosen for a major office.

For the four years, 1945 through 1948, for which data were available, the average age of alguacilitos was 35.8 years as compared with an average age of 31.8 for the fiscalitos. With the greater prestige attached to the office of alguacilito this difference of four

years was not surprising. A trend appeared in the annual average ages of both groups which was made more reliable when personnel involved was noted. In 1945, with many young men still in service, places were filled by more elderly men who had not yet served as a major officer. In 1946, these assistantships were filled by younger men, the procedure reverting toward the customary pattern. However, in 1947 and 1948 the alguacilitos, and in 1948 the fiscalitos also, were again selected from older individuals. Informants' comments confirmed the inference seen in these shifts. It was increasingly difficult to find individuals who would serve as minor officers in a satisfactory manner.

Reasons for this unwillingness to serve were primarily economic. Particularly in the office of fiscalito, there was little involved which would conflict with a younger man's disapproval of native ceremonial life. However, both types of minor officers had to be willing to spend considerable time in performing their duties. This time not only was lost from working time in the village proper, but it largely prevented these minor officials from seeking gainful employment elsewhere. Many young men were unwilling to forego these opportunities. This pertained not only to 1948, but it would apply to the future when, assuming satisfactory service as a minor officer, these individuals could expect to be chosen as a major officer. Since the major officers received no compensation other than prestige and the satisfaction of having served their people, many individuals did not care to serve. That the Cochiti had recognized these economic factors was evident in the "regulation" that only one major or minor officer could be chosen from the same household in any one year and that these officers could

not be chosen for more than two consecutive terms. However, under the economic changes which Cochiti was experiencing, these "regulations" were proving to be insufficient safeguards for many men.

Functions of the offices of governor and lieutenant governor were continually expanding due to programs of the United Pueblos Agency. Since the two kiva groups were again alternating the senior and junior offices, general satisfaction was expressed in the manner in which the officers were serving. The long monopoly of the senior offices by the Turquoise Kiva members was apparently due to the three medicine society heads being of that kiva. Only long and urgent protests on the part of the Pumpkin Kiva leaders succeeded in rectifying the situation. As noted earlier, it was interesting that informants never referred to the final years of the last century when the Pumpkin Kiva representatives, including as least the cacique among their membership, exercised a similar monopoly. This political game of tug-of-war between the two kiva groups was a clear example of what one informant meant when he said, "Anyone who thinks there is all cooperation and no politics in a pueblo, just doesn't know anything about pueblos."

The war captain and his lieutenant were included in discussing political organization because they were selected annually in the same manner as the governors and the fiscales were. While they sat in consultation with other major officers, and also in sessions of the Council of Principales, the specific concerns of the war captains were ceremonial. These duties have been elaborated elsewhere and are not repeated here; however, some discussion of the nature of the changes in these offices is pertinent.

The constant interchange of the terms "war captain" and "war chief" in the literature was confusing and unfortunate. While not all pueblos can be considered identically, the following reconstruction, or suggestion, is proposed for Cochiti. In aboriginal times, the cacique was balanced by the war leaders, the two nēhīa. These men were not medicine men, but they achieved their offices by virtue of war honors. The head nēhīa was the warrior who had taken the most scalps. Nothing in the literature revealed how the second nēhīa was chosen; once the dual nature of this office was initially commented upon, it was ignored thereafter and remarks were worded as though the position was singular. Perhaps, the second nēhīa was the one who had taken the second highest number of scalps and may likely have succeeded to the head position upon the death of that warrior. These officers were known by the names of the Twin War Gods, culture heroes among these people, Masēwa and Ōyōyēwa.

When the Spanish took control of the pueblo, the offices of war captains, or perhaps more properly, alguaciles, or sheriffs, were introduced. As the pre-Spanish war chiefs declined in importance with the passing years and lessening activities of enemy tribes, the alguaciles and their assistants, the six alguacilitos, acquired more and more of their powers and functions. These individuals were selected annually while the war chiefs, despite life-time offices, were disappearing as the chances of obtaining scalps diminished. In their functions as sheriffs, the alguaciles protected the pueblo against the currently rising enemies, the witches, and against all other intruders who could damage their way of life. War captains, in 1948, were no

longer referred to as alguaciles.

One weakness of this reconstruction is the fact that the earlier ethnographic accounts revealed the war captains as powerful officers in the ceremonial and civil organizations at Cochiti while the war chief, or nēhĪa, (one or two?), was still in existence. Dumarest named the war captain (captain of war) as the "foremost" officer.[15] Projecting this situation back another generation, it is doubtful that the war captains could have usurped various functions from the war chiefs who were still active. However, such a transition was possible, and the foregoing reconstruction of the functions and disappearance of the entire Warriors Society and its head (s?), the nēhĪa, with the subsequent replacement by the present war captains is suggested as a point meriting further investigation.

Changes in the functions of the fiscales were very slight, these men continuing their supervision of the church and working with the governors in civil affairs. Informants stated that the current practice of fiscales eventually serving as war captains would never have been possible under the old system in which the fiscales and governors were kept separate from the war captains. This intermingling of personnel undoubtedly reflected the increasing difficulty of finding satisfactory officers.

Council of Principales. As has been mentioned, the economic change from agricultural to other pursuits had freed these people from

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[15]Dumarest, Notes on Cochiti, p. 200.

the domination of the council. Formerly, when agriculture was almost completely dominant, economic sanctions such as land confiscation were powerful weapons of the community. These powers, plus those associated with accusations of witchcraft for non-conforming behavior and a general feeling of discomfort in moving to a residence away from this domination had served to keep the people at home and under the control of the pueblo officers. Economic changes, education, and Catholicism had broken these bonds.

Indian Service. Of the changes in political organization at Cochiti, probably the most outstanding aspect had been the struggle between the "Conservatives" and "Progressives" for control of the pueblo. Begun early in the century and continuing bitterly into the middle 1920's, this dispute was primarily instigated by John Dixon. From a background of a Carlisle education, this man led a movement to abolish the old culture and install a government patterned after that of the whites. He became "judge," and in performing his newly conceived duties, ran into serious opposition from the tribal officers. Supported by Federal Government representatives, the "Progressives" renounced the native way of life, especially that in which the native religious leaders, the cacique, the medicine men, and the war captains, had control. The Catholic priest encouraged them, and the conflict's basic grounds of religious and political differences, involving economic factors as well, were bitterly fought.

By the middle 1920's, John Dixon had died, and the "judgeship" was abolished. Land confiscated by the tribal government was restored

to the "Progressive" owners, although awards of damages were never honored. Feeling on both sides gradually subsided with the "Progressives" recognizing the pueblo officials except for the authority of the war captains as it pertained to ceremonial affairs. With the death of John Dixon and several of his most ardent supporters, the political dispute disappeared. In 1948, the chief distinction between "Conservatives" and "Progressives" was the fact that the latter considered themselves strict Catholics and did not acknowledge the powers of the medicine men nor authority of the war captains in native religious activities. This intra-pueblo split was injurious to Cochiti, particularly at its height. Although isolated undercurrents of ill-feelings had continued, it also appeared that from a long time perspective Cochiti had profited in surviving the effects of this controversy.

In 1948, both factions accepted attitudes of the other side with considerable tolerance. Cooperation in community labor and other projects, so long as native ceremonials were excluded, was willingly shared. In dealing with the Indian Service, social intercourse, and economic activities, the former lines separating the two factions had been obliterated. Some explanation for this was the frequent display of progressive attitudes on the part of the "Conservative" officials. It had been the officers and members of the Council of Principales, all of the technically "Conservative" faction, who had purchased for the pueblo such agricultural machinery as tractors, threshers, and the combine harvester, and the community truck, and who had actively defended the El Pueblo Bus Line, all to improve the economic condition of the people.

The "Conservative" officers and council members had further demonstrated their enlightened attitudes in their general cooperation with the programs of the Federal Government in both education and health. Accordingly, the pueblo had advanced and thereby had undoubtedly regained considerable unity. Agency officials who worked with the Cochiti in extension programs were unanimous in their endorsement of the support they had received from Cochiti officials and people.

In endorsing education for the children and young people, it was somewhat ironical that "Conservative" leaders had committed what could be termed "cultural suicide." As leaders of the old ways of life these individuals had been respected. At the same time they were aware of the advantages, economic and otherwise, of their children continuing their education through the day schools, boarding schools or high schools, and, in some cases, specialized training. As a result of this training, together with the prolonged residence among modern conveniences and acquaintance with a divergent culture, young people had developed the desire to compete in Anglo communities for positions that paid higher wages which, in turn, permitted them to acquire items of Anglo culture which they had come to desire. As indicated, this had had the effect, as of 1948, of drawing away from the pueblo approximately one-fourth of the total population.

To summarize changes in political organization, the combined influences of economics, education, and Catholicism were all manifest. The interactions of these factors, with ramifications of each, were repeatedly apparent. As of 1948, there remained enough of the older pattern that its outward appearance was assured for some years to come.

However, decline in the power of the medicine men, powers behind the "Conservative" officers, the increasing unwillingness of qualified men to serve in offices, and the gradual but steady increase in the number of special officers, invariably reflecting new needs of the tribe which resulted primarily from economic developments, were all evidences that the older pattern, itself, must some day undergo change.

In concluding this summary of changes in Cochiti culture and the reasons for them, it should be restated that this analysis has not been made with any motive of establishing a case for "economic determinism," or for any other preconceived explanation of culture change. On the contrary, developments in both formal and informal education in matters of health, agriculture, vocational and professional training, and in broader orientation in the dominant Anglo culture must not be minimized. The long-standing influence of the Catholic Church has likewise been important. However, this and the accompanying Spanish culture were of a type that created additional cultural items and yet disturbed few of the basic Cochiti patterns of culture. The stability and resilience of pueblo culture was demonstrated in the ability of Cochiti culture to remain influenced but basically unchanged in its patterns for several centuries. Education more recently interacted and merged with other factors in fashioning the 1948 phrasing of Cochiti culture. It was evident from the data examined in this study that economic changes, operating both as cause and effect, had profoundly, although not exclusively, influenced Cochiti Pueblo culture.

CHAPTER XI

CONCLUSIONS

This study has repeatedly substantiated general statements to the effect that culture is constantly changing and that the many parts of any culture are intricately interrelated. Changes in one phase of culture have ramifications in other phases. In evaluating the effects of economic changes upon the remainder of Cochiti culture, several conclusions are warranted.

It is evident that economic changes had occurred at Cochiti. These were primarily changes in item content during the Spanish, Mexican, and early American periods. They enriched, rather than altered, economic activities; the tribe retained its self-sufficiency and depended upon the cooperation of its members in many enterprises. Until about 1930, economic and other changes had been absorbed for the most part within the existing patterns. Education, Catholicism, long-standing contacts with Spanish-Americans residing in and near the pueblo, and more recent contacts with Anglo culture had had some effect on but had done little damage to basic cultural patterns. The bitter intra-pueblo "Conservative"-"Progressive" conflict had been experienced, and to a considerable extent, survived.

Thus, prior to 1930, it was demonstrated at Cochiti that an integrated culture, although exposed to alien influences and even attacked by them, was able to survive essentially unchanged in its basic patterns despite innumerable accretions and introductions of alien items. Explanation of this ability to survive was found in the fact

that, although weakened during the intra-pueblo dispute and possibly during previous times of stress, the social controls operating in Cochiti culture remained basically intact until early in the 1930's. Regarding social controls, Slotkin made the following comments.

> There are three kinds of customary social controls: education, reinforcements, and sanctions. Education teaches the members how to behave according to the customs of the group, reinforcements support customs, and sanctions reward or punish acts according to whether they do or do not conform to custom.[1]

Prior to 1930, Cochiti social controls centered in the power and influence of the medicine society members, often made manifest through their appointees, the officers and council members. Formal education was limited in scope and patronage and was designed to re-turn students to their culture with little real change involved; the dominant informal education was a family and community process in which established cultural values and concepts were stressed and reinforced. Catholicism had been accepted by most as an external supplement to, not as a substitute for, basic native religious patterns.

Reinforcements of traditional behavior were continued within a relatively unified community; non-conformists were rare and were not tolerated, being driven from the pueblo or disposed of under charges of witchcraft.

Sanctions, i. e., land confiscation, persecution for witchcraft, and similar steps, were effective means of maintaining the status quo.

Beginning about 1930, a definite trend toward a new economic

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[1]Slotkin, J. S., Social Anthropology, New York, 1950, p. 525.

pattern began. This was based upon cash and individual competition, new emphases derived from increasing contact with and pressure from the dominant Anglo culture. It involved partial abandonment of subsistence agriculture and reduction of hunting, gathering, and other lesser activities.

Ramifications of these economic changes, both of item content and pattern, were evident in other phases of Cochiti culture. In some phases, economics was the basic, if not the exclusive, contributing factor. In others, and in varying degrees, the impact of educational enlightenment, especially during the last two decades, and the long-term cumulative impact of Catholicism were evident.

With the shift toward a cash economy, beginning about 1930 and continuing as of 1948, the complex of social controls began to lose its effective force. Education slipped into the hands of alien, formal teachers to an increasing degree; accompanying this change, the curriculum aimed increasingly toward adjustments to the dominant Anglo culture and ways of competing within it. As wage-earners and craft workers began to leave the pueblo, they were freed from the domination of the officers, religious and secular. Even those who turned to cash crops and improved saleable livestock became increasingly independent of the tribal opinion in its function as a reinforcing agent. As the power of the medicine societies waned, the awe formerly accorded their threats of economic and other sanctions declined or was totally lost.

The fact that social controls, collectively, were losing their grasp over individual Cochiti in 1948, strongly suggested that additional changes could be expected in the future. Some trends already

present would crystallize as patterns; changes occurring at an accelerating rate could be anticipated. Change in the basic pattern of economic activity, with its ramifications, was permitting change of a scope previously excluded by the integrated social controls. Accepting this evaluation of Cochiti culture up to and including 1948, certain indications for the future could be postulated.

(1) An increasing percentage of the Cochiti will leave the pueblo, many marrying non-Cochiti, and the families will be raised with a decreasing amount of influence from the pueblo.

(2) Clans will disappear from general Cochiti consciousness; kinship concepts and terminology will continue to approach those of Spanish and Anglo cultures.

(3) Economic emphasis will shift increasingly toward wage-earning, income producing handicrafts, and commercial agriculture. The last activity will be limited by the amount of irrigated land and marginal range.

(4) Medicine societies and members will continue to lose power and prestige; eventually this will necessitate a new system of designating secular officers. Very possibly the new system will be that of electing officers who will serve within the bounds of a written constitution, as is already true of a few pueblos.

(5) Non-medicine societies will continue as secret societies, but their activities will be concentrated in managing certain ceremonies, primarily associated with the Catholic calendar.

(6) Present esoteric aspects of the katchinas and medicine societies will be lost completely or will shift to exoteric ceremonies.

In this transition, the ceremonies will lose their religious significance and will be primarily tribal folk pageantry.

(7) The two kiva groups will continue as friendly rivals with increasing attention toward social, rather than religious, functions.

(8) Witchcraft will continue but will be carried on by persons who will practice esoterically as individuals. They will be ignored by the majority, except in extreme cases where civil peace officers will be forced to reckon with their activities.

(9) The Catholic Church will continue to grow in strength in association with its attention to crises of the life cycle and in its general religious doctrines. This strength will increase as the rival medicine societies decline.

