





THE ROCK AND PUEBLO OF ACOMA, SEEN FROM THE NORTH.

Papers of the Archaological Institute of America. AMERICAN SERIES.

III.

FINAL REPORT

OF

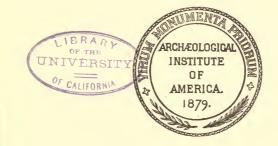
INVESTIGATIONS AMONG THE INDIANS OF THE SOUTHWESTERN UNITED STATES, CARRIED ON MAINLY IN THE YEARS FROM 1880 TO 1885.

PART I.

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A. F. BANDELIER.

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PREFACE.

IN submitting this First Part of my Report to the Archæological Institute of America, I have to apologize for the long delay in its completion. Although the material for it was ready long ago, circumstances beyond my control have prevented my putting it into shape for earlier publication.

I take this occasion to acknowledge the debt of gratitude which I owe to the population of the sections of country through which my investigations have led me, for the uniform kindness and hospitality shown to me, for the frequent disinterested assistance lent me in my labors, and for the valuable information imparted at almost every step. This acknowledgment is due to all classes and to all races with whom I have come in contact. I forbear offering the thanks specially due to personal friends, since, were I to enumerate them, the list would become far too long for a Preface. I offer my grateful acknowledgments to the civil and ecclesiastical, as well as to the military, authorities of both the American and Mexican portions of the Southwest, for having, by their protection, largely furthered my work.

The orthography of Indian names which I have adopted is not that adopted by the Bureau of Ethnology, at Wash-

LIST OF ILLUSTRATIONS.

															Page
Тне	Rоск	AND	PUEBLO	O OF	Ac	ОМ	А,	SEI	EN	F	RO	М	ΤН	Е	
Ν	Jorth	• •	• • •	• •	•	•		•	•		•	• 1	Fron	ntis	piece
Proci	ESSION,	Feast	C OF ST	. Esti	EVAN	τ, .	Ace	ома						•	219
Foot	Race	at Pu	EBLO O	ғ Тас	s.										240
Асом	A: NO	RTHER	N Row	of H	lous	ES									265
Puebi	lo of '	Γaos :	South	Hous	SE		•								266
INTER	RIOR OF	A Ho	DUSE AT	Zuñi	ί.		•								269
Мар	OF SON	IORA A	ND CH	IHUAH	UA						1	Ena	t of	10	lume

FINAL REPORT

ON

INVESTIGATIONS IN THE SOUTHWEST.

Part I.

I

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INVESTIGATIONS IN THE SOUTHWEST.

I.

INTRODUCTION.

THE country explored, or at least visited, during the period of four years which the Archæological Institute devoted to American research, (exclusive of the year 1881, which was spent in Southern and Central Mexico,) lies between the 36th and 29th parallels of latitude North, and the 105th and 112th degrees of longitude West. Since the year 1884, when explorations were discontinued, I have, as often as it was feasible, made short tours of investigation into regions hitherto unknown to me. Although such excursions were wholly independent of my connection with the Institute, that connection terminating officially in January, 1885, I shall include here also whatever observations I may have been able to secure. They are not very important, still they contribute to render the general picture more accurate. The accompanying map will give an idea of the whole ground gone over, - mostly alone, on horseback or on foot. To one bent upon scientific observations, even journeys by rail become instructive and valuable. I have therefore laid down on the map mentioned the railroad trips also. In a country where the aboriginal population has been so completely dependent upon nature as the aborigines of the Southwest were prior to the sixteenth century, the topography and hydrography of the

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land, its natural history and meteorology, form the basis of archæological researches. They furnish the key to the ethnological development of primitive man; through them we secure the explanation of most of the changes which he has undergone; they show to us, in a measure, how present ethnography has come to be. To attempt historical studies anywhere, without first knowing thoroughly the nature of the country, is as futile as to try astronomy without the aid of mathematics, or mineralogy without a previous course of analytical chemistry.

I have given to the Institute an account of all my trips, with the exception of the last one, which occupied the period from November, 1883, to July, 1884. Before entering upon the general Geographical Introduction to this Report, I may be permitted to sketch the route of these last travels.

Leaving Santa Fé, I went to El Paso del Norte, where I resided for nearly two weeks among the remnants of the Mansos, and among the Piros and Tiguas, who were transplanted to this vicinity about 1680. Being obliged to return to Santa Fé, owing to a serious attack of bronchitis, so soon as I was sufficiently recovered, I made a flying trip to the Pueblo of San Juan, on the Rio Grande, where I enjoyed full access to the fine collection of Indian objects and antiquities which my friend Samuel Eldodt has gathered in the course of nineteen years' residence among the Tehuas. The severe cold compelling me to go south, I accordingly removed to Rincon, on the Rio Grande, there to investigate ruins of "small-house villages," near San Diego. Thence I went to Fort Cummings, at the foot of Cook's Peak, and thence on to the Rio Mimbres, whose course I ascended on foot to the source. Crossing the divide to the Sapillo, I reached the wilderness about the head-waters of the Rio Gila, with its remains of cave habitations, cliff-houses, and open-air villages

4

of the small-house type. Returning to the Mimbres, I reached from there Silver City, Deming, and at last, by rail, Tucson, where my horse, the same animal that had carried me from Santa Fé to Tucson previously, had been most kindly taken care of by the military authorities at Fort Lowell. My intention was to visit Sonora, and although the advice of my military friends was against an attempt to penetrate the Sierra Madre, I nevertheless left the post on the 7th of February for the valley of the San Pedro, and travelled up the valley from Tres Alamos to Contencion, thence to Fort Huachuca. and entered Sonora on the 20th of the same month, near the head-waters of the stream between the Sierra Cananéa and the Sierra de San José. Once on Mexican soil, I followed the course of the Rio Sonora almost due south, stopping at every village and hamlet which the Apaches have failed to destroy, as far as Babiacora, quite one hundred and forty miles south of the frontier line of the United States. Here the dangerous part of the journey commenced; for though Gerónimo and his people were on the point of returning to the North, occasional bands of Apaches might still be expected to infest the mountains converging towards the Sierra Madre from Sonora. Nevertheless, I decided upon travelling to the eastward, with as little display as possible, relying upon night trips and general caution for safety. By way of Oposura the upper Rio Yaqui was reached on the 3d of April. Here I found an opportunity of joining two young men from Nacori, who had come in order to lay in a supply of provisions for their forsaken village, - the last one in Sonora towards the east, and often sorely crowded by the Apaches. My horse being exhausted, I accompanied the party on foot to their village, and thence, with an Indian guide, and with the greatest precaution, penetrated to the western slopes of the Que-hua-ue-ri-chi range, considered in the country to be the

highest and most central portion of the Great Sierra under that parallel of latitude. After my return to Granados on the Yaqui, and a few days spent at Huassavas, chiefly in examining remnants of church archives from the time of the Jesuits, and in measuring the abundant remains of ancient garden-beds and dwellings, I continued my journey, taking advantage of a convoy, to Huachinera. It would have been, to say the least, exceedingly imprudent to undertake the trip of fifty miles alone, and in a mountain wilderness, where the presumption was that Apaches might be encountered at any moment. Huachinera became another centre of operations, and the next one was Baserac, again on the Yaqui. From here I succeeded in penetrating the formidable Sierra de Teras, until then wholly untrodden, as, indeed, may be said of this region in general, so far as scientific research is concerned. Babispe was my last station in Sonora. From there I passed over into Chihuahua, crossing the desert plateau to Janos. Turning south again, I reached Casas Grandes on the 8th of May. At this important locality I was delayed nearly a month, inclusive of another tour on foot into the Sierra Madre as far as the Arroyo del Nombre de Dios, where I found some very well preserved cave-houses. On the 14th of June I came at last to Deming, within reach of regular mail facilities and railroads. After my return to Santa Fé, I spent a few days in the Pecos valley, to see once more the sights which had made such a profound impression upon me when I first engaged in the service of the Institute.

The journey into the Sierra Madre, although to a certain extent hazardous beyond the measure of duty, has left me no cause for regret. The numerous remains of man there have been noticed but lately by travellers, and they have become a source of undue wonder. As I hope to be able to show hereafter, they are far from being so marvellous as they have been thought. On the other hand, they are interesting and instructive in the highest degree. They form a connecting link between the extreme North and much more southerly regions that does not appear at the first glance, and explain features the origin of which is certainly not to be looked for in North America even. These features will be sketched in their place further on. So much for my journey.

The portion of the North American Southwest of which we treat consists of the Territories of New Mexico and Arizona. within the limits of the United States, and of the States of Sonora and Chihuahua, on Mexican soil. It is a region remarkable for high average elevation above the sea level, and for aridity. The whole area forms, so to say, a pitched roof, whose northern gable-end is much higher than the southern, so that there are three slopes: one to the west, towards the Gulf of California; one to the east, towards the Mississippi valley; and a gradual decrease in height of mountain chains from Colorado down to the boundaries of Durango. This latter is not a drainage slope, although it also has its influence upon river courses, and especially upon the volume of water they carry. The farther south we go, on this side of the Isthmus, the less important do the watercourses become, not only in length, but also in power.

The highest point of the whole region, as far as known, lies in Northern New Mexico. The "Truchas," north of Santa Fé, ascend to 13,150 feet above sea level. None of the peaks of the Sierra Madre reach this altitude; they do not even attain the proportions of lesser mountains in New Mexico like the Sierra Blanca,¹ "Baldy,"² the Costilla,³ or the Sierra de

¹ The *List of Elevations*, 1877, does not give the height, but the official maps place it at 12,892 feet. — Thos. Gannett.

² 12,661 feet.

⁸ 12,634 feet. List of Elevations, p. 118.

San Matéo.¹ The same may be said of Arizona, where only the northern ranges, the Sierra de San Francisco and the Sierra Blanca, rise above 12,000 feet.² There is a gradual decline in size as the mountains approach the mouth of that funnel whose wide aperture forms the North of the Mexican Republic, and its small escape the Isthmus of Panama. It is doubtful whether any of the summits in the Sierra Madre, down to the Durango line, rise higher than 10,000 feet.³ Another peculiarity is the narrowing of mountain regions from north to south. In those portions belonging to the United States, fully three fourths are strictly mountainous; in Sonora and Chihuahua, scarcely one half may be called mountain lands. The general drift of the chains is from north to south, although transverse ranges are numerous,⁴ and towards the south one of the characteristic features of the landscape consists often in isolated mountain masses, rising directly and abruptly out of a level which frequently is of repulsive barrenness. Such is the case, for instance, in Southwestern New Mexico, where the Sierra Florida dominates the plain around Deming;⁵ in Southwestern Arizona, with the peak of Baboquivari;⁶ in Northwestern Chihuahua, with the Sierra de en el Medio; and even in a measure in Southeastern New Mexico, the huge Sierra Blanca rising to a height of 7.000 feet above the level of Fort Stanton.

¹ 11,200 feet. List of Elevations, p. 129.

² Humphrey's Peak in the San Francisco range, 12,561 feet.

⁸ J. Ross Browne, *Report on the Mineral Resources of the States and Territories west of the Rocky Mountains*, p. 641: "few if any points exceeding 10,000 feet in elevation."

⁴ For instance, the Sierra Diablo, and the Sierra Luera, near the head-waters of the Gila; the Sierra del Datil, and the Escudilla, in Western Central New Mexico; also the Sierra de Zuñi. In Northern Chihuahua, the Sierra de las Espuelas, etc.

 $\frac{5}{5}$ This very abrupt and picturesque group is a conspicuous object. It rises out of the plain around Deming to a height of about 4,000 feet.

⁶ Visible easily from Tucson. Its elevation is about 7,000 feet, and the plain around it scarcely reaches 2,000.

The landscape in the Southwest is striking at all times. The plains of Eastern New Mexico are impressive through their immensity and absolute rigidity. They are far from producing the feeling which is created by the ocean. A liquid level is never absolutely at rest; the mind, as well as the eye, is always kept on the alert for something to occur, even on the calmest day. The plains, on the contrary, are immovable; there is nothing on the stark and stiff surface to connect it with the sky. On the wanderer, they produce easily a feeling of utter hopelessness.¹ With a sigh of relief, he at last discovers the faint outline of distant mountain chains, and their profile, strikingly like motionless lightning, is to him a token of new life. The plains lie between the luxuriant vegetation of the central States and the arid mountains of the Southwest, like a forbidding barrier. Without the buffalo, primitive man could never have traversed them.

The higher ranges, especially those in the northern sections of New Mexico, are far from being dismally arid. In the latitude of Santa Fé, pine timber begins at an altitude of about seven thousand feet. It rises to varied and very irregular heights, at the upper timber-line. That line changes : in almost every chain it is different by a few hundred feet.² Still it may be said that its average level lies above eleven thousand feet in the Southwest. This height is reached only by Coniferæ; the scrub oak crowns lesser crests and tops, such as the mountains on the Mexican border, — the Sierra de la Hacha, the Sierra de la Boca Grande, and the Espuelas. Some ranges are strikingly destitute of arborescent

¹ This feeling is already noticed by the chroniclers of Coronado's march. Castañeda, *Relation du Voyage de Cibola*, p. 189.

² It is sometimes more elevated in northern ranges than in southern ones. Thus in Lat. 33° to 34° it is 11,100 feet, in Arizona. On Pike's Peak, in Lat. 38° to 39°, it is 11,720 feet; on Buffalo Peak, in Colorado also, 12,041; and in the Sawatch range of Colorado, from 11,500 to 12,117 feet. vegetation. The Sierra de los Organos and its neighbors north and south along the eastern border of the Rio Grande valley, from the Sierra Oscura to El Paso, are completely without timber. Steepness of the slopes, incident upon geological structure, may be regarded as the principal cause of this bareness.

Although the basis of the plain abutting against the mountain regions on the east is mostly cretaceous and tertiary, volcanic flows have penetrated into it, and they form isolated videttes in the form of table-mountains or Mesas.¹ The Mesa is one of the distinctive traits of Southwestern mountain scenery. Frequently a thin crust or layer of metamorphic trap or of basalt covers a base of sedimentary rocks, and the difference in hardness between base and top has given a hold to erosion by water as well as by atmospheric currents,² — a hold that causes the sides to give way and leaves the surface as a projecting table, whence the Spanish popular term, now universally accepted, is derived. Erosion has been exceedingly powerful: not only the Mesa formation, the gigantic gorges, or cañons, are due to this agency. With their vertical walls encasing a narrow bottom, these deep ravines are a testimony of a slow corrosive and erosive force exerted through long periods of time.

Withal, volcanic action has left many traces. Extinct craters are frequent in New Mexico and in Arizona, and some of the most important mountain clusters owe their origin to eruptive action. The Sierra de San Francisco in Arizona, and the Sierra de San Matéo in New Mexico, are tall extinct volcanoes. Well delineated lava-flows fill the bottom of vales

¹ Wagon Mound, on the Atchison, Topeka, and Santa Fé Railroad, is a good specimen of this kind. So are some of the Mesas around Raton, where that road enters New Mexico.

 2 Remarkable erosions through wind are visible in the valleys of Pojuaque and Tezuque, which empty into the Rio Grande north of Santa Fé.

in Western New Mexico,¹ and they appear of relatively recent origin. Yet it is positive that in the past four centuries no eruption of any kind has occurred in the southwestern portions of the United States. On Mexican soil, the disturbances in the northeastern portions of Sonora and the northwestern of Chihuahua during this year (1887), are the only trace of events of this nature within historical times. Confused, and perhaps unauthentic, Indian tales hint at displays of volcanic forces in times previous to Spanish occupation, but it is impossible as yet to determine when and where they took place. The "Year of Light and Fire," (Año de la Lumbre,) spoken about by the Indians of Laguna, may have been a year of volcanic phenomena; but it may equally well have been one of brilliant auroral displays.

Thermal mineral springs are remarkably common in the Southwest. Hot springs, with a large proportion of soda only in their water, are also numerous. There are valuable medicinal sources in some places.² The importance of these localities has been, locally, exaggerated.

A similar exaggeration has prevailed, and even to a greater degree, in regard to the mines in the Southwest, and has a direct bearing upon the studies which I was called upon to pursue, since it is often stated that the Indians while in their original condition engaged in mining, and since it is commonly believed that the aboriginal population was diminished in numbers, or at least degraded, through compulsory mining for the benefit of the Spaniards. In the Southwest, the

¹ A fine lava-flow begins near the Agua Azul on the Atlantic and Pacific Railroad. It is very prominent near McCarthy's. In its passage it has scarcely ruffled the edge of the carboniferous red sandstone between whose walls it ran, at the bottom of a narrow valley. The bottom rocks are but slightly singed.

² Joseph's Springs, west of Taos, and Jemez Springs, north of the Pueblo, in the Cañon de San Diego. The former are arsenical; the latter contain, besides iodine, much lithion.

Indians were compelled to mine but very seldom, and then only with a stipulated compensation.¹ In New Mexico and in Arizona they never were compelled to work in the mines, not only on account of the stringent protective laws of Spain, but because the Spaniards, more experienced in the forma-

¹ It is evident that in Spanish America, as well as everywhere else, the strict decrees of the Crown in behalf of the Indian were sometimes evaded or disregarded, and the native occasionally treated with cruelty. But these instances were only exceptions, and not the rule. Las Casas, in his injudicious diatribes, has completely misrepresented the facts in many cases. He was an honest, but utterly unpractical enthusiast, who failed to understand both the Indian and the new issue placed before that Indian through the discovery of America, and who condemned everything and everybody from the moment that they did not agree with his own theories and plans. The royal decrees in favor of the Indian were numerous, and the labor bestowed by the kings of Spain and their councils on the "Indian question" was immense, so that it would require a special monograph of great extent in order to do justice to the subject. Compulsory labor in mines without compensation, was first abolished in 1551; but Philip II. regulated more explicitly the case by his Real Cédula of 10th January, 1589. See Recopilacion de las Leyes de los Reynos de las Indias, ed. 1756, lib. vi. tit. xv., ley I a, vol. ii. fol. 254. "Declaramos, que á los Indios se les puede mandar, que vavan á las minas, como no sea mudando temple, de que resulte daño á su salud, teniendo Doctrina y Justicia, que los ampare, bastimentos, de que poderse sustentar, buena paga de sus jornales, y Hospital, donde sean curados, asistidos, y regalados los que enfermaren, y que el trabajo sea templado, y haya Veedor, que cuide de lo susodicho; y en quanto á los salarios de Doctrina y Justicia, sean á costa de los Mineros, pues resulta en su beneficio el repartimiento de Indios ; y tambien paguen lo que pareciere necesario para la cura de los Enfermos." See also the Reales Cédulas of 24th January, 1594, and 26th August, 1595, etc. That the Southwestern mines were often a real benefit for the Indian who understood how to take hold of them in the right way, is thus told by P. Andrés Perez de Ribas, Historia de los Trivmphos de nvestra Santa Fee entre gentes las mas Barbaras y Fieras del Nueuo Orbe, etc., 1645, lib. viii. cap. iii. p. 475. Speaking of the Indians around the celebrated mines of Topia in Durango, he says : "Y declararé aqui lo que significa esa palabra: porque se entienda la grande ganancia que tienen en la labor de minas los Indios trabajadores, principalmente los ladinos en ellas, y que conocen los metales, y son barreteros, que con barretas rompen la veta del metal. Porque estos, demas de la paga de su salario de cada dia, que es de quatro reales de plata por lo menos: pero fuera de ese, los principales trabajadores tienen facultad y licencia, de escoger para si vna de las espuertas que llaman Tenates, llena de metal, que cada dia rompe, y saca de la veta; metal que siempre es el mas rico y escogido: porque como ellos lo conocen, y registran primero que sus amos, apartan para si lo mas precioso; y esto no se les tions of the country than the modern "prospecter" and the young graduate of mining schools, very soon perceived that mines in New Mexico, as a general rule, "would not pay."¹ As for aboriginal mining, it is a myth. We have yet to find a trace of work similar to the breaking of native copper with huge mauls, performed on Lake Superior. Of reduction of

puede estoruar á los Indios: porque al punto que eso se les estoruase, desampararian las minas, y ellas y sus amos quedaran perdidos. La espuerta de metal que saca, al Indio le suele valer quatro, seis, y tal vez diez, y mas reales de á ocho. Y á esto llaman Pepenas, que son muy vsadas en todos los Reales de minas de la Nueua España, y lo mismo deue de pasar en los otros Reinos de las Indias; y así los Indios que son diestros en la labor de minas, andan lucidamēte tratados y vestidos."

¹ The deceptive nature of New Mexican ores was discovered by the Spaniards at an early day. In 1626 complaints were already uttered against the settlers of New Mexico on the ground of their complete apathy in matters of mining. Fray Gerónimo de Zárate-Salmeron, Relaciones de Todas las Cosas que en el Nueuo México se han visto y sabido, etc., MS., Art. 34, says : "De todo esto se rien los Españoles que allá estan: Como tengan buena cosecha de Tabaco para chupar, estan mui contentos, y no quieren mas riquezas, que parece han hecho voto de pobreza, que es mucho para ser Españoles, pues por codicia de plata y oro entraran en el mismo Ynfierno á sacarlas." In Art. 35 he tells of three Flemings who came to New Mexico with some capital, and with the intention of working mines; but the Spaniards of Mexico burnt the machinery, which had been standing idle since the time of Don Pedro de Peralta, Oñate's successor as governor of the province. The viceroys themselves were not much taken with mining prospects in New Mexico. Already the Conde de Monterey wrote to the King in 1602, Discurso y Proposicion que se hace a vuestra Magestad de lo Tocante a los Descubrimientos del Nuevo México (Documentas de Indias, vol. xvi. p. 50): "Y cierto que no tengo perdido esperanza de que se haya de verificar lo que el Gobernador todavía afirma, de que hay plata en algunos cerros de aquella comarca en que está, . . . y aunque Joan de Oñate escribe que ahora saldria á hacer algunas catas hondas, y que hasta tanto no asegura riqueza, porque no sabe que haya metales de aventajada ley; esto no me desánima, porque no hay cuenta cierta en ello." In 1630, Fray Alonso de Benavides writes glowingly of mines in New Mexico, especially of those of Socorro (Memorial, pp. 17-19); but nobody felt constrained to attempt working them. The reason for it is stated afterwards officially by the Brigadier Pedro de Rivera, Diario y Derrotero de lo Caminado, Visto, y Observado en el Discurso de la Visita General de Presidios, situados en las Provincias ynternas de Nueva España, 1736, p. 32: "Hanse encontrado en dicho Reyno, algunos Minerales, sin dar su metal mas ley, que la de Alquimia, y Cobre; y como no se ha podido costear el beneficio que necesita, las han dejado abandonadas."

13

ores, even by the rude process invented by the ancient Peruvians, there is no sign. For the Southwestern Indian, copper ores had value only in proportion as they were *bright* blue and *bright* green; and the inferior kalaite, met with in New Mexico, was liked as well as the bluest turquoise from Asia Minor would have been. Mining, therefore, has had not the slightest influence on the fate of the native in the Southwest, under the Spanish sway; and no tale of ancient and now hidden treasures, which "only the Indian knew and made use of," should ever be taken as a basis for earnest enterprise. I am speaking here of those regions alone upon which I have to report to the Institute.

The geology of the Southwest has given to the Indians who inhabited the country resources more precious to them than metal. At a certain stage men do not attempt cutting and hewing. They have not advanced far enough to know how to prepare instruments for such purposes, and are therefore reduced to hammering and breaking. Metals are either too malleable for such purposes, or too brittle, unless a much greater advance has been made in treating them than that which the remains in these regions show. Thus it was that hard rock, flint, and obsidian were to the aborigines as important as iron and copper are to us to-day. These minerals are found in abundance in the Southwest, but they are strictly localized, and do not appear everywhere. The mountains converging toward the Sierra Madre from the side of Sonora, where they merge into that backbone of the Mexican isthmus, contain an abundance of obsidian in places.¹ Flint is scattered here and there. Basalt is common. To these we have

¹ I saw much obsidian in nodules on the elevated plateau called "Llanos de Huépari," near Huachinera, on the western spurs of the Sierra Madre. The Tahuaro also is full of it. There is obsidian in the mountains which divide the Rio Grande valley from the sources of the Rio Jemez.

to add, as a matter of secondary importance, however, mineral paints. Iron is plentiful, and often in the shape of iron ochre. The copper greens and blues are found almost everywhere. Kaolin, or rather a coarse kaolin clay, is met with occasionally. This exhausts the list of mineral products indispensable to the aborigines which the Southwest afforded.

The dryness of the Pacific coast is well known. From that side the regions of New Mexico and Arizona derive no humidity. Only what passes over the mountains from the northwest can occasionally irrigate the valleys and basins. In fact, it is the contact of northerly currents, cold and dry, with the slight moisture still contained in the air coming up from the Gulf of Mexico, that produces rain in summer, snow in winter. This moisture is in itself but a residue, for it has shed its main contents over the plains of Texas. It may be said that irrigation, both by precipitation and drainage, is furnished from the leavings of surrounding territories, north as well as south. In winter northerly winds prevail; in summer they blow from an intermediate direction between south and east. Both equinoxes are usually stormy, without much rain. The rainy season is defined, inasmuch as it is limited to the months of July, August, and September ; but it is far from displaying the copiousness of tropical climates. Weeks may elapse without the discharge of a single shower; then again weeks may bring a series of thunder-storms accompanied by floods of rain. During the other nine months of the year there are occasional days of rain, which usually comes from the southeast, and lasts until the wind settles in the opposite quarter. The same happens with snow-storms; the southeasterly winds are their forerunners, while northwesterly currents bring them to a close. What, during winter months, causes a snowfall in northern sections, appears in Southern Arizona and Sonora as a succession of rainy days, akin to

"bad weather" in the Eastern States, and called "Quipata" by the natives of Sonora and Chihuahua. A "Quipata" resembles an equinoctial storm of rain, but with less violence of wind, and perhaps less copiousness of precipitation. The further south these disturbances occur, the more severe becomes their character. This may be said of aqueous phenomena in general. The banks of the Rio Yaqui and of the Mayo are very humid in comparison with those of northern rivers; and when it rains, even on the dry plateaux of Central Chihuahua, the fall is extraordinarily heavy.

In a country whose topography displays such variety of features, and which besides extends over so many degrees of latitude as well as of longitude, a great number of what might be termed "local climates" appear. According to altitude, temperature varies within short distances.¹ The direction of mountain chains deflects and diverts atmospheric currents; what is a northerly wind on the plains may enter a narrow gorge from an opposite direction; a circle of high ranges around a low basin may keep it absolutely dry for years, all the precipitation being shut off by the crests. Such is the case on the middle Rio Gila about Casa Grande, and near Maricopa, in Southern Arizona. Years elapse sometimes ere these sandy bottoms are blessed by a substantial shower. Santa Fé in New Mexico is much more arid than the valley of Tezuque, although the latter is only seven miles distant. Las Cruces and the Mesilla valley on the Rio Grande are moist, and to a slight extent malarial, compared

¹ There is already a marked difference between Santa Fé and Tezuque, although the distance is only seven miles. Peña Blanca, twenty-seven miles from the capital, and 1,700 feet lower, is both colder in winter and much warmer in summer than the former. At Albuquerque the thermometer rises occasionally to over 100°, whereas at Santa Fé it never reaches 90° in the shade. At Tucson, where the thermometer attains 120° frequently, and where it hardly ever snows, the climate is torrid, whereas the sources of the San Pedro on the Sonora frontier are bitterly cold in winter.

with Socorro on the same stream, while the difference in their altitude is only a few hundred feet. Still, the general characteristics prevail everywhere as soon as we compare the climate with that of other regions on the North American continent. Dryness, comparative richness in ozone, and in the higher portions a mild temperature, whose extremes fluctuate between 90° in the summer, and -12° in cold winters. These extremes do not apply of course to the mountain zones proper, at an elevation of 8,000 feet and beyond, nor to the torrid lowlands of Arizona, of Chihuahua, and of the Sonoran sea-coast.

Where the water supply is wholly dependent upon what surrounding countries cannot absorb, the river systems suffer from the same scantiness as precipitation itself. Rainy seasons do not swell streams in the northern Southwest in any permanent manner; it is the melting of snow on the mountains of Colorado that causes the Rio Grande and the great Colorado to rise, and to inundate their banks. The same is true of the Gila, whose head-waters lie in the mountains of Southern New Mexico. These streams are therefore highest in May and in June, whereas during the months of rain their volume of water is steadily on the decrease. All these rivers have a rapid fall in the beginning, and are constantly washing down detritus, mostly of volcanic origin, towards their lower course. In proportion as they approach the ocean they have formed sandy bottoms, and this soil contributes to narrow the river bed, even to close it, where the stream is of small The rivers of the Southwest, therefore, diminish volume. more or less before reaching their mouths. South of the Rio Chama, the waters of not a single tributary of the Rio Grande reach the main artery throughout the whole year: the confluences of the Rio de Jemez, of the turbulent Puerco, of the Pecos, and of the Concho, are dry washes, except for a

17

few hours in the rainy season, when an extraordinarily heavy shower causes the torrent to disgorge floods of roaring waters, carrying huge boulders and masses of rubbish. This peculiarity of Southwestern rivers and streams, which causes them to resemble mountain torrents rather than regular watercourses, is of great importance to the historical student. In the dry season, early Spanish explorers could easily fail to notice a river which, on maps, astonishes us by the length of its course, and therefore leads us to expect a corresponding volume of water, whereas in reality it presents at a certain period of the year but the appearance of a dry gulch, or at best of a thin film lazily sinking through whitish sand. If, for instance. Alarcon does not mention the mouth of the Gila when he rowed up the great Colorado in September, 1540, it should be no matter of surprise, for the Gila at that season sometimes carries no more water than an ordinary brook, notwithstanding the length of its course.

Under such circumstances, it follows that even the moisture which the Southwest derives from surrounding districts by the channels of drainage is not abundant. That drainage itself is limited in area, and hence the habitable portions of the surface are small in comparison with the total expanse. The soil is largely fertile, that is, where there is any soil at all; it produces as soon as it can be moistened. Vegetation therefore bears the character that might be expected : it appears scant along the mountain bases, and often on the lower mountains themselves; and owing to the more southerly latitude, coupled with the elevation of the general level, it affords singular associations of vegetable types, and great contrasts in what lives and blossoms in the same neighborhood.

I have already alluded to the Coniferæ as forming the vegetable covering of the higher mountains. These stately plants are not limited to northern latitudes; they extend into Sonora

and Chihuahua, where large portions of the Sierra Madre display vast forests of splendid pine timber. Pinus Chihuahuana and strobiformis cover the central elevated basins, the "heart of the Sierra." On the whole, forests are not abundant in the Southwest. What is called "Monte" in Spanish embraces any description of country covered with plants, perennial, and higher than the low shrub. Mezquite (Prosopis *juliflora*), although only three and four feet high, but scattered thickly over a number of acres, is a "Monte" in the midst of an arid plain. Narrow cañons studded at intervals with tall pines, high Mesas on which the low and wide juniper bushes are scattered for miles like an irregular orchard, are called "Monte." Real timber regions are scarce. The cold and well-watered Tierra Amarilla in Northern New Mexico, the plateau of the Sierra de Zuñi, the surroundings of the Sierra de San Francisco in Arizona, are among the few typical timbered areas.¹ In the main, trees are farther apart than in better irrigated sections, and the majority of valleys present a series of groves, instead of a connected forest.²

The change in vegetation incident upon more southern latitude, as well as upon decrease in altitude, is very sudden and striking in Southern Arizona, on the banks of the Gila River. There the transition from the pine area, clustering around the base of the Sierra Blanca, to the thorny and threatening forms of gigantic Cacti, of *Fouquiera splendens*, *Larrea gigantea*, Dasylirium, Parkinsonia, and similar brilliantly flowering monstrosities of the vegetable kingdom, is not only interesting, it is fascinating to the eye. Another world opens before the

¹ A beautiful section of high and picturesque timber-land surrounds also Fort Apache in Eastern Arizona. There the forest is dense, the trees stately, and among the varieties represented is the *Pseudotsuga Douglassii*. The pines of Chihuahua reach as far north as Mount Graham, on the southern shores of the Gila.

² The valley of the upper Rio Pecos is a good specimen.

traveller; with the unexpected sight of strange plants he breathes, or seems to breathe, another equally strange air.

In other sections of the Southwest this transition is much more gradual, certain families of plants, like the Cacti, for instance, being everywhere represented,¹-Opuntiæ blossoming in the shade of Pinus Murrayana, as well as on the plain alongside of Buffalo-grass and of Yucca angustifolia. The transformation from smaller into taller forms as we proceed farther south is not so striking. In Central Arizona the "Palo Verde" (Parkinsonia Torreyana) creeps up to near the Little Colorado River.² In Western Sonora the specifically Arizonian flora prevails generally in the centre, the "Pitahaya" takes the place of the colossal "Zahuaro" (*Cereus giganteus*), and cylindrical Opuntiæ or "Choyas" increase in number, as well as in size. Thickets are not common in the South vest. on the whole. They are found in northern sections, in gorges and ravines like the Cañon of Santa Clara, where wild-cherry trees, and even elders, willows, and poplars, gather closely along the banks of a limpid brook. Farther south, however, the thicket is much more frequent, and what is there called "Monte" is but a thicket, often dangerous to penetrate on account of the thorny plants of which it is constituted. Such thickets cover the drift-hills encasing the Sonora and Upper Yaqui Rivers; they impede approach to the numerous and small aboriginal ruins with which these hills are covered, and render both difficult and tedious the surveys of rude fortification lines that sometimes furrow the slopes of more isolated eminences.

Sonora is a country of striking contrasts. From the road leading to Bacuachi, the eye embraces at once pine-clad crests,

¹ Opuntia arborescens, for instance, acquires a fine development on the plains, or rather basins, of Middle New Mexico. It flowers in four different shades.

² Through Tonto Basin. It is also found in the Mojave Desert.

slopes covered with oak, Palo Blanco, and "Dunes" thickly overgrown with Mezquite and formidable Choyas. In the narrow cleft through which the Yaqui runs past Huassavas and Granados, wild-fig trees associate with oak. The latter is also an almost steady companion of the Fan-palm.¹

Farther south, on the banks of the Lower Yaqui and of the Rio Mayo, vegetation assumes more vigorous proportions. The sugar-cane grows well there, and orange trees thrive luxuriantly around Hermosillo and near Guaymas on the coast of the Gulf of California;² or rather near it, for the coast itself, on Sonoran territory at least, is a forbidding stretch, marshy below Guaymas, fearfully dry and arid between Guaymas and the mouth of the Colorado River. What are called the "Play; s" is nothing else but a desert of sand and occasional rock, — a dreary waste, without water, unfit for permanent abode. Of similar character is Eastern Chihuahua. It is a dismal region, almost destitute of water in many places, terribly hot, and with a dwarfish and thorny vegetation.³ As for the Bolson de Mapimi, it is Sahara on a limited scale.

Apparent poverty of the vegetable kingdom, while it seems to be one of the characteristic traits of nature in the Southwest, does not preclude the existence of a great number of useful plants, — useful through their nourishing qualities as well as through medicinal properties of no small value. Of nutritive indigenous species there are a great number, and many of them are, like the medicinal herbs and shrubs, far

¹ Corypha. I found it with oak in many places, on the desolate stretch extending between Babiácora on the Sonora River, and Oposura at the foot of the Sierra de Bácachi. I also found it similarly associated in the State of Oaxaca, under the 18th degree of latitude.

² What is called in Sonora the Date-palm appears already on the banks of the Sonora River, at Arispe, in an isolated specimen. I met it again on the Upper Yaqui at Huassavas.

³ The mountains skirting the Rio Grande are fearfully arid. Mezquite is the dominating plant.

too little known as yet.¹ Truly, the Indian feeds on many a natural resource which we should fail to appreciate, but it is not our taste which determines the value of a plant in matters of historical import. The great question of subsistence is one which has exercised a powerful influence on the ethnography of the American continent, for primitive man, man destitute of iron and of draft animals, was not nature's master; he lived with nature, and so to say by its pleasure and permission, - with him, life was indeed a struggle, and the degree of culture which he attained the result of necessity. Inorganic forces alternately fostered and threatened his existence, without leaving him any clue to their why and wherefore; vegetation appeared more congenial; still it lay before him like a vast field for doubtful experiments. The animal kingdom, however, was more tangible: its species placed their useful and the noxious qualities within easy reach of his judgment. The Fauna of the Southwest, therefore, is deserving of attention, - even of closer notice than the other features of nature's complete realm.

In the Fauna of the Southwest there appear, prominent to the general observer, a certain number of species of a high order like zoögeographic landmarks. It is not always the large animal which has played the most important part in man's history; still, it cannot be denied that the Indian associated and lived more intimately with larger species than with inferior ones. I purposely say with — for he was placed in a state of quasi equality towards beasts whose physical

¹ To enter into details here would be to undertake an almost endless task. For Sonora, the *Descripcion Geográfica de Sonora* (1764, MS.) contains a list which is very important in every respect. I shall have occasion to refer to it subsequently, as well as to the excellent treatise of Dr. Washington Mathews, *Names of Plants in the Navajo Language*. The latter is especially valuable from a medicinal point of view. The Pueblo Indians know and use, often with great secrecy, a large number of medicinal plants. Others play a famous part in magic performances and conjurations. I shall treat of some of these hereafter.

INVESTIGATIONS IN THE SOUTHWEST. 2

properties resembled closely his own. There is no clear division line susceptible of being drawn in the Fauna, except in as far as the topography has marked out the great plains, with their crushing uniformity, and the mountain regions, with ever-changing accidentations. The great plains only graze the Southwest; they lie at some distance east of the Rio Grande, and do not penetrate Mexico. Their Fauna has played a remarkable part in the past of the Indian, a part which deserves special investigation further on. As to the larger animals of the mountain districts, it is not easy to draw lines of geographical distribution.

Thus the mountain-sheep (*Ovis montana*) is found to-day in northern, and even in northeastern Chihuahua.¹ Among the objects exhumed from the ruins at Casas Grandes, I saw and copied a pestle, whose upper end was a perfect representation of the mountain sheep with its enormous spiral horns. The panther (*Felis concolor*), the coyote (*Canis latrans*), the wolf, the deer, the bear species with exception of the grizzly,² —are all found in Sonora, as well as on the southern border of the State of Colorado. Mountain goats were noticed in Southern Arizona as early as 1540.³ Now they have almost completely disappeared from the Southwest. *Antilocapra Americana* is as common on levels in the 29th degree of latitude as on the Northern New Mexican plains.⁴ Lynx rufus

¹ In the mountains west of El Paso del Norte, even, I presume, in the Corral de Piedras. The *Descripcion Geográfica de Sonora*, cap. iii. art. 5, 1764, says:) "Carnero cimarron, en ópata Tetesso: hay muchos en la Pimeria alta, en lo demas de Sonora no tanto. Son mas grandes que los mansos y tienen los cuernos sin comparacion mas gruesos y largos que los domésticos."

² What is called Grizzly, "Oso platiado," or "Oso barroso," in New Mexico, is a cross-breed only. The real Grizzly seldom enters the Southwest.

³ Castañeda, *Cibola*, p. 159: "On trouve beaucoup de moutons et de chèveres sauvages; ces animaux sont très-grands, ils ont de longues cornes."

⁴ On the plain which extends along the eastern foot of the Sierra Madre, and southwest of Casas Grandes, beyond the abandoned hacienda of San Diego, I saw large flocks of antelopes.

and L. Canadensis — commonly designated as "wild-cats" — are found on nearly all the mountains. But the largest of American felines, the jaguar (*Felis onza*), but very rarely treads the soil of the United States. I know of well-authenticated instances when strayed specimens of this beautiful and powerful animal were discovered as far north as the 33d degree of latitude in Arizona.¹ But the home of the jaguar in the Southwest is Sonora, and some parts of Chihuahua. Among larger mammals the elk, *Cervus Canadensis*, has practically been exterminated in this century, whereas formerly it was found, abundantly even, in the mountains north and west of Santa Fé. Of smaller mammals, the badger, the hares and rabbits, etc., are scattered over the entire region, and varieties of the prairie marmot inhabit, or infest sometimes, all the larger level spaces, and especially the plains.²

It is a surprising fact, that, in a country so devoid of water as New Mexico, almost one fourth of the species of birds should be aquatic. Ducks, wild-geese, herons, cranes, even the swan and the gull, make at least sporadically their appearance on the Rio Grande. In the dry and high mountain regions, the crow and the raven rule supreme. No solitude is so complete that the wanderer will not meet one or more of these birds of ill omen.³ They form almost an integral

¹ In the Sierra Blanca. The fact appears to me well authenticated.

² Arctomys flaviventer, for instance. The animal is not at all limited to the plains. At Santa Fé, it burrows to-day in fields on the outskirts of town, and even in town. On the Mesa between Santa Fé and Peña Blanca it is very common, and renders transit for horses often dangerous, by burrowing in the middle of the road. On the Rio Grande near Santo Domingo, prairie-dog holes are of frequent occurrence. As usual, owls and rattlesnakes associate with the harmless little rodent, and the great Mygale retire into their subterraneous dwellings also.

³ Corvus Americanus, the crow, is much more common than C. corax, the raven. The latter is but occasionally met on Mesas, where a solitary bird of the species may be seen to stand watching the neighborhood in search of food.

part of the Southwestern landscape. In elevated regions eagles (in New Mexico *Aquila chrysaëtus* and *lcucocephalus*) are not unfrequent. Quails, grouse, pheasants, and the beautiful wild turkey, represent the Gallinaceæ. Songsters haunt groves as well as thickets; the mocking-bird enlivens at night the banks of the Rio Grande as well as the solitudes of the Gila. In the immense pine forests of the heart of the Sierra Madre, the tall green parrot is a conspicuous feature. At sunrise, it flutters from tree-top to tree-top, filling the air with discordant, but ever-changing cries.

Still, animal life is far from being prominent on the whole. Nature in the Southwest is rather solemn than lively. Days may elapse ere the wanderer meets with anything else than a solitary crow, a coyote, or, if he chance to strike a grove of Piñon trees, flocks of handsome but ruthlessly pilfering Picicorvus columbinus, - a beautiful bird, though damaging to the edible fruit of this species of Coniferæ, and disagreeable on account of the unharmonious noise with which he accompanies his work of plunder. On smaller plains droves of antelopes are occasionally encountered; the other large mammals, even deer, although plentiful in certain localities, shun even the distant approach of man. There is a stillness prevailing which produces a feeling of quiet and solemnity well adapted to the frame of pine-clad mountains, with their naked clefts and rents, or huge, picturesque crags, from which one looks down on mesas and basins, beyond which the eye occasionally escapes towards an unbounded horizon, over arid valleys and barren plains, with the jagged outline of other ranges far away, where the dark-blue sky seems to rise or to rest.

This scarcity of animal life visible to the traveller prevails also in lower orders of the Fauna. Snakes, especially the venomous Caudisona, are but locally abundant. Months and months may elapse before we meet a single one of the much feared "rattlers"; then, again, within a small compass, quite a number are seen. *Heloderma suspectum* (the "Gila Monster"),¹ Mygale Heintzii (the "Tarantula" of popular fame),² the scorpion and telyphonus,³ the disgusting scolopenders and julus, are noxiously frequent in certain parts, but only at the periods of annual rains. They become then, in a fearfully torrid atmosphere, the fit companions of thorny Choyas, spectral Cereus, sharp-cutting Yucca, and of the Fouquiera, with its dangerous spines, emerald-green foliage, and flaming red blossoms.

Thus there is a certain harmony between all the kingdoms of Nature in the Southwest. They compose everywhere a picture, not lovely, but very striking; attractive through its originality rather than through beauty. It is so striking that over primitive man it has wielded power in every sense, and in every direction of his physical, as well as intellectual life. The Indian was, and still is, much more helpless in presence of nature than we are. In order not to succumb to that nature's encroachments, he must yield where we oppose successful and profitable resistance. The physical qualities of the Indian, for which we envy him, are the result of compulsory pliability, rather than of superior endowment.

The Indian, says Lewis H. Morgan, "migrates under the influence of physical causes."⁴ This is absolutely true; for

¹ The Gila Monster is much dreaded, but I never heard of one authenticated case when his bite had fatal results. I know, on the other hand, that dogs were bitten by this ugly-looking but very slow animal (slow unless teased, when it becomes very lively), without the slightest noxious effects.

 2 The Mygale is not so common by far as reported by many. In the rainy season it appears sometimes quite often in certain places, but, on the whole, as it is not at all gregarious, and two mygale can hardly approach each other without fighting at once, it is very rare to meet any numbers of them. As to the bite, it is certainly very dangerous, unless attended to without delay.

⁸ The so-called "Vinagron."

⁴ In that very remarkable and too little known essay entitled *Indian Migrations*. I refer to it because it deserves greater attention than has hitherto been

even when superstition impels him to change his place of abode, that belief has been created by natural phenomena. Topography, hydrography, the flora and fauna, they induce him to stay or to move. Relations towards others of his race - hostilities, for instance - have similar effects, but their origin is mostly a desire to obtain what Nature has given to one locality and refused to another. The Indian, untouched by European culture, was nowhere absolutely sedentary; neither did he become a perfect nomad until he learned to own and to use the horse, with one single exception; and this was the Indian of the great plains. He was a true nomad, because the plains nowhere afforded him permanent subsistence, and he could secure it only by following the American bison or buffalo. As soon as a tribe came in contact with a great quadruped, and began to enjoy the manifold benefits which it offered as a source of food, of clothing, and of shelter, that tribe gave up sedentary life, unless the jealousy of others that had preceded drove it back into the mountains. The difference between sedentary and roving Indians is therefore not one of kind; it is the result of circumstances under which the sympathies and antipathies of man have only been involuntary agents of Nature. Still, the topographical division of the Southwest into mountain region and steppes reflects upon ethnography. There are mountain Indians and plain Indians; the former are more sedate, the latter more erratic. Groups of both speak the same language, and recognize each other as having a common origin. I allude here especially to the Apaches, and to their cousins the Navajos.

From whatever side the Indian may have come, the steppes or plains opposed to his movements a formidable barrier. In

bestowed upon it. Much of what I say here is almost repetition of what Mr. Morgan wrote many years ago.

the North he might cross them by following streams like the Missouri, the Platte, the Arkansas, shifting from west to east, or *vice versa*, within constant reach of water. Therefore we notice remains of more permanent habitations — vestiges of household pottery — along the Canadian River in the steppes, far away from those sections where the "Pueblos" have dwelt and dwell to-day;¹ but where streams traverse the plains from north to south, as in Texas, or where there are no water-courses at all, it was impossible for primitive man to cross the plains in any direction, — that is, without the buffalo.

The greatest of all American mammals was never permanent in the Southwest. Its home is in the Northwest, and overcrowding there, it pushed its herds steadily and uninterruptedly to the South. Therefore the buffalo people, as we might term the enormous droves of the American wild steer, were constantly on the move, and the Indian followed them, lived from them, — in fact, with them.² Once accustomed to

¹ Ruins are found in the plains both west and east of Wagon Mound. I have not been able to visit them, and cannot therefore speak of their character. Those east lie on Canadian River, aud twenty-five miles east from the railroad. The pottery, of which I have seen specimens, appears to be similar to that made by the Pueblos. One specimen had the bright glossy ornaments, apparently covered with a very coarse glaze, peculiar to some of the older Pueblo pottery.

² This "living with the buffalo" of the Plains Indians struck the earliest Spanish explorers. I begin with Coronado, *Carta al Emperador*, 20th October, 1541 (*Doc. de Indias*, vol. iii. p. 364): "Y á los 17 dias de camino, topé una ranchería de Indios, que andan con estas vacas, que los llaman querechos, los cuales no stembran, y comen la carne cruda y beben la sangre de las vacas que matan. Estos adoban los cueros de las vacas, de que en esta tierra viste toda la gente della; tienen pabellones de cueros de vacas adobados y ensebados, muy bien hechos, donde se meten y andan trás las vacas, mudándose con ellas." Juan Jaramillo, *Relacion hecha por el Capitan* —; *de la Jornada que habia hecho á la Tierra Nueva en Nueva España y al Descubrimiento de Cíbola ; yendo por General Francisco Vasquez Coronado (Doc. de Indias*, vol. xiv. p. 310): "En estos principios de las vacas hallamos indios que los llamaban á estos, los de las casas de azotea, querechos; ... segun se entendió de estos indios, todo su menester humano es de las vacas, porque dellas comen, y visten y calzan; son

life in company with the buffalo, the Indian was no longer master of his destinies. He traversed the steppes hither and thither, as the animal led him. Fragments of these wandering tribes were sometimes cast ashore, so to say, on both banks of the plains. There they were forced to become more permanent, in a measure. On the other hand, the Indian from Western mountains, as well as the Indian from Arkansas and Missouri, was tempted to try his luck at times in the hunt of the great quadruped. Thus the steppes became, through the buffalo, traversable, useful to the aborigines, and almost a mart where the two sections of the continent, the East and the West, communicated. In hostile meetings of bands who spoke distinct tongues, --- who had not the slightest idea of each other's existence even, - or in attempts at exchange of captives, they carried over to one section of the continent notions or objects from the opposite; geographical conceptions, however vague and distorted, passed from east to west, or from west to east, wandering over the plains after the buffalo.¹ Instead of being a barrier, the plains became a con-

hombres que se mudan aquí y allá, donde mejor les parece." Relacion del Suceso de la Jornada que Francisco Vazquez hizó en el Descubrimiento de Cíbola (Ibid., p. 327): "En estos llanos é con estas vacas andaban dos maneras de gente; los unos se llamaban Querechos é otros Teyas... No tienen otra grangería ni asiento mas de cuidarse con las vacas, de las cuales matan todas las que quieren, é adoban los cueros, de qué se visten é hacen tiendas, é comen la carne é aun algunas veces cruda, y aun tambien beben la sangre, quando en sed." Relacion Postrera de Sívola: y de mas de Quatro-cientas Leguas Adelante (MS., Libro de Oro, Fray Toribio Motolinia): "El mantenimiento o sutentamiento de estos indios es todo de las vacas, porque ni siembran ni cogen maiz." See also Castañeda, Cibola (pp. 116, 190, etc.).

¹ Evidence of this is furnished by the tales of the so-called Turk, the captive Indian, from a tribe living east of the plains, and who determined the expedition of Coronado in search of Quivira through his statements. It is not unlikely that the great river of which the Spaniards heard at Pecos, and from this same Indian, was either the Missouri or the Mississippi. Thus the Pueblos had some notions of the eastern half of North America. It was of necessity very defective; but still it was a notion, and it had reached them through that occasional intercourse, hostile or friendly, to which the plains gave rise. Compare Castanecting medium between the two divisions of North America, even in aboriginal times.

Entirely different was the fate of the Indian in the mountains. There it was, above all, linked to the distribution of water. Scarcity of permanent water is one of the dark sides of many regions in the Southwest; wherever water appeared to be in permanence, therefore, it created a tendency to remain and to settle. The approach of others to the same spot caused dispute, estrangement among people of the same stock, secessions, warfare, displacements. Water was the most powerful agent which propelled the settlement of these regions; at the same time, it was the most immediate cause for strife and disturbances.

An Indian tribe may have wandered for a long while without forgetting agricultural arts and their consequences for living. As soon as necessity or natural advantages impel to it, they settle again, adapting their customs to whatever change nature requires. Thus we find the southern Pimas, in Sonora, living at the time the Spaniards first came in contact with them in solid houses made of large adobes, each village having besides a central place of refuge in the shape of a house strongly constructed for defence.¹ The northern

ñeda, *Cibola*, pp. 72 and 77; Jaramillo, *Relacion Hecha*, p. 311; *Relacion de Suceso*, p. 325, etc.

¹ This fact is stated by P. Ribas, *Historia de los Trivmphos* (p. 360): "Poblados estauan los Nebomes á orillas de arroyos de buenas aguas, y corrientes; sus casas eran mejores, y mas de asiēto que las de otras Naciones: porque eran de paredes de grandes adobes, que hazian de barro, y cubiertas de azoteas, y terrados. Algunas dellas edificauã mucho mayores, y con troneras a modo de fuertes, y propósito para si acometiesen enemigos, recogerse a ellas la gente del pueblo, y valerse de su flechería." *Relacion de los Descubrimientos Conquistas y Poblaciones hechas por el Gobernador Francisca de Ybarra en las Provincias de Copala, Nueva Vizcaya y Chiametla (Doc. de Indías*, vol. xiv. p. 482): "Y que habia muchas tierras fertiles y cómodas para sementeras de trigo y maiz, . . . en partes donde buenamente se podian regar con los rios que por cerca dellas iban; y que ansimismo tenian muchas casas hechas de terrados."

Pimas and the Pápagos, although their near relatives, occupied huts well covered, but still only huts, and their villages were but hamlets compared with those of their southern brethren. The Navajos cultivated by irrigation, and lived in log cabins,¹ while their cousins the Apaches moved to and fro, subsisting on the chase and on murder and rapine. If the reports of Espejo are correctly interpreted, the Jumanos in Central Chihuahua were village Indians,² whereas those of New Mexico lived in a condition little better than the tribes of the plain. On the other hand, the Piros on the Rio Grande irrigated their lands, while the Piros on the so-called "Médano" - those who inhabited the village of Tabira and its neighboring settlements, who were strictly Pueblos also ---depended upon the annual precipitation for their crops, and upon tanks for their drinking water. The Tehuas irrigated on the Rio Grande; the Tanos, who spoke the same language, and had the same beliefs and customs, raised on the arid plain of Galisteo corn and squashes by means of summer rains and winter snow alone, without attempting to extend their dominion by encroaching upon more amply watered valleys. \times

It is difficult to trace the migration lines of the Indians on a sweeping scale. In the Southwest there seems to be, as in the configuration of the country, a general trend from north to south; but transverse movements have been as common in the vicissitudes of the same tribes as trans-

¹ The first notice of the character of the culture of the Navajos I find in Fr. Benavides, *Memorial* (pp. 57, 58): "Y estos de Nauajó son muy grandes labradores, y eso significa Nauajó, sementeras grandes... Tienen su modo de viuienda debaxo de tierra, y cierto modo de xacales para recoger sus sementeras, y siempre habitan en aquel puesto."

² Antonio de Espejo, *Relacion del Viage (Doc. de Indias*, vol. xv. p. 105): "En que vimos cinco pueblos, con mas de diez mil indios y casas de azotea, bajas y con buena traza de pueblos."

31

verse upheavals of the surface, and often barriers of that nature have changed the fate of a group, compelling it to retrace its steps, — even to "go back to the place of beginning."

The topography of the country has thus, to a great degree, determined the sites of establishments. The Indian looks to a few leading features to decide his settlement, apart from the indications given by superstition. He wants, first of all, water. Then he requires a limited extent of fertile soil. If that soil cannot be irrigated, he relies upon rain and snow, for corn will always grow where it rains moderately. Furthermore, he seeks a location where he may feel reasonably safe from an enemy. In judging of defensible locations, we cannot apply to them the principles of modern warfare. A treeless level is often as good a protection to an Indian village, constructed of heavy adobes, against a foe armed with bows and arrows, as an extensive uncommandable slope is against the artillery of to-day. Retreats, concealed nooks, were as valuable to the Indian as high-perched rocks. Communities could afford to retire into caves, on rocky recesses, where access to water was difficult in the day-time, without thereby exposing themselves to more than usual danger, - for it is only of late that the Indian learned to attack at night. Lastly, the abundance of game, or its absence, and the prevalence of certain nutritive or medicinal plants, influenced the choice of location.

The abandonment of villages has been due to various causes. Thus the Tehuas, of Santa Clara, assert that their ancestors dwelt in the clusters of artificial grottos excavated in cliffs of pumice-stone west of the Rio Grande. The cave villages of the Pu-yé and Shu-fin-né are claimed by the Tehuas as those of their own people. A few years of drought compelled them to abandon these elevated and

33

sparsely watered places, and to descend upon the river banks, where they had to resort to irrigation for raising their crops, whereas at the caves they grew corn and squashes by means of the rains alone. The Queres of Cochiti positively state that similar artificial caves, which line the walls of the Rito de los Frijoles, or Tyuo-nyi, were formerly the habitations of their tribe, and that constant hostilities of the Tehuas and Navajos, as well as the gradual disintegration of the very friable rock, compelled their abandonment. The latter is very plainly visible. In proportion as the material is easy to work, it deteriorates easily, and crumbles. The majority of such caves have fallen in on the front, and against such accidents there was no remedy.

On the high "Potreros," fronting upon the Rio Grande, stand the ruins of a number of villages. These were successively occupied by the same tribe, and therefore successively abandoned also, owing to "physical causes." Drought especially has been a leading agent; a single year, without adequate rain, compelled the tribe to remove to a better watered locality. Comparative permanence of abode was possible in the Southwest only where irrigation could be resorted to, and even there the irregularity of water supply is such that the Rio Grande, for instance, has been known to disappear in the middle of its course, as at La Joya and Mesilla in New Mexico. There is no positive evidence that the climate of the Southwest has suffered any important changes since man has inhabited the country; every seeming anomaly in the location of ancient dwellings explains itself, after a close scrutiny, by phenomena which are of actual occurrence today. The existence of the long "mysterious" ruins on the Médano, south of the salt lagunes of the Manzano, the socalled Gran Quivira, the Pueblo Blanco, and others, in localities where there is no water far and near, where irrigation

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was impossible, but the soil fertile and game abundant, is fully explained by the fact that the main Indian staples corn and calabashes — grow with summer rain alone, while the discovery of water tanks near to every ruin proves that the inhabitants had artificially provided for the supply essential to life. The same is true in regard to the ruins scattered over arid plains of Southwestern Arizona; everywhere the artificial reservoir accompanies traces of former settlements.

But while deficiency in the water supply has occasionally determined changes of abode on the part of primitive man, excess of it has quite as often had the same consequences. In the mountainous parts of Sonora, the villages of the Opatas were constructed on dunes skirting the river banks. Torrential rains flood these regions in summer; they not only cause sudden freshets, but wash even the bluffs sometimes to a degree which rendered the small dwellings of the Indian very insecure, and occasioned displacements of whole villages. In New Mexico, and during historical times, the instances of pueblos being destroyed by a sudden rise of mountain torrents are not infrequent. Santo Domingo, for instance, has been washed away four times within the last two hundred years,¹ and every time it has been rebuilt on a new site. With the exception of Acoma, there is not a single pueblo standing where it was at the time of Coronado, or even sixty years later, when Juan de Oñate accomplished the peaceable reduction of the New Mexican village Indians. Such mutations have also been caused by hostilities, or merely by fear of them. The great insurrection of 1680 wrought an important change in the numbers and distribution of Indian villages.

¹ The original pueblo, called Gui-pu-y, stood on the banks of the Arroyo de Galisteo, more than a mile east of the station of Wallace. It was partly destroyed by a rise of this dangerous torrent in one night. The next one has completely disappeared, the Rio Grande having washed it away. It was called Uash-pa Tze-na. The present village has suffered three disasters

Although the Southwest is, on the whole, not subject to epidemic diseases, — the coast of Sonora excepted, — it is not unlikely that many ancient settlements owe their decay and abandonment to sickness among its inhabitants. Mountain fever induced the remnants of the Pecos to forsake their homes and retire to Jemez. The villages on the lower Rio Mimbres became deserted, in all likelihood, owing to the malarial? qualities of the region. The Indian is much more helpless in such cases than we are; and when the "hand of nature" begins to weigh heavily upon any tribe, superstition comes in and hastens the destruction through practices which, while intended for relief, are actually more dangerous than the evil itself.¹

The natural resources of the Southwest have been sufficient to induce man to settle, and to remain settled, in a great number of localities, for a certain length of time at least; but the influence of contact of different tribes has done a great deal also towards tying them to the soil, or loosening ties already extant. This contact has nowhere been constant; overcrowding has not occurred, although crowding in the shape of persistent harassing, as the wolf harasses and finally wears out a steer or a drove of cattle, has been the constant tactics of the roving Indian against the land-tilling natives.

Contact has been occasional only, whether it was friendly or hostile. Natural resources and wants have caused and upheld this. The existence of products which one possessed and the other coveted has alternately caused war and com-

¹ Any disaster of magnitude, like drought, epidemic diseases, or a flood, is quickly attributed by the Pueblos to witchcraft. In consequence of this, suspicion sets in, and many crimes are committed which are kept secret, but contribute slowly and surely to depopulate the village. Certain pueblos, like Nambe, Santa Clara, and Cia, owe their decline to the constant inter-killing going on for supposed evil practices of witchcraft.

merce. 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. The possession of turquoise in the small range of mountains called Cerrillos gave the Tanos Indians of Galistéo Basin a prominent position among their neighbors. The Zuñis enjoyed similar privileges, which caused their modest relations of commerce to extend as far as the interior of Sonora and the Colorado of the West.¹ The proximity of the buffalo gave the Pecos Indians a valuable staple of commerce. Buffalo robes wandered as far as Zuñi, and from there into Arizona.² These robes also were, for the Pecos Indians, an acquisition largely by trade; they obtained them quite as often from the Apaches, who came down to the village in winter in order to get corn,³ as by actual hunt on the plains. The salt marshes in front of the Manzano range gave the Tiguas, as well as the Piros of Abó and of Tabira, an influential position, through their control over the supply of salt. Possession of such natural treasures formed ties of friendship, or broke them, as circumstances might determine. They also extended the geographical knowledge of the native, by attracting to his home people from other regions. This geographical knowledge, very faint and still more confused, has played an important part in the creeds and beliefs of the aborigines. What the Indian fails to understand he assigns at once to the domain of the supernatural; distant lands, of which he hears fabu-

¹ This is stated by various authors of the sixteenth century, like Fray Marcos of Nizza, *Descubrimiento de las Siete Ciudades (Doc. de Indias*, vol. iii. pp. 333-342). About the veracity of Fray Marcos there cannot longer be any doubt. I hope to have established this point fully in two essays on the subject. Compare also, in regard to the Indians of the Colorado River, Hernando Alarcon, *Relation de la Navigation et de la Découverte faite par le Capitaine Fernando Alarcon* (in *Cibola*, Appendix, p. 324, *et seq.*).

² Ibid.

⁸ Castañeda, Cibola, p. 179.

lous descriptions, become the scene of folk-lore; events which are striking, and yet inexplicable to him, pass over into the realm of mythology.

The rôle which plants have played in Southwestern ethnography has been varied, and yet not as evident on the surface as might be expected from its intrinsic importance. The same staples in the shape of domestic vegetables prevailed in the main over the Southwest. Corn, beans, calabashes, were cultivated almost everywhere, and only local and temporary scarcity could cause a pressure upon the native. But there were other plants also cultivated which could not grow everywhere, and thus became an element of trade. Such was cotton. Cotton demands irrigation, and a warm season of considerable duration. North of Cochiti it was not raised on the Rio Grande. Neither did it occur at the Zuñi villages. Commercial intercourse furnished it to such tribes as had it not, and with that intercourse came all the favorable and unfavorable results of contact. Tobacco was not known to the Pueblos until Spanish rule became established; but it was in constant use among the tribes of Southern Sonora, - the Yaquis, Mayos, and probably the Southern Pimas. Through cotton the art of weaving became an accomplishment among certain groups, whereas others, equally advanced in other respects, resorted to plaiting and tressing, using the yucca, turkey feathers, and rabbit skins for their vestments.¹ I have

¹ The Zuñis, for instance, raised no cotton. The Moquis, and the Rio Grande Pueblos, however, cultivated the plant. This is so positively stated by the majority of writers contemporary with the expedition of Coronado, that it is almost superfluous to quote from them. Still I must notice a few, as they refer more particularly to the mode of dress of the Pueblo Indians. Castañeda describes the costume of Zuñi as follows (*Cibola*, p. 163): "Les Indiens de ce pays sont trèsintelligents; ils se couvrent les parties naturelles et tout le milieu du corps avec des pièces d'étoffes qui ressemblent à des serviettes; elles sont garnies de houpes et d'une broderie aux coins; ils les attachent autour des reins. Ces naturels ont aussi des espèces de pelisses en plumes ou en peaux de lièvres, et des étoffes de

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already spoken of the part played by the buffalo in general; he has been a powerful agency in the formation of Southwestern ethnography. It is not unlikely even that he has largely contributed to facilitate the peopling of the whole North American continent, at least to direct the movements of the Indian. In regard to this quadruped, and to whatever he could afford to man, the roving Indian had the advantage over the villagers. He almost controlled the market. He might, if not exclude, at least very much hamper their endeavors to obtain hides and meat. The roving Indian was not much below the Pueblo in arts of life. He had even made one step beyond what the sedentary aborigine ever achieved without the aid of the European, in Peru excepted, - the Apache of the plains had a beast of burden ! With the Pueblos the only domestic animal was the turkey.¹ The Apaches-Vaqueros had the Arctic dog to carry his tents, his wardrobe, his entire household goods.² This animal gave

coton." The *Relacion del Suceso* (p. 320): "... á causa que no tienen ningun algodon; é se visten de mantas de Henegrien é de cueros de venados, é algunos de vaca." Jaramillo, *Relacion* (p. 308): "Tienen mantas de algodon cuadradas; unas mayores que otras, como de vara y media de largo." *Relacion Postrera* (MS.): "Desta gente algunos traen mantas de algodon y de maguey y cueros de venados adobados, ... tambien hacen mantas de pellejos de liebres y de conejos, con que se cubren : andan las mujeres vestidas de mantas de maguey hasta los pies." Fr. Gerónimo de Zárate-Salmeron, *Relaciones de Todas las Cosas* (1626, MS., art. 44): "Vistense de mantas de Yztli texidas de cardoncillo, no tienen estos Yndios algodon." The mantles of maguey were made of yucca leaves. Such textures are still found occasionally in cave houses and cliff dwellings. The mantles of rabbit hair are still worn at Moqui to-day. As to the mantles made of turkey plumes, they are out of use altogether at present.

¹ They kept the turkey for his plumage, rather than for meat or eggs. *Relacion del Suceso* (p. 320): "La comida que tienen es mucho maiz, é frisoles, é melones, é algunas gallinas de las de México; y estas las tienen mas para la pluma que para comer, porque hacen della pellones."

² This domestic dog is mentioned by all the authors who were eyewitnesses of Coronado's march. Subsequent authors, like Benavides and Villaseñor y Sanchez, mention it also. Not one of them, however, gives a detailed description. Still, it must have been the same dog which more northern Indians still roving man a sway on the plains which the villager could not dispute. The main staple of the plains, therefore, the hides and meat of *Bison Americanus*, became of necessity an object of commercial intercourse, even between the most hostile groups of sedentary Indians and nomads.

On account of the demand for animal products, commerce extended in the Southwest over much greater expanses than might be supposed. Iridescent shells, common on the coast of the Gulf of California, wandered as far as the plains, changing hands through barter, gift, or violence. The inhabitants of the Colorado river shores, the Seris of Sonora, exchanged these bivalves for the turquoises of Zuñi, or the tanned hides and rabbit mantles of Moqui. The same took place with parrot feathers. The large green parrot is very common in the Sierra Madre, and Cabeza de Vaca tells us that the Jovas, who dwelt on the mountainous confines of Sonora and Chihuahua, exchanged its plumes for green stones farther north.¹ At Casas Grandes I saw turquoises, shell beads, and marine snails of various kinds, which had been exhumed from the ruins, and among the latter were species found only in the West Indies, or in the Gulf of California,² whereas Casas Grandes lies midway between the shores of both oceans, in the very heart of Northern Mexico. All these objects were not necessaries of life in the strictest sense, they were luxu-

use as a beast of burden. In this case, it certainly is a variety of the Arctic. The *Relacion Fostrera* says of the dogs of the Querechos: "Esta gente tiene perros como los de esta tierra, salvo que son algo mayores." Mota-Padilla, *Historia de Nueva Galicia* (1742, p. 165): "Unos perillos no corpulentos."

¹ Alvar Nuñez Cabeza de Vaca, *Naufragios, y Relacion de la Jornada que hizó á la Florida* (in Vedia, *Historiadores primitivos de Indias*, vol. i. cap. xxxi. p. 543): "Y dijeron que las traian de unas sierras muy altas que estan hácia el Norte, y las compraban á trueco de penachos y plumas de papagayos." The Indians of whom Cabeza de Vaca received this information were Jovas.

² There were, among others, *Turritella Broderipiana*, from the Pacific; • *Conus proteus*, from the West Indies; and *Conus regularis*, from the west coast of Mexico. ries, and constitute to-day what the Southwestern Indian regards as his specific "treasure." Still, the possession of them was regarded as essential, because they formed an accessory to their religious rites, or to the magic processes with which their religion is so intimately linked.

The influence of natural scenes, of atmospheric phenomena, of the qualities, useful and baneful, of natural objects, on the religious beliefs and practices of the Indians of the Southwest is such, that one may feel tempted to think that that religion itself sprung up in the midst of a nature reflecting itself so strongly in the mental conceptions of man.

The scenes of man's first appearance upon this earth are laid among the Pueblos and Navajos, in that Southwest which they inhabit to-day. What occurred previously is said to have been enacted below, and not on the surface of the earth, in distant countries. Still, this may be a "myth of observation," arising from the sight of growth in plants, and from the forms of mountains. But the peculiarly vivid tints of the skies have given rise to the characterizing of cardinal points by colors, and these colors are again given in the most ancient myths to specific mountains, easily recognizable at this day. The regions beneath the surface of the earth mentioned in myths of the Pueblos and Navajos are naturally unrecognizable. These myths show, at least, that, if those Indians removed to their present homes from distant lands, it was so long ago that recollection has become exceedingly dim and ill-defined. The same may be said of their mythological animals. The earliest of these are shapes purely monstrous in part, but those which have become chief characters in the practices of to-day are well-known types of the present fauna. The creeds and beliefs of Southwestern tribes may have at one time possessed more elevated ideas; to-day these redeeming features are wellnigh obliterated, and it is the influence of a

nature which man was unable to master that has done it. In order to save himself from that nature in which he was compelled to live, the Indian strains all his faculties to soothe it by worship. If the Indian has ever had a clear conception of monotheism, it is long forgotten, and the most slavish cringing before natural phenomena, the cause of which is inconceivable to him, has taken its place.¹ Idolatry is not even an adequate term for it; it is a Fetichism² of the grossest kind, and so complicated, so systematized, that an appeal to one particular natural object, to one specific deified feature or phenomenon, can be resorted to, and is resorted to, in every circumstance of human life. Indian religion bows to the seasons for its rites, it borrows from them and from atmospheric phenomena its symbols. It places animals on a footing of equality with mankind, - often even they are recognized as his superiors, and placed before him as models of conduct. Indian religion assumes utter helplessness on the

¹ Dr. Mathews says of the Navajos, Some Deities and Demons of the Navajos: "It is a difficult task to determine which of their gods is the most potent. Religion with them, as with many other peoples, reflects their own social conditions. Their government is a strict democracy. Chiefs are at best but elders, men of temporary and ill-defined influence, whom the youngest men in the tribe can contradict and defy. There is no highest chief in the tribe. Hence their gods, as their men, stand much on a level of equality." What the Pueblo Indian mentions as a supreme God is the Christian God, but this supreme power is strictly apart from the real Pueblo creed. I have noticed this often, and very plainly, in my conversations with them, as well as in the rites which I witnessed. ² F. H. Cushing, Zuñi Fetiches (1883, from the Second Annual Report of the Bureau of Ethnology), says: "The A-shi-wi, or Zuñis, suppose the sun, moon, and stars, the sky, earth, and sea, in all their phenomena and elements, and all inanimate objects, as well as plants, animals, and men, to belong to one great system of all-conscious and inter-related life, in which the degrees of relationship seem to be determined largely, if not wholly, by the degrees of resemblance. In this system of life the starting point is man, the most finished, yet the lowest organism; at least the lowest, because most dependent, and most helpless. In just as far as an organism, actual or imaginary, resembles his, it is believed to be related to him, and correspondingly mortal; in just as far as it is mysterious is it considered removed from him, further advanced, powerful, and immortal."

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part of man within the natural realm; it excuses crimes on that account, and denies retribution beyond the grave. It teaches no fatalism, because for every evil there is a remedy within nature itself, which has a supernatural effect as soon as properly employed. There is something like a poetic hue cast over some elements of their religion, but this poesy is not derived from the creed, it is rather a last echo from a time when man knew better, and felt differently, -a complaint that such times are gone! There is no greater slave than the Indian. Every motion of his is guided by superstition, every action of his neighbor suspiciously scrutinized. We wonder at many strange actions of the Indian, at what seems to us a lack of consistency, of truthfulness, an absence of moral consciousness. We punish him for crimes which he commits without any regret whatever about the consequences of his misdeed. In this we fail to understand the motives of the Indian. He is not his own master. Nature, deified by him to the extent of innumerable personalities and principles, exacts from him the conduct that we blame. His religion, notwithstanding the promise of coarse felicity which it holds out beyond the grave, reduces him to utter helplessness so long as he has not crossed the threshold of death, makes of him a timid, fettered being, anxiously listening to the voices of nature for advice. These voices stifle the silent throbs of conscience; they are no guide to the heart, no support for the mind.

This is not the place to enter into details concerning the creeds of the Indian of the Southwest. What little I shall have to say about them will find its place farther on. Neither can I attempt here a discussion of the great importance that nature has had in shaping his household arts and architecture. Having described the nature of the country in general, and its relation to man before the coming of European colonists,

43

I proceed to consider that man as he presents himself now, as well as he presented himself when first encountered; to explain the changes in his condition; and, lastly, to examine his vestiges from a time of which we have few if any positive records.

II.

ETHNOGRAPHIC CONDITION OF THE SOUTH-WEST IN THE SIXTEENTH CENTURY.

IT may be asserted, and without danger of exaggeration, that before the year 1600 the Spaniards had visited all the principal regions of the Southwest comprised between the Indian Territory on the east and the western Rio Colorado, and had gone as far north as the southern limits of the State of Colorado. They had even penetrated farther, for the tribe of Quivira, which Coronado visited in 1541, were living at that time in eastern Kansas.¹ But his adventurous expedition was a mere reconnoissance, and while it has left us excellent descriptions of the great plains, of their fauna, and of the general features of the existence of man in the American steppes, little that was definite was ascertained concerning the tribes which the Spaniards met, and with which they had a short period of peaceable intercourse.² In order to present a picture of primitive southwestern ethnography it is necessary

¹ I cannot give here all the proofs on hand of this fact. A careful examination of the various documents of Coronado's time, as well as of those which, while having been written by companions of Coronado, were composed from memory years afterwards, proves the location to be as I have stated it. One of the most important witnesses on that point is the Captain Juan Jaramillo, *Relacion hecha* . . . *de la Jornada que habia hecha en la Tierra Nueva en Nueva España y al Descubrimiento de Cibola ; yendo por General Francisco Vazquez de Coronado (Documentos de Indias*, vol. xiv. p. 312). I also refer to the MS. *Relacion Postrera de Stuola y de mas de Quatro-Cientas Leguas adelante*, in Fray Motolinia's *Libro de Oro ó Thesoro Índico*.

² That Coronado never experienced any difficulty in his intercourse with the Indians of the plains is a fact well ascertained.

to extend the scope of study to sources more recent than the sixteenth century, and to embrace in it so far as possible everything on record concerning the earliest meetings between the white and the so-called "red" man. It is not likely that a century could have wrought important changes in the condition of tribes which were not in contact with Europeans, and, of such changes as there were, some even are traceable through Spanish sources themselves. The peremptory orders of the Crown to all explorers about preserving accurate records of what they experienced, saw, and heard,¹

¹ Compare Codice de Leyes y Ordenanzas nueuamente hechas por su Magestad para la Gouernacion de las Yndias y buen Tratamiento y Conseruacion de los Yndios, etc. (Docum. de Indias, vol. xvi. p. 458, art. 119), A. D. 1571. Also, and in the same volume, Ordenanzas de su Magestad hechas para los nuevos Descubrimientos, Conquistas y Pacificaciones (p. 149): "Los descobridores por mar ó por tierra hagan comentario é memoria por dias, de todo lo que vieren y hallaren y les aconteciere en las tierras que descobrieren; é todo lo vayan asentando en un libro, y despues de asentado se lea en publico cada dia, delante de los que fueren al dicho descobrimiento, porque se averigue mas lo que pasare y pueda constar de la verdad de todo ello, firmándolo de algunos de los principales, el cual libro se guardará á mucho recabdo para que cuando vuelvan le traigan y presenten ante la Audiencia con cuya licencia hobieren ido." Still more definite is one of the preceding paragraphs (p. 107): "... é por medio de las dichas lenguas 6 como mejor podieren, hablen con los de la tierra y tengan platicas y conversacion con ellos, procurando entender las costumbres calidades y manera de vivir de la gente de la tierra y comarcanos, informándose de la religion que tienen, ýdolos que adoran, con que sacrificios y manera de culto, si hay entre ellos alguna dotrina ó genero de letras, como se rigen y gobiernan, si tienen reyes y si estos son por eleccion ó derecho de sangre, ó si se gobiernan como república ó por linages; que rentas y tributos dan y pagan, y de que manera y á que personas, y que cosas son los que ellos mas precian que son las que hay en la tierra, y cuales traen de otras partes quellos tengan en estimacion ; si en la tierra hay metales y de que calidad; si hay especería, alguna manera de drogas y cosas aromáticas, para lo qual lleven algunos géneros de especias así como pimienta, clavos, gengibre, nuez moscada y otras cosas por muestras para amostrárselo y preguntárles por ello; y así mismo sepan si hay algun género de piedras, cosas preciosas de las que en Nuestros Reynos se estan; y se informen de la calidad de los animales domésticos y salvajes, de la calidad de las plantas y árboles cultivados é incultos que hobiere en la tierra, y de los aprovechamientos que dellas se tiene," etc. Although this royal decree is dated 1573, similar instructions were imparted to discoverers by the viceroys at a much earlier

had to be obeyed. Out of this resulted an accumulation of ethnographic, historic, and geographic material, the critical sifting of which - in the spirit and from the standpoint of the times in which it was collected — gives a tolerably accurate idea of how man was in the Southwest when he first saw man coming from a world which, in nature as well as in ideas, was as new to him as America seemed to the European.

The Indian tribes of Sonora and of Chihuahua were known, and were to a limited extent described, by the Spaniards, in the first half of the sixteenth century. But an accurate description of them was secured only one hundred years later, when Jesuit missionaries established themselves among them. It is therefore essential to blend the reports of Fray Marcos of Nizza¹ with those of P. Andres Perez de Ribas,² of Castañeda³ with those of anonymous writers of the "Company of Jesus." The same is the case in regard to the inhabitants of Chihuahua: Juan de Miranda⁴ must be consulted, as well as Fray Francisco de Arlegui,⁵ and Espejo⁶ placed

date. Witness the Instruccion de Don Antonio de Mendoza, Visorey de Nueva España, to Fray Marcos de Nizza, from 1538 (Documentos de Indias, vol. iii. pp. 325-328). When Coronado went to New Mexico he took along a special chronicler, Pedro de Sotomayor. Castañeda, Relation du Voyage de Cibola (p. 65): "Garci-lopez avait emmené avec lui un certain Pedro de Sotomayor, qui était chroniqueur de l'expédition."

¹ Descubrimiento de las Siete Ciudades. (Doc. de Indias, vol. iii.)

² Historia de los Trivmphos de nvestra Santa Fee entre Gentes las mas Barbaras y Fieras del Nueuo Orbe: conseguidos por los Soldados de la Milicia de la Compañía de Iesus en las Misiones de la Prouincia de Nueua España. Madrid, 1645.

⁸ Relation du Voyage de Cibola.

⁴ Relacion hecha por Joan de Miranda, Clérigo, al Doctor Orozco, Presidente de la Audiencia de Guaaalajara; sobre la Tierra y Poblacion que hay desde las Minas de San Martin á las de Santa Bárbara, que esto último entonces estaba poblado. 1575. (Doc. de Indias, vol. xvi. p. 563.)

⁵ Chrónica de la Provincia de N. S. P. S. Francisco de Zacatécas. 1737.

⁶ Relacion del Viaje. 1583. (Doc. de Indias, xv.) The same volume contains two copies of this report. There are important discrepancies between Espejo's original report and the corrupted and distorted version given by Hakluyt. The latter is completely unreliable, and does not deserve to be consulted at all.

alongside of the *Litteri Annui*. It is impossible, and were it possible it would scarcely be judicious, to go here into great details concerning any of these tribes. Much of what is recorded in early writers is still exposed to misinterpretation on our part, for none of the Sonora Indians have been subjected to systematic ethnologic investigation according to the methods initiated by Mr. Cushing, and so long as this is not done we are quite as liable to reject truths as to accept errors.

A powerful group, divided into two dialects, of almost sedentary Indians, barred access, so to say, to Sonora from the south. These were the natives who spoke, and speak to-day, the Cahita language,¹—the Mayos, and their northern relatives, the Yaquis. In the first half of the seventeenth century these two tribes together represented a population of not exceeding sixty thousand souls.² I would here remark, that the average proportion of adult males to the total number of people, among village Indians, does not exceed I to 3³/₄. Among roving tribes it is still lower. As most of the estimates of population in former times are derived from those of the "men at arms," this basis of calculation should be stated beforehand.³

¹ So it is called by modern linguists, and I follow their lead, not having been among the Yaquis myself.

² Ribas, *Historia de los Trivmphos*, etc. (lib. iv. cap. i. pp. 236, 237): "La palabra, Mayo, en su lēgua significa, Término: por vētura, por estar este rio entre otros dos de gentes encontradas, y \bar{q} traian guerras cotinuas con los Mayos, y no les dauan lugar á salir de sus terminos. . . . Pero aū \bar{q} el Rio no es caudaloso, era de lo mas poblado de gēte de todos los de Cinaloa: de suerte, que se podrian jūtar en sus poblaciones ocho, ó diez mil Indios de pelea, y eran como treinta mil personas las \bar{q} lo poblauan." In regard to the Yaquis he states (p. 284): "Quando los Hiaquis en su Gentilidad poblauā este rio, era en forma de rancherías tendidas por sus riberas, y junto á sus sementeras, y el número destas rancherías seria de ochenta, en que auja treinta mil almas."

 8 A close examination of a great many old and modern estimates, lists, and censuses has satisfied me that the average ratios are as stated. It would be tedious to furnish the proof in detail.

The Mayos were independent of the Yaquis, and the relations between the two groups were far from being always friendly. There even existed on the part of the latter a tendency to crowd and overwhelm the former, in that gradual but persistent manner which is characteristic of Indian warfare.¹ Still, there was no difference in degree of culture. Settled each along the banks of a considerable river, which bore the name of its respective tribe, they planted Indian corn, cotton, calabashes, beans, and tobacco, improved the Mezcal varieties of the American agave, hunted, fished, and fought their neighbors, as well as among themselves.² Owing

¹ Ribas, Historia, etc., lib. iv. p. 236.

² Ribas, (Historia, p. 237,) speaking of the Mayos: "Su legua es la misma que corre en los rios de Cuaque, y Hiaqui: el natural de la gēte no tā feroz como el de las otras Naciones; ántes mas tratable, y blado: son todos labradores, excepto los de qual, ó qual, rāchería, q eran motarazes. En lo demas de sus costūbres, sustēto, casas, viuiēda, armas, vsos de borracheras, y bailes, multiplicidad de mugeres, ó cocubinas, era los Mayos semejates á las demas Naciones de q auemos escrito. Á la pesca se dauan muchos, particularmête los q tenia habitacio mas cercana á la mar, el qual, y su rio, es muy abudate de pescado : sus poblaciones estauã en forma de rācherías á las riberas del rio." In a general way, this author, who saw the Indians of Sonora when they were yet untouched by the influence of European culture, says of them (lib. i. cap. ii. pp. 5, 6): "Las poblaciones destas naciones son ordinariamente á las orillas y riberas de los rios ; porque si se apartaran dellos, ni tuuieran agua que beuer, ni aun tierras en que sembrar. Las habitaciones, en su Gentilidad, erā de áldeas, ó rancherías no muy distantes vnas de otras aunque en partes á dos y tres leguas, conforme hallauan la comodidad de puestos y tierras para sementeras, que ordinariamente las procurauan tener cerca de sus casas. Estas hazian, vnas de varas de monte hincadas en tierra, entretexidas, y atadas con vejucos, que son vnas ramas, como de carcaparrilla, muy fuertes, y que duran mucho tiempo. Las paredes que hazian con essa barazon las aforrauan con vna torta de barro, para que no las penetrasse el sol, ni los vientos, cubriendo la casa con madera, y encima tierra, ó barro, con que hazian açotea, y con esso se contentauan. Otros hazian sus casas de petatos, qē es un género de esteras texidas de caña raxada, y estas cosidas vnas con otras, siruen de pared y cubierta, que es tumbada sobre arcos de varas hincadas en tierra, y sobre ella corre el agua sin peligro de gotear, y quedan al modo de los carros cubiertos de España. Delante de sus casas levantan vnas ramadas que les siruen de portal, sobre que guardan los frutos de sus sementeras, y debaxo del es su viuienda entre dia, y les sirue de sombra. Allí duermen de noche en tiempo de calores, teniendo por colchon

49

to the almost tropical climate, their dwellings appeared frail, canes and boughs forming the framework, palm-leaves the

y cama vna estera de caña de las dichas. Cerradura, ni llaue, no la vsauan, ni la conocian, y lo que mas es, sin temor de hurtos; contentándose quando algunas vezes hazian ausencia de su casa, con poner á la puerta algunos ramos de árbol sin otro guarda. Y esta tenian tambien para los frutos de la sementera, quando los dexauan en el campo. . . . Las semillas que estas gentes sembrauan, y frutos de la tierra que benefician y cogen, y de que se sustentan, son en primer lugar el maiz que en España llaman, trigo de las Indias, que se da con tanta multitud, g suele rendir vna fanega sembrada ciento y mas de fruto. Demas de esse siembran entre el maiz varios géneros de calabaças, sabrosas y dulces, y de algunas dellas hazen tassajos que secos al sol les duran mucho tiempo del año. El frixol, que es semilla semejante a la haba de Castilla, y aun mas suaue, vsan todos sembrarlo, con otros géneros de semillas," etc. Among the nutritive plants he mentions also Mezquite beans, Mezcal, Tunas, and others. Cotton is mentioned by him on page 12 : "Y para sembrar essas semillas, y limpiar la tierra, no tenian otros instrumentos que los de vnas cuchillas anchas, y largas, de palo, con que mullian la tierra; en que tambien ayudaban á los varones las mugeres. Estas vsauan el arte de hilar, y texer algodon, ó otras yeruas siluestres, como el cañamo de Castilla, o pita; y desta hazian algunas mantas, no en telares, que aun esse arte no alcançaron ; sino con traça trabajosa, hincando vnas estacas en el suelo, de donde tirauan la tela." Of tobacco he says (p. 9) : "Y en estas tales fiestas eran tambien muy celebres los brindis del Tabaco, muy vsado de todas estas gentes barbaras." He places considerable stress on the fact, that all these Indians of Sonora and of Sinaloa were addicted to intemperance (p. 8): "El vicio que mas generalmente cundia en estas gētes, y de tal suerte g apenas se hallaua vna en la qual no predominasse, era el de la embriaguez, en q gastaua noches y dias; porq no la vsauan cada vno solos, y en sus casas, sino en célebres, y continuos cobites que hazian para ellos : y qualquiera del pueblo q hazia vino, era llenando grandes ollas, y combidando á la boda á los de su ranchería, ó pueblo, y á vezes tambien á los comarcanos, y vezinos: y como era tanto la gente, no faltaua combite para cada dia y noche de la semana; y assí siempre se andaua en esta embriaguez. El vino hazia de varias plantas, y frutos de la tierra, como de Tunas, que en Castilla llaman higos de las Indias, o de Pitahayas; otras vezes de las algarrouillas de Mezquite, q atras dixe, ó de la p'āta Mescal, y sus pencas, coforme á los tiempos en que se dan estos frutos, y de otras plantas; q molidas, ó quebratadas, y echadas en agua, en dos ó tres dias se acedan, y toman el gusto que tanto arrebataua el juizio que de almas racionales les auia quedado á estas gentes. Entre todos los vinos que hazian, el mas estimado y gustoso, era de panales de miel, q cogen á sus tiempos. Y es de aduertir, que en este vicio de embriaguez auia vna cosa que lo templaua, porq en el no entrauan mugeres, ni los que eran moços, y gente nueua." Segunda Relacion Anónima de la Jornada de Nuño de Guzman (Colleccion de Documentos para la Historia de México, Garcia Ycazbalceta, vol. ii. p. 304) : "El

outer protective shell.¹ Split up into a number of autonomous villages, each one governed after the well known tribal system, the entire dialectic cluster only coalesced temporarily and at rare intervals, for self-protection, in case insult offered by one of their villages to outsiders led to threatened revenge on a larger scale.² No central head existed, either for war or

brebaje que tienen es de unos árboles que tienen que se dice mezquites, que dan unas algarrobillas delgados, y majanlas en unos almireses de palo que tienen grandes, y aquello mezclan con agua, y otras cosas de que hacen su brebaje para beber."

¹ See above. Also Proceso del Marques del Valle y Nuño de Guzman y los Adelantados Soto y Alvarado, sobre el Descubrimiento de la Tierra Nueva, 1541 (Doc. de Indias, vol. xv. p. 332) : "En sábado, dia de Sant Francisco, pasé el rio, y de la otra parte hallé una estancía de treinta ranchos de petates con unas ramadas pequeñas; no habia gente." Castañeda, Cibola, p. 157: "On nomme cette province Petatlan, parceque les maisons sont faites en Petates (nattes de jonc). Cette manière est la même pendant deux cent quarante lieues, jusqu'à l'entrée du désert de Cibola." Relacion del Suceso de la Jornada que Francisco Vazquez hizó en el Descubrimiento de Cibola, 1541 (Doc. de Indías, vol. xiv. p. 318): "Todo este camino hasta cinquenta leguas ántes de Cibola es doblado, aunque en algunas partes está apartado del camino; la poblacion es toda una suerte de gente, porque las casas son todas de petates, e alguna entre ellas de azoteas baxas. Tienen maiz todos, aunque no mucho, y en algunas partes muy poco; tienen melones é frisoles." Ribas, speaking of the change in customs and manners of the Yaquis, after their reduction to obedience to the Church, says (Historia de los Trivmphos, lib. v. cap. xxi. p. 339): "Los pueblos estan dispuestos en muy buena forma, sin quedar ya vno solo, que de assienta viua en sus sementeras, ni rancherías antiguas. Las casas hazen ya muchas de paredes de adobes, y terrados, y las de los Gouernadores mas amplas."

 2 Ribas, lib. i. cap. ii. p. 5: "Qvādo llamo naciones las que pueblan esta Prouincia, no es mi intento dar á entender, que son tan populosas como las de Europa; . . . porque no tienen comparacion con ellas. Pero llamolas naciones diferētes, porque aunque no son tan populosas, pero estan diuididas en trato de vnas con otras: vnas vezes en lenguas totalmente diferentes, aunque tambien sucede ser vna la lengua, y con todo estar desvnidas, y encontradas: y en lo que todas ellas estan diuididas y opuestas, es en continuas guerras \bar{q} entre ellos traian, matandose los vnos á los ótros; y tambien en guardar los términos, tierras, y puestos que cada vna destas naciones poblauan, y tenia por propios; de suerte, \bar{q} el \bar{q} se atreuia á entrar en los agenos, era con peligro de dexar la cabeça en manos del enemigo que encõtrasse." Ibid., p. 11: "Leyes, ni Reyes que castigassen tales vicios y pecados, no los tuuieron, ni se hallaua entre ellos género de autoridad y gouierno político que los castigasse. Es verdad que reconocian

in peace.¹ Still, it is not improbable that each group may have constituted a sort of barbaric confederacy, although it is certain that it did not possess the consistency which we admire in the "League of the Iroquois." Gentilism certainly prevailed,² and there are traces of similar esoteric clusters to those discovered by Mr. Cushing among the Zuñis, and which, guided by his observations, I have since found in existence among the Queres, Tehuas, and the Tiguas, in New Mexico.³ Fetichism characterized their religious beliefs, as well as those of all other southwestern Indians, and the absence of the conception of one supreme being is as plain among them as elsewhere.⁴

algunos Caciques principales, que erã como cabeças y Capitanes de familias, o rancherías, cuya autoridad solo consistia en determinar alguna guerra o cometimiento contra enemigos, o en asentar pazes con otra Nacion : y por ningun caso se determinauan semejantes facciones sin la voluntad de los dichos Caciques, que para tales efectos no dexauan de tener muy grande autoridad. En casa destos se celebrauan las borracheras célebres de guerra, y tambien á estos ayudauan sus subditos á hazer sus sementeras, que erā lo ordinario mayores que de los demas. Esta tal autoridad alcançauā dichos Caciques, no tanto por herencia, quanto por valētia en la guerra, ó amplitud de familia de hijos, nietos, y otros parientes, y tal vez por ser muy habladores y predicadores suyos."

¹ Compare the description of the hostilities between the Yaquis and the Spaniards in Ribas, lib. v. cap. ii. to vi. Also in Francisco Xavier Alegre, *Historia de la Compañía de Jesus en Nueva España*, 1842, vol. ii. pp. 31-38. Alegre gathered most of his information from Ribas.

² Ribas, *Historia*, p. 295. The disconnected state of affairs among the Vaquis is very well pictured in their attempts to treat with the Spaniards after they had repelled three attacks from the latter. Alegre, *Historia de la Compañía*, vol. ii. p. 32 : "Los yaquimis tuvieron su asemblea y se dividieron en varios pareceres. Los mas juiciosos, á cuya frente estaba el cacique Anabaylutei fueron de sentir que se ofreciese al capitan la paz y se le concediese lo que tan justamente pedia."

⁸ The sorcerers or magicians were so numerous, that Ribas affirms (p. 332): "En cierto pueblo, por medio de su Governador, quisó otro Padre corregir a vnos quantos hechiceros, para escarniento de los demas; y ellos mismos dixeron: Padre, no te canses en juntarnos, porque qual mas, qual menos, la mitad de los del pueblo (que era grande) son como nosotros."

⁴ Ribas, p. 332: "Estaua tan sepultada esta Nacion en estas tinieblas, que vna India, ya desengañada despues que se introduxó la doctrina del Euangelio, declaró, y dixó á vno de los Padres que se lo predicaua: Padre, mira de la otra These two clusters dwelt, for the most part, about the mouths of the two rivers bearing their names: they held but a portion of the course of each stream, and it cannot

parte del rio; ves quantos cerros, mōtes, picachos, y cimas ay en todo este contorno? pues en todos ellos teniamos nuestras supersticiones ; y á todos los reuerenciamos, y las celebrauamos en ellos. Las viejas certificauan, que el demonio se les aparecia en figura de perros, sapos, coyotes, y culebras." This belief is eminently Indian. To-day the sedentary aborigines of New Mexico, Sonora, etc., believe in the possibility, not only of such apparitions, but also of the transformation, through witchcraft, of men and women into animals of some kind. Ribas, p. 332 : "Indios principales, y Fiscales, afirmaron, como cosa sabida y recibida entre ellos, que las hechizeras ivan de noche á ciertos bailes y combites co los demonios, y que boluian por los aires." Page 16: "Viniendo aora á las gentes barbaras de que trata esta historia, y auiendo estado muy atēto los años que entre ellas auduue para aueriguar lo que passaua en esta materia de idolatría: y lo que con puntualidad se puede dezir es, que auque en algunas destas tales gentes no se puede negar que auia rastro de idolatría formal, pero otras no tenian conocimiento alguno de Dios, ni de alguna Deidad aunque falsa, ni adoracion explicíta de señor que tuuiesse dominio en el mundo. ni entendian auia providencia de Criador y Gouernador de quiē esperassen premios de buenas obras en la otra vida, ó castigo de las malas, ni vsaron de comunidad culto diuino. El que en ellos se hallaua, se venia á reduzir á supersticiones barbaras, ó hechizos enseñados por los demonios á particulares personas, con quienes en su Gētilidad teniā familiares tratos ; y este vnos implicíto, y heredado de sus mayores, q se lo enseñaua á la hora de su muerte, encargándoles vsassen algunas ceremonias de hechizos, y supersticiones q serian para curar, ó matar, ó engañar." The same author describes the Fetiches very clearly (p. 17): "El pacto q co estos hechizeros tiene assentado el demonio ordinariamente está aligado, y lo tienen muy guardado en vnos cuerecillos de animales parecidos al Hurō, de que hazen vnas bolsillas, y detro dellas vnas pedreçuelas de color, ó chinas medio trāsparentes, y esta bolsilla guardā como si fuera de reliquias; y quando para bautizar se entregã estas prēdas, es buena seña, de q recibe de veras la Fe de Christo, y dexan y se apartan de la familiaridad del demonio." It is indeed very difficult to induce any Indian to part with the Fetich, which many of them carry in the little satchels of buckskin, or hide of some kind, that F. Ribas describes. He continues: "Este muchas vezes se les aparecia en tiepo de su Getilidad, habladoles en figura de animales, pescados, ó serpientes, q no se ha oluidado quã á su proposito le salia el auer derribado á nuestra primera Madre en esta forma. Horauale mucho, ó temialo quando se les aparecio; y por titulo de honra le llamauan Abuelo, sin hazer discurso si era criatura, ó Criador : y aunque la figura de animal, ó serpiente en que se les aparecia el demonio, la obserbauan y pintauan á su modo, y tal vez leuantauan alguna piedra, ó palo á manera de ídolo; pero claramente no parece reconocian deidad, ni suprema potestad del vniuerso."

be said that their sway extended any distance into the Sierra Madre. East of them, Indians speaking what may be dialects of the Tarahumar and Tepehuan idioms occupied the valleys and fastnesses. These tribes are little known, some of them have disappeared by name, and what we know of their condition recalls that of the Yaquis and Mayos, locally varied through environment.¹

North of the Yaquis, and in what might be called the southern heart of Sonora, we meet with an interesting tribe, about which little has been said lately, and in regard to which the positive information of older authors has been in a measure overlooked. These are the southern Pimas, also called

¹ Orozco y Berra (Geografía de las Lenguas y Carta Etnográfica de México, 1864, p. 356) mentions among the "lost languages" the Tepahues, Tecayaguis, Cues or Macoyahuis, Vayema, Putima, Baturoque, and Teparantana. At the same time he says that the Tepahue was spoken at San Andres Conicari and at La Asuncion Tepahue. The Relacion de las Misiones que la Copañía de Jesus tiene en el Reino y Provincia de la Nueva Vizcaya en la Nueva España, 1678, (Documentos para la Historia de México, IVa Série, vol. iii. p. 384,) says about the Partido of San Andres Conicari: "La lengua es particular si bien una parcialidad de este pueblo es de Mayo en la nacion y en la lengua." In regard to "la Asuncion de Tepahue" (p. 385) : "La lengua es particular : distinta de la de los demas pueblos si bien todos los demas de ellos entienden la lengua tepave y aun la caita aunque no la hablaban." This leads to the inference, that the Tepahues and those of Conicari spoke not the same idiom. Ribas (Historia de los Trivmphos, p. 254, etc.) says of the Tepahues, that they were settled in the mountains higher up than the Mayos, with whom they were generally at war, and that after the reduction of the latter they established themselves "a vn puesto llano, cinco leguas arriba del rio de Mayo, en vn arroyo, q entra en el donde formarō vn pueblo de hasta seiscientas familias, y como dos mil personas de todas edades." Of the Conicaris he tells us (p. 254), "tenia como de dozientas familias." It is difficult to determine whether or not the Guazapares and the Tubares belonged to Sonora. Orozco (Geografía de las Lenguas, pp. 323, 324, 326) locates both tribes in southwestern Chihuahua. There is no doubt that they lived there in part. Alegre however (Historia, vol. iii. p. 12) locates the Guazapares in Sinaloa, that is, either in the Northern part of that State or in southeastern Sonora. The same with the Tubares. (Ibid., p. 52.) Pedro de Rivera, in his Diario y Derrotero de lo Caminado visto y observado en el Discurso de la Visita General de Presidios situados en las Provincias Ynternas de Nueva España, 1736, p. 47, includes the Tubares among the tribes of Sonora. Orozco y Berra classifies both languages as dialects of the Tarahumar.

ARCHÆOLOGICAL INSTITUTE.

Nebomes or Coras. I shall call them Nebomes hereafter, in order to distinguish them from the Arizonian Pimas, which are more generally known under that name. Their social organization, their religious system of beliefs and practices, were analogous to those of the Yaquis, their language so differentiated that it made intercourse impossible except by signs, and the Nebomes were higher advanced than their southern neighbors, inasmuch as they were more substantially dressed.¹ Their mode of agriculture and also their

¹ Ribas, who visited the southern Pimas at the time of their first contact with Europeans, speaks of the tribe as follows (Historia, p. 360): "En el vestido era esta Nacion la mas compuesta de todas las demas de Cinaloa, á que les ayudaua la mucha cātidad de los cueros de venado, que sabian beneficiar, y hazen muy buenas gamuzas, muy durable, y que les siruen en particular de cubierta, al modo de faldellines á las mugeres, tan largos q arrastra por el suelo : y era gala entre ellas, q los estremos de las gamuzas arrastrasson por tierra. Á que la gente moca tambien añadia otra gala de labores de almagre. En medio cuerpo arriba, tambien era ordinario traerlo cubierto con mantas, que texiã, ó de algodon, ó de otra planta como la pita. Y aunque en los varones no era tã ordinario el andar vestidos, todavia muchos se cubrian con dichas mātas." On page 380 he describes the costume of a chief of the "Sisibotaris," a branch of the Pimas or Nebomes : "Vestido y cubierto con vna large manta, enlaçada al onbro al modo de manto, y demas desta traia otro ceñida á la cintura, como lo vsan otros desta Nacion." Father Alegre gathered his information concerning the Nebomes from the writings of Father Diego Guzman, S.J., who began his mission work among them in 1619, and he quotes his statements in Historia de la Compañía, vol. ii. p. 117, "y las mugeres desde muy niños andan cubiertas hasta los pies con pieles de venado muy bien curtidas y pintadas." His information in regard to the Sisibotaris is derived from a letter written by Father Nicolas de Arnaya in 1621 (Ibid., p. 124): "Los hombres se cubren con una pequeña manta pintada de la cintura á la rodilla y cuando hace frio usan unas mantas grandes de algodon y pita. Las mugeres van cargadas de vestidos, y al entrar en la iglesia hacen tanto ruido como si fueran españolas. Las faldellines que usan llegan hasta el suelo, de pieles bruñidas y blandas como una seda, con pinturas de colores ó de algodon y pita, que tienen en abundancia. Se ponen á mas de eso un delantar de la cintura abajo, que en muchas suele ser negro, y parece escapulario de monjas. Las doncellas especialmente usan una especie de jubones ó corpiños muy bien labrados; á todo esto añaden en el invierno unos como roquetes, y así todas son honestísimas." Ribas (Historia, p. 385) uses almost the identical words, but he attributes the letter to Father Pedro Mendez.

54

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houses are described as follows by an author of the seventeenth century, a missionary, who witnessed the first efforts made at their Christianization : "The Nebomes were settled on the banks of creeks with good running water. Their houses were better and more durable than those of other nations, for the walls were made of large adobes, which they manufactured out of clay and covered with flat roofs of earth. Some of these houses they built even much larger, and with loopholes like forts, in order that, if they should be attacked by enemies, the people of the village might retire into them and make use of their arrows."¹

It is not devoid of significance that the southern Pimas dwelt in such buildings, which so closely recall the architecture of the Casa Grande on the Gila, as well as of the Casas Grandes in Chihuahua.

As to the numbers of the Nebomes, it is difficult to form any close estimate. The tribe was divided into two groups, geographically, — the Lower and Upper Nebomes, — both of which were autonomous, often at loggerheads with each other, and respectively inhabiting a number of equally autonomous villages. If the Nebomes counted, all told, eight thousand souls, it is as much as may be safely attributed to them.² They were consequently at a disadvantage, so far as numbers were concerned, as compared with the Yaquis, and only natural advantages and superior architectural skill in works for defensive purposes enabled them to maintain their existence.

Without mentioning here several smaller tribes wedged in, as it were, between the more conspicuous groups,³ and with-

¹ Ribas, p. 360. Already quoted in the Geographical Introduction. Alegre copies the passage almost textually.

² Ribas, Historia, p. 370. Alegre, Historia, vol. ii. p. 122.

⁸ These tribes were branches of the Nebomes; for instance, the Sisibotaris, Nures, and the Aivinos. They spoke the same language, but their settlements lay apart from the clusters formed by the Nebome villages.

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out more than alluding to the Eudeves and Jovas, — two clusters using dialects of the Opata, and occupying a number of villages nearly in a half-circle around the Opatas and dividing them from the Nebomes,¹— I pass on to the Opata Indians, a formerly important group, now so completely "Hispanicised" as to have almost forgotten their native tongue. The

¹ That the Eudeve and the Jova idioms are dialects of the Opata is generally accepted. The Eudeves began on the west of the Sonora River, at Opodepe, Cucurpe, and Toape, and extended as far southeast as Matape and Los Alamos. The Jovas were along the Upper Vaqui south of Huassavas, Sahuaripa and Aribechi belonging to their range. Thence they penetrated into the very heart of the Sierra Madre as far as western Chihuahua. All their villages within the great chain are now in ruins, owing to the hostilities of the Apaches. Thus Tyopari, Mochopa, Servas, and other villages, part of which were Jova, part Opata, had to be abandoned in the second half of the past century. Of the Jovas, says the Descripcion Geográfica Natural y Curiosa de la Provincia de Sonora, 1764 (cap. vi. art. i., MSS. of the National Archives at Mexico): "Mas zafios y agrestes son los Jovas, especialmente casi la mayor porcion de su casta que no quiere reducirse á vivir en pueblos, fuera de los que estan en Ponida, Teopari y Mochopa; sino tiran á vivir en las barrancas de la sierra donde nacieron; ni cede su terquedad á diligencias que se hagan con ellos; ni se enamoran con el buen trato, comodidades y conveniencias que se les procuren para conservarles, aun despues de traidos y congregados en pueblos, como le ha sucedido al padre Manuel Aguirre, misionero en mision de San Luis Gonzaga de Bacadeguatzi con los de la ranchería de Satechi, y los de las margenes del rio de los Mulatos y del de Aros que moran entre breñas y malezas manteniéndose con raices, yerbas y frutas silvestres, consistiendo sus siembras solo en tal cual mata de maiz y algunas calabazas y sandias donde lo consienten las angosturas, en que dichos rios rompen por aquella Sierra. . . . Su tal cual ejercicio es hacer esteras, Hifet en opata de las muchas y buenas palmas de que abunda su terreno, y llevarlas á vender á los pueblos circunvecinos por semillas y alguna ropa que con poco se contentan, pues por comun la frazada que las mujeres mismas se ingenian á tejer á su modo de la lana de unas pocas ovejas que crian, al höbre sirve de capa, jubon y calzones; y á la mujer de manto, tapapies, camisa y corpiños. Lo bueno que tienen, es no ser perjudicales, ni hazer daño en las vidas y haciendas de los reducidos. Solo con los apaches son bravos," etc. Of the Eudeves the same source speaks more favorably; they were more docile, and more inclined to learn civilized arts and usages. A number of the Jovas lived in Chihuahua. Relacion de las Misiones, p. 341: "Esta nacion está poblada á orillas del rio Papigochic, variedad de algunos pueblos y corre hasta cerca del partido de Sauaripa y uno de sus pueblos llamado Teopari." These Jovas were still independent in 1678.

Opatas, to whom also the names of Sonora, Teguima, and Ure are given,¹ held the northwestern quarter of the present State of Sonora. They held sway over fully one fourth of the State. While in Sonora, the few Opatas who still spoke their aboriginal idiom told me that their proper name was "Joylra-ua!" *Op-a-ta* seems indeed to be a Pima word, a corruption of *Oop*, enemy, and *Ootam*, people, that is, people of our own stock with whom we are at war. The Opata language, as well known, is closely allied to the Pima; both are but members of one family.

The bulk of the Opatas were settled in the valley of the Sonora River, from north of Bacuachi as far south as Ures.² West of this channel, the water supply grows scant and scantier, towards the arid coast of the Gulf of California. Indian settlements therefore became less numerous, and they were no longer of pure Opata stock. East of the Sonora valley, forbidding mountains separate it from the upper course of the Rio Yaqui, there called locally Rio de Babispe, Rio de Huassavas, even Rio de Sahuaripa. Only the narrow valleys of this stream were inhabitable for agricultural Indians, and these vales themselves are few and far between. Thus the Opatas became geographically and politically divided into a number of small tribes, or rather village communities, au-

² This appears at a very early date, in 1539, when Fray Marcos of Nizza made his bold journey to Cibola. As I believe to have established in two publications on the subject, the villages of the Opatas reached as far north as above the mouth of the Arroyo de las Higueritas, and perhaps to Mututicachi. Compare La Découverte du Nouveau Mexique par le Moine Franciscain Frère Marcos de Nice, in Revue d'Ethnographie, 1886, vol. v. p. 131. Also, The Discovery of New Mexico by Fray Marcos of Nizza, in the Magazine of Western History. That the Opatas ranged as far south as Ures is well known. We have fair descriptions of the Sonora valley from Castañeda, Cibola, p. 157.

¹ The terms Teguima and Ure, as applied to the language, I never heard in Sonora. Still Orozco y Berra, *Geografía*, etc., and Pimentel, *Cuadro descriptivo y comparativo de las Lenguas indígenas de México*, adopt the words.

tonomous and often hostile towards one another.¹ On the Rio Sonora alone, confederacies appear to have been formed, if the evidence of Indian tradition, as collected by me while there, is reliable.² The Opatas of Oposura made war upon those of Banamichi and of Babiacora on the Sonora River ; ³ there was no connection between the people of Babispe and those of Tamichopa, although both dwelt on the Upper Yaqui, and only twenty miles apart. The villages of the Opatas were small, their houses detached, and only for one family. A slight foundation of cobble-stone supported a framework of posts standing in a thin wall of rough stones and mud and a slanting roof of yucca or palm leaves covered the whole. Such was the Opata house in the vicinity of Cumpas.⁴ At Joytudachi in the Sierra de Baserac, one of the northwestern spurs of the Sierra Madre, I found a house still partly standing. It had the usual limited size, and was made of thin plates of stone laid in mud. On the Sonora River, where the climate is warmer and where it seldom snows, the walls even seem to have been of yucca and canes;⁵ but in

¹ This is already stated by Castañeda, *Cibola*, p. 157: "Derrière cette province jusq'aux montagnes sont bâtis un grand nombre de villages habités par des Indiens, qui forment une multitude de tribus à part, réunis en petites nations de sept ou huit, dix ou douze villages." He gives several names, which I omit here, as they are evidently misspelt. Ribas is also quite explicit, *Historia de los Triomphos*, p. 392. Here he speaks of the Opatas of the Sonora valley. The population of that valley, he leads us to infer, was about four thousand souls, perhaps five thousand. In addition to these Sonoras proper, he speaks, on pages 358 and 359, of the tribes west from the Rio Sonora, like the Nacosuras (Nacosaris), Cumupas (Cumpas), Buasdabas (Huassabas), and Bapispes (Babispes). All these were Opatas, like the Hures (Ures).

 2 I was told by the Opatas of Banamichi, that they confederated with those of Sinoquipe against their nearest neighbors of Huepaca and Aconchi.

⁸ I was assured that the fortified hill called Cerro de Batonapa, near Banamichi, was the place of refuge against incursions from Cumpas and Oposura.

⁴ I have not myself seen this building, but obtained a fair description of it through Sr. Espiridion Arvisu of Oposura.

⁵ So says Castañeda, *Cibola*, p. 156. He asserts that the dwellings were of canes, or rather of mats ("nattes de jonc"). Ribas (*Historia*, p. 392) says of

the Sierra Madre proper, where the Yaqui gushes out of the picturesque gorge descending from its source at Chu-ui-chu-pa, there are remains of Opata villages recalling, on a lesser scale, the stately architecture of Casas Grandes. The houses are connected so as to form an interior square, and appear as if raised on artificial platforms.¹ Mutual protection from enemies, which threatened the Opatas on the Chihuahua side of the great central chain, from the inhabitants of the valley of Casas Grandes, is stated as having caused this superior and defensive mode of building.²

As late as the past century, isolated hamlets of Opata Indians were scattered throughout some parts of the Sierra

the houses in the Sonora valley, "sus casas mas durables y compuestas." It may not be amiss to recall here the report of Francisco de Ibarra, Relacion de los Descubrimientos, Conquistas y Poblaciones hechas por el Gobernador Francisco de Ybarra en las Provincias de Copala, Nueva Vizcaya y Chiametla (Doc. de Indias, vol. xiv. p. 482): "Y entrando en la dicha tierra adentro, fué en cantidad de trescientas leguas desde la dicha provincia de Chiatmela en adelante, en la cual entrada halló grandes poblaciones de naturales, vestidos, y que tenian muchos bastimentos de maiz, y otras cosas, . . . y que ansimismo tenian muchas casas hechas de terrados." The report of Francisco de Ibarra is not always quite clear, and it is evident that he is careful not to diminish the importance of his own achievements; still it is not unlikely that he saw either the houses of the Pimas or those of the Opatas in the Sonora valley. Compare also Relacion de lo que descubrió Diego de Ibarra en la Provincia de Copala, llamada Topiame, etc. (vol. xiv. pp. 554, 558). The title is misleading, for it refers to a discovery made by Diego de Ibarra, whereas it is in fact another report on the explorations of Francisco de Ibarra. How far to the north the latter penetrated I am unable to determine.

¹ This is very plain in the ruins of Batesopa and Baquigopa, east of Huachinera, and on the very banks of the Upper Yaqui.

² Such is the common opinion of the Opatas of the villages from Huassabas to Baserac and Babispe. They showed me the sites of hamlets which, according to tradition, had been deserted on account of the constant danger threatening from the Chihuahua side. Whether the enemies who compelled this abandonment, were the Sumas of Casas Grandes, or some other tribe who perhaps built the villages whose ruins have given the name to the valley and settlements, I am unable to tell. One of my informants boldly asserted that the builders of Casas Grandes were Opatas. There is nothing improbable in this. Madre.¹ The movement of the tribe appears to have been a shrinkage from east to west, receding across the Cordillera into the Sonoran valleys. Still the Opatas claim to have come from the north; and this may have been the case. The average general direction of a migratory route is often changed for a while: the movements of southwestern tribes are not so much analogous to a wave, or a steady current, as to a slow filtration, where the fillets are frequently deflected from the original course.

Of the agricultural pursuits of the Nebomes we have a fair picture from the pen of Padre Ribas : "Nearly all the people were workmen; they defined their land, they planted those plants which we said were general all over the Indies, and even in some localities well adapted for it they practised irrigation, leading the water therefor out of the creeks by means of ditches. In addition to this they planted near their houses a kind of vine, of a plant which the Spaniards call *lechuguilla*, since its shape is similar to that of lettuce, only the leaves are much stronger, and it requires one or two years ere it matures. When it is ripe they cut it, and the root toasted with some of the leaves serves as an aliment. It is savory and sweet, and when ground they make of it something like a preserve."²

About the Opatas we have no such explicit statements, but vestiges of artificial tanks on barren hills,³ and innumerable dikes scattered all over the northern parts of the Sierra

¹ For instance, east of Nacori there are a number of small ruined settlements in the very heart of the Sierra Madre. The majority of these were inhabited by Jovas, still there were Opatas among them. Thus, in 1678, Servas or Sereba was an Opata village, according to F. Juan Ortiz Zapata, *Relacion de las Misiones*, p. 366.

² Ribas, *Historia*, p. 360.

³ Such tanks are found for instance near the Hacienda de las Delicias, on the hills near Vaynorpa and Badeuachi. The rim is of drift, and they are not very large. The only direct information that I have been able to obtain on the

60

Madre and its spurs, permit us to form a conception of how they improved the soil for their sustenance. These dikes, called now in the country "benches" (*banquitos*), are an interesting feature in the archæology of the region.

The slopes of the mountain ranges are steep, and exceedingly gravelly or rocky in many places. Only trees and thorny shrubs grow on them. In fact, they cannot be used for tillage of any kind, as the drainage is too violent, especially in summer, with the heavy rains of that season. Still, the Opatas, and their cognates, the Jovas, dwelt on such slopes, forming small villages, and they used the very drainage channels, the so-called "arroyos," for the artificial accumulation of soil, or for retaining in place what was already there. It may be remembered, that, in my report to the Institute dated August 11, 1883, I alluded to the rectangular spaces enclosed by upright small stones which are so numerous in Arizona.¹ I have since found them in northern New Mexico, also in proximity to and connected with ruined villages of the communal type of architecture.² In my report alluded to, I described these enclosures as court-yards. In many places, however, they are found apart from houses. Pima Indians of Sonora assert that they were garden beds, where such nutri-

mode of agriculture of the Opatas dates from 1764, that is, after they had been under control of the Jeşuit missionaries for more than a century. The *Descripcion Geográfica* (cap. vi. art. i.) praises the Opatas and some of the Eudeves for being "los mas aplicados al trabajo y cultivo de sus tierras y cria de ganados. ... Sus siembras consisten en trigo, maiz, frijol, calabazas, sandias, melones, e'c., de que hacen muy buenas cosechas; pero como no estiman su trabajo, lo malbaratan á toda prisa por qualquier cosa que se les ofrezca por sus frutos."

¹ Compare my report in the Fifth Annual Report of the Archaelogical Institute of America, 1884, pp. 63, 64, 65, 77.

² At the Ojo Caliente of the Hon. Antonio Josef (called Joseph's Hot Springs), near the ruiued Tehua Pueblos of Pose-uing-ge and Ho-ui-ri; at the Rito Colorado, about ten miles west of the Hot Springs and near the old Pueblo of Sepa-ue; also near Abiquiu. They are clearly a variety of *banquitos*, and almost an intermediate between them and the "Garden beds" of Arizona.

tious plants were raised as, like corn, grow without irrigation and with the help of summer showers alone. Full confirmation of this statement has been obtained by me through the Opatas of Sonora. By holding the soil in place by means of a low barrier of stones, protruding above the surface rarely more than six or ten inches, a bed of cultivable loam is gradually accumulated. The banquitos serve a similar purpose to a greater degree. Behind each wall, (and these are usually from two to three feet in height and one to two feet thick,) a small plot of loam has formed, as wide as the bed of the arroyo, and with a length proportioned to the fall of the creek. These plots are commonly free from rocks, such as mountain torrents always carry; frequently the rocks are heaped at the sides, showing that rock-picking has been the chief duty of the owner, in place of weeding.¹ These simple contrivances, to which man was driven by the nature of the country, have rendered the heart of the Sierra Madre, as well as its wild eastern and western ranges, like the formidable Sierra de Teras in Sonora and the mountains about Casas Grandes in Chihuahua, habitable by land-tilling Indians. The fact that they resorted to such places for their homes, where extraordinary efforts and devices were necessary for subsistence, is also indicative of two facts, - the aridity of the lower levels, and a state of insecurity, both of which conditions seem to have existed from a date long previous to the advent of Europeans.²

In dress and ornaments the Opatas resembled the Pimas

¹ This is very clear at the ruins of Va-yua-va-bi, east of Nacori, and at Quita-mac, east of Huachinera. The rocks and stones seem to have been removed from between the dikes and thrown aside, thus clearing the soil.

² East of the Sierra Madre the lower levels are indeed very arid, and therefore almost impracticable for agriculture except in some valleys. The course of the Upper Vaqui in Sonora is very tortuous, and along it an occasional opening like a small "bottom" affords room for cultivation. Many miles of rocky gorges intervene between these rare fertile spots. as well as the Yaquis; but owing to their more northerly and more mountainous home, their costume was more substantial. Skins of deer and cotton mantles constituted it in the main.¹ If Fray Marcos of Nizza was correctly informed, we might even suspect that an occasional buffalo robe found its way into the valley of the Sonora River. Still, the hide of the large red deer, or of the mule deer, so common in Lower California, may have given rise, through imperfect and still more imperfectly understood descriptions of the animal, to the supposition that the Opatas obtained buffalo hides from the Zuñi Indians.² It is certain, however, that they secured turquoises and turquoise ornaments by com-

¹ Of this custom we have early descriptions, Fray Marcos de Nizza, *Descubrimiento de las Siete Ciudades*, says (p. 337): "Antes de llegar al despoblado, topé con un pueblo fresco, de regadío, á que me salió á rescibir harta gente hombres y mujeres, vestidos de algodon y algunos cubiertos con cueros de vacas, que en general tienen por mejor vestido quel de algodon. Todos los deste pueblo andan encaconados con turquesas que les cuelgan de las narices y orejas, y á esta llaman Cacona." This must have been in the vicinity of Bacuachi. One year later, the expedition of Coronado found the "Sonoras." According to Castañeda (*Cibola*, p. 157), "Les femmes portent des jupons de dessous en cuir de cerf tanné, et de petits san-benitos qui leur de scendent à mi-corps." Ribas says (p. 392): "La gente que en el esta poblada, es del mismo natural que los Sisibotaris, y de las mismas costumbres vestidos como ellos, y mas que otras Naciones."

² I doubt very much the existence of buffalo robes in Sonora at the time of Fray Marcos. The distance was too great. Furthermore, the monk only repeated what he understood the people to say to him, and he had never seen buffalo hides, still less the animal itself; misunderstanding was therefore easy. I am of the opinion that the large hides shown to him were those of large deer, like *Cervus canadensis*, or of the "Bura," or mule deer The latter is found in Sonora and in Lower California. The only buffalo robe that may have been exhibited to him was the hide which he describes as follows (p. 341): "Aquf en este valle, me truxeron un cuero, tanto y medio mayor que de una gran vaca, y me dixeron que es de un animal, que tiene solo un cuerno en la frente y queste cuerno es corbo hácia los pechos, y que de allí sale una punta derecha, en la cual dice que tiene tanta fuerza, que ninguna cosa, por recia que sea, dexa de romper, si topa con ella; y dicen que hay muchos animales destos en aquella tierra; la color del cuero es **á** manera de cabron y el pelo tan largo como el dedo." Eut this was among the Sobaypuris of Arizona.

mercial intercourse with the people of Cibola-Zuñi, and that parrot skins and plumes were given to the latter in return.¹ Aboriginal commerce, slow and irregular, contributed to modify ideas and customs, by creating new desires, and furnishing the means of satisfying them.

In regard to the religious ideas and beliefs of the Opatas, they do not appear to have fundamentally differed from those of the other southwestern tribes. At the present time, it is very difficult, if not impossible, to gather anything on this subject except after a long residence among them; and even then it must be considered that the changes which the Opatas have undergone are perhaps more thorough than those of any other tribe.² Still, traditions are left, and one of them, as related to me by an Indian of Huachinera, recalls strangely the tale of the creation of the sun and moon current among the Nahuatl.³ Some Spanish authors speak of their belief in a supreme being,⁴ called Tamu-mo-ta, but the chief

¹ I have already mentioned this fact in the Geographical Introduction.

² They are absolutely Christianized, on the surface at least. This does not prevent them from being convinced of the efficacy of witchcraft and of the existence of witches. I have a slight suspicion, furthermore, that they still maintain their former practices and rites in secret. As far as their original condition is concerned, we must go back to Ribas in order to find some intimations of it (*Historia de los Triemphos*, lib. vi. cap. xviii. p. 393): "Apartauanse de costumbres Gentílicas, que en todas estas Naciones reinan, como viuen en tinieblas, por mas morigeradas y māsas que sean, y en particular el vicio tan repetido forçosamente en esta Historia, de las borracheras, que á todos los manchaua." The similarity of customs between all the tribes of Sonora was such, that it caused Father Alegre, who had access to the reports and correspondence of all the tribes of that country. In this he follows Ribas, who also includes all the Indians of what at his time was called Sinaloa in a general view. (Lib. ix. cap. ii. to vi.)

 3 At Baquigopa, I was shown the place where the sun and moon were said to have been created, and in the manner told by Sahagun. I shall have to return to this further on.

⁴ This fact is found in the document entitled *Estado de la Provincia de Sonora*, written by an anonymous Jesuit, in 1730. It is printed in the third

64

attention was always drawn towards their faith in witchcraft and their practice of it.¹ This belief is indeed fundamental with the Indians, and is a sure indication that what is cur-

series of Documents for the History of Mexico. I refer here to a manuscript copy made by myself from the original in the Mexicau Archives. The writer says of the Opatas : "De aquí tuvo entre ellos origen un error oculto á los primeros misioneros y descubierto en estos años por algunos padres perictísimos en la lengua opata, este era, que estaban persuadidos á que su primer principio, no solamente en cuanto á su poblacion en estas tierras, sino en cuanto al ser y existencia, era Moctezuma, y así le llamaban en su lengua Tamo Mota que quiere decir : nuestro primer principio, de que ya por la misericordia de Dios estan desengañados." On the other hand, I again refer to the statement of Ribas (*Historia*, p. 16), already quoted.