(10) Interest in education of a broader and more advanced nature will increase as more Cochiti find remunerative places for themselves in Anglo culture.

(11) Certain people will retain their interest in the old ways for their intrinsic values; they will have no desire to leave the pueblo nor to change their economic or other behavior patterns and beliefs.

While drastic changes in general and specific pueblo cultures have been predicted earlier on numerous occasions and without eventual realization, the possibility of more basic changes in Cochiti culture, as of 1948, seemed plausible. While these will be slow to materialize in this traditionally conservative culture, the already present trend facilitated by the combined influence of economic change, educational enlightenment, and Catholicism will gather momentum in the future.

This can be attributed, not exclusively, but certainly predominantly, to the basic change already experienced in the economy of Cochiti Pueblo.

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A P P E N D I C E S

APPENDIX I

CLIMATIC SUMMARY*

Selected Stations Surrounding Cochiti

Station & County	Temperature					Killing Frost Average Dates			
	Record Span	Jan. ave.	July ave.	Maximum	Minimum	Record Span	Last in Spring	First in Fall	Growing Season
	Yrs.	°F	°F	°F	°F	Yrs.			Days
Alamos Ranch, Sandoval	18	27.2	66.7	95	-14	23	May 8	Oct.18	163
Frijoles Cañon, Sandoval	--	----	----	--	---	--	-----	------	---
Jemez Springs, Sandoval	29	31.9	69.4	95	-13	29	May 1	Oct.24	176
Lee Ranch, Sandoval	15	20.5	58.6	90	-24	15	Jun.11	Sep.17	98
Española, Rio Arriba	29	29.1	72.1	106	-23	38	Apr.29	Oct.10	164
Santa Fe, Santa Fe	40	29.2	68.9	97	-13	40	Apr.24	Oct.19	178
Albuquerque, Bernalillo	40	34.1	76.7	104	-10	37	Apr.13	Oct.28	198

*U. S. Department of Agriculture, Climate and Man, pp. 1011, 1014-15.

Station & County	Record Span	Average Precipitation												
		Jan.	Feb.	Mch.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total Annual
	Yrs.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
Alamos Ranch, Sandoval	28	.96	.70	.98	1.10	1.48	1.46	3.30	3.34	2.05	1.51	.68	.71	18.27
Frijoles Cañon, Sandoval	14	.42	.90	.81	.75	1.59	1.17	2.53	2.55	2.00	1.15	.59	.80	15.26
Jemez Springs, Sandoval	29	.78	1.09	1.03	1.13	1.45	1.52	3.11	2.77	2.09	1.61	.78	.83	18.19
Lee Ranch, Sandoval	15	.68	1.81	1.27	.98	1.73	1.74	4.09	3.75	3.14	1.39	.87	1.00	22.45
Española, Rio Arriba	29	.40	.42	.47	.89	.96	.77	1.48	1.77	1.08	.89	.62	.36	10.11
Santa Fe, Santa Fe	40	.66	.74	.81	1.07	1.46	1.19	2.28	1.90	1.68	1.11	.71	.58	14.19
Albuquerque, Bernalillo	40	.34	.31	.38	.68	.68	.68	1.46	1.25	.94	.73	.50	.45	8.40

APPENDIX I (Cont'd)

Average Precipitation

Station & County	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Annual
Fort Lee, Pike Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Milford, Pike Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Dingmans Ferry, Pike Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Bushkill, Pike Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Shawnee Branch, Pike Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Delaware Water Gap, Monroe Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Stroudsburg, Monroe Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Mount Pocono, Monroe Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Tannersville, Monroe Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Saylorsburg, Monroe Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Kunkletown, Monroe Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Bartonsville, Monroe Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Effort, Monroe Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Gilbert, Monroe Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Brodheadsville, Monroe Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Mount Bethel, Northampton Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Portland, Northampton Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Wind Gap, Northampton Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Nazareth, Northampton Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Bath, Northampton Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Northampton, Northampton Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Allentown, Lehigh Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Emmaus, Lehigh Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Coplay, Lehigh Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Whitehall, Lehigh Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Schnecksville, Lehigh Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Slatington, Lehigh Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Walnutport, Northampton Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Lehighton, Carbon Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Weissport, Carbon Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Jim Thorpe, Carbon Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Penn Haven Junction, Carbon Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Mauch Chunk, Carbon Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Summit Hill, Carbon Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Nesquehoning, Carbon Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Tamaqua, Schuylkill Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Hometown, Schuylkill Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Pottsville, Schuylkill Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Schuylkill Haven, Schuylkill Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Auburn, Schuylkill Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Port Clinton, Schuylkill Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Hamburg, Berks Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Leesport, Berks Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Temple, Berks Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Reading, Berks Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Shoemakersville, Berks Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Kutztown, Berks Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Fleetwood, Berks Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Bernville, Berks Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Centerport, Berks Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Mohnton, Berks Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Wernersville, Berks Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Sinking Spring, Berks Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Wyomissing, Berks Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Robesonia, Berks Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Womelsdorf, Berks Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Bethel, Berks Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Myerstown, Lebanon Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Lebanon, Lebanon Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Palmyra, Lebanon Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Annville, Lebanon Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Cleona, Lebanon Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Jonestown, Lebanon Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Fredericksburg, Lebanon Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Bellegrove, Dauphin Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Harrisburg, Dauphin Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Hummelstown, Dauphin Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Middletown, Dauphin Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Elizabethtown, Lancaster Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Mount Joy, Lancaster Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Manheim, Lancaster Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Lancaster, Lancaster Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Columbia, Lancaster Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Marietta, Lancaster Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Mount Gretna, Lebanon Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Quentin, Lebanon Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Lititz, Lancaster Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Ephrata, Lancaster Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Adamstown, Lancaster Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Denver, Lancaster Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
New Holland, Lancaster Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Strasburg, Lancaster Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Paradise, Lancaster Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Gap, Lancaster Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Parkesburg, Chester Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Coatesville, Chester Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Downingtown, Chester Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Exton, Chester Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Malvern, Chester Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Paoli, Chester Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Berwyn, Chester Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Wayne, Delaware Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Radnor, Delaware Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Bryn Mawr, Montgomery Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Ardmore, Montgomery Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Narberth, Montgomery Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Overbrook, Philadelphia Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Philadelphia, Philadelphia Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Germantown, Philadelphia Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Chestnut Hill, Philadelphia Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Fort Washington, Montgomery Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Jenkintown, Montgomery Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Abington, Montgomery Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Glenside, Montgomery Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Willow Grove, Montgomery Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Hatboro, Montgomery Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Doylestown, Bucks Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Newtown, Bucks Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Yardley, Bucks Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Morrisville, Bucks Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60
Bristol, Bucks Co.	3.77	4.24	4.09	4.29	4.29	3.61	3.61	3.77	3.93	47.60

APPENDIX II

SELECTED 1776 CENSUS DATA*

Pueblo	Families	Persons	Family Average
Cochiti	116	468	4.10
Cañada de Cochiti (Spanish)	52	307	5.90
Pecos	100	269	2.69
Sandia	92	275	2.98
San Felipe	95	406	4.27
Santa Ana	102	384	3.76
Santo Domingo	136	528	3.88
Sia	125	416	3.32
Totals	818	3071	
Average			3.75

*Biblioteca Nacional, Legajo X, Document 43.

APPENDIX III

1948 INDIVIDUAL WHEAT PAYMENTS TO COMMUNITY

Wheat Farmer	Sacks (100 lbs.) Paid
Epitacio Arquero	5.5
Juan Estevan Chalan	9.5
Philip Cooka	2.5
Lorenzo Cordero	4.0
Santiago Cordero	1.5
Frank Herrera	1.5
Loreto Herrera	4.0
Nestor Herrera	4.0
Reyes Melchior	2.0
Alcario Montoya	2.0
Aloysius Pecos	1.5
Cresencio Pecos	1.5
Epifanio Pecos	5.0
Santiago Pecos	-.-
Cruz Perez	1.0
Cipriano Quintana	7.0
Damasio Quintana	8.0
Delfin Quintana	2.0
Geronimo Quintana	2.0
Jose Domingo Quintana	3.0
Diego Romero	2.5
Santiago Romero	16.0
Cresencio Suina	3.0
Jose Rey Suina	4.0
Juan Jose Suina	11.5
Octavio Suina	-.-
Juan Jose Trujillo	5.5
Pablo Trujillo	2.0
Rose Trujillo	4.0
Juan Velasquez	-.-

APPENDIX IV

COCHITI CROP ACREAGES AND YIELDS*

Crops	Acreages	Yields
Maize	270	5400 bu.
Alfalfa	136	244 T.
Wheat	120	1440 bu.
Sudan Grass & Tame Hay	41	43 T.
Beans	14	66 bu.
Chili	8	8 T.
Watermelons	6	12 T.
Oats	5	40 bu.
Total	601	

Fruits	Trees	Yields
Peaches	550	2200 bu.
Grapes	300	63 bu.
Apples	297	1485 bu.
Plums	25	100 bu.
Apricots	20	80 bu.
Cherries	15	45 bu.
Pears	5	15 bu.
Total	1212	3988 bu.

*These figures were taken from the Field Agent's Annual Report, filed with the United Pueblos Agency. Field crop data are for 1945, while the tree fruit data are for the year 1941.

APPENDIX IVa

SELECTED TYPE FARMS

The following seven farms have been selected for brief summarizations intended to characterize Cochiti agriculture. While these examples included some of the better farmers, they presented a fairly accurate impression of what farming meant to individual families.

Farm A. This man operated about fifteen acres on a crop rotation basis, maize being replaced by wheat, and the wheat replaced in turn by alfalfa which was allowed to grow for several years. There were five acres of maize, a little blue and a little white but mostly yellow. (This was true of the whole pueblo: blue and white corn were formerly the most popular but yellow corn, primarily for stock-feeding, had supplanted both types.) There were four acres of alfalfa which yielded three to four cuttings per year, depending upon the weather. This was not baled but was hauled in wagons and stacked high on the sheds in the corral, or placed on the ground in a separate corral where the stock could not reach it. Two acres were planted in wheat with a normal yield of about twelve sacks. Since two sacks went to the community for use of the combine harvester, the net return was ten sacks. There were smaller tracts of garden vegetables, chili, and watermelons. In 1948, the chili and watermelons planted west of the river dried up while those on the east matured. This was true of all fields, and it remained an unsolved mystery despite soil and other tests made by the Agency. While formerly practicing dry-farming, this man had only irrigated fields. Farmer A also had a few acres washed out in a flood several years before, and he had not repaired the damage. He did not need the additional land, and since he had "homesteaded" them, he had no fear of their reverting to the pueblo. He formerly had cattle, as many as three at once, but had none in 1948. There were three horses, all draft animals, but one could be used with a saddle. Farmer A had never raised sheep or goats. He possessed about thirty chickens which were kept penned, at least at night. Chicken stealing was still present at Cochiti, but he felt it had declined with the exodus of Spanish families from the pueblo. This man had no pigs in 1948, although he had kept some in the past. (73.)

Farm B. This man farmed about sixteen acres acquired in part through inheritance from his father, mother, and step-father and

APPENDIX IVa (Cont'd)

in part by "homesteading" in the bosque. There was also some land which had belonged to his wife which he was holding in trust for their children. These fields were scattered throughout the cultivated lands of the pueblo, as was true of almost all holdings. This man had done some dry-farming and occasionally had done well, "when the rains hit right." He had eight acres of wheat; seven of maize, all yellow; and three of alfalfa. He also had about a quarter acre of chili, onions, cabbage, a few grapes, and some young apple trees. In addition, he had one team of work horses, six head of cattle (two were milk cows), ten sheep, three pigs, and between thirty-five and forty chickens. He, and others, had used fertilizers of various kinds for as long as he could remember. (74.)

Farm C. Farmer C had a small garden of lettuce, carrots, chili, and red beans. A quarter-acre tract was used for muskmelons and watermelons. No maize was grown by this man, but he raised about twelve acres of oats which he cut slightly before it matured in order to keep the heads intact. He used the oats for fodder. This man had one of the largest cattle herds in the pueblo, grazing as many as thirty-six head at a time. He also had eight horses. (75.)

Farm D. About nine acres were farmed; of these, about three acres were devoted to maize, all yellow. Farmer D formerly grew white and blue but had not done so recently, using the yellow mostly for stock-feed. He had about five acres of alfalfa which he had grown for the past several years in preference to wheat. Although he had grown oats successfully, in 1948 he did not. In a half-acre garden plot he grew chili, onions, and tomatoes. He had never grown tobacco. This man had experimented with hybrid corn, importing seed from Iowa which did not grow well. Later, he tried seed from Illinois which grew very well. However, he did not care much for it as it was expensive and had to be purchased each year. He had ten or eleven head of cattle and depended on community-owned bulls for breeding. He had a team and one smaller horse which had not yet been broken. (76.)

Farm E. This man farmed about twenty acres, the amount left after about twenty acres had been given his married children. The twenty acres were farmed as follows: about eight of maize, five of alfalfa, three of wheat, two of beans, and one of garden vegetables, including sweet corn, melons, chili, onions, sweet potatoes, and peas. He had a heifer, two pigs, about fifteen chickens, and

APPENDIX IVa (Cont'd)

three horses, one still unbroken. This man also had two hives of bees, the only person in the pueblo keeping bees. (Many Cochiti liked to gather wild honey in the mountains.) Instead of stacking his hay as did most Cochiti farmers, this man baled his alfalfa. He obtained the baler belonging to "Rusty" Campbell, a storekeeper at Peña Blanca, and paid every fifth bale for the privilege. In 1947, he paid thirty bales, leaving one hundred and twenty for himself. He felt this was worthwhile since the bales were piled neatly, and more compactly, in sheds. Protecting the hay from the weather made it better feed, and less hay was wasted. This man always rotated his crops and had used manure on his fields for as long as he could remember. (77.)

Farm F. This man farmed about twenty scattered acres with help from his step-sons. He plowed as soon as the ground thawed, but never during the fall or winter. He plowed, moving counterclockwise from the center section of the field outward. Wheat was broadcasted and plowed into the ground, normally about three inches. Some harrowed and dragged the wheat seed, but this man felt deeper sowing enabled the wheat to withstand dry spells better. "Indians like to plow wheat under." This man used any and all kinds of fertilizers, principally manure. By plowing in the stubble, the humus content of the soil was increased. He had about eight acres of maize, four and a half acres of wheat, six and a half acres of alfalfa, and a quarter acre of chili. He also raised some pinto beans. His rotation sequence of crops went from wheat to maize to wheat to alfalfa for several years before returning to wheat again. Blue and white corn was eaten; yellow corn was for the stock. In the garden plot Farmer F grew onions, pumpkins, garlic, peas, tomatoes, carrots, cabbage, havas, and garbanzas. (78.)

Farm G. Farmer G had about thirty acres in one unit. He had about eight acres of yellow corn and seven acres of alfalfa. In a small garden plot he grew cabbage, carrots, onions, sweet potatoes, chili, tomatoes, muskmelons, watermelons, and squashes. The garden was cared for mainly by his wife and children, and he spent his time with the field crops. Havas and garbanzas, a larger pea with a salty flavor, were both raised. The latter sold very well in stores catering to the Spanish trade. "Those people like them (garbanzas) even better than frijoles." In rotating crops, this man often planted maize one year, followed with wheat or beans, after which a forage crop such as alfalfa was grown for several years before maize was grown again. His wife tended the chickens and hogs during the summer months; he relieved her of this work in

APPENDIX IVa (Cont'd)

the winter. This man had seven horses, including both draft and saddle animals. He also cared for the community stud. In return for the feeding and care of this animal, he used him in his team. Anyone desiring to breed a mare could do so without paying a stud fee. This man also had a small flock of sheep, normally about eight or ten animals. He was one of the few in the pueblo who had sheep in 1948. These were good quality animals and yielded a fair return in wool and lambs. In 1948, Farmer G was increasing his flock and seldom butchered. (79.)