¹ In this all authors of the past centuries agree, and also in that they had recourse to innumerable presages, etc. Among these one very singular one is related in Alegre, Historia, vol. ii. p. 217. Since his account is probably derived from the Descripcion Geográfica (cap. v. art. iii.), I will take the quotation from the latter document : "Antiguamente, para saber por donde venian sus enemigos, cojian cierta especie de langosta llamada Hupitui : tomándola de su cabeza la preguntaban ¿ por donde venian sus enemigos? y como es natural que el animalito menée y alce los piés en tal situacion, tomaban por respuesta y creian que los apaches entraban por el rumbo que señalaba dicha langosta con la manita que primero alzaba." It would carry us too far to repeat here all that is told by older authors about the superstitions of the Opatas, - that people wounded by a lightning stroke were thereafter excluded from intercourse with the rest, - that when it hailed, they placed in the doors of their dwellings a cane (Baqui-go), believing that this would cause the hail to stop. The custom of erecting heaps of stones, sticks, etc., alongside of trails, so common among the New Mexican Indians and also in Peru, is thus described: "A las orillas del camino real se suelen encontrar unos montones de piedras, palos, huesos de animales, etc., en dichos montones suelen echar los de á caballo, las varillas que llevan para pegar á la cabalgadura, y los de á pie alzar algun palito por el camino y tirarlo asimismo sobre dichos montones; unos dicen que con esto dejan allí el cansancio, asi propio como el de la bestia: otros que allí está enterrado alguno, que murió de frio en tal paraje y que para calentarle hacen aquellas ofrendas, que suelen quemar algun dia qua hace mucho frio." This custom is well known in New Mexico, where the stones and sticks or branches signify as many sacrifices and prayers or invocations. The sticks and twigs stand in place of what is known among the Pueblos as "prayer plumes,' or "prayer sticks," and wherever these heaps are found it is a sure sign that the same ideas prevail that underlie the complicated uses of the prayer plumes, in most instances, even, that the tribes had the plumes also and used them as votive offerings. Analogies with northern tribes are therefore not wanting. The anonymous report which I have already quoted, Estado de la Provincia de Sonora, 1730, contains

65

rently called their religion was more properly a fetichism, highly developed, very complicated, and systematized in every detail. Mention is made of places of sacrifice situated out-

the following very significant statement in regard to the beliefs of the Opatas: "No se halló en esta nacion ópata la idolatría ni la embriaguez; muchas mugeres si solian tener, al sol y á la luna veneraban como hermanos, y aun todavia escondidos en donde el padre no los pueda ver en sus bailes, saludan á la luna nueva esparciéndole por el aire puños de pinole. Sus viejos, que entre ellos tienen grande autoridad, les enseñan patrañas muy ridículas; diré una sola, en que se conoce su grande simpleza y poco discurso para convencer de embusteros á sus viejos predicadores; estos les han persuadido (con algunos resabios de la fabulosa laguna Stigia) que en muriendo van sus almas á una espaciosa laguna, en cuyas orillas por la banda del Norte estaua sentada un hombrecillo muy pequeño, á quien llamaban Butzu-uri: este, pues, las recibia, y colocándolos apiñadas por su multitud en una gran canoa, las remitia, á la otra banda del Sur, á dar residencia á una reverenda vieja que se llamaua Vatecom Hoatziqui, en una por una las iba comiendo, y á las que hallaba pintadas con las ravas con que se afean las caras, las arrojaua á la laguna diciendo que no las comia porque tenian espinas, y las no pintadas pasaban á la barriga contentas de gozar de una inmundísima bienaventuranza " This recalls forcibly the lagune of Shi-Pap-u, or Cibobe, of the Queres and Tehuas of New Mexico, and the monsters which, according to Cushing, receive the souls on their approach to eternal rest and joy in the lagune of Cothluellonne. I only add here the following from the same source: "Valense de los maleficios, yerbas venenosas para quitar la vida á sus mismos parientes, y especialmente á aquellas que quiere mas el padre ó con quienes habla frecuentemente por sus familiares, etc." The marriage ceremonies are described as follows in the Descripcion Geografica: "Apuntaré las mas decentes, y son : 1º. juntos grandes y pequeños, ponen á los mocetones y mujeres casaderas en dos hileras, y dada una seña emprenden á correr estas, dada otra siguen la carrera aquellos, y alcanzándolas, ha de cojer cada uno la suya de la tetilla izquierda; y quedan hechos, y confirmados los desposorios. Acabado este preámbulo, se ponen á bailar, y segun me acuerdo haber oido, los novios y novias en traje de la primera inocencia. Á su tiempo, como ya tienen para cada par de novios prevenidos dos petates ó esteras de palma, sin mas ceremonia que la dicha, los meten entre sus dos esteras á cada par, y los demas siguen á festejarlos con sus danzas y cantares hasta que amanece o se cansan, aunque solo en este con incansables. Semejantes funciones las hacen en los bosges no muy retirado de los pueblos." The same document also describes the mortuary customs: "Al enterrar á sus difuntos todas estas naciones, á escepcion de los apaches, en su gentilidad y aun recien convertidos, solian de enterrar con ellos todo su ajuar y vestuario, con su pínole, olla de agua, etc.... Á los niños y niñas de pecho les llevan en una jicara la leche ordenada de sus pechos las mismas madres, y se las echan en la sepultura; y esto lo hacen por algunos dias continuos." The Jesuit Father Ignatius Pfefferside of the villages,¹ and many of their dances are described. We recognize among them the deer dance (Maso-daui),² and in the details of some of the others analogies with practices of the New Mexican pueblos are quite abundant.³ At the

korn, who was missionary in Sonora for eleven years, says in his Beschreibung der Landschaft Sonora samt anderen merkwurdigen Nachrichten von den inneren Theilen Neu-Spaniens, (Cologne, 1794, vol. ii. p. 214,) that the Pimas bewail their dead. Of the medicine-men he asserts (p. 209) that they suck the sickness through a tube, and also blow tobacco smoke on carbuncles. This agrees with what we are told by Ribas (Historia de los Trivmphos, lib. i. cap. v. p. 17): " El medio de curar estos endemoniados medicos es vnas vezes soplado la parte lesa ó dolorida del cuerpo, ó todo el, con tāta fuerça y conato, q se oye muchos passos el ruido q haze: otras chupado la parte dolorida. Y auq en parte pudieramos dezir, q esta acció tenia el efecto natural de la vetosa, que atrae, o disgrega el humor, pero esso está embuelto en tantas supersticiones y embustes, \bar{q} no nos podemos fiar \bar{q} sea todo seguro, y libre de engaño, ó pacto con el demonio: porg á los enfermos les dan a entender, que les saca del cuerpo palos, espinas, y pedreçuelas, que les causauan el dolor y enfermedad; y todo es embuste, porg ellos traen essos en la boca, ó en la mano con dissimulacion; y quando han curado al enfermo se lo muestran, vediéndolos por verdad, lo q es patraña v mentira."

¹ Castañeda mentions those places in *Cibola*, p. 157: "Tous les matins, les caciques des villages montent sur de petites éminences de terre élevées à cet effet; et, pendant plus d'une heure, ils crient comme des crieurs publics, pour avertir chacun de ce qu'il a à faire. Leurs temples sont de petites maisons autour desquelles ils plantent une quantité de flèches quand ils s'attendent à la guerre." This is so far the only mention which I have found of places of worship among the Indians of Sonora.

² The deer dance was mentioned to me while I was in Sonora. It is said to be still used to-day. Pfefferkorn (*Beschreibung*, vol. ii. pp. 79, 80) refers to animal dances in general: "Sie wissen den Gang, die Spruenge, die Raenke, das Bruellen, die Wuth, kurz, alle Eigenschaften dieser Thiere mit vieler Achnlichkeit nachzumachen, und damit der Spass desto natuerlicher scheine, bekleiden sie sich mit der Haut des Thieres das sie vorbilden wollen. Dieses Possenspiel nennen sie *Toopter*, das Thiermachen." This seems to imply that they had other animal dances beside the Maso-daui.

³ Whoever has seen the dances of the New Mexican Pueblos must be struck by the resemblance between the so-called "Entremeseros," or clowns, and the description of the solo dancers among the Opatas and Eudeves, as given by Pfefferkorn (vol. ii. p. 80): "Ihre vornehmsten Taenze sind der Pascola, und der Montezuma. In dem ersteren koemmt ein Indianer zum Vorschein, der einen Taenzer, und zugleich einen Harlekin, vorstellt. Seine Tracht stimmt auch mit dieser Person ueberein. Auf dem Kopfe traegt er ein lederne present day, the Daui-Namaca, a dance modified by ideas of the Catholic Church, is danced during Easter week.¹ The deer dance has almost fallen into oblivion, and the Mariachi, one of the many sensual and decidedly obscene performances constituting a part of Indian rites, has at last been abolished.²

Muetze, welche mit langen vielfaerbigen und emporstehenden Federn geziert ist. Am Hintertheile des Kopfes haengt der Schwanz eines Coyote, welcher ueber dem Ruecken des Taenzers hinablaeuft. Ober dem Elnbogen, und unter den Knien, ist er mit Baendern geziert, welche mit langen und niedlichen Federn dicht besetzt, und mit kleinen Schellen oder Muscheln zu dem Ende behaengt sind, damit diese bei den Bewegungen des Koerpers ein Geracusch von sich geben. Den Unterleib hat er bis zur Haelfte der Schenkel ringsherum mit einer Schuerze von praechtigen Federn, und den Hals mit einem Kragen von dem naemlichen Stoffe bedeckt. Der ganze uebriege Leib ist mit verschiedenen Farben bemalt, und das Gesicht auf eine laecherliche Art beschmiert. In der Hand haelt er einen Stab, an dessen Spitze zwei oder drei Fuchsschwaenze, oder ebensoviele Rindsblasen angebunden; womit er die Knaben, welche ihm aus Neugierde oder Muthwillen zu nahe kommen, verscheucht. In diesem Putze, tritt der Pascola auf den Schauplatz, und faengt seine Rolle an. Er tanzt, und bewegt die Fuesse mit einer unbeschreiblichen Geschwindigkeit so, dass diese Bewegungen nicht nur mit allen und jeden Noten, sondern auch mit den raschen Laeufen der Musik, vollkommen uebereinstimmen. Unter dem Tanzen macht er zuweilen erstaunenswuerdige Luftspruenge, auch dann und wann laecherliche Mienen, und naerrische Gebaerden. . . . Die gewoehnliche Musik bei diesen Tanze ist eine kleine Trommel, und eine Floete. Ein Indianer spielt beide zugleich, und haelt so ziemlich den Takt." The Pascol is (according to Escudero, quoted by Orozco y Berra, Geografía, etc., p. 355) still danced among the Yaquis, and the description given of it agrees with that of Father Pfefferkorn. Escudero very justly remarks: "La institucion de este baile podria decirse que se haria siguiendo el principio de Horacio, Canendo et ridendo corrigo mores ; porque en el se satirizan los vicios y se dicen chistosos epigramas, que casi siempre agradan á los espectadores." This same kind of satire is displayed by the Qo-sha-re of the Queres, personages whose real functions are quite different from the rôle of clowns which they play in the dances of the Pueblos.

¹ The Daui-na-maca is performed in the valley of the Rio Sonora annually. In place of head-boards or feather bushes the dancers wear a head-band of matting covered with colored paper, and decorated by a medallion and bright plumes. A peculiar kilt, made of canes, is worn on the occasion.

² The Mari-a-chi was a round dance. Among the many dances that had to be abolished was the Torom-ra-qui. It is described as follows in the *Estado de la Provincia de Sonora*: "Y por ser prueba de su docilidad no será fuera de propósito decir, que esta nacion Opata usaba un baile verdaderamente diabólico In these displays bright plumes held, as they still hold, the place of painted head-boards, but masks seem to have been used also.¹ Both faces and bodies were painted with bright tints, solo dancers appeared, and the music was in no manner distinct from the rhythmic noise accompanying the performances of northern Indians.

The Opatas danced the scalp dance $also.^2$ This shows that the custom of mutilating the dead enemy by taking his scalp prevailed among them. As we go farther south, however, the *hcad* of the foe was the most desired trophy. A gradual change in these customs of war religion appears from the north to the equator, from the process of scalping to that of securing the entire body for purposes of cannibalism, or the live enemy in order to sacrifice him to the fetiches.³

que llaman Torom Raqui, con que decian que asegurauan las lluvias y las cosechas abundantes: este baile comenzaba al salir el sol y duraba hasta ponerse, á el asisten de todos los pueblos, sembraban toda la plaza adonde se bailaua de todo género de semillas y ramos de árboles y á trechos huecos y pesuñas de bestias, astas de reces, caracoles, y otras inmundias, en los cuatro angulos de la plaza formaban cuatro chozas, de donde salian por torno los bailadores con unos aullidos y clamores espantosas, y disfrazados con trajes y monteras abominables al son de huesos y sonajas, legaban á cada una de las baratijas que estaban esparcidas en la plaza y bailaban con tristísimos gemidos, llantos y ceremonias diabólicas."

¹ The Pascola wore a mask, according to Escudero. Orozco, *Geografía*, p. 355.

² Compare Pfefferkorn, *Beschreibung*, etc., vol. ii. p. 172. According to him, the triumphant war party was received by the women. *Descripcion Geográfica* (cap. v. art. v): "Si les va bien en la campaña, de los enemigos que matan traen sus cabelleras, que aprecian mas que otro botin, y los cautivos, niños y mugeres que llegando á sus pueblos bailan dia y noche, que da lástima ver el estrago que causan con esta locura en si propias, y mas en los cautivos que de esta manera llevan en triunfo."

⁸ Torturing prisoners of war seems to have taken place occasionally among the Opatas. *Descripcion Geográfica*: "En algunos pueblos aun de Ópatas siendo estos, segun todas, los mas allegados á la razon entre los demas indios, he sabido, usarse el salir las viejas de sus casas con tizones ardientes y quemar á los pobres cautivos en varias partes de sus cuerpos, mayormente en los muslos con tanta crueldad, que he visto los señales en un muchachito bien tierno, y tales que no se le quitaron en toda su vida." The Yaquis took the heads of Anthropophagy in America was practised mainly within the tropics.¹

The same may be said in regard to the use of poisoned arrows. That the Opatas used them is fully established, and the counter poison is also known.² The custom appears to have been general with the tribes of Sonora, and the poison is described as mortal, though not in every instance.³ In addition to the bow and arrow, the usual and well known aboriginal weapons, the club, the shield, and possibly the sling, were handled by the Opatas in warfare, and, like less sedentary tribes, they frequently set out in small war parties, accompanied by a sorcerer or medicine-man.⁴

Remnants of fortifications are common in Sonora. These are the so-called "Cerros de Trincheras," more or less isolated heights, on whose slopes stone parapets have been erected at various elevations, presenting the aspect of concentric circum-

the dead enemies, not merely the scalp. So did the tribes of Sinaloa proper. Ribas, *Historia*, pp. 10, 294.

 1 I have not found any trace so far, of a positive nature, that any of the tribes of Sonora have been cannibals.

² As early as 1542, the Spaniards experienced the poisoned arrows of the Opatas. As to the counter poison, it is given in the *Descripcion Geográfica*: "Taramatraca ó Caramatraca, se llama una raiz pequeña que se halla en la costa de Guaimas, es muy medicinal y contraveneno muy apreciable para heridas de flechas poñzonosas, aun contra la mas brava del seri, como me lo aseguró el padre Francisco Pimentel, de la Compañía de Jesus, quien sirvió de capellan en la espedicion contra dicho enemigo el año de 1750, y que ninguño murió de los heridos que se valieron de ella mascándola y tragando la saliva y poniéndola, así mascada, sobre la herida y aun comiéndola."

³ Castañeda, Cibola, p. 221.

⁴ The warlike customs are so fully and so frequently described, that I forbear quoting in detail. Ribas (*Historia*, lib. i. cap. iii.) is very detailed about them. Among others he describes the war paint: "Para salir á la guerra se embijan, o pintan con vn barniz que hazen de vn azeite de gusanos, rebuelto con almagre, 6 ollin de sus ollas, con que quedan pintados en cara y cuerpo desuerte que parecē fieros demonios del infierno." An equally full account may be found in the *Descripcion*. According to it, the young men were "initiated" (cap. v. art. v.). Pfefferkorn also (*Beschreibung*, vol. ii. pp. 163-172)

vallations, encircling a more or less conical elevation. On the top or summit there are nearly always traces of rude habitations, and of round small erections, that appear to have been lookouts or watch-towers. The Opata country is rich in such remains, and the outskirts of the Sierra Madre particularly so. Indian tradition of to-day connects their erection and use distinctly with the Opatas. It is further asserted by the same source, that these parapet hills were fortified, not only against enemies of a foreign stock, but against neighboring villages also. Thus the "Cerro de Batonapa," near Banamichi on the Sonora River, served as a place of refuge for the inhabitants of Motepori, Badeuachi, Vaynorpa, etc., if attacked by the other Opatas, those from the valleys of Oposura and Cumpas, or even by their immediate neighbors of Huepaca and Aconchi. The latter had a "Refuge Hill" at Huepaca, quite as extensive as that of Batonapa.¹

Villages expressly fortified were also in existence. Thus, in the very heart of the savage Sierra de Teras, the ruins at "Los Metates" are those of a little pueblo built on a steep but low promontory of rocks, of which almost every projection shows traces of having been lined by parapets. The cluster of dwellings on the "Mesa de San Antonio," near Granados on the Upper Yaqui, was surrounded by a low circumvallation. Still the majority of villages were open, their people

gives details. Their tactics were the usual ones of surprises and ambusa. But if hard pushed, they fought desperately.

¹ One of these "Cerros de Trincheras," and one whose size and importance has lately been much exaggerated through newspaper reports, is near Magdalena in Sondra. These rude fortifications were much in use among the Sondra Indians. Pfefferkorn says about them (*Beschreibung*, vol. ii. p. 161): "Noch stehen auf einigen Bergen die Ueberbleibsel der Brustwehren, welche diesen Voelkern statt einer Festung dienten. Sie waren von aufgehaeuften Steinen auf die Art einer Mauer errichtet; und standen vom Fusse des Berges mehrere dergleichen uebereinander." Similar fortifications were erected by the Seris against the Spaniards in 1758, (Ibid., vol. i. p. 414,) and by the insurgent Tarahumares in Chihuahua. relying for safety in case of attack upon the wide range of view, or upon the peculiarly concealed locality, but especially upon the safety resorts just described. These features tend to indicate that, at the time when they were in use, there was as yet little or no danger from that prowling and incessant harassing which has rendered the Apaches so formidable to the village Indians of northern Mexico during historical times. While these military constructions are of course evidences of continual dissensions among the Indians of Sonora, they indicate a warfare less persistent and less unrelenting than that which the Apaches have since made upon them.¹

Between the Opatas and Eudeves in the east, and the arid shores of the Gulf of California on the west, a branch of the great and numerous Pima stock, the Papap-Otam or Pápagos, roamed over, rather than inhabited, northwestern Sonora and southwestern Arizona. The Pápagos came in contact with the Spaniards in the latter half of the seventeenth century.² From the nature of their country, they could scarcely be called village Indians. Though they spoke the Pima language, they were much more unsettled than either the Nebomes or the Arizonian Pimas. Mostly reduced to hunting, to wild plants, and to a limited exchange with other tribes for their subsistence, the Pápagos were shunned and feared, as nearly all roving Indians are by

¹ Pfefferkorn mentions (vol. ii. p. 161) frequent wars between the Opatas and the other tribes, but they were not as unremitting in their hostilities as the Apaches have shown themselves to be. There were periods of peace, or at least of security.

² The name Papa-Otam is taken from the *Descripcion Geográfica* (cap. vi. art. ii.). On the map accompanying the work of Father Pfefferkorn they are called "Papabi-Ootam sive Papagos." Ootam signifies man in the Pima language; what the other word means I am unable to say. That they are Pimas is fully established. It was the celebrated Jesuit Father Eusebius Kühne or Kino who made the Spaniards first acquainted with them. They were not hostile, only shy, in the beginning.

72

sedentary tribes.¹ Still, it was shyness rather than ferocity that kept the former aloof from intercourse. Their situation was such as to render life dismal. In the southwest, their neighbors were a tribe which has left in the records of Sonora

¹ Although the Pápagos were never, on the whole, dangerous to the whites, they enjoyed a bad reputation for a long time. The so called Papagueria is very well described in the Descripcion Geográfica (cap. vi. art. ii.) : "Verdad es, que en todo este vasto espacio hay mucho despoblado, como son casi todas las marismas, y aun la mayor parte de ellas incapaz de poblarse por la gran escasez de agua y esterilidad de la tierra, porque todo el largo trecho que lo ay desde Caborca hasta cerca de la boca del rio Colorado, que pasa de ochenta leguas, son casi puros médanos y páramos tan escasos de agua, que apenas se halla por toda la costa para poderla registrar caminando; y aun para esto falta del todo las últimas treinta leguas ántes de llegar á dicha boca. . . . La única mision que se erigió el año de 1751 por Mayo en San Miguel de Sonoitac, cerca de cincuenta leguas al nor este de Caborca, aun ella sola padecia escasez de agua, y así no hay donde congregar á los pápagos ó papapootam, que así se llaman los pimas que viven en aquellos páramos, de semillas de zacate, yerbas y frutas silvestres, y aun de conejos y ratones." The Noticias de la Pimeria (anonymous, its date 1740) mentions the Pápagos as "tambien es nacion Pima, pero muy inferior á la otra, respecto á que estos no tienen rio, arroyos ni ojo de agua, y viven el verano en los llanos haciendo vatequi o pozos para beber, y en dichos llanos siembran de temporal maiz. frijol y calabazas, muy poco de este, y apenas se les acaba, se reparten á las rancherías ó pueblos de los otros pimas á servirles como criados por solo el interes de la comida, y aun se alargan hasta venir á San Ignacio y Dolores ; son muy afectos á comer carne, que aprecian en estremo la que fuera, aunque sea de caballo, burro, etc., y al tiempo de volverse á sus tierras, no estan seguros los perros de que los hurten para comer; es nacion muy pusilánime y afecta á los españoles como las demas." Father Kühne, in his letter to the Padre Visitador Horacio Polici, dated September 22, 1698, (Carta del Padre Eusebio Francisco Kino, al Padre Visitador Horacio Polici, acerca de una Entrada al Noroeste y Mar de la California, etc.,) says that the Papagos, that is, the inhabitants of the country between Caborca and the Rio Gila, - he does not mention them as Pápagos by name, - consist of "mas de cuarenta rancherías entre chicas y grandes, todas de gente muy amigable, docil y tan afable que en todas partes nos recibieron con casas prevenidas, con cruces y arcos puestos y con muchas de sus comidas de maiz, frijol y calabazas, sandias y pitahayas, y de sus cazas, liebres, etc., y con muchos bailes y cantares de dia y de noche." In the winter of 1697, the same missionary had already traversed a part of the Papagueria and had been kindly treated. Compare Relacion del Estado de la Pimeria, que remite el Padre Visitador Horacio Polici, 1697; and in it the joint report made of the trip by Cristobal Martin Bernal, Eusebio Francisco Kino, and others, Dec. 4,

a stain scarcely less dark than that made by the Apaches. These neighbors were the Seris, linguistically allied to the Arizonian Yumas,¹ and of whom little is known except that they were a terrible scourge to the village Indians of Sonora first, to the Spanish settlements and to the missions afterwards,²

1697. Father Jacob Sedelmayr, S. J., Relacion que hizo . . . con la Ocasion de haber venido a México por el Mes de Febrero del Año de 1746, a solicitar Operarios para fundar Misiones en los Rios Gila y Colorado, etc.: "Las rancherías que hay desde casas grandes hasta abajo, Pimicas, Papalotes que viven á su lado del Sur en tierras secas y estériles, y inadministrables y por eso las mas gentiles." Notwithstanding the docility of the Pápagos, we find them described as wild, and even as dangerous. Of their other customs and of their religion, etc., we have nothing except the well grounded complaint that they were much addicted to witchcraft, and that their superstitious practices contributed to diminish their numbers with the ultimate prospect of their complete extermination. Without referring to other sources which speak positively on the subject, I quote here Fray Juan Domingo Arricivita (Crónica seráfica y apostólica del Colegio de Propaganda Fide de la Santa Cruz de Queretaro, Segunda Parte, lib. iii. cap. xiii. p. 397); "Son estos Indios muy inclinados y propensos al exercicio y trato de la hechizería, cuya raiz les viene de su antigua prosapia gentílica supersticion. . . . Ellos mismos son sus crueles verdugos, que por un ridículo sentimiento hacen duelo, y por rencor, envidia ó venganza, y aun por sola vanidad y loca presuncion, se acometen y se matan unos á otros con crueles y torpes maleficios." This is what may be observed to-day among the Apaches, Navajos, and among the New Mexican Pueblos.

¹ The Seris appear first under the name of Heris, and thus they are called by Ribas (Historia, lib. vi. cap. i. p. 358). He speaks of them in a very appropriate manner: "Es sobremanera bozal, sin pueblos, sin casas, ni sementeras. No tienen rios, ni arroyos, y beuen de algunas lagunillas, y charcos de agua: sustentanse de caça," etc. He had ascertained that a portion of the Seris dwelt on an island in the Gulf of California, for he says (p. 359): "Y dentro de la misma mar, en isla, se dize que habitan otros de la misma nacion." The first white man who came in contact with the Seris was undoubtedly Fray Marcos de Nizza, in 1539 (Descubrimiento de las siete Ciudades, p. 331): "Asimismo me vinieron á ver indios de otra isla mayor quella, questá mas adelante de los cuales tuve razon haber otras treinta islas pequeñas, pobladas de gente y pobres de comida, ecebto dos, que dicen que tienen maiz. Estos indios traian colgadas de la garganta muchas conchas, en las cuales suele haber perlas; é vo les mostré una perla que llevaba para muestra, y me dixeron que de aquellas habia en las islas, pero yo no les ví." The discovery that the Seri language belongs to the Yuma family of idioms is due to Mr. Albert S. Gatschet.

 $^2\,$ From the latter part of the seventeenth century to the close of the eighteenth, the documents relative to Sonora are filled with complaints about ravages

and that at the present time they huddle together on the isles of the Californian Gulf, shy and difficult of approach, living, as they always have as long as known to Europeans, on marine productions, fish, shells, and whatever game they might occasionally secure, and having some commerce. Today they perform occasional work at the port of Guaymas, whereas in the sixteenth century and previously they even depended for Indian corn upon barter with the inland tribes.¹ Close by the Seris dwelt, along the coast also, the Guaymas and Upan-Guaymas. Both clusters may be said to have been exterminated by the Seris, in the same relentless but slow manner in which the Apaches wiped out some of the Indians of Chihuahua.² Little, if anything at all, is therefore known of them, and they have been classed linguistically with the Seris themselves.³ I am informed, however, on the authority

committed by the Seris. It would be needless to refer to them in detail. Their last stronghold was the "Cerro Prieto," where they finally surrendered in 1770. The Seris never were numerous; with the exception of the Guaymas, they constituted the weakest tribe of Sonora in point of number. But their home — if a range of arid coast may be called a home — was such as to render offensive warfare against them almost impossible, whereas they could prey upon their neighbors with impunity.

¹ Ribas says (*Historia*, p. 358): "Sustentanse de caça; aunque al tiempo de cosecha de maiz, con cueros de venados, y sal que recogen de la mar, van á rescatarlo á otras naciones. Los mas cercanos destos á la mar tambien se sustentan de pescado." This, having been written about the year 1645, of course refers to commerce as it existed *previously* to the advent of the Spaniards.

² The enmity between the Guaymas and the Seris must have been hereditary, or at least traditional. Thus, in 1754, while the Seris were temporarily at peace with the Spaniards, the Guaymas attacked one of their rancherias unexpectedly, and committed some murders. In matters of war between Indian tribes it is difficult, nay, often impossible, to ascertain which party is to blame.

³ See Orozco y Berra, *Geografía de las Lenguas*, p. 354. I was told in Sonora, that the name Guaymas was an Opata word, and signified "where they ate." I cannot vouch in the least for the correctness of this interpretation. The *Descripcion Geográfica* (cap. v. art. i.) says of the Guaymas: "Hablan con muy poca diferencia una misma lengua con los Seris; pero es tan corto su número, que en ninguna manera merece el nombre de nacion; á demas de vivir ya mesclados con los hiaquis en Belen y otras, por haberse visto obligados á ceder su of a distinguished traveller, Mr. Alphonse Pinart, that the Guaymas were of the stock of the southern Pimas, or Nebomes. This would suffice to explain the savage hatred with which the Seris persecuted them. The Guaymas, furthermore, are represented as having been land-tillers on a very low scale,¹ a feature in which they differed essentially from the Seris. The latter may be regarded as something like maritime Indians, akin to the Antillean and South American Caribs. The Isla del Tiburon and other islands were to them not only homes, but also their places of refuge, or lairs.² Here they were invulnerable by the tribes of the mainland, and safe unless caught on one of their marauding expeditions away from the coast. But once near the sandy and waterless, treeless "Playas," or on the shores of the Gulf, the Seris could hoot at the idea even of pursuit.

It is a well known fact that the Seris used poisoned arrows. It is even asserted, and commonly believed, that they still use them.³ In presence of the positive assertions of early chroniclers, that the Opatas also used these dangerous weapons against the first Spaniards who came to Sonora, assertions which are substantiated by the descriptions of symptoms and by the indication of well known

naturaleza al sangriento furor de los Seris." The mission of Nuestra Señora de Belen had been recently founded in 1678, according to Ortiz Zapata (*Relacion de las Misiones*, etc., p. 379): "Nuevamente fundada de indios que llaman de la nacion Guaymas los cuales algunes años ha que han ido acudiendo á este partido atraidos de la Divina Providencia," etc.

¹ Perhaps this was due to their contact with the Yaquis. They were neighbors, although hostile to each other, as Ribas relates on page 319. He calls them Guayamas.

² See *Descripcion Geográfica*: "Otro asilo tienen, así en su isla del Tiburon, casi como cuarenta leguas al Poniente de la hacienda de Pitiic, . . . como en la de San Juan Bautista."

⁸ Orozco y Berra, Geografía, p. 354. Charles P. Stone, Notes on the State of Sonora, Washington, 1861, p. 19.

counter poisons, the fact can hardly be doubted. The nature of the poison was evidently vegetable, and no credit is to be given to tales ascribing the mortal effects of arrow wounds to snake poison collected on arrow-tips and preserved there in a dried state. A document of whose great value for aboriginal medicine there can be no doubt, the celebrated ' Rudo Ensayo," gives the name of the plant whose milky sap was used to anoint the weapons, and thus render them fatal.¹

Ere leaving the Indians of Sonora, and before I pass on to the tribes of Chihuahua, I must add a few remarks on their medical art, if their empirical practice may be so called. It appears certain that the Opatas, Pimas, and probably the Yaquis, possessed and used a vast arsenal of medicinal herbs and other remedies, in addition to the superstitious practices resorted to by them for purposes of healing and curing.² I cannot go into any details, but it is my duty to call the attention of students of other branches of science than ethnology to the lists given by Jesuit fathers of the medicinal plants of Sonora, and to their accounts of the virtues attributed to them, and of the preparation and application of remedies.³ I have myself experienced the value of some

¹ The *Rudo Ensayo*, published by Buckingham Smith in 1863, is the same as the *Descripcion Geográfica*. In the latter there is mention of a plant: "230. Magot en lengua ópata es un árbol pequeño muy lozano de verde y hermoso á la vista; pero contiene una leche mortal, que á corta incision de su corteza brota, con la que los naturales solian untar sus flechas, y por eso la llaman Yerba de la Flecha, pero ya pocos la usan. Sirue tambien dicha leche para abrir tumores rebeldes, aunque no lo aconsejaria por su caracter venenoso." This would indicate a Euphorbiacea. In regard to the poison used by the Seris the writer is not so positive as to the ingredients employed, but is of the opinion that it must be vegetable. The tale of snake poison being used he rejects.

² I cannot sufficiently insist, from a practical point of view, upon a thorough study of the medicinal plants of the Southwest in general. There are certainly many of great value.

⁸ The Descripcion Geográfica, or Rudo Ensayo, appears to be the source from which Alegre gained his information on the plants, etc. of Sonora. The work of Pfefferkorn, Beschreibung der Landschaft Sonora, also contains information, but it may have come from the same source, since the Beschreibung is posterior

of them, and have become inclined to suppose that a study of them, with the methods and means of modern science, might be profitable, independent of its value as a contribution to knowledge of Indian culture.

While in Sonora we have mostly met with tribes almost, if not exclusively, sedentary, (the Seris and Pápagos being the only ones to whom this designation cannot be properly applied,) on the soil of Chihuahua the proportion of roving Indians to those of more sedate habits is greater. It is easy to account for this, when we consider the physical geography of the country.

The western half of Chihuahua, generally speaking,¹ is occupied by the Sierra Madre and its immediate ramifications. That region is therefore better watered than the eastern half, large portions of which, while not strictly plains, are still broad valleys, through which the water supply is scant, and often but periodical.² The southeast is particularly forbidding in this respect; furthermore it is hot, and the mountains are rugged and arid.³ With the limited mechanical means at his disposal, the Indian could not well subsist by agriculture on an area of this sort; there was little incentive for him to become or remain a permanent settler, but often

to the *Descripcion* by thirty years, and P. Pfefferkorn was in Sonora when the *Descripcion* was written. He was then missionary at Toape (cap. vii. art. iii.). As for the author of the *Descripcion*, I am convinced it was the Padre Nentwig, S. J., priest at Huassavas in eastern Sonora.

¹ I use this term, because there are levels of considerable extent, and also long valleys, like those following the course of the Rio de Casas Grandes and Rio de Galeana. But the whole region belongs to the upper drainage of the great central chain.

² The eastern half of Chihuahua is not absolutely barren. Still, the watered expanses are isolated, and the region near the Rio Grande may be termed arid, and it is excessively hot and unattractive, even at present.

⁸ See above. Mezquite beans have been the chief support for days of the horses of the United States troops that entered Chihuahua from that direction, in pursuit of Apaches, according to convention between the governments of the United States and Mexico.

78

the necessity of shifting seemed absolute. In consequence of this, we find village Indians clustering three centuries ago in the southwest and west of Chihuahua, as also in the extreme east, on the triangle formed between the Rio Grande del Norte and its western tributary, the Rio de las Conchas, or Conchos.¹ The former people, or the mountaineers proper, belonged linguistically to the same great family with the Yaquis, Pimas, and Opatas. They lived in the extreme Southwest, the Tepehuanes in the South and as far as Namiquipa, and the Tarahumares² south of Casas Grandes. Outposts of Sonoran Jovas, perhaps of Opatas too, reached over into Chihuahua from the west in small villages. Since the boundary line between Sonora and Chihuahua is yet imperfectly defined, it is not worth while attempting to locate such advanced colonies of the one or the other cluster with any great precision.³

¹ The name has been corrupted into "Conchos," but the original designation was "Rio de las Conchas." See Joan de Miranda, *Relacion hecha al Doctor Orozco, Presidente de la Audiencia de Guadalajara*, etc., p. 566: "Á diez y á doce leguas de las minas de Santa Bárbara, al Norueste, está un rio muy grande que corre hácia Lebante; llamanle el rio de las Conchas, y á esta causa, llaman los indios que en el hay, de las Conchas." It was called thus in the documents of 1582. *Testimento dado en Méjico sobre el Descubrimiento de doscientas Leguas adelante de las Minas de Santa Bárbola, Gobernacion de Diego de Ibarra*, etc. (*Doc. de Indias*, vol. xv. pp. 83, 90). It was Antonio de Espejo who (*Relacion del Viaje, Doc. de Indias*, vol. xv. p. 104) perverted it into Conchos.

² It is not possible to establish definite boundaries, for the simple reason that there were none. The tribes were so scattered, that they seemed to overlap one another's grounds, and the settlements frequently shifted their location. Orozco y Berra's ethnographic map seems to be correct in the main. Tutuaca, however, was a mission of the Tepehuanes, and Tutuaca lay almost in the latitude of the city of Chihuahua, near the present boundary dividing Chihuahua from Sonora. The fact that Tutuaca was a Tepehuan settlement in 1678 is established by the Jesuit P. Juan Ortiz Zapata, *Relacion de las Misiones*, p. 340.

³ Ortiz Zapata, *Relacion*, p. 342. These Jovas probably were the Indians whom Cabeza de Vaca met in the Sierra Madre, who lived partly in houses made of sod, *Relacion de Naufragios* (in Vedia's *Historiadores Primitivos de Indias*, vol. i. p. 543), "Entre estas casas habia algunas de ellas que eran de tierra," and who told him about so called Pueblos farther north. In the valley of Casas Grandes and north of it, tribes occupied the country which have completely disappeared, and to which I shall refer later on. Whether these tribes were land-tilling or not is a point yet in doubt.

In the east we find the Jumanos, a tribe also extinct as such, settled between the Rio Grande and the Conchas. When first met with and described, in 1582, the Jumanos lived in villages of houses with upright walls and covered with mud roofs; they cultivated corn, squashes, and beans. They may consequently be classed, so far as that part of the tribe is concerned which lived in Chihuahua, among the sedentary Indians of the Southwest.¹

¹ Antonio de Espejo, Relacion del Viage (Documentos de Indias, vol. xv. p. 168): "Acabadas de salir desta nacion, entramos en otra que se llama de los Xumarias, que por otro nombre los llamaban los españoles, los Patarabueyes, en que parecia habia mucha gente y con pueblos formados grandes, en que vimos cinco pueblos con mas de diez mil indios, y casas de azotea, bajas, y con buena traza de pueblos; y la gente desta nacion está rayada en los rostros; y es gente crecida, tienen maiz y calabazas, y caza de pié y vuelo, y frísoles y pescados de muchas maneras, de dos rios caudalosos, que es el uno que dicen viene derechamente del Norte y entra en el rio de los Conchos, que este será como la mitad de Guadalquibi, y el de Conchos será como Guadalquibi, el cual entra en la mar del Norte." A better and clearer description of the delta formed by the junction of the Rio Grande and the Conchos could not be wished. The other copy of Espejo's report, in the same volume of the Documentos de Indias (p. 105), has distinctly "que se llama de los Jumanos." The corrupt version given in Hakluvt describes the dwellings of the Jumanos as being "de calicanto." There is nothing of it in the original reports.

It is strange that there should be, so far as anything appears, such a long silence on the Jumanos of Chihuahua, after Espejo's journey, for it is more than likely, it is almost certain, that they continued to inhabit the delta above mentioned. They were there in 1683, and of their own choice; no missionary had induced them to settle there. This is clearly established by the documents relative to the reconnoissance made by Juan Dominguez de Mendoza as far as the Rio Nueces in Texas in the year 1683 (see *El Diario del Viaje de Juan Dominguez de Mendoza á la Junta de los Rios y hasta el Rio Nueces*, MS. copy in my possession), and more particularly by the documents annexed to it. See also Felipe Romero, *Carta al Gobernador Don Dominguez Mendoza*. Father Nicolas Lopez, who accompanied Dominguez, says the same in his Memorial acerca de la Repoblacion de Nuevo México y Ventajas que ofrece el Reino de

80

The centre of Chihuahua cannot be said to have been permanently occupied by any cluster of natives. It was how-

Quivira, April 24, 1686 : "Y en la sazon halle treinta y tres capitanes infieles de la nacion Jumanas y otras que venian á pedir el baptismo, . . . nos fuimos caminando á pie y descalzos en compañía de dichos infieles sin escolta de españoles, haste llegar á la Junta de los Rios, . . . á donde nos tenian estos infieles fabricados dos ermitas aseadas," etc. Also Fray Alonzo de Posadas, Informe al Rey sobre las Tierra de Nuevo México Quivira y Teguayo, 1686. It is true that Dominguez calls these Indians Julimes, but from the contexts I must conclude that they were also Jumanos. It looks as if the two tribes had lived together at the "Junta de los Rios." In 1715, when the missions were re-established there, the following tribes or clusters are mentioned as living at the "Junta" in Los Títulos y Advocaciones de los Once Pueblos contenidos en esta Relacion (Documentos para la Historia de Méjico, Cuarte Seria, vol. iv. p. 169) : Mesquites, Cacalotes, Oposines, Conejos, Polames and Sivolos, Puliquis, Conchos, Pasalmes. These names are repeated, with many others, as those of tribes inhabiting New Biscay in 1726, by the Brigadier Pedro de Rivera (Diario y Derrotero de lo Caminado visto y observado, etc., p. 22). Juan Dominguez de Mendoza (Diario, fol. 46) gives the names of a number of tribes connected at least with the Jumanos, which he met in northwestern Texas, and among that list the "Poliches" (Puliquis?) are mentioned. I suspect, however, that these names are not always those of separate tribes, but rather names of clans or bands. The Jumanos are ranked among the Chihuahua tribes by Orozco y Berra (Geografía, etc., p. 386). But he considers them as a branch of the Apaches-Faraones. There are no grounds for such a conclusion beyond the possible fact, that the remnants of the Jumanos may have become absorbed by the Apaches, upon the latter obtaining sway over Chihuahua. This is only a possibility, and as yet no certainty. Of the language of the Jumanos we know nothing. Fray Nicolas Lopez asserts (Memorial) that he composed a vocabulary of the Jumano idiom, but we have no knowledge of its existence. He says : "Yo Señor, saldria de esta ciudad á fines del que viene para aquella custodia; llevo dispuesto el ánimo á entrar segunda vez á dichas naciones, por saber ya la lengua jumana y haberla predicada á aquellos y haber hecho vocabulario muy copioso de dicha lengua, como consta juridicamente en los instrumentos que tengo presentados." Father Lopez is not an absolutely reliable authority. He took the part of Juan Dominguez Mendoza in the latter's quarrels with nine of his men, who subsequently deserted his camp, returning to El Paso del Norte at their own risk. Compare his Diario, fol. 14, Auto, fol. 15, Peticion, etc.; also Felipe Romero and others, Carta al Gobernador, fol. 1-3; Pedimento, p. 2. He was even accused of conspiring with Dominguez against the Governor Petriz de Cruzate, in 1685. Testimonio à la Letra dela Caussa Criminal que se à seguido contra el Maestre de Campo Juan Domingues de Mendoza y los demas, etc., September, 1685, MS. Some of his claims to services performed may be exaggerated.

The Jumanos of Chihuahua disappear in the eighteenth century. In regard to their possible linguistic connection with the Julimes, see further on.

ever claimed and roamed over by Indians whose idioms are yet unclassified, simply because some of these idioms have disappeared from the surface. In the south, we find the Conchas, or Conchos, and, hanging about them like Arabs of the desert, a wild, ferocious, errant stock, the Tobosos. What the Seris were to Sonora, the Apaches to New Mexico at an early date, the Tobosos were to the aborigines of Chihuahua, and later on to the Spaniards, namely, an incessant scourge. Their incursions extended over a wide range, embracing the States of Nuevo Leon, of Tamaulipas in part, of Coahuila, and of Chihuahua. So omnipresent were these nomads, that each one of these districts now claims to have been their home at one time, while in fact they wandered everywhere and dwelt nowhere.¹ The Conchos were not

¹ The Tobosos also appear first in Espejo's reports, *Relacion del Viage*, p. 167. He calls them Tobozos, and in the other version there is the misprint Jobozos. Already Espejo noticed that they were shy and shiftless : "Son esquivos, y así se fueron de todas las partes que estaban pobladas, en xacales, por donde pasabamos; . . . susténtanse con lo que los dichos Pazaguates; usan de arcos y flechas; andan sin vestiduras; pasamos por ¹esta nacion que parecia haber pocos indios, tres jornadas, que habria en ellas once leguas."

Gaspar Castaño de Sosa, who marched from Nuevo Leon to New Mexico in 1590, makes no mention of the Tobosos in his Journal. Neither does Juan de Oñate in his diary of 1596. The Tobosos were, then, to be found mainly in Coahuila and Nuevo Leon, and also in Tamaulipas. They became formidable to Chihuahua only in the seventeenth century, after missions had been established, and the contact with civilization gave some pretext for depredations. I say pretext, for in most cases, as with the Apaches, for instance, such tribes only waited for some opportunity to resort to murder and rapine. In his Carta Etnográfica, Orozco y Berra localizes, so to say, the Tobosos in Coahuila and Nuevo Leon. It seems certain that they most habitually infested those districts. but they were also a terrible scourge to Chihuahua. On the whole, it would be as difficult to assign to them a definite territory as it would be to the Apaches in former times, previously to their reduction to reservations. In 1630, Fray Alonzo de Benavides mentions again the Tobosos, Memorial que Fray Ivan de Santander de la Orden de San Francisco, Comisario General de Indias, presento à la Magestad Católica del Rey don Felipe Cvarto Nuestro Señor, Madrid, 1630, p. 7. He speaks of the Tobosos along with a number of other tribes of Chihuahua, like the Tarahumares, Sumas, Janos, etc., and says of them collectively: "Gente muy feroz, barbara, y indómita; porque andan siempre totalmente desnudos,

any more tractable, neither do they appear as having been more civilized in the beginning, yet they showed afterwards

sin tener casa, ni sementera alguna, viuen de lo que caçan, que es todo género de animales, aunque sean inmundos, mudándose para esto de unos cerros á otros; y sobre el juego suelen estas naciones tener guerras ciuiles, y se matan brutalmente, sus armas son arco y flecha, que son las generales de todas las naciones; quando passamos por entre ellos, nos embisten cara á cara, si ven poca gente, y hacen el mal que pueden; por lo cual no se puede passar menos q co doze hombres co sus cauallos, de armas mui bie apercibidos, y aun desta suerte se ha de ir con cuidado, haziedo lubre á prima noche en vna parte, para diuertírlos, y passarla lo mas adelante que se pudiere; y por lo menos quando ven mucha fuerça y gente, procuran de noche en sus emboscades hazer el daño que pueden en la cauallada; y desde que se descubrió el Nuevo México, siempre que se passan estas cien leguas, ha auido guerras con estos indios, en defensa de los daños que pretenden hazérnos." The historian of the Jesuit missions in Mexico, P. Francisco Xavier Alegre, says of the Tobosos, speaking of their first appearance as fomenters and leaders in the insurrections of contiguous tribes (Historia de la Compañía de Jesus en Nueva España, vol. ii. p 244): "Comenzaron las hostilidades por los tobosos, gentes belicosas y barbaras, y que servian como de asilo á todos los foragidos y mal contentos de aquellas provincias. Los robos y las muertes eran ordinaries no solo en los carros y españoles que encontraban en los caminos, pero aun en las poblaciones y en los reales de minas mas poblados. En los reales de Mapimi, del Parral y en San Miguel de las Bocas se vivia en un continuo sobresalto, especialmente en las crecientes de las lunas, en que solian juntarse." This recalls vividly the condition of New Mexico and of Arizona not more than twenty-five years ago. The same custom of starting on forays and killing expeditions with the waxing moon, is well known to exist also among the Apaches. What Father Alegre says refers to 1644, however. A witness of the times, the Jesuit P. Nicolas de Zepeda, says, Relacion de lo Sucedido en este Reino de Vizcaya desde el Año de 1644 hasta el de 1645, etc. (Doc. para la Historia de Méjico, Serie 2): "Como tambien tan cercano á las cosas tan nobles que han sucedido de dos años á esta parte que ha que comenzaron á malograrse los indios de la nacion tabaz, que es y ha sido siempre la mas cruel, bulliciosa y guerrera pues no obstante que casi cada año de nuevo les bajaban de paz los señores gobernadores y capitanes de presidios." The historian of the Province of San Francisco de Zacatecas, Fray Francisco de Arlegui, devotes several chapters to dissertations on the manners and customs of the Indians inhabiting or roaming over the various regions through which the missions of that Province were scattered. He enumerates a long list of tribes, and among them the Tobosos. But his picture of habits and mode of life is general, embracing all the forty and more tribes of his list, and without special reference to any of them in particular. The dissertation embraces chapters ii. to xii. inclusive of his Chrónica de la Provincia de N. S. P. S. Francisco de Zacatécas (1st edition, 1737, pp. 148-208). It would be impossible to trana much greater willingness to adopt permanence of abode.¹ Almost in the heart of the Concho range we find the Julimes, a small tribe classified linguistically with the Tepehuanes. I may be permitted here to call attention to the possibility of the Julimes having been properly but Jumanos, and of stating that my reasons for this suggestion are found in comparisons of the Reports on the Missions of the "Junta de

scribe the whole of it here, and I simply refer the reader to the work, pointing out to him, however, that of the many and often interesting statements we are never told to which particular tribe they refer.

The constant hostilities of the Tobosos were, for more than a century, the greatest obstacle to the colonization of Chihuahua, and they seriously impeded communication between Parral and New Mexico. The authors of the past century designate them as the scourge of northern Mexico. Says Fray Isidro Felis de Espinosa, Chrónica Apostólica y Seráphica de los Colegios de Propaganda Fide de Oueretaro (1746, lib. v. p. 481): "Como son los Indios Tobosos, apostatas de nuestra Santa Fe, y azote de las Provincias de la Nueva Vizcaya y de Coahuila." And the same author uses almost the identical words in the Peregrino Septentrional Atlante (Biography of Fr. Antonio Margil de Jesus, 1737, p. 271). It was only after more than a century of frequently unsuccessful warfare - very similar to that which the United States troops have had to carry on against the Apaches, although numbers were, on the part of the Spaniards, much inferior to those of the American troops employed in the Southwest, and there was much less disparity in armament between the Spaniards and the Tobosos than between the Americans and the Apaches fifteen years ago - that the Tobosos were finally exterminated and the Apaches took their place as the curse of the unfortunate provinces. In 1748 the Tobosos, according to Villa-Señor y Sanchez (Theatro Americano, vol. ii. lib. v. cap. xi. p. 297), were reduced to not over one hundred families. Together with another tribe from Coahuila, the Gavilanes, they were still committing depredations. The Gavilanes decorated their faces with a blue line on the forehead.

It is not unreasonable to suppose that the few remaining Tobosos, if any, joined the Apaches, when the latter began to infest Chihuahua. But this would be no proof of the assumption by Orozco y Berra, that the language of the Tobosos belonged to Apache or Tinne stock. See *Geografía de Lenguas*, pp. 309, 325, 327. It is perfectly true, as the author just quoted says, that the Tobosos prepared the road for the Apaches in central and southern Chihuahua, in Coahuila, and in neighboring States; but while it is not at all impossible that they were a kindred tribe, there is as yet, to my knowledge, no evidence to that effect.

¹ Compare Arlegui, *Chrónica*, p. 308, on the labors of Fray Alonzo de Oliva among the Conchos.

los Rios," which date back as far as 1683.¹ The Julimes are said to be extinct, and there is no doubt as to their having disappeared as an autonomous tribe. Whether every trace of their idiom is really lost, is yet to be ascertained.

In 1725, a list is given of the tribes of Chihuahua, which counts up as many as twenty-seven.² Some of these (as the catalogue includes all the Indians of New Biscay in general), lived outside of the limits of the present Mexican state, and others are evidently but the names of different bands or clans of one and the same tribe.³ While it is possible, therefore, that I may omit one or more small tribes in my enumeration, it is quite as likely that future researches will connect some of those which, in the present state of knowledge, I am compelled still to treat as independent groups.

Among the tribes of northern and northeastern Chihuahua, most of which have ceased to exist politically, if the term may be employed in designating societies of the Indian kind,

¹ I have already alluded to the contradictory reports about the Indians of the "Junta de los Rios," dating from 1683 to 1686. Thus, Dominguez Mendoza, in his Diario (fol. 5), calls them "Jente de la nasion Julimes jente politica en la lengua mexicana y que todos siembran mais y trigo y otras semillas." Also Felipe Romero (Carta, p. 1), "á este puesto de Xulimes." But Fray Nicolas Lopez, Memorial, calls them Jumanos. So, on the other hand, Fray Silvestre Velez de Escalente, Carta al Padre Fray Agustin Morfi (April 2, 1778, paragraph 7), says : "Llegaron à la junta de los dos rios Norte y Conchos, predicaron à los indios que allí estaban, que eran de las tres naciones, Conchos, Julimes y Chocolomes." The documents of 1715 do not mention the Jumanos as living there. It may be that, as Sabeata, the Jumano Indian who guided Dominguez, considered the people at the Junta as his own, and as Espejo had, in 1582, met the Jumanos at that very place, that the Julimes were in fact but a branch of the Jumanos. I give this as a mere suggestion. In a witchcraft trial of 1732, (Causa Criminal contra unos Yndios del Pueblo de Santa-Ana denunciados por Echiseros, MS. in my possession,) there appears a Jumano Indian from El Paso, but whose relatives lived at Julimes. Orozco y Berra (Geografía, p. 326) classifies the Julime with the Tepehuan, without giving any authority for so doing.

² Rivera, Diario y Derrotero, p. 22.

³ Surnames given to clans or to bands have often appeared as tribal names, e. g. those of the various fractions of the Apaches.

are the Mansos, the Piros, and the Tiguas. All three reside at or near El Paso del Norte, the Tiguas even on the Texan side of the river, but none of them were original Chihuahueños.¹ The Mansos were transplanted to the south in the middle of the seventeenth century,² the others in 1680 and 1681.³ Therefore they belong to New Mexico, which was their original home. It is different with the lost tribes called Sumas, Janos, and Jocomes.

The Janos became known to the Spaniards as early as the beginning of the seventeenth century, if not earlier, and it is likely that the Jocomes were equally well known about the same time, since they were near neighbors of the Janos, and their allies and confederates in every subsequent enterprise against other Indians, as well as against the Spaniards.⁴ Considerable interest attaches itself to these lost tribes, since they were found occupying the vicinity of the large

¹ Not even the Mansos. Juan de Oñate met them, or some of them, in or near the Pass (Paso del Norte), on the 3d of May, 1598. *Discurso de las Jornadas que hizo el Campo de su Magestad desde la Nueva España á la Provincia de la Nueva México (Doc. de Indias*, vol. xvi. p. 243). But these were only men : " Y vinieron al Real quarenta de los dichos indios, arco turquesco, cabelleras cortadas como porrillas de milan, copetes hechos ó con sangre ó con color para atesar el cabello: sus primeras palabras fueron Manxo, Manxo, Micos, Micos, por decir mansos y amigos."

² In 1659 the mission of El Paso del Norte was founded. Fray Garcia de San Francisco, *Auto de Fundacion de la Mision de Nuestra Señora de Guadalupe de los Mansos del Paso del Norte*, Dec. 8, 1659 (MS. copy from the *Libro primero de Casamientos* of El Paso del Norte, fol. 74, 75): "Y aver bajado, no con pocos trabajos, al passo del Rio del Norte, de la banda de N³ España; que es el medio de la cuztta y prouya del N⁹ México y en dho citio auer congregado las mas de las Rancherías de los gentiles Mansos."

⁸ Upon his retreat from Santa Fé, Ant. de Otermin gathered many Indians of Isleta, Alamillo, and Socorro, Tiguas as well as Piros, and carried them to El Paso, where they were afterwards settled in the pueblos of Senecu and Socorro del Sur (both Piros), and Isleta del Sur (Tiguas). Compare on the subject *Salida de Otermin para el Paso del Norte* (MS. 1680, copy). The facts need no proof, they are too well established.

 4 The earliest mention I can find of the Janos, as a tribe, dates from the first half of the seventeenth century.

86

ruins called Casas Grandes. The most numerous and most extended of them were the Sumas, of which by the way, the last survivor still dwelt at El Paso del Norte in 1883. With his death, so my informant, a Manso Indian, pertinently remarked, the Sumas would die out completely, since, said he, "There are no women left to perpetuate the tribe." This simple statement conveys the valuable information that among the Sumas also descent was in the female line.

Geographically, the Sumas appear to have been divided into two branches, one part of them hovering about the environs of El Paso, the other in possession of the fertile valley in which the ruins of Casas Grandes are situated. Of the first, we only know that they appear to have lived in very frail abodes, to have been hostile to the whites for a long time at least, that their dress was very scant, and their weapons the customary ones of all southwestern aborigines. Of their creed, their superstitious practices and medicine, and their religious organization, nothing as yet has become known beyond the fact that the peculiar office or dignity termed erroneously "Cacique" to-day existed among them, that they had at least three principal shamans or leading "medicine-men," and that they celebrated dances of a religious nature, which often had a sensual and even obscene character.¹ These northern Sumas appear not to have been

¹ That the Sumas lived about the Pass of the North at a very early date is certain. They are mentioned as forming a part of the first mission there, under the name of Zumanas, by Fray Garcia de San Francisco, *Auto de Fundacion*, 1659: "Por aver ido, á dha custta los Capitanes y ancianos de la gentilidad, de los indios Mansos y Zumanas, á suplicarme; les bajase á predicar el SS evang^o de nro Sr. Jesuxpto." At a still earlier date, in 1630, the Sumas are mentioned by Benavides, *Memorial*, p. 7. Vetancurt, *Crónica de la Provincia del Santo Evangelio de México* (edition of 1871, p. 308), speaks of the Zumas and Zumanas as living somewhat below the Paso. Of their original numbers I have no idea. They became very turbulent after the uprising of 1680. As early as 1681 there were signs of trouble. *Autos que se ysieron sobre clamar los Vesinos de este Reino para Salir á Mejorarse de Puesto*, 1681 (MS.

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numerous, and their style of living, even during the past century, whenever they could return to their pristine condi-

copy, fol. 1): "Y mas abiendo corrido vnas vozes de que á ymitacion de los del Nueuo Mexo, an tratado de perder la obediencia á su RI mag." This occurred at the instigation of Pueblo Indians from New Mexico, who had accompanied Otermin to El Paso. Autos Criminales contra Juan Paititi, Indio, 1682, (MS. copy). Causa contra Juan Cucala, same year (MS. copy). Interrogatorios de Indios hechos en el Pueblo del Paso del Norte, 1681 (MS. copy). Confesion y Declaracion de un Yndio de Nacion Pecuri que dijó llamarse Juan, 1683 (MS. copy). They finally broke out in 1684, (Causa Criminal por Denunciacion de Andres Jopeta contra Nuebe Yndios, etc., 1684, MS. copy,) and dragged the Mansos into the fray, (Causa Criminal que se á seguido contra los Yndios Xptianos Manssos, etc., 1684, MS. copy,) and compelled the Governor Domingo Jironza Petriz de Cruzate to march against them, and against the Janos, their confederates : Lista y Muestra dela Jente de Gua que por Orden del Capn Dn Domingo Xironza Petriz de Cruzate va á aser Castigo y Justa Gua alos Yndios Xptianos Apóstatas Janos Sumas y demas Nasiones, Sept. 6, 1684 (MS. copy). They were definitively reduced in 1686 : Escalante, Carta, 1778, par. 7. Several settlements of Sumas were formed by the Spaniards around El Paso at various times, but only one remained, San Lorenzo del Real. In 1744 it had fifty Indian families, in 1765 only twenty-one. Fray Agustin Morfi, Descripcion Geográfica del Nuevo México, 1782 (MS. copy, fol. 114). From a document of the latter part of the past century, the exact date of which I am unable to ascertain, although a copy of its text is in my hands, I gather that the population had at an early date decreased to one hundred and eighty-nine. Estado de la Mision de San Lorenzo el Real Pueblo de Zumas (MS.). Current tradition among the Mansos of El Paso attributes their decline to the small-pox. It is certain that between 1693 and 1709 severe epidemics prevailed among the Indians at the Paso. Libro Tersero de Difuntos. El Paso del Norte (MS.).

In regard to the customs of the Sumas of the Rio Grande, little is positively known. That they originally lived almost like nomads is certain. The document above cited, *Estado de la Mision de San Lorenzo*, contains some information on their condition at that place. Among the one hundred and eighty-nine individuals of all ages and sexes, there were still twelve who never had embraced Christianity. Even among those who had been baptized, there were three acknowledged sorcerers: "Obseruan su especie de religion, vsan de infinitas supersticiones y abusos como pudieran en la gentilidad. Los principales agoreros de los christianos son tres, llamados Santiago Chicama, Antonio Colina y Felipillo. Á estos juntamente con todos los gentiles seria conuenientísimo separarlos del pueblo," etc. The Cacique had recently died. Among the many bad habits charged to the Sumas, in general terms, the use of the Peyote is specially mentioned. This herb has a very bad reputation in the southwest among Indians and Spaniards. Says the document before quoted: "Es gente mui viciosa dada á la embriaguez, y no es la peor la del vino y aguardiente si la de tion, was little, if any, better than that of the Apaches.¹ Of their language it may yet be possible to save some fragments, by searching at El Paso del Norte, where, as I have stated, the "last of the Sumas" may still be alive.

As early as 1645, an author of high importance for the history and ethnology of Sonora speaks of the "Sunas" as living in the northwestern part of the present territory of Chihuahua.² Fifteen or twenty years later began the conversion of the "Yumas," who occupied the valley of Casas Grandes.³ There is no doubt that these Yumas were but

la yerua que llaman Peiote esta los trasporta de modo que los vuelve furiosos. Es entre ellos yerva misteriosa y la vsan en sus juntas de religion, que por lo comun acaban en las mayores impurezas y obcenidades. Á estas juntas se congregan de noche y con escasa luz. Se inciensan por todos los de los demas, y aquellos explican los principales dogmas de su religion y acaban como dexo dicho." Touching the office of the Cacique the document says: "Pues este tiene entre ellos una especie da soberanía que todo quanto manda se ejecuta sin repugnancia; á este solo obedecen, prefiriendo su dictámen en qualquier asunto al de qualquier Justicia, y Ministros, y aun el Gobernadorcillo que de ellos se les nombra por el Juez Real, está subordinado en vn todo al Cazique." It is easy to recognize, for any one who knows the religious organization of the New Mexican Pueblos, the same office of chief oracle combined with the duty of chief penitent, which the so-called Cacique of the Pueblos fills to this day.

In the documents forming the acts of the prosecution against the Mansos Indians when the latter, induced by the Sumas, rose against the Spaniards in 1684, there is a mention of a ceremony performed by the Sumas, *Declaracion de Juan del Espiritu Santo* (fol. 21): "Y llebándole de buelta á la Rancheria, les hallo á todos Juntos en Rueda, y con un cuchillo clauado en medio de ella en el suelo." This ceremony appears to have been connected with their customs of war. Among the Pueblos I never heard of a similar practice, but it is said that the Apaches have some performance of that kind.

¹ Estado de la Mision de San Lorenzo el Real: "Aspiran siempre á la independencia, lo que comprueba el modo de vida que observan, semejante al de los Apaches."

² Ribas, *Historia de los Trivmphos* (lib. vi. cap. i. p. 359): "La Nacion de los Batucos, caminando al Norte, tiene tambien por confinantes muchas Naciones de Gentiles amigos Cumupas, Buasdabas, Bapispes; y declinando al Oriente, á los Sunas." The location could not be more definite.

⁸ Arlegui, *Chrónica de Zacatécas*, (p. 105.) says that the mission of San Antonio de Casas Grandes was founded in 1640. This appears to be erroneous. In the



the Sumas, and that the word is a misprint. Different from their brethren who roamed near the Rio Grande, the Sumas of Casas Grandes are described as a docile, even as a sedate stock, whom it became easy to accustom to culture of the soil after the methods in vogue among the Spaniards of the seventeenth century.¹ How far they had been agricultural already, it is impossible to determine. Still, it seems as if there had been more stable settlements of theirs around the important ruins appropriately called "the Great Houses."

> third volume of the fourth series of Documentos para la Historia de Méjico, there are a number of documents concerning the establishment of the missions of Casas Grandes, Torreon, and Carretas. In the Patente, dated October 11, 1666, (p. 238,) it is stated: "Certifico y doy fé como el señor maese de campo D. Francisco de Gorraez Beaumont, caballero de la Orden de Calatrava, gobernador y capitan general de este reino de la Nueva Vizcaya que fue habiendo certidumbre y clara noticia de que los indios barbaros que asisten en el Distrito de Casas Grandes distancia de este real del Parral mas de cien leguas, pedian el santo Evangelio y ser instruidos y catequizados en los misterios de nuestra santa fé católica, condescendiendo á sus piadosos ruegos y llevado del celo cristiano que le acompaña, envio al dicho puesto con licencia de sus prelados al padre Fray Andres Perez, religioso de esta provincia, aviándolo de todo lo necesario para el efecto mencionado, el cual se ha ejercitado mas de dos años en catequizar, bautizar y casar mucha cantidad de indios, formar poblacion." This places the beginning of the missions at about 1664. The principal missionary of Casas Grandes was however Fray Pedro de Aparicio: Patente, Ibid.; Andres Lopez de Gracia, Carta al Gobernador Antonio Oca Sarmiento (Ibid., p. 242). He died soon. Andres Lopez, Carta al Padre Provincial Valdes (Ibid., p. 245); Informe al Virrey Marques de Mancera, October 23, 1667, (p. 232). Francisco de Gorraez Beaumont, Informe al Virrey (p. 233): "Al segundo año de mi gobierno en aquellas provincias, haciéndome capaz de ellas, tuve noticia como en esta paraje citado de las Casas Grandes y otro llamado el Torreon y las Carretas y su circunferencia habia muchos indios llamados Yumas y otras naciones." That the Yumas and the Sumas were one and the same tribe can hardly be doubted. Aside from the fact that it was generally admitted in the latter half of the seventeenth century that the Sumas were the inhabitants of the Casas Grandes valley, there is the testimony of various documents to the effect. The Yumas are nowhere spoken of, and the word appears to be simply a misprint.

¹ This is shown by the kind reception given by them to Fray Andres Perez, to Fray Pedro de Aparicio, and to Fray Nicolas de Hidalgo. See the documents above quoted.

But I have not been fortunate enough to find any vestige of authentic Suma tradition concerning those ruins themselves. It is likely, from reasons that will be stated further on, that Casas Grandes were built by another stock; it is certain that, when first heard of by the Spaniards and missionaries, Casas Grandes was already a cluster of stately ruins.¹

The fate of the Sumas of northwestern Chihuahua is so intimately connected with the history of the Apaches and of their devastations, that I prefer to turn to it again when I shall treat of that much dreaded tribe. But I cannot overlook here the very positive statements of the Opatas of eastern Sonora, that the people living at Casas Grandes were always their bitter enemies, and that the villages in the Sierra Madre like Batesopa, Baquigopa, Quitamac, and others, owe their destruction to incursions of these foes, — raids made long ere the white man entered the valleys of the Upper Yaqui.

Concerning two tribes who were immediate neighbors of the Sumas, and often their allies, not much more than the name and their manner of disappearance is as yet known. These were the Janos and the Jocomes, both ranging to the north of Casas Grandes and as far west as the present village of Fronteras in Sonora,² who vanished within the grasp of

¹ Franc. de Gorraez Beaumont, *Informe*, p. 234: "Por haber tenido noticia que en este puesto de Casas Grandes era panino de minería y segun tradicion antigua, y ruinas que se veian que decian ser del tiempo de Moctezuma." The Casas Grandes are spoken of as ruins in all the documents relating to the place.

² The headquarters, so to say, of the Janos were Janos and Carretas. There two missions were established. Both, however, were soon abandoned, owing to the incursions of the Apaches, and their forming a league or alliance with the Janos, Jocomes, and some Sumas. This league was, according to Alegre, *Historia de la Compañía de Jesus*, (vol. iii. p. 53.) at Casas Grandes, in October or November, 1684. The originator of the conspiracy is said to have been an Opata Indian of Sonora, and it included, in addition to the Conchos, Tobosos, and Opatas, "los sumas ó yumas, á los janos, á los chinanas," etc. The

the Apaches, and were absorbed by the latter. The names of these tribes are frequently mentioned in the early reports and registers of the Jesuit missionaries of Sonora; they are always characterized as so many fiends who harassed and hampered the docile village Indians of Opata stock.¹ And yet, at the same time, while they were the greatest impediments to progress of the Jesuit missions, the Janos and Jocomes had submitted willingly to the control of the Franciscans. Such a strange condition could not last; the Spaniards, especially the clergy, could not allow the converts of one order to remain persecutors of the other and of their neophytes. When the great insurrection initiated in New Mexico began to spread southwards through the Apaches, it found the Janos and their allies willing to join in it. Their incursions soon extended as far as southern Arizona, but this course of action was the doom of the tribe, which before long disappeared among those who had led them into the new career of rapine. A few remnants of it were still left around Janos in the first half of the past century; but now the name of the tribe is extinct.

I have designated these Indians by such names as the Spanish authors have applied to them, but it is by no means certain that such designations are genuine. It is not improbable that the words Janos, Jocomes, etc., were derived from some other Indian idiom, and were given to them by

Jocomes were of course included. These lived west of the Janos, partly in Sonora, near Corodéhuachi or Fronteras, partly in Chihuahua. Of the language, manners, and customs of either tribe nothing is known. The assertion of Orozco y Berra (*Geografía*, pp. 325, 386), that their idioms were "de filiacion apache," may ultimately prove true, but he fails to give any evidence of it.

¹ These depredations are so well known, that it is useless to adduce proof. As early as 1655, the church books of Bacadéhuachi in Sonora report the O-pa-ua (enemies) as killing the inhabitants of caves in the Sierra Madre. In the past century, the Janos and Jocomes are yet mentioned frequently. *Difuntos de este Real de Opoto*, 1677 to 1743 (MS.).

foreign tribes, or that the names are the product of misunderstandings or misapplications. Whether traces may yet be found of the language spoken by the lost clusters of northwestern Chihuahua, that of the Sumas excepted, is in my estimation doubtful. It may be, that among the Apaches traces of the Janos idiom still linger, and the statement of Orozco y Berra — which makes of that language, as well as of the Toboso, a branch of the Apache — may yet prove correct. No vocabulary of it has been discovered, but this is no proof that none ever existed.

The main aboriginal groups of Chihuahua, and those who are best known to-day, are thus the village Indians of the mountain regions, the Tepehuanes, and especially the Tarahumares. The Conchos are extinct as a tribe, the Tobosos were destroyed. The Jumanos were not of such importance in Chihuahua as they were in New Mexico, and they also lost, so to say, their individuality in the whirlpool constituted by the Apache tribe. It is to the Tepehuanes and Tarahumares that I must devote more attention now.

The former are properly Indians of Durango,¹ and only their most northern spurs extended into Chihuahua. They inhabited that celebrated mining region of the Southwest where San Jose del Parral now stands.² They were village Indians, they cultivated all the nutritive plants common to the American native before the coming of wheat, barley, the potato, fruit-trees, etc., and other vegetables imported from the eastern continent or from the southern half of America. Cotton appears also to have been raised by them; they wore cotton mantles and used the fibre of the yucca for making garments also. Their abodes were of wood, of

¹ Orozco y Berra, Carta Etnográfica.

² The ethnographic map just cited includes Parral within the range of the Tarahumares, but I still suspect that the Tepehuanes formerly reached into that neighborhood.

branches, and sometimes of stones and of mud. The villages or rather hamlets (*rancherias*) commonly occupied the banks of streams.¹ Their country being mountainous, they clustered together in valleys and sheltered nooks, where it was easy to raise some limited crops, and where at the same time protection from enemies was relatively easy to secure. For the Tepehuanes bordered upon tribes whom, through their own ferocity, they had turned into hereditary enemies.

All authorities agree in describing the Tepehuanes as a group not only warlike, but decidedly ferocious, — as a scourge to all who lived within reach of their grasp. The Acaxees of Durango, and the Tarahumares of Chihuahua were in mortal dread of them.² The object of the Tepehuanes in

¹ The oldest description of the Tepehuanes at my command dates back to the year 1596. It is contained in the Documents for the History of Mexico, and bears the title, Del Anua del Año de 1596. It says of them : "Los tepehuanes hacen grande ventaja á los de la Laguna para recibir la fé, así por ser de naturaleza mas blandos y llegados á razon como por tener algun rastro de politica humana de que carecen todos los de la Laguna. Andan vestidos de lana y algodon; tienen cosechas de maiz; habitan de asiento en sus casillas o chozas, crian con amor y cuidado a sus hijos." But the most complete description has been left by Ribas (Hist. de los Trivmphos, lib. x. cap. i. p. 574) : "El sustento era el general de los Indios, maiz con otras semillas propias suyas que sembrauan, por ser casi todos labradores, aunque no de grandes sementeras; y á falta dellas se valian de los otros frutos siluestres de que vsan otras Naciones. De la caça, y otros animales, y aues tambien se valian, de que ay abundancia en sus tierras. El vestido es el que se ha dicho de otras Naciones serranas, vsando muchos dellos de mantas de algodon, que sembrauan, y pita que se da en sus montes; y de las mismas hazian á su modo faldellines las mugeres. De la planta de Mescal, y otros frutos siluestres, hazian vino y celebrauā sus embriaguezes frequentemente, que estas en todas estas gentes las tenia introducidas el demonio. . . . Las casas eran ó de madera y palos de monte, ó de piedra y barro : y sus poblaciones vnas rancherías, á modo de cafilas, cerca de aguajes arroyos, y rios, que no les faltauan, y el principal era el de Santiago Papazquiaro, su principal pueblo." Arlegui (Chrónica, p. 187) says : "La qual se estiende desde la Sierra del Mezquital hasta el Parral, en que habitaba toda la Sierra multitud de Indios en Pueblos muy bien formados hasta adelante de Topia, y muy cerca de caponeta."

² The relations between the Tepehuanes and their neighbors are thus described by Ribas, *Historia*, p. 574: "El natural de los Tepeguanes, de suyo fue these constant hostilities was the killing of the men in order to secure their heads, and the carrying of women and female children into slavery. The Tarahumares were specially afraid of them, for their settlements were more particularly menaced by the Tepehuanes. It took the Jesuits a long time, and it cost them many martyrs, ere they succeeded finally in restoring peace between the tribes, and accustoming the ferocious Tepehuanes to cease preying upon their neighbors.

The Tepehuanes more properly belong to the State of Durango, and should be referred to the Indians of that section. I may be permitted to screen myself behind this geographical accident in order to escape the duty of entering at any length upon the question of their creed and beliefs. The information which we as yet possess on this topic is not as detailed and positive as might be desirable. Still, it is not devoid of importance.

It appears from the reports of early Jesuit missionaries, that they succeeded in obtaining, and destroying, according to custom, a great number of large and small idols which were held in veneration by the Tepehuanes. The majority of these were of stone, and had at least human faces, if not the entire human form. They were real fetiches, to

siempre mal sujeto, brioso, y guerrero, y que se preciaua de leuantar cabeça, y sujetar, y hazerse temer de Naciones vezinas, en particular de la Acaxee de la Taraumara, y de otras; á las quales tenian tan acobardadas, y ellos á ellas tan superiores, que sucedia entrar en vna poblacion de las dichas poco número de Tepeguanes, y sin atreuerse á hazerles resistencia, sacar della las mugeres, y donzellas que les parecia, y lleuarselas á sus tierras, y apreuecharse tiranicamente dellas." Still they sometimes confederated with fractions of a neighboring tribe against the other branches of that tribe. So it happened with the Tarahumares, and this was the origin of the establishment of missions among the latter. Ibid., p. 592: "Porque leuantándose vn alboroto de guerra entre estas dos Naciones, los Tepeguanes vezinos a los Taraumares, y que poblauan en el valle del Aguila, embiaron á pedir socorro de gente á los demas pueblos Tepeguanes," etc. But Alegre (*Historia de la Compañía*, vol. ii. p. 6) represents the case differently. He says that the Tepehuanes of the Valle del Aguila had confederated with some Tarahumares.

which the Indian applied for the most varied purposes, as in case of disease, failure of rain and of crops, in war, etc.¹ While, of course the medicine-men had the most important idols in charge, every Indian family harbored and revered its

¹ I proceed chronologically as far as possible. The oldest mention of the idols of the Tepehuanes that I can find is that of the Jesuit P. Juan Fonte, given by Alegre, Historia, vol. i. p. 452 : "Semejante fue el número de bautismos en la mision de Tepehuanes. . . . Estos gentiles (dice el padre Juan Fonte en la relacion que hace al padre provincial), guardan la ley natural con grande exactitud. El hurto, la mentira, la deshonestidad está muy lejos de ellos. La mas ligera falta de recato ó muestra de liviandad en las mugeres, sera bastante para que abandone su marido á las casadas y para jamas casarse las doncellas. La embriaguez no es tan comun en estas gentes como en otros mas ladinos, no se ha encontrado entre ellos culto de algun dios; y aunque conservan de sus antepasados algunos ídolos, mas es por curiosidad ó por capricho que por motivo de religion. El mas famoso de estos ídolos era uno á quien llamaban Ubamari, y habia dado el nombre á la principal de sus poblaciones. Era una piedra de cinco palmos de alto, la cabeza humana, el resto como una columna, situada en lo mas alto de su montesillo sobre que estaba fundado el pueblo. Ofrecianle los antiguos flechas, ollas de barro, huesos de animales, flores y frutas." The instances of idols among the Tepehuanes being described by early witnesses are not unfrequent. Thus Ribas (Hist. de los Trivmphos, p. 582) speaks of an idol that was, after many fruitless endeavors, at last delivered up: "Sacó de su casa y choza al ídolo y á escusas de los demas, embuelto y cubierto, lo truxó, y se lo entregó al Padre; auisando á los circumstantes, q saliessen fuera, sino querian caer allí muertos." When the idol was at last uncovered, "y hallaron que tenia por encima tres, ó quatro telas muy sutiles, que jusgaron ser membranos de sesos de cabeças humanas. Estas cubrian vna piedra rolliza, como de jaspe, y poco mayor que vna mançana." Such fetiches of rolled pebbles are common among the New Mexican Pueblos to-day. Ibid., p. 598. An Indian who had been Christianized turned to idolatry again: "Este apóstata de la Fé, y trayendo consigo vn Ídolo, por medio del qual se entendia con el demonio, y era como su oráculo." For further details, I refer to Anua del Año de 1596, p. 24. In the same volume and under the heading of Del Anua del Año de 1598, p. 47, is the following paragraph: "En viendo algun remolino causado de viento solian todos los que lo veian tirarse á tierra de espanto, diciéndose unos á otros Cachiripa! Cachiripa! que así llaman al demonio; y preguntando que ? por que hacen esto ? Decian que porque no se muriesen, que iba alli el demonio." The whirlwind is one of the most common symbolical figures on ancient pottery in the Southwest. For the rest of the superstitions and idolatries of the Tepehuanes, I again refer to Arlegui, Chronica, Tercera Parte, cap. iii., to the end of the third part. It would be superfluous to quote in detail.

own, and the general features of their worship are in strict accordance with the celestial or supernatural democracy peculiar to all Indian mythologies. There existed no belief in one really supreme god. Locally or occasionally, one or the other of the idols appeared endowed with certain advantages over all others. As the necessity of the case dictated, such or such a fetich was applied to in preference to all others. As was the case with the Navajos, the Olympus of the Tepehuanes reflected their own social and governmental organization. Split into a number of autonomous villages, each at liberty to fight for or against its neighbors, the tribe formed no political unit. So the mythology did not give rise to any hierarchy; the multiplicity of fetiches was evidently systematized, but after the basis of their efficiency and not from the standpoint of tradition or chronological creation.¹

Sorcery and witchcraft of course played an important part in the life, public as well as private, of the Tepehuanes.² The prevalence of rites of this description is a sure sign of the existence among the Tepehuanes of esoteric societies. That clans existed among them, there can be no doubt either. These features describe sufficiently the standard of culture reached by the tribe; they place it on a level with the Yaquis,

¹ The reference to the Navajos is based upon the excellent pamphlet of my friend Dr. Mathews on the Navajo Mythology.

² Ribas, *Hist. de los Triumphos*, p. 574: "En todo lo demas de costumbres gentilicas, principalmente de hechizeros, introduxó el enemigo infernal en esta Nacion, lo que en las otras; y aun desta se auia enseñoreado tāto mas, quāto la hallo mas conforme en su natural, á la fiereza y crueldad de que se vistió esse enemigo, luego que cayó del cielo, para perseguir a los hombres." This accusation of witcheraft, fulminated against the Indians, is often taken with a smile of disdain by such as do not know the real nature of the aborigines. But it is certain that, for the Indian, there is nothing more dreadful than sorcery. He believes in it, he lives partly through it, and he punishes it in secret as severely as possible. The mention of sorcerers among Indians, on the part of early missionaries, should therefore never be taken lightly. On the contrary, it reveals a condition which is characteristic of Indian society.

Mayos, and others of Sonora, with whom they were, besides, linguistically connected.

The same may be said of the Tarahumares. They stood on the same level as their neighbors and enemies, had analogous habits and customs, their language was fundamentally related to the others, and they bowed to the same species of worship.¹ But the Tarahumares, owing to the nature of the country which they inhabited and to the constant danger to which they were exposed, were in many places cave-dwellers. They lived in natural cavities, as well as in open-air dwellings of mud, stone, or wood. These caves they partitioned to suit their convenience ; whole families, even small villages, occupying such troglodytan recesses.² If the verbal information imparted to me lately is correct, the Tarahumares are, at

¹ Wherever there appears a religious organization indicated by systematized sorcery, gentilism always prevails. Another sign of gentilism is the absence of family names. Both are clearly defined among the Tepehuanes.

² Ribas, Historia, p. 594 : "La morada de mucha gente es de cueuas (q ay muchas en su tierra) y algunas tan capazes, que en vna viue vna paretela, haziendo sus diuisiones de casillas dentro. Vsan el vestido de sus mantas de pita, q sabe bien labrar las mugeres : son muy recatadas, y no vsan sentarse ni entremeterse con los hombres. En enterrar sus difuntos se diferencia de otras Naciones, en tener lugar señalado y apartado á modo de cementerios donde los entierran, poniendo con el difunto todo el ajuar de que vsaua, y comida para el viaje; y la casa donde auia muerto se quemaua, ó totalmente se desamparaua; y el luto de los parientes era cortarse el cabello. El natural de la gente es mas blando y docil que el de los Tepeguanes. El modo de recibirme era, que ántes de llegar á su pueblo, como dos leguas, tenian puestas atalayas, para que en descubriendome fuessen de carrera á auisar al pueblo donde toda la gente, hombres, y mugeres, con sus niños, se juntauan en hileras para el recibimiento, precediendo el Cacique con su lancilla, o chuzo, plumería, y otros adornos q ellos vsan." Ribas quotes this from a letter written by Father Juan Fonte, who visited the Tarahumares in 1608. Alegre, Historia, vol. ii. p. 6. The fact that the Tarahumares dwelt at least partly in caves cannot be doubted. Cave-dwelling, on the whole, seems to have been quite common in the mountains of Chihuahua, in those of Sonora bordering upon Chihuahua, and in Sinaloa. In the Libro de Entierros de la Mision de Bacadehuachi, 1655, (MS.,) it is mentioned that the Janos and Jocomes used to surprise and kill the people of the Sierra Madre in their cave dwellings. In many places of the Sierra, the

the present time, and in a few secluded localities, still the cave-dwellers of the American continent.

About the numbers of these different tribes at the time of their first contact with Europeans of Spanish blood, nothing absolutely trustworthy is known to me. There are very detailed counts by Jesuit missionaries, but these refer only to such as had embraced Christianity.¹ The manner in which

formation of rocks favors the existence of natural cavities, therefore ancient cave houses and whole cave pueblos are of common occurrence.

In regard to the creed and beliefs of the Tarahumares, little is reliably ascertained. We might judge from what is known of the 'Tepehuanes, who, in addition to being their near neighbors, spoke a kindred language. It is certain that witchcraft played an important part with them. Drunkenness was among them too. Compare, for instance, *Testimonio de Carta Escrita por los Padres Tomas de Guadalajara y José Farda*, February 2, 1676 (*Doc. para la Historia de Méjico*, 4th series, vol. iii. p. 283). In a general way, I also refer to Arlegui, *Chronica*, *ut supra*.

On the whole, the Tarahumares were a numerous, scattered, and quite docile tribe. At the instigations of the Tepehuanes, Tobosos, and of some of their own sorcerers or medicine-men, they rose upon the missionaries several times during the seventeenth century, and behaved with as much cruelty as any other Indians. Otherwise they were quiet, and tilled their plots of land, raising the usual kinds of crops.

¹ The oldest census of the Tarahumares, for instance, which is at my command, dates back to 1678. There are certainly older ones, and even this one embraces only such Indians as had become Christian. It is found in the Relacion de las Misiones, by P. Juan Ortiz Zapata, S. J. According to it, the number of persons administered by the Jesuits in the districts of western Chihuahua, almost exclusively Tarahumares, with but a few Tepehuanes and Conchos, was about 8,300. In addition to these, there are mentioned a number of heathens in the mountains, but their numbers were of course unascertainable. In 1570, the Cabildo Eclesiástico of Guadalajara reported to the king, Informe al Rey por el Cabildo Eclesiástico de Guadalajara, acerca de las Cosas de aquel Reino, January 20, 1570 (Ycazbalceta, Collection de Documentos, vol. ii. p. 503) : "Item : enviamos la copia autorizada de los indios, y por ella parece haber en este reino hasta veinte y cuatro mill y trecientos indios tributarios, que en uno de los medianos pueblos de Tlaxcala ó México hay mas indios que en todo este Reino." New Galicia, to which this statement applies, extended then over southern Chihuahua also, but only Santa Barbara and San Bartholomé, or the regions of Parral and Allende, were included in the report. The bulk of the numbers applies therefore to the southern Tepehuanes (those of Durango), and to other more meridional tribes. In speaking of the Jumanos in 1582, Espejo (Relathe Indians of Chihuahua have disappeared is varied, and the term "extermination" can hardly be applied to any. In regard to the sedentary stocks proper, civilization or assimilation to Spanish American habits has more than anything else contributed to destroy the *Indian*, without however obliterating the *man*. Through bringing the natives into Missions, and often congregating there representatives of different, even hostile stocks, a new population has been formed of land-tillers and herders that is still largely Indian without the organization of society that more than anything else distinguishes the Indian in his natural condition. To search among these for remains of their ancient culture and traditions will be the task of the practical ethnologist ; it is hardly doubtful that such researches will be richly rewarded.

The Apaches are also considered as belonging to the aboriginal inhabitants of Chihuahua. In point of fact, they did not penetrate so far south before the latter half of the seventeenth century. The career of this adventurous and dangerous tribe deserves separate treatment, and I shall devote to it a special section after I have spoken of the Indians of Arizona and New Mexico.

cion del Viage, p. 168) estimates their numbers at 10,000, but all through his report, those estimates, for reasons which I shall give further on, are greatly exaggerated, - sometimes even tenfold and more. In 1684, Juan Dominguez Mendoza (Diario, fol. 49) gathered at the Junta de los Rios "todos los gobernadores y Capitanes con mas de quinientos Yndios que unos y otros son de las Siete nasiones que tienen dada la obediencia a su magd." Of the Mansos, Vetancurt says (Chronica, p. 308): "Tiene [the mission of El Paso] mas de mil feligreses." In 1744, the various villages composing the jurisdiction of El Paso del Norte contained, in all, 360 families of Indians, and their number was on the decrease. Morfi, Descripcion Geográfica, fol. 114. The census of 1749 (Relacion de las Misiones del Nuevo México, MS. copy) gives for the same district 1,328 Indians of various tribes. In 1725, Rivera (Diario y Derrotero, p. 22) says of the Indians of New Biscay in general : "Y hauiéndose computado su número, se halla hauer de todas hedades y sexos cinquenta y vn mil novesiētos y diez; y todos estan administrados por Religiosos de Nro P. S. Frācisco, y de la Sagrada Compañía de Jesvs." This included Durango also.

INVESTIGATIONS IN THE SOUTHWEST.

Although the Arizonian natives became known fully to the Spaniards later than the Pueblos, I hold it to be in order to speak of them first. It is true that from the reports of Fray Marcos of Nizza and of Coronado's chroniclers, both treating of events which occurred between the years 1539 and 1542, some data may be gathered about the Arizonians; still, it is not until 1604 that an insight is obtained into the ethnography of the whole territory as constituted to-day.¹ Detailed statements concerning the tribes of central Arizona appear only after 1680, when the Jesuits extended their travels to the Gila and beyond, and for northern Arizona, where the Moquis had been well known for some time, we must look to the letters of Fray Francisco Garcés and Fray Silvestre Velez de Escalante for satisfactory information. Fray Marcos, Castañeda, and Jaramillo describe, without naming them, the Sobaypuris or Pimas of the valley of the Rio San Pedro, and they hint at the Apaches also. The former are represented as agricultural Indians living in villages scattered along the banks of the little stream. Among them Cibola-Zuñi was well known, and a certain commerce existed with the most westerly pueblos of New Mexico.²

¹ Through the expedition of Juan de Oñate to the mouth of the Colorado. Unfortunately, I have not the report of Fray Roque Figueredo on that important journey, but its lack is partly supplied by the manuscripts of Fray Gerónimo de Zárate-Salmeron and of Mateo Mange, to both of which I shall refer further on.

² Fray Marcos de Nizza, *Descubrimiento de las Siete Ciudades (Doc. de Indias*, vol. iii. p. 338): "Otro dia entre en el despoblado. . . Al cabo dellos, entre en un valle muy bien poblado de gente, donde en el primer pueblo salieron á mi muchos hombres y mugeres con comida; y todos traian muchas turquesas que les colgaban de las narices y de las orejas, y algunos traian colares turquesas." Ibid., p. 339: "Aquí habia tanta noticia de Cíbola, como en la Nueva España, de México y en el Perú, del Cuzco." That Fray Marcos was a truthful and reliable reporter I have established beyond a doubt, I believe, in *The Magazine of Western History (The Discovery of New Mexico by Fray Marcos of Nizza)*; and in the *Revue d'Ethnographie (La Decouverte du Nouveau Mexique par le Frère Marcos de Nice)*.

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To condense the material in a general sketch, we find that the ethnography of Arizona has not much changed since about the year 1600. The main changes which have taken place are due to the Apaches in the last half of the seventeenth century, and to the settling of the country since its annexation by the United States. The Apaches caused the Sobaypuris to give up their homes on the San Pedro and to merge into the Pápagos.¹ During the wars with the Apaches, the Tontos were either destroyed or absorbed by the former. Therefore the appellative of Tonto-Apaches. The last mentioned wars were waged only about thirty years ago, and their real cause is still wrapt in doubt.

In the beginning of the seventeenth century, we find that Arizona was inhabited in the south by tribes speaking the Pima language. The extreme southeast of the territory seems to have been desert, only a band of Apaches traversing it occasionally. Along the San Pedro valley, the Sobaypuris had their settlements, which extended as far north as within a short distance of the Rio Gila. West of them commenced the range of the Papap-Otam, or Pápagos, whom we have already met in northwestern Sonora, and who roamed over rather than resided in the southwestern corner of Arizona

¹ The Sobaypuris being in no way different from the Pimas, to whose linguistic stock they belonged, I do not refer here specially to their customs, etc. In regard to their fate, it is known that the Apaches compelled the abandonment of their settlements on the Rio San Pedro. Arricivita, *Crónica Seráfica y Apostólica del Colegio de Santa Cruz de Queretaro* (part ii. p. 410): "Vió las que habian sido habitadas por los Indios Sobaipures, que son parcialidad de los Pimas lastimosamente desiertas por la barbara persecució de los Apaches." The *Descripcion Geográfica de Sonora* (cap. vi. part ii.) fixes the date of the abandonment of the San Pedro valley in 1762: "Ya cansados de vivir en guerra continua, han abandonado el año de 1762 su ameno y fertil valle, retirandose unos á Santa Maria Soamca, otros á San Javier del Bac y Tucson, y otros al pueblo de visita de Guevavi llamado Sonoitac." The date seems correct. P. Manuel de Aguirre, *Carta al Teniente Coronel D. Juan de Pineda, Doc. para la Historia de México*, 4th series, vol. i. p. 125.

to within a short distance of the Gulf coast.¹ The country is so bleak, so destitute of attractions for village Indians, that no large population of any numbers could remain there for any length of time so long as general safety was not firmly established. An agricultural stock could prosper in those regions only with a great deal of patient toil. Therefore the scattered remains of more permanent villages, with artificial tanks, mounds of houses constructed of clayey marl and sometimes more than one story high, which are met with here and there throughout the Papagueria, are evidences of a period of relative quiet that has long since disappeared.

North of the Pápagos, and along the Gila River, between the Cañon of San Carlos and Yuma, the Pimas proper, or Aquira-Otam, dwelt in scattered hamlets, the houses of which combine to-day the mud roof of a typical New Mexican Pueblo with the temporary frame-work of frail branches characteristic of the roaming savage.² The frailty of these abodes seemed so apparent to the first missionaries who visited them, and at the same time so adapted to the intensely hot and arid climate, that their intricate construction, the sig-

¹ Caborca, for instance, was a Pápago mission.

² It would seem that the Sobaypuris dwelt in more substantial houses. See Christobal Martin Bernal, Eusebio Francisco Kino (Kuehne), and others (*Relacion del Estado de la Pimeria*, 1697, MS. copy): "Tienen muy buenas y fertiles tierras con sus acequias, son indios laboriosos en algunas partes, tienen principio de ganado mayor y menor, de sementeras y cosechas de trigo y maiz, y casas de adobe y terrado para los reverendos padres que piden y esperan recibir." This would indicate that the Sobaypuris, even if they did not dwell in such houses, at least knew how to construct them. Among the Gila Pimas the buildings erected for the missionary were, however, invariably "de Petates." *Relacion del Viaje al Rio Gila* (MS. copy). P. Jacob Sedelmair (*Relacion*, 1746, MS.). The term Rancheria, which is always applied to the settlement of the Gila Pimas, implies a group of frail constructions or huts. The roof of the Pima hut, although dome-shaped, is in material exactly similar to the ordinary mud roof of the New Mexican pueblos; in fact, it is only a convex one of the same kind, and also similar to the cost for the casa Grande ruin near by.

ARCHÆOLOGICAL INSTITUTE.

nificant touches of a more permanent style of architecture, escaped their notice, as well as that of observers of a later period who were better equipped than the devoted missionaries of two centuries ago, and who enjoyed the benefit of all the intervening growth in methods of research.

The Pimas lived then very much where they live now, and as they live to-day. They cultivated their little patches of indigenous plants, they irrigated to a moderate extent, using mountain torrents rather than the river. For this there was a good reason. The Gila, while at times a large stream, does not afford a regular supply. During some of the months when water is most needed, its level is often lowest. During the same period, showers descend upon the environing mountains daily, and their waters escape through gulches into the plain below. It was more advantageous for the Pimas to collect the torrents and guide them to their fields, than to dig long canals along the river bottoms, as their ancestors are said to have done at a time when they were yet undisturbed by prowling intruders.¹

Of the social condition of the Gila Pimas, of their organization, and of their beliefs and religious rites, nothing of importance can be gathered from older sources beyond the conviction that they were very much the same at that time as they are to-day. A close study of these people, after the manner in which Mr. Cushing has studied the Zuñis, appears

¹ The information on the condition of the Arizonian Pimas is meagre, and not sufficiently specialized. Nearly all the sources already quoted refer also to their agriculture and accompanying arts. That they irrigated is beyond a doubt. They raised cotton and dressed in cotton. As to the localities occupied by their rancherias, they extended from the western end of the San Carlos Cañon to beyond Gila Beno. In 1697 the number of rancherias was about six. *Relacion del Estado de la Pimeria*. In 1746 Father Sedelmair, *Relacion*, speaks of three rancherias about Casa Grande on the Gila. When the Franciscans took charge of the former Jesuit missions, the number of Pimas and Pápagos settled there at the missions was 3,011. Arricivita, *Crónica Seráfica*, p. 402.

therefore of much importance. There is more originality, in the sense of absence of contamination through European influence, among the Pimas of Arizona than among most other Indian stocks. This is easily accounted for. They became quickly reduced, that is, gathered to larger communities receiving a light coat of Christianity; but the abolition of the Jesuit missions followed so closely upon their reduction that the effects of these first missions were but transient. The Franciscans, the successors of the Jesuits, had to begin anew, and they had in addition to contend with an almost insurmountable obstacle, - one which in the exhausted condition of Spain was beyond hope, - the sudden expansion of the Apaches. The influence which it exercised was not detrimental through its devastations alone. It was the moral infection which did the greatest harm. Whenever an Indian tribe is persistently harassed by another, it tends to incline towards its tormentors, or at least to turn away from those who pretend to protect it. The Spanish administration in Mexico was unable to protect the missions, and the Pimas, who had been unsuccessfully rebellious once before, gradually became indifferent. At last, the missions were abandoned as useless, and the Pimas relapsed almost into their pristine state, with the exception of a few dim and mythologized recollections of the earliest teachings of the Christian faith among them.

I have been thus explicit in regard to the Gila Pimas only in order to show that what may yet be secured from their traditions and beliefs possesses intrinsic interest, and should be gathered as soon as possible. I have already alluded to some of these traditions in my Report of 1883.¹ What I have since heard through Mr. Cushing, gained from his long resi-

¹ Fifth Annual Report of the Executive Committee of the Archaelogical Institute of America, Appendix, p. 80. dence in the vicinity of the Pimas near Tempe, corroborates my former statements. The Pimas are still divided into clans; they have no central government, but among them the esoteric societies constitute a mutual tie that supplies the want of a central political nucleus. They form, so to say, an unconscious unity, through the bonds of language, of creed, and of ceremonial congruence.

While the Pimas occupied the specially arid portions of Arizona, another linguistic stock, the Yumas, extended along the great Colorado River of the west, and had penetrated inland as far as the Tonto Basin. From its issue from the terrible Cañons in northwestern Arizona to its mouth, the Colorado River was controlled by tribes speaking the language to which modern philology has applied the name of Yuma. The Spaniards knew all these tribes, they met them in the localities where they became known to subsequent explorers, and they describe them accurately in their original state. The Amacavas are the Mojaves of to-day. We find a plain mention of the Yavipais, and of the Huallapais. As we approach the mouth of the Gila, the Yumas are mentioned, originally under a different name, but the identity of the tribe is unmistakable. The Cocapas are even named as such by Juan de Oñate, in 1604.1 All these tribes held commercial relations with Zuñi; they were village Indians within the limits prescribed by the nature of the region; they lived

¹ Fray Gerónigo de Zárate-Salmeron, *Relaciones de todas las cosas que en el Nueuo México se han Uisto y Sabido assí por Mar como por Tierra, desde el Año de* 1538, hasta el de 1626 (MS. in the National Archives of Mexico): "Luego los Cocapas, son 9 pueblos, esta es la ultima que se vió, y llegó hasta lo ultimo donde se puede beuer el agua dulce que es cinco leugas de la Mar." Mateo Mange, Luz de Tierra Incógnita, en la América Septentrional ó Indias Orientales de la Nueva España, 1720, (MS., cap. xix. p. 237,) merely transcribes Fray Zarate's relation, who in turn evidently gathered his information from the report of Fray Francisco de Escobar, who accompanied Oñate, and who was then commissary of his order.

, 106

partly in large communal houses accommodating a number of families, and the autonomy of the various hamlets was carried to the extent of absolute independence. Of their rites, creeds, and beliefs we know very little, but what is told of them fosters the idea that the principles pervading all Indian creeds were also paramount among theirs.

For the ethnography of northwestern and western Arizona, the report on Juan de Oñate's journey from San Gabriel del Yunque on the Rio Grande opposite the pueblo of San Juan de los Caballeros to the mouth of the Colorado, in the years 1604 and 1605, is an excellent guide; but for the ethnology of the Lower Colorado, to about as far north as Long Bend, there are earlier sources of considerable value. I refer to the report of Hernando de Alarcon on his boat voyage up the great stream in 1540, and to the statements concerning the expeditions of Melchior Diaz and Garcia Lopez de Cardenas to the same river in the same year, the former crossing it above Fort Yuma, the latter visiting the plateau above the Grand Cañon, whence he looked down into the frightful chasms without being able to descend into them.¹

Alarcon certainly held intercourse with the Cocapas, the Yumas, and the Mojaves. Melchior Diaz met the two last mentioned tribes, and possibly some of the first. He calls attention to the large communal sheds, accommodating a number of families, which constituted the homes of the Lower Colorado Indians.² Alarcon obtained some dim no-

¹ There docs not seem to exist an original report on the trip made by Melchior Diaz. The information I have on it is, however, from a member of Coronado's expedition, Pedro de Castañeda, *Relation du Voyage de Cibola* (French translation of the Spanish original, in Ternaux-Compans's collection (vol. i. chap. x. and xvii.). There is also a short, but quite valuable, notice of it in Mota-Padilla, *Historia de la Nueva Galicia* (cap. xxxii. p. 158).

² The fact that Alarcon came up as high as Long Bend, that is, higher than the mouth of the Rio Gila, is doubted. But there is no reason to doubt the accuracy of his statement that he proceeded eighty-five leagues up the Colorado

tions of the faith and creed; and he ascertained that, far as was the distance to Zuñi-Cibola, that cluster of villages

of the West, counting from its mouth. Relation de la Navigation et de la Découverte faite par le Capitaine Fernando Alarcon (in Relation du Voyage de Cibola. Appendix, p. 347): "J'ai fait quatre-vingts cinq lieues en montant le fleuve." Herrera, Historia General, Dec. vi. lib. ix. It is alleged that Alarcon failed to notice the mouth of the Rio Gila, and that he must have seen and mentioned it in case he had gone higher up the Rio Colorado. But at the time of the year when Alarcon made his exploring expedition, (August, September, and the beginning of October,) the Gila is so low that it scarcely would attract attention from any one who, like Alarcon, was ascending the main stream in boats. As to the journey of Melchior Diaz, it is much more difficult to trace his course. There is no doubt however, that he crossed the Colorado River into southern California. His description of the large communal dwellings of the Colorado River Indians is in Castañeda, Voyage de Cibola (p. 49): "Après avoir fait environ cent cinquante lieues, il arriva dans une province dont les habitants, d'une taille prodigieuse, sont nus, et habitent de grandes cabanes de paille construites sous terre. On ne voyait que le toit de paille qui s'élevait au dessus du sol : l'entrée etait d'un coté et la sortie de l'autre. Plus de cent personnes, jeunes et vieilles, couchaient dans chaque cabane." More than two hundred years later this statement about the dwellings was confirmed by Father Sedelmair, S. J., Relacion, 1746 (MS.): "Sus rancherías, por grandes de gentío que sean, se reducen á una ó dos casas, con techo de terrado y zacate, armadas sobre muchos horcones por pilares con viguelos de unos á otros, y bajas, tan capaces que caben en cada una mas de cien personas, con tres divisiones, la primera una enramada del tamaño de la casa y baja para dormir en el verano, luego la segunda division como sala, y la tercera como alcoba, donde por el abrigo meten los viejos y viejas, muchachitos y muchachitas, escepto los pimas que viven entre ellos, que cada familia tiene su choza aparte." It seems, then, that this style of communal living was peculiar to Indians of the Yuma group. This division of the house into three compartments is still found among the Nahuatl Indians of Central Mexico. See Archaelogical Tour into Mexico, pp. 124, 129, 132.

In connection with the above confirmation, by authority of a later date, of the statements of Melchior Diaz, I may advert here to another point, also related by Diaz, or rather by Castañeda (*Cibola*, p. 49), which has given rise to the name "Rio del Tizon" (river of the firebrand), applied in older sources to the Colorado of the West. It relates to the custom of the Indians there of carrying a firebrand in order to keep themselves warm, whenever they undertook journeys during the cold season. "Quand ils voyagent pendant les grands froids, d'une main ils portent un tison qui leur sert pour réchauffer l'autre et tout le corps ; de temps en temps ils le changent de main. Cet usage a fait donner le nom de Rio del Tizon à une grande riviere qui arrose le pays." This custom is also reported as extant, in 1746, among the Cocomaricopas, by Sedelmair, *Relacion* : "Su frazada en tiempo de frio es un tizon encendido que aplicándole á la boca

was known to the Yumas and the Mojaves, and occasionally visited by them.¹ In 1583, Antonio de Espejo penetrated into northwestern Arizona from the Moqui pueblos, a distance of one hundred miles at least, and he is the first to mention the "Cruzados,"² a tribe which it is not very easy to identify, although, from the direction in which they were met, we might suppose them to have belonged to the Yavipais. In the report of Oñate's journey there is a list of the tribes which he encountered between the Moquis and the Colorado, as well as along that river to its mouth. From the Moquis to the Little Colorado, and even beyond the latter as far west as the vicinity of Prescott, the country appeared to be a desert. In the region where the present capital of Arizona has been located, probably a little to the west, the Cruzados were found; and the inference that these Indians were the Yavipais is thus confirmed.³ Here Oñate

del estómago caminan por las mañanas, y calentando ya el sol como á las ocho tiran los tizones, que por muchos que hayan tirado por los caminos, pueden ser guias de los caminantes; de suerte que todos estos rios pueden llamarse rios del Tizon, nombre que algunas mapas ponen á uno solo."

¹ Alarcon, *Relation da la Navigation et de la Découverte*, p. 309: "Je parvins, par signe, à apprendre que le soleil était ce qu'ils révèrent davantage." He speaks of this alleged sun-worship several times. In regard to intercourse with Zuñi, it is alluded to very distinctly and positively on pages 321, 325, 331, etc. Even the name or word Cevola seems to have been familiar to the natives on the upper course of the river.

² Relacion del Viage, p. 183. He marched to the west of Ahuatuyba (a now deserted Moqui village) forty-five leagues. "Hay algunos pueblos de indios serranos, los cuales nos salieron á recibir en algunas partes, con cruces pequeñas en las cabezas" The Indians told Espejo that "detras de aquellas serranías, que no podimos entender bien que tanto estaba de allí, corria un rio muy grande." This river must have been the Colorado.

⁸ Zárate-Salmeron (*Relaciones*, par. 46) indicates that the Cruzados lived in the vicinity of the Sierra de San Francisco, in northern Arizona. After crossing the Little Colorado River, Oñate struck "por las faldas de unas mui altas sierras donde los españoles sacaron mui buenas metales. . . . En esta sierra tienen sus moradas los Yndios Cruzados, son rancheados, las casas de paja, no siembran bastimento: sustentanse con la caza que matan, venados, y carneros heard of the Amacavas, or Mojaves, and he shortly afterwards found them on the Great Colorado.¹ Lower down were the Bahacecha, who spoke the same language, or very nearly the same, and who therefore were either a branch of the Mojaves, or else of the Huallapais, since the latter belong linguistically to the same family. The Bahacecha extended to near the mouth of the Gila, to which river Oñate gave the name of Rio del Nombre de Jesus, and there he met a tribe which he calls Ozarrar. As he says that the Ozarrar occupied the banks of the Gila for some distance to the east, it may be supposed that they were the Maricopas. Below the mouth of the Gila dwelt successively the Halchedoma, the Haclli, the Cohuana, the Halliquamayas, and finally the Cucapas, who ranged as far as the Gulf of California.²

It is to be observed, that Oñate found the villages of these tribes sometimes on one, and sometimes on the other bank of the stream.³ Some of the names can easily be recognized. The Cohuana, for instance, are the Yumas, or Cuchan, which is the same word as Gohun or Ko-un, applied in the latter case to the Tontos. In the Halliquamayas we find the Comoyei; in the Cucapas, the Cocopas.⁴ The others appear to be names of single groups of one tribe, local appellatives.

monteses (que hay muchos).... Con los pieles se cubren las carnes ellos, y ellas, andan calzados chicos y grandes: Tambien tienen para su sustento Mescali que es conserva de raiz de Maguey." Ibid., par. 47: "Llaman á estos Yndios los Cruzados, por unas cruzes que todos, chicos y grandes, se atan del copete que les biene á caer en la frente; y esto hacen quando véen á los Españoles."

¹ Ibid., par. 47. The identification with the Mojaves is fully made out by Mr. A. S. Gatschet, *Classification into seven Linguistic Stocks of Western Indian Dialects contained in forty Vocabularies. U. S. Geological Surveys*, vol. vii., *Archæology* p. 415.

² Zárate-Salmeron, *Relaciones*, par. 47, 53. It may be also that the Gila Pimas are meant, at least in part. For the other tribes, see the same paragraph.

⁸ Ibid. Already Alarcon had made a similar remark.

⁴ This identification is after Gatschet, *Classification*, p. 415.

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The dwellings of the Mojaves and their neighbors, the Bahacechas, are described as low, constructed of branches and covered with mud.¹ Of the Ozarrar it is stated that they wove mantles of cotton, and wore the hair long, plaited, and covered it with a piece of cloth or buckskin.² The tribes of the Lower Colorado as far as the Gulf are represented as being similar to the Bahacecha and the Mojaves, their language but little differentiated, their mode of living identical. All cultivated Indian corn, and gathered shells, and even coral and pearls. Their numbers are mere guesswork, and show the exaggerations that such estimates usually reveal.³ It is only in the seventeenth century that we obtain anything like reliable estimates of the numbers of most of the Yuma tribes.

The celebrated Jesuit missionary, Father Eusebius Francis Kuehne, or Kino, visited the Lower Gila.⁴ In 1744, Father Jacob Sedelmair followed the Gila as far down as its mouth, and he gives a catalogue of the numerous hamlets inhabited by the Coco-maricopas along the stream. He noticed the admixture gradually taking place between the Maricopas and Pimas, several of the rancherias speaking both languages.⁵ The Maricopas extended also along the Rio Colorado, and were neighbors of the Yumas.⁶ North of them lived the "Nijores," in whom we easily recognize the Yavipai.⁷ Father

¹ Zárate-Salmeron, Relaciones, par. 50.

² Ibid, par. 53.

8 Ibid., par. 53, 54.

⁴ Father Kuehne made the journey to the Colorado and Gila first in 1698. See his *Diario de la Entrada al Norueste*, MS. It was not his only trip in that direction.

⁵ Sedelmair, *Relacion*: "Desde la junta [of the Gila and the Salado] hasta la primera ranchería hay como doce leguas; es ranchería de mucha gente llamada stue, cabitio, tripulados, pimas y cocomaricopas, que los mas saben las dos lenguas."

6 Ibid.

7 Ibid. Also Noticias de la Pimería, 1740 (anonymous MS.).

Sedelmair describes all these river tribes as kindly disposed, eager to treat with the new-comers, agricultural, and the men as going almost naked, while the women dressed in cotton mantles and in skirts made of buckskins or of willow bark. Sorcerers, that is Indian Shamans, were numerous, and the missionary found traces of fetiches.¹

It is to the Franciscan Fray Francisco Garcés - the heroic priest who travelled without escort through central Arizona as far as the Moqui villages, in order to make a fruitless attempt for the reduction of the latter - that we owe a reasonable estimate of the numbers of all these tribes, as well as a correct picture of their geographical distribution. He but confirms, in the latter case, the statements of his predecessors in the main, but he corrects them in details, and adds further information. According to him, the Pimas and Pápagos numbered together 6,500 souls; the Maricopas, 2,500; the Yuma tribes on the Colorado, 5,500; the Mojaves (whom he calls "Jamajabs"), 3,000; the Cocopas and other Indians settled on the lowest course of the Colorado, like the Comoyéi, etc., 8,000.² He also names the Huallapai and Yavipai for the first time as such, without attempting an estimate of their numbers.³ Through him, also, we obtain a glimpse at the most northern Indians of Arizona, who in

¹ Sedelmair, *Relacion*: "Su religion es ninguna; no tienen ídolos, ni adoratorios, ni culto público, aunque desde nuestras entradas por nuestras predicaciones, tienen conocimiento del verdadero Dios. . . . hechiceros no faltaran entre ellos como lo hay entre todas estas naciones y son los que estorban mas la conversion, y uno de ellos me lo afirmó, y yo viendo en la pared de casa grande una cueva, metí mano y saqué un bulto en forma de hombre, que lo quemé delante de un monton de indios de Sudacson."

² Diario y Derrotero que siguio el M. R. P. Fr. Francisco Garcés en su Viaje hecho desde Octubre de 1775 hasta 17 de Setiembre de 1776, al Rio Colorado, etc. (Doc. Hist. Mejico, 2d series, vol. i. p. 350).

³ Ibid., p. 351. He calls the Huallapai "Jagullapai," and the Yavipai are subdivided by him into Yavipaicajuala, Yavipai Cuercomache, Yavipai Jabesua, and Yavipai Muca Oraive.

I I 2

INVESTIGATIONS IN THE SOUTHWEST. 113

OF CALINGANS

point of fact but sporadically visited the territory, the Yutas.¹ In addition to these, the Navajos roamed over the northeast, and claimed it as their soil. But since the Navajos belong with the Apaches, mention only can be made of them here, a fuller sketch being reserved for the proper place later on.

Of the Tontos, or Gohunes, little, if any, notice is found in the documents of Spanish times. The tribe held the valley of the Upper Rio Salado and the so called Tonto basin. Into these regions, which are difficult of access from the south, the Spaniards hardly penetrated, and the missionaries were busy with the Gila Pimas and with the tribes of the Colorado River. Still, Fathers Sedelmair and Keller both visited the banks of the Salado, which they baptized Rio de la Asuncion, and they also examined part of the Lower Rio Verde.² On his trip to the Moquis, Father Garcés did not go through the wild and dangerous country between the Gila on the south and the Moqui plateaus. But he mentions the inhabitants of the valleys in that direction, around the Sierra Ancha, the Sierra Pinal, etc., as "Yavipais-Tejua."³ They were enemies to the other Indians, who inclined in favor of Christianity. The Tontos already, then, seem to have

¹ Ibid., p. 351. As Payuchas and Yutas.

² Sedelmair, *Relacion*: "Está uno en su junta con el rio de la Asuncion, compuesto del Salado y Verde." The name "Rio de la Asuncion" applies therefore only to that part of the Salado below the mouth of the Rio Verde. In the year 1743, Father Ignatius Keller travelled through that region when he attempted to reach the Moquis: "De estas rancherías [on the Gila] sale camino derecho para la provincia de Moqui hácia el Norte, pero tiene muy cerca al Oriente una sierra poblada de los enemigos apaches, que el año 1743, salieron al padre Ignacio Keler de la Compañía de Jesus cuando iba al Moqui, y le llebaron la caballada y volvió su reverencia con trabajo."

⁸ Garces, *Diario y Derrotero*, etc., p. 352: "El intermedio del Colorado y Gila, ocupan los yavipaistejua, y otros yavipais: al sur del Moqui son todos yavipais, que es lo mismo que apaches, donde se conoce el gran terreno que ocupa esta nacion." Ibid., p. 351: "En el dia de hoy, todas las del rio Gila y Colorado estan en paz, y todas sus colaterales, menas los yavipaistejua enemigos de los pimas y cocomaricopas."

been classed with the Apaches,¹ as they were afterwards in the popular mind. Their idiom, however, is declared to be of Yuma stock by high recent authority.

The extermination of the Tontos as a tribe is represented as having been an absolute necessity. Such may have been the case, but it is not to be forgotten that very little is known as to the manner in which it was accomplished. One thing however is certain, namely, that if the Spaniards had done it in the manner in which it is said to have been performed, there would be a hue and outcry about "cruelty" and "treachery" over the whole civilized world. I have heard too many conflicting tales about the so called "Pinole treaties," and other incidents of the Tonto war, to venture any opinion of my own on the subject. But at any rate it is a dark and certainly interesting matter in the study of Anglo-American Indian policy.

Longest, and above all best, known among the Indians of Arizona, are the Pueblo Indians of the north, the Moquis, or Shinumo. They were mentioned to Fray Marcos of Nizza in 1539, under the name of "Totonteac," — a corruption of a Zuñi term which applied to a cluster of twelve pueblos lying in the direction of Moqui, and already abandoned in the sixteenth century, but the reminiscence of which still remained in the name.² In 1540, one of Coronado's lieu-

¹ It is worth noticing that Father Garces clearly intimates that the Yavipai were the Apaches also. So, on page 355, he speaks of the Yavipai-Lipanes, Yavipais-Natajé, Yavipais-Navajai, and Yavipais-Gileños. All these names are those of Apache tribes.

² The ruins of the villages whose name, as given by the Indians of Zuñi in their idiom, has been corrupted into Totonteac, lie between Zuñi and Moqui. It is interesting to note how the reports which Fray Marcos gathered in Sonora concerning the northern Pueblos frequently relate to events which had occurred some time previous to his coming. Tribes were mentioned to him, like "Marata" and "Totonteac," who had ceased to exist, though the distant southern Indians had no knowledge of their disappearance. This is very instructive in regard to the value of historical tradition in point of chronology.

tenants, Don Pedro de Tobar, visited the seven villages of Tusayan, a few days' journey northwest or west of Zuñi. There is not the slightest doubt that the Tusayan of Castañeda is the Moqui of to-day.¹ The group consisted of seven pueblos, and that same number subsisted until the beginning of the past century, when one of the seven disappeared, Ahuatu,² although it was promptly replaced by a village founded mostly by Tanos fugitives from New Mexico, and to which, in deference to the language there spoken, the name of Tehua has been given.³

Not much importance can always be attached to the numbers and names of Indian villages, according to Spanish sources of an older date. Thus, at the time of Coronado, the seven pueblos of Tusayan Moqui admit of no doubt. Forty years afterwards, the Asay or Osay of Chamuscado had,

¹ In addition to the abundant documentary evidence, Mr. Cushing has lately obtained from the Zuñi Indians another and quite satisfactory proof of the identity of Tusayan with Moqui. Two of the largest Moqui villages were formerly called by the Zuñis Usaya-kue, or people of Usaya. Hence T-usayan, the Asay and Osay of Chamuscado.

² Ahuatu, Aguitobi, Aguatuvi, or Ahuatuyba, was destroyed by the Moquis of Oraybe, in the year 1700. It existed in June of that year: Fray Juan Garaycoechea, *Carta al Gobernador Pedro Rodriguez Cubero*, June 9, 1700. In 1701, Cubero made an unsuccessful expedition against the Moquis. *Relacion Anónima de la Reconquista del Nuevo México* (MS. Sesto Cuaderno). The cause for this military movement is stated in the declaration of the New Mexican clergy, November 20, 1722, as follows (*Autos y Parezeres dados for Orden de Don Antonio Cobian Busto Visitador de los Presidios en la Tierra adentro*, MS.): "Se mobió [Cubero] con las armas de este Rl Presidio á la venganza del estrago qe dhos apostatas executaron contra los Yndios del Püo de Aguatubi de su misma Nazion, qe pacíficos y combertidos á fira Sta Fee passaron á sangre y fuego las vidas bienes y alajas, del culto diuino de los miserables qe solo con la firmeza con qe se hallauan de fira Sta Fee sin otro motibo hizieron en ellos tan pernisiossos estragos." It appears, therefore, that Ahuatu was destroyed either towards the end of the year 1700, or in the beginning of 1701.

⁸ The Tehua pueblo in the Moqui region was erected in the first years of the eighteenth century; at any rate, between 1696 and 1706. It certainly existed at the latter date. Juan Roque Gutierrez, *Junta de Guerra en el Paraje de los Chupaderos; Camino para Moqui*, October 4, 1706 (MS.).

according to the statements made to that explorer by Zuñi Indians, — he himself never visited the locality, — only five.¹ Two years later, Antonio de Espejo went among the Mohoce, who are the Moqui again, and he finds the same number of villages.² In 1599, when Juan de Oñate received the formal allegiance of the Moquis, he mentions only four.³ Six years later, Oñate passed through the country on his way to the Colorado River, and his chroniclers record seven Moqui villages.⁴ In 1680 only five are counted; ⁵ but ever since seven has been admitted as the real number, and there are indeed seven of them at this day.

The Moquis are Pueblo Indians to all intents and purposes, their language excepted, which has been classed with the Shoshoni or Numa group of American idioms.⁶ Nothing can be said about them, as they appeared in the past centuries to the first European visitors, that does not apply to the New Mexican Pueblos also. The differences are purely local, and can at once be explained by physical causes. Thus, the Moquis raised cotton, whereas the Zuñis did not; and the reason for it is found in the southerly exposure of the lands which the Moquis cultivate.⁷ The blankets of rabbit

¹ Testimonio dado en México sobre el Descubrimiento de Doscientos Leguas adelante de las Minas de Santa Bárbola, etc., 1582 (Doc. de Indias, vol. xv. pp. 86, 93).

² Relacion del Viage, p. 182.

⁸ Discurso de las Jornadas, p. 274. Obediencia y Vasallaje á su Magestad por los Indios de la Provincia de Mohoqui (Doc. de Indias, vol. xvi. p. 137).

⁴ Zárate, Relaciones, par. 44.

⁵ Vetancurt, *Crónica*, p. 321. In 1692, Diego de Vargas found only five. *Relacion de la Reconquista*, Primer Cuaderno, MS.

⁶ As early as 1876, Mr. Gatschet, *Zwölf Sprachen aus dem Südwesten Nord Amerikas*, p. 56, asserted: "Dass die Moquis Shoshonen sind, wird man mit ziemlicher Gewissheit den untenstehenden Zusammenstellungen entnehmen können." In his *Classification*, p. 412, he is more positive yet: "The Moqui language is certainly Numa."

 7 That they cultivated cotton is amply proved. Castañeda, Cibola, p. 61, says that there was no cotton raised in Tusayan. But the Relacion del Suceso de la

hair, which Fray Marcos was informed were made and worn at Totonteac,¹ were not exclusively Moqui; the Zuñis made them also. There is one point, however, that attracts our attention in regard to the Moquis, and that is the feeling of coldness, not to say hostility, which prevailed between them and their nearest neighbors, the Zuñi Indians. As early as the time of Coronado, the two clusters were not on good terms.² There was comparatively more intercourse between the Moqui and some of the Rio Grande Pueblos than between the Moquis and Zuñi. Up to the present day this feeling, strengthened by events subsequent to the reconquest of 1694,³ is very marked. Another curious fact, which may be deduced from the report of Fray Marcos, and which is corroborated by Moqui and Zuñi tradition, is the existence of a cluster of twelve pueblos inhabited by people of Moqui stock, the ruins of which villages exist to-day, and which have given rise to the name of Totonteac. We are led to infer in this case, as well as in that of the ancient villages at the salt marshes near Zuñi, that the said cluster of twelve was abandoned but shortly before the sixteenth century. One of their number, Ahuatu, even remained occupied until the first half of the past century. These are among the few historical data

Jornada que Francisco Vazquez hizó en el Descubrimiento de Cíbola (Doc. de Indias, vol. xiv. p. 321) says: "Los pueblos son algun tanto mayores que los de Cibola, y en los demas, en comida y en todo son de una manera, salvo que estos coxen algodon." Zarate, *Relaciones*, par. 44.

¹ Fray Marcos de Nizza, Descubrimiento de las Siete Ciudades, p. 338.

² Castañeda, *Cibola*, p. 58: "Car ils n'avaient pas de rapports avec cette province."

³ Not only were the relations between the Zuñis and the Moquis very much strained by the attitude taken by the Moquis during the reconquest, but this tension brought about open hostilities. Francisco Cuerbo y Valdés, Orden al Cappo Dn Francisco Valdes Soribus sobra la Guerra contra los Moquis (MS., 1706), says: "Entendiendo en la guerra defensiba que se ase alos reueldes y contumases apóstatas de la dha Provinzia de Moqui quienes continuamente ynbadiendo ostillisando y ynfestando la dha Provinsia de Zuñi."

ARCHÆOLOGICAL INSTITUTE.

that may be gathered from early Spanish records now at my disposal, and which relate to a period anterior to the coming of the white man.

In the beginning of the seventeenth century, we find mention made of a tribe, now reduced to a few families that have sought shelter at the bottom of the abyss of Cataract Creek, one of the tributaries of the great Colorado, where they live in small permanent dwellings made of mud, stone, and wood. These village Indians of to-day are mentioned in former times as the merest savages. If the Cosninos, Cosninas, or Hava-Supay, as they are variously called, have progressed in culture while diminishing in numbers, it can only have been through force of circumstances. It would be an interesting illustration of how dire necessity may work upon the culture of a people. On a very small scale, it would recall the progress achieved at one time by the ancient Mexicans, when driven into the marsh or swamp called the "Lake of Mexico." The Cosninos appear to be kindred to the Moquis, although their language is classified with the Yuma group; and the present condition of the Hava-Supay may therefore be but a "return to first principles," compelled by accident. At all events, it is very desirable to continue among them the researches begun by Mr. Cushing.1

I now pass to the Indians of New Mexico. The sedentary groups, the Pueblos *par excellence*, will first be considered. As already stated, whatever is said in regard to

¹ The Cosninos are frequently mentioned by older authors. As to the origin of the name, Fray Francisco Garces, *Diario*, p. 352, says: "En los nombres de las naciones puede y suele haber muchas variacion, v. g. los cocomaricopas y jalchedunes, llaman á los jamajabs Cuesninas o Cuismers, y los demas Jamajabs." This would imply that the Cosninas were Mojaves. But it is also supposed that the language is Moqui, or at least of the same stock. Mr. Gatschet, however, than whom there is certainly no higher authority, classifies the Cosninos among the Yuma tribes. *Classification*, p. 415.

customs and habits of the New Mexican Pueblos, applies to the Moquis too, at least in a general way. Discrepancies of an important or interesting nature I shall call attention to if necessary. Furthermore, under the head of New Mexican Pueblos, I include the remnants of New Mexican tribes now settled in Chihuahua and Texas, the Piros and the Tiguas. The Mansos will be treated of among the roaming Indians of New Mexico.

In the first half of the sixteenth century, and until the great uprising of 1680, the villages or "pueblos" extended, or were scattered rather, on a line from Taos, in the extreme north, as far south as where San Marcial now stands, or a length of nearly two hundred and thirty miles. From east to west they spread from about longitude 105° 30' (Taos, Pecos, and the pueblos south of the Salines or Manzano) to nearly 110° 30' (the Moqui villages). Within the area thus defined the villages were scattered very irregularly, and in fact their inhabitants occupied and used but a small quantity of the ground. Extensive desert tracts often separated the groups, and these spaces were open to the roving Indians who prowled about in and between the permanent settlements, much to the detriment of their inhabitants. Thus, Acoma is separated from the Zuñi group by at least seventy miles of waste, and the Navajos raided over this space at will, endangering communications. From Acoma to the Rio Grande Tiguas, another forty miles of desert intervened. Between the latter and the Tiguas of Cuaray, Chilili, and the Manzano, both groups of one and the same linguistical stock, the uninhabited region is from thirty-five to forty miles wide, and here the Apaches could lurk and assault at any time. The Pueblos, far from being masters of New Mexico previous to the coming of the Spaniards, were, on the contrary, hemmed in and hampered on all sides by tribes who, while not mere savages, were of wild habits, and, having no permanent abode, were swift in their movements, and, as we shall see further on, had a great advantage in number over the Pueblos.

The Pueblos, besides, were not harmonious among themselves. Divided into seven distinct linguistic groups, the difference of languages created a barrier that often led to intertribal hostility. Moreover, there was not even unbroken peace between the villages of the same stock.¹ The villages of that time were on an average much smaller than those of to-day inhabited by Pueblo Indians, but there was a greater number of them.² The aggregate population of the pueblos

¹ I have already alluded to the unfriendly relations between Zuñi and Moqui The reports of Fray Marcos about "Marata" afford another instance. Descubrimiento de las Siete Ciudades, p. 340: "Dice que à la parte del Sueste, hay un reino que se llama Marata, en que solia haber muchas y muy grandes poblaciones, y que todas tienen estas casas de piedra y sobrados, y questos han tenido y tienen guerra con el Señor destas siete cibdades, por la cual guerra se ha disminuído en gran cantidad este reino de Marata, aunque todavia está sobre sí y tiene guerra con estotros." The current Zuñi tradition confirms this report. The ruins of the villages of "Ma-tya-ta," or "Ma-kya-ta," lie along the old trail leading from Ha-ui-cu to Acoma, and there are to-day - according to Mr. Cushing, to whom I owe the knowledge of these facts - descendants of their former inhabitants among the Zuñis. Fray Marcos therefore reported on events which, at his time, had but lately occurred. Hernando de Alvarado saw these ruins in 1540 on his way to Pecos, and speaks of them in his Relacion de lo que Hernando de Alvarado y Fray Joan de Padilla descubrieron en Demanda de la Mar del Sur (Doc. de Indias, vol. iii. p. 511). Evidence of actual hostilities, probably between Pueblos, is given by Gaspar Castaño de Sosa, Memoria del Descubrimiento que Gaspar Castaño de Sosa hizó en el Nuevo México (Doc. de Indias, vol. xv. p. 256) : "Y andando tomando la posesion de los dichos pueblos, fue por entre unas sierras donde halló dos pueblos despoblados, respeto de que por guerra de otros habian dejado sus pueblos, como en efeto hera, porque otros indios que con nos iban nos lo dieron á entender, é lo vimos claro ser así, por las muestras de muchas muertes que habia señales."

² Castañeda, *Cibola*, p. 172, enumerates 71 pueblos. Oñate, *Obediencia y Vasallaje á Su Magestad por los Indios del Pueblo de San Juan Baptista*, (*Doc. de Indias*, vol. xvi. pp. 108–117,) more than one hundred, although several pueblos appear two or three times under different names. Benavides, *Memorial*, over eighty. This includes the period from 1540 to 1630. That the villages were small is stated by Castañeda, *Cibola*, p. 146: "Des villages de deux cents âmes

I 20

in the sixteenth and seventeenth centuries did not exceed twenty-five thousand souls.¹

au lieu de grandes villes, et tout au plus huit-cents ou mille habitants dans les plus grands villages."

¹ Castañeda, Cibola, p. 182: "Ils peuvent renfermer environ vingt mille hommes à en juger par l'apparence." The original has indeed "veinte mil hombres," but this evidently means, not men, but inhabitants, as the term "hombre" is also used in Spanish. This is clearly denoted by the passage above quoted from page 146. If only the largest towns had from 800 to 1,000 souls, there is no possibility of a population of 70,000, which 20,000 male Indians would imply. The contemporaneous reports on Coronado's expedition, also, when speaking of Cibola, for instance, assign to its villages but a moderate population. Relacion Postrera de Sívola (from the Libro de Oro of Fray Toribio de Paredes, alias Motolinia, MS.): "Son siete pueblos en esta provincia de Síbola en espacio de cinco leguas : el mayor sera de ducientas casas y otros dos de á ducientas, y los otros á sesenta y á cincuenta y á treinta casas." The term "casa" is to be taken in the sense of household, and not as an independent building. This results from Relacion del Suceso, p. 319: "Los pueblos son de á trescientas é docientas, é de á cien cincuenta casas ; algunos estan las casas de los pueblos todos juntos, aunque en algunos pueblos estan partidos en dos ó tres barrios; pero la mayor parte son juntos y dentro sus patios."