APPENDIX V

COCHITI NON-RESIDENTS AS OF AUGUST, 1948

Luisa Pancho Anderson, wife of Roy Begay Anderson, a Navaho silversmith, lived in Santa Fe with her husband and three children.

Cirelia Arquero was employed as housekeeper and cook for the priests' residence in Peña Blanca.

Nestor Arquero remained in service after World War II and was stationed in Japan.

Santiago Benada had reenlisted in the army.

Reyes Ortiz Bowannie, formerly married to a Zuñi man and at one time a silversmith, was working in Santa Fe, possibly as a silversmith.

Maria Veronica Pancho Calabaza, married to Felice Calabaza of Santo Domingo, was living at that pueblo.

Jose Vidal Chavez lived in Santa Fe working silver. With him were his Spanish-American wife and their three children.

Jose Vivian Chavez, with his Spanish-American wife and their daughter, was living at St. Micheal's, Arizona, where he was working for the mission.

Juana Maria Chavez was working at the Santa Fe Indian School.

Juan Estevan Chavez was employed as a tailor in a men's clothing store in Albuquerque.

Juan Manuel "Bob" Chavez lived in Santa Fe with his wife, Marianita Perez, and both were employed in a curio store waiting on trade.

Maria Margarita Chavez was working in Washington, D. C.

Natividad Chavez worked in Santa Fe at St. Catherine's School. With him were his wife, Manuelita Cordero, and their four children.

Mary Rosaline Cooka was going to high school in Denver, Colorado, and worked part-time as domestic help for a family acquainted with her family.

Ada Cordero was working in Santa Fe as domestic help (?).

APPENDIX V (Cont'd)

Dominga Cordero was working in Bernalillo.

Eleuterio Cordero was working at a sawmill near Grants, New Mexico, although his family remained at Cochiti.

Romulo Cordero was working at Bandelier National Monument.

Felecita Herrera Eustace, married to Benjamin Eustace of Zuñi, was living at that pueblo with her husband and their two children.

Catherine Quintana Garcia, formerly married to a Santo Domingo man, was working in Albuquerque, living there with her three children.

Ernestina Garcia was going to high school in Denver, Colorado, where she worked part-time for a family acquainted with her family.

Felipe Herrera was working in Santa Fe, clerking in a grocery.

Jose Domingo Herrera was working in Santa Fe.

Jose Hilario Herrera, married to Julia Paisano of Laguna, was living in Santa Fe where he was doing art work while Julia clerked in a curio store. Their son remained in the pueblo with his grandmother, Tonita Peña.

Justino Herrera was working silver in Santa Fe.

Lorenzo Herrera was working either in Santa Fe or in nearby Parkview, living with his Spanish-American wife and their daughter.

Martina Herrera was in the United States Indian Sanatorium in Albuquerque.

Perfecto Herrera, with his wife, Mary Sarracino of Laguna, was living in Santa Fe where he was working silver.

Seferina Herrera was working in Santa Fe where she was a housekeeper at the Santa Fe Indian School.

Stephen Herrera, a veteran of World War II, had reenlisted and was stationed at the Albuquerque air base.

Victoriano Herrera was working in Santa Fe.

Diego Martin was working in California.

APPENDIX V (Cont'd)

Jose Alcario Melchior was in the army.

Manuel Melchior, with his wife, Dominga Pancho, and their three children, was living in Santa Fe where he worked as a tailor.

Celso Montoya was working at Young's ranch, Cañada.

Isabel Chavez Montoya, wife of Ernest Montoya of Taos, was living with her husband and son in Albuquerque where Ernest was employed.

Mary Lucianita Ortiz was working in California.

Juan Bautisto Pancho was working in Santa Fe although his family remained at Cochiti.

Encarnacion Pancho, formerly married to a Zuñi man, was married again and lived in Santa Fe.

Lorenza Pecos was working in Albuquerque.

Margarita Pecos was working in Albuquerque.

Maria Marta Pecos was employed as a nurse in a doctor's office in New York City.

Jose Vicente Perez, with his wife, Isabel Martinez of San Lorenzo (Picuris), and their six children, was living in Santa Fe where he was employed as a tailor.

Juan Perez was living in Albuquerque where he was employed with the United States Army Engineers.

Celestino Quintana, with his wife, Hilia Chavez, and their three children, lived in Santa Fe. Celestino was a silversmith and also clerked, while his wife was a clerk in another curio store.

Jose Adolfo Quintana, a veteran, had reenlisted in the army.

Jose Higinio Quintana was working in Bakersfield, California, for the same people who had employed his father-in-law, Juan E. Chalan, for many years.

Maria Crucita Quintana was working in Santa Fe where she clerked in a curio store and also did some silversmithing.

Maria Genevieve Quintana was working in Santa Fe.

APPENDIX V (Cont'd)

Maria Lupita Quintana was working in Santa Fe.

Maria Reyecita Quintana was working in Santa Fe.

Maria Trinidad Quintana was working at the Santa Fe Indian School.

Jose Florentino Romero was working in Santa Fe.

Maria Eva Romero was working in Washington, D. C.

Maria Reyecita Romero was working in Santa Fe.

Maria Rosita Romero was working in Santa Fe.

Santiago Romero, a veteran, had reenlisted in the United States Marine Corps and was stationed on the west coast.

Adelaido Antonio Suina was working at Young's ranch, Cañada.

Dorothy Suina was working in Winslow, Arizona.

Jose Maria Suina, married to a San Juan woman, was living in Santa Fe where he was working silver.

Juanito Suina was married to a Spanish-American woman and was living in Santa Fe.

Mary Evangelista Suina was working in Albuquerque.

Maria Marianita Suina was working at Young's ranch, Cañada.

Reyes D. Suina was living in Santa Fe where he was either a silversmith or was employed at St. Vincent's Academy.

Maria Pablita Ortiz Tecumseh, married to a Choctaw, Julius Tecumseh, was living in Albuquerque with her husband and child.

Margaret Arquero Tenorio, married to a Santo Domingo, Jose R. Tenorio, lived in Flint, Michigan, where her husband was employed.

Fermina Cordero Torivio, married to a Zia, Cresencio Torivio, lived with her husband at Frijoles Cañon where her husband worked.

Abenicio Trujillo was in the United States Indian Sanatorium in Albuquerque.

Jose Demitrio Trujillo worked in Utah for a railroad.

APPENDIX V (Cont'd)

Mary Josephine Trujillo was working in Albuquerque.

Sebastian Urina was living in Wisconsin Dells, Wisconsin, and was married to an Anglo woman. He was known as "Chief Evergreen Tree" and had made a name for himself as an imitator of bird-calls and as a whistler.

In addition to individuals listed on the preceding pages, there were four Cochiti who had married into other pueblos and were carried on the rosters of these other tribes. The four were: Nazeria (Nancy) Benada at Jemez, Tonita Herrera at Isleta, Ramon Quintana at San Felipe, and Florence Trujillo at Zia.

APPENDIX VI

COCHITI CENSUS DATA*

Date	Totals	Males	Females	Families
1948	423	217	206	93
1944	353			
1943	346	181	165	81
1940	324			
1937	307	163	144	
1936	309	167	142	
1935	309	169	140	
1934	307	165	142	
1933	298	159	139	
1930	280			
1928	272	138	134	
1910	237			
1900	198			
1897	273	146	127	59
1890	268			
1851	254			
1821	339	182	157	
1799	505			
1794	667			242
1776	486			116
1765	450			150
1749	521			
1744	400			80
1707	500			
1706	520			
1680	300			

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*Data were compiled from the following sources: 1948: census of the writer; 1944, 1943, 1940, 1937, 1936, 1935, 1934, 1933, 1930, 1928: United Pueblos Agency, Annual Reports; 1910, 1900: Bureau of Census, 1915; 1897: Starr, Census of Cochiti; 1890: 11th Census, 1895; 1851: Abel, Official Correspondence, p. 294; 1821: Bloom, Mexican Administration, p. 28, n. 43; 1799: Biblioteca Nacional, Legajo X, Document 74; 1794: Biblioteca Nacional, Legajo X, Documents 70 and 82; 1776: Biblioteca Nacional, Legajo X, Document 43; 1765: Thomas, Forgotten Frontiers, p. 99; 1749: Kelly, Franciscan Missions, pp. 362-363; 1744: Hackett, Historical Documents, Volume III, p. 404, and Thomas, Antonio de Bonilla, pp. 207-208; 1707: Thomas, Forgotten Frontiers, p. 99; 1706: Hackett, Historical Documents, Volume III, p. 369; 1680: Hodge, Cochiti, p. 318.

APPENDIX VII

COCHITI COMPARATIVE CLAN ROSTERS

Clans	1881[a]	c1882[b]	1897[c]	1899[d]	1906[e]	1923[f]	1924[g]	1948[h]
Sun	P	P	P	P	P	P	P	E
Water	P	P	P	P	P	P	P	P
Cottonwood	U	P	P	U	P	P	P	P
Turquoise	U	P	P	U	P	P	P	P
Cougar	U	P	D	U	P	U	E	D
Bear	P	P	D	U	P	U	D	P
Pumpkin[1]	P	P	P	U	P	P	P	P
Coyote (Fox)	P	P	P	U	P	P	P	P
Oak	P	P	P	U	P	P	P	P
Corn	P	P	P	U	P	P	P	P
Fire	U	P	E	P	P	U	E	D
Eagle	P	U	U	P	E	U	P	D
Turkey	P	U	U	U	E	U	E	E
Antelope	P	U	E[2]	P	E	U	E	P
Rattlesnake	D	U	U	P	E	U	D	D
Sage	U	P	P	U	E[3]	P	P	P
Elk	U	U	E	U	E[4]	U	E	D
Ivy	U	P	P	U	U	P	P[5]	P
Shipewe	U	U	P	U	U	P	P	P
Red Shell	U	U	U	U	U	U	U	P
Badger	P	U	U	U	U	U	U	D
Macaw (Parrot)	P	U	U	U	U	U	U	D
Frog	D	U	U	U	U	U	U	D
Dove	U	U	U	U	U	U	U	E

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[a]Bourke, [b]Bandelier, [c]Starr, [d]Dumarest, [e]Hodge, [f]Goldfrank, [g]Curtis, [h]Lange.

P: present at time of recording; U: unmentioned; E: extinct at time of recording; D: denied as ever existing at Cochiti.

[1]Recorded by most writers as Squash, by Bourke as Melon; [2]recorded by Starr as Wood; [3]recorded by Hodge as Dance-kilt; [4]recorded by Hodge as Reindeer (?); [5]recorded by Curtis as Mustard.

APPENDIX VIII

COCHITI CLAN INTERMARRIAGES, 1897 and 1948

1897*

	Squa	Oak	Wate	Cott	Fox	Sage	Sun	Ivy	Turq	Cipe	Corn
Squash	0	1	2	1	0	2	0	0	1	4	0
Oak	1	0	1	5	2	0	0	2	0	0	0
Water	2	1	0	2	0	0	2	0	0	0	1
Cottonwood	1	5	2	2	1	6	1	2	2	0	0
Fox	0	2	0	1	0	2	1	2	1	1	0
Sage	2	0	0	6	2	0	1	2	1	1	2
Sun	0	0	2	1	1	1	0	0	0	0	2
Ivy	0	2	0	2	2	2	0	2	2	1	0
Turquoise	1	0	0	2	1	1	0	2	0	1	0
Cipewe	4	0	0	0	1	1	0	1	1	0	1
Corn	0	0	1	0	2	2	0	0	0	1	0

1948**

	Pump	Oak	Wate	Cott	Coy	Sage	Sun	Ivy	Turq	Ship	Corn
Pumpkin	0	0	0	3	1	1	0	1	0	1	0
Oak	0	4	3	5	5	5	0	7	1	0	1
Water	0	3	0	2	0	1	0	0	2	0	0
Cottonwood	3	5	2	0	3	3	0	1	0	1	2
Coyote	1	5	0	3	0	0	0	2	1	1	0
Sage	1	5	1	3	0	2	0	0	1	3	0
Sun	0	0	0	0	0	0	0	0	0	0	0
Ivy	1	7	0	1	2	0	0	0	0	1	1
Turquoise	0	1	2	0	1	1	0	0	0	0	0
Shipewe	1	0	0	1	1	3	0	1	0	0	1
Corn	0	1	0	2	0	0	0	1	0	1	0

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*Goldfrank, Social and Ceremonial Organization, p. 14. (These data were based upon the census of Cochiti taken by Starr in 1897.)

**Informants 16, 44, 45, 53, 70.

APPENDIX IX

COCHITI INTER-CLAN MARRIAGES*

	Pu	Oa	Wa	Ct	Co	Sa	Su	Iv	Tu	Sh	Cn	Be	An	Do	RS	Un	AS	Total
Pumpkin	0	1	1	3	2	2	0	1	0	2	0	0	0	0	1	1	0	14
Oak	1	7	8	14	9	12	1	11	1	2	2	0	0	1	0	27	4	100
Water	1	8	1	10	3	2	0	1	4	4	1	0	0	0	0	8	1	44
Cottonwood	3	14	10	5	7	13	0	9	5	2	3	0	0	0	0	23	3	96
Coyote	2	9	3	7	0	4	1	4	3	2	1	0	0	0	0	7	0	43
Sage	2	12	2	13	4	3	1	1	1	5	2	0	1	1	0	26	0	74
Sun	0	1	0	0	1	1	0	1	2	1	0	0	0	0	0	4	0	11
Ivy	1	11	1	9	4	1	1	0	3	1	1	0	0	1	0	4	0	38
Turquoise	0	1	4	5	3	1	2	3	0	1	0	1	0	0	0	12	0	33
Shipewe	2	2	4	2	2	5	1	1	1	0	1	0	0	0	0	13	2	36
Corn	0	2	1	3	1	2	0	1	0	1	0	0	0	0	0	3	1	15
Bear	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Antelope	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Dove	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	3
Red Shell	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Unknown	1	27	8	24	7	26	4	4	12	13	3	0	0	0	0	92	3	224
Anglo-Spanish	0	4	1	3	0	0	0	0	0	2	1	0	0	0	0	3	0	14

	748
Intra-clan marriages	16
Both clans unknown	92
Personnel Total	856
Total marriages	428

*Data were based on the records of the Franciscan Fathers, Peña Blanca, and checked by informants for clan affiliations. Undoubtedly, some of the ninety-two marriages for whom no clan memberships could be recalled included additional marriages with Cochiti and early Spanish families which were no longer living in Cochiti and were no longer remembered by present day Cochiti people. This has been estimated as raising the above total of fourteen marriages involving Cochiti and Spanish-Americans to as many as fifty cases.

APPENDIX X

INTRACLAN MARRIAGE ROSTER

Juan Jose Montoya, born c. 1836, and Maria Trinidad Herrera, both Cottonwood Clan, married about 1857, the year of birth of their first child, according to baptism records at Peña Blanca.

Cleto Urina and Reyes Archibeque, both Water Clan, married 11-28-74.

Jose Arquero, 18 years, and Cecilia Cordero, c. 17 years, both Cottonwood Clan, married 10-16-78.

Adelaido Montoya, 27 years, and Lucia Romero, 17 years, both Cottonwood Clan, married 7-25-87.

Juan Pedro Melchior, c. 32 years, and Ignacia Montoya, 26 years, both Cottonwood Clan, married 3-1-92.

Jose Nicanor Cordero, 28 years, and Juana Maria Archibeque, both Sage Clan, married 4-18-04.

Diego Arquero, 22 years, and Anita Chavez, 17 years, both Sage Clan, married 4-7-10.

Miguel Ortiz, 42 years, and Maria Quirena (Zeferina Gerina) Urina, 47 years, both Sage Clan, married 4-11-15.

Onofre Pancho, 21 years, and Cecilia Roybal, c. 20 years, both Oak Clan, married 5-6-18.

Manuel Ortiz, 45 years, and Victoria Martinez, both Oak Clan, married 4-9-22.

Pasqual Suina, 26 years, and Aurelia Montoya, 15 years, both Oak Clan, married 8-30-26.

Salvador Arquero, 30 years, and Candelaria Montoya, 24 years, both Cottonwood Clan, married 12-6-29.

Ricardo Chavez, 21 years, and Juana Maria Romero, 15 years, both Oak Clan, married 12-29-33.

Damasio Quintana, 48 years, and Cresencia Arquero, 65 years, both Oak Clan, married 3-30-40.

Aloysius Pecos, 30 years, and Sinaida Chavez, 25 years, both Oak Clan, married 11-24-45.

Jose Dolores Pecos, 26 years, and Caroline Melchior, 22 years, both Oak Clan, married 12-26-47.

APPENDIX XI

COCHITI CLAN STRENGTHS: 1897 and 1948

Clan Name	Starr: Males	Females	Total	Lange: Males	Females	Total
Pumpkin (Squash)	10	5	15	10	3	13
Oak	12	22	34	60	54	114
Water	6	9	15	12	8	20
Cottonwood	27	24	51	25	18	43
Coyote (Fox)	10	12	22	13	20	33
Sage	23	20	43	29	30	59
Sun	4	0	4	0	0	0
Ivy	21	12	33	14	10	24
Turquoise	13	11	24	9	13	22
Shipewe (Cipewe)	14	11	25	16	17	33
Corn	4	1	5	8	9	17
Totals	144	127	271	196	182	378
(Plus two unlocated males)			273	(Plus 21 males and 24 females who belonged to none of these clans.)		423

Item Name	Price	Sold	Income
Apples (Apiaal)	$1	5	$5
Oak	$4	2	$8
Maple	$3	1	$3
Driftwood	$7	0	$0
Coyote (Fox)	$40	1	$40
Sage	$1	3	$3
Bee	$2	4	$8
Log	$5	2	$10
Turpentine	$6	1	$6
Whiskey (Grapes)	$12	0	$0
Horn	$9	1	$9
Totals			$92

(Like how relatable my sales are?)

APPENDIX XII

COCHITI KINSHIP TERMINOLOGY*

English		1947-1948	Earlier Recorded Terminology
I (man speaking)		hĪn	
(woman speaking)		hĪn	
Great-grandfather	(m. sp.)	bĪsavūelō	mumu (G) (P)
		mōmō avūelō (rare)	
	(w. sp.)	bĪsavūelō	baba (G) sababa (P)
		tata avūelō (rare)	
Great-grandmother	(m. sp.)	bĪsavūela	baba (G) sababa (P)
		yaya avūela (rare)	
	(w. sp.)	bĪsavūela	da'o' (C) da'o' (P)
		yaya avūela (rare)	
Father's Father	(m. sp.)	mōmō	mumu (G) sómomo (C) mumu (P)
		sómōmō	voc. momo (C)
	(w. sp.)	papa, sápapa, kápapa, karpala (obs.)	baba (G) sá-papa (C) sababa (P)
Mother's Father	(m. sp.)	mōmō	mumu (G) sómomo (C) mumu (P)
		sómōmō	voc. momo (C)
	(w. sp.)	papa	baba (G) sá-papa (C)
		sápapa	sababa (P)
Father's Mother	(m. sp.)	papa	baba (G) sá-papa (C)
		sápapa	sababa (P)
	(w. sp.)	yaya, sáda'ō, sánaiya, karla (obs.)	da'o' (G) sa-ṭáo (C) da'o' (P) voc. ṭáo (C)
Mother's Mother	(m. sp.)	papa	baba (G) sá-papa (C)
		sápapa	sababa (P)
	(w. sp.)	da'ō	da'o' (G) sa-ṭáo (C) da'o' (P)
		sada'ō	

*Terms in this appendix were recorded by the present writer for 1947-1948; published terms were from Goldfrank (G), Curtis (C), and Parsons (P).

APPENDIX XII (Cont'd)

English		1947-1948	Earlier Recorded Terminology
Father	(m. sp.)	ōmō sánashtʸō	umu (G) sá-nastyuᵘ (C) umu (P) voc. omo (C)
	(w. sp.)	tata	(sa)nactᵘᶜ (G) sá-nastyuᵘ, voc. táta (C) wawa, sanashtᵘˢʰ, dada (P)
Mother	(m. sp.)	yaya sánaiya	yaya (G) sá-naya (C) yaya (P) voc. yáya, náya (C)
	(w. sp.)	yaya, sánaiya, voc. ya	yaya (G) sá-naya (C) yaya (P) voc. yáya, náya (C)
Father's Brother	(m. sp.)	sánawashē ōmō (obs.)	umu, (s)anawacɛ, (s)anawa, awa'wawa (G) sá-nawashĕ (C) umu, wawa (P)
	(w. sp.)	sánawashē sánēñe	nyenye, (sa)nactᵘᶜ (G) sa-ñĕñĕ (C) nyenye, sanashtᵘˢʰ, dada (P)
Mother's Brother	(m. sp.)	sánawashē ōmō	umu, awa'wawa, (s)anawa, (s)anawash (C) sá-nawashĕ (C) umu, wawa, awa, anawa, anawashe (P)
	(w. sp.)	sánawashē	nyenye, (sa)nactᵘᶜ, dada (G) sá-ñĕñĕ (C) nyenye, sanashtᵘˢʰ, dada (P)
Father's Sister	(m. sp.)	sánēñe, kánēñe, yaya	yaya (G) sá-naya (C) yaya (P) voc. yáya, náya (C)
	(w. sp.)	sánēñe	yaya (G) sá-naya (C) yaya (P) voc. yáya, náya (C)
Mother's Sister	(m. sp.)	sánaiya, yaya	yaya (G) sá-naya (C) yaya (P) voc. yáya, náya (C)
	(w. sp.)	sánēñe	yaya (G) sá-naya (C) yaya (P) voc. yáya, náya (C)
Wife's Father	(m. sp.)	ōmō	sá-nastyuᵘ, voc. omo (C)
Husband's Father	(w. sp.)	tata	sá-nastyuᵘ, voc. ţaţa (C)
Wife's or Husband's Mother	(m. or w. sp)	yaya	sá-naya, voc. yáya, náya (C)

APPENDIX XII (Cont'd)

English		1947-1948	Earlier Recorded Terminology
Husband	(w. sp.)	sátroshē	(sa)truce (G) sá-tsŭ shĕ (C) satrushe (P)
Wife	(m. sp.)	saúkō	(s)ok'o (G) sô'ko, sá-uko (C) sok'o (P)
Husband's Brother	(w. sp.)	mēmē	watic (G) sá-mĕmĕ (C) wat^{i}' (P) voc. mĕmĕ (C)
Wife's Brother	(m. sp.)	satyúmshē saúkō satyúmshē	wat^{ic} (G) sá-wat!i (C) wat^{i}' (P) shqĕ-wat!i, voc. wát!i (C)
Husband's Sister	(w. sp.)	sáda'ō	bi'hia (G) sa-ṭáo (C) bi'hia (P) voc. sáṭao, ṭáo (C)
Wife's Sister	(m. sp.)	mēmē, sámēmō	bi'hia (G) sá-mĕmĕ (C) bi'hia (P) voc. mĕmĕ (C)
Brother	(m. sp.)	satyúmshē	(sa)dyumice, toutoume (i) (G) sá-tyumshĕ (C) sad^{y}umishe, chuohumi (P)
	(w. sp.)	mēmē, sámēmō	meme (G) sá-mĕmĕ (C) meme (P) voc. mĕmĕ (C)
Sister	(m. sp.)	mēmē, sámēmō	meme (G) sá-mĕmĕ (C) meme (P) voc. mĕmĕ (C)
	(w. sp.)	sáda'ō	ta'o, sooshe, da'ona (G) sa-ṭáo, voc. saṭáo, ṭáo (C) ta'o, sooshe, da'ona (P)
Brother's Wife	(m. sp.)	bĕhī^{ya}	bi'hia (G) sá-pihya (C) bi'hia (P)
	(w. sp.)	bĕhī^{ya}	bi'hia (G) sá-pihya (C) bi'hia (P)
Sister's Husband	(m. sp.)	wátē	wat^{ic} (G) sá-wat!i (C) wat^{i}' (P)
	(w. sp.)	wátē	wat^{ic} (G) sá-wat!i (C) wat^{i}' (P)
Widow	(m. sp.)	bīūda	biuda (G)
	(w. sp.)	bīūda	biuda (G)
Widower	(m. sp.)	bīūdo	biudo (G)
	(w. sp.)	bīūdo	biudo (G)

APPENDIX XII (Cont'd)

English		1947-1948	Earlier Recorded Terminology
Son	(m. sp.)	sáōshē, sáwishē	(sa)wuce (G) sá-hw^{i}shĕ (C) voc. sáhw^{i} (C) sawushe (P)
	(w. sp.)	sáōshē, sámōt (obs.)	(sa)wuce (G) sá-hw^{i}shĕ (C) voc. sáhw^{i} (C) sawushe (P)
Daughter	(m. sp.)	sáōshē	(sa)wuce (G) sá-hw^{i}shĕ (C) voc. sáhw^{i} (C) sawushe (P)
	(w. sp.)	sáōshē	(sa)wuce (G) sá-hw^{i}shĕ (C) voc. sáhw^{i} (C) sawushe (P)
Son's Wife	(m. sp.)	bé́hĪ^{ya} sápē'ashē	sabi'hia (G) sá-pihya (C) bi'hia (P)
	(w. sp.)	bé́hĪ^{ya} sápē'ashē	sabi'hia (G) sá-pihya (C) bi'hia (P)
Daughter's Husband	(m. sp.)	wátē	wat^{ic} (G) sá-wat̩i (C) wat^{i}' (P)
	(w. sp.)	wátē	wat^{ic} (G) sá-wat̩i (C) wat^{i}' (P)
Son's Son	(m. sp.)	sé́mōmō	mumu (G) sámomo (C) mumu (P) voc. momo (C)
	(w. sp.)	sé́mōmō	baba (G) sá-papa (C) sababa (P)
Daughter's Son	(m. sp.)	sé́mōmō	mumu (G) sámomo (C) mumu (P) voc. momo (C)
	(w. sp.)	sápapa	baba (G) sá-papa (C) sababa (P)
Son's Daughter	(m. sp.)	sápapa sámak (obs.)	baba (G) sá-papa (C) sababa (P)
	(w. sp.)	sáda'ō	da'o (G) sá-t̩áo (C) da'o (P) voc. t̩áo (C)
Daughter's Daughter	(m. sp.)	sápapa sámak (obs.)	baba (G) sá-papa (C) sababa (P)
	(w. sp.)	sáda'ō	da'o (G) sá-t̩áo (C) da'o (P) voc. t̩áo (C)
Father's Brother's Son	(m. sp.)	sánawashē, náwa, wawa (obs.)	awa'wawa', toutoumi, (s)anawa, (s)anawace, (sa)dyumice (G) sátyûmshĕ (C) wawa, chuchumi, sanawa, sad'umishe (P)
	(w. sp.)	sánḗlle, né́lle, kánḗlle, sámēnē	nyenye, meme (G) sá-mĕmĕ (C) voc. mĕmĕ (C)

APPENDIX XII (Cont'd)

English	1947-1948	Earlier Recorded Terminology
Mother's (m. sp.) Sister's Son	satyúmshē, nēñe, sánēñe, sánawashē	(sa)dyumice, toutcumi, awa'wawa', (s)anawa, (s)anawacɛ, (G) sátyûmshĕ (C)
(w. sp.)	sánēñe, nēñe, sámēmē, kánēñe	mame, nyenye (G) sá-mĕmĕ, voc. mĕmĕ (C)
Mother's (m. sp.) Sister's Daughter (w. sp.)	sánēñe, nēñe, sámēmē, kánēñe sáda'ō	mame (G) sá-mĕmĕ (C) br-sis (P) voc. mĕmĕ (C) ta'o, (s)ooce, da'ona (G) sa-ṭáo, voc. saṭáo, ṭáo (C) ta'o, sooshe, da'ona (P)
Father's (m. sp.) Brother's Daughter	sánēñe, nēñe, sámēmē, kánēñe	yaya, mame (G) sá-mĕmĕ, voc. mĕmĕ (C) brother-sister terms (P)
(w. sp.)	sáda'ō, sáūshē, (when older), kánēñe	yaya, (sa)wuce (G) sa-ṭáo, voc. saṭáo, ṭáo (C) ta'o, sooshe, da'ona (P)

APPENDIX XII (Cont'd)

APPENDIX XIII

1948 MOIETY STRENGTH

Divisions	Total	Males	Females
Pumpkin	219	118	101
Conservative	113	64	49
Progressive	106	54	52
Turquoise	204	99	105
Conservative	176	88	88
Progressive	28	11	17
Totals	423	217	206

APPENDIX XIV

1948 INTER-MOIETY MARRIAGES

Men / Women	Pump-kin	Pump. Prog.	Turq-uoise	Turq. Prog.	Alien Pump.	Alien Turq.	Alien Ind.	Alien A-Sp.	Total
Pumpkin	10	1	10	0	1	0	1	0	23
Pump. Prog.	0	4	0	3	0	0	3	6	16
Turquoise	9	0	22	0	0	3	1	1	36
Turq. Prog.	0	1	0	1	0	0	0	1	3
Alien Pump.	0	5	6	0	0	0	0	0	11
Alien Turq.	0	0	4	0	0	0	0	0	4
Alien Prog. Indians	0	5	6	0	0	0	0	0	11
Alien Prog. Anglo-Sp.	0	0	0	0	0	0	0	0	0

Total Marriages (husband, or wife, or both, still living) 104

ALL-TIME INTER-MOIETY MARRIAGES

Time-span	T Hus.-Wife	P Hus.-Wife	T Hus.-P Wife	P Hus.- T Wife
1948-1925	17	11	5	13
1924-1900	13	18	19	12
1899-1875	9	7	10	8
1874-before	0	4	1	2
Totals	39	40	35	35