Antonio de Espejo has given a quite different idea of the former population of the New Mexican pueblos. If we sum up the number of souls attributed to them by him, we arrive at about a quarter of a million. Wherever we go into details, however, and compare his estimates for certain well known villages with the possibilities and the true conditions, or with other statements of older sources about them, it becomes clear how this otherwise acute observer was misled in his estimate of the numbers of the people. Thus, for instance, Acoma (Relacion del Viage, p. 179) is reckoned at "mas de seis mil ánimas," - whereas Castañeda (Cibola, p. 69) says that it can place on foot about 200 warriors, and on the rock of Acoma there is, furthermore, not room for much over 1,000 people. The Pecos, or the Tamos, as he calls them, are credited with 40,000 (p. 185), but the pueblo of Tshi-quit-e, or the old Pecos village, shows that over 2,000 souls could never have lived in it. Indeed, Castañeda (p. 176) asserts that the people of Cicuye might place on foot 500 warriors all told. Such evidences of very gross exaggeration could be multiplied. Espejo has consistently exaggerated, but not intentionally. He was led astray by the appearance of the pueblos, most of which he saw at a distance, in the first place, and then still more by the custom of the Indians flocking to the place where strangers arrive, in great numbers, and remaining about these strangers so long as they are new and interesting visitors. Also out of suspicion. Wherever Espejo stopped, he found, not merely the inhabitants of that particular pueblo, but nearly the whole tribe, congregated, and, having once begun to form his estimates, he applied the same criterions to Every place. His figures are therefore to be absolutely rejected,

The distribution of the linguistic stocks was as follows. Beginning at the extreme north of New Mexico, we meet

without invalidating thereby the exactitude of other parts of his valuable report.

I am not in possession of official data emanating from Oñate directly, and establishing the population of the pueblos about the year 1600, but the investigations into his administration, made at the instigation of the Viceroy Conde de Monterey, contain some information at least on the ideas then prevalent on the subject. The factor Don Francisco de Valverde examined five witnesses on the subject. Memorial sobre el Descubrimiento del Nuevo México y sus Acontecimientos, 1595 to 1602 (Doc. de Indias, vol. xvi. p. 210): "Uno dice que diez é seis mill indios; otro, doce mill, para guerra y trabajo; otro treinta mill ó cuarenta mill; y otro treinta mill; y todos dicen sin mugeres y niños al respeto." In regard to such statements the Viceroy very justly observes, Discurso y Proposicion que se hace á Vuestra Magestad de lo Tocante á los Descubrimientos del Nuevo México, 1602 (Doc. de Indias, vol. xvi. p. 45): "Se colige que realmente para labranza y crianza hay tierras y pastos apropósito; y no es aquella tan esteril como la gente que se vino la pintaba, ni tan próspero como otros lo hacen y lo representó el Gobernador en las relaciones del año de noventa y nueve, que algo niejor informado con mas moderacion escribe de esto, y con la misma hablan los suyos: aquí por donde se dexa de entender, que debe de ser cosa corta lo de allí. . . . Colígese tambien que hay razonable número de indios."

In 1630, Benavides gives an approximate enumeration of the Pueblos, and he figures their numbers at 70,000 about. Acoma appears in that list with 2,000. (Memorial, p. 32.) We know what to think of such an estimate; it is twice as much as the rock will hold conveniently. There are other equally glaring inaccuracies. On page 26, the Tehuas are credited with eight villages, whereas they had only seven. On page 33, the Zuñi pueblos are set down at "eleven or twelve," whereas there were only half that number. The population of Taos, given at 2,000, is also vastly exaggerated. In short, the Memorial is, in many respects, a "campaign document." Its purpose was to induce the King to favor the Missions, to create a better impression of the missionaries than the Spanish government had at that time, after their constant quarrels with the Governors of New Mexico, and to obtain the establishment of a bishopric at Santa Fé. The latter fact is very plainly established in the Real Cédula of May 19, 1631, MS., in which the King, among other matters touching the proposed establishment of an episcopal see, says: "Fray Franco de Sosa Comissario de Corte y Secreto General del orden de San Francisco se me ha hecho relacion, . . . y estan oy convertidos mas de quinientos mill Indios y de ellos bautizados mas de ochenta seis mill." This is said of New Mexico.

The earliest actual census of the Pueblos which I know dates back to 1660. Vetancurt (*Cronica*, p. 314): "Pues el año de 1660 se hizó padron general, en que se hallaron mas de veinticuatro mil personas, chicas y grandes, indios y españoles." There were then about 1,000 Spaniards in all New Mexico, so that

I 2 2

there the tribe of Taos, or Te-uat-ha, which, as far as ascertainable, lived then, as they do to-day, in a single large pueblo.¹ Southwest of them about twenty miles stood, and stands to-day nearly on the same spot, the pueblo of Picuries, the aboriginal names of which are both Ualana and Ping-ul-tha.² Both villages spoke the same idiom dialectically differentiated, the Tigua.³

A desert stretch of another thirty miles, about, separated Picuries from the next group of sedentary Indians, the Tehuas. Whereas both Taos and its neighbor, Picuries, are some distance away from the Rio Grande, in side valleys whose watercourses are tributaries of that stream, the *northern* Tehuas cluster near the great river. Their most northerly village, San Juan de los Caballeros, or Oj-ke, lies about thirty miles southwest of Picuries, on the left river-bank. Then followed, when the Spaniards first came among them in 1541, Yugeuing-ge,⁴ now in ruins and its site occupied by the little

the number of Pueblo Indians was a little over 23,000. This corresponds very well with the statements of Castañeda, one hundred and twenty years previously.

¹ Taos is the "Braba" of Castañeda (*Cibola*, p. 139). His description, taken from the reports of Francisco de Barrionuevo, is excellent, and can only apply to Taos: "Il était bâti sur les deux rives du fleuve, que l'on traversait sur des ponts construits en madriers de pins, très-bien équarris. L'on vit dans ce village les étuves les plus grandes et les plus extraordinaires de tout le pays." Further on, he says that Braba was the most northerly of all the pueblos (p. 182). No mention of Taos is found, as nobody visited it until 1598, when Oñate went there on the 14th of July (*Discurso*, p. 257). But in this document, as well as in the *Obediencia y Vasallaje, etc. de San Juan Baptista*, (p. 114,) Taos is called a Province. It is also named Tayberon. In 1630, Benavides speaks of only one pueblo at Taos, and thus it appears in all posterior documents.

² Oñate (*Discurso*, p. 257) mentions the "gran pueblo de los Picuries." Also Benavides. There was but one village of that tribe.

⁸ Benavides, Memorial, p. 29.

⁴ Yuge-uing-ge is the Yuque-yunque of Castañeda (*Cibola*, p. 138). The Tehuas occupied, says he, two pueblos on the Rio Grande, and four in the mountains. The four in the mountains may have included, in addition to the three mentioned further on, Cu-ya-mun-gue. The information is of course imperfect, as Barrionuevo had no intercourse with the people, who fled at his approach. hamlet of Chamita, opposite San Juan; on the right bank, Santa Clara, or Ka-po; and a few miles lower down, San Ildefonso, or Po-juo-ge. Some six to nine miles eastward from the Rio Grande valley were three more Tehua villages: Pojuaque, or more properly Pozuang-ge; Nambe, or Na-imbe; and Tezuque, or Te-tzo-ge. The last named lay some eight miles north of the site where the settlement of Santa Fé was founded in 1605.¹

¹ The date of the foundation of Santa Fé can as yet be but approximately determined, although it is certain that it cannot have taken place before April, 1605. Oñate returned to San Gabriel, or Chamita, where the Spaniards all resided, on the 25th of April, 1605, from his expedition to the Colorado of the West. The date is given by Zarate-Salmeron, Relaciones, par. 47. It is confirmed by the inscription on the Rock of the "Morro," or "Inscription Rock," which states that Oñate passed through there on the 16th of April of the year "del descubrimiento de la Mar del Sur." Consequently, there was no settlement at Santa Fé at that time. What has been said and published concerning the foundation of the present capital of New Mexico by Antonio de Espejo in 1583, or by Coronado in 1540, or by an unknown founder in 1550, is devoid of all historical basis. Espejo founded no colony, could not found any with his little band of fourteen, and the propositions he subsequently made to the Crown for the settlement of New Mexico had in view the establishment of a post at Acoma, whereas the country of the Tanos, in which the site of Santa Fé was situated, is treated by him merely as one of the many ranges of sedentary tribes which might be brought under Spanish sway in course of time. Expediente sobre el Ofrecimiento que hace Francisco Diaz de Vargas, de ir al Nuevo México, y refiere la Historia de este Descubrimiento (Doc. de Indias, vol. xv. pp. 156, 157): "Y desde allí [from the Queres] irá á la provincia de Acoma, ques una peña alta que está hácia el Norueste y en ella, poblados, mas de seis mil indios á donde hará hacer un fuerte y casa Real, entre la dicha provincia y un rio pequeño, donde mas comodidad le paresciere; y se pondrán allí los dichos cient hombres casados, y se hará de forma que aunque no sea necesario guerra, esten apercibidos para ello; y á este fuerte han de venir las otras dos compañías." The date of this proposal to the King is 1584. It was never carried out, as Espejo died soon after. When Oñate came, in 1598, he moved directly to San Juan, established his camp there, and proceeded to found San Gabriel, on the opposite bank of the Rio Grande (Discurso de las Jornadas, pp. 256, 263). It is abundantly proved, by documentary evidence, that from San Gabriel the camp and seat of government were moved to Santa Fé, and this appears to have been done in 1605. Fray Alonzo de Posadas, Informe al Rey (MS.): "La villa de Santa-Fé . . . descubrióla el año de 1605 el Adelantado D. Juan de Oñate, llevando en su compañía algunos soldados y religiosos de

That site was deserted in the sixteenth century, the two pueblos of Tehua Indians that stood there once having been abandoned long previous to this date. Consequently an interval or vacant space of some thirty miles separated the northern Tehuas from their southern kinsmen, the Ta-geuing-ge, or Tanos.¹ The nearest Tanos village to the locality of Santa Fé was then the Ciénéga, called by its inhabitants Tzi-gu-ma. It is twelve miles to the southwest. A few miles southeast of it was San Marcos, or Cua-ka. Both pueblos are in ruins. Twenty-two miles south of Santa Fé began the Galisteo group of Tanos villages, consisting of Galisteo or Ta-ge-uing-ge proper, of San Lazaro or I-pe-re, of San Cristóbal or Yam-p'-ham-ba, all of which clustered in a radius of ten miles on or about the Galisteo basin, and possibly the Pueblo Largo or Hishi. Whether any other of the ruins in that region were inhabited in the sixteenth century I am unable to decide. But west and south of it the Tanos still dwelt in the village of Tung-ke, on the northern spurs of the Sandia range; in one of the little pueblos whose site is known, but whose remains have disappeared, near the mining place called Golden; in the small pueblos of O-ja-na and Ki-pa-na, near the hamlet of Chimal; and finally at San Pedro, where the ruins of Ku-kua are still visible.²

Parallel with the Tanos settlements and skirting the course of the Rio Grande, the most easterly villages of the numerous (comparatively speaking, of course) Queres stock were scat-

mi seráfica religion, y por Presidente al padre predicador Fr. Francisco de Escobar." In 1606 Oñate was at Santa Fé. Therefore it must have been founded in 1605.

¹ There is nowhere any mention of a pueblo at Santa Fé. There had been one formerly, as the ruins attest, but when the Spaniards came it was in ruins. These ruins are now almost obliterated, and they are not those of the so-called "oldest house," opposite the chapel of San Miguel.

² Both Ojana and Quipana are mentioned in the *Obediencia de San Juan Bartista*, p. 114.

tered on the banks of the river. Twenty-seven miles southwest of Santa Fé is Cochiti, or Ko-tyi-ti. Three miles east of the stream, on the dangerous Galisteo Creek, was the old pueblo of Santo Domingo, or Gui-pu-y, the predecessor of the village of to-day. On the same side, but directly on the river banks, stood Kat-ish-tya, the antecessor of the present San Felipe. This exhausts the list of the Rio Grande Queres, but farther west, along the Jemez River, the tribe inhabited several sites. There was the cluster of the Cia or Tzia towns, of which but one remains,¹ and old Santa Ana, or Ta-ma-ya.²

North of Cia began the range of another linguistic group, that of Jemez. Until the first half of the seventeenth century, the Jemez inhabited a number of pueblos along the upper course of their stream, and on the towering mesas which skirt its headwaters. There was Guin-se-ua, where the famous hot springs of San Diego issue from the rock, and the old church stands in its ruined and picturesque beauty. There was Amo-xium-qua, on the mesa above the mouth of the great gorge, Asht-ia-la-qua, on the very point of the table mountain overlooking the valley, and others besides. The number of these which were inhabited simultaneously in the sixteenth century is variously stated, but the probability is that there were ten, scattered along the

¹ The present village of Cia is surrounded by ruins of old pueblos formerly inhabited by the same stock. In 1540, Castañeda mentions but one village; but Espejo in 1582 says (*Relacion del Viage*, p. 178), "hallamos otra provincia que llaman los Punames, que son cinco pueblos, que la cabecera se dice Sia." Oñate, in *Obediencia de San Juan* (p. 115), mentions only "el gran pueblo de Tria." When the smaller villages were abandoned, I am unable to determine as yet.

² The first pueblo of Tamaya stood near the "Mesa del Cangelon," and far from the mouth of the Rio de Jemez. The historic pueblo, that was stormed by Pedro Reneros de Posada in 1687, was on the summit of what is called to-day the "Mesa de Santa Ana." This was the one, probably, which Oñate alludes to in his papers.

Jemez River from San Diego in the north to near Cia in the south.¹

The Jemez group of villages is the most distant one west from the Rio Grande in the latitude of Santa Fé. In a straight line, it lies nearly thirty miles from the great New Mexican artery. Strange to say, another branch of the same linguistic stock, speaking the identical idiom, was met with about forty miles east of the Rio Grande, and southeast of the present capital. These were the Pecos, with their large pueblo, the most populous one in New Mexico or Arizona, whose ruins were described and figured in the first series of American papers published by the Institute.² Tshiquit-é, or Tzi-quit-é, according as the sounds are clearly or less clearly pronounced by the Indians of Jemez or the remaining Pecos, is the Ci-cuic, Ci-cui-ye, A-cuique, of Coronado and his chroniclers.³ It was separated from its kinsmen in the west by two linguistic groups, distinct from each other and from the Jemez, - the Queres, and the Tanos, or southern Tehuas. This is an interesting fact in New Mexican ethnography, and even in pre-documentary

¹ Castañeda (*Cibola*, p. 138) speaks of seven Jemez villages. Espejo (p. 179) gives the same number. Oñate (*Discurso*, p. 261): "Á quatro, bajamos á otros pueblos de los emmes, que por todos dicen, son honce, vimos los ocho. . . . Á cinco, bajamos al húltimo pueblo de la dicho provincia, y vimos los maravillosos baños calientes que manan en muchas partes y tienen singulares maravillas de naturaleza, en aguas frias y muy calientes, y muchas minas de piedra azufre y de piedra alumbre." In 1626, Zárate (*Relaciones*, par. 111) mentions the pueblos of Amoxunque (Amo-shium-qua), and Quiumzique (Guinse-ua). The pueblos of the Jemez were abandoned after 1622, and resettled previously to 1627. Benavides, *Memorial*, p. 27. Vetancurt, *Menologio*, p. 76.

² Report on the Aboriginal Ruins in the Valley of the Rio Pecos, 1881.

⁸ The name "Aquiu," or "Paequiu," which I heard given to the Pecos in the year 1880, is "Pae-quiua-la." It applies to the Pecos tribe, but the proper name of the great village that Coronado saw, and where the old church was in the beginning of the seventeenth century, is "Tshi-quit-e," or "Tziquit-e." I have this information direct from the Pecos Indians living to-day at Jemez, some of whom dwelt in the old village up to 1840. history. The Pecos declare that they came into their valley from the southeast, but that they originated in the north, and shifted across the Rio Grande. The Jemez say that their origin was in the northeast, whence they slowly drifted into the Jemez valley. Probably more than one village was inhabited by the Pecos three hundred years ago. It is not unlikely that the ruins at "Las Ruedas" (Rowe), and at "El Gusano" (Fulton), are those of smaller villages, possibly contemporaneous with the large pueblo of Pecos.¹

It is certain that along the Pecos River, below its upper valley, there were no inhabited pueblos in the sixteenth century. In 1590, Gaspar Castaño de Sosa travelled up the whole length of the Rio Salado, as the Pecos was then called, to above Anton Chico, and he did not find the slightest traces of human occupancy on either bank. West of it, and south of both Galisteo and Pecos, a string of small villages, which extended from east to west over to the Rio Grande, were visited by the explorer. These appear to have been the Tanos villages already mentioned.² South of them, on the east side of the Cordillera which runs at some distance east of and parallel with the Rio Grande, began the settlements of the Tiguas, with their pueblos of Chilili, Ta-ji-que,

¹ The fact of their having been inhabited in 1540 is yet in doubt. The Pecos Indians assert that they were not, and that they had been abandoned previously to the "first conquest." But Espejo (*Relacion*, p. 185) mentions three pueblos of the Tamos. That the Tamos were the Pecos is proved by the same authority when he says (p. 186): "Y medio legua de un pueblo de la dicha provincia, llamado Cicuique, hallamos un rio, el cual nombré de las Vacas, respeto que caminando por él seis jornadas, como treinta leguas, hallamos gran cantidad de vacas de aquella tierra." Oñate (*Discurso*, p. 258) "Al gran pueblo de los Peccos, y es el que Espejo llama la provincia de Tamos." The aboriginal names of the villages at Rowe and Fulton are, respectively, the Pueblo de las Ruedas, or Kuuang Ua-la, and Se-yu Pae-la.

² It is very difficult at the present time to identify the numerous pueblos visited by Castaño. Compare *Memoria del Descubrimiento*, pp. 221-253. Some are of course easily recognized, like San Cristobal, San Marcos, etc. From these it may be possible to locate many of the others.

I 28

Manzano (of which I have not yet been able to find the aboriginal name), and Cua-ray. These towns ranged along the west and southwest of the salt marshes; it seems that they were not the only ones inhabited by the Tiguas in that vicinity, as their number is variously stated from "many" to a half-dozen. The latter number is probably correct.¹

The same feature which I have noted in regard to the Jemez, namely, a division of the stock into two geographically distinct groups, repeats itself with the Tiguas. Not only do we find a northern, or Taos and Picuries cluster, and a southern one divided from the former by a distance of nearly one hundred and fifty miles and by the tribes of the Tehuas, Tanos, and Queres, but of the southern Tiguas there were also two clusters, those around the Salines, already mentioned, and on the Rio Grande, in the most fertile part of its valley, the series of Tigua pueblos called by Coronado "Tiguex" (which is the correct Indian pronunciation of the word, as it may still be heard to-day), beginning at Bernalillo in the north, and extending as far as the present village of Tshyaui-pa, or Isleta.² On this stretch there were, close by the

¹ I am only positive about three, Tajique, Chilili, and Cuaray. Of the Manzano, I have not as yet been able to find anything reliable. There are vestiges of Indian remains there, but I do not know if they belonged to the communal or to the small house type. During my stay at Manzano in 1883 the ground was covered with deep snow.

² This extent of territory, or this stretch, includes both the Tiguex and the Tutahaco of Castañeda; unless, indeed, the latter were the northern Piros, which extended certainly as far north as "La Joya," or Sevilleta. I have identified, in *Historical Studies among the Sedentary Inhabitants of New Mexico*, the location of Tiguez more properly and specially with the vicinity of Bernalillo. Notwith-standing adverse opinions, I am more than ever convinced of the correctness of this view. In addition to the evidence there adduced, I can quote the testimony of Espejo, *Relacion del Viage*, p. 175. Speaking of Puaray, where the two monks had just been killed, and which pueblo stood directly opposite the present town of Bernalillo, he states: "A donde hallamos relacion muy verdadera; que estubó en esta provincia Francisco Vazquez Coronado y le mataron en ella nueve soldados y cuarenta caballos, y que por este respeto habia asolado

river-side, ten or twelve towns, mostly small, the most celebrated of which became the one called Pua-ray, or village of the worms or insects.¹ Where Bernalillo stands to-day, there were probably two; there was one called Na-fhi-ap,² which is the present aboriginal name of the pueblo of Sandia, another one near "Los Corrales," and several as far down as the vicinity of Isleta.³ South of that place, and almost touching the lands of the Tiguas, began the range of the Piros, which reached as far south as San Marcial, and consisted of at least ten settlements in sight of the river bank. Conspicuous among them were Alamillo,⁴ north of Socorro, Pil-a-bo, on the site of Socorro itself,⁵ and Se-ne-cu, whose ruins are now covered by the village of San Antonio.⁶ San

la gente de un pueblo desta provincia, y destos nos dieron razon los naturales destos pueblos por señas que entendimos." This corresponds exactly with what Castañeda (*Cibola*, vol. i. chap. xv.) relates concerning events at "Tiguex."

¹ The site of Puaray is well known to the Indians of Sandia. It is furthermore established by documentary evidence. Vetancurt (*Crónica*, p. 312) places it "cerca de una legua de Zandia, á la orilla del rio." *Venta real del Capitan Juan Gonzalez*, 1711 (MS.).

² Napeya, Obediencia de San Juan, p. 115.

⁸ Near the Mesa de las Padillas. Where Albuquerque now stands, there appear to have been no villages; but farther south, on the right bank, there were several, like Hyem Tu-ay on the Mesa de los Padillas, and Be-jui Tu-uy, or the village of the Rainbow, near Los Lunas.

⁴ Alamillo was a conspicuous pueblo as late as 1680. It was then abandoned, the inhabitants scattering, and in part removing to El Paso with the Spaniards, on the latter's retreat from Santa Fé.

⁵ The name of Pilabo, for the old pueblo on the site of the present town of Socorro, is taken from Benavides (*Memorial*, p. 16): "el otro en el Pueblo Pilabo, á la Virgen del Socorro." On the other side of the Rio Grande, nearly opposite Socorro, or probably at what is called "El Pueblito de la Parida," in front of "El Barro," there was a pueblo called "Tey-pana." Oñate (*Discurso*, p. 251): "Dormimos frontero de Teipana, pueblo que llamamos del Socorro." Oñate was travelling up the left bank of the Rio Grande.

⁶ The village of San Antonio de Senecu was the first mission founded on the southern Rio Grande on New Mexican soil. According to Vetancurt (*Cronica*, p. 309), it was established in 1630. Its founder was the Capuchin Fray Antonio de Arteaga. Benavides (*Memorial*, p. 15) places the foundation of the mission as early as 1626. It was abandoned, and the pueblo destroyed, in the year

Marcial stands on or very near the place where the most southerly pueblo inhabited in the sixteenth century was found. It was the village of Tre-na-quel.¹ It is worthy of remark, that here the many-storied, honeycombed, large communal house reaches its meridional limits.

But the Piros also had crept up towards the coveted salt lagunes of the Manzano. The picturesque valley of A-bó, northeast of Socorro, contained at least two of their villages, A-bó proper, and Ten-a-bó, probably the ruin called to-day "El Pueblo de los Siete Arroyos." Lastly, still east of it, at the foot of the Mesa de los Jumanos, there was Ta-bir-a, now famous under the misleading surname of "La Gran Quivira." It lay very near the range of the New Mexican Jumanos, so that it is not unlikely that the Pueblo de los Jumanos, mentioned as a Piros village, is but another name given to Tabira.²

1675, on the 23d of January. The Apaches pounced upon it, killing the priest, Fray Alonzo Gil de Avila, and many of the people. The remainder fled to Socorro or to El Paso. Martin de Solis Miranda, *Parecer del Fiscal Real* (MS., 1676): "Val Pe. Fr. Alonzo Gil de Avila, Ministro del Pueblo de Zennecu en el dia 23 de Enero del año pasado de 1675." Fray Juan Alvarez, *Carta al Gobernador Francisco Cuerbo y Valdes*, 28th April, 1705 (MS.): "Tembien el pueblo de Senecu, mattaron al Pe. Por Fr. Alonzo Gil de Avila, y destruieron lo mas de la gentte indiana."

¹ Oñate (*Discurse*, p. 240) says that the second pueblo after passing the "mesilla de guinea, por ser de piedra negra," was Qualacu. This black mesa is that of San Marcial, a very conspicuous object in that region for any one coming up the river or through the "Jornada del Muerto." In *Obediencia de San Juan* (p. 115), he speaks of "Trenaquel de la mesilla, que es la primera poblacion de este Reyno, hácia la parte del Sur y Nueva España."

² Of these three, or four pueblos, it is only known that they were abandoned between 1670 and 1680, probably about 1675 or a little previously. The descendants of their inhabitants to-day live at Senecu in Chihuahua. Of the cause of their abandonment there is but one report, namely, that the Affaches compelled the people to leave. Fr. Juan Alvarez (*Carta*, MS.) places the loss of the six pueblos of the Salines immediately before the slaughter at Senecu, and after the massacre at Hauicu in 1672. Fray Silvestre Velez de Escalante (*Carta al Padre Morfi*, 1778, par. 2) mentions the event as follows: "Pocos años ántes de la dicha sublevacion, destruyeron los enemigos apaches con casí West of the Rio Grande, and towards Arizona, we find but two groups of Pueblo Indians, isolated from the others, as well as from each other, by long distances. I have already named the celebrated rocky retreat of A-co, or Aco-ma, the Hacus of Fray Marcos and the Acuco of Coronado.¹ Impregnable to Indian assault, Acoma might well remain alone in the vast solitude surrounding the basin from which the rock arises, and its people need have no fear of the hostile Navajos so long as they did not descend from the stronghold to attend to their crops. The Acomas are Queres, and there was no other settlement of the same language nearer than Cia,² a distance of seventy miles. The same distance sepa-

continuas invasiones, siete pueblos de los cuarenta y seis dichos: que fueron Chilili, Tafique y Quarac, de indios Tehuas; Abo, Jumancas y Tabira de Tumpiros, todos los cuales estaban en la falda oriental de la sierra de Sandia, menos dos que estaban distantes de dicha sierra hácia las Salinas." Of these, it seems that Cuaray or Quarac fell first. *Dilixencias practicadas sobre la Solizitud de el Cuerpo del venerable Padre Fray Gerónimo de la Llana*, 1759 (MS., fol. 2, 5). The people fled to Tajique. Those of the Piros villages retired to Socorro and Alamillo, or to El Paso, for safety.

The chief interest, historically, centres in the ruins called "La Gran Quivira." There is no doubt that they simply are the remains of the pueblo of Tabira. The name of Quivira was given to them in the latter part of the past century in consequence of a misunderstanding. The mission at Tabira was founded, and the older and smaller of the two churches built, by Fray Francisco de Acevedo, between r625 and r644. Vetancurt, *Menologio*, p. 260. The large church and convent are posterior to that date, and were evidently never used, not even finished. There were Indians (Piros) from Tabira at El Paso in 1684. *Causa Criminal por Denunciacion de Andres Jopita* (MS., p. 4).

Whether the pueblo "de Junanos" was the same as Tabira it is difficult to determine. I suspect it to have been the same. In the document entitled, *Confessiones y Declaraciones de varios Indios de los Pueblos del Nuevo México*, 1683, (MS. fol. 6,) there is the deposition of an Indian calling himself Juan, and "de nacion piro natural del pueblo de Jumanos en el Nuebo México." There was one Jumano village, if not more, but this particular one strikes me as being possibly a surname given to Tabira, owing to the latter being situated on the southern declivity of the "Mesa de los Jumanos."

¹ The origin of these two words is the Zuñi name for Acoma, Ha-ku Kue.

² The pueblo of Laguna was founded in 1699. See *Relacion de la Reconquista* (Sesto Cuaderno). That the site of the actual pueblo of Laguna was vacant previous to that date is amply proved. rated them from Zuñi, and the latter spoke an idiom distinct from the Queres language.

Zuñi, as is well known by this time through the investigations of Mr. Cushing, was the Cibola of old. Until after 1680, the tribe inhabited several villages, whose inhabitants were finally concentrated into the actual pueblo called Halo-na by its people. The "seven cities of Cibola" were Ha-lo-na, on the site of the present one; Kia-ki-ma, in a recess on the south of the gigantic mesa; the village where the negro Estevan was killed,¹ Ma-tza Ki, on the northern base of the same mesa; Pin-a-ua, three miles southwest of the actual Zuñi ; Ha-ui-cu, or Aguas Calientes (Zuñi hot springs), fifteen miles southwest of Zuñi also; and Chan-a-hue, in the same vicinity. The name of the seventh I am as yet unable to give. That last village (so much appears to be certain) was abandoned between 1542 and 1580.² After 1604, and prior to 1680, three more pueblos of the Zuñi cluster were abandoned, and when the rebellion broke out the tribe was huddled together in three pueblos only; to wit, Halona, Matzaqui, and Kyakima.³ After the reconquest, Halona alone remained.

¹ This tradition was recorded by Mr. F. H. Cushing.

² Since writing the above, I have made another trip to Zuñi, and, guided by Mr. Cushing, have again examined the question of the seven cities of Cibola. Mr. Cushing has elicited fresh information from the Indians, and has led me to other localities. The following pueblos appear now fully identified, Hauicu, Halona, Kyakima, Matzaqui, Chyanaue. Pinaua and Quakyina appear both equally probable, but neither is absolutely certain as far as identity with the Aquinsa of Oñate, *Obediencia y Vasallaje por los Indios de la Provincia de Aguscobi (Doc. de Indias*, vol. xvi. p. 133). As to the seventh, the Indians of Zuñi assert that there is a chapel in ruins at Ketchip-a-uan. In that case, the latter pueblo would have been occupied after 1629, when the Zuñi missions were founded, and Pinaua or Cuakyina would be the one that was abandoned between 1540 and 1580.

⁸ Vetaneurt, *Cronica*, p. 320. He includes Hauicu in his list also, and says it contained over one thousand souls, including the population of "other smaller villages." But Hauicu had been sacked by the Navajos in the year 1672, on

It has been the custom to give the name of "Old Zuñi" to a group of small and ruined pueblos which lie on the summit of the great mesa called by the Indians "Thunder Mountain'' (To-yo-a-la-na). The idea has arisen, consequently, that the six villages on that formidable table height were the original ones of the Zuñis. This is an error, for the pueblos on the top of Toyoalana were built after 1680 and previous to 1692 during the interregnum succeeding the withdrawal of the Spaniards from New Mexico, and while the Pueblos, left to their fate, were often sorely pressed by the Navajos and Apaches. Thunder Mountain, thus much appears certain, besides being the site of important folk-lore and consequently the centre of many religious performances, was the place of refuge, the citadel or safety place, for the people of Zuñi. It was but little fortified, some parapets of rocks along the most accessible parts of its brink or rim being the only attempts at strengthening the naturally almost impregnable position. The Spaniards never took it by force of arms, never stormed it, as they did Acoma in 1599. Three times, according to the records within my reach, did the Zuñi flee to the plateau of the gigantic mesa within the course of two centuries, and each time they were induced to return to the basin below, in a peaceable manner.1

the 7th of October (Miranda, *Parecer*, MS.), and was not permanently occupied any longer.

¹ That Toyoalana was a point of refuge, a citadel, for the Zuñis in case of urgent necessity, is recognized as early as 1540. *Traslado de las Nuevas y Noticias que dieron sobre el Descobrimiento de una Cibdad que llamaron de Ctbola situada en la Tierra Nueva (Doc. de Indias*, vol. xix. p. 532): "Y que á xix del mes de Julio pasado, fue quatro leguas de esta Ciudad á ver un peñol, donde le dixeron que los Yndios desta provincia se hacian fuertes." It is not stated whether the Zuñis retreated to Thunder Mountain at the time of Coronado, but they certainly did so about 1630, after they had murdered Fray Francisco Aetrado and Fray Martin de Arvide. *Autos y Traslados de Autos sobre las Misiones de Zuñi*, 1636 (MS., fol. 1): "Por quanto los yndios del peñol de caquima de la prouyca

Of the pueblos of the Moquis I have already spoken, but it may not be superfluous to return to them, their numbers and names, again. There were seven villages of Tusayan, five of Asay, five of Mohoce, and Oñate mentions by name only four in 1598, but found seven six years later. Up to 1680 the following can be recognized: A-hua-tu, Gualpi, Oraybi, and Mishongop-avi.¹ The names of the others are so distorted that I do not venture to mention them. In the year 1700, Ahuatu was destroyed by the Moquis of the other pueblos, who hated those of Ahuatu for their loyalty to the Spaniards. The Tehua village took its place in the list of the seven. In 1782, the names of the seven Moqui pueblos as given are very similar to those current to-day, and in most cases identical.²

The total number of pueblos, as stated in the sixteenth and in the seventeenth centuries, does not at all agree with that number as it stands at the present time. It is much larger, and varies from forty-six (Escalante, from reports at the time of the rebellion) to over one hundred (Oñate, in the Acts of Submission of 1598). The latter number is exaggerated, mainly from one cause. The names of the villages

de cuñi qe se abian alsado en tiempo del gen. don Franco de Silua los quales yndios, don Franco de la Mora qe susedio en el gouierno los dejó de paz, la qual siempre an conservado desde qe enbió el dho don Franco de la Mora al mro de campo Thomas de Albisu y subieron los religiosos qe yvan con el dho mro de campo al peñol con algunos soldados." *Carta del Cabildo de Santa-Fe á Don Antonio de Otermin*, 5th October, 1680 (MS., in *Diario de la Salida de Otermin para El Paso del Norte*, p. 71).

Again they fled to the mesa after 1680, and Diego de Vargas found them there in 1692, and for the third time they took refuge on the inaccessible height in 1703, after having killed three Spanish soldiers.

¹ Vetancurt, Cronica, p. 321.

² Fr. Agustin Morfi (*Descripcion Geográfica*, fol. 112) mentions Moqui, Tanos, Gualpi, Mosasnabi, Xipaolabi, Xongopabi, and Oraybe. Fr. Francisco Garces (*Diario*, p. 352): "Los nombres de los pueblos del Moqui son (segun lengua de los yavipais) Sesepaulabe, Masagneve, Janogualpa, Muqui, Concabe y Muca á quien los Zuñis llaman Oraive."

are given, and frequently the same one is repeated in more than one idiom. This was a source of error against which it was impossible for the Spaniards to guard. Unacquainted with the native tongues, and having but one set of interpreters, they recorded every name given, and it was difficult for the Indians to make themselves understood in case when, as at Santo Domingo and at San Juan, there were three and four linguistical stocks represented at the council.¹ The list of Oñate must be considerably reduced, also, in view of the more accurate numbers of Castañeda, who gives the number of villages at seventy-one, exclusive of those of the Salines.² The average population of each did not exceed three hundred souls, a fact which derives additional confirmation from surveys of over three hundred ruins in the whole Southwest. In placing the original pueblo population at twenty-five thousand, we are near the limits of truth, and do not overstep them.³

Political autonomy of each pueblo — even complete independence from its nearest neighbor of the same stock, to

¹ Obediencia y Vasallaje por los Indios de Santo Domingo, p. 102. Obed. de San Juan, p. 109. In the former, we clearly recognize the Queres, Tiguas, Jemez, and possibly the Piros. In the latter, it is stated: "Ayunto los indios capitanes de las provincias de los Chiguas y Puaray de los Cherechos, de los Teguas, de los Pecos, de los Picuries y de los Taos."

² No mention is made of those villages. It was Chamuscado who, in 1581, first visited them. *Testimonio Dado*, p. 86: "Y alli tubieron nueva de unas salinas que estaban catorze leguas del dicho pueblo, las cuales fueron á ver y hallaron que estaban detras de una sierra, que llamaron Sierra Morena, las cuales son las mejores que se han descubierto hasta hoy, . . . y junto á estas salinas se vieron otros muchos pueblos y estuvieron en ellos, los cuales tenian la traza que los demas; y les dieron nuevas de otros tres pueblos que bigurficaban los naturales; estan cerca de las dichas salinas y ser muy grandes."

⁸ In 1680, the Cabildo of Santa Fé (*Carta à Otermin*, MS., fol. 9) estimates the number of the Pueblo Indians in New Mexico who were implicated in the uprising at over 16,000: "Y el numero de todo el gentio de naturales que hoy se halla en el Nuevo México de los Apóstatas alzados, no es tan corto que no pase de 16 mil almas." such a degree that it led not infrequently to hostilities was the condition of the Pueblos when the Spaniards first visited them, and it remains thus to the present day, with the difference that intertribal warfare was not further tolerated as soon as the villagers became subjects of the King of Spain. The government of each village was vested in the council, and the execution of that council's decrees was intrusted to two sets of officers, civil and military, both elective. At the head of the former was the equivalent of the Governor of to-day, and there are traces of his assistants or lieutenants. Public crying was the manner in which everything of import was promulgated and made known. The Governor is called "Cacique." in the early reports, and is not to be confounded with that strange office to which the title of Cacique is now erroneously given.¹

¹ Although there is no doubt about these facts, I will nevertheless give the authorities on which my statements are based. Too much of an antiquated terminology is still lingering in regard to the organization of the Pueblos, and I hold it proper to prove that I am not setting forth assumptions under the guise of facts. Beginning with the time of Coronado, we find in Castañeda (Cibola, p. 61), speaking of the Moquis and Zuñis : "Ces Indiens sont gouvernés, comme ceux de Cibola, par un conseil de vieillards. Ils ont des gouverneurs et des capitaines." On page 164, he partly contradicts himself in regard to Zuñi : "Il n'y a pas de caciques réguliers, comme à la Nouvelle Espagne, ni de conseils de vieillards. Ils ont des prètres qui prèchent, ce sont des gens agés; ils montent sur la terrasse la plus élevée du village et font un sermon au moment ou le soleil se lève. Le peuple s'assied à l'entour et garde un profond silence; ces vieillards leur donnent des conseils sur leur manière de vivre; je crois même qu'ils ont des commandements qu'ils doivent observer." And on page 168, as to the other pueblos of New Mexico : "Toutes ces provinces ont les mêmes mœurs et les mêmes coutumes. . . . Elles sont gouvernées par un conseil de vieillards." Espejo, Relacion del Viage, p. 173: "Tienen en cada pueblo sus caciques conforme á la gente que hay en cada pueblo; así hay los caciques, y dichos caciques tienen su tequitatos que son como alguaciles que executan en el pueblo lo que estos caciques mandan, ni mas ni menos que la gente mexicana; y en pidiendo los españbles á los caciques de los pueblos cualquier cosa, llaman ellos á los tequitatos y los tequitatos publican por el pueblo, á voces, lo que piden y luego acuden con lo que se les manda, con mucha brevedad." Juan de Oñate, Carta escripta al Virrey Conde de Monterrey, March 2, 1599 (Doc. de Indias, vol. xvi.

War captains, also elective, and commanded by the council, to a certain limit and extent at least, formed the military executive.¹ There is no trace of military confederacies after the manner of the Iroquois and Nahuatl leagues, and there were no higher captaincies than those for each pueblo. If the tacit agreement that still to-day prevails among the

p. 308): "Su gobierno, behetría, que aunque tienen algunos capitancillos, obedecénles muy mal y en muy pocas cosas." Gaspar de Villagran, *Historia de la Nueva México*, 1610 (Canto xv. fol. 139):

" No tiene ley, ni Rey, ni conozemos, Que castiguen los vicios ni pecados. Es toda beherría no enseñada, Á professar justicia, ni tenerla."

Benavides, *Memorial*, p. 39: "Siempre ha sido gente de gouierno y republica, juntandose los viejos con el Capitan major, á conferir y dicernir las cosas que les conuenian, y despues de determinadas salia el Capitan mayor personalmente pregonando por el pueblo lo que se mandaua, y esta es aun oy accion de grande autoridad pregonar los Capitanes mayores lo que se ha de hazer en el pueblo." Thus far eyewitnesses of the early times of Spanish occupation or contact. But there is evidence from sources whose authors never visited the Pueblos, and who report from the statement of eyewitnesses.

Fray Juan de Torquemada, who wrote about 1612, says, in *Monarchia Indiana* (2d ed., 1723, lib. v. cap. xl. p. 681): "De los Oficios de la República, es el primero el Mandon, a quien dan mano, para que mande en lo que es Govierno: Y despues de el, el que pregona, y avisa las cosas, que son de República, y que se han de hacer en el Pueblo. Demas de estos dos, tienen Capitanes para la Pesca, para el Monte, para la Caça, y para las Obras; y á cada cosa que de nuevo les piden, o imponen, se juntan en vna Estufa grande, que tienen de Comunidad (como Sala de Cabildo) y de alli sale acordado lo que han de hacer, ó responder." A more accurate statement of affairs, and one more analogous to the present organization of the pueblos, could hardly be desired.

The term "Cacique" was applied in the beginning, as the preceding quotations show, indifferently to civil and military officers. At the present day it is misapplied to a religious functionary, of whose duties I shall treat in the course of this Report.

¹ Benavides (*Memorial*, p. 39) gives the following description of the manner of initiation of what he calls a captain: "Para hazer á vno Capitan se juntauan en vna plaça, y le amarrauan desnudo en vn pilar, y con vnos abrojos craeles le açotauan todos, y despues le entretenian con entremeses, y otros juguetes, y si á todo estaua muy sesgo, y no lloraua, ni hácia gestos á lo vno, ni se reia al otro, lo confirmauan por muy valiente Capitan." The Capitan Mayor corresponded to the war captain of to-day.

Pueblos is a reminiscence of olden times, as I have good reasons to suppose, then, in case any village begged of another military assistance, and it was granted, the war captain of the first one was *ex officio* commander in chief of the campaign. In case of absolute necessity, tribes of distinct idioms called upon each other for aid, and the instances are not rare where two villages of the same language quarrelled, and one turned to another of another stock to help him against their kinsmen.¹ Pueblo society was tribal society in

¹ I have already alluded to the fact of war being waged between the pueblos. This is further confirmed by Torquemada, Monarchia, p. 680: "Estos poblados han tenido tambien, entre sí, y vnos con otros, guerras." As to the manner in which the villages confederated and organized in case of joint warfare against an outsider, the same authority gives information, the case being that of assault by Apaches : "Conocen de mui lejos venir los enemigos, y para que les vengan á socorrer los Pueblos comarcanos, se suben las mugeres á lo mas alto de sus casas, y hechan ceniça en alto, y tras de esto hacen lumbre ahogada, para que hechando mas espeso humo, sea mas visto de los otros Pueblos (cuio favor piden): las mugeres, dando con las manos en las bocas abiertas, hacen vn grande clamor, que se oie mucho, y de mui lejos." In the various attempts at uprisings against the Spaniards which preceded the great revolt of 1680, the proposals for them issued mostly from one pueblo or from a certain group of pueblos. Thus, after the conspiracy formed during the administration of Governor Hernando Ugarte y la Concha had been discovered and the criminals punished (1650 about), another one sprang up and the appeal to the other villages was issued by the Taos and went as far as Moqui. Interrogatorios y Declaraciones de varios Indios, 1681 (MS., fol. 135): "Y despues de algun tiempo despacharon del pueblo de Taos dos gamuzas con algunas pinturas por 🍐 los pueblos de la custodia, con señales de conjuracion á su modo, para convocar la gente á nuevo alzamiento, y que dichas gamuzas pasaron hasta la provincia de Moqui donde no quisieron admitirlos, y ceso el pacto por entonces." Another conspiracy was afterwards started at the pueblos of the Salines, and spread to all the others. Ynterrogatorio de Preguntas hecho por don Antonio de Otermin, 1681 (MS.). How the final conspiracy, which resulted in the outbreak of 1680, was organized, is well known. Also that it started from the village of Taos, although instigated by an Indian from San Juan, the famous Po-pe, who, however, after the war had begun, exercised but limited authority. He was a medicine-man, and no war chief. Confesion y Declaracion de vn Yndio de Nacion Pecuri, 1683 (fol. 22, MS.). In that year, the southern Indians (Queres, etc.) followed the lead of Catiti, (fol. 23,) and Luis Tupatu was regarded as leader of the northern Pueblos: "Que ya tiene declarado quel dho Don Luis Tupatu

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its full meaning, with all its lack of consistency, and yet with those original ties that bind together clusters of that nature, and make of them such singularly solid and resisting bodies. Thus the gens or clan was fully developed among them. It is beyond a doubt that the gentes of the Pueblos are almost, if not absolutely alike. Along the Rio Grande, for instance, whether Tehua, Tigua, Queres, or even Piros, the same clans are met with such differences only as arise from the differences of language. The eagle, the bear, and especially the corn and water clans, are found from Taos to Isleta, from Tezuque to Zuñi. In older sources of information concerning the New Mexican villages, the existence of the gentile system is indicated, but not plainly. Thus descent in the female line, such as exists to-day, is hinted at. The custom of the women building and owning the dwellings, whereas the men tilled and owned the fields, is another trace of gentilism.¹ Among

gouierna las naciones que ai desde el pueblo de la Cienega hasta los Taos, y que Alonso Catiti gouierna lo demas del Reino." But when Otermin marched up the Rio Grande valley in 1681, and the Indians retreated into the mountain region called the "Cañada de Cochiti," they were commanded, so to say, by Catiti, who sent word to the Picuries to come to their assistance. The Teguas and Picuries came, but Catiti remained in command, and his counsels prevailed against those of Tupatu, who was in favor of peace. *Interrogatorios y Declaraciones* (fol. 129, 132, 140). Also, *Ynterrogatorio de Preguntas*. Catiti was an Indian from Santo Domingo, therefore one of the Queres, who were more directly threatened by the Spanish forces.

In regard to war having been waged by villages of one stock upon their kindred, and of having even confederated with other stocks for that purpose, there is the example of 1696, when the Queres of Cochiti, Santo Domingo, and Acoma confederated with the Jemez and Zuñis against the Queres of San Felipe, Santa Aña, and Cia. See *Autos de Guerra sobre el Alzamiento de* 1696 (MS.).

¹ It is not to be wondered at if no direct mention is made in older sources of clanships among the Pueblos. The fact that the clans exist to-day is sufficient proof of their existence centuries ago, for the introduction of Christian rites of marriage and baptism, in place of strengthening gentilism, tended to destroy it. Notwithstanding, it exists, and is therefore a survival. In regard to the custom of the women building the houses in place of the men, it was noticed by Castañeda (*Cibola*, p. 168): "Les maisons se bâtissent en

the Pueblos, as well as among all sedentary tribes, the position of woman was not that of a slave. But marriage was rather an act of the clan, and therefore the parties stood to each other in relations of greater independence. Chastity was an act of penitence; to be chaste signified to do penance. Still, after a woman had once become linked to a man by the performance of certain simple rites, it was unsafe for her to be caught trespassing, and her accomplice also suffered a penalty.¹ But there was the utmost liberty, even license, as towards girls. Intercourse was almost promiscuous with

commun; ce sont les femmes qui gâchent le plâtre et qui élèvent les murailles. Les hommes apportent le bois et construisent les charpentes." Still more explicit is Benavides (*Memorial*, p. 41): "Como lo testifican bien todas las iglesias y conuentos, que tienen hechos, los quâles todos parecera encarecimiento el dezir, que siendo tan suntuosos y curiosos, los hā hecho tan solamēte las mugeres, y los muchachos y muchachas de la dotrina; porque entre estos naciones se vsa hazer las mugeres las paredes, y los hombres hilan y texen sus mantas, y van á la guerra, y á la caza, y si obligamos á algū hombre á hazer pared, se corre dello, y las mugeres se rien."

¹ That the Pueblos were officially monogamous is generally affirmed by the older sources. I refer to Castañeda (*Cibola*, p. 164): "Un homme n'épouse jamais qu'une seule femme." Mota-Padilla (*Historia de Nueva Galicia*, p. 160): "No tienen estos indios mas que una mujer."

Marriage rites are variously described. Castañeda (*Cibola*, p. 170): "Quand un jeune homme se marie, c'est par l'ordre des vieillards qui gouvernent. Il doit filer et tisser un manteau: on lui amène ensuite la jeune fille, il lui en couvre les épaules, et elle devient sa femme." Mota-Padilla (*Historia*, p. 160): "En los casamientos hay costumbre, que cuando un mozo da en servir á una doncella, la espera en la parte donde va á acarrear agua, y coge el cantaro, con cuya demostracion manifiesta á los deudos de ella la voluntad de casarse." Villagran, *Historia de la Nueva México* (canto xv. fol. 135):

> "Y tienen una cosa aquestas gentes, Que en saliendo las mozas de donzellas, Son á todos comunes, sin escusa, Con tal que se lo paguen, y sin paga; Es una vil bageza, tal delito, Mas luego que se casan viven estas, Contenta cada qual con su marido, Cuia costumbre, con la grande fuerça, Teniendo por certissimo nosotros, Seguiamos tambien aquel camino, Juntaron muchas mantas bien pintadas,

members of the tribe. Towards outsiders the strictest abstinence was observed, and this fact, which has long been overlooked or misunderstood, explains the prevailing idea, that before the coming of the white man the Indians were both chaste and moral, while the contrary is the truth. Only, and this has been lost sight of, adoption into one of the clans was necessary in order to share the privileges which were considered essential for propagation.¹

The Pueblo Indians had in fact no home life. Their dwellings have been so frequently described, and are therefore so

> Para alcançar las damas Castellanas, Que mucho apetecian y quisieron."

Villagran is an execrable poet, but a reliable observer. What he states here occurred in one of the Piros villages near Socorro. Benavides (Memorial, p. 38): "Las mugeres que querian que los hombres las apeteciessen, salian al campo gordas, y buenas, y alçauan vna piedra, ó algun palillo sobre algun cerrillo, y allí le ofrecian harina, y en ocho dias, ó los que podian, no comian, sino cosa que las inquietasse los estómagos y prouocasse á trocar, y se acotauan cruelmente, y quando ya no podian mas, y que de gordas se auian puesto flacas, y figuras del demonio, se venian muy confiadas en que el primer hombre que las viesse, las apeteceria, y les daria mantas q es su principal fin." Finally, there is the proof as furnished by the Indians themselves after the departure of the Spaniards from New Mexico in 1680. The first measure taken by the Pueblos was a return to the customs of the "olden times." This is plainly expressed in the depositions of the Indians themselves, in 1681. Interrogatorios y Declaraciones (fol. 116) : "Y las mugeres que tenian de santo matrimonio las devasen, y cogiesen las que ellos quisiessen." Even later there are from time to time evidences of a design of "returning to first principles." Causa Criminal contra Gerónimo Dirucaca Indio del Pueblo de Picuries, 1713 (MS.). This Indian was accused by his own people of living in concubinage with several women, at the same time being legitimately married. Several witnesses declared that he had publicly told the people, "que no creiesen lo que el R. P. les dezia sino lo que les auian enseñado sus antepasados, que eso lexitimamente era lo que deuian guardar y no otra cosa, y que para que ha de ser uerdad, y ser buena uida tenian el exemplar en la mano en el pues no ignorauan de la manera que el auia uiuido amancebado siempre."

¹ In order to marry into a tribe, adoption into a clan is essential. There are, of course, in many pueblos, females who will not hesitate to yield. But this is a transgression of older rules, when the concession is made to a stranger, whereas, among the Rio Grande villages at least, cohabitation often precedes matriage, and promiscuity, as in favor of the "village boys," is an established fact.

well and widely known, that a fresh description of them is needless. Specimens of them can be seen to-day in at least twenty-four pueblos of New Mexico and Arizona. Their architecture has been correctly called communal. The village in its original form was a bee-hive. But one feature of its life, and an interesting one, no longer exists, at least in New Mexico. This is the separation by sexes. At present the Indian dwells with his wife and children, and a number of families occupy one large, mostly two or more storied house. When the Spaniards came, they found that the women and their offspring occupied the cells and the houses, whereas the men, even after marriage, spent the nights in those singular constructions of a public nature which are now known under the name of "Estufas." It is commonly supposed that an estufa is always round, and at least partly subterraneous, but this is not the case. Where the estufa could be dug out, it was so made, and then it was natural that it should be circular; but where this was impossible, as is the case to-day at Acoma, Laguna, and at Zufii, an inner room, well secluded and easily guarded, served instead. It may be said that there are to-day two kinds of estufas, the official or public estufa, and the private one, which often is temporary. When the Pueblos were in their primitive condition, the estufa was not only the place of abode for the males,¹ but it also served the purpose of the Mexican Tel-

¹ Castañeda (*Cibola*, p. 170): "Les maisons appartiennent aux femmes, et les étuves aux hommes. Il est défendu aux femmes d'y coucher et même d'y entrer, autrement que pour porter à manger à leurs maris ou à leurs fils." Speaking of the young men (Ibid., p. 169): "Ils habitent les étuves, qui sont sous terre dans les cours de village. Il y en a de carrées et de rondes." Zárate-Salmeron (*Relaciones* par. 74): "La última, en que duermen las mugeres y sus hijos. Los hombres duermen en la estufa, en cuyo medio encienden lumbre, y con los pies hacia ella." As late as 1704, this custom certainly prevailed among the Tehuas. Diego de Vargas, *Autos Formados sobre la Llegada de unos Indios Moquis al Pueblo de Taos* (MS., fol. 2): "Qē vn yndio del Pueblo de los puch Calli, or house of education for the boys.¹ It is probable that, as in Mexico, there were in each pueblo as many estufas as there were clans. This explains the great number of these constructions among many of the ruins. There the boys slept, ate, and whiled away their time when not strolling; there the men gathered also, and generally the women brought them their meals into that "House of the Males." The estufa was of necessity the council-house, for the "business" of the clans as well as of the tribe was in charge of the men, not so much as a right as a duty. That many religious rites were performed there is evident, but the estufa was not, as has been supposed, the permanent "temple" of the Pueblos. There were places of worship and conventional places of sacrifice, sacred spots and rooms, distinct from the estufas.² A reminiscence of this state of

taos qe no conoze vino al Pueblo de thezuque y selo dijo así á este declarante como á otros yndios del Pueblo de thezuque estando en la estufa unos trauajando y otros platicando y otros jugando á los patoles."

¹ Compare On the Social Organization and Mode of Government of the Ancient Mexicans, p. 616.

² Torquemada (*Monarchía*, vol. i. p. 681) gives a description of one of these permanent places of worship, as he calls it, although it is by no means certain that it was permanent: "Su templo es vn aposento alto, de diez piés de ancho, y veinte de largo, todo pintado, y vnos arquillos tambien pintados. El ídolo es de piedra, ó de barro, y está asentado á la mano derecha de el Templo, con vna xícara, con tres huevos de gallina de la tierra; y tiene á la otra mano izquierda otra xícara, con elotes (ó maçorcas de maiz) y delante de si tiene vna olla llena de agua." This looks very much like the outfit of a temporary or occasional "place of worship." Another description of a similar locality is given by Villagran, *Historia* (Canto xv. fol. 135):

" Y á nuestro General ouedecieron, Alojándole dentro de su pueblo, En cuias casas luego reparamos, En una gran suma que tenian, De soberuios demonios retratados, Feroces, y terribles por extremo, Que claro nos mostrauan ser sus dioses, Porque el dios del agua, junto al agua, Estaua bien pintado, y figurado, Tambien el dios del monte, junto al monte, affairs is found to-day in the private estufas (of the medicinemen, etc.), and it is still fully developed in the customs of outside worship in the desert timber, or on secluded meass, as practised by the Rio Grande villagers; it is especially well exemplified among the Zuñi Indians in every branch of their religious life. Religious practices in vogue to-day are more or less exactly described by authors of the seventeenth, and even of the sixteenth century, although not with their full de-

> Y junto á pezes, siembras, y batallas, A todos los demas que respetauan, Por dioses de las cosas que tenian."

Espejo says (*Relacion*, p. 174): "Tienen en cada uno destos pueblos una casa donde llevan de comer al demonio, y tienen ídolos de piedra pequeños donde idolatran; y como los españoles tienen cruzes en los caminos, ellos tienen en medio de un pueblo á otro, en medio del camino, unos cuizillos á manera de humilladeros hecho de piedras donde ponen palos pintados y plumas, diciendo va allí á reposar el demonio y hablar con ellos."

From the time of Coronado we have some statements in regard to places of worship. *Relacion del Suceso*, p. 320: "Los ritos é sacrificios que tienen son algunos ídolos; pero á lo que mas husan es á la agua, á la qual ofrecen unos palillos pintados, é plumas, é polvos amarillos de flores, y esto es lo mas ordinario en las fuentes. Tambien ofrecen algunas turquesas que las tienen, aunque ruines."

Oñate, *Carta escripta al Virrey*, p. 308: "Su religion es adorar ídolos que tienen muchos, y en sus templos á su modo los reverencian con fuego, cañas pintadas, plumas y ofrenda universal, casi de todas las cosas que alcanzan, animalejos, aves, legumbres," etc.

But the principal object of the estufa seems to have been, not worship, but a home for the males recalling the time when only sexual distinctions formed the basis of society. During the Spanish occupation of the country the aboriginal worship was largely suppressed, but as soon as the Pueblos felt themselves once again independent they at once re-established the estufas; and together with the estufa, the outside places of worship, the shrines, reappeared. This results from the proceedings following the expulsion of Otermin. *Interrogatorios y Declaraciones*, fol. 130: "Y pusieron por sus Iglesias á los quatro vientos y en medio de la plaza unos cercadillos de piedra amontonada, donde iban á ofrecer arina, plumas, y la semilla del meague, del maiz, tabaco, y otras supersticiones, . . . mandaron leuantar todas las estufas, que son sus casas de idolatría." Ibid., fol. 139: "Que mandaron de orden del dicho Pope, Alonso Catite, Gobernador y cabeza de la nacion Queres, que pusiesen en el pueblo, y sus alrededores montones de piedra, para que allí ofreciesen maiz quebrado y otras semillas, . . . hicieron muchas estufas en los pueblos."

tails. Sometimes they are erroneously explained, but enough is stated concerning them to prove that recent discoveries about the pueblos rest on solid fact, and are not the product of imagination.

The idea of one supreme being is not mentioned as existing among the New Mexican villagers. But the strongly fetichistic nature of their creeds, beliefs, and rites struck the early missionaries very forcibly. This is graphically expressed in the statements that they worshipped the devil and demons in general, and that witchcraft and adoration of the elements, etc. were their chief religious practices. Idols of stone and of wood were found among them in great numbers, and some of the Spanish authors made not incorrect guesses at the signification of some of them.¹ The practice of performing sacrifices outside of the villages, at small heaps of stones and near to springs or other places marked by their natural features, is often emphasized, and the prayer plumes, or sacrificial plume-sticks, are frequently referred to.² The custom of doing penance, of fasting and

¹ I refer again to Villagran, *Historia*, fol. 135. Idols of stone are frequently mentioned. In addition to the sources already quoted, see Gaspar Castaño de Sosa, *Memoria del Descubrimiento*, p. 244: "Porque tienen muchos ídolos que atras nos olvidaba de declarar; y en el primer pueblo, donde esto sucedió, al maese de campo el susso, habia muy gran cantidad, é los tienen todos." Oñate, *Discurso*, p. 252: "Donde habia gran cantidad de maiz, y muchos ídolos pintados, tantos, que en solas dos piezas, conte sesenta." This is a confirmation of Villagran. *Ynterrogatorio de Preguntas*, MS., 1681: "Y habiendo descubierto esta traicion ahorcaron el dicho yndio Estevan, y sosegaron á los demas, y en los bienes que se sequestraron del dicho yndio se halló dentro de su casa cantidad de ídolos."

² Relacion del Suceso, p. 320. Espejo, Relacion, p. 174. Oñate, Carta, p. 308. Ynterrogatorio de Preguntas : "Y ollas enteros de polvos de yerbas idolátricas, plumas y otras porquerías." Benavides, Memorial, p. 38 : "Su Religion, aunque no era idolatría formal, casi lo era, porque para qualquiera accion ofrecian, como era al tiempo que ivan á pelear con sus enemigos, ofrecian harina, y otras cosas á las cabelleras de los que auian muerto de la nacion enemiga. Si ivan á caçar, ofrecian harina á cabeças de venados, liebres, conejos, y otras animales muertos ; si á pescar ofrecian al rio." Ibid., p. 39. Torquemada, Monarchía, vol. i. p. 681 :

abstinence, is insisted upon as common, and resorted to for various purposes.¹ Even the strange religious organization that Mr. Cushing has re-discovered did not escape the notice of writers in the seventeenth century.

It is true that this religious organization, which at the present day is kept as much as possible secret from the outsider, was then public property in so far that every member of a tribe knew of its existence, and belonged more or less to a certain branch of it. The workings of the system were plain to every one, and they would have remained plain to this day had it not been for its baneful effects, which more than anything else contributed to retard the advance of the Indian on the path of progress. It caused a constant clash with the European element, and created the absolute necessity of suppressing customs so directly opposed to the ideas of civilization as understood by the whites. Witchcraft was one of the principal weapons used by the leaders of Indian faith ere they resorted to force of arms, and, while the formulas and magic means employed were of course harmless, the intention of doing injury was manifest, and it required, when persuasion failed to check it, the strong hand of force; just as a child, when teachings and reprimands are no longer effective, must be convinced by the corrective rod. But the system was so strongly rooted, it had taken such a powerful hold on every thought and action of Indian life, that, upon suppressing its public manifestations, it continued to prevail as an occult affair, secret from all who did not believe in it. Of this religious organization, which now takes an esoteric form, at least three

[&]quot;Luego de mañana, van las mugeres con harina y plumas, á vnas piedras toscas, que tienen levantadas, y les hechan vn poco de la harina que llevan, y de aquellas plumas, porque las guarden aquel dia, para que no calgan de las escaleras, y tambien para que les den mantas."

¹ Benavides, Memorial, p. 39.

components are plainly mentioned as early as 1630; namely, the warriors, the medicine-men, and the highest Shamans or priests of the tribe. Their influence was then so prominent, that intertribal dissensions are attributed to their mutual antagonism.¹ We may infer that the power which they then

¹ Even in the first years after Oñate's settlement of New Mexico, secrecy about religious matters became noticeable among the Pueblos. Torquemada, *Monarchia*, vol. i. p. 6S1 : "Esta Gente es sagaz, y de mucho secreto ; y por esta causa no se han podido ver mas cosas, ni saberlas, acerca de su falsa religion." Allusion to the esoteric orders is found in Benavides, *Memorul*, p. 37 : "Toda esta gente y naciones en su gentilidad estaua diuidida en dos parcialidades, guerreros, y hechizeros, procurando los guerreros reduzir á su imperio y mando, en oposicion de los hechizeros, toda la gente; y los hechizeros con la misma oposicion persuadian á todos á que ellos hazian llouer, y dar la tierra buenas sementeras, y otras cosas de que mofauan los guerreros, por lo qual auia entre ellos continuas guerras ciuiles, tan grandes, que se matauan, y asolauan los pueblos enteros."

Witchcraft is one of those features of Indian creed and worship which most strongly attracted the attention of early writers, and whose operations were directly felt; not that the incantations themselves could produce any effect, but they were a sign of hostility which could be but a prelude to more effective action. Besides, witchcraft was then regarded as a fact, as a real and substantial crime, and liable to punishment. Therefore, as I have already observed, when speaking of other tribes, witchcraft embodied in the eyes of the European new-comers the substance of Indian creed and of Indian cult. Among the Pueblos, the sorcerers attracted most attention; idolatry appeared practically only in the background.