Endogamous marriages 79 Exogamous marriages 70

Total marriages with both moieties known 149

APPENDIX XIV

1940 INTER-SURVEY MARRIAGES

Men \ Women	Ala. Prog.	Weeks Prog.	Pres. Univ.	Allen Univ.	Allen Theol. Sem.	Allen Prog. Theol.	Allen Univ. Prog.	Total
Theolin	10	1	10	0	1	0	1	0	23
Prog. Prof.	0	4	0	3	0	0	3	0	10
Surgeons	9	0	25	9	0	2	1	1	48
Univ. Prof.	0	1	0	1	0	0	0	0	2
Allen Theo. Sem.	0	5	6	0	0	0	0	0	11
Allen Univ. Prof.	0	0	4	0	0	0	0	0	4
Allen Theol. Sem. Prof.	0	3	6	0	0	0	0	0	10
Allen Prog. Theo.	0	0	0	0	0	0	0	0	0
Total Marriages (husband, or wife, or both, still living)	19	14	51	13	1	2	5	1	106

ALL-TIME INTER-SURVEY MARRIAGES

Time-span	I Man.-Wife	I Man.-Prof.	I Man.-Other	Total
1940-1945	17	12	3	32
1941-1900	15	10	3	28
1899-1875	9	7	10	26
1874-before	0	4	4	8
Total	39	40	20	94

Endogamous marriages	79	Exogamous marriages 7%
Total marriages with both members living	142	

APPENDIX XV

1948 CLAN STRENGTHS WITHIN MOIETIES

	Pumpkin Moiety				Turquoise Moiety				
	Actives		Progressives		Actives		Progressives		
Clans	Male	Female	Male	Female	Male	Female	Male	Female	Total
Pumpkin	4	1	1	0	4	2	1	0	13
Oak	29	22	9	9	22	22	0	1	114
Water	1	0	5	0	6	7	0	1	20
Cottonwood	11	8	7	4	6	5	1	1	43
Coyote	4	6	0	0	9	14	0	0	33
Sage	6	4	8	15	12	6	3	5	59
Sun	0	0	0	0	0	0	0	0	0
Ivy	6	1	1	0	7	9	0	0	24
Turquoise	0	0	0	5	9	8	0	0	22
Shipewe	2	2	4	4	9	11	1	0	33
Corn	1	0	4	2	0	2	3	5	17
Bear	0	0	0	0	1	0	0	0	1
Antelope	0	0	0	0	1	0	0	0	1
Red Shell	0	0	0	0	1	0	0	0	1
Unknown	0	5	9	6	1	2	2	1	26
Anglo-Spanish	0	0	6	7	0	0	0	3	16
Totals	64	49	54	52	88	88	11	17	423

APPENDIX XVI

COCHITI BIRTHS, 1875-1947*

Year	Annual Totals			Total			Illegitimates		
	Total	Males	Females	Twins	Males	Females	Total	Males	Females
1947	11	7	4	0	0	0	2	1	1
1946	18	8	10	2	1	1	3	2	1
1945	13	5	8	2	1	1	5	2	3
1944	14	7	7	0	0	0	2	1	1
1943	6	4	2	0	0	0	1	0	1
1942	13	7	6	0	0	0	3	3	0
1941	9	5	4	0	0	0	1	1	0
1940	9	5	4	0	0	0	0	0	0
1939	17	8	9	2	0	2	1	1	0
1938	10	3	7	0	0	0	1	0	1
1937	12	7	5	0	0	0	3	1	2
1936	15	7	8	0	0	0	1	1	0
1935	13	8	5	0	0	0	1	1	0
1934	18	13	5	2	1	1	1	1	0
1933	11	5	6	0	0	0	0	0	0
1932	15	7	8	2	0	2	1	0	1
1931	17	5	12	0	0	0	1	0	1
1930	12	11	1	0	0	0	1	1	0
1929	12	5	7	0	0	0	0	0	0
1928	10	5	5	0	0	0	0	0	0
1927	16	10	6	0	0	0	4	3	1
1926	11	7	4	0	0	0	0	0	0
1925	11	3	8	0	0	0	2	1	1
1924	15	7	8	0	0	0	1	0	1
1923	15	3	12	0	0	0	1	1	0
1922	10	5	5	0	0	0	0	0	0
1921	9	5	4	0	0	0	0	0	0
1920	16	9	7	0	0	0	0	0	0
1919	7	5	2	0	0	0	0	0	0
1918	16	8	8	0	0	0	0	0	0
1917	11	3	8	2	0	2	0	0	0
1916	12	6	6	0	0	0	0	0	0

*Data based on the baptism records of the Franciscan Fathers.

APPENDIX XVI

COCHITI PUEBLO, 1875-1947*

Year	Total Males	Total Females	Males Born Elsewhere	Females Born Elsewhere	Total Males Married	Total Females Married
1875	11	7	4	0	0	2	1	1
1880	14	8	10	2	1	3	2	1
1885	15	5	8	2	1	3	1	2
1890	14	7	7	0	0	2	1	1
1895	6	4	2	0	0	1	0	1
1900	13	7	6	0	0	3	2	0
1901	9	5	4	0	0	1	1	0
1910	9	5	4	0	0	0	0	0
1919	17	8	9	2	0	1	2	0
1920	10	3	7	0	0	1	0	1
1927	12	7	5	0	0	3	2	0
1936	15	7	8	0	0	1	1	0
1935	15	6	9	0	0	1	1	0
1938	18	13	5	2	1	1	1	0
1939	11	5	6	0	0	0	0	0
1932	15	7	8	2	0	1	2	0
1934	17	5	12	0	0	0	0	0
1940	12	11	1	0	0	1	1	0
1945	12	5	7	0	0	0	0	0
1946	10	5	5	0	0	0	0	0
1947	16	10	6	0	0	4	3	1
1948	11	7	4	0	0	0	0	0
1949	11	3	8	0	0	2	1	1
1951	15	7	8	0	0	1	0	1
1952	15	3	12	0	0	1	1	0
1955	10	5	5	0	0	0	0	0
1957	9	5	4	0	0	0	0	0
1960	16	9	7	0	0	0	0	0
1959	7	5	2	0	0	0	0	0
1958	16	8	8	0	0	0	0	0
1957	11	3	8	2	0	0	0	0
1956	12	6	6	6	0	3	3	0

*Data based on the baptism records of the Franciscan Fathers.

APPENDIX XVI (Cont'd)

Year	Annual Totals Total	Males	Females	Total Twins	Males	Females	Illegitimates Total	Males	Females
1915	18	9	9	0	0	0	2	1	1
1914	15	9	6	0	0	0	0	0	0
1913	14	7	7	0	0	0	1	0	1
1912	13	7	6	0	0	0	0	0	0
1911	16	7	9	2	1	1	1	1	0
1910	19	10	9	0	0	0	1	0	1
1909	14	5	9	0	0	0	0	0	0
1908	14	7	7	0	0	0	1	1	0
1907	9	4	5	0	0	0	0	0	0
1906	13	9	4	0	0	0	2	2	0
1905	14	5	9	0	0	0	2	1	1
1904	15	9	6	0	0	0	0	0	0
1903	13	6	7	4	2	2	0	0	0
1902	19	13	6	0	0	0	2	2	0
1901	7	3	4	0	0	0	1	1	0
1900	17	12	5	0	0	0	2	0	2
1899	14	8	6	2	0	2	1	1	0
1898	15	10	5	0	0	0	1	1	0
1897	20	10	10	2	0	2	2	1	1
1896	16	5	11	0	0	0	1	1	0
1895	19	9	10	0	0	0	1	0	1
1894	20	12	8	0	0	0	1	0	1
1893	25	15	10	0	0	0	2	1	1
1892	22	10	12	0	0	0	4	3	1
1891	18	11	7	0	0	0	5	3	2
1890	27	12	15	0	0	0	3	1	2
1889	18	7	11	0	0	0	4	2	2
1888	19	9	10	2	1	1	1	0	1
1887	22	10	12	0	0	0	5	1	4
1886	19	9	10	0	0	0	0	0	0
1885	14	9	5	0	0	0	1	1	0
1884	20	12	8	0	0	0	3	3	0
1883	20	11	9	0	0	0	3	1	2
1882	14	13	1	0	0	0	1	1	0
1881	19	14	5	0	0	0	0	0	0
1880	12	9	3	0	0	0	3	1	2
1879	15	9	6	0	0	0	0	0	0
1878	19	11	8	0	0	0	2	2	0

Year	Total Rules Promulgated	Annual Periods Prior Major Overlap	Total Major Overlap	Total Multiple Overlap
1915	14	9	5	5
1916	15	9	6	6
1917	13	7	6	6
1918	12	7	5	5
1919	16	9	7	7
1920	15	10	5	5
1921	14	7	7	7
1922	11	6	5	5
1923	9	4	5	5
1924	12	7	5	5
1925	14	5	9	9
1926	15	6	9	9
1927	13	7	6	6
1928	15	12	3	3
1929	17	12	5	5
1930	11	6	5	5
1931	10	5	5	5
1932	7	3	4	4
1933	8	4	4	4
1934	9	5	4	4
1935	11	6	5	5
1936	13	7	6	6
1937	12	6	6	6
1938	10	5	5	5
1939	9	4	5	5
1940	8	3	5	5
1941	7	3	4	4
1942	6	2	4	4
1943	5	2	3	3
1944	4	1	3	3
1945	3	1	2	2
1946	2	1	1	1
1947	1	0	1	1
1948	0	0	0	0
1949	1	0	1	1
1950	2	1	1	1
1951	3	1	2	2
1952	4	2	2	2
1953	5	2	3	3
1954	6	3	3	3
1955	7	3	4	4
1956	8	4	4	4
1957	9	4	5	5
1958	10	5	5	5
1959	11	5	6	6
1960	12	6	6	6
1961	13	6	7	7
1962	14	7	7	7
1963	15	7	8	8
1964	16	8	8	8
1965	17	8	9	9
1966	18	9	9	9
1967	19	9	10	10
1968	20	10	10	10
1969	21	10	11	11
1970	22	11	11	11
1971	23	11	12	12
1972	24	12	12	12
1973	25	12	13	13
1974	26	13	13	13
1975	27	13	14	14
1976	28	14	14	14
1977	29	14	15	15
1978	30	15	15	15
1979	31	15	16	16
1980	32	16	16	16
1981	33	16	17	17
1982	34	17	17	17
1983	35	17	18	18
1984	36	18	18	18
1985	37	18	19	19
1986	38	19	19	19
1987	39	19	20	20
1988	40	20	20	20
1989	41	20	21	21
1990	42	21	21	21
1991	43	21	22	22
1992	44	22	22	22
1993	45	22	23	23
1994	46	23	23	23
1995	47	23	24	24
1996	48	24	24	24
1997	49	24	25	25
1998	50	25	25	25
1999	51	25	26	26
2000	52	26	26	26

APPENDIX XVI (Cont'd)

Year	Annual Totals Total	Males	Females	Total Twins	Males	Females	Illegitimates Total	Males	Females
1877	14	8	6	0	0	0	0	0	0
1876	11	7	4	0	0	0	1	1	0
1875	22	9	13	0	0	0	1	0	1
Totals	1098	584	514	24	7	17	97	55	42

APPENDIX XVII

DATES OF MARRIAGES AND FIRST BIRTHS*

Date of Marriage	First Birth	Age of Mother	Date of Marriage	First Birth	Age of Mother
12-26-47	7-16-47	21	8-2-31	11-19-31	18
12-26-47	5-9-48	19	1-15-31	10-1-31	19
6-13-47	10-19-47	20	10-4-30	7-3-32	19
5-6-46	5-5-47	19	4-28-30	9-16-31	18
5-5-46	7-8-45	19	4-26-30	6-22-31	22
2-21-46	11-4-46	24	3-3-30	3-16-30	23
11-24-45	10-4-46	26	2-13-30	5-20-30	19
4-27-45	6-18-45	21	12-6-29	3-17-30	25
6-11-44	2-18-47	27	9-6-29	1-14-30	20
3-10-44	4-5-46	23	8-10-29	6-20-30	20
9-21-42	5-11-43	22	3-9-29	9-19-29	24
4-18-41	6-4-41	37	1-22-27	12-19-27	19
4-14-41	3-20-42	--	8-30-26	8-6-27	16
8-10-37	10-29-38	36	6-3-26	3-15-27	34
12-23-36	1-5-38	27	9-6-24	1-30-29	21
11-28-36	4-16-37	30	7-14-24	8-5-24	19
11-12-36	5-15-37	25	3-3-24	4-6-25	29
5-12-35	4-25-36	20	3-3-24	5-30-24	20
4-28-35	5-3-37	25	11-1-23	5-11-25	19
1-14-34	5-16-48	32	4-13-23	2-12-24	26
12-29-33	2-17-34	26	1-22-22	2-2-23	29
12-24-33	2-22-35	30	8-1-19	12-10-19	26
9-24-33	2-17-34	20	8-17-18	4-17-19	20
9-24-33	7-30-36	34	11-3-17	5-31-18	17
7-14-33	6-18-34	23	1-20-17	9-5-18	23
5-8-33	11-8-33	24	6-12-16	12-28-16	37
1-22-33	10-5-34	29	2-9-16	12-15-16	21
1-22-33	4-5-34	24	4-28-15	10-6-16	22
12-25-32	9-13-33	19	7-14-13	8-27-14	20
12-13-32	6-24-33	18	6-28-13	12-6-17	27
10-9-32	4-11-31	18	9-10-12	5-8-15	29
7-14-32	8-14-32	16	4-15-12	11-23-12	21
6-21-32	5-31-32	24	2-5-12	12-17-12	19
4-13-32	6-24-33	18	4-7-10	5-23-10	17
1-30-32	3-16-34	--	4-7-10	11-25-10	18

*Data based on records of the Franciscan Fathers.

APPENDIX XVII (Cont'd)

Date of Marriage	First Birth	Age of Mother	Date of Marriage	First Birth	Age of Mother
4-7-10	2-24-10	17	8-20-92	9-21-93	--
2-7-10	2-15-14	25	7-14-92	4-17-92	16
2-7-10	11-2-10	18	3-1-92	3-5-96	26
5-4-08	4-4-10	21	2-1-92	2-13-93	18
4-27-08	11-30-08	24	2-1-92	3-1-95	20
4-27-08	6-11-09	--	1-18-92	5-7-91	15
3-2-08	4-5-09	15	1-18-92	1-19-94	18
1-8-08	3-25-08	18	10-8-91	9-7-92	--
11-11-07	8-14-08	18	1-9-91	2-6-91	17
8-2-07	1-3-09	20	11-12-90	10-1-90	--
6-20-06	5-7-09	19	7-14-90	4-25-96	--
2-26-06	2-?-06	15	5-2-90	2-24-92	17
2-11-06	6-20-05	18	1-25-90	1-28-92	24
5-8-05	12-16-06	18	1-25-90	10-2-90	17
5-3-05	4-7-06	25	11-25-89	7-26-90	18
7-14-04	12-9-04	16	10-14-89	2-11-90	--
4-18-04	5-21-08	--	11-17-88	3-18-89	20
2-14-04	7-27-08	19	10-6-88	9-28-89	--
2-19-03	7-3-03	17	7-25-87	4-9-90	17
2-19-03	11-10-04	--	7-25-87	6-17-88	23
2-9-03	11-24-04	21	7-2-87	3-7-89	21
12-10-02	10-20-12	25	2-7-86	3-26-86	19
7-31-02	3-31-04	21	2-16-85	4-1-86	15
2-19-01	3-5-02	18	2-16-85	11-9-88	37
11-23-00	8-26-01	--	1-19-84	5-20-84	18
11-23-00	1-10-01	28	1-7-84	12-20-86	22
7-25-00	3-25-01	17	11-29-83	3-1-85	--
7-14-00	9-8-00	--	11-14-83	12-3-83	13
7-14-00	3-28-05	38	5-21-83	5-23-84	--
10-29-99	7-10-00	29	4-17-82	6-14-83	20
1-27-98	1-27-02	21	11-5-81	3-22-84	15
4-20-97	5-1-99	29	9-26-81	7-31-84	15
7-30-96	3-30-96	--	6-11-81	6-2-83	16
1-8-96	2-17-03	22	11-23-80	11-14-82	--
8-27-95	3-12-95	17	10-27-78	7-18-79	--
3-26-95	1-9-96	20	10-16-78	10-9-79	18
3-26-95	6-8-95	22	10-14-78	5-14-80	--
3-26-95	2-8-99	20	5-17-77	8-21-78	19
3-26-95	12-8-95	17	2-21-76	3-13-81	--
11-23-94	5-5-95	--	11-8-75	11-16-76	22
1-18-94	6-17-94	20			

Date of Marriage	Birth Birth	Age of Husband	Date of Marriage	Birth Birth	Age of Wife
1-19-10	2-23-12	17	1-10-29	4-13-13	—
2-17-10	2-19-12	26	1-14-29	3-17-13	15
2-19-10	11-8-12	10	1-1-29	4-1-13	15
4-1-08	1-4-10	29	1-1-29	5-12-13	15
1-27-08	11-23-07	34	1-1-29	2-1-13	24
1-27-08	4-13-09	—	1-12-29	5-7-14	15
2-2-08	1-3-09	15	1-25-29	1-31-13	15
3-18-08	2-25-12	13	12-12-28	3-1-13	—
12-13-07	5-13-08	15	1-1-29	4-1-13	17
8-8-07	1-3-09	28	12-14-28	10-3-13	—
6-20-06	5-7-07	15	1-14-29	1-1-14	—
2-28-06	8-4-08	19	1-2-29	1-13-14	17
3-11-06	6-20-05	18	1-25-29	1-20-13	23
5-8-05	12-12-05	19	1-28-29	12-1-13	17
5-3-05	1-7-05	25	11-27-28	1-29-14	16
1-16-04	12-9-04	16	12-21-28	1-1-14	—
12-29-03	5-21-03	—	11-23-28	1-1-14	15
2-14-04	7-27-03	20	1-1-29	1-1-14	15
2-12-04	7-3-03	17	1-1-29	1-1-14	15
2-12-04	12-12-03	—	1-1-29	1-1-14	15
1-18-04	11-24-03	21	1-1-29	1-1-14	15
1-21-04	3-1-04	18	1-1-29	1-1-14	15
12-19-03	4-25-03	—	1-1-29	1-1-14	15
11-21-03	1-1-04	17	1-1-29	1-1-14	15
1-24-04	5-14-03	—	1-1-29	1-1-14	15
1-24-04	9-14-03	—	1-1-29	1-1-14	15
1-24-04	2-23-03	18	1-1-29	1-1-14	15
12-26-03	7-10-03	25	1-1-29	1-1-14	15
1-27-04	1-27-03	21	1-1-29	1-1-14	15
1-23-04	3-1-03	17	1-1-29	1-1-14	15
1-20-04	4-20-03	—	1-1-29	1-1-14	15
1-20-04	6-12-03	17	1-1-29	1-1-14	15
1-27-04	1-18-03	17	1-1-29	1-1-14	15
1-28-04	1-1-04	20	1-1-29	1-1-14	15
1-26-04	6-23-03	22	1-1-29	1-1-14	15
1-24-04	2-1-04	17	1-1-29	1-1-14	15
1-22-04	12-5-03	17	1-1-29	1-1-14	15
11-29-04	5-24-04	—	1-1-29	1-1-14	15
1-18-04	4-17-03	20	1-1-29	1-1-14	15

APPENDIX XVIII

COCHITI DEATHS, 1878-1947*

Year	Total	By Sex M	By Sex F	By Months up to 2 Years of Age**	By years over 2 Years of Age
1947	2	1	1	8	14***
1946	7	3	4	3, 5	22, 24, 70, 73, ?
1945	5	3	2	5, 7	25, 66, 70
1944	2	0	2		24, 70
1943	1	0	1		?
1942	4	0	4	3, 3, 8	?
1941	4	3	1		18, 20, 36, 75
1940	1	0	1		70
1939	4	3	1	3	32, 50, 68
1938	2	1	1	1	84
1937	4	1	3	9, 20	69, 70
1936	2	0	2		23, 29
1935	8	3	5	8, 21	21, 25, 33, 37, 52, 75
1934	3	0	3		30, 45, 68
1933	3	3	0	10	21, 58
1932	1	1	0		46
1931	4	3	1	4, 10	41, 53
1930	8	6	2	2d, 6d, 10, 11, 19	4, 39, 72
1929	7	0	7	13, 20	20, 21, 60, ?, ?
1928	12	7	5	1, 6, 10, 10, 16, 16, 22	3, 10, 11, 24, 35
1927	11	5	6	1d, 1, 8, 8, 9, 11, 16, 18	59, 74, ?
1926	7	3	4	1d, 3, 16, 21, 24	3, 60
1925	11	6	5	3, 3, 3, 18, 18, 23	21, 59, ?, ?, ?
1924	7	4	3	1, 2, 5, 11	19, 21, 34
1923	8	2	6	9, 10, 18, 23	5, 28, 30, 40
1922	3	1	2	12d, 8, 18	
1921	8	4	4	6, 10, 13, 21	2, 4, 42, 61
1920	8	5	3	6d, 7d, 15d, 14, 18	2, 33, 41
1919	10	7	3	4d, 11, 12, 13, 17, 23	3, 17, 55, ?
1918	11	4	7	6, 13, 15, 15, 20	3, 20, 23, 28, 80, ?

*Data based on the records of the Franciscan Fathers.
**Following a number, "d" indicates days rather than months.
***Underlined numbers indicate males.

APPENDIX XVIII (Cont'd)

Year	Total	By Sex M	By Sex F	By Months up to 2 Years of Age	By Years over 2 Years of Age
1917	8	4	4	1d, 1d, 1d, 12	29, 33, 50, 60
1916	15	9	6	1, 2, 4, 9, 12, 19, 20, 22, 24	3, 4, 8, 28, 45, 47
1915	14	7	7	2, 3, 5, 8, 9, 11, 19	3, 18, 22, 29, 35, 50, 50
1914	11	6	5	6d, 19d, 14, 14, 18	30, 31, 33, 50, 65, ?
1913	4	2	2	6	15, 19, 62
1912	15	7	8	1, 8, 9, 10, 10, 12, 13, 22	4, 22, 36, 54, 60, 70, ?
1911	11	6	5	3, 12, 16	6, 27, 28, 30, 50, 55, 55, 60
1910	13	5	8	14d, 1, 2, 4, 8, 9, 18, 20	3, 22, 22, 24, 90
1909	9	3	6	10d, 6, 10, 13, 15, 16, 20	2, 70
1908	16	8	8	9, 15, 15, 16, 19, 20	2, 2, 2, 3, 35, 37, 55, ?, ?, ?
1907	6	5	1	5d, 7, 12	2, 3, 14
1906	7	3	4	11, 13, 17	6, 16, 31, 36
1905	4	3	1	11, 11, 15	43
1904	18	11	7	1, 3, 5, 6, 12, 14, 18, 20, 21, 24, 24, 24, 24	2, 11, 15, 27, 31
1903	9	4	5	1d, 2, 8, 13, 19	23, 49, 70, ?
1902	5	3	2	12	2, 26, ?, ?
1901	4	3	1		3, 10, 52, ?
1900	0	0	0		
1899	17	10	7	2, 4, 14, 21	3, 5, 6, 8, 25, 44, 50, 55, 60, 60, 65, ?, ?
1898	18	13	5	5, 9, 11, 11, 11, 13, 16, 24	3, 7, 16, 21, 22, 27, 33, 55, ?, ?
1897	4	4	0	1, 10, 13	55
1896	13	6	7	1d, 1d, 2, 2, 3, 8, 24	3, 4, 6, 20, 29, 80
1895	5	4	1		3, 4, 4, 40, ?
1894	29	18	11	3d, 3, 6, 7, 7, 9, 11, 11, 24, 24	19, 25, 27, 27, 28, 30, 34, 35, 36, 40, ?, ?, ?, ?, ?, ?, ?, ?, ?
1893	11	6	5	3d, 9d, 7, 12, 13, 17	15, 16, 30, 40, 50
1892	17	8	9	2d, 5d, 1, 2, 3, 12, 13, 18, 19, 23	12, 60, ?, ?, ?, ?, ?
1891	17	6	11	3, 6, 12, 14, 15, 17, 17, 19, 19	4, 8, 12, 38, 52, 60, 61, ?
1890	5	5	0	11	5, 11, ?, ?
1889	1	0	1	12	
1888	0	0	0		

APPENDIX XVIII (Cont'd)

Year	Total	By Sex M	F	By Months up to 2 Years of Age	By Years over 2 Years of Age
1887	1	0	1		11
1886	2	1	1		36, 50
1885	3	2	1	9, 11	3
1884	8	3	5	2, 8, 12, 18, 24, 24	20, ?
1883	2	2	0	10, 17	
1882	2	2	0	24	?
1881	1	0	1	4	
1880	0	0	0		
1879	2	2	0		31, ?
1878	1	1	0		34
	496	261	235		

APPENDIX XIX

COCHITI CACIQUE ROSTER

Marcelo Quintana, Cottonwood Clan, Turquoise Kiva, born 5-15-04; became cacique 12-18-46 after serving several days as cacique pro tem.

Victoriano Cordero, Shipewe Clan, Turquoise Kiva, born 3-12-76; became cacique 12-22-14; died in office 12-12-46.

Rafaelito Herrera (also Semilla and Guayave de Leche), Coyote Clan, Pumpkin Kiva, born 1864; became cacique 11-8-11; died in office 12-22-14.

Antonio Suina, Coyote Clan, Pumpkin Kiva, born 1856; became cacique sometime after September, 1897; died in office 11-8-11.

Guadalupe Romero, Sun Clan, Pumpkin Kiva, born --?--; became cacique about 1890 and was still cacique when Starr took his census, September 28, 1897.

APPENDIX XX

COCHITI FLINT SOCIETY ROSTER

Marcelo Quintana, Cottonwood Clan, Turquoise Kiva, born 5-15-04; cacique and Flint Head since 12-18-46; also Kō´sharī.

Juanito Trujillo, Sage Clan, Turquoise Kiva, but formerly Pumpkin, born 1-13-81; also Kō´sharī.

Victoriano Cordero, Shipewe Clan, Turquoise Kiva, born 3-12-76; died 12-12-46; cacique since 12-22-14; also Kō´sharī, Snake, and Fire.

Rafaelito Herrera, also known as Semilla and Guayave de Leche, Coyote Clan, Pumpkin Kiva, born 1864; died 12-22-14; cacique since 11-8-11; also Kō´sharī.

Antonio Suina, Coyote Clan, Pumpkin Kiva, born 1856; died 11-8-11; cacique since sometime after September, 1897; also Kō´sharī, Snake, Fire.

Antonio "Chavesito" Trujillo, Sun Clan, Pumpkin Kiva, but formerly Turquoise; born 2-21-60; died 7-31-21; not Kō´sharī.

Jose Domingo Chalan, Water Clan, Pumpkin Kiva, born 5-29-75; died 9-15-33; also Kō´sharī (?).

Antonio Chalan (father of Jose Domingo), Cottonwood Clan, Pumpkin Kiva, born c. 1842; died 3-28-12; not Kō´sharī.

Guadalupe Romero, Sun Clan, Pumpkin Kiva, born --?--; died --?--; cacique from c. 1890 to at least September 28, 1897; also Kō´sharī.

Luis Romero, Shipewe Clan, Pumpkin Kiva, born 1-31-79; died 4-28-20; not Kō´sharī.

APPENDIX IX

COUNTY FLINT QUARRY RENTAL

APPENDIX XXI

COCHITI SNAKE SOCIETY ROSTER

Victoriano Cordero, Shipewe Clan, Turquoise Kiva, born 3-12-76; died 12-12-46; cacique since 12-22-14; also Flint, Fire, and Kō´sharī.

Antonio Suina, Coyote Clan, Pumpkin Kiva, born 1856; died 11-8-11; cacique since sometime after September, 1897; also Flint, and Kō´sharī.

Jose (?) Montoya (brother of Alcario Montoya), Corn Clan, Pumpkin Kiva, born c. 1873; died c. 1908.

APPENDIX XXII

COCHITI GIANT SOCIETY ROSTER

Cipriano Quintana, Water Clan, Turquoise Kiva, born 3-1-72; Head Giant since 10-24-45.

Vicente Suina, Shipewe Clan, Turquoise Kiva, born 8-9-20; son of Pedro Suina, Head Giant until his death, 10-24-45.

Pedro Suina, Pumpkin Clan, Turquoise Kiva, born 4-6-75; died 10-24-45; was Head at the time of his death.

Francisco Quintana, Water Clan, Turquoise Kiva, born 8-23-69; died 12-30-16; was Head at the time of his death; a brother of the 1948 Head, Cipriano Quintana.

Vicente Arquero, Oak Clan, Pumpkin Kiva, born c. 1871; died 11-22-39; served as mayori for Pumpkin Kiva dancers about 1923.

Natividad Arquero (later known as Quintana), Oak Clan, Turquoise Kiva; Head Giant at the time of his death; had been a member of ShrützI before joining the Giants; served as mayori for the Turquoise Kiva about 1923.

Priciliana Roybal Cordero, born in San Ildefonso, Oak Clan, Turquoise Kiva with her husband, Lorenzo Cordero (formerly in the Pumpkin Kiva with her first husband, Buenaventura Herrera); also a member of Thundercloud, or Thunder, Society; asked to join the Giant Society with which the Thundercloud Society, a woman's organization, was especially closely affiliated.

Trinidad Melchior Montoya, Cottonwood Clan, Pumpkin Kiva, born 9-13-73; died 12-23-46; also Thundercloud Society; asked to join Giant Society.

APPENDIX XXIII

COCHITI SHĪ´KAME SOCIETY ROSTER

Eufrasio Suina, Coyote Clan, Turquoise Kiva, but formerly of the Pumpkin Kiva, born 11-17-12; Head; also Kwi´rēna.

Jose Maria Naranjo, Oak Clan, Turquoise Kiva, born --?--; died --?--; Head until his death; also Kwi´rēna.

Manuel Ortiz, Oak Clan, Turquoise Kiva, born 4-21-77; died --?--; Head until his death; also Kwi´rēna.

Antonio Calabasa, Shipewe Clan, Turquoise Kiva, born c. 1866; died 9-20-41; also Kwi´rēna.

Manuel Melchior, Turquoise Clan, Pumpkin Kiva, born c. 1839; died 9-19-09; Head until his death; also Kwi´rēna.

Jose Vivian Perez, Water Clan, Pumpkin Kiva, born c. 1855; died 6-22-08; also Kwi´rēna.

Santiago Romero, -?- Clan, Turquoise Kiva, born --?--; died --?--; also Kwi´rēna; father of Vicente and Diego Romero, both Kwi´rēna members.