The mentions of witchcraft are frequent, and we meet them at an early day. They abound in the documents of the period preceding the revolution of 1680. It was indeed a case of witchcraft which brought into prominence the notorious Po-pe, and which caused that Indian, already a medicine-man of repute to assume a leading position among his people. Castañeda does not mention sorcerers. He only says (Cibola, p. 172), "Ils ont des prédicateurs." Mota-Padilla (Historia, p. 160) says of their religious practices : "No se vió templo alguno, ni se les conoció ídolos, por lo que se tuvo entendido adoraban al sol y á la luna, lo que se confirmó, porque una noche que habó un eclipse, alzaron todos mucha gritería." What are usually called "sorcerers" in the older sources are the members of the secret orders, the medicine-men or "priests" of each tribe. I cannot here give a detailed explanation of these organizations, - this must be reserved for the next section, - but the practical working of them, as towards the Spaniards, is instructive. Benavides is probably the first who has given a clear notice of these strained relations. He says (Memorial, p. 34). "Es costumbre general entre todos los Indios infieles, recibir al principio muy

wielded over the social public as well as private life of their tribes was larger than it is to-day, for it had full sway over the imagination of the people. Among its leading exterior tokens were the numerous dances which occupied part of the time of the public, and many of which are easily recognized as still practised now. Thus Antonio de Espejo describes a festival at Acoma during which live snakes were handled by the dancers, after the manner of the snake dance that is still danced among the Moquis.¹ Several other performances of a similar nature are occasionally described,² although, on the

bien al religioso en sus pueblos, y reduzirse luego al bautismo, y viendo quando les catequizan, que han de dexar sus idolatrías, y hechizerías, sientenlo tanto los hechizeros, que inquietan á todos, y los diuierten, para que no sean Christianos, y no solo esto, sino que echen al religion ó del pueblo, y sino que le maten." In these performances of witchcraft, poison was not unfrequently employed against the Spaniards, as well as against the missionaries. I shall have to treat of these facts at length in the next section of the present Report, and therefore limit myself to one single quotation in regard to the existence of sorcerers among the Pueblos at the time of Oñate. Villagran, *Historia* (canto xv. fol. 139):

> "Y en sus prestigiosos hechizeros, Idólatras perdidos."

¹ It is with no small personal gratification that I quote here as old an eyewitness as Antonio de Espejo in favor of the veracity of my friend Captain J. G. Bourke, U. S. Army, in regard to the snake dance still practised among the Moqui Indians. It has, besides, been not unfrequently stated to me by Indians from the Rio Grande pueblos, that they also had that dance at one time. But Espejo saw performances with live snakes on the rock and in the pueblo of Acoma in 1582, during a solemn dance. He says (*Relacion*, p. 180): "Hicieron nos un mitote y baile muy solemne, saliendo la gente muy galana y haciendo muchos juegos de manos, algunos dellos artificios con viveras vivas, que era cosa de ver lo uno y le otro."

² Villagran (*Historia*, fol. 222) describes a nocturnal dance at Acoma, which was danced as a preliminary to the fight with Juan de Zaldivar, in 1599:

"Y ellos empezaron luego el baile, Y entraron tan briosos y gallardos, Cual suelen los cauallos que tascando Los espumosos frenos van hiriendo, Con las herradas manos lebantadas, Los duros empedrados, y así bravos, Hollándose ligeros, mil pedazos, whole, the student will regret to find that the Spanish authorities fail to give us ample descriptions of what to-day is "the greatest curiosity" among the Pueblos for tourists and ethnologists. This apparent lack of due attention is misinterpreted if it be attributed to carelessness, or even to obtuseness created by prejudice. Its causes are different. The Spaniards came from Mexico, and had mostly lived in Mexico at a time when idolatrous dances were performed with an amount of display in costumes and ornaments with which the modest paraphernalia of the Pueblos not only could not compete, but in comparison with which they dwindled into insignificance. Not that the dress and decorations worn by the Nahuatl, the Maya, etc. bore testimony to any great advance in art or industry over the culture of the New Mexicans. The costumes were similar in many particulars, but tropical nature afforded to the southern tribes so much more richly colored and showy material, that the appearance to the eye was incomparably superior. There was a like sim-

> Canosos de arrancar se van haziendo, Assí los bravos baruaros soberuios, Haziendo mil lindezas y saltando, Heriendo aquel penasco á puros golpes, De las valientes plantas que assentauan, Y con fuerça de gritos y alaridos, Un infernal clamor allí subian, Tan horrendo y grimoso que las almas De todos los dañados parecian, Que allí su triste suerte lamentauan, Este baile turó hasta el alua."

Torquemada, *Monarchía* (vol. i. p. 681): "Vistense galanos para hacer sus mitotes y bailes, cada barrio por sí; salen a ellos vestidos, así hombres, como mugeres, con mantas pintadas y bordadas; lo qual todo pintan, y bordan los hombres, porque las mugeres no lo aprenden, y así no lo hacen. Quando piden agua á sus dioses, andan los indios desnudos junto á las casas, y las indias desde los corredores, les hechan agua con ollas, y jarros, con que los bañan bien, y tambien bailan en las estufas, y açotan á vn indio cruelmente, y lo arañan, y rasguñan con vnos como peines; de manera, que lo dexan todo desollado y rasgado, y todo esto hacen porque llueva."

ilarity in the music, in the custom of wearing masks, and in the general order and motions of the dances.¹ The dances of the Pueblos were therefore no surprise to the whites; they had seen far more striking displays of the same nature, and unless a calisthenic feast showed features which farther south they had not seen, it was passed over in silence or slightly noticed. Nevertheless, there was one class which became soon very prominent in the eyes especially of the clergy, and to which great attention was paid, not for ethnological purposes, since ethnology was not yet a branch of knowledge. but owing to their signification and their practical bearing upon the religious and social life of the Indian. These dances have been handed down to us under the common designation of "Ca-chi-nas." The origin of the word is found in the Tehua language, where "Ka-tzin-a" signifies the spirits of the fetiches of game.² To dance a Katzina was therefore to perform some animal dance with the object of performing an incantation, either for purposes of the hunt, or of war, or some other work of public utility. The deer dance, when

¹ Espejo, *Relacion*, p. 174: "Tienen todas las pinturas de sus casas y otras cosas que tienen para bailar y danzar, así en la música como en lo demas, muy al natural de los mexicanos."

² Torquemada (*Monarchía*, vol. i. p. 681) mentions these deities, three in number, and it is clear from the context that he particularly refers to idols of the Tehuas. Other similar deities are mentioned on occasion of the uprising of 1680. *Interrogatorios y Declaraciones*, fol. 135. While Po-pe was concealing himself in the estufas of Taos three "demons" are said to have appeared to him, and these demons or deities are called, respectively, Caudi or Cadi, Tilim, and Heume. In the same document mention is also made of the sacred lagune whence the Pueblos claim to have issued, and this lagune, the Tehua name for which was Cibobe, is called Colela and Copiala, — "porque siempre deseaban viuir como salieron de la laguna de Colela."

The Cachina, as the name of a particular class of idolatrous dances, appears in the middle of the seventeenth century. The dance was early prohibited, but was never completely suppressed, and the Spaniards soon found out that, whenever a Cachina was preparing, it meant surely some mischief. One of the first things the Pueblos did after the expulsion of Otermin from New Mexico was to re-establish the Cachinas. performed with a religious intent, and not merely for the entertainment of visitors, the dance of the mountain sheep, the much discredited snake dance, in fact, all animal dances, are the original Cachinas. But the name was very soon extended to all idolatrous dances in general, and as a number of them were very obscene, it was necessary to prohibit them. Obscenity and public immorality enter into Indian belief and creed as symbolism. With the Indian, form and shape appear so intimately connected with substance that they are inseparable, and the surest way, in the Indian's mind, to make a prayer effective, is to symbolize the matter prayed for by a close imitation thereof.

To the numerous rites of a religious nature, whose performances strike the eye even of the most inattentive, belongs one which consists in the representation of particularly obscene rites. It is variously called, according to the idiom of the tribe to which it belongs, and a description of the ritual dress as well as paint has been handed down to us from as early a date as 1599. At that date it was performed in connection with warlike operations.¹

¹ It is easy for one who has seen the so-called Ko-sha-re or Entremeseros act the part of clowns at some of the Pueblo dances to recognize these obscene and disgusting personages in the graphic description furnished by Villagran of the manner in which the Acomas received the Spaniards when Vicente de Zaldivar approached their inexpugnable rock, in January, 1599 (*Historia*, fol. 226):

"Tambien entre varones y mugeres, Andauan muchos baruaros desnudos, Los torpes miembros todos descubiertos, Tiznados, y embijados de unas rayas, Tan espantables negras y grimosas, Cual si demonios brauos del infierno. Fueran con sus meleñas desgrenadas, Y colas arrastrando, y unos cuernos, Desmesurados, gruessos y crecidos, Con estos trajes todos sin verguenca, Saltauan como corços por los riscos, Diziéndonos palabras bien infames." Information as to the burial rites of the Pueblos is exceedingly meagre and unsatisfactory. It points to cremation, but in presence of the pre-Hispanic burial grounds discovered lately, which contain complete skeletons, cremation cannot be asserted to have been a general custom.¹

Religion, or rather magic, was essential to warfare. Many of its details, important as well as unimportant, were connected with articles of Indian faith. Such, for instance, was, and is yet, the act of scalping. In securing the scalp of the dead, the captor secures the faculties, mental as well as physical, of him whom he has slain, and renders them so to say tributary to himself and to his tribe. The Pueblos scalped, they danced with the scalp, and honored it.² The scalp dance also was therefore a Cachina. Fasts preceded a campaign, as well as among other tribes. The warrior before and immediately after his military enterprise was almost a sacred being. The mode of warfare of the Pueblos did not differ from that of other Indians. Its tactics were ambush and surprise, its weapons those of the savage. The Pueblos carried the shield, the bow and arrows in their respective

¹ Castañeda (*Cibola*, p. 165) says of the Indians of Zuni-Cibola : "Ils brûlent les morts, et avec eux les instruments qui leur ont servi à exercer leur métier." Mota-Padilla (*Historia*, p. 160) describes a cremation witnessed by Coronado's men : "Y en una ocasion vieron los españoles, que habiendo muerto un indio, armaron una grande balsa ó luminaria de leña, sobre que pusieron el cuerpo cubierto con una manta, y luego todos los del pueblo, hombres y mujeres, fueron poniendo sobre la cama de leña, pinole, calabazas, frijoles, atole, maiz tostado, y de lo demas que usaban comer, y dieron fuego por todas partes, de suerte que en breve todo se convertió en cenizas con el cuerpo." Mota-Padilla had access to sources extant at Guadalajara in the past century which are unknown to me.

² The custom of scalping the dead seems to have been an ancient one among the Pueblos. Benavides, *Memorial*, p. $_38$: "Como era al tiempo que ivan á pelear con sus enemigos, ofrecian harina y otras cosas á las cabelleras de los que auian muerto de la nacion enemiga." The taking of scalps is mentioned in documents of a posterior date, but always in a manner that leads to suppose that it was an ancient custom.

quivers, and the war-club; whether the lance was in use is still undetermined. But in addition he wore a sort of helmet; it was a close-fitting cap made of buffalo hide, strong enough to resist an arrow at long range. This military garment has now gone out of use, and the shield of buffalo hide is little more than a mere ornament or keepsake. Both have shared, or are bound to share, the fate of the flint-tipped arrow and of the war-club with a massive head of stone.¹ The question whether slings were used for hurling stones is not certain. Pebbles and rocks were largely resorted to for defensive purposes. The flat roofs contained accumulations of such material.² The villages were defended from the

¹ The helmet or cap of buffalo hide is mentioned by Castañeda, *Cibola*, p. 67. Indians from Pecos (Cicuye) came to visit those of Zuyi, and they offered to Coronado "des casques." The helmet was well known to the Zuñis and used by them, according to Mr. Cushing. As to the shields of buffalo hide, they are so frequently mentioned by the oldest authors that it is superfluous to quote. The same is the case with the other weapons mentioned. I merely quote one author, Villagran, who when he describes the people of Acoma arming them. selves against the Spaniards, gives the following inventory of the weapons used by the tribe (*Historia de la Nueva México*, canto xviii. fol. 157):

> "Los unos con gran priesa descolgando, Del alto techo la formida maça, Otros el gruesso leño bien labrado, Qual la rodela y hasta bien tostada, El arco, y el carcax de agudas puntos, Con otras muchas armas que á su modo, Han conserbado siempre, y han guardado."

In regard to the macanes or war-clubs, it seems that the club of to-day, a short stick with a heavy notch at one end, was in use three centuries ago. Espejo (*Relacion*, p. 175): "Y las macanas son un palo de media vara de largo, y al cabo del muy gordo." One and a half vara, or about eighteen inches, is the customary size of the war-club of to-day. That the arrows were tipped with flint or stone scarcely needs proof, still I shall quote here Espejo (p. 174): "Que las flechas son de varas tostadas y la puntas dellas de padernal esquinadas, que con ellas facilmente pasan una cota."

² When Coronado had to storm the village of Hauicu of the Zuñi group of pueblos, he was himself hurt by rocks thrown from the houses. *Traslado de las Nuevas y Noticias*, fol. 532: "Dieronle en la cabeza y hombros y piernas muchos polpes de piedra." Castañeda, *Cibola*, p. 43: "Le général fut renversé d'un

house-tops;¹ in a few rare instances, as at Pecos, a rude stone wall encompassed the place.² In case of dire necessity the pueblo was temporarily abandoned, and the tribe retired to the nearest convenient rock or plateau for a time. If in the interval the village had been sacked or burnt, it was rebuilt, but seldom on the same site. As a general rule, changes of location were common and easy; hence the great number of ruins to-day. They indicate, and I cannot enough insist upon this fact, numerous shiftings, and not a large simultaneous population.³

There is nothing in the natural resources of New Mexico that could maintain a large number of people whose mechanical and industrial means of support were those of what has been called the "stone age." The water supply of the territory is remarkably scant, and, while the Indian knew and used springs which the present settler is sometimes unacquainted with, the value of such springs was not very great. They might suffice for the wants of one or a few families, sometimes for a small village. To such watering places the Indian was limited, outside of the river bottoms of larger

coup de pierre en montant à l'assaut; et il aurait été tué sans Garci-Lopez, etc. qui se jetèrent devant lui et reçurent les pierres qui lui étaient destinées et qui n'étaient pas en petit nombre." As to the custom of storing pebbles on the house-tops, it is abundantly proved. Gaspar Castaño de Sosa (*Memoria del Descubrimiento*, p. 230) also mentions "hondas."

¹ Almost every engagement with the Pueblos proves this. Already the *Relacion Postrera de Sivola* (MS.) says: "Es gente que defiende bien su capa, y desde sus casas, que no curan de salir fuera."

² This stone wall is still visible at Pecos. It existed in 1540. Castañeda, p. 177.

³ The changes that have occurred in the sites of the various pueblos within three centuries are considerable. It required the dispositions taken by the Governor Don Domingo Gironza Petriz de Cruzate in 1689 to compel the Indian to remain within a certain circuit at least. The so-called Pueblo Grants are not grants, they are limitations placed to the erratic tendencies of the sedentary, or rather land-tilling aborigines. Previously the villages were moved about within the range at will, and upon the slightest provocation. streams. But the larger streams are few and far between, and only portions of their course suitable for cultivation. Only the Rio Grande, the San Juan, the Chama, parts of the Pecos, Jemez, Puerco, and Upper Gila, irrigate large valleys.

True it is, the Indian did not need to irrigate everywhere. His domestic plants did not all require artificial watering. Corn, for instance, grows by means of summer rain and winter snows alone, provided both come at the right time. Wheat the Pueblo Indian knew only after the advent of the Spaniard. Squashes, or calabashes, and beans required irrigation. But corn was the great staple, and corn may grow on elevated table mountains or plateaus that are many hundreds, nay thousands, of feet above a spring or a brook. In such cases, the village Indian subsisted on a scanty crop and on game: he sacrificed to security of living the comforts of a more productive location.¹

The Tanos of the Galisteo basin had no watercourses from which to derive channels for the wants of their crops.² The Piros of Tabira, and the Tiguas of Cuaray, subsisted from corn watered only by rain. Nor was it indispensable that the precipitation should be very abundant; but only that the rain or snow should come in season. The Pueblo had no stock to water, the turkey was his only fowl.³ Mammals he did not

¹ The testimony in favor of the assertion, that the Pueblos irrigated previous to the advent of the Spaniards, whenever the water-courses gave a sufficient supply, are abundant and conclusive. I only refer to those from the earliest times, and in regard to which there can be no suspicion of reporting features introduced by Europeans. Espejo, *Relacion*, p. 174: "Y de todo esto hay sementeres de riego y de temporal con muy buenas sacas de agua y que lo labran como los Mexicanos." Old irrigating ditches are quite common in New Mexico.

² Espejo, p. 176.

⁸ Turkeys, as a domestic fowl, are frequently mentioned. Castañeda, *Cibola*, p. 171. *Relacion del Suceso*, p. 320. Hernando de Alvarado, *Relacion de lo que descubrieron en Demanda de la Mar del Sur*, p. 512: "Tienen mucha comida de maiz e frisoles y melones y gallinas en grande abundancia." *Relacion Postrera*:

know how to domesticate and to raise. If, therefore, necessity compelled him to retire into regions where running water or springs did not exist, a tank or simple artificial cistern was sufficient for his needs. Thus, the village of Tabira (Gran Quivira) had four large artificial pools from which the people derived drinking water. The pueblo of Acoma subsists to-day upon the water collected in a picturesque basin on the top of the rock, three hundred and fifty feet above the utterly dry valley. To such and similar devices the New Mexican villager had to resort, and it was a relief to him when he could nestle by the side of a permanent river, and raise beans and calabashes with the aid of primitive channels of irrigation. The tribes on the Rio Grande, and the people of Taos and Pecos, enjoyed such privileges more than any of the other tribes. With them irrigation was easy, and frequent mention is made of it by the older writers.

As far north as the village of Santo Domingo, or Cochiti, that is, in the latitude of Santa Fé, cotton was raised by the Pueblo Indians. The introduction of sheep has, in this colder climate, caused wool to supersede cotton among the natives; but previously to the seventeenth century the aboriginal dress consisted largely of cotton sheets, or rather simple wrappers, tied either around the neck or on the shoulder, or converted into sleeveless jackets. This was the custom especially in the cotton-raising villages, but the others also, like Zuñi, Acoma, and the Tanos, used cotton, obtaining it by barter.¹ Beside cotton, the materials used for the dress of the Pueblos were deer skins and buffalo

[&]quot;Tienen algunas gallinas, las cuales guardan para hacer mantas de la pluma." Espejo, *Relacion*, p. 175.

¹ The fact that cotton was raised along the Rio Grande is so universally stated by older authors, that I refrain from quoting. In regard to Zuñi, it is doubtful, although I believe that it was not the case. The Moquis, however, did raise cotton.

robes, rabbit hair or skin (particularly at Zuñi and at Moqui), and leaves of *Yucca bacata* and *Y. angustifolia*. Of the fibre of the Yucca, the Zuñi Indians made skirts and kilts; of rabbit skins, very heavy blankets were made.¹ The northern Pueblos, the Tehuas, Taos, and also the Pecos and Tanos, dressed in buckskin in preference to anything else.² But still, even when cotton was unobtainable for whole garments, they sought to secure cotton scarfs and girdles woven in bright colors, which were used for belts as well as for garters, etc. The dress was more simple than that of today. Leggings of buckskin were worn in winter only, and then mostly by the northern Pueblos. The moccason, or "tegua," protected the feet. It is explicitly stated that, while the "uppers" of this shoe without heel were of deerskin, the soles were frequently of buffalo hide.³ The Pueblos,

¹ Skirts made from Yucca leaves are frequently mentioned. At Zuñi, for instance, *Relacion del Suceso*, p. 320: "se visten de mantas de Henegrien," that is, I presume, of Hennequen, a species of the Agave. *Relacion Postrera*: "Andan las mugeres vestidas de mantas de maguey hasta los piés." Zarate, *Relaciones*, par. 44: "Vistense de mantas de Yztli texidas de cardoncillo." As for the robes of rabbit skins, they are mentioned by Fray Marcos de Nizza, *Descubrimiento*, p. 338; Don Antonio de Mendoza, *Deuxième Lettre à l'Emfereur*, 17th April, 1540; Cibola, Appendix, p. 294, after the statements of Melchior Diaz, *Relacion Postrera*: "Tambien hacen mantas de pellejos de liebres y de conejos, con que se cubren."

² Hernando de Alvarado, *Relacion*, p. 513. Espejo, *Relacion*, p. 177. *Relacion Postrera. Relacion del Suceso*, p. 325.

⁸ Descriptions of the Pueblo costume are very frequent in older sources. Of Zuñi, Castañeda (*Cibola*, p. 163) says: "Les Indiens de ce pays sont très-intelligents, ils se couvrent les parties naturelles et tout le milieu du corps avec des pièces d'étoffes qui ressemblent à des serviettes; elles sont garnies de houpes et d'une broderie aux coins; ils les attachent autour des reins. Ces naturels ont aussi des espèces de pelisses en plumes ou en peaux de lièvres, et des étoffes en coton. Les femmes portent sur les épaules une espèce de mante qu'elles nouent autour de cou en les passant sous le bras droit; elles se font aussi des vêtements de peaux très-bien préparées, et retroussent leurs cheveux derrière les oreilles en forme de roue, ce qui ressemble aux anses d'une coupe." I omit the descriptions furnished by Fray Marcos and by Melchior Diaz, since neither of them saw the costume, and they report from hearsay merely. Juan

as well as the roaming Indians, knew the art of tanning, and the astringent qualities of the "Caña agria" (*Rumex venosus*) were not unknown to them, but the plant came into use for tanning only under the Spanish régime.

Thus both agriculture and the hunt furnished to the villagers not only food, but dress also. The turkey, which was kept around the houses of the pueblo, was domesticated, not so much for its meat as for its feathers. Feather mantles were a part of the wearing apparel, and afforded both protection and ornament.¹ We meet among the New Mexicans the two elements which, farther south, consti-

Jaramillo, Relacion hecha de la Jornada que habia hecho á la Tierra Nueva, p. 308: "El vestido de los indios es de cueros de venados, estrenadísimo el adobo, alcanzan ya algunos cueros de vacas adobado con que se cobijan, que son á manera de bernias y de mucho abrigo; tienen mantas de algodon cuadradas, unas mayores que otras, como de vara y media en largo; las indias las traen puestas por el hombre á manera de gitanas y ceñidas una vuelta sobre otra por su cintura con una cinta del mismo algodon." Relacion Postrera: "Andan cernidas: traen los cabellos cogidos encima de las orejas como rodaxas." Testimonio Dado en México, pp. 84, 90: "Y la gente vestida de mantas de algodon y camisas de lo propio." Espejo, Relacion de Viage, p. 173: "En esta provincia se visten algunos de los naturales, de mantas de algodon y cueros de las vacas, y de gamuzas aderezadas; y las mantas de algodon y cueros de las vacas las traen puestas al uso Mexicano, eceto que debajo de partes vergonzosas traen unos paños de algodon pintados, y algunos dellos traen camisas, y las mugeres traen naguas de algodon y muchas dellas bordadas con hilo de colores, y encima una manta como la traen los indios Mexicanos, y atada con un paño de manos como tohalla labrada, y se lo atan por la cintura con sus borlas, y las naguas son que sirven de faldas de camisa á raiz de las carnes, y esto cada una lo trae con la mas ventaja que puede; y todos, así hombres como mujeres, andan calzados con zapatos y botas, las suelas de cuero de vacas, y lo de encima de cuero de venado aderezado; las mugeres traen el cabello muy peinado y bien puesto y con sus moldes que traen en la cabeza uno de una parte y otro de otra, á donde ponen el cabello con curiosidad sin traer nengun tocado en la cabeza."

¹ The manner of making these feather mantles is described as follows by Juan Jaramillo (*Relacion hecha de la Jornada*, p. 309): "Cueros unos pellones de plumas que las tuercen, acompañando la pluma con unos hilos, y despues las hacen á manera de tegido raro con que hacen las mantas con que se abrigan." Alvarado (*Relacion*, p. 512) also mentions the "pellones de la pluma de las gallinas."

tuted the fine robes of the Mexican Indians, the feather or plume, and the rabbit skin or hair. In Mexico, the two were combined in a garment that astonished the Spaniards by the beauty of its color and its intricacy of design. Farther north, each material was used by itself: the Pueblos had not yet advanced to the idea of a combination.

The hunt as well as fishing was mostly communal. What in Peru has been described as the "Cha-cu," or great hunting expeditions of the Incas, could be witnessed in New Mexico even as late as this century. It was nothing else than a wholesale slaughter, in the most cruel and sometimes wanton manner, of all the game within a circle encompassed by a large number of people. Such communal hunts were under the special direction of the war captains, and not unfrequently several villages associated for the purpose. The meat was distributed among the households, and it would seem that a portion was reserved for rainy days.¹ For the Pueblo was not as improvident as the roaming Indian, who has the resource of changing his abode in case the local supply is exhausted. The Pueblo laid in communal stores; certain small tracts were cultivated for that purpose, and the crops were housed in advance of the individual ones. There is still one remnant left of the ancient custom of communal hunting. These are the periodical rabbit hunts, made ostensibly for the benefit of the Cacique. I merely mention them here because they were accurately observed and described as early as the last years of the sixteenth century.² There is of

¹ This custom is reported by the Pueblo Indians as being an ancient one : it is now falling into disuse.

² The communal hunts are described, or at least noticed, by Torquemada, *Monarchía*, vol. i. p. 680: "Para ir á caça, hechan vando, y lo pregonan tres dias continuas; pasados los tres dias, salen á los campo y á la caça, que ya está pregonada." An excellent description of it, particularly of the rabbit hunt still practised to-day, is found in Villagran, (*Historia*, canto xvii. fol. 163.) but it is too long to be copied here.

course a great deal of superstitious practice connected with all these performances, for the Indian is so fettered to his complicated creed that his most insignificant actions are associated with some ritualistic performance.

Landed tenure was simple, and had not risen to the conception of individual ownership. The tribe or village claimed a range, the limits of which were ill defined. Within this range each male was at liberty to till a plot or tract, and since he it was who did the work on it, to him, and not to any female, was the right conceded of controlling the field. But he could not alienate it except to members of the tribe or of the clan. To such he could barter away and exchange his field, his crop even, so long as it was not housed. After housing, the crop belonged to the family, for the house was its abode, and the house had been built by the woman. There is consequently truth in the broad assertion, that the land belonged to the men and the dwellings to the women, with the restriction, however, that such possession was subject to the claims of social organization; it was a possessory right rather than an absolute title. The fields, after the father's demise, might descend to his male children, or one of them; but any young man had the opportunity to obtain a plot of his own, and strict rules of inheritance cannot be said to have existed. With articles of personal use, the brothers seem to have stood nearer than the children: the Pueblos were approaching a state of transition from mother right to descent in the male line.¹

It is almost superfluous to enter into any details about the agricultural and household implements of the Pueblos. To say that these Indians knew no metal of any kind, that

¹ These facts have been told me by a number of old Indians, belonging to the esoteric groups among which traditions are preserved with the utmost care. They refer more particularly to the Rio Grande Pueblos.

consequently basalt, flint, obsidian, granite, bone, and wood were the materials out of which they manufactured their instruments, designates their average type. To the student of details many interesting local variations will appear, but it suffices for our purpose to establish the degree of culture in general. I must, however, observe that the use of stone implements does not imply absolute imperfection and rudeness of work. By means of a simple pebble or fragment of stone, the Pueblo Indian could perform sometimes as much as many of us can to-day with an implement of steel. Only the native, who had no idea of the value of time, supplemented the imperfection of the instrument by a degree of patience which we cannot afford to practise. It is well known that every principal tool of modern times had its prototype in the so called stone age, and this fact is illustrated by the ancient Pueblo implements. The plough they of course did not have, because they had no beasts of draught; a planting stick and stone knives took its place. Bone saws have been found; the fire drill was their auger and their gimlet. The axe, the hatchet, the hammer and maul, as well as the club-head, are all represented in basalt, in granite, and similar material. The Pueblo, as we have seen, spun and wove; he made wickerware and pottery, the latter without the potter's wheel.

In the main, the pottery of pre-Spanish times appears better made and more handsomely decorated than the modern pottery of the Pueblos. But the patterns are similar, and the symbols used are identical. There are of course many local differences, but they can be explained by local resources or lack of resources. Where mineral paints were abundant, and varied in shades, the colors of the designs show brighter hues; where good clay was not accessible, the pottery suffered in durability. The Pueblo, however, knew how to impart a certain lustre or glaze to some of the decorations on his earthenware, and this art is lost. How the decadence in ceramics is to be accounted for, I shall state further on.

Divided -into petty communities, the Pueblo traded with his neighbor, or fought with him, as circumstances might dictate. Trading was simple exchange, for there was no money. The solemn dances served often as marts, where the people came to enjoy themselves and to barter. But the village Indian also made longer trips for commercial purposes. In 1540, the Pecos Indians came to Zuñi with buffalo hides. The two extremes, west and east, possessed distinct commodities, which gave rise to commerce.¹ Again, certain groups of villages in the very heart of New Mexico controlled natural resources coveted by others, and for their possession they bartered or wrangled. The Tanos held the veins of turquoise, or kalaite, at the Cerrillos, about twenty miles southwest of the present Santa Fé. A branch of the Tiguas and another of the Piros were settled in the neighborhood of the salt marshes. The Zuñis enjoyed a similar privilege in being within a short distance of the Salines of the Carrizo. The Queres of San Felipe had in front of their village large veins of mineral paint, valuable to the Indian for his pottery. Such and other natural "treasures" were guarded as jealously as the limited power of their possessors permitted; they both divided the pueblos from one another at times, and held them together by the great tie of commercial intercourse.

Although never clearly defined, a certain solidarity existed between all the villages, of whatever language or geographical position. The tie was very nearly unconscious, and it made

¹ Such commerce is frequently alluded to. Thus Pecos occasionally traded buffalo hides with the Zuñis. Castañeda, *Cibola*, p. 68. Salt was an important article of commerce; not that the people of the villages situated near the Salines "exported" the coveted condiment, but those of the other pueblos had to submit to the conditions which those who held the marshes exacted.

itself felt only in the hours of greatest need, at what might be termed supreme moments. It originated from community of customs, organization, and creed. It did not prevent intertribal squabbles, it was not formulated by any compact of the nature of league or confederacy. The Spaniards felt its force several times, and for the last time in 1680. This tie, which acknowledged the beliefs of all the Pueblos to be one, and which hinted at a community of origin too, was quite as much a product of necessity as of anything else. It was also the result of contrast in condition between the village Indians and the roving tribes surrounding them, and constantly threatening more or less their existence.

The relation between these two classes of natives, the agricultural and the nomad, were peculiar. In general there was war between them, war to the knife, a war of extermination. Nevertheless commerce existed. The people of Acoma exchanged cotton mantles against deer-skins with the Navajos;¹ the Yutas traded at Taos, the Apaches of the plains came to Pecos with their buffalo robes. But on such occasions the people of Pecos did not allow them to enter the village, because, says Castañeda, "they are people who cannot be trusted. They receive them kindly, trade with them, without however allowing them to spend the night in their village. They even keep watch with trumpets, the sentinels calling out to each other as is done in Spain."² This applies to the Pueblos in general, and expresses the true relations between them and the nomads. The latter could "never be trusted"; they might trade peaceably to-day, and

¹ Espejo, *Relacion*, p. 180: "Los serranos acuden á servir á los de los poblaciones, y los de las poblaciones les llaman á estos, querechos; tratan y contratan con los de las poblaciones, llevándoles sal y caza, venados, conejos y liebres y gamuzas aderezadas y otros géneros de cosas, á trueque de mantas de algodon y otras cosas con que les satisfacen la paga el gobierno."

² Castañeda, Cibola, p. 179.

murder to-morrow those with whom they bartered. The Pueblos had always to be on the *qui vive*.

Ere I speak of the tribes called savages, I must refer to two clusters which were included under that denomination in part, but which still may not have deserved the name, since they showed a more docile spirit and a greater tendency to assume stability of abode than have been found in the others, the Navajos excepted. These two tribes are the Mansos and the Jumanos. Both of them I have already enumerated among the Indians of Chihuahua.

The Mansos also are called Lanos and Gorretas, but the name which they themselves recognize is not ascertained as yet. It is certain that they formerly lived on the Rio Grande in New Mexico, some fifty-five miles north of El Paso del Norte.¹ Their dwellings were made of branches and boughs, and they tilled the soil to a limited extent, but in dress they were like the Apaches and other Indians of the plains. Towards the Spaniards they showed themselves hostile in a small way, or rather distant and intractable for a while, until in the middle of the sixteenth century they were reduced to a permanent colony at the Pass and definitively settled.² Their numbers originally cannot have been more

¹ The place is indicated by Pedro de Rivera, *Diario y Derrotero*, p. 26. He places it twenty-one leagues north of El Paso del Norte, or in the vicinity of the present railroad station and military post of Fort Selden. That the Mansos did not live at El Paso originally is clearly proved. Benavides, *Memorial*, p. 9. That they were settled at the Pass by Fray Garcia de San Francisco in 1659 has been mentioned already.

² Fray Garcia de San Francisco, *Auto de Fundacion*, 1659 (MS.). The most detailed description at my command is the one by Benavides, *Memorial*, p. 9: " \bar{q} comunmente llamanos, Mansos, ó Gorretas; porque de tal suerte se afeitan el cabello, que parece traen puesta vna gorreta en la cabeça; y asimismo, escarnentados de que nuestros perros los han mordido algunas vezes, quando ellos nos reciben de guerra; y quando vienen de paz y mansos, dezimos á los perros, sal ai, porque no los muerden, suelen ellos tābien preuenirse, que les atagenos los perros diziéndones, sal ai, sac ai, manso; y por este nobre de Man-

than from five hundred to a thousand souls.¹ About their idiom no studies have as yet been made. They have to-day the same officers as the Pueblos, and, although reduced to a dozen families, maintain their organization, and some of their rites and dances, which are very similar to those of the New Mexican villagers. They acknowledge having come from the north; the clans that are still extant are the same as the clans of the Pueblos, and they confess that, while they lack at present the medicine-men or shamans, the need might be supplied by applying for the necessary idols and paraphernalia to any of the northern Pueblos. This confession is important, since it proves that the Mansos also recognize that tacit solidarity which binds together the sedentary Indians of New Mexico. I call particular attention to the Mansos, for they are fast disappearing, and ought to be studied while it is yet time.²

sos son conocidos comunmente entre nosotros. Tambien esta es gente que no tiene casa, sino ranchos de ramas, ni siembran, ni se visten ellos en particular, sino todos desnudos; y solamente se cubren las mugeres de la cinta á baxo, con dos pellejos de venado, vno adelante, y otro atras. Tambien son de la condicion de los antecedentes, que si ven la suya hazen todo el mal que pueden; pero no pudiendo, se vienen todos de paz á buscárnos, para que los demos de comer que este es su principal fin, y se comen entre pocos vna baca cruda, no dexando nada de la pança, pues aun para limpiarla de la vascosidad no reparan en tragársela assí, como perros, cogiendola con la boca, y cortandola con cuchillos de pecernal, y tragando sin mascar. Estos Mansos pues, como estan en el passo del rio, es fuerça topar siempre con ellos, y suelen lleuarnos á sus propias rancherías para que les demos de comer á sus mugeres, y hijos, y tambien nos suelen regalar con lo que tienen, que es pescado y ratones. Es gente muy dispuesta, bien agestada y fornida." Of the creed and beliefs of the Mansos I have not been able to find anything reliable.

¹ Vetancurt, *Crónica*, p. 308, speaks of over one thousand previous to 1680. But in this number are manifestly included the Sumas and other Indians (Piros, Jumanos, etc.) who had intermarried with the Mansos or were living among them. In 1749 the number of Indians at El Paso is estimated at one thousand, which comprises Mansos, Tiguas, and Piros, *Relacion de las Misiones del Nuevo México* (MS.). According to Father Agustin Morfi, *Descripcion*, fol. 114, there were fifty Indian families in 1744, and two hundred and ninety-four Indians in all in 1765.

² I shall refer to these details in the third part of this Report.

The Jumanos have disappeared from the surface, and, strange to say, although mentioned as an important and even numerous tribe in the sixteenth and seventeenth centuries, I have not as yet been able to trace any description of the customs, manners, etc. of that northern branch of them which belonged to New Mexico proper. They ranged in the southeastern part of the territory, south and southeast of the salt lagunes of the Manzano, where the name of "Mesa de los Jumanos" still commemorates their former presence.¹ About their abodes, their mode of dress, their rites and creed, we know as little as of their language, — nothing. Still it is certain that a vocabulary of the latter was made in 1684 by Fray Nicolas Lopez, but it has disappeared. Benavides states that the Jumanos of New Mexico subsisted on the

¹ In 1598, Oñate visited the three great villages of the Jumanos, or "Rayados," in the vicinity of the Salines and of Abo, consequently on or near the Mesa de los Jumanos of to-day. Discurso de las Jornadas, p. 266 : "Uno muy grande." In the Obediencia de San Juan Baptista (p. 114) are mentioned "Los tres Pueblos grandes de Xumanas ó Rayados, llamados en su lengua, Atripuy, Genobey, Quelotetreny, Pataotrey con sus subgetos." This would make four instead of three. The Obediencia y Vasallaje á su Magestad por los Indios del Pueblo de Cuéloce (Doc. de Indias, vol. xvi. p. 126) mentions the pueblo of Cuéloce as "que llaman de los rayados." Cuéloce may be another version of Cuelotetrey. In the same document Xenopué is mentioned, and Patascé. The former is most likely the same as Genobey, and the latter may stand for Pataotrey. I place some stress on these local names, as they may be authentic remains of the language. Oñate (Carta escripta 1599, p. 306) mentions the Xumanas as the second tribe encountered in New Mexico, coming to that country from the south. In 1630, Benavides (Memorial, p. 77) locates the Jumanos 112 leagues east of Santa Fé. Fray Alonzo de Posadas (Informe al Rey, 1686) locates them on the Upper Rio Nueces, in Texas, 80 leagues east or northeast of the Junta de los Rios, or mouth of the Conchos. Dominguez Mendoza (Diario, 1684, fol. 12) also places them in that vicinity. In connection with the location of the Jumanos I may be permitted here to recall the mention made of the Teyas, a tribe of the plains, which tribe Coronado met on his adventurous trip to Quivira, Carta á su Magestad, 20th of October, 1541, old style (Doc. de Indias, vol. xiii. p. 263): "Y otra nacion de gente que se llaman los teyas, todos lobrados los cuerpos y rostros." The fact that the Teyas tattooed their faces and bodies might possibly indicate that they were the Jumanos, who, in quest of the buffalo, had gone as far north as eastern or northeastern New Mexico.

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buffalo almost exclusively, and I have not been able to find any documentary evidence that they cultivated the soil.¹ And yet Espejo found their kindred in Chihuahua living in permanent abodes, and raising the same crops as the Pueblo Indians. It is not unlikely that the northern branch of the tribe succumbed to the remarkable influence which the great quadruped exerted over the aborigines, who attached themselves to its immense hordes, and, becoming accustomed to the life which the following of the buffalo required, discarded permanence of abode, exchanging it for vagrancy with its con-

¹ The only peculiarity which is attributed to the Jumanos in the sources at my disposal is the custom of striating the face. From the word used, "rayado," it is not quite certain whether this was done merely with paint, or whether it was done by incising. It may be the latter. It is certain that, as late as 1697, a Jumano Indian, a female described as "a striated one of the Jumano nation," was sold at Santa Fé for a house containing three rooms and a small tract of land besides. This woman had been sold to the Spaniards by other Indians, who had captured her. Escrittura de Uentta de una Casa de las Hijas de Fco Luzero que isieron al Sarjento Mayor Fco de Anaya Almazan (MS.): "Por una india rrayada de nazion Jumana auida y comprada de los amigos christianos." In regard to the habitations of the Jumanos I can find nothing precise; that is, so far as the New Mexican Jumanos are concerned. From the statements of Benavides it might be inferred that they had no fixed abodes, but lived almost exclusively on the buffalo. Memorial, p. 79: "Viendo el demonio, enemigo de las almas, que aquellos Religiosos ivan á librar de sus vñas las que allí gozaua, quisó defenderse, y vsó de vn ardid de los que suele, y fué, que secó las lagunas del agua que bebian, á cuya causa tambien se auyentó el mucho ganado de Sibola que por allí auia, de que todas estas naciones se sustentauan, y luego, por medio de los Indios hechizeros, echó la voz, que mudassen puesto, para buscar de comer." This intimates an erratic life. On the other hand, however, Oñate, as I have shown above, mentions at least three large villages. In 1700, a village of the Jumanos reappears, and that village cannot have been situated outside of New Mexico, as the news of its destruction (by the French) was carried to Taos in the most northerly part of the territory by the Jicarilla Apaches. Relacion Anónima de la Reconquista (MS., Sesto Cuaderno) : "El año de 1700 refirió un apache de los llanos, que los franceses habian destruido el pueblo de los Jumanos, y esta noticia, que el alcalde mayor del pueblo de Taos comunicó á Cubero, hizó temer á todos los del reino que los franceses podian hacer suya esta tierra." The village of Jumanos here mentioned cannot have had any connection with the pueblo of Jumanos, which had been abandoned previously to 1680.

sequences. The Jumanos were lost sight of after the great convulsions of 1680 and succeeding years, and their ultimate fate is as unknown as their original numbers.

Tribes properly belonging to the area of Texas also roamed occasionally over southeastern New Mexico. Such were the Ayjaos, the Utacas, and others.¹ It is not improbable even that stray bands of Indians from Chihuahua, crossing the Rio Grande in quest of the buffalo, may have grazed at least the southern parts of the territory. In 1590, Gaspar Castaño de Sosa met Tepehuanes on the Lower Rio Pecos.² The steppes formed a vast expanse of territory, on which representatives of all the stocks living or roaming in their vicinity could be met. Among these are named the Pananas, or Pawnees,³ a northern tribe, and another group, from the north also, the Quiviras, or Tindanes.

The name "Quivira" has played a very remarkable part in the events of Spanish colonization of the Southwest. I say the name, for there is no substance to the pictures associated with it. The origin of the name is not known; it is not a Spanish fabrication, but in all probability some word of an Indian tongue, misunderstood or misapplied, as so frequently happened and yet happens.⁴ We must divest our-

¹ As these tribes apparently belonged to Texas rather than to New Mexico, I forbear referring to them otherwise than in a passing manner. The Ayjaos of Ayjados appear already in the documents touching the expeditions of Oñate, or about the year 1600. They roamed over the eastern plains, along the borders of New Mexico, the Indian Territory, and Texas.

² Memoria del Descubrimiento, p. 207. He calls them "Despeguanes."

³ That the Pananas are the Pawnees needs no proof. They sometimes made their appearance in northeastern New Mexico, and were found among the Indian captives which the Spaniards purchased from the Apaches or Cumanches or Yutas. The Pananas are frequently mentioned.

⁴ The word Quivira was first heard by the Spaniards either at Pecos or among the Tiguas at Bernalillo, and from an Indian who was not a native of New Mexico, but who seems to have belonged to one of the tribes of the Indian Territory who frequented the plains, where this Indian was taken prisoner by the Pecos. *Rela*

selves totally of the notion of Quivira being anything else than a name given to a roving band of Indians, - a name which has become famous through a series of misstatements and misunderstandings, as well as involuntary and intentional deceptions. Here, I have to deal only with the tribe of Quivira. From the itineraries in my possession it appears that in 1541 Coronado found the Quivira Indians in Northeastern Kansas, beyond the Arkansas River, and more than one hundred miles northeast of Great Bend. They were a tribe of nomads, who depended for livelihood principally on buffalo hunting, but also cultivated some corn. Their dwellings were mere huts, of the kind now termed "Typees" or "Wickeeups," made of tree branches and covered with reeds or grass. Not a trace of metal was found in their country, and the only piece of it in their possession was a lump of native copper which one of their chiefs carried on a string of leather around his neck. I must reiterate that they are positively stated to have been a wandering tribe, who shifted with the buffalo herds, and were by no means of the Pueblo type.¹ But it is strange,

cion del Suceso, p. 325: "El indio que daba tanta razon de lo que decia como si fuera verdad é lo ubiera visto era de trescientas leguas deste rio al levante de un pueblo que llamaba Harall." This Indian was the notorious "Turk." His plan was evidently to lead the Spaniards into the plains, with the expectation that there they would perish.

¹ The descriptions furnished of Quivira and its inhabitants by Coronado and all the other eyewitnesses or their companions are precise, and it is a mystery to me that modern writers have still continued to treat of Quivira as a large town, or of its people as a powerful tribe considerably advanced in civilization. Although the quotations are long, I feel compelled to refer to the sources here, and in full, to show what Coronado and his men saw, and what they said of Quivira. I begin with the commander's own report to the Emperor, *Carta á* su Magestad, 1541, p. 264: "Al cabo de aber caminado por aquellos desiertos setenta y siete dias, llegue á la provincia que llaman Quivira, donde me llevavan los guias, y me abian señalado casas de piedra y de muchos altos, y no solo no las ay de piedra sino de paja, pero la gente dellas es tan barbara como toda la que he visto y pasado hasta aquí, que no tienen mantas ni algodon de que las

although not without many parallels in the annals of the Southwest, both ancient and modern, that the majority of

hacer, sino cueros que adovan de las vacas que matan, porque estan pobladas entrellas, en un rio bien grande ; comen la carne cruda como los querechos y teyas; son enemigos unos de otros, pero toda es gente de una manera, y estos de Quivira hacen á los otros bentajas en las casas que tienen y en sembrar maiz en esta provincia, de donde son naturales los guias que me llevaron; me recibieron de paz, y aunque quando partí para ella me dixeron que en dos meses no la acabaria de ver toda, no ay en ella y en todo lo demas que yo ví y supé mas de veinte y cinco pueblos de casas de paja. . . . La gente dellos es crecida y algunos indios hize medir, y hallé que tenian diez palmos de estatura; las mujeres son de buena disposicion, tienen los rostros mas á manera de moriscas que de indias; allí me dieron los naturales un pedazo de cobre que un indio principal traya colgado del quello; embíolo al Visorey de la Nueva España. porque no he visto en estas partes otro metal sino aquel, y ciertos cascabeles de cobre que lo embio, y un poquito de metal que parecia oro, que no he sabido de donde sale, mas de que creo que los indios que me lo dieron le hubieron de los que yo aquí traigo de servicio, porque de otra parte yo no le puedo hallar el nascimiento, ni de donde sea." Ibid., p. 266: "Porque los guias que llevava me avian dado noticia de otras provincias adelante de ella, y la que puede aver es que no abia oro ni otro metal en toda aquella tierra, y las demas de que me dieron relacion no son sino pueblos pequeños y en muchos dellos no siembran ni tienen casas, sino de queros y cañas, y andan mudándose con las vacas, por manera que la relacion que me dieron fué falsa porque me mobiese á ir allá con toda la gente, creyendo que, por ser el camino de tantos desiertos y despoblados y falto de aguas, nos metieran en partes donde nuestros caballos y nosotros murieramos de hambre, y así lo confesaron los guias." After this plain statement from Coronado himself, I will turn to the report of one of his officers, Juan Jaramillo (Relacion hecha, p. 315): "Las casas que estos indios tenian eran de paxa y muchas dellas redondas, y la paxa llegaba hasta el suelo como pared que no tenia la proporcion de las de acá; por de fuera y encima desto, tenian una manera como capilla ó garita, con una entrada donde se asomaban los indios sentados ó echados."

The anonymous *Relacion del Suceso*, written in New Mexico in 1541, therefore by one of Coronado's companions, says (p. 326): "Lo que en Quibira hay es una gente muy bestial sin policía ninguna en las casas, ni en otra cosa, las cuales son de paja á manera de ranchos tarascos, en algunos pueblos juntas las casas, de á docientas casas; tienen maiz é frisoles é calabazas, no tienen algodon, ni gallinas, ni hacen pan que se cueza, sino debajo de la ceniza."

The *Relacion Postrera* was written before Coronado's return from Quivira, and does not, therefore, contain anything on the subject.

Castañeda, *Cibola*, p. 194 : "Leurs mœurs et leurs coutumes sont les mêmes que celles des Teyas, et leurs villages ressemblent à ceux de la Nouvelle Espagne. Les maisons sont rondes, n'ont pas de murailles ; les étages sont semblables à people rejected the testimony of Coronado, and of those who went with him to Quivira.¹ Quivira became a golden vision in theory; practically, it was a delusive spectre.

In 1541 and 1542, we find the Quiviras in northeastern Kansas. About 1600, they were in southwestern Kansas or southeastern Colorado.² Thirty years later, they roamed

des soupentes. Les habitants couchent sous le toit ; c'est là qu'ils conservent ce qu'ils possèdent : ces toits sont en paille."

The agreement of all these witnesses on the condition of the tribe of Quivira is striking. They concur in picturing the Quiviras as a people of nomads, following the buffalo, planting some little corn wherever they stayed for any number of years, — in short, as Plains Indians of the purest type. These reports were reproduced in standard works of the time, and it shows that contemporaries placed full confidence in them. Francisco Lopez de Gomara, *Historia General de las Indias*, Primera Parte, edition of Vedia, in *Historiadores primitivos de Indias*, vol. i. p. 278: "Vista por los españoles la burla de tan famosa riqueza, se volvieron, etc. No hay algodon y vesten cueros de vacas y venados." Gomara's work was published in 1554.

Antonio de Herrera was not a contemporary, but he compiled his great work from the most authentic sources. He gives a description of Quivira that is manifestly taken from Coronado's or Jaramillo's writings, probably compiled from both. *Historia General*, vol. ii. p. 206. As his work was published under the special sanction of the Crown, about 1610, it shows that there were no extravagant notions about Quivira current in governmental circles at the time.

Torquemada was Herrera's contemporary. He says in his *Monarchia* (vol. i. p. 610): "En el interim, que llevó consigo, y en todo quanto anduvó, no halló ninguna gente congregada, y en esto se detuvó tiempo de seis Meses; y cien leguas adelante de donde estaba alojada el exército." The document called *Demarcacion y Division de las Indias (Doc. de Indias*, vol. xv. p. 461), of the sixteenth century, says of Quivira : "Dozientas [leguas] de Cíbola, al oriente aunque de esto se tiene poca certidumbre, ni de la qualidad de la tierra, mas de set fria por estar en mucha altura y por esto pobre." Until Oñate, the expeditions to New Mexico paid hardly any attention to Quivira. It was Oñate's reports, and especially the inflated descriptions of Fray Geronimo de Zarate-Salmeron and Fray Alonzo Benavides, which directed the attention of the public to imaginary riches and supposed numerous populations, to which the name Quivira was applied.

¹ Even the soldiers of Coronado disbelieved at first the reports about Quivira which their commander and his companions made. Castañeda, *Cibola*, p. 142.

² According to Zárate-Salmeron (*Relaciones*, par. 37), the Indian Jusepe, who had accompanied Humaña and Leyva-Bonilla on their disastrous journey to the unknown North about 1585, led Oñate first into the plains, and then to the

I72

along the boundary line of New Mexico and the Indian Territory of to-day.¹ From 1684 to the beginning of the eighteenth century they were looked for farther south yet, about the northern frontier of Texas.² Lastly, in 1719, "the Cancey, whose principal village is that of the Quirireches," were located on the head-waters of Red River.³

northeast, in all about 200 leagues, or approximately 540 miles. This must have carried them into Colorado or Kansas. There they met the "Escanxaques," or Kansas, and finally the Quiviras. The reports about the condition of the latter are so vague and conflicting, that it is not worth while to discuss them. The same authority (par. 43) states that when the Quiviras sent to Oñate a messenger or ambassador, that delegate remarked : "Que les Españoles habian rodeado mucho por el camino que fueron, que si salieran al Norte llegaran en breve, de suerte que segun lo que dijeron se ha de ir por los Taos, y por tierras del gran capitan Guima por aquellos llanos." This points clearly towards southern Colorado. The investigations made officially and by order of the crown in regard to Oñate's undertakings and administration prove the same. See Informacion que por Comision del Visrey hizó en México el Factor Don Francisco de Valverde con cinco Testigos (Doc. de Indias, vol. xvi. p. 210), and Informacion hecha en la Audiencia de México por parte del Adelantado Don Joan de Oñate en Abril (Ibid., p. 214).

¹ Benavides, *Memorial*, p. 85: "Qvando estos dos Religiosos estuuierō obrando aquellas marauillas en la nacion Xumana. . . . Llegó tābiē esta voz al Reyno de Quivira, y al de los Aixaos, q̄ estaua de allí 30 ó 40 leguas al mismo rumbo del Oriente." The Jumanos were then, as I have shown, in eastern or southeastern New Mexico. Ibid., p. 86: "Siendo pues assí, q̄ la villa de Sāta Fé está en treinta y siete grados, yendode allí al Leste ciēto y cinquēta leguas dase en este Reyno, y assí está en la misma altura."

Fr. Alonso de Posadas, *Informe* (MS.). In 1634, Alonso Vaca found the Quiviras due east of Santa Fé.

² I omit here the pretended reports of Diego de Peñalosa. It is not improbable that that adventurous officer made an expedition into the plains, but what he has attributed to Fray Nicolas de Fleytas (not Freytas) on this point is most likely a forgery perpetrated by Peñalosa himself. But in 1684, Juan Dominguez de Mendoza made his journey to the Rio Nueces in Texas, and he heard of the Quiviras in that vicinity. *Memorial informando acerca de las Naciones del Oriente* (MS.). Everything points to a confirmation of the statements made by Coronado and his people, namely, that the Quiviras were a band of nomadic Indians, and that they were gradually pushed southward by other tribes, like all the Indians of the plains.

⁸ Journal Historique de l'Établissement des Français à la Louisiane, pp. 200 and 211. The Quiviras had another name, by which they became known to the Spaniards of New Mexico as early as 1600, or a little afterwards. It is the name Tindan. This word has an analogy with Thinthonha, as the Teton Sioux were called by Hennepin.¹ There is nothing unlikely in the supposition that the Quiviras were a band of southern Dacotas, who penetrated farther south in pursuit of the buffalo, and finally disappeared among the Indians of Arkansas and Texas.

That the Yutas occasionally impinged upon the northern sections of New Mexico is a well known fact. They were the neighbors, therefore also the enemies, of the most northerly Pueblos, the Taos and Picuries.² Of their congeners, the Comanches, I shall treat briefly hereafter. The Comanches are the latest of the aborigines of the Southwest.

It remains for me now to consider the most numerous of all linguistic groups in New Mexico and in Arizona, and one that has played a conspicuous part in its history, past and present. These are the southern Tinnehs, — the Navajos and the Apaches.

That the Navajos and Apaches are a branch of the Tinneh family is unquestionable. But the usual custom of treating

¹ Description of Louisiana, by Father Louis Hennepin, published by Mr. Shea in 1880. On the map accompanying the work, and which bears date 1683, there is, at the head-waters of the Mississippi, in lat. 50° N., "Thinthonna ou gens des prairies." (p. 200.) "They merely told me that twenty or thirty leagues below there is a second fall, at the foot of which are some villages of the prairie people, called Thinthonha, who live there a part of the year." Also *Journal Historique de l'Établissement des Français* (p. 70). Among the western Sioux, "Tintangaoughiatons . . . Village de la grande cabane."

² Declaracion de un Indio Pecuri, fol. 23. Relacion Anónima de la Reconquista (MS.). In the first half of the past century, the Yutas troubled the settlers at Abiquiu greatly. They even caused its temporary abandonment. See Declaracion de Bentura Yndio Genizaro Christiano, sobre el Estado en que oy se halla la Provincia de Nabajo y sus Naturales, 1748 (MS.); Providencias y Mandamiento sobre el Repueble del Parage de Abiquiu, 1750 (MS.). the Navajos as a part of the Apaches is incorrect. It is the Apaches that are ramifications, degenerated and vagrant, of the Navajos. The Navajos are, and always have been, the main body. They have also preserved their original tribal name with greater purity, calling themselves Din-ne, while the Apaches have perverted it into N'day. Their relative numbers also indicate that the Navajos constitute the majority. The proportion to-day is as three to one, the latter counting 21,000, the Apaches hardly more than 6,000 to 7,000 souls. That nearly the same proportion existed in the beginning of the seventeenth century can be gathered from the enormously exaggerated estimates of Benavides.¹ Lastly, the state of culture of the Navajos is not so widely different from that of the northern Tinnehs as are the social condition and the habits of life of the Apaches.

When first met with, the Navajos occupied the same range of country they now inhabit, namely, northwestern New Mexico and northern Arizona. They were then, as they are to-day, land-tillers to a certain extent, and while not so stationary as the Pueblos, yet they lived in dwellings, partly underground, and more substantial than those of the Apaches, and they erected special storehouses for their crops.² Had the Navajos possessed a central organization, they would have been a very formidable power, and the Pueblos, scattered and widely distributed, could not long have held their own against them. But clanship so predominated among them that no tribe or association of tribes became possible. This also worked unfavorably for permanence of abode. Their bands, consisting of a clan, or fragment of a clan,

¹ Memorial, p. 70. He estimates the Navajos alone at over 200,000.

² Ibid., p. 57: "Y estos de nauajo son muy grandes labradores, q esso significa Nauajo, sementeras grandes." Ibid., p. 58: "Tienen su modo de viuienda debaxo de tierra, y cierto modo de xacales para recoger sus sementeras, y siempre habitan en aquel puesto."

moved hither and thither, according to circumstances and superstitious indications. Their country, in many portions of it, fostered separation into small bands; for its deep valleys are long rather than broad, and the arable and irrigable spots lie in nooks, corners, and bay-like openings. There was therefore little cohesion between the clusters, and, as Dr. Washington Mathews has most correctly observed, a democracy prevailed that forbade all idea of central will and force. The Navajos fought the Pueblos nearly every year at one or more points, and the villages of the Jemez, for instance, were brought by them to the verge of utter ruin.¹ But this did not preclude commercial intercourse, and the desultory warfare never grew into any attack on a larger scale, - at least not in past centuries.² The Navajos irrigated at places, and raised corn, as well as the other vegetables common to the Indian. Cotton, it seems, they did not grow, and their dress consequently was of skins and hides, perhaps also of vucca.³ Their implements and weapons were the same as those of all the others. Of their house life and social customs in general the authors of the past tell us hardly anything, and they are equally silent about their rites and beliefs. What has been ascertained concerning the cult and religious customs of the tribe is due almost exclusively to the efforts of investigators of the present generation, and

¹ Benavides, Memorial, p. 27. Vetancurt, Crónica, p. 319. Menologio, p. 76.

² Their trading with the Pueblos, so far as Acoma is concerned, is mentioned by Espejo, *Relacion*, p. 180. There is no evidence of any concerted attack upon the Pueblos; such an attack they could scarcely have withstood, as they were hardly so numerous as the Navajos, and were much more widely scattered. Had there been concerted action on the part of the Navajos, they could, at any time previously to 1700, have wiped out both the Pueblos and the Spaniards.

⁸ The famous Navajo blankets are nowhere mentioned. On the contrary, Espejo positively states that they obtained cotton mantles from the Pueblos by barter. The art of weaving appears to have been learned by the Navajos from the Pueblos.

INVESTIGATIONS IN THE SOUTHWEST.

of Anglo-American origin. It may be that the Spanish civil or ecclesiastical archives still contain unknown documents with valuable information on the subject, but the sources so far accessible to me are as good as silent. Benavides speaks, in terms general and vague, of idolatry among the Apaches, — consequently among the Navajos by inference. He mentions sun-worship, for instance.¹ But details in regard to these matters, which are comparatively numerous in regard to the Pueblos, are sought for in vain in his pages, though he bestowed much and intelligent attention on the Apaches and their kindred.²

The Apaches proper have played such an important part in the history of the Southwest, that we might expect to find them a tribe of considerable numbers. Indeed, if we accept the wild statements of the honest but over enthusiastic Benavides, such would appear to have been the case. But Benavides judged from appearances only. He found the Apaches everywhere, on the plains, in the mountains, all around the villages, — north, south, east, and west, — and he concluded that they must be exceedingly numerous. He estimated their numbers from the bands which came in to treat with the Spaniards, not knowing that these bands were all, or nearly all, that there were of the tribes.

The earliest notice of the Apaches was certainly in 1541, by members of Coronado's expedition and by Coronado himself. A report on that exploration, written about thirty years after the event by one of the soldiers, Castañeda, is the only known document of that time which speaks of the Apaches in Arizona. Speaking of the country around the so-called "Red House," — a ruin situated where now is Fort

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¹ Memorial, p. 55.

 $^{^2}$ Benavides says, that to him are due the first successful efforts to reduce the Apaches to Christianity. How far this may be true, I am unable to decide.

Grant, on the south of the Rio Gila, near the Anivaypa, he mentions its inhabitants as follows : "These Indians dwell in isolated huts, and subsist on the chase alone." Previously, he says of them that they "are the most barbarous people thus far found in these parts."¹ Still they opposed no obstacles to the passage of the Spaniards, even when they travelled in groups of a few men only.²

The Apaches of the eastern plains, those who supported themselves exclusively by following the herds of buffalo and almost living in company with them, attracted the attention of the Spaniards in a greater degree. Coronado fell in with them in 1541, about two weeks after he had left the Pecos village on his adventurous journey to the northeast in search of Quivira. It was consequently about due east of the present settlement of Mora, on the great plains.³ He, and all the other chroniclers of his expedition, describe them as being taller than the Pueblos, and as living exclusively upon and with the American bison. This animal gave them meat, clothing, fuel, shelter, and to a great extent the material for their implements and weapons. They dressed in its hides, and made their tents from them; they burned its manure, drank its blood, and made awls, arrow-points, needles, and other instruments out of its bones.

¹ Cibola, p. 162. Speaking of the Red House, or "Chichiltic-Calli," he says: "Il parait qu'elle fut détruite anciennement par les habitants, qui forment la nation la plus barbare que l'on ait encore trouvée dans ces parages. Ces Indiens habitent dans des cabanes isolées, et ne vivent que de chasse."

² The chroniclers of Coronado are unanimous in declaring that no opposition was offered to the Spaniards between Culiacan, in Sinaloa, and Zuñi. *Relacion del Suceso*, p. 319: "Todo este camino hallamos los naturales de paz" Castañeda, *Cubola*, p. 40: "Le général et ses compagnons traversèrent tranquillement le pays qu'ils trouvèrent entièrement pacifié; car tous les Indiens connaissaient Frère Marcos, et quelques-uns d'entr'eux avaient accompagné Melchior Diaz et Juan de Saldibar dans leur voyage de découverte."

 8 As Coronado travelled to the northeast after leaving Pecos, he struck the plains in the vicinity of Mora, to the east of it.

The name given to these Apaches at that time was Querechos. Of their numbers no adequate conception can be obtained, for they were roving, constantly changing about, and the same band might be counted often. But they frequently, in winter, came into the neighborhood of the Pueblos, in order to trade with their inhabitants.¹ It was noticed as a peculiarity of theirs that they used the dog as a beast of burden.² This fact alone, were there no other reasons for identifying the Querechos with the Apaches of the plains, would be an important indication.³ The Querechos, however, were not the only Indians of the great plains who thus employed dogs: a tribe which roamed in the same region, and farther east, called the Teyas, and which I am unable to identify so far, used them for the same purpose.

¹ Castañeda, Cibola, p. 179. Espejo, Relacion, p. 180.

² Cibola, p. 190 : "Ils ont de grands troupeaux de chiens qui portent leurs bagage; ils l'attachent sur le dos de ces animaux au moyen d'une sangle et d'un petit bat. Quand la charge se dérange les chiens se mettent à hurler, pour avertir leur maître de l'arranger." Relacion del Suceso, p. 328 : "Y quando van de una parte á otra, las llevan en unos perros que tienen, de los quales tienen muchos, y los cargan con las tiendas y palos y otras cosas; por ser la tierra tan llana que se aprovechan en esto, como digo, porque llevan los palos arrastrando." Coronado, Carta, p. 263: "Tiene perros que cargan en que llevan sus tiendas y palos y menudencias." Relacion Postrera : "Esta gente tiene perros como los de esta tierra, salvo que son algo mayores, los cuales perros cargan como á bestias, y les hagen sus ensalmas como albardillas, y las cinchan con sus correas, y andan matados como bestias en cruzes. Cuando van á caça cargánlos de mantenimientos, y cuando se mueven estos indios, porque no estan de asiento en una parte, que se andan donde andan las vacas para se mantener, estos perros les llevan las casas, y llevan los palos de las casas arrastrando atados á las albardas, allende de la carga que llevan encima; podra ser la carga segund el perro arroba y media y dos." I omit the testimony of authors who were not eyewitnesses.