Luis Archibeque, -?- Clan, -?- Kiva, born --?--; died --?--; also Kwi´rēna.

Anastacio Urina, Water Clan, Pumpkin Kiva, born 4-2-76; died --?--; also Kwi´rēna.

APPENDIX XXIV

COCHITI WOMEN'S SOCIETY ROSTER

Juanita Chavez Romero, Cottonwood Clan, Pumpkin Kiva, born 7-9-72; Head; also Kō´sharī.

Reyes Suina Chalan, Ivy Clan, Pumpkin Kiva, born 4-15-83; also Kwi´rēna.

Damesia Suina Cordero, Shipewe Clan, Turquoise Kiva, born 11-26-04; daughter of Lucinda Cordero Suina.

Lucinda Cordero Suina, Shipewe Clan, Turquoise Kiva, born 12-15-78; also Kwi´rēna.

Inez Moquino Arquero, Sage Clan, Pumpkin Kiva, born c. 1850; died 3-1-19; also Kō´sharī.

Juana Herrera Herrera, -?- Clan, -?- Kiva, born ---?---; died ---?---; Head before Juana Chavez Romero.

APPENDIX XXV

COCHITI SHRŪ'TZĪ SOCIETY ROSTER

Jose Nicanor Cordero, Sage Clan, Turquoise Kiva, born 8-8-76; Head since 12-19-27.

Guadalupe Ortiz, Cottonwood Clan, Turquoise Kiva, born 12-10-29.

Jose Victor Suina, Sage Clan, Turquoise Kiva, born 2-23-53; died 12-19-27; Head at time of his death.

Abenicio Trujillo, Ivy Clan, Pumpkin Kiva, born 5-5-95; dropped out of society and became a "progressive" about 1920.

Juan Pedro Melchior, Cottonwood Clan, Pumpkin Kiva, born c. 1860; died 5-1-35; dropped out of society and became a "progressive" about 1920.

Manuel Cordero, -?- Clan, -?- Kiva, born --?--; died --?--.

Jose Ortiz, -?- Clan, -?- Kiva, born --?--; died --?--; also a member of the Warriors' Society.

Santiago Quintana Melchior, Coyote Clan, Turquoise Kiva, born 6-23-78; died 3-1-31.

Jose de Jesus Quintana Benada, Turquoise Clan, Turquoise Kiva, born 3-13-81; died --?--.

Adelaido Montoya, Cottonwood Clan, Pumpkin Kiva, born 12-25-60; died 5-17-26.

Lucia Romero, Cottonwood Clan, Pumpkin Kiva, born 3-22-70; died 1-29-06; wife of Adelaido Montoya and daughter of Guadalupe Romero, cacique during the 1890's.

APPENDIX XXVI

COCHITI KATCHINA ROSTER

1948	Translation	1923*
na´ẘish		na´wic
hil´lil-yĭka		hel^{y}alika
tsĭna	Turkey Katchina	tsina
ō´shatch	Sun Katchina	ocatc
kásh-kō		ckoucgo
kūtz	Antelope Katchina	kurts
shpūla	Fawn Katchina	cpula
má-sha-wa	Turkey Buzzard Katchina	macawi
hē´a-ch^{io}	Turtle Katchina	hetc^{uc}
ĭ´djak-kū	Katchina Father, Shrū´tzĭ	edjak^{u}
nén-yē-ka		nyenyeka
hĭ´hya	Kō´sharĭ Father (?)	he`ya
ē´ka		aik`a
mō´katsh	Mountain Lion Katchina	mokaitc
kō´chĭ-nakō	Yellow Woman	gotchini nako
tsē´a-dyū-wĭtsa		ts´ead^{y}uwitsa
wē´kōlĭ	Kwi´rēna Father	wekore
kō´haiō	Bear Katchina	gowai
wai´yōsh	Duck Katchina	waiyuc
mō´shatsh	Buffalo Katchina	mocatc

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*Goldfrank, Social and Ceremonial Organization, pp. 111-113.

APPENDIX XXVII

COCHITI KŌ'SHARĪ SOCIETY ROSTER

Lorenzo Cordero, Coyote Clan, Turquoise Kiva; born 8-2-98; Head since 12-18-46.

Marcelo Quintana, Cottonwood Clan, Turquoise Kiva; born 4-15-04; Head until 12-18-46 when he became cacique; also Flint.

Isidro Cordero, Shipewe Clan, Turquoise Kiva; born 1867.

Lorenzo Herrera, Water Clan, Pumpkin Kiva; born 3-23-81.

Santiago Pecos, Ivy Clan, Pumpkin Kiva; born 12-20-86.

Alcario Montoya, Corn Clan, Pumpkin Kiva; born 1-26-79; withdrew from active participation in autumn of 1947, at which time he also resigned as Sacristan.

Juanito Trujillo, Sage Clan, Turquoise Kiva but formerly Pumpkin; born 1-13-81; also Flint.

Cleto Arquero, Pumpkin Clan, Pumpkin Kiva; born 12-19-34.

Juanito Suina, Oak Clan, Pumpkin Kiva; born 11-27-82; withdrew from active membership many years ago; Spanish-American wife; son of Antonio Suina, cacique until his death, 11-8-11.

Sebastian Urina, Water Clan, Pumpkin Kiva; born 1-20-90; withdrew from active participation many years ago; has lived away from Cochiti since 1911.

Victoriano Cordero, Shipewe Clan, Turquoise Kiva; born 3-12-76; died 12-12-46; cacique at time of his death; also Flint, Snake, and Fire (?); brother of Isidro Cordero.

Luis Moquino, -?- Clan, -?- Kiva; born --?--; died --?--.

Rafaelito Herrera, Coyote Clan, Pumpkin Kiva; born c. 1864; died 12-22-14; cacique at time of his death; also Flint.

Torivio Herrera, Water Clan, Pumpkin Kiva; born 6-8-78; died --?--; brother of Lorenzo Herrera.

Antonio Montoya, Coyote Clan, -?- Kiva; born --?--; died --?--; withdrew many years ago and joined the Penitentes.

APPENDIX XXVII (Cont'd)

Salvador Romero, Shipewe Clan, Turquoise Kiva; born 10-7-17; died --?--; KIA, World War II.

Jose Maria Che, Cottonwood Clan, -?- Kiva; born 2-20-75; died --?--.

Ricardo Chavez, Oak Clan, Turquoise Kiva; born 2-4-12; died 12-31-33; died after being a member only a few days.

Jose Domingo Chalan, Water Clan, Pumpkin Kiva; born 5-29-75; died 9-15-33; also Flint.

Juan Arquero, Cottonwood Clan, Pumpkin Kiva; born c. 1850; died 2-13-15.

Salvador Pecos, Turquoise Clan, Pumpkin Kiva; born 4-9-65; died --?--; Head during early 1920's; father of Santiago Pecos.

Juan Isidro Chavez, Ivy Clan, Turquoise Kiva; born 1858; died 9-12-12.

Antonio Suina, Coyote Clan, Pumpkin Kiva; born c. 1856; died 11-8-11; cacique at time of his death; also Flint, Snake, and Fire.

Mariano Chavez, Cottonwood Clan, Pumpkin Kiva; born c. 1857; died 6-11-17; Sacristan at time of his death.

Santiago Quintana ("Guerro"), Pumpkin Clan, Turquoise Kiva; born --?--; died --?--.

Estephanita Arquero Herrera, Coyote Clan, Turquoise Kiva; born 3-18-89; daughter of Natividad Arquero (later Quintana), Shrū'tzĪ and later Giant.

Juanita Chavez Romero, Cottonwood Clan, Pumpkin Kiva; born 7-9-72; also Head of Women's Society; daughter of Juan Isidro Chavez, Kō'sharĪ.

Victoria Pecos Suina, Ivy Clan, Turquoise Kiva; born 7-6-89; daughter of Salvador Pecos, Kō'sharĪ Head c. 1920.

Clemencia Arquero Quintana, Oak Clan, Turquoise Kiva; born 4-5-95; wife of Cipriano Quintana, Giant Head.

Dominga Pecos Suina, Coyote Clan, Turquoise Kiva; born 10-1-90; daughter of Candelaria Trujillo Pecos, Kō'sharĪ.

APPENDIX XXVII (Cont'd)

Merced Montoya Arquero, Sage Clan, Pumpkin Kiva; born 7-28-66; died 1937.

Lorenza Arquero Cordero, Oak Clan, Turquoise Kiva; born 3-10-68; died --?--.

Petra Herrera Quintana, Water Clan, Turquoise Kiva; born c. 1888; died 5-1-10; sister of Lorenzo Herrera and Torivio Herrera, both Kó´sharī; daughter of Maria Ignacia Archibeque Herrera, Thundercloud.

Estafana Montoya Quintana, Cottonwood Clan, Turquoise Kiva; born 9-26-02; died 6-24-35; daughter of Alcario Montoya, Kó´sharī, and Trinidad Melchior Montoya, Thundercloud and Giant.

Inez Moquino Arquero, Sage Clan, Pumpkin Kiva; born --?--; died 3-1-19; also Women's Society; wife of Juan Arquero, Kó´sharī.

Rosaria Arquero Quintana, Cottonwood Clan, Turquoise Kiva; born 10-9-79; died 6-28-21; wife of Cipriano Quintana, Giant.

Lorencita Che Pecos, Ivy Clan, Pumpkin Kiva; born c. 1864; died 3-7-19; wife of Salvador Pecos, Kó´sharī; mother of Santiago Pecos, Kó´sharī.

Juanita Quintana Chavez, Cottonwood Clan, Turquoise Kiva; born --?--; died --?--; wife of Juan Isidro Chavez, Kó´sharī.

Josefa Peña Suina, Oak Clan, Pumpkin Kiva; born c. 1880 (San Ildefonso); died 5-19-15; wife of Antonio Suina, cacique, Flint, Snake, Fire, and Kó´sharī.

Zeferina Garcia Quintana, Oak Clan, Turquoise Kiva; born 6-2-58; died 1-5-30; wife of Santiago Quintana ("Guerro"), Kó´sharī.

Candelaria Trujillo Ortiz, Coyote Clan, Turquoise Kiva; born c. 1881; died 11-13-11; wife of Ventura Ortiz, Kwi´rēna.

Victoria Martinez Ortiz, Oak Clan, Turquoise Kiva; born --?-- (San Ildefonso); died 10-21-29; wife of Manuel Ortiz, Kwi´rēna and Shī´kame.

Lucia Naranjo Arquero, Oak Clan, Pumpkin Kiva; born c. 1849 (Santa Clara); died 11-9-14; mother of Clemencia Arquero Quintana, Kó´sharī.

APPENDIX XXVII (Cont'd)

Reyes Quintana Arquero, Oak Clan, Pumpkin Kiva; born c. 1869; died 3-18-29; wife of Vicente Arquero, Giant.

Refugia Pancho Perez, Cottonwood Clan, Pumpkin Kiva; born 10-26-54; died 4-23-38; wife of Jose Vivian Perez, Kwi´rēna and Shī´kame.

Manuelita Moquino Che, Sage Clan, Pumpkin Kiva; born 4-22-54; died 8-3-03; mother of Juanito Trujillo, Flint and Kō´sharī; sister of Inez Moquino Arquero, Kō sharī.

APPENDIX XXVIII

COCHITI KWI´RĒNA SOCIETY ROSTER

Vicente Romero, Sage Clan, Turquoise Kiva; born c. 1885; Head since early 1920's.

Diego Romero, Sage Clan, Turquoise Kiva; born 5-18-90; brother of Vicente Romero.

Eufrasio Suina, Coyote Clan, Turquoise Kiva; formerly Pumpkin; born 11-17-12; also Head ShĪ´kame.

Luis Ortiz, Turquoise Clan, Turquoise Kiva; born 3-?-81; mayori of Turquoise Kiva, 1948.

Jose Hilario Herrera, Oak Clan, Turquoise Kiva; born 3-10-20.

Juan Estevan Chalan, Corn Clan, Pumpkin Kiva; born 1878; Head of Pumpkin Kiva.

Pablo Trujillo, Turquoise Clan, Turquoise Kiva; formerly Pumpkin; born 3-31-04.

Jose Adolfo Quintana, Turquoise Clan, Turquoise Kiva; born 2-17-21.

Ramon Quintana, Sage Clan, Turquoise Kiva; born 3-24-98; married San Felipe woman and has lived there many years.

Ventura Ortiz, Turquoise Clan, Turquoise Kiva; born 7-1-66; died 9-26-25.

Antonio Calabaza (also Archibeque), Shipewe Clan, Turquoise Kiva; born c. 1866; died 9-20-41; also ShĪ´kame.

Miguel Ortiz, Sage Clan, Turquoise Kiva; born c. 1873; died --?--.

Manuel Ortiz, Oak Clan, Turquoise Kiva; born 4-21-77; died --?--; also Head ShĪ´kame.

Jose Maria Naranjo, Oak Clan, Turquoise Kiva; born --?--; died --?--; also Head ShĪ´kame.

Luis Archibeque, -?- Clan, -?- Kiva; born --?--; died --?--; also ShĪ´kame.

APPENDIX XXVIII (Cont'd)

Santiago Romero, -?- Clan, Turquoise Kiva; born --?--; died --?--; also ShĪ´kame; father of Vicente Romero, Head Kwi´rēna, and Diego Romero, Kwi´rēna.

Jose Vivian Perez, Water Clan, Pumpkin Kiva; born c. 1855; died 6-22-08; also ShĪ´kame.

Jose Antonio Melchior, Turquoise Clan, Pumpkin Kiva; born c. 1838; died 4-20-18.

Manuel Melchior, Turquoise Clan, Pumpkin Kiva; born c. 1839; died 9-19-09; also ShĪ´kame; brother of Jose Antonio Melchior.

Anastacio Urina, Water Clan, Pumpkin Kiva; born 4-2-76; died --?--; also ShĪ´kame.

Cleto Urina, Water Clan, Pumpkin Kiva; born --?--; died --?--; father of Anastacio Urina, Kwi´rēna and ShĪ´kame, and Sebastian Urina, Kō´sharĪ.

Terecita Chavez Romero, Shipewe Clan, Turquoise Kiva; born 5-14-94; wife of Diego Romero, Kwi´rēna.

Agrapina Ortiz Quintana, Turquoise Clan, Turquoise Kiva; born 5-23-87; daughter of Victoria Ortiz, Kwi´rēna, and sister of Luis Ortiz, Kwi´rēna.

Anita Trujillo Suina, Oak Clan, Turquoise Kiva; born 2-24-10.

Lucinda Cordero Suina, Shipewe Clan, Turquoise Kiva; born 12-15-78; also Women's Society; wife of Pedro Suina, Head Giant; sister of Victoriano Cordero, cacique, Flint, Snake, Fire, and Kō´sharĪ; sister of Isidro Cordero, Kō´sharĪ.

Pablina Quintana Cooka, Turquoise Clan, Turquoise Kiva; born 6-2-05; daughter of Agrapina Ortiz Quintana, Kwi´rēna.

Felipa Herrera Trujillo, Coyote Clan, Turquoise Kiva; born 4-27-08; wife of Pablo Trujillo, Kwi´rēna; daughter of Estephanita Arquero Herrera, Kō´sharĪ.

Maria Genevieve Quintana, Cottonwood Clan, Turquoise Kiva; born 1-19-29; daughter of Estafana Montoya Quintana, Kō´sharĪ.

Zeferina Arquero Suina, Cottonwood Clan, Pumpkin Kiva; born 7-25-67; died 3-22-37.

APPENDIX XXVIII (Cont'd)

Lucia Romero, Sage Clan, Pumpkin Kiva; born 7-20-87; died --?--; wife of Natividad Quintana, Shrū´tzĪ, and later Giant Head; sister of Vicente Romero, Kwi´rēna Head, and Diego Romero, Kwi´rēna; daughter of Santiago Romero, Kwi´rēna and ShĪ´kame.

Maria Quirina Urina Ortiz, Sage Clan, Turquoise Kiva; born 7-6-68; died 7-19-27; wife of Miguel Ortiz, Kwi´rēna.

Victoria Ortiz, Turquoise Clan, Turquoise Kiva; born --?--; died --?--; sister of Luis Ortiz, Kwi´rēna; mother of Agrapina Ortiz Quintana, Kwi´rēna.

Maria Luisa Trujillo Calabaza, Sage Clan, Turquoise Kiva; born 11-16-76; died 4-14-12; wife of Antonio Calabaza, Kwi´rēna.

Lupita Cordero (also Panocha) Suina, Pumpkin Clan, Turquoise Kiva; born 2-23-53; died 12-19-27; wife of Jose Victor Suina, Head Shrū´tzĪ.

Guadalupe Archibeque, Water Clan, Pumpkin Kiva; born 2-15-70; died 4-12-40; wife of Mariano Chavez, Kō´sharĪ and Sacristan; sister of Ignacia Archibeque Herrera, Thundercloud Society.

Juana Apodaca Cordero, Shipewe Clan, Turquoise Kiva; born --?--; died --?--; Comanche captive raised by Spanish family at Cochiti and wife of Teodosio Cordero, a Cochiti; mother of Victoriano Cordero, cacique, Flint, Snake, Fire, and Kō´sharĪ; mother of Isidro Cordero, Kō´sharĪ; mother of Lucinda Cordero Suina, Women's Society and Kwi´rēna.

APPENDIX XXIX

COCHITI GOVERNORS AND LIEUTENANT GOVERNORS

Year	Governor (Age) Clan	Kiva	Lieutenant Governor (Age) Clan	Kiva
1948	Juan Jose Suina (66) Ivy	P	Geronimo Quintana (33) Oak	T
1947	Juan Jose Trujillo (59) Coyote	T	Fernando Cordero (42) Oak	P
1946	Clofe Arquero (53) Sage	P	Geronimo Quintana (31) Oak	T
1945	Luis Ortiz (64) Turquoise	T	Salvador Arquero (46) Cottonwood	P
1944	Epitacio Arquero (54) Sage	T	Geronimo Quintana (29) Oak	T
1943	Epitacio Arquero (53) Sage	T	Geronimo Quintana (28) Oak	T
1942	Luis Ortiz (61) Turquoise	T	Salvador Arquero (43) Cottonwood	P
1941	Luis Ortiz (60) Turquoise	T	Salvador Arquero (42) Cottonwood	P
1940	Epitacio Arquero (50) Sage	T	Lorenzo Herrera (59) Water	P
1939	Luis Ortiz (58) Turquoise	T	Salvador Arquero (40) Cottonwood	P
1938	Luis Ortiz (57) Turquoise	T	Salvador Arquero (39) Cottonwood	P
1937	Alcario Montoya (58) Corn	P	Celestino Quintana (26) Turquoise	T
1936	Luis Ortiz (55) Turquoise	T	Lorenzo Herrera (55) Water	P
1935	Luis Ortiz (54) Turquoise	T	Lorenzo Herrera (54) Water	P
1934	Santiago Cordero (56) Sage	T	Clofe Arquero (41) Sage	P
1933	Luis Ortiz (52) Turquoise	T	Lorenzo Herrera (52) Water	P
1932	Juan Jose Trujillo (44) Coyote	T	Clofe Arquero (39) Sage	P
1931	Juan Jose Trujillo (43) Coyote	T	Clofe Arquero (38) Sage	P
1930	Luis Ortiz (49) Turquoise	T	Lorenzo Herrera (49) Water	P
1929	No records available.			
1928	Luis Ortiz (47) Turquoise	T	Lorenzo Herrera (47) Water	P

APPENDIX XXIX (Cont'd)

Year	Governor (Age) Clan	Kiva	Lieutenant Governor (Age) Clan	Kiva
1927	Alcario Montoya (48) Corn	P	-----?-----	
1926	No records available.			
1925	No records available.			
1924	No records available.			
1923	Marcial Quintana (44) Water	T	Lorenzo Herrera (42) Water	P

APPENDIX XXX

COCHITI WAR CAPTAINS AND ASSISTANT WAR CAPTAINS

Year	War Captain (Age) Clan	Kiva	Assistant War Captain (Age) Clan	Kiva
1948	Santiago Romero (66) Shipewe	P	Diego Romero (58) Sage	T
1947	Juan Velasquez (45) Red Shell	T	Santiago Arquero (57) Sage	P
1946	Epifanio Pecos (52) Ivy	P	Diego Romero (56) Sage	T
1945	Eleuterio Suina (64) Pumpkin	T	Santiago Pecos (59) Ivy	P
1944	Santiago Romero (62) Shipewe	P	Vicente Romero (59) Sage	T
1943	Santiago Romero (61) Shipewe	P	Vicente Romero (58) Sage	T
1942	Eleuterio Suina (61) Pumpkin	T	Santiago Pecos (56) Ivy	P
1941	Eleuterio Suina (60) Pumpkin	T	Santiago Pecos (55) Ivy	P
1940	No records available.			
1939	No records available.			
1938	No records available.			
1937	Epifanio Pecos (43) Ivy	P	Epitacio Arquero (47) Sage	T
1936	No records available.			
1935	No records available.			
1934	No records available.			
1933	Santiago Romero (51) Shipewe	P	Jose Domingo Quintana (46) Oak	T
1932	Eleuterio Suina (51) Pumpkin	T	Santiago Pecos (46) Ivy	P
1931	Eleuterio Suina (50) Pumpkin	T	Santiago Pecos (45) Ivy	P
1930	Marcial Quintana (51) Water	T	-----?-----	
1929	No records available.			
1928	No records available.			
1927	No records available.			
1926	No records available.			
1925	No records available.			
1924	No records available.			
1923	Jose D. Chalan (44) Corn Juan E. Chalan (Pro tem)	P	Santiago Melchior (44) Cottonwood	T

APPENDIX XXXI

COCHITI FISCALES AND LIEUTENANT FISCALES

Year	Fiscales (Age) Clan	Kiva	Lieutenant Fiscales (Age) Clan	Kiva
1948	Cresencio Pecos (49) Ivy	P	Pablo Trujillo (44) Turquoise	T
1947	Lorenzo Suina (63) Pumpkin	T	Ramon Herrera (46) Cottonwood	P
1946	Nestor Herrera (55) Cottonwood	P	Pablo Trujillo (42) Turquoise	T
1945	Diego Romero (55) Sage	T	Cresencio Pecos (46) Ivy	P
1944	Pasqual Suina (44) Oak	P	Santiago Herrera (31) Coyote	T
1943	Pasqual Suina (43) Oak	P	Santiago Herrera (30) Coyote	T
1942	Diego Romero (52) Sage	T	Lorenzo Cordero (44) Coyote	T
1941	Diego Romero (51) Sage	T	Lorenzo Cordero (43) Coyote	T
1940	No records available.			
1939	Diego Romero (49) Sage	T	Pasqual Suina (39) Oak	P
1938	Diego Romero (48) Sage	T	Nestor Arquero (33) Sage	P
1937	Pasqual Suina (37) Oak	P	Marcelo Quintana (33) Cottonwood	T
1936	No records available.			
1935	No records available.			
1934	No records available.			
1933	No records available.			
1932	Epitacio Arquero (42) Sage	T	-----?-----	
1931	Epitacio Arquero (41)	T	-----?-----	
1930	Epifanio Pecos (36) Ivy	P	-----?-----	
1929	No records available.			
1928	No records available.			
1927	No records available.			
1926	No records available.			
1925	No records available.			
1924	No records available.			
1923	Adelaido Montoya (56) Cottonwood	P	Diego Arquero (34) Sage	T

APPENDIX XXXII

COCHITI ALGUACILITOS

Year	Alguacilitos (Age)	Kiva	Clan
1948	Tony Suina (21)	P	Oak
	Francisco Herrera (55)	P	Cottonwood
	Juan B. Arquero (24)	P	Water
	Solomon Suina (33)	T	Shipewe
	Cresencio Suina (35)	T	Ivy
	Octavio Suina (42)	T	Ivy
1947	Justo Perez (52)	P	Pumpkin
	Alvin Arquero (28)	P	Oak
	Cruz Perez (67)	P	Cottonwood
	Damasio Quintana (55)	T	Oak
	Reyes Melchior (24)	T	Pumpkin
	Santiago Benada (23)	T	Sage
1946	Jose Albert Arquero (14)	P	Cottonwood
	Fernando Cordero (40)	P	Oak
	Pancracio Chalan (38)	P	Ivy
	Solomon Suina (31)	T	Shipewe
	Cresencio Suina (33)	T	Ivy
	Octavio Suina (40)	T	Ivy
1945	Alvin Arquero (26)	P	Oak
	Justo Perez (50)	P	Pumpkin
	Ramon Herrera (43)	P	Cottonwood
	Romulo Cordero (23)	T	Corn
	Jose Loreto Herrera (20)	T	Coyote
	Juan Velasquez (43)	T	Red Shell (San Felipe)

Annual Average Ages

1948	35.0 years
1947	41.5 years
1946	32.6 years
1945	34.1 years

APPENDIX XXXIII

COCHITI FISCALITOS

Year	Fiscalitos (Age)	Kiva	Clan
1948	Juan Rosario Melchior (36)	P	Pumpkin
	Pancracio Chalan (40)	P	Ivy
	Celso Montoya (34)	P	Oak
	Aloysius Pecos (33)	P	Oak
	Philip Cooka (41)	T	Bear (Hopi)
	Ivan Lewis (29)	T	Antelope (Acoma)
1947	Antonio Naranjo (29)	P	Oak
	[illegible] (20)	P	Oak
	[illegible]res Pecos (26)	P	Oak
	[illegible] Ortiz (18)	T	Cottonwood
	[illegible]to Herrera (22)	T	Coyote
	[illegible] Suina (37)	T	Ivy
	[illegible]rquero (22)	P	Water
	[illegible]rio Melchior (34)	P	Pumpkin
	[illegible] Pecos (31)	P	Oak
	[illegible]uintana (31)	T	Cottonwood
	[illegible]rio Herrera (26)	T	Oak
	[illegible]fo Quintana (25)	T	Turquoise
	[illegible]toya (31)	P	Oak
	----	P	-?-
	[illegible]artinez (42)	T	Oak (San Ildefonso)
	[illegible]Quintana (53)	T	Oak
	[illegible]da (29)	T	Sage
	[illegible]ooka (38)	T	Bear (Hopi)

Q-#1- fiscalitos duties
#2- a formal conversation post between the Conservation and programs

Annual	Average Ages
1948	35.5 years
1947	25.3 years
1946	27.9 years
1945	38.6 years

APPENDIX XXXIV

COCHITI COUNCIL OF PRINCIPALES

1948 MEMBERSHIP

Name (Age)	Kiva	Clan
Clofe Arquero (55)	P	Sage
Diego Arquero (60)	T	Sage
Epitacio Arquero (58)	T	Sage
Salvador Arquero (49)	P	Cottonwood
Santiago Arquero (58)	P	Sage
Juan Estevan Chalan (70)	P	Corn
Francisco Chavez (65)	P	Water*
Fernando Cordero (43)	P	Oak
Lorenzo Cordero (50)	T	Coyote
Nicanor Cordero (72)	T	Sage
Santiago Cordero (70)	T	Sage
Lorenzo Herrera (67)	P	Water
Nestor Herrera (57)	P	Cottonwood
Ramon Herrera (47)	P	Cottonwood
Santiago Herrera (35)	T	Coyote
Alcario Montoya (69)	P	Corn*
Luis Ortiz (67)	T	Turquoise
Juan Pancho (60)	P	Oak*
Crosencio Pecos (49)	P	Ivy
Epifanio Pecos (54)	P	Ivy
Santiago Pecos (62)	P	Ivy
Celestino Quintana (37)	T	Turquoise
Geronimo Quintana (33)	T	Oak
Jose Domingo Quintana (61)	T	Oak
Diego Romero (58)	T	Sage
Santiago Romero (66)	P	Shipewe
Vicente Romero (63)	T	Sage
Eleuterio Suina (67)	T	Pumpkin
Juan Jose Suina (66)	P	Ivy
Lorenzo Suina (64)	T	Pumpkin
Pasqual Suina (48)	P	Oak
Juan Jose Trujillo (60)	T	Coyote
Pablo Trujillo (44)	T	Turquoise
Juan Velasquez (46)	T	Red Shell

*Inactive members of the Council of Principales.

APPENDIX XXXIV

COUNCIL OF PRINCIPALS

1948 MEMBERSHIP

Name (Age)	Sex	Dept.
Olofo Arguero (55)	M	Engr.
Diego Arguero (60)	M	Engr.
Epifanio Arguero (52)	M	Engr.
Isaiador Arguero (47)	M	Mathematics
Santiago Arguero (50)	M	Engr.
Juan Esteva Ghalan (70)	M	Engr.
Procopio Chaves (65)	M	Ed. Dept.
Fernando Cordova (43)	M	Engr.
Lorenzo Cordero (50)	M	Chemistry
Eleanor Cordero (72)	M	Engr.
Santiago Cordero (73)	M	Engr.
Lorenzo Herrera (67)	M	Engr.
Nestor Herrera (57)	M	Mathematics
Ramon Herrera (47)	M	Mathematics
Santiago Herrera (55)	M	Chemistry
Alberto Hortiga (69)	M	Chem.
Luis Ortiz (67)	M	Languages
Juan Pardo (59)	M	Engr.
Crescencio Pena (60)	M	Engr.
Epifanio Pena (58)	M	Engr.
Santiago Pena (52)	M	Engr.
Celestino Quintana (37)	M	Languages
Gervasio Quintana (53)	M	Engr.
Jose Domingo Quintana (43)	M	Engr.
Diego Romero (59)	M	Engr.
Santiago Romero (66)	M	Mathematics
Vicente Romero (63)	M	Engr.
Filiberto Sutan (67)	M	Chemistry
Juan Jose Sutan (66)	M	Engr.
Lorenzo Sutan (61)	M	Languages
Pasqual Sutan (43)	M	Engr.
Juan Jose Trujillo (60)	M	Engineering
Pablo Trujillo (49)	M	Mathematics
Juan Velasquez (46)	M	Soil Engr.

Inactive members of the Council of Principals.

PLATES

PLATE I. COCHITI PUEBLO

February, 1947

Air view from the southeast.

PLATE II. COCHITI PUEBLO

February, 1947

Air view from the northeast.

PLATE III. COCHITI PUEBLO

February, 1947

Air view from the southwest.

PLATE IV. COCHITI PUEBLO

February, 1947

Air view from the south.

282