⁸ In 1630, the "Apaches Vaqueros," or the Apaches of the plains, used dogs in great numbers. Benavides, *Memorial*, p. 74: "Y las tiendas las lleuan cargadas en requas de perros aparejados co sus enxalmillas, y son los perros medianos, y suele lleuar quinietos perros en vna requa vno delante de otro, y la gente lleua cargada su mercadería, que trueca por ropa de algodon, y por otras cosas de que carecen."

ARCHÆOLOGICAL INSTITUTE.

In 1583, the name Querechos is applied by Espejo to the Navajos who haunted the mountains in the vicinity of Acoma. The term Apaches is first met with in the documents concerning Oñate's colonization of New Mexico, in 1598.¹ From that time on, these Indians are associated with every period of the history of the Southwest.

Different groups are mentioned from time to time, but the present appellatives of the Apache fractions, such as Mescaleros, Jicarrillas, Chiricahuas, and "White Mountain Apaches," appear but gradually, and subsequent to 1630. The first two of these groups are the remainder of what were then known as Vaqueros and "Apaches del Perrillo." These two divisions became afterwards subdivided into many fractions, to each of which a name was given, not so much by the Indians themselves as by the Spaniards, who gathered the designations from various sources.² The Apaches recog-

¹ It occurs in two documents, and is misspelt or misprinted in one. *Obediencia de San Juan Baptista* (p. 114) has Apaches. Oñate, *Carta Escripta* (p. 308), "es infinita gente los Apiches, de que tambien hemos visto algunos."

² The changes in the names of Apache tribes, as found in Spanish authors, are to be accounted for by the fact that the Spaniards, according to the shiftings of the bands, applied to them fresh designations. So, in 1630, Benavides distinguishes the following groups (Memorial, p. 13): on the Rio Grande and in the Jornada del Muerto, the "Apaches del Perrillo"; to the west and into present Arizona, "Apaches de Xila" (p. 53): the "Apaches de Navajo," where the Navajos are to-day (p. 57); in the eastern plains (p. 71), the "Apaches Vaqueros." At the time of the Reconquest, and in the first quarter of the eighteenth century, the "Faraones" and "Jicarrillas" became very prominent. It seems that they were subdivisions of the "Vaqueros" of Benavides. The Jicarrillas were the northern, the Faraones the southern branch. Compare on the subject Autos de Guerra dela Primera Campaña que el Sr. Marq^s de la Naua de Brazinas, etc., en Persona sale á hazer la Guerra ofenziba á los Apaches Faraones desde la Sierra de Sandia y Carnue, etc. (1704, MS.); Autto y Junta de Guera sobre si sele deue azer la Guera alos Yndios Jentiles de la Nazion Faraona (1714, MS.); Testimonio delas Juntas de Guerra que se formaron para hazer la Campaña á la Sierra de los Ladrones, etc. (1715, MS.). The Jicarrillas were generally friendly, or at least much less hostile than the other bands. Haunted by the Comanches, they finally sought shelter with the

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180

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nized properly but their generic name of N-de, and each band was known to itself and its neighbors (if any) of the same stock by appellatives akin to gentile terms. Nearly every such name ended with the termination n-de also.¹ Thus the word "Lipanes" is a corruption of Ipa-nde.² Sometimes the personal name of a prominent leader was applied by the Spaniards to the horde which he directed, rather than commanded, for the Apaches were always loth to bow, except on special occasion, to any authority, including even that of their shamans. Constant success could alone secure lasting

Indians of Taos and of Pecos. Testimonio sobre lo Acaesido en el Pueblo de Pecos (1748, MS., fol. 6).

The Lipanes appear in Texas, in the middle of the past century, whence the Comanches drove them into Coahuila and Chihuahua. In 1705, an attempt at confederacy of the Apaches, Navajos, and Yutas against the Spaniards and the Pueblos was discovered, and the following subdivisions are mentioned. Juan Paez Hurtado, Diligenzias sobre hauer contraydo Amistad los Yndios Xptianos con los Ynfieles (MS.): "Que lo que saue es que toda la apachería de Nauajo de su nacion se hauian combocado con todas las demas naciones Apaches como son los de la Xicarilla, Trementino, Acho, Faraones, y Xilas." The Chiricahuis appear in the first half of the eighteenth century. Finally, in 1796, Lieutenant-Colonel Don Antonio Cordero, in his Noticias Relativas á la Nacion Apache, etc (MS.), establishes the following groups : Tontos, Chiricahuis, Gileños, Mimbreños, Faraones, Mescaleros, Llaneros, Lipanes, and Navajos. Most of these names are those of bands whose duration was more or less ephemeral. It would be useless, or at least superfluous, to enter into details concerning each one of them. Other fractions are also mentioned, as, for instance, the "Natajees," the "Apaches del Cuartelejo," etc. These two groups were Apaches of the plains. Those who mostly infested Sonora and Chihuahua in early times were the Apaches of the Gila, of whom the Chiricahuis are but an outgrowth. Villa-Señor y Sanchez (Teatro Americano, vol. ii. p. 348) says of the Chiricahui Mountains: "Corónala la naturaleza de muchas peñas que le sirven de antemural y defensa á los Indios Apaches, que es la Nacion recogida en ella y en la que hacen sus destacamentos para los puertos y entrada de los caminos, con el destino de robos, y muertes . . . tiene esta Sierra mucho Mescal."

¹ Cordero, Noticias relativas á la Nacion Apache, 1796.

² Arricivita, *Chrónica Seráfica y Apostolica*, p. 346: "Son los Apaches llamados Ipandes y Natages." Ibid, p. 349: "Por no baxar todavía el Capitan grande Ipandi." This seems to indicate that the word Ipande is derived from a personal name. On p. 383, we finally read "Ipandes"1

influence; the unlucky sorderer was as quickly discarded as the unsuccessful war captain.¹

· Scattered over an immense territory, abiding nowhere permanently, often penetrating into the ranges of the Pueblos and trespassing upon them, while at the same time they roamed all around the territory at will, except where their kindred, the Navajos, held them at bay, the Apaches created the impression of being powerful in numbers, while in fact they were but outlying bands of the Navajos, long separated or outcast from the mother stock, and dangerous alike through their great mobility and the superior skill in waylaying and hiding which their roving life imparted. They knew the country more thoroughly than the Pueblos, were better acquainted with all its resources, and were a hardier, that is, a tougher stock, since exposure and hardship were their only school. The Apaches and the Navajos are sometimes declared to be superior to the sedentary Indians in intelligence, as well as in physical characteristics. On the whole, the Navajos are taller and stronger built than the Pueblos: so are the northern bands of the Apaches. They are quick of perception, -- cunning rather than bright, -- and this cunning and a certain practical turn of mind captivate easily the sympathies of a civilized people. But while quicker, they are not so persistent as the Pueblos, and while the latter may learn more slowly, they will profit more from what they learn. That the Apaches should appear more intelligent than the village Indian is natural: the difference between them is like that between the much travelled man and the one who has always remained within the boundaries of a small territory.

No tribe in the Southwest has exercised such a powerful influence on the fate of its inhabitants as the Apaches.

¹ Cordero, Noticias, etc.

They were the most formidable barrier to an extension of the Pueblo stocks. To their constant harassing it is due that the Pueblos receded from their eastern advanced limit. Nothing worries and disheartens so much as permanent insecurity, and for centuries no group of Indians, the Iroquois excepted, understood so thoroughly the art of keeping people on the *qui vive* as the Apaches. Their sudden appearance might always be expected, and their sudden disappearance promised no permanent relief. They stood towards the landtilling Indians in the relation of a man-eating tiger to East Indian communities. Nobody knew, even if there was but a single enemy in the neighborhood, where he might strike next. One Apache could keep a pueblo of several hundred souls on the alert, and hamper them in their daily work. He had nothing to attend to but his purposes of murder, rapine, and theft, which were his means of subsistence, whereas the others had their modest fields to till, and in the performance of such duties danger was lurking unseen, always likely to display itself when and where it was least expected.

The hostility between the Apaches and the Pueblos was rather traditional than hereditary. From the Pueblos it was transmitted to the Spaniards, with whom the Apaches had remained on good terms until the Spaniards were forced to protect the villagers, who had become vassals of the Crown, against the untiring aggressions of the nomads. This is not the place to sketch the history of the Apaches under Spanish rule. It is enough to say here, that the tribe played a very important part in the history of Spanish domination. It may be affirmed that during that period they completely changed the ethnography of the Southwest.

Of their creed and belief almost nothing can be gathered from older sources beyond the fact that their idolatry was not as complicated and thoroughly systematized as that of the sedentary Indians. Sun-worship of course existed;¹ but the true position of the sun in their mythology has been misunderstood. It is not the orb proper which the Indian worships, it is some personal deity with whom the sun is connected, either as his abode, or as an ornament. Such is the case among the Navajos. It is quite clear to the Indian that the sun is a created object, and not a spiritual being;² the same is true of the moon. Among the Pueblos, the moon is the abode of a celestial mother, the sun the home of a celestial father.

Of the warlike customs of the Apaches not much is to be said here. It would require a series of monographs to do justice to them. That cruelty to prisoners which has rendered the tribe so terrible, even during the present generation, was early noticed.³ Scalping was sometimes practised by them, but not so generally as by the Pueblos. Their weapons were in the main the same as those of their seden-

¹ Whenever no well defined system of idolatry could be found, sun-worship is always taken for granted by the older authors. It stands for worship of the elements in general. Benavides quotes what he asserts to have been the words of an Apache (a chief, of course) to himself (p. 55): "Padre, hasta aora no auiamos conocido otro bienhechor tan grande como el Sol y la Luna, porque el Sol nos calienta y alumbra de dia y nos cria las plantas, y la Luna nos alumbra de noche; y assí adorauamos á estos dos, como á quien tanto bien nos hazia, y no sabiamos que auia otra cosa mejor." On page 52 he asserts : "No tienē otra idolatría que la del sol, y aun no es general en todos y se rien mucho de las demas naciones que tienen ídolos."

² In the part next following, I shall have occasion to treat more extensively of this matter, and to quote the remarkable information derived from my friends Messrs. Cushing and Mathews on the subject.

³ Not only among the Apaches, but even among the Pueblos, were the captives sometimes tortured, if Torquemada was correctly informed. *Monarchia*, vol. i. p. 680: "Al que cautivan y llevan preso, le matan despues con grandes crueldades." Instances of torture of prisoners by Apaches are not unfrequently related in older sources; and it would be as unfair and unreasonable to attribute such atrocities to simple retaliation for alleged "Spanish cruelties" as it would be to charge the English and French with the burnings at the stake of the Iroquois and other Eastern tribes. The custom of tormenting prisoners was an old Indian custom, and partly of a religious nature.

tary neighbors; but their tactics were rather more desultory, and consequently they appeared more formidable. They rarely attacked in large numbers; worrying, slow wearing out by persistent harassing, was their mode of warfare, and against it the Pueblo was, in the long run, almost defenceless.

While the Apache of the plains lived in tents of buffalo skins, the mountain hordes erected frail huts of tree branches and leaves. Neither made pottery, and only the women, whose social position was rather inferior, in some instances tilled small patches of Indian corn. But their chief support was game; they subsisted on meat; vegetable food was limited mostly to wild fruits like that of the Yucca, to the stalks of the Maguey baked into a sweet conserve called Mezcal, to roots and the beans of the Mezquite in the southern steppes. Even to-day the Pueblo Indian attributes the physical vigor of the Apache to the fact that he has more opportunity of being exclusively carnivorous than the house-dweller. There is in this belief as much superstition, in all likelihood, as reality.¹

With this brief mention of the Apaches, the sketch of the ethnography of the Southwest at the time of the first discovery by Europeans must terminate. It presents the region as sparsely inhabited on the whole, and separates its population into two divisions, — land-tilling Indians with a tendency

¹ That the Querechos, or Apaches of the plains, dwelt in tents of buffalo hides is frequently stated by Coronado, and by the other chroniclers of his journeyings. It is needless to refer to them in detail. Oñate says of the "Apiches" (*Carta*, p. 309): "Y aunque tobe noticia, vivian en rancherías; de pocos dias á esta parte he averiguado viven como estos en pueblos." Torquemada (*Monarchia*, vol. i. p. 679): "Estos no siembran, ni tienen casas, comen yervas, y raices, y vacas, y otras caças, que matan con arco, y flechas." Benavides (*Memorial*, p. 51): "No viuen en poblados, ni en casas, sino en tiendas, y rancherías, por lo que se mudan de serranía en serranía, buscando caça que es su sustento."

ARCHÆOLOGICAL INSTITUTE.

¹ to permanence of abode, and wandering tribes. The latter are found mostly in the eastern half, on or near the plains, and the question involuntarily arises whether unsteadiness of abode has not been the result of causes of a physical order. In point of numbers the sedentary tribes exceeded the others by far, (if we do not include the Navajos with the latter,) just as the herbivorous mammals outnumbered the carnivorous who still preyed upon them. Among the village Indians, there were variations in culture, but these variations appear due to physical causes and influences. Even the difference between the arts of the savage and those of the Pueblo is slight, and marked only in degree, according as the mode of life exacted from man a peculiar development under altered circumstances. · The religious system, the general character of creeds and beliefs, appear analogous, if not uniform. So were the system of government and the social institutions. It was language that separated the various groups, and kept them apart.

In respect to their language I can but follow the results of the investigations of others. These investigations have established that of those languages which have been studied two groups can be formed, both of which are radically connected with stocks now existing in the Northwest. Mr. A. Gatschet, than whom there is no better authority, holds that the Yutas, the Moquis, the Pimas of Arizona, as well as the Nebomes of southern Sonora, the Opatas, the Yaquis and Mayos, the Tepehuanes and Tarahumares of Chihuahua, all belong to the same linguistic stock as the Snakes of Oregon and the Shoshonis of Wyoming, Utah, and Nevada. On the other hand, the Yumas and their kindred of the Colorado River country, as well as the Seris of Sonora, are linguistically allied among themselves, as well as with the tribes of the Californian peninsula.¹ The Navajos and Apaches are of Tinneh stock. The majority of the inhabitants of the Southwest, therefore, spoke languages affiliated to others on the Northwest Coast. The Pueblos still await their classification. If the late Orozco y Berra is right, the Concho and Julime of Chihuahua should also be classified among the Numa languages to which the Yuta, Moqui, etc., belong.² This still further increases the majority with Northwestern affinities. Of the remaining idioms, several are today unknown, but I would most earnestly suggest that the vicinity of El Paso del Norte be searched for traces of them. I positively know that the Manso and Piro are still preserved there, at least in fragments. It is not altogether impossible that traces of the Jano and of the important Jumano may be found among the indigenous population of that region.

What may be the true position of those idioms designated latterly as "Pueblo" *par excellence*, is yet to be established. The Zuñi is stated to be allied to the Moqui. The Tehua and the Jemez are closely related to each other.³ To these Pueblo languages the Piro must be added, as it was only in 1681 that the tribe was transported to its present location. There has been a change in some of the Pueblo idioms in the course of the past three centuries. Many words have been imported from the Spanish, the Nahuatl of Mexico, the Apache of Navajo, the Yute, the Comanche, and even the Opata. This tends to obscure the proper affiliations of these languages, and to impart to them the strange character of isolation which they now exhibit.

¹ Gatschet, Ueber die Yuma-Sprachen.

 $^2\,$ As already stated, Orozco classifies the said idioms, but gives no evidence in support of his classification.

⁸ Also with the southern Tigua of Isleta. Gatschet, Zwölf Sprachen aus dem Südwesten, etc., pp. 48 and 49.

III.

PRESENT CONDITION OF THE INDIAN TRIBES.

I. INTRODUCTION.

THE Indian of to-day is in many respects different from the Indian found by the first Europeans who visited the American continent. This truth holds good in all parts of America, more or less. Even tribes that came but indirectly in contact with the Europeans were affected, through their neighbors, by means of the slow vehicle of primitive commerce, etc., in their arts, their industry, and especially in their religious notions. I cannot sufficiently insist upon the marked influence that "news from the outside world," or the sight of objects carried for long distances from tribe to tribe, have exercised upon the mythological ideas of primitive man in America, — probably of primitive man in every quarter of the globe.

To understand the present condition of the Indian it is therefore indispensable to know, first, his condition at the time when he first came in contact with people from the eastern continents; and, secondly, the nature and manner of working of the influence which those people could and did bring to bear upon him. In the preceding pages of this Report I have attempted to give, as far as able, a picture of the condition of the tribes of the North American Southwest while yet in a pristine state. Ere I can presume to speak of these tribes as they appear to-day, I must therefore cast a glance at the policy pursued towards them by the Europeans who occupied the territories in which these Indians lived, or over which they roamed. These Europeans were the Spaniards, — for Anglo-American influence has been felt but very lately, — and whatever change has been wrought among the Southwestern Indians within the last three centuries is attributable to the Indian policy of Spain. The term "Indian policy" includes also the action of the Catholic Church; for while the Church strove to maintain, and in fact mostly maintained, a certain independence of the political power, nevertheless Church and State were so intimately connected, so closely interwoven, that they generally had a common policy.

I. Changes in customs wrought through Spanish legislation and administration.

2. Changes in art and industry, — agriculture of course included.

3. Changes in the religious condition. This last class embraces modifications of the constitution of the family, which of necessity had to be attempted at least, especially in regard to education and the transformation of matrimonial customs.

Simple personal contact alone, without the systematic processes indicated by the action of law and of religion, would have produced results different from those obtained in the course of Spanish domination. Still the effects of this personal intercourse cannot be overlooked, and I shall refer to it wherever it appears to have produced results not attributable to any of the three classes mentioned.

The manner in which Spain obtained its hold in America was, as is well known, different from that of other nations. While England and France, but more especially the former, advanced with comparative slowness and timidity, — perhaps

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resulting as much from indifference at home as from other causes, - Spain spread its domination, nominally at least, over the new continent with amazing rapidity. One hundred and six years only had elapsed since Columbus planted the Spanish banner, figuratively speaking, on the shores of Watling Island, when that banner actually floated from the thirtysixth parallel of latitude north to the extreme end of South America. And not the coasts alone, the very heart of both continental sections had been searched, explored, and partly occupied by Spaniards. This gigantic performance was far in excess of the legitimate powers of so small a nation as Spain in reality was; it became an element of the weakness and ultimate decay of that nation itself. "Oui trop embrasse, mal étreint." This popular adage of the French tells better than the most elaborate specifications the weak points and unavoidable fate of Spanish sway in both Americas. In those regions most remote from the coast and of most difficult access, like our Southwest, the intrinsic weakness of Spanish domination largely determined the character of its relations with the aboriginal inhabitants.

To describe Spanish domination in the New World as a mere system of brutal plunder and mercenary rapine, is a kind of so called historical appreciation the time for which is happily past. The popular and religious passions kindled in the sixteenth century, flaming with greatest vehemence in the seventeenth, and adroitly nursed by England, are out of season now, and we no longer admit that a people could have achieved great things without at least some great and noble motives; still less, that it could have maintained its hold at such great disadvantages as the Spaniards labored under, without manifest ability, wisdom, and some humanity in its directing power. Even the conquerors themselves, as historic *science* turns its attention to their deeds in a

light uncolored by passion, appear of more modest abilities, but of more humane motives and actions. The better also we become acquainted with the character of the Indian by direct intercourse with him, the more we become convinced that military necessities dictated often, if not nearly always, deeds which have hitherto been considered as wanton barbarities. That the periods of first conquest entailed extreme measures there is no doubt; but after the three great Spanish footholds in America, the Antilles, the Isthmus including Mexico, and Peru, had been gained, further conquests did not require many striking instances of display of martial power, unless called forth by the Indians themselves.¹ The conquistorial period is the most attractive, the most romantic part of Spanish American history, but we must look to subsequent times for the agencies that have determined the true influence of Spain upon the American aborigines, — in other words, the establishment of regulated administration and the framing of special legislation for the Indian. They are the criterion by which to judge the part played by Spain on American soil.

Close upon the heels of the conquerors, the organizers and

¹ There is no doubt that many of the most bloody occurrences in Spanish American history, which have been charged to the Spaniards as acts of wanton cruelty, will yet be explained and justified as legitimate measures of war. What I have said of the occurrences at Cholula in regard to Cortes (see Archaelogical Tour, p. 164, note 1) will eventually prove to have been the position in which Pizarro found himself at Caxamarca. That excesses were committed is beyond a doubt, but these excesses were the exceptions, and not the rule, and furthermore they were punished. See, for instance, the ultimate career of Nuño de Guzman, and the punishment awarded to Hernando de Bazan, and to many others. Spanish justice was slow, but it was sure, and no official, however exalted his position, escaped the dreaded "Residencia," or the still more dangerous "Visita." On such occasions a functionary had his misdeeds charged against him, and, if nobody else would accuse him of cruelty against the natives, there was surely some priest ready to drag him to trial for misconduct of that sort. It was not easy to escape punishment for cruelty to Indians under Spanish régime.

administrators were wont to follow. After the Conquistadores had subdued the Indian, the Spanish Crown promptly attended to the task of subduing these Conquistadores themselves to the law of the land to which they owed allegiance. Thus Antonio de Mendoza followed, in Mexico, upon Nuño de Guzman, who had been used to check the plans of Cortés for secession and independence. After the organizers and administrators were firmly established, special legislation began, and it continued uninterrupted — though with declining vigor in the latter half of the eighteenth century — as long as Spain had a foothold on the American continent. The "declining vigor" was manifest, not by a decrease in solicitude, but by the inability to put good intentions into execution which marked the general decline of the nation.

The Spanish government recognized at an early day, not merely that the Indian was a human being, but that he was, after all, the chief resource which the New World presented to its new owners. The tendency of Spanish legislation is therefore very marked towards insuring the preservation and progress of the natives. The first great step in this direction was the promulgation of the celebrated "New Laws and Ordinances for the Government of the Indies," finally established in 1543, by which the aborigines were declared direct vassals of the Crown. Stipulations in their favor, as, for instance, enfranchisement from personal servitude and from compulsory labor, became the subject of subsequent modifications and local changes, but the disposition first enounced, that of direct vassalage, remained a fixed dogma in Spanish American law.

It may not be amiss here to glance at the great question of Indian servitude and compulsory labor. The question was one of utmost vitality, for the obvious reason that upon its solution depended the future prosperity of the colonies. We

must not forget that, as I have already stated, Spain was a small nation, that it had overrun a territory enormous in extent, extremely varied in resources as well as in natural obstacles, and that Spanish immigration could in no manner suffice for the imperative demand for labor which the resources of the land presented. In order to improve the Indies, the Indian must work, and work was as distasteful to him then as it is to-day. Furthermore, he had to be taught to perform this work with implements the mere material of which was to him a mystery, and therefore a source of mistrust and superstitious fear. The reluctance on the part of the native to work was therefore for reasons paramount to him, but utterly incomprehensible to the Spaniard, or to any other European of the time. Hence the Crown decrees in regard to compulsory labor changed in tone frequently, and finally measures were adopted which, if properly executed, would have responded to all the demands of humanity and statesmanship combined.¹ As regards the Southwest, we must

¹ I cannot go into the details which would be necessary in order fully to illustrate the development and progress of Spanish legislation on this point. They all appear but a gradual fulfilment of the celebrated clause in the last will and testament of Queen Isabella of Spain. See Vasco de Puga, Cedulario (1878, 2d ed.), vol. i. p. 11: "Suplico al Rey mi señor muy efectuosamente, y mando á la dicha Princesa mi hija, y al dicho Príncipe su marido, que ansí lo hagan y cumplan; y que este sea su principal fin: y que en ello pongan mucha diligencia, y no consientan ni den lugar á que los yndios vezinos y moradores de las dichas yndias y tierra firme, ganadas y por ganar, reciban agrauio alguno en sus personas y bienes; mas manden que sean bien y justamente tratados; y si algun agrauio han recibido, lo remedien y preuean, por manera que no se exceda cosa alguna lo que por las letras apostólicas de la dicha concession nos es injungido y mandado." The concession herein referred to is the famous Bull of Pope Alexander VI. The royal decree of the 9th of November, 1526, (Ibid., p. 29,) provided that no Indians of New Spain should be enslaved without a preceding information conducted in presence of the Governors and their officials. The pretext then used for obtaining slaves was : " Socolor que dicen que los tienen los naturales entre sí por esclauos cautiuados en las guerras que han tenido y tienen vnos con otros." This decree was repeated in 1529 (p. 36). Stronger yet is the Cédula of January 10, 1528, reiterated on

bear in mind that only Sonora and a part of Chihuahua contained mines actively worked.¹ In New Mexico, there were

August 2, 1530 (pp. 230, 231). Severe punishment was enjoined against such as might ill treat the natives. Cédula of March 20, 1532 (p. 254). Further decrees for the protection of the Indians of New Spain are those of January 7, 1549, April 16, 1550, August 28, 1552, etc. A detailed statement concerning legislation on the treatment and personal service of the Indians is found in Juan de Solorzano-Pereyra, Política Indiana (ed. of 1703, lib. ii. cap. 1-4). It would take too long to copy all he says on the subject. The famous decree of May 26, 1609, bears exclusively on the good treatment of the aborigines. See Francisco de Montemayor, Sumarios de las Cédulas, Órdenes, y Provisiones Reales, 1678, (sum. 48, fol. 216,) which contains the complete text. This decree authorized the employment of Indians in the mines, provided they were specially cared for and remunerated for the work they performed. The principle of remuneration of mining work was rather a local measure. The Indians attached to "Encomiendas" were compelled to labor in the mines in early days. Mining was regarded as a public work, and as such the Indians were called upon to perform it, but every precaution was taken by the law for their welfare. Hospitals were required to be established for their special benefit. Still, in a long decree directed to the Conde del Villar (predecessor in the Viceroyalty of New Castile, or Peru, to Don Francisco de Toledo), the King writes as follows (Solorzano, Política Indiana, p. 76): "E porque aviendose platicado sobre este, ha parecido, que sin embargo de lo proveido por cédulas antiguas ; cerca de que no fuesen compelidos á este trabajo contra su voluntad, se les podria mandar, que vayan á ellas, lo haren de aquí adelante, no mudando temple de que se les siga daño en la salud, é teniendo dotrina, é justicia que les ampare, é comida con que se sustenten, é buena paga de sus jornales, y hospital donde se curen, y sean bien tratados los que enfermaren." The expense of these arrangements was at the cost of the miner.

¹ Mining began in Chihuahua much earlier than in Sonora. The mines of Santa Barbara (now Allende) and of the valley of San Bartholomé or of Parral were discovered by Francisco de Ibarra about 1556. *Relacion de los Descubrimientos Conquistas y Poblaciones hechas por el Gobernador Francisco de Ybarra en las Provincias de Copala, Nueva Viscaya y Chiametla (Documentos de Indias,* vol. xiv. p. 478): "Y por su mandado descubrió las dichas minas de Santa Bárbola y San Juan, y las pobló; de las cuales se ha sacado gran cantidad de plata, porque los metales déllas han sido muy ricos." Informe al Rey por el Cabildo Ecclesiástico de Guadalajara (Docum. para la Historia de México, Ycazbalceta, vol. ii: p. 494). The date of this document is January 20th, 1570. Arlegui, *Crónica de Zacatécas* (p. 64). In Sonora, no mines were worked prior to the seventeenth century. Most of the Sonora mines, however, date from the eighteenth. The Indians of Sinaloa and western Durango were not adverse to mining, says Ribas, Historia de los Trivmphos (lib. viii. cap. iii. p. 476). Speaking of the famous mines of Topia, the historian of the Jesuit Missions in Sinaloa no mines until after 1725,¹ and compulsory labor on the part of Indians even after that date was limited to service in the

says : "Despues de descubiertas las minas de plata, donde trabajauan, auja vez que llegaua el valor de vestidos, ó preseas que apostauan, á quinientos pesos ó reales de á ocho : que bien los saben ellos sacar de las que llamā Pepenas. Y declararé aquí lo que significa essa palabra: porque se entienda la grande ganancia que tienen en la labor de minas los Indios trabajadores, principalmente los ladinos en ellas, y que conocen los metales, y son barreteros, que con barretas rompen la veta. Porque estos, demas de la paga del salario de cada dia, que es de quatro reales de plata por lo menos, pero fuera de esso, los principales trabajadores tienen facultad y licencia de escoger, para si vna de las espuertas que llaman tenates, llena de metal, que cada dia rompe y saca de la veta; metal que siempre es el mas rico y escogido: porque como ellos lo conocen, y registran primero que sus amos, apartan para si lo mas precioso, y esto no se les puede estoruar á los Indios; porque al punto que esso se les estoruasse, desampararian las minas, y ellas y sus amos quedaran perdidos. La espuerta de metal que saca, al Indio le suele valer quatro, seis, y tal vez diez y mas reales de á ocho." These Indians were the Acaxees of Durango, and their work in the mines was obligatory. Still they were paid for it. The Yaquis even went to the mines of their own free will, owing to the wages paid to them. (Ibid., p. 340): "Otros se hazen à la vida con los Españoles . . . ó en reales de minas, donde los jornales son mas crecidos." Spain did everything in its power to induce the Indian to mine for his own account.

¹ The current notions of rich Spanish mines in New Mexico, and of great metallic wealth, which the Spaniards derived from that territory, are the purest myths and fables. The opinion in which New Mexico was held in Spain as well as in Mexico is expressed by A. von Humboldt, Essai Politique sur la Nouvelle Espagne (ed. of 1827, vol. ii. p. 246): "Plusieurs géographes paraissent confondre le Nouveau Méxique avec les Provincias Internas: ils en parlent comme d'un pays riche en mines, et d'une vaste étendue. . . . Ce qu'il appelle l'empire du Nouveau Méxique n'est qu'un rivage habité par de pauvres colons. Cest un terrain fertile, mais dépeuplé, dépourvu, à ce que l'on croit jusqu'ici, de toutes richesses métalliques." The earliest explorers and settlers collected samples of ore which proved to be rich, but as early as 1602 the chief authorities at Mexico became rather sceptical concerning the mineral wealth of the territory. The Count of Monterey says, in his Discurso y Proposicion que se hace à Vuestra Magestad, etc. (Doc. de Indias, vol. xvi. p. 45): "Y no es aquello tan esteril como la gente que se vinó la pintaba, ni tan prospero como otros lo hacen, y lo representó el Gobernador en las relaciones del año de noventa y nueve." Ibid., p. 50: "Y cierto que no tengo perdida esperanza de que se haya de verificar lo que el Gobernador todavía afirma, de que hay plata en algunos cerros de aquella comarca en que está." In 1626, great complaints are made by Fray Gerónimo de Zárate over the apathy of the Spaniards about mining in New Mexico. Relaciones, art. 34: "De todo esto se rien los Españoles que allá

ARCHÆOLOGICAL INSTITUTE.

Missions, and, by abuse of authority, to personal attendance upon higher magistrates. The latter was time and again severely checked, and strong penalties threatened the Governor who ventured to infringe the royal decrees prohibiting personal service to him and to his assistants.¹ The solicitude

estan. como tengan buena cosecha de tabaco para chupar, estan mui contentos, y no quieren mas riquezas, que parece han echo voto de pobreza, que es mucho para ser Españoles, pues por codicia de plata y oro entraran en el mismo Ynfierno á sacarlas." So great was the apparent indifference of the Spanish settlers concerning mines, that, according to the same author (art. 35), they burnt the machinery that had been carried to Santa Fé in the time of Governor Peralta, rather than allow mining to go on. After the rebellion of 1680, several so-called mines were entered by prospecters. For instance, one in the Jornada del Muerto in 1685 (Rexistro de una Mina de Pedro de Abalos, MS.), and several in 1713. But in 1725 we are officially informed by the Brigadier Don Pedro de Rivera, - who was commissioned to inspect all the military posts or Presidios of the North and the districts thereto pertaining, - that up to that date no mines had been worked in New Mexico, owing to the low grade of the ore. I give the words from his Diario y Derrotero (p. 32): "Hanse encontrado en dicho Reyno, algunos Minerales, sin dar su metal mas lev, que la de Alquimia, y Cobre : y como no se ha podido costear el beneficio que necessita, las han dejado abandonadas." These citations ought to be conclusive, and to dispose of the myths about Spanish treasure taken from New Mexico, as also of the other not less ridiculous tale, that the uprising of 1685 was produced chiefly by the hard labor to which the Pueblo Indians were compelled in mines in New Mexico.

¹ Very stringent are the laws promulgated on that score by King Philip II. in 1571. See Códice de Leyes y Ordenanzas nueuamente hechas por su Magestad para la Gouernacion de las Yndias, etc., September 24, 1571 (Doc. de Indias, vol. xvi.). In regard to New Mexico, a very instructive case occurred in 1709. The Viceroy of New Spain, having been secretly informed that the Governor of New Mexico (at that time the Marques de la Peñuela) was making liberal use of the personal services of the Indians for his own benefit, wrote at once to that functionary, enjoining him from further abuse of this sort, and threatening him with a fine of two thousand pesos, and damages to the Indians, in case of disobedience to the royal edicts on that point. See Fray Juan de la Peña, Carta Patente, May 18, 1709 (MS.). It gives the order of the Vicerov to the custodian of the Franciscans, in which the Duke of Albuquerque states : "Se despacho esta en este dia ordenando al Gov^r de aquellas partes y Prov^{as} q^e pena de dos mil pesos q^e he aplicado á mi distribucion, demas de lo q^e importaren los daños qe se causaren á los Yndios se contengan, y mando contener alos Maiores p^a q^e no executen ni hagan semejantes extorsiones." Another case occurred in 1784. A bitter strife prevailed between the Governor Juan Bautista de Anza

196 .

of royal officers went so far as to abolish, in 1784, any and all personal services for church matters; a measure that called forth well grounded and effective protests.¹

Slavery was considered in the light of a punishment, and as war against Spain was a crime against the state and its subjects, prisoners of war made in campaigns against hostile tribes could be sold as slaves. The immediate result of this custom was, in New Mexico, frequent intermixture of the different aboriginal stocks, and hence a gradual modification of physical type.² Previously to the advent of the Spaniards, intermarriages between distinct tribes were rare; afterwards, the distribution of captives among the Pueblos, and the formation of villages of so called "Genizaros" (captives bought from roaming Indians or rescued from them) worked a change that may have affected anthropological features in course of time.³

By declaring the Indian to be a crown vassal, the laws placed him on an equal footing with the native of Spain in one sense, and yet, practically, he enjoyed a much more favorable position. He became a special ward of the royal government, and the complaint by Spanish settlers is very

and the Franciscans, and the commander in chief at Arizpe had to intervene. He sent peremptory orders that all personal services of Indians to the Governor and his lieutenants should cease. Fray Santiago Fernandez de Sierra, *Memorial presentado al Señor Comandante General en Arizpe* (MS., 1784).

¹ Fray Santiago Fernandez de Sierra, Memorial, MS.

² And yet Philip II. had ordained in 1571 (*Códice*, art. 26): "Item: Ordenamos y mandamos que de aquí adelante por ninguna causa de guerra ni otra alguna aunque sea so titulo de reuelion ni por rescate, ni de otra manera no se pueda hacer esclauo yndio alguno; y queremos que sean tratados como basallos nuestros de la Corona de Castilla, pues lo son." But this did not include the Indians who, after having been approached peaceably, remained in a state of persistent hostility against the Spaniards.

⁸ The "Pueblos de Genizaros" were an institution rather peculiar. Even before 1748 there existed such a settlement of rescued captives at Abiquiu. Another was subsequently established at Tomé, on the lower Rio Grande. well grounded, that everything was done for the Indian, and but little for them.¹ The Spanish government recognized at an early day that the Indian was a big child, who should be elevated very gradually, and nursed very carefully, in order not to warp his nature, or ruin it.² The wide gap between Indian culture and European civilization could not be filled; the aborigines had to be led across it gradually. It was impossible to press them at once into the mould of Spanish organization; therefore their own original form of government was maintained, and only such modifications made as became necessary to assure the supremacy of Spain in case of need.³ This policy perpetuated among the sedentary Indians the communal system known as the Pueblo type in New Mexico. Under this order of things each tribe retained its jurisdiction, and became responsible for the misdeeds of the individual. The Pueblos have disappeared, as such, in the Mexican part of the Southwest, among the

¹ This complaint is uttered as late as 1793. See Fernando de la Concha (Governor of New Mexico), Orden al Alcalde Mayor de Santa Cruz de la Cañada, para que castigue á los Indios Tehuas que hicieron Juntas Secretas, 1793 (MS.): "Emanadas, presisamente de la abundancia, comodidad, y ventajas que logran estos Yndios mui superiores en ellas á los Españoles que se hallan establesidos en sus ynmediaciones."

² This is forcibly expressed by Solorzano-Pereyra, *Política*, (lib. ii. cap. 28, p. 119). In this chapter he maintains: "Que los Indios son, y deben ser contados entre las personas, que el derecho llama Miserables." On page 109, the same author copies textually the recommendation made by the Third Council of Lima (act 5, cap. 4, p. 104): "Que mal pueden ser enseñados á ser Christianos, si primero no los enseñamos á que sepan ser hombres, y vivir como tales." Very clear and logical too is the dissertation on the "Encomiendas," in Antonio de Leon y Pinelo, *Tratado de Confirmaciones Reales*, 1629 (part i. cap. 18, 19). It is too long to be copied, and I only refer the student to it. He will find there the real grounds on which the so much condemned system of Encoraiendas was based.

³ This resulted from the form of Encomiendas. Not a certain number of Indians, but a certain range with its Indian population, was assigned to the Encomendero. By the *Cédula* of April, 1546, the King reserved, however, the civil and criminal jurisdiction. Vasco de Puga, *Cedulario*, vol. i. p. 169.

Opatas and Pimas of Sonora and the christianized Tarahumares of Chihuahua. The old organization still prevails with the Yaquis, the wild Tarahumares of Chihuahua, and the Mansos and Piros of El Paso del Norte. The so called "Reform Laws" of 1857 nominally abolished the ancient system in Mexico, much to the regret of the Indian, and even of some of the prominent originators and fosterers of the measure. That the Pueblo system still rules the New Mexican village Indians, and the Pimas and Maricopas of Arizona, is well known.

Under the supposition that monarchical ideas prevailed among the Indians of Mexico, and that there existed an hereditary aristocracy, some authors have attributed the measure adopted by Spain, at an early day, of making the leading offices of each tribe elective at stated periods, to an intention of breaking a supposed aristocratic power.¹

¹ This is presented, in a very interesting and instructive manner, in the document entitled, Real Ejecutoria de S. M. sobre Tierras y Reservas de Pechos y Paga, perteneciente à los Caciques de Axapusco de la Jurisdicción de Otumba (Doc. para la Hist. de México, Ycazbalceta, vol. ii.). The grant therein executed is probably the oldest one in Mexico, bearing date 1519. As early as 1540, (p. 23,) an order was issued by the Royal Audiencia to remove one governor of the pueblo of Axapusco and put another in his place. In regard to this measure, Don José Fernando Ramirez wrote as follows (Noticia de la Piezas, etc., p. 12) : "La diestra política del gobierno español comprendió los riesgos de este sistema, que en su principio fué muy general [referring to the fact that the descendants of the original chiefs remained in possession of the landed titles of the village] y lo minó empleando sus propios medios. Procuró dar todo el conveniente desarollo á la institucion municipal, y poniendo así en accion el elemento democrático, pusó tambien en oposicion á los caciques con sus antiguos subditos, destruyendo su influjo y su poder. En el caso que nos ocupa, el Virey autorizó los mencionados pueblos para hacer eleccion de autoridades municipales." Señor Ramirez had not been among the New Mexican Pueblos, and consequently overlooked the fact that the sons of former governors, etc. frequently hold valuable papers, with the consent of the tribe, and for the benefit of the entire community. The democratic element was not imported by Spain, it was only respected and preserved as the most appropriate form for the conservation of the Indians, and most suitable to their low degree of culture.

ARCHÆOLOGICAL INSTITUTE.

This measure was in fact adopted for the purpose of asserting the supremacy of the government at regular and often repeated intervals, through the formality of confirmation and investiture. No other idea actuated the King of Spain in his decree of 1620 to the Custodian of New Mexico, in which he notified that prelate that he had ordained that annually, on the first day of January, an election should be held in every New Mexican Indian village of "a governor, alcaldes, fiscales, and other ministers of the Republic, without that my Governor or any other officer of mine, or you, or any ecclesiastic, being present at the said elections, in order that the Indians may enjoy the necessary freedom, and that after the election they shall be reported to the Governor for his confirmation."¹ This royal order introduced among sedentary Indians the democratic idea of rotation in office, and, while this was but imperfectly understood and practised (for reasons which will be hereafter explained), it still contributed towards fostering individualism, in contradistinction from communistic socialism, which is the leading characteristic of Indian society, and the great exterior stumbling-block in the path of the Indian towards civilization.

To force this idea of individualism upon the Indian tended toward the ruin of the Indian himself. It happened then, as it would happen to-day were he free to act, with noth-

¹ Real Cédula dirigida al Padre Custodio Fray Estevan de Perea, 1620 (MS.): "Embié mandamiento al dho mi Gou^T para que dé orden como cada vno de los Pue^{os} de estas prouincias el primero dia de Henero de cada vn año sus elecciones de Gou^T, alcaldes topiles y fiscales y demas ministros de República sin que el dho mi Gou^T ni otra mi Justicia, bos ni otro relixioso de bra Custodia se hallen presentes en las dhas elecciones, porque en ellas los dhos Yndios tengan la libertad que combenga, y que las que en esta forma hicieren las lleben al dho mi Gou^T para que los confirme estando echas." The custom among the New Mexican Pueblos of electing their officers annually on the first of January is therefore a Spanish modification, and dates from the year 1620.

ing but the law of the land between his rights and the superior faculties and aspirations of his white neighbor. First the Indian's property, next he himself, was wrecked for the benefit of the white man. While, therefore, in matters of government, Spain imposed a progressive measure, in matters of landed property it enforced conservatism. The communal system of land tenure was legally established by the granting of community lands to each settled tribe, --lands inalienable except through consent of the whole tribe and with permission of a set of authorities specially intrusted with the care of the Indian's interests.¹ This perpetuated communism of land-holding, but did not exclude individual tenure, within the limits and under the restrictions of communal rights. It impressed upon the Indian the notion of land measure, and limited him also to a definite space for abode as well as subsistence; and, since space and time are inseparable ideas, it created in his mind the first feeble rudiments of economy in both, of which he had until then not the least conception. These rudiments are, indeed, very feeble at this day.

In the Southwest, the establishment of community grants

¹ These were the so called "Protectores de los Indios." Their chief duty was to defend legally the rights of the Indians. It was considered that the Indian, although a vassal, was a vassal under age, a minor, and needed somebody to represent him and assist him in law. Compare Solorzano, Política, p. 121 et seq. The Protectors of the Indians were established at an early date. At first, the prelates of the Indies (archbishops and bishops) were the protectors. See Cédula of March 26, 1546, in Montemayor, Sumarios, fol. 211. Philip II. reestablished special official protectors. Recopilacion de Leyes de los Reynos de las Indias, lib. vi. tit. vi., Ley primera. The date of the Cédula is January 10, 1589. The protectors were in a manner similar to our agents of to-day, with the difference that they had less power and were far better controlled, and their duties were well defined. They had no jurisdiction over the Indian, and no right nor power to meddle in the interior affairs of the tribes. Each Indian of New Spain had to pay one half-real towards defraying expenses of defence of the Indians in case of necessity. Recopilacion, vol. ii. fol. 218, Cédula of June 13, 1623, Philip IV.

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is of comparatively recent date. A peremptory order of the King, dated 1682, laid the foundation of the so called Pueblo grants of New Mexico.¹ In Sonora, the papers and deeds of the Opatas date back to the beginning of the seventeenth century.² As long as the Jesuits were almost the sole white occupants of that State, it was superfluous to execute the royal dispositions in regard to Indian lands, as nobody was near or far who could encroach upon the native's possessions. In Chihuahua, El Paso del Norte excepted, the unsettled nature of the aborigines rendered the community system impracticable except in the shape of "reductions," that is, aggregations, sometimes of several stocks, around a mission, as centre and pivot of life. To such reductions an area of communal land was assigned.³

At the bottom of these changes rested an idea entirely novel to the Indians, that of ownership of the country by a power whose head remained invisible to them. They saw his representatives, felt the effects of his decrees, but saw

¹ Real Cédula nombrando á Don Domingo Gironza Petriz de Cruzate por Gobernador del Nueuo México, MS., 1682.

² For instance, the grants of the Pueblos of Sinoquipe and Banamichi.

⁸ The "Reducciones" are defined by Solorzano as follows (p. 107): "De lo qual desciende, que podriamos, no sin causa, equiparar estas reducciones ó agregaciones de los Indios á los Metoecios de los Romanos, y llamarlas con este nombre. Pero todavía entiendo, que les quadra mejor, y mas en comun, el de los Pueblos que los mesmos Romanos llamaban Municipios, o Metrocómias. Municipios eran unos lugares pequeños, adonde por razon de la labrança, ó por otras conveniencias, hazian agregar algunas gentes, y que allí assentassen sus casas y domicilios, y repartiessen entre si los cargos de ellos, por lo qual se llamaron Municipes, como lo dizen los textos y dotores que de ellos tratan: las Metrocómiae eran como villas, ó pueblos mayores, que tomaron este nombre, como que fuesen madres ó cabeças de los menores. . . . Y uno y otro responde al modo y forma de los de nuestros Indios, que se ponen los mayores en cabecera de cada provincia, y á su abrigo otros, que no son tan grandes, para que todos se ayuden assí comunmente dezimos, los pueblos, y repartimientos de Indios, y sus cabeceras." The earliest Cédula I can find establishing these Reducciones bears date 21 March, 1551. Recopilacion, vol. ii. lib. vi. tit. iii. The whole section treats of them.

him not. More perhaps than anything else, this opened their eyes to consciousness that the little world of their own, of which each pueblo appeared to be the centre, formed but a portion of a grand uncomprehended total. The idea was crushing to them in one sense. It humbled the childish pride which isolation and ignorance beget and foster. In another sense it was comforting, for that unseen power not merely exacted obedience and tribute, it promised protection, it brought facilities for living, means of improving the mode of existence.

The latter consideration, for instance, acted strongly upon the minds of the Pueblo Indians of New Mexico, when, in 1598, they voluntarily submitted to Spanish sway. It cannot be alleged that the acts of submission of the Pueblos were not understood by them. Every precaution was taken to make them realize perfectly what these acts implied,¹ and, having assumed the position of vassals of Spain of their free will and consent, a withdrawal from it entailed, especially if carried on with violence, the same consequences and legal necessities as rebellion.² It was different in Sonora and in

¹ There are seven of these *Obediencias y Vasallajes á su Magestad*, all of which are contained in vol. xvi. of the *Documentos de Indias*. They bear date respectively, *Santo Domingo*, July 7, 1598; *San Juan*, September 9, 1598; *Acoloci*, October 12, 1598; *Cuéloce*, October 17, 1598; *Acoma*, October 27, 1598; *Aguscobi (Zuñi)*, November 9, 1598; *Mohoqui*, November 15, 1598. In each case there were interpreters. The conditions of submission were read, and afterwards interpreted, and the question asked, "Y que así viesen si querian dar la obediencia como está dicho." Invariably follows the reply: "Los quales dicho, con muestras de contento respondieron de un acuerdo y deliberacion y expontánea voluntad, que querian ser vasallos del dicho Christianísimo Rey Nuestro Señor, y como tales, desde luego le queriã dar y daban la obidencia y vasallaje por si y en nombre de sus Repúblicas."

² Ibid.: "Y el dicho Señor Gobernador les replicó, que mirasen y entendiesen que el dar la obidencia y vasallaje al Rey Nuestro Señor, era subjetarse á su voluntad y á sus mandamientos y leyes, que si no los guardasen, serian castigados como trangresores á los mandamientos de su Rey y Señor natural; Chihuahua. There, the Indian submitted to the government locally; to the Church, and in particular to the Jesuit order, at large.¹ This produced results not always beneficial to the native.

That the Indian, once incorporated in the royal domain, should contribute to the expenses of the governmental machine, was but imperfectly understood by him. He never saw the head of the institution, and what he contributed went manifestly, and before his own eyes, to the support of minor functionaries. Tribute was a well established custom in Mexico, especially in the central and southern parts; in the Southwest it was unknown, and remuneration for governmental work had but a few very faint analogies among Indian customs. The tribute exacted from the Pueblos was a peculiar one. It consisted mainly of cotton cloth and of maize.² Against the amount of tribute no reasonable com-

y que así viesen lo que querian y respondian á esto; á lo qual dixieron los dichos capitanes, que querian dar y daban la dicha obidencia y vasallaxe, como ántes habian dicho, por sí y en nombre de sus Repúblicas."

¹ The Jesuits actually went in advance of the establishment of civil authority in Chihuahua and Sonora. They were really pioneers, whereas in New Mexico the Franciscans, although pioneers too in a certain sense, established their missions more directly with the aid of the temporal power, and furthermore in closer proximity and more immediate contact with the resident civil authorities.

² The general rules laid down for the levy of tribute are contained, as far as the Southwest is concerned, in the *Códice de Leyes y Ordenanzas* of King Philip II. (*Documentos de Indias*, vol. xvi. p. 394): "Y de mas de lo susodicho, mandamos á las dichas personas que por nuestro mandado estan descubriendo, que en lo descubierto hagan la tasacion de los tributos y seruicios que los yndios deuen dar como basallos nuestros, y el tal tributo sea moderado, de manera que los puedan sufrir, teniendo atencion á la conservacion de los dichos yndios, y con el tal tributo se acuda al comendero donde lo quiere." In art. 49 (p. 200) the King ordains : "Proueyemos y mandamos que ante todas cosas se hiciese la tasacion de lo que los dichos yndios de ay adelante deuian pagar, ansí de los que estan en nuestra caueça y corona Real, como de los que estan encomendados á otras personas particulares. . . Por endé encargamos y mandamos á los nuestros Presidentes y Oydores de las dichas quatro audiencias cada vna en su distrito y jurisdicion, cada vna, se ynformen de lo que buenamente los dichos yndios pueden pagar de seruicio ó tributo sin fatiga suya ansí á nos como á las plaint could be made; the manner of levy sometimes gave rise to justifiable protests.¹

Punishment for crimes according to Spanish laws was, to the Indian, a source of great astonishment, and often of displeasure. Atonement for murder by the death of the murderer at the hands of justice, without the possibility of redemption by remuneration, was an entirely new feature. On this point the Indians had generally to yield, for the law could not give way to their customs. Still there are evidences of compromise in the Southwest, as there was great difficulty in inculcating in the mind of the aborigines, rapidly, any other notion but that execution was another murder or manslaughter calling for equivalent retribution. In regard to theft, communism of living rendered their notions very vague. As little as the Indian understood why necessities of life should not be free to all, so little did the European comprehend why they should be, and constant conflicts arose.

personas que los tubiere en encomienda, y teniendo atencion á esto les tasen los dichos tributos y seruicios, por manera que sean menos que los que solian pagar en tiempo de los Caciques y Señores que los tenian ántes de venir á nuestra obediencia." The Indians of New Mexico paid no tribute whatever in primitive times, but in Central Mexico a tribute, and a very severe and onerous tribute, was exacted of vanquished tribes by their conquerors. This explains the last portion of the royal ordinance. In New Mexico the tribute was paid in cotton cloth and in grain, often in buckskin and sometimes in buffalo robes. Conde de Monterey, Discurso y Proposicion (Doc. de Indias, vol. xvi. p. 48): "De algodon ó cueros de Cíbola, y de maiz, presupongo yo que serán los tributos." In 1630, according to Benavides, (Memorial, p. 25,) the tribute consisted "en cada casa vna manta, que es vna vara de lienço de algodon, y vna fanega de maiz cada año, con que se sustentan los pobres Españoles." Compare also Fray Pedro Zambrano, Carta al Virrey (MS., November 6, 1636). Fray Antonio de Ybargaray, Carta al Virrey (MS., November 20, 1636); Carta al Virrey del P. Custodio y Difinidores del Nueuo México (MS., November 28, 1636).

¹ Great complaints are uttered by the Franciscans about the manner of collecting the tribute in New Mexico. I refer, among others, to the letters to the Viceroy quoted above, and especially to Fray Andres Suarez, *Carta á su Magestad* (MS., October'26, 1647).

At last, however, the Spanish ideas prevailed to a great extent, and by allowing permanent tribes independent jurisdiction a compromise was effected, the result of which has been that, as towards outsiders, the Pueblo recognizes the action of law, while the law in turn tacitly acknowledges the right of home rule in his favor.¹

In the main, the effects of Spanish legislation upon the Indian mind have been to enlarge the scope of its vision, and to foster the thought of individuality, thus shaking primitive socialism without abolishing it in a manner detrimental to the race. It has placed an effective barrier to the unsteadiness of Indian nature, has opened his mind to the conceptions of metes and bounds of time and space, and has even striven, though with small effect, to impress him with a thought of economy of time. Indirectly and through the medium of language it has also encroached upon the Indian principle of segregation, by placing at the command of the native a new medium of utterance that renders intercourse possible between separate stocks, thus paving the way for an idea entirely foreign to all American aborigines, — that of fraternity among mankind.

Any other nation governing the Indian according to European systems might have achieved similar results; but the special merit of Spain consists in having achieved them, whereas other nations occupying American soil have given comparatively little attention to the well-being and conser-

¹ This tacit arrangement prevails to-day with the Pueblos, and it has been legalized in the first statutes of New Mexico, which declare the pueblos to be bodies corporate, corporations having their own jurisdiction over their members. When the Indians of Nambé, in March, 1855, butchered three men and one woman of their village in the most horrible manner for alleged witchcraft, the courts decided that no interference was possible. The Indians were, it is true, compelled to pay four hundred dollars, but these were rather costs and fees than fines. Compare *Relacion de la Matanza de los Brujos de Nambé, por Juan Lujan, Testigo Ocular* (MS., 1888, original in my possession).

vation of the red man. Certain it is, that the Spanish laws of the Indies are by far the most beneficent, the most humane, and the most practical that were ever framed for the government of the aborigines, and that while they have done a vast amount of good, if they did not achieve more, it was not the legislator, but the administrator, who was at fault.

Although not germane to the points under treatment, I cannot refrain from noticing here the contrast between the astounding impetuosity displayed by the Spaniards in their spread over the American continent, and the slow and patient wisdom which marks their legislative enactments. All the very numerous edicts and decrees breathe, in regard to the Indian, the spirit of utmost solicitude for his welfare and gradual introduction into the path of civilization. The rulers of Spanish affairs were thoroughly convinced that nothing could be gained by urging the aborigines to march along a line on which they were as yet unable to advance. There is nothing wiser, nothing more humane and more practical, in this respect, than the voluminous ordinances framed in 1573 by King Philip the Second,¹ and under these ordinances the annexation of the Southwest to the Spanish dominion was effected. These remarks do not apply to the administration of pacified and permanently established tribes alone, they refer as well to that of new discoveries and settlements, and to the conduct towards hostile tribes. From this time on, the term of "Conquests" was banished from Spanish legal terminology, and "Pacifications" adopted in its stead.²

² Ordenanzas, p. 152 : "Los descobrimientos no se den con titulos de nombre

¹ Ordenanzas de su Magestad hechas para los nuevos Descubrimientos Conquistas y Poblaciones, July, 1573 (Doc. de Indias, vol. xvi.). I refer the reader to this important enactment, which is a model of sound practical sense, of knowledge of the true nature of the Indian, and of noble and generous sentiments.

ARCHÆOLOGICAL INSTITUTE.

The changes in art and industry wrought by contact with the Spaniards, while great and manifold, appear less striking in the light of the present state of progress in mechanical appliances. We smile at the antique plough, at the two-wheeled cart, at the clumsy iron axe, the imperfect saw, etc., still found among the New Mexican Pueblos, and deride the Spaniard who, three centuries ago, could not give the Indian any better implements than those used at that time among all civilized nations. We chide him for not having kept step in his distant colonies with progress in other climes, under different circumstances. We are liable to forget, however, that the adoption of even those imperfect implements was a gigantic stride for the Indian at whose disposal they were placed gratuitously.¹ He passed, at one step, from the age of stone

de conquistas, pues habiendose de hacer con tanta paz y caridad como deseamos, no queremos quel nombre dé ocasion ni color para que se pueda hacer fuerza ni agravio á los indios." This was reiterated by Philip III. in 1621, and by Carlos II. *Recopilacion*, vol. ii. fol. 80.

¹ An illustration of the gratuitous distribution of agricultural implements is found in the case of re-settlement of the pueblo of Sandia, New Mexico. In the list of things that were necessary in order to settle the Indians recently come from the Moquis appear, besides a number of carpenter's tools, all kinds of agricultural implements of the period, and, in addition, abundance of seeds and grain for planting. Joachin Codallos y Rabal, Testimonio á la Letra del Superior despacho que me presentó el rdº Padre Comisario Delegado, etc., en Orden á retoblarse los Sitios antiguos con los Yndios Moquinos reducidos (MS., January 23, 1748). I shall not insist upon the industrial education which was furnished to the Indians of Mexico by the Franciscans at an early date, - the fact is too well known and too thoroughly established to require proof, - but I shall merely state that Philip II. was perfectly justified in saying, in the Ordenanzas already quoted (p. 182): "Haseles dado el uso de pan y vino y aceite y otros muchos mantenimientos; paño, seda, lienzo, caballos, ganados, herramientos y armas, y todo lo demas que de España ha habido, y enseñado los oficios y artificios con que viven ricamente." It is interesting to learn what use the Indians of New Mexico made of the implements and domestic animals, the possession of which they owed to the Spaniards, during the time they succeeded in "freeing themselves," as current terminology has it. In 1683, several Indians from the pueblo of Picuries went down to El Paso del Norte to reconnoitre the Spanish armament there. These Indians were surprised by the Mansos and one of them captured. In his interrogatory he deposes (Declaracion de vn Yndio de Nacion

209

into a state of transition, wherein, without the intermediate use of copper or bronze, he learned to weld iron, as well as to fuse and to hammer silver and copper; and to employ

Pecuri que dijo llamarse Juan, MS.) that Luis Tupatu, one of the most influential Indians of his pueblo (and among the pueblos in general), said : "Que atendiesen á como se hallauan destituidos de todo con la falta de los españoles. Porque ya no tenian vacas ni abejas ni cauallos ni cuchillos ni coas ni alesnas ni ropa ni bestuario ni con que dar á vn enfermo porque todo lo traian los españoles y que en aquel Rno no lo abia ni balia nada de lo que podian aprobechar para su biujenda." It seems that three years after the uprising the cattle and sheep had already been eaten up, instead of continuing to be raised as heretofore. "Y que en todo el Reino no ai vna res vacuna ni cabesa de ganado menor ni los atajuelos que tenian los Yndios que todo selo an comidos los apóstatas, y que la cauallada y yeguas toda sela á llevado los Apaches, que no ai oy en todo el Reino mas de algunos vueies que an dejado en los pueblos para el venefizio de sus mielgas y que en algunos Pueblos ai de tres á quatro bestias, que todo está destruido." This shows, in the first instance, that the Indians had stock and agricultural implements to a fair extent, and, secondly, that as soon as the Spaniards were gone they squandered these possessions in the most wanton and most truly Indian style.

In regard to Sonora, whatever progress was made by the Indians was mostly due to the Jesuits, who, indeed, obtained the material, so far as implements, cattle, etc. were concerned, from the Spanish government, and served merely as distributing agents, so to say. Father Ribas, who wrote in 1645, not thirty years after the final reduction of the powerful tribes on the Yaqui and Mayo Rivers, and only a few years after the peaceable submission of the Pimas and Opatas, is very emphatic about the rapid changes in mode of life and arts of husbandry. Historia de los Trivmphos (p. 251), about the Mayos : "Y el viuir y auezindarse los Indios en tales estancias y puestos está ya muy introducido en las Indias; y les está muy bien á sus naturales, porque tienen tierras, y comodidades, si quieren sembrar, y la comida y sustento muy seguro." Of the Yaquis, the fiercest and most warlike of the Indians of Sonora, he remarks (p. 339): "Los Pueblos estan dispuestos en muy buena forma, sin quedar ya vno solo, que de assiento viua en sus sementeras, ni rancherías antiguas. Las casas hazen ya muchas de paredes de adobes, y terrados, y las de los Gobernadores mas ámplias. . . . Muchos de los Hiaquis vsan ya de cauallos, en que andan y traginan sus carguillas, comprándolos con los frutos que cogen, con tanta codicia, que por esse respeto se aplican á hazer mayores sementeras, de que suele ser tā abundāte su valle, que en años esteriles entran á rescatar los Españoles y otras Naciones, sus frutos, con permutas que hacen de vnas cosas por otras, y á esso llaman rescatar. En lo que toca al vestido, es grande la mudança que desean y procuran, y por este respeto se dan mas á sembrar algodon. Demas de esso . . . los Padres . . . han procurado, que entre en Cinaloa alguna cantidad de ouejas, para que con la lana pudiessen las Indias labrar mantas de que vestirse, como ya lo hazen."

not only these two metals, but also gold, as a medium of commerce and barter. In place of the wooden stick used for planting, he obtained the hoe and the plough; he got the saw, the chisel, and the auger, in place of the fire-drill. He obtained draught animals, cattle, sheep, the cat, the domestic dog. He was taught to raise wheat, barley, melons, vegetables, apples, pears, peaches, and grapes.¹ In Sonora the orange and the citron were added to his stock of native fruit-bearing trees. Wool supplanted cotton and buckskin for vestments; the old musket with powder and lead took the place of bow and arrow. True it is, the Indian grasped all these improvements but slowly. Their very advantages were a source of misgiving to him for a long time, and even to-day he is, generally speaking, more dexterous with the bow than with the rifle, more prone to use a stone than a hammer, raw-hide and buckskin than rope or wire. As far as the New Mexican Pueblos are concerned, it may be said that they are still in that state of transition from stone to metal in which they found themselves three centuries ago, after the Spaniards had begun to introduce the arts of life and husbandry of the Eastern world. The assertion of decadence in their arts, so often repeated, is devoid of all basis. Certain arts have been abandoned by the sedentary Indian, because he found more profitable employment.

¹ The introduction of grapes into New Mexico took place in the first half of the seventeenth century, and the first vineyard was planted at San Antonio de Senecú, eighteen miles south of the present town of Socorro. The village of Piros Indians founded there about 1626 was abandoned about 1675. The Senecú of to.day, near El Paso del Norte, harbors some descendants of the former Piros of Senecú in New Mexico. Vetancurt (*Crónica de la Prov. del Sto Evangelio de México*, p. 309) attributes the introduction of vines to Fray Garcia de San Francisco. Fray Balthasar de Medina (*Chrónica de la Santa Provincia de San Diego de México*, 1682) attributes the introduction of the grape-vine in New Mexico to Fray Juan de Arteaga, which would place it before 1630. At all events, it appears certain that this improvement was due to the Capuchins, — *Frayles descalzos*. Thus the New Mexican Pueblos dropped the manufacture of blankets almost completely for a time. It was preferable to buy them from the Navajos (who learned the art from them) and from the Spanish colonists. Their pottery today is no longer as barbarously elaborate as centuries ago, because other more practically useful arts engross their attention. Such changes are no evidences of decay, they are inevitable results of progress. With the introduction of improved implements and of new products, the Indian ideas of commerce changed correspondingly, their scope of knowledge was enlarged, and in this respect also, while his pride was constantly humbled by the sight of new and unknown things, his standard of manhood became unconsciously raised to a higher level.

These considerations apply not alone to the sedentary Indian, the vassal of Spain, but also to the vagrant roaming aborigines, the relentless foes of the house-dweller and of the Spaniard. In many respects the Apache, the Comanche, the Navajo above all, owe more to European culture introduced by Spain than the Pueblo Indian. That is, for their particular ends and aims they have derived greater profit than their sedentary kindred. They also obtained the horse, and, as in the first section of this Report I have spoken of the buffalo as one of the chief agents in bringing about ethnographical distribution upon the North American continent, so now I would point out that the horse was second in importance only to the buffalo in this respect. Possession of the horse made rapid circulation over the plains possible; it led in the past century to the astonishing spread of a northern stock, the Comanches, towards the Mexican Gulf, and even across the Rio Grande; it created an indirect intercourse, through Indians of the plains, between New Mexico and western Canada, which finally brought about actual contact with the French.¹ Comanches traded with the French of Louisiana and Texas; Comanches alternately made raids upon and traded with the village Indians of Pecos. The savage Indian grasped the utility of the horse and of fire-arms with much greater vigor than sedentary tribes, and the complaint is often heard that the Apaches, as well as the Comanches, were better armed and better equipped than the few Spanish soldiers who pretended to defend New Mexico against their incursions.² It

¹ The earliest advance on the part of the French towards New Mexico, so far as known, is reported as having taken place in 1700. The French were said to have destroyed a village of the Jumanos. This however is not certain. I find it in the Relacion Anónima de la Reconquista del Nuevo México (p. 180). 'The news was brought by an Apache from the plains. Certain it is that in 1702 the Governor Pedro Rodriguez Cubero made an expedition to the Jumanos. See Libro de Difuntos de Pecos (MS.), 1695 to 1706. In case this aggression be true, it must have come from Texas or Louisiana. In 1720, the Spaniards made a reconnoissance with fifty men as far as the Arkansas, but they were surprised by the Pawnees and some French, and nearly all perished. In 1748, it is officially stated that the French traded with the Comanches at the place called Quartelejo, north or northeast of Mora. Joachin Codallos y Rabal, Testimonio sobre lo Acaesido en el Pueblo de Pecos: Notizia del Theniente de Thaos de hallarse en el Rio de la Gicarilla cien tiendas de Cumanches enemigos y que á ellas llegaron treinta y tres Franceses que los bendieron estos á aquellos bastantes escopetas (MS.), 1748, fol. 5. But the first French immigration into New Mexico (aside from the three deserters from the expedition of Lasalle, among them the famous L'Archevêque, who came to New Mexico about 1693) took place in 1739, when nine French Canadians made their appearance, and two of them remained in New Mexico. One of these, named Luis Maria Colons (?), attempted to foment an insurrection among the Pueblos against the Spaniards, for which he was shot at Santa Fé on October 19, 1743. Causa fulminada criminalmente contra Luis Maria Colons, moro criollo de las Colonias de Franzia de la parte de la Frobinzia de Cánada en 31 de Mayo del Año de 1743 (MS. in my possession).

² Antonio Bonilla, *Apuntes Históricos sobre el Nuevo México*, 1776 (MS.), p. 119: "Hay abundancia de hombres, así Españoles, como Indios, mui á proposito para la guerra : pero la carencia de armas y caballos los inutiliza." Ibid., p. 124: "Los Cumanches . . . no les intimidan las armas de fuego, porque las usan y manejan con mas destreza que sus maestros." Speaking of the inhabitants of New Mexico, he says (p. 135): "Y enseñarles el uso del arma de fuego, que verdaderamente por lo general se ignora en estas tierras." It is useless to quote from other sources; they all agree on the point of utter defencelessness of the Spanish inhabitants of New Mexico and of the Southwest in general, and of the

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may be said that the hostile tribes took from the Spaniards only what they could turn to advantage against them, and that what they took they wielded with terrible effect. The implements of peace were slow to penetrate among peoples by whom peaceable work is regarded as degrading to man.

One of the results of the introduction of new arts and objects has been a change in the conceptions of the Indian about wealth. If treasure is mentioned to the Pueblo, we must specify what kind of treasure is meant. His original treasure is neither gold nor silver. His treasure consisted of shell-beads, of green stones, and of objects of worship. His medium of exchange, aside from objects of practical value, was formerly these shell-beads and these green stones.¹ To-day he still clings to them with tenacity, and many a good horse is purchased from the Navajos by the Pueblos by means of turquoises alone. But the Indian has learned from the Spaniard the usefulness of coined money, and while he regards his own treasure as equally valuable, if not more so owing to the superstitious importance placed upon it, money is handled by him and esteemed a desirable convenience. He knows that with money he can acquire certain things unattainable through shell-beads alone, but he knows also that the last can procure him things which no money perhaps may buy. There exists consequently, among many sedentary tribes of the Southwest, a double circulating medium; a civilized currency of United States or of Mexican coins, and an aboriginal currency, which has value in transactions with their kindred only.

superiority in horses and armament of the hostile tribes. In 1778, the Territory of New Mexico had, all told, eight guns (one without carriage) and eighty-four serviceable muskets! *Noticia del Armamento, Peltrechos, y Municiones pertenecientes á este Gobierno del Nueuo Méjico* (MS.).

¹ I refer, among others, to the exchange of turquoises for parrot's plumes, already mentioned by Cabeza de Vaca, in 1536.

Such dualism is a feature that underlies the Indian's life in every direction. It is especially prominent in his religious conceptions and ideas.

I have included the action of the Church in what I termed the "Indian policy" of Spain. Through the concession termed the "royal patronage," the Crown had obtained a powerful hold on the Church in the Indies. It insured control of the investiture of ecclesiastics and the distribution of parishes and curacies.¹ It placed the Regular Orders in a kind of dependency towards the government, and long and bitter was the struggle that terminated in the secularization of the doctrines, and finally in the expulsion of the Jesuits.² For the Indians, and for the welfare of the colonies in general, these two results were great misfortunes. By the first, a large body of men, hitherto zealous and active, were forcibly confined to contemplative retirement, that is, to mental stagnation coupled with passive accumulation of idle wealth. The expulsion of the Jesuits deprived the Indians of excellent directors, and the Creoles of able and progressive teachers. It was a severe blow to the aborigines of Sonora and Chihuahua. In the Southwest, the loss was

¹ The concession of patronage of the Indies dates from 1508. See the Bull of July 28 of that year, issued by Pope Julius II. I cite it from the work of Antonio Joachin de Ribadeneira y Barrientos, *Manual Comfendio de el Regio Patronato Indiano*, 1735 (p. 409). Bulls confirmatory were, among others, those of Benedict XIV., of February 20 and June 9, 1753.

² The decree of expulsion of the Jesuits was communicated to the latter on the 25th of June, 1767. Alegre, *Historia de la Compañia*, Appendix by Bustamante, vol. iii. p. 301. The great majority of them sailed from Vera Cruz on the 24th of October of that year. But the strife between the temporal power and the Regular Orders (most of the secular clergy being on the side of the government) dates from the close of the sixteenth century. Compare (in the *Sumarios* of Montemayor, fol. 19, 20, 22, and 23) the stringent *Cédulas Reales* of April 28, 1603, June 22, 1624, April 6, 1629, and June 10, 1634, touching the regulars and the royal patronage. The bitter conflict between the Bishop of Puebla, Don Juan de Palafox y Mendoza, and the Jesuits, towards the middle of the seventeenth century, was one of the precursors of their expulsion.

not felt, inasmuch as the Franciscans of New Mexico were not secularized previous to Mexican independence.¹ Decay, indeed, set in among the Franciscans, but the causes of it belong to an order of events to which I refer elsewhere.

I may as well state here, that the Inquisition had no manner of sway or jurisdiction over the American Indians. References to *autos de fé* in which Indians are represented as being the victims are absolutely untrue. Not only the laws of the Indies, but the official declarations of the Holy Office, bear witness to this fact. Crimes committed with Indians were visited by this tribunal upon those who perpetrated them, but it never interfered nor was permitted to interfere in matters of faith or belief of the aborigines.² Cases of witchcraft even were disposed of by the civil or military authorities, as the case might be.³ It was considered that the Indian could not be held responsible for his creed in the same degree as the European or his American offspring, and

¹ Most of the Franciscans were removed in 1832 and 1833. A titular "Custodio," Fray Mariano de Jesus Lopez, continued to reside at the Pueblo of Isleta and to administer occasionally to the distant Indian villages of Laguna, Acoma, and Zuñi, until 1847, when an accident put an end to his life.

² The great documentary historian of Mexico, Don Joaquin Garcia Ycazbalceta has called attention to this in his *Bibliografia Mexicana del Siglo* XVI, p. 377. He refers to the Cédula of Charles V. of October 15, 1538, and to Law No. 35, tit. i. lib. vi. of the *Recopilacion de Indias*. Here follows the text of this law (fol. 192, vol. ii.): "Por estar prohibido á los Inquisidores Apostólicos el proceder contra Indios, compete su castigo á los ordinarios Eclesiásticos, y deben ser obedecidos y cumplidos sus mandamientos, y contra los hechiceros, que matan con hechizos y usan de otros maleficios, procederán nuestras justicias reales." In confirmation see *Carta Patente del Padre Custodio Fray Joseph Lopez Tello, comunicando una Instruccion del Santo Tribunal de la Inquisicion*, April 22, 1715 (MS.; the instruction is issued by three Inquisitors and the Secretary): "Esto es porque los delitos de Yndios no tocan al Sto Oficio, si los que en materia de fé se cometen con ellos ó Yndios."

⁸ See the law above quoted. I have in my possession a number of witchcraft trials from New Mexico, beginning with 1704. All were conducted by the civil authorities of the province.

the principle of patience and leniency adopted in legislation also prevailed in religion.¹

The conversion and spiritual "reduction" of the Indians of New Spain were from the beginning, after the conquest, intrusted chiefly to the Franciscans. But in proportion as other orders and secular priests arrived from the mother country, they were assigned to certain provinces and localities. The friars of St. Francis had discovered New Mexico.² Their blood was repeatedly shed on New Mexican soil.³ They held the first claim to the missions there, and thus the territory became an annex to the province of the Holy Evangile of Mexico under the title of the Custody of Saint Paul of the Conversion of New Mexico. Afterwards, in southern and central Chihuahua, the Franciscans of Zacatecas established themselves,⁴ while the Jesuits took hold of Sonora, and subsequently of Arizona, where they remained

¹ The prohibition to the Inquisition to meddle in Indian matters is due to Philip II., and the Cédula bears date February 23, 1575. It is in harmony with the ordinances of 1573. Ordenanzas para Descubrimientos, etc., p. 182: "Los predicadores, con la mayor solenidad que podieren y con mucha caridad, les comiencen à persuadir, quieran entender las cosas de la Santa Fee católica, y se las comiencen á enseñar con mucha prudencia y discrecion por el orden questa dicho en el libro primero, en el Título de la Santa Fee católica, usando de los medios mas suaves que podieren para los aficionar á que la quieran aprender; para lo cual, no comenzarán reprehendiéndoles sus vicios ni idolatrías, ni quiténdoles las mugeres ni sus ídolos. Porque no se escandalizen ni tengan enemistad con la doctrina cristiana, sino enseñénsela primero, y despues que esten instruidos en ella, les persuaden á que de su propia voluntad dexen aquello ques contrario á nuestra Sancta Fee católica y doctrina evangélica." This is so far as the idols are concerned an abrogation of decrees of Charles V., June 26, 1523, of the Empress, August 23, 1538, and of the King (then Prince Regent) himself, August 8, 1551. See Recopilacion, vol. i. fol. 2.

² Fray Marcos of Nizza in 1539.

³ Fray Juan Padilla, in 1543; Fray de la Cruz and Fray Luis Descalona, a short time after; Fray Agustin Rodriguez, Fray Francisco Lopez, and Fray Juan de Santa Maria, in 1581.

⁴ The Custody of San Francisco de Zacatecas was established in December of 1566. Arlegui, *Crónica de Zacatécas*, p. 41, and its first mission in Chihuahua was San Bartholomé, or Parral.

till they were supplanted by the Franciscans of the College of Querétaro in the second half of the eighteenth century.

The system of work pursued by the Franciscans in New Mexico consisted, first, in the construction of churches with the aid of Indians.¹ This necessitated giving to these Indians a certain amount of mechanical training, and thus it was that the Pueblos became acquainted with tools of iron and steel. Secondly, in the setting apart and cultivation of plots for the support of the missionary. This made the Indian acquainted with improved methods of tilling the soil, as well as with the use of superior implements and of domestic animals.

The teaching of letters and of the catechism was a herculean task, considering that the priests had to become acquainted with the languages of the neophytes, and had to encounter a violent opposition against arts which the Indian regarded with superstitious dread.²

Painting was easily taught, for the Indian is always very fond of colors; but music was more difficult, for, although the aborigines are much given to rhythmic noise, music

¹ This was done everywhere, and was a natural consequence of missions. The work of building the walls of these churches was performed, at least in New Mexico, by the women. See Benavides, *Memorial*, p. 41.

² It would be too long to go into details on this point. I can only refer the student or reader to some of the principal sources. Thus, in regard to Sonora there is Ribas, Hist. de los Trivmphos, the Estado de la Pimeria, and the Descripcion Geográfica de la Provincia de Sonora. In regard to New Mexico the sources are too numerous even to indicate here. As to the difficulties of teaching, consult especially Benavides, Memorial, pp. 40, 90-130. The greatest stress was laid upon the acquisition by the missionaries of native Indian tongues. The interest taken in these American languages lasted late; I have a number of circulars of the last century, in which the learning of Indian idioms is enjoined on the missionaries in New Mexico. The re-establishment of mission schools is specially ordered by Fray Miguel Menchero, Carta Patente, 1731 (MS.): "Otrosí mandamos que en todas las missiones halla Escuela y Doctrina en nuestro Ydioma y lengua Castellana, como está ordenado probehido y mandado por la Magestad de nro Rey y Señor en repetidas Cédulas para lo qual distribuirémos Cartillas, Catecismos, y Cartones á cada Mision segun el número de los de doctrina."

proper falls harshly on their untrained ears. Nevertheless, as early as 1607 there existed at least one small organ in one of the Pueblo churches of New Mexico.¹

To depict all the difficulties which the brethren had to encounter would require a space far exceeding the limits of this work. I can only notice the changes wrought, very gradually too, in the condition of the Indians.

The Pueblo Indians accepted the new faith voluntarily, and to a certain extent honestly. They adopted it, however, from their own peculiar standpoint, that is, they expected material benefits from a creed that pretended to give them spiritual advantages. In their conception, religion is but a rule of conduct controlling man while alive, and on strict compliance with which his success in this world depends. In short, the Pueblos looked upon Christianity as upon another kind of magic, superior to the one which they practised themselves; and they expected from the new creed greater protection from their enemies, more abundant crops, less wind, and more rain, than their own magic performances procured. To disabuse them was extremely difficult, and yet it was done, — done through teaching, and also by the force of circum-

¹ There exist to-day paintings on buffalo hide executed by Indians of the Pueblos. I photographed in 1882 a picture of "Nuestra Señora de Begonia," at Galisteo, which bore the date of 1808. Artistically, these paintings are worthless, still they indicate progress over the decorations of pottery. In music, the organ was of importance. Fray Cristobal Quiñones placed one in the church at San Felipe (now destroyed, and the pueblo has disappeared also). Vetancurt, Menologio, p. 137: "Solicitó para el culto divino órganos y música, y por su diligencia aprendieron los naturales y salieron para el oficio divino diestros cantores." Idem, Crónica, p. 315. Benavides, Memorial, p. 40. About Sonora says Ribas (Historia, p. 336): "Preuenidos estos habiles niños, se procuraron Maéstros de canto Christianos antiguos, y juntaron, y formaron capillas muy diestras en cada vno de los partidos de Hiaqui, dode ya oy se celebran las fiestas á canto de órgano, y con otros instrumentos músicos, de baxones, sacabuches, chirimías, y flautas, que en todo han salido diestros." The same about the Mayos (p. 250). Also Estado de la Provincia de Sonora (MS., 1730). Evidences might be multiplied.

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PROCESSION, FEAST OF ST. ESTEVAN, ACOMA.

stances. The result was, that the Pueblo Indians, seeing that the new creed did not produce the effect they had anticipated, turned against it, and the rebellion of 1680 was greatly due to a feeling that the new order of things, religious as well as civil, was not worth the support of the people.¹

Still almost three hundred years of patient toil bore some fruit. A change crept over the religious beliefs of the native, that renders it very difficult for the ethnologist to separate the primitive doctrine from the Christian. The task is the more intricate, since much of what is originally Christian has become distorted in the Indian's mind, and assimilated by him to his own fetichism and polytheism. Among most of the Pueblos, however, a few simple Christian notions have taken root permanently. Among them are : —

First. The idea of one Supreme Being, for which the name of God in Spanish (Dios) is used. *Dios* is looked upon as the original creator, but recognized at the same time as the Christian God *par excellence*.

Second. Intercession by the saints.

Third. Baptism, in most of the pueblos. At Zuñi it has almost disappeared. There is a superstitious idea among many, that children baptized are sure to die soon.²

¹ Among the causes alleged by Pueblo Indians who testified in regard to the uprising of 1680, is expressed the conviction on the part of the Fueblo Indians that the Christian creed had no value. Compare *Interrogatorios y Declaraciones de varios Indios, hechos de Orden de Don Antonio de Otermin* (MS., 1681). One Indian declares (fol. 126): "Que el Demonio era muy fuerte, y mucho mejor que Dios. . . Diciendo que mejor era lo que el Diablo mandaba, que lo que les enseñaban de la ley de Dios." Another one says (fol. 130): "Ya murió el Dios de los Españoles que era su Padre, y Santa Maria que era su Madre, y los Santos que eran pedazos de leños podridos, y que solo vivia su Dios de ellos." Still another one (fol. 136): "Porque el Dios de los Españoles no valia nada, y que el los tenian era muy fuerte."

125

² This idea was clearly expressed by the Indians of Zuñi to Fray Mariano de Jesus Lopez in 1847. *Libro de Bautismos*, MS.

Fourth. The Mass.

Fifth. Burial in consecrated ground.

Ideas about retribution after death are vague among the majority of Indians in the Southwest, except in particular cases, where the teachings of the Church have entered into the flesh and blood, so to say, of the individual. Confession is not often practised; there are objections against it from the Indian standpoint; still many of them perform their duties in this respect, and the Church shows leniency on account of their intellectual condition.

The effects of education, or instruction, have, however, now wellnigh disappeared; still there are signs of former and better times. In general, there are many and very plain tokens of a relapse into barbarism, after the experience of a lift towards higher development.

Baptism has remained as an established form, and the Indian attaches to it considerable importance. The death of a child unbaptized is regarded in most of the pueblos as a calamity. Interment is performed everywhere among the Pueblos (Zuñi and the Moquis excepted) as close to the temple as possible, and the New Mexican clergy have experienced great trouble in attempting to wean their Indian parishioners from this custom, and to induce them to bury their dead in outside cemeteries.¹

Matrimonial customs have undergone a relative change. On this score the struggles of the clergy have been severe. The Indian recognizes the sacrament of marriage, he demands it, but declines to obey the moral precepts of Christianity. He clings to the customs of olden times, which make the

¹ Witness the great difficulties which my esteemed friend, Rev. Father Camille Seux, priest of San Juan, has lately experienced from the Indians of that village, when, in compliance with the territorial laws, he caused the cemetery to be removed outside the village. It nearly cost his life.

increase of the tribe and clan a duty under all circumstances; he considers formal marriage as an essential detail, though seldom as a binding pledge. Nevertheless, there is a great difference between matrimonial relations as they exist to-day, and the condition of the family in primitive times, when dissolution of the bonds uniting man and wife was the rule. Now it excites gossip, scandal even, and calls forth the reprimands of the old men, and the reproaches of the whole tribe. The strenuous efforts made to bring together a couple who, for some reason or other, have separated, show that a revolution in ideas has taken place through the agency of the Church; that concubinage, formerly a rule, is now an exception; and that, while tolerated, it is still looked upon as reprehensible.¹

I am speaking here of such Indians as are nominally christianized, and not of the still roaming tribes. I allude also more particularly to the village Indians of New Mexico, since these are the best known and have been the most closely studied, and since they have been under the exclusive guidance of the Franciscans for nearly three centuries. The Jesuits were more fortunate with at least two numerous groups of village Indians, — the Opatas and the southern Pimas, or Nebomes, of Sonora. Among these they have succeeded in destroying almost completely the foothold

¹ At the time of the great rebellion, in 1680, one of the first measures adopted by the successful insurgents was to dissolve all marriages effected under the Church, and to set every one free to live and cohabit as he pleased. See *Interrogatorio de varios Indios*, 1681 (MS.), fol. 126, 130. As early as 1713, however, there is testimony to the effect that the Indians had changed their ideas about concubinage. One of the most interesting witchcraft trials of New Mexico, the *Causa Criminal contra Gerónimo Dirucaca, Indio del Pueblo de Picuries*, 1713 (MS.). The said Dirucaca openly boasted of living in concubinage, and the Indians of his village became scandalized and accused him before the Governor. At the present day, strenuous efforts are made to reunite couples that have separated, and an Indian who while married still maintains a so called "Casera" is subject to reproof by his kindred. of primitive institutions. I have no doubt that this result is due largely to the greater independence enjoyed by the Jesuits in their missions, and yet what sad complaints have these missionaries themselves recorded, as late as the second half of the past century !¹ Certain it is, that no other spiritual power has understood so well how to reconcile the advancement of the Indian with his preservation, but the problem may be properly formulated in the discouraging theorem, If it takes twenty-one years in the eyes of the law to make a man out of a child, how much time will it take for thousands of men, born and bred in organized childhood for untold centuries, to develop into independent manhood?

The Indian presents the strange anomaly of a human being ruled by two distinct systems of laws, using two classes of implements separated from each other in point of development by thousands of years, two kinds of currency, and professing sincerely two distinct creeds as antagonistic to each other as fire and water. It is vain to deny that the southwestern village Indian is not an idolater at heart, but it is equally preposterous to assume that he is not a sincere Catholic. Only he assigns to each belief a certain field of action, and has minutely circumscribed each one. He literally gives to God what, in his judgment, belongs to God, and to the Devil what he thinks the Devil is entitled to, for the Indian's own benefit. Woe unto him who touches his ancient idols, but thrice woe to him who derides his church or desecrates its ornaments.

Considering the time devoted to the Indian of the Southwest by the "Indian policy" of Spain in all its various forms, and the sacrifices of life and means which it has entailed, the results may appear surprisingly meagre. Yet it would be idle to inquire if another nation, another religious

¹ Estado de la Provincia de Sonora, 1730, MS.

direction, might have "done better." Judging from results obtained in other parts of America, we are hardly authorized to believe it. Still I have until now only presented the favorable side of Spanish influence, and I am the last to deny the existence of grave defects, the committal of serious faults. As these dark sides of Spanish administration of the Indies have contributed greatly to our knowledge of the Indian, I must allude to them here, as well as for the sake of impartiality, which is the first duty of the historian.

Spanish legislation affords but few grounds for complaint, but the execution of the laws was often far from satisfactory. American Spaniards invented the famous expedient of "obeying without complying," and from Santa Fé to Madrid the distance was immense, in space as well as in time. Hence it resulted that the promulgation of decrees, even the reception of special ones, was often much delayed. The territory administered from Madrid was so immense and so diversified, that a good deal of what was excellent in one portion proved an utter failure in another. But until the Council of the Indies could be informed and convinced, and other dispositions taken, much evil was done by compliance with well intended laws. In the Southwest, the same failures, through disobedience of officials, through impracticability of execution, or through delays, did not equally affect Sonora and New Mexico, Chihuahua and Arizona, because the natural conditions are different. Thus the royal decree of 1620, of which I spoke in the preceding pages, worked well in New Mexico: it remained a dead letter almost everywhere else in the Southwest.¹ The peremptory order of the King to the Gov-

¹ In Sonora, for instance, the Governors of Sinaloa frequently nominated the chiefs of the Indian villages; during the seventeenth century. The regular elections, but under the supervision of the Jesuit missionaries, were instituted by a decree of 1716. Ribas, *Historia*, p. 339: "Gouiernanse ya todos sus pueblos por Gouernadores, Alcaldes, Fiscales de Iglesia, y otros ministros de

ernor of New Mexico (then residing at El Paso del Norte), to assign to each Indian pueblo four square leagues of land, was issued in 1682, but its execution was inevitably delayed, through force of circumstances, until the century following.¹ The Governors of New Mexico frequently did very much as they pleased, for they knew that their term of office was short, and their salary (two thousand ducats) not in proportion with the uncomfortable life they were called upon to lead. Consequently, they tried to "make" as much of their position as could be "made," confident that, after their term of office expired, they would have to disgorge at least a portion of whatever ill-gotten gains they had gathered. This exposed the Indian to a number of local and temporary vexations, the severity of which varied within a very short lapse of time, and often alternated with periods of great benefit to the native, according to the character of the magistrate who represented the Crown.² Neither were the clergy free

justicia de su misma nacion, con orden, sujecion, y obediencia. Los vnos puestos por el Capitan, aunque distante mas de cincuenta leguas; los otros Fiscales de Iglesia por el Ministro de doctrina." This was in 1645, or twenty-five years after the promulgation of the royal Cédula mentioned. *Descripcion Geográfica*, cap. viii. art. ii.: "El gobierno civil de los pueblos de Indios, consiste en un gobernador, un alcalde, alguacil y topile. El gobernador se elije por los mismos Indios en presencia del padre misionero, quien por las leyes reales insertas á una Provesion Real de la Audiencia de Guadalajara de veinti cinco de Septiembre de 1716, y un despacho del Exmo Señor Virey D. Juan Francisco de Guémes y Orcasitas, su fecha en México 25 de Noviembre de 1746 años, les dirije en la tal eleccion, para que acierten á dar sus votos á algunos cuya vida y costumbres no les sirvan de tropiezo, sino de freno respecto de lo malo, y aguijon y espuela para lo bueno." The change effected in New Mexico in 1620 thus took place in Sonora fully one century later.

¹ The four square leagues were tacitly allowed to the pueblos, but they were surveyed and staked out only in the course of the eighteenth century, and at very different times for the different pueblos; thus, for San Ildefonso in 1704 and 1726; for the Sumas of San Lorenzo in 1765, etc.

 2 For instance, in Sonora, the change from Hernando de Bazan to Francisco de Urdiñola, and to the Captain Martin de Hurdaide (died in 1626); in New Mexico, from Francisco de la Mora Ceballos (1634) to Francisco Martinez

from blame. The regular orders acquired an ascendency threatening to the rights of the secular priests as well as to those of the government. Proud of the signal services rendered by them to the cause of civilization and religion, and

Baeza, or from Diego de Vargas to Pedro Rodriguez Cubero (1697). Sometimes several governors in succession were tyrannical towards the Indians. Says Fray Andre Suarez, Carta á su Magestad (MS., October 26, 1647): "De treze gouernadores que ha avido, los diez ya han dado cuenta á Dios ñro Señor, y todos los he conocido en esta tierra, saluo uno que fué el armador desta tierra, solo trato de los tres, que actualmente estan en estas provincias, avnque los dos salen en este despacho, el vno aprisionado por aver vendido la pólvora de vuesa Magd, y el otro sin ellas por cohechas que ha hecho," etc. In this letter, Fray Suarez complains bitterly about the Governors Fernando de Arguello and Luis de Guzman y Figueroa. Such individual instances of arbitrariness and actual disregard for the laws may be found frequently, and how could it be otherwise when the central authorities were so far away? Still, it can be proved that no transgressing official escaped punishment in time, provided that death did not interfere with the slow but sure action of Spanish justice. The miserable end of Nuño de Guzman is well known. Hernando de Bazan was severely chastised. Diego de Peñalosa's fate is well known too, although erroneously attributed to persecution by the Inquisition. Bernardo de Mendizabal was put in prison. Luis de Rozas was in prison when murdered. Pedro Rodriguez Cubero was only saved from severe punishment by his speedy death. The "Residencia," which every official had to give at the close of his term of office, was sure to disclose every fault and crime committed, and whenever there were accusations made during the term of office, there came the dangerous "Visita," which struck the suspected officer unawares, suspending him at once, throwing him into prison, and sending him to Spain in case of necessity in irons, there to pine until his case was decided. Accusers never failed, sometimes evil-disposed persons, sometimes over-zealous ones, but frequently well intentioned and thoroughly informed advisers. In connection with the Indians, the clergy were bound, and by positive royal orders, to watch the civil officers and to report any abuse committed by them. Such reports, even if made by the most humble monk, were acted upon by the King himself. This is shown, for example, by the action taken in regard to the letter above quoted of Fray Andres Suarez. On the 22d of September, 1650, the King despatched a special Cédula to the Viceroy of New Spain ordering him as follows : "He tenido por bien de dar la presente, por la qual os mando, que luego que la reziuiais, os entereis muy especialmente, de si es Verdad lo que contiene, y siéndolo atendereis desde luego á procurar y impedir las Vejaciones que reziben los Yndios, amparándolos como lo tengo dispuesto por cédulas mias." Not content with this, the King reiterated his order on the 20th of June, 1654, after the Viceroy had removed the Governor of New Mexico and put Don Juan de Samaniego in his place. See Cédula al Virrey de la Nueua España, remitiéndole una copia de

initiated into the ways of the Indian, they assumed a position towards the government, which in New Mexico, for instance, called forth dangerous conflicts at a very early date, and discredited both Church and State in the eyes of the aboriginal vassal and convert. The origin of the terrible rebellion of 1680 can be traced as far back as 1642, when Governor Rozas was assassinated in Santa Fé.¹ Dissensions between the

Carta sobre las vejaciones que se han entendido hazer los Gouernadores de Nuebo México alos Yndios (MS., Sept. 22, 1650). Real Cédula al Virrey de Nueua España sobre el Aciuio de los naturales del Nueuo México (MS., June 20, 1654). The great stumbling-block in the way of making the solicitude of the central government effective was, first of all, the enormous distance separating the head from the extremities of the gigantic body. Thus the Real Cédula of October 20, 1665, was received at Mexico on the 28th of May of the following year. It took often eight and nine months for a royal despatch to reach New Spain, and from Mexico to Santa Fé quite as long, if not longer. Another difficulty arose from possible connivance of the highest officials at Mexico with the governors of distant provinces. This is very plainly hinted at by Fr. Andres Suarez, Carta: "Pero, muy católico Rey y Señor, como los que vienen son Criados de los Virreyes, ó compran los officios como lo [illegible in orig.]. El governador passado Don Fernando de Arguello que le havia coprado el officio nuebe mill pesos, y todo esto, muy católico Rey y Señor, lo vienen á pagar estos pobres naturales, y Españoles." The principle adopted, of selling certain offices to the highest bidder, was a vicious one, and did a great deal of harm. This innovation (for at the outset all offices of the Indies were given as favors) is due to Philip II. Antonio de Leon y Pinelo, Tratado de Confirmaciones Reales, part ii. cap. i.

¹ This crime, which was committed by one Antonio Baca, came very near bringing about an uprising on the part of the Spanish colonists of New Mexico. Dissensions between the clergy and the Governors of New Mexico began at an early day, and very soon after the instalment of Don Pedro de Peralta as successor to Juan de Oñate, in 1608. The violence of the strife was such, and the Custodians, Fray Bernardo de Aguirre, and chiefly Fray Cristobal de Quiros, were so jealous of every prerogative of their order, that the King had to interfere. He took the part of his Governors, and one portion of the often quoted *Real Cédula al Padre Custodio Fray Estevan de Perea*, 1620, is devoted to the matter. Philip III. speaks very plainly : "Ha constado de los grabes inconvenientes que se han seguido y resultado de que los Prelados buestros antezesores ayais usado de la dha Jurisdicion contra Dn Pedro de Peralta y del almirante Bernardino de Zeballos, . . . con mas escándalo y menos prudencia de lo que fuera justo exzediendo contra lo determinado por los Sacros Canones Bulas de Su Santidad y Zédulas mias," etc. Quiet was restored for a time, but

temporal and spiritual powers laid the foundations of unbelief among the Indians. But the greatest cause of the decay of the good work commenced was the closing of the colonies to foreign immigration. This measure, adopted by Spain as a method of defence, killed vitality in the colonies, and created an intellectual stagnation which struck the clergy as well as the laymen. After the crisis which the Indian revolts caused at the close of the seventeenth century, new life sprang up in the missions.¹ But soon the effects of the policy of seclusion began to tell, and most forcibly in remote quarters. In the Southwest it coincided with a new factor, the increasing spread of hostile tribes freshly arriving from the North. These enemies formed a circle of blood and fire around the Spanish outpost of New Mexico; they cut it off from the distant South, and produced a spirit of hopelessness among the inhabitants of all classes. The clergy

under the Governor Martinez Baeza, in 1636, the strife broke out with greater violence. From the documents in my possession, dating from the years 1635 to 1639, I must, however, conclude that the Governors Don Francisco M. Baeza and Don Luis de Rozas were in the wrong; that the former especially was in principle opposed to the Church as protector of the Indians, and that while the Custodian, Fr. Cristobal de Quiros, was a very energetic and even naturally violent man, he was fundamentally in the right. Many of the colonists were on the side of the clergy, and the tumult broke out in 1642. When Governor Rozas was murdered, he was in prison for Residencia, a fact that speaks strongly against him. The assassination was charged upon the Franciscans, and by that bitter enemy of all regulars, Bishop Palafox, whose difficulties with the Jesuits were then at their height. Still it appears that the Franciscans were afterwards fully exonerated. Real Cédula al Virrey de la Nueua España, en Racon de las Cosas Tocantes al Lebantamiento del Nueuo México, July 14, 1643 (MS); also, Ynforme del Yllustrisimo Señor Don Juan de Palafox Obispo de la Puebla, al Conde de Salvatierra, 1642 (MS.). That such dissensions contributed greatly to the uprising of the Pueblos is openly asserted by the Provincial Fr. Pedro Serrano in his Ynforme al Excmo Señor Virrey Marques de Cruillas sobre la Custodia de el Nuevo México, 1761 (MS.), and hinted at by Fr. Antonio Camargo, Carta Patente, 1717 (MS.), by Antonio Bonilla, Apuntes Históricos, 1776 (MS.), and others.

¹ This is very evident through the circulars of Custodians, to some of which I have already referred.

could not remain exempt. Although nearly all of the priests who served in New Mexico during the past century were born and bred in Spain, they went to the Southwest as into an exile.¹ "Lasciate ogni speranza." No military protection anywise adequate could be given, for Spain was exhausted, and weary of maintaining empires from which it derived only sacrifice to itself.² Thus began a decline, from which the intellectual progress of the Indian suffered correspondingly. During the Mexican Republic, matters grew worse, for the Indian traits of segregation and intertribal strife displayed themselves as soon as the bond of unity imposed by Spain was forcibly removed, and with such tendencies neither church nor school can prosper. Therefore I say that the intellectual development of the Indian has suffered a decline, not from its primitive condition, but from the height

¹ Nearly all the New Mexican priests, up to this century and the establishment of the Mexican Republic, were born Spaniards, and educated in Spain. I have a copy of the *Libro en donde se asientan las Vidas de los Padres Misioneros que obraron en el Nuevo México* (MS.). Unfortunately it is only a fragment. Of seventeen priests whose nativity is given, only five were American born.

² I have already alluded to the utter defencelessness of the colonists. The number of actual soldiers maintained in the Southwest was correspondingly insignificant. The garrison at Santa Fé was usually one hundred men, and of these a great number had to be campaigning all the time. At El Paso del Norte there was another "Presidio" of one hundred troops. In Sonora, there were not over three Presidios. At Parral there was one. The Brigadier Pedro de Rivera bitterly complains about the insufficiency of means of protection, in his Informe del Estado de las Misiones de la Compañía en las Provincias de Sinaloa y Sonora (MS., 1727). Similar complaints were uttered by Don José de Berrotaran, Informe acerca de los Presidios de la Nueva Vizcaya (Doc. para la Historia de México, second series, vol. i., 1748), by Don Pedro Fermin de Mendinueta, Carta sobre Asuntos Militares (MS., 1772), by Antonio Bonilla, Apuntes Históricos, and others. On the other hand, we cannot overlook, in addition to the general exhaustion of Spain, the fact that New Mexico, for instance, was nothing but a constant drain on the Spanish resources. The Crown never received one iota of remuneration for its efforts to hold the province, and maintained possession of it finally for no other purpose than to erect a barrier against the northern hostile tribes for the protection of the more valuable southern regions of Durango, Sinaloa, and southern Sonora and Chihuahua.

which it had reached under the first impulses of Christianity and of a wise and well regulated governmental discipline.

The present Indian of the Southwest, objectively speaking, is a result of all those various agencies that played a part in his education under Spanish rule. After this long introduction, the picture which I intend to present of him as he is now will become more intelligible, and I hope more clear and concise.

II. CHARACTERISTICS OF EXISTING TRIBES.

I cannot pretend to speak with any assurance of Indian tribes which I have not personally visited. Therefore I shall make but brief mention of the Yaquis, Pimas, and Seris of Sonora; of the Tarahumares and Conchos of Chihuahua; of the Moquis, the tribes of the Colorado River, and the Maricopas of Arizona; and of the Yutas, who occasionally wander upon New Mexican soil. Since the beginning of the labors of the Bureau of Ethnology, many of the southwestern tribes within the United States have been earnestly investigated, and a mere reference to the works of Captain John G. Bourke, U. S. A., on the Moquis and Apaches, and of Dr. Washington Mathews, U. S. A., on the Navajos, is perhaps of more intrinsic value to the student than additional confirmation of the results obtained by them through any assertion of mine. In regard to Linguistics, I hardly need recall the valuable labors of Albert S. Gatschet. Of the work of Mr. F. H. Cushing I shall have to treat at length further on. Although mostly distant from each other, frequently out of communication through the force of circumstances, I may well affirm that our results can hardly be separated; that since I formed his acquaintance I have scarcely discovered anything about the aborigines while residing or travelling among them to which my attention had not been called by some observation of his at Zuñi, or which did not subsequently find its equivalent in the complete picture of indigenous life which his material will present when placed before the public.

The Jovas and Eudeves of Sonora I have not met, and I am led to believe that they have almost, if not completely, disappeared as a tribe. The same might be said of the southern Pimas and of the Opatas. Having, however, spent a short time among the Opatas, I shall be compelled to treat of them separately. The Mayos, or southern kindred of the Yaquis, can be referred to together with them.

It is impossible as yet to give any reliable idea concerning the number of Indians in the Mexican States of the Southwest. The assertion in regard to the Yaquis, for instance, that they are nearly thirty thousand strong at this day, is but an estimate. The Department of Statistics at Mexico is collecting data with the greatest activity, but the difficulties in its way are enormous when the work concerns tribes which, like the Yaquis, have been, not only practically independent, but openly hostile to the government of Mexico for many years. It was easier, in fact, for the Jesuit missionaries of the sixteenth and seventeenth centuries to make a census of these Indians, than it is now. As to the Opatas and Pimas, they have become so thoroughly merged into the Spanish or Creole population, that it is not possible to separate the pure blood from the Mestizo. The Seris are nearly inapproachable in their island homes. The same may be said of the wild half of the Tarahumares of Chihuahua, whereas the settled portion of the tribe and the Mansos of El Paso del Norte have intermingled with the whites, although the former but slightly. The Piros of Senecu remain not intact, for intermarriage with Mansos, Tiguas, Apaches, Sumas, and

Janos has modified their blood; still they at least dwell by themselves, and an approximate estimate of their numbers is not impossible.

I have not at my command any recent reports on the condition of the Mayos and Yaquis of southern Sonora. Orozco y Berra published in 1864 some notice of these tribes. But rather than follow that author, who has not professed to enter into more details than were indispensable for his specifically linguistic purposes, I shall avail myself of the statements of José Francisco Velasco, a man who was eminently fitted for the task with which he had been officially intrusted, that of preparing statistical notices of Sonora, and who united with a thorough knowledge of his State an equally deep acquaintance with Indian nature in general, and the various causes that have affected it.

Velasco says of the Yaquis: ---

"Their industry, such as it is, consists in the fabrication of woollen blankets or covers, with which they protect themselves against the cold. These blankets are very densely woven, and in color black and blue. In general, the Yaqui appears endowed with good natural faculties of perception. With very slight efforts he masters any kind of mechanical trade or profession.

"Their character shows much firmness, or rather obstinacy. Nobody can induce them to reveal secrets, or any of their projects. Not even Free Masons are so reticent in respect to their mysteries. Time and again they have suffered death rather than disclose what they did not wish to divulge, and this is one of the many points of advantage which they have possessed in their rebellions.

"The Yaqui has usually no other ambition than to eat and to obtain for himself a shirt and a pair of white trousers, for his wife a 'Rebozo' and skirts, while his children go naked, or with a simple breech-clout called 'Sapeta,' consisting of a rag which covers the loins, with its ends tied to a girdle or string around the waist. He is much given to festivities, and generally of a merry disposition, often shouting while he walks. At night, if they are not tired out, they dance their dances, - the Pascola, the deer dance, the Tesguin, or the dance of the Coyote. Naturally suspicious and rude, it is difficult to dissuade them from any preconceived notion, especially if they believe they have been abused by anybody. This is more especially the case in regard to whites, towards whom they harbor a distrust characteristic of the antipathy existing between the races. Indeed, their customs, actions, and manners are so distinct from ours, that even their gait is different. There are of course exceptions, since some of the Yaquis, who have been raised among whites from childhood on, enjoy our mode of living and sympathize with us.

"Their complexion is usually bronze; they are well formed, the women rather buxom and of middle height. In some of the pueblos females are found who are very white and handsome; they are children of so-called Coyotas, or daughters of a Spanish father and an Indian mother. Their language is easy to learn, free, and susceptible of being reduced to grammar and rules." ¹

Further on the same author proceeds as follows : ---

"All the customs of the Yaquis are the very opposite of ours. From childhood on, they are inclined to theft, addicted to drunkenness from all kinds of fermented liquors, are in the highest degree sensual, and gamblers. Social intercourse with whites they shun, although they crave the wages which the latter are willing to pay. As for rendering any service, or doing anything out of generosity or gratitude, it

¹ Velasco, Noticias Estadísticas del Estado de Sonora, pp. 73 et seq.

is out of the question. In their villages, only such whites are tolerated as foster their vices and passions, and even these are very few; they treat them with the utmost suspicion, and upon the slightest pretext they are despatched. Although some of them speak Spanish, they always address the whites in their own native idiom, well aware that the latter do not understand it, and when chided for this disregard, they laugh or stammer some few broken words. Of conjugal fidelity they are not careful at all, interchanging wives, or, if their spouses run off with another man, they pay no attention to it.

"Notwithstanding all these defects, we must render justice to them by saying that they are the laborers or laboring class of Sonora. They are its miners, its farm hands, its artisans for the construction of buildings, as well as for all classes of mechanical work. And so it is in the higher arts also. They play the flute, the violin, the harp, and the guitar, although they never have received the least primary instruction. Many of them, after having been for a short time only in the employ of a mechanic, be it a blacksmith or a carpenter, know these trades as well as their master. Had this tribe received, under the Spanish government, the education proper to its aptitudes, and with a view of elevating them morally and intellectually, they would now be, instead of a source of incalculable evil, highly useful to themselves, as well as to us. In what they undertake they display firmness and consistency, and in war they are very bold."¹

No better picture could be presented of a tribe which, after having been set on the right track in early times of Spanish colonization, deflected from it afterwards during the period of decay. A relapse into ancient customs while in possession of the material and intellectual advantages brought to them

¹ Ibid, p. 78.

by the first educators, could not fail to produce the strange admixture, the singular compound, of old and new, of good and bad, which here is attributed to the Yaquis. Similar but less marked characteristics are attributed by the same author to their cousins, the Mayos. The latter always were more pliable, less hostile and ferocious. But they are described as equally lazy, and as practising the same simple arts as the Yaquis.

Velasco gives no estimate of numbers with any pretence to exactness. He merely says, that at his time (about 1850) there were probably not over three thousand warriors, if as many. This would give a total number of ten thousand souls. He states that their numbers are declining considerably, "be it from the vicious and abandoned life they are leading, or from the ravages which contagious diseases are making, or from their carelessness in chronic diseases, or from the prevalence of syphilis, or finally from the number of those who have perished in the constant rebellions."¹

It may not be amiss to compare the remarks above quoted with those of another modern writer, Escudero, on the Yaquis and Mayos.

"These Indians are both pleasant and tractable. They have a lively, nay fiery imagination, and natural brightness. Although given to music and enjoyment in general, and very fond of feasts and recreations, they are intrepid, bold, ferocious even, in warfare. . . They are active and industrious, which the degenerate and sybaritic tribes are not. In Sonora and in Sinaloa they are the carriers, the field-hands, the cowherds, divers, sailors, miners, gold-hunters, or explorers for gold ores and placers. They practise all sorts of mechanical and manual work, since they usually show natural aptitude for every kind of trade, office, and art of that class. They

¹ Noticias, p. 78.

work with assiduity and persistence the whole year, in order to gather some money. With their earnings they return to the Yaqui villages for the Feast of St. John, when the fruits are ripe, as we have said above. Among their customs there is a very reprehensible one, that of the dance called 'Tutile gamuchi' (exchanging wives). At this dance, every Yaqui who pretends to display good taste exchanges his woman for another, just as the Spartans were wont to do, in order to multiply and perpetuate their warlike stock. Their favorite diversion is the spectacle of a lively clown, who, if not ingenious, is at least malicious and satirical, and who, during the time he is not talking, dances to the sound of a fife and tambourine, and whose gestures and grimaces amuse even those who do not understand the language. This strange dance is called Pascol, it being performed with greatest pomp at the time of Easter. He who plays the part of buffoon covers his face with a deformed mask. Rattles hang round his feet, arms, and waist; and he holds another in his hand, shaking it to the rhythm of the music. The violin and the harp are very common instruments among the Yaquis; they play them with harmony, which proves their taste for music, and also that this taste is not new among them."¹ According to Orozco y Berra, the Yaquis lived, in 1864, in eight villages, and the Mayos also in eight.²

I have not been among the Seris. I am therefore compelled to quote in regard to them such modern or comparatively modern authorities as are at my command, without assuming, of course, any responsibility in regard to their statements. I begin again with Velasco : —

"Their clothing generally consists of pelican skins or of a coarse blanket around the waist, the remainder of the body

¹ Orozco y Berra, Geografía de las Lenguas, p. 355, quoting from Escudero.

² Ibid., pp. 355, 356. Velasco (Noticias, p. 84) gives the same number.

ARCHÆOLOGICAL INSTITUTE.

being left completely nude. They paint or striate their faces with lines of black, and many of them perforate the bridge of the nose and suspend from it pieces of green stones like ordinary glass.

"The women do more work than the men. They gather the seeds of grass or other herbs, do the fishing, and sell coarse pottery and the like. But the women, as well as the men, spend whatever they realize in this manner in liquor, the taste of which controls them absolutely.

"They are tall, straight, and rather corpulent, with usually black eyes. The women present not an uncomely appearance; their complexion is of a bronzed hue.

"The dress of the females is also made of the skin of the pelican with which they cover themselves from the waist downwards. The rest of the body, the chest included, is bare.

"The ladies of Hermosillo, for the sake of charity and public decency, give to these women, whenever they come to their houses, old garments, dresses, etc. These the Indian females wear until they are completely rotten, for they do not know how to wash.

"This tribe, besides being very coarse, and the wildest and rudest one known in these parts, is at the same time the most inconstant and most treacherous. Since the time when the first attempts were made at its reduction, not less than forty uprisings have occurred."¹

In regard to the number of the Seris, Velasco states that

¹ Velasco, *Noticias*, p. 131. Orozco (*Geografia*, p. 354) says: "Feroces y salvajes han preferido morir en la guerra contra los blancos, ántes que adoptar sus usos y costumbres, perezosos, indolentes, se entregan con tanta pasion á la embriaguez, que las madres dan con la boca el aguardiente á los niños mas pequeños. Son altos, bien formados, y las mugeres no carecen de belleza. Es proverbial la ponzoña con que envenenan sus flechas, por su efecto mortífero; componen el jugo venenoso con multitud de ingredientes, y añaden al confectionarlo prácticas supersticiosas."

INVESTIGATIONS IN THE SOUTHWEST. 237

it at no time exceeded two thousand, and in his time it reached not five hundred, among which sixty or eighty were capable of bearing arms. He adds: "The Ceris are not polygamous, since they have but one wife; still there is much looseness in their matrimonial relations, and a good deal of tolerance towards each other. The only worship known to exist is that of the moon, which orb they respect and revere as a god. At the time of the new moon they kneel down and cross themselves, kissing the ground, and beating their breasts."¹

Further on he quotes from a letter of Mr. Thomas Spence, as follows:---

"The Seris Indians are tall, well formed, not very stout; the women are striking for their busts and for the smallness of the feet, which are drawn in, and for the rather prominent abdomen. After nightfall their eyesight is defective, which I attribute to the reflection of the sun on the white sands over which they more or less constantly roam in order to obtain their subsistence, which consists of fish and other marine products. . . Their language is guttural. They are as filthy in their appearance as in their habits, eating everything raw, or at best slightly broiled. Life on the islands exposes them to a thousand hardships, and yet they cling to it with incredible attachment. They are always accompanied by many dogs."²

It is well known that the Seris now inhabit in part some of the islands of the Gulf of California. In 1861, Charles P. Stone estimated their numbers at three hundred. He says of the Seris : "They are of large stature, well made, and athletic. In war and in the chase they make use of poisoned arrows, the wounds from which are almost always fatal."³

⁸ Notes on the State of Sonora, p. 19.

¹ Noticias, p. 133.

² Ibid., p. 169.

I regret not to be able to give more details, but, not having visited them myself, I am limited to such printed information as lies within my immediate reach.

The same I must say in regard to the Pimas of Sonora, the Southern Pimas, or Nebomes. All I know of them is, that as a tribe they have wellnigh disappeared; that is, they have become "Mexicanized." This is the case with the Opatas also. It would be very difficult to distinguish any of the numerous branches of this once powerful tribe from the others, for they are fast losing their original language. During my stay in the Sonora River valley the men who still spoke Opata were mostly old, and were pointed out as relics, so to say, of times gone by. I was assured that not more than twenty or thirty could be found in the whole region, from Arizpe in the west to the frontier of Chihuahua in the east, who spoke the idiom with any pretence to correctness, and I once witnessed a lively and very amusing discussion between two of these proficient old men over the meanings of the best known local names in Sonora in the Opata language.¹ It showed me how far, even in the approaches to the Sierra Madre, the Opata had become estranged from his primitive condition and mode of utterance. Still, there are traces of dialects. Thus the dialect of Banamichi is positively stated to be very different from that of the Upper Yaqui River at Guassavas, Baserac, and Babispe. I was informed that there was a difference even between the Opata of Banamichi and that of Sinoquipe, although the two villages are but twelve miles apart. I also noticed or was led to notice, a division into

¹ This was at Baserac in northeastern Sonora, where the Opata language is still occasionally spoken. My two informants hardly agreed on any name. One of them, Gregorio Hernandez, was considered the best "Opata linguist" in the district, and his interlocutor, Señor Dolores, as "well up" in the idiom.

original clusters, remnants of former tribal leagues, evidenced by sympathies and antipathies, and, not long ago, by associations of certain pueblos against others in the game of ball. Thus Banamichi and Sinoquipe play against Huepaca and Aconchi. Their former organization on the pueblo system has been abandoned since 1858; still each village retains a particular chief or functionary of its own, who is in possession of the landed titles and valuable papers of the community, and who holds office for life or during good behavior. In addition, there are the regular municipal officers appointed according to Mexican law; but the former represents, it seems, the "power behind the throne" which is to be found in all Indian communities. How far this functionary is alone, whether he has associates, and to what extent the old semi-religious government peculiar to Indians is kept up, I was not able to learn. Still there must be traces of it left, else the Opatas would not cling with such tenacity to some of their primitive dances.

In many places the Maso-da-ui, or Batespar, or Deer-dance, has fallen into disuse. In others, for instance, below Babiacora on the Rio de Sonora, it is still occasionally performed. There is in this dance but one performer, who wears a deermask with its antlers; he does the jumping and high stepping called forth by the rôle he has to perform, and he does it to the tune of a peculiar drum, consisting of a "Corita" or impermeable basket (such as are made by the Papagos) filled with water, in which an earthen bowl is placed upside down. The rappings of a stick on this inverted bowl, floating as it were on the liquid, produces the desired rhythmic noise. In addition to the deer-dance, the Mariachi, an obscene round dance, was performed, more particularly among the eastern Opatas, those of the Upper Yaqui River at Opoto, Huachinera, etc. It was also danced farther towards the heart of the

Sierra Madre, at Bacadehuachi and Nacori. It has been abolished owing to its indecency. The dance that is still practised almost everywhere among the Opatas is the Da-ui or Daui-namaca, which is regularly performed about Easter. Both sexes wear on this occasion a sort of diadem or head-band of braided corn leaves, covered with gaudy paper, and bearing in front a medallion, with a figure of the sun for the men, and of the moon for the females. A skirt of little canes strung to a leather girdle, with small plumes depending from each cane, is the most striking garment of the males. The women wear, in addition to the diadem, their best suit; in the hand they carry a long staff with colored ribbons, and an intricately tressed ornament made of wheat-straw, common also among the Zuñis and the Apaches of New Mexico. The men carry a rattle painted white with red dots. Some of the figures of this dance are very elegant, but it would take too much space to describe them.

Next to dances, the games are the most common diversions. The Ua-ki-mari is rather a foot-race than a game of ball, for the runners toss the ball before them with their toes, and the party whose "Gomi" (or ball of a certain kind of wood) reaches the goal first is declared the victor. As stated before, village plays against village. The Maynates or captains of the runners are important personages on such days, and what is evidently primitive, and shows besides that there is a religious import placed upon the ceremony, is the fact that they formerly used to gather the evening before at a drinking bout, smoking at the same time the fungus of the Mezquite (called in Opata "To-ji") in long and big cigar-like rolls. The game of ball, or foot-race, is not the only one played in common. Of like sort is the Ua-chi-cori, or "Shinny," as it is called in this country. The Patol, or Quince, is rather a social game, played on the street often. In all of



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INVESTIGATIONS IN THE SOUTHWEST. 241

Strektmonth's

these games are rudiments of a religious observance, and the game, as well as the dance, is more than a diversion; it is symbolical, often regarded as prophetic even. Dance and game are, among the Opatas, the last remains of a creed which is now almost extinct, or at least has disappeared from the surface. Vestiges of it are still preserved in other directions, as in the belief in witchcraft and in auguries of all kinds. The wild and sinister cave of Vay-mo-da-chi, in the mountain fastnesses between Huassavas and Bacadehuachi, not many decades ago, was still the resort of Indians for the purpose of performing ancient rites and incantations. The owl is not more beloved by the Opatas than by other tribes of the Southwest, and the crow is no favorite. Eagle plumes are prized for bodily decoration, and as well as buzzard feathers are worn at some of the dances.

In dress and mode of life the Opata has little to distinguish him from the poorer class of originally Spanish settlers. His features also are not, as a rule, particularly Indian. He frequently is bearded and wears a moustache. Still he, although reluctantly in most cases, acknowledges himself as having been once, at least, an Indian. I heard the complaint made by old men who still spoke the language, "that the present generation would not be Opatas any more, but regarded themselves as Mexicans." Under such circumstances it is very difficult to investigate the traces of primitive faith and belief, and still more difficult to find original traditions. And vet I have picked up some of the latter, mostly local tales, and even one or two mythological ones. I propose to give some of the local tales in the archæological part of this report proper; the others will be mentioned when I come to treat of Southwestern tribes in comparison with their more southerly congeners.

That the Opatas, when at war, took (and perhaps would

still to-day take) the scalps of their enemies can be inferred from what I said about the tribe in the second part of this Report. The scalp-dance was described to me by several of their number, and they assured me that it was still danced but a comparatively short time ago, the constant wars with the Apaches furnishing good opportunities for it. The ceremonies of this dance appear to be very similar to those practised by other Southwestern tribes. The trophy was set on the top of a high pole, and the women opened the dance by throwing ashes at the men. The man-killer, that is, the warrior who has himself secured a scalp, wore a distinctive ornament, a red scarf of cotton, and a badge consisting of a cord or band of buckskin, from which depended a small wallet of the same material, with tassels and pieces of iron that rattled while he was dancing.¹ Since the establishment of peace the scalp-dance has not been practised. It is likely to fall into oblivion, as has been the case with the ceremonial rabbit hunt, which occurred in May of every year, and which has been abolished but recently.

The Opatas have but few industrial arts at present. Weaving with the primitive loom consisting of four stakes placed in the ground is almost totally abandoned. The pottery of the Opatas of to-day is uniformly reddish in color. They build the vessel in coils as do the Pueblos of New Mexico, smooth it while damp, paint it with red ochre and burn it mostly in small kilns, sometimes also in dung-heaps, in the centre of which the vessels are placed. Their system of

¹ This ornament is the equivalent of one worn to-day among the Pueblos of New Mexico by the man-killer, Matalote ("Um-pa" among the Queres). It is his badge of honor, and does not belong to him but is intrusted to him to be worn only at special rites. I saw a similar badge that had been found in the cave dwellings on the Upper Rio Salado in Arizona. The material was different from what it is among the Pueblos, being made out of Yucca fibre or cord. agriculture and their implements are those common to the interior of Mexico, except that they use some foreign imported tools, which are, though extremely slowly, taking the place of the old.

To give a census of the Opatas proper is very difficult, nay, impossible, for the reason that statistical data are as yet uncertain, and the still more potent reason that it is not possible to determine where the pure Opata begins and the Mestizo ends, and vice versa. That the population of many localities has diminished within this and the past century is beyond doubt. Constant revolutions, and especially the relentless warfare made upon the house dweller by the Apaches, are the chief causes. The devastations by these fiends have been most terrible in the settlements bordering upon the Sierra Madre, and the church books of the parishes on the Upper Yaqui and beyond, of Huassavas, Bacadehuachi, and Nacori, present ghastly lists, year after year, of the victims of the roaming and murderous foe. In Sonora as well as in New Mexico, under Spanish Mexican rule, the advantages of weapons were all on the side of the Apache. They have had, since about 1846, the advantage of obtaining fire-arms from the northern or Anglo-American sections of the Southwest, just as the Comanches during the eighteenth century enjoyed the same advantage from the French settlements in Louisiana and in the Mississippi Valley. The Apache alternately robbed on Mexican soil and bartered the plunder in the United States (Arizona and New Mexico), and vice versa. As soon as he crossed the boundary line into either of the two Republics, he felt safe from pursuit from the other side. All this has been changed, by treaty, only within recent years. But the Apache was wily enough to nurse another source or outlet for his ill-gotten gains. He raided Sonora in the most merciless manner, and bartered the stolen

horses and cattle at Casas Grandes or Janos in Chihuahua. Certain parts of the latter State enjoyed relative security from these savages, but upon Sonora he had no mercy. Since the uprising of 1829, these savages have displayed a hostility towards Sonora that has been the greatest calamity to that State. I cannot treat here of the Apaches as former residents of Sonora. Since 1830, their abodes have always been temporary, occupied only as long as it was safe to stay within the State and prey upon its inhabitants. The deep cañons south of Huachinera, the formidable Sierra de Teras, the heart of the Sierra Madre towards the solitudes of Huaynopa and the Taraycitos, contained "Rancherias"; but the marauders felt safer, on the whole, on the Chihuahua than on the Sonora side of the extensive mountain chain. There they could barter the plunder (gathered in western Sonora sometimes) with impunity for bad liquor and other "necessaries of life."

I must now cast a glance at the aborigines of Chihuahua.

From personal inspection I know nothing of the numerous tribe of the Tarahumares. To my knowledge, I have never seen one of them. They occupy Southwestern Chihuahua, and are said to be of a very swarthy complexion, rather well formed, and are divided into sedentary Tarahumares, nominally Christianized, and wild or savage ones, living separate from the others, though in the same region. When willing to work they are regarded as faithful laborers, and they seem to be in that respect for Chihuahua what the Yaquis and Mayos are for Sonora. A friend of mine living at Parral has had the kindness to gather some information concerning this tribe. I trust he will forgive the liberty which I take, in the interest of ethnology, of transcribing here a portion of his letter to me on the subject: —

"It is a very large tribe, but scattered, and no estimate of

numbers can even approximate truth. I have seen quite a number, --- small, wicked-looking, sneaking, cowardly, shiftless, and ill-clad (or rather not clad, for a bow and arrow and a very small piece of a very small shirt seem to constitute full dress), tough-looking citizens. They live as they can, plant a little corn and potatoes, raise small herds of cattle and goats, gather wild honey, etc., all in a very small way, sufficient only to keep body and soul together. The tribe is divided into two great sections or factions, Gentiles and Christians, (for want of another name, I suppose,) who are distinct in their habits and ways of living, holding no intercourse with each other. The Christians are more advanced, will mix with white people, and do some trading. Their habit of living in villages (houses), and of election of officers to govern the different pueblos, I should imagine, must be similar to that of the Pueblo Indians of New Mexico. But the Gentiles are a different people, live in caves, scarcely plant or raise anything, subsist mainly by hunting, and run away on the approach of a white man. Very little is known about them, and it will be most difficult to gain their confidence, or even to see them, they hide so effectually. But they are harmless, and no violence need be feared, although it is necessary to carry provisions as none are to be had in their country. They only speak their own language, but some of the head men of the Christians speak Spanish. To find out more about the Gentiles will probably be a long job, as before you can hold intercourse with them you must in some measure gain their confidence."

I place absolute reliance on the statements of my friend, in as far as he speaks *de visu*. He is also very careful in the choice of his informants, so that I do not hesitate to accept the picture presented in his letter as substantially true. It has confirmed an impression which I had conceived long ago, that the Tarahumares should be made the subject of special ethnological study. Under the present rule in Mexico, the support of the Mexican government would not fail to be given to an earnest and honest investigator.

Of the other tribes which, in the centuries past, occupied Chihuahua, or at least roamed over a part of its surface, I have no knowledge in the present epoch. The Conchos, the Tobosos, and the Julimes seem to have disappeared, and I have not the slightest doubt but that they have vanished as tribes. The same is the case with the Jumanos, the Janos, and the Jocomes. The last two clusters were certainly engulfed by the Apaches; of the first, I have found (since I finished the second part of this Report) a trace dating as late as 1855. They were then living in Texas, not far from the Comanches, and the characteristic disfiguration of the face through incisions which they afterwards painted, was noticed by my informant, who traded with them thirty-three years ago. Whether the Julimes are not perhaps Jumanos, I cannot determine ; there are (as I have noted in the second part) indications to that effect, and it might not be impossible to find traces of the Julimes yet in Chihuahua, although Orozco y Berra includes the language among the lost idioms.

I have, however, become personally acquainted with two small groups of Indians of Chihuahua, of whom hardly the name is known outside of the district of El Paso del Norte in which they reside. These are the Mansos and the Piros. Of the latter, who dwell in the hamlet of San Antonio de Senecu, six miles east of the town of El Paso del Norte, or Villa Juarez, I can say that whatever may be stated hereafter in regard to the New Mexican Pueblos (to whom they belong historically and ethnologically) will apply to them in a limited sense, that is, so far as may be true of a tribe reduced to about sixty individuals. The social organization was kept

up in 1883, when I visited them. They had their officers, including the so called Cacique, who was the pivot and mainstay of old customs. They even preserved the "mother," the emblem of the soul, and they prayed to the mother of mankind, whom the Pueblo Indians believe to dwell in the moon. But the sacred emblem was hidden, for ruthless curiosity had attempted to tamper with it. The Piros have preserved their language, and some of their historical traditions. They know that they are descended from the Piros who in the seventeenth century and untold centuries before dwelt at Senecu, Pilabo, Abo, and, as far as I can infer, at Tabira or Gran Quivira. They are reticent and timid, but in a longer stay among them one would almost certainly discover features of considerable interest compared with analogous ones among the northern Pueblos.

It is much more difficult to separate, among the descendants of the Mansos living to-day in the so called Barreal (one of the outskirts of the newly fledged Villa Juarez), the original Manso element from its admixture with the Tiguas, Piros, Sumas, Janos, and other tribes who have married or crept into the original blood of the settlers of El Paso del Norte and founders of the Indian mission there. I have been misled myself by not paying sufficient attention to the numerous miscegenations (from the standpoint of tribal integrity and purity of blood) that have occurred here. Still, the Mansos of El Paso del Norte claim to be direct descendants of those whom Fray Garcia de San Francisco settled at the "Pass" in 1659. They recollect that their ancestors were from New Mexico, and at a still earlier date came from the North. They remember through the sayings of the oldest men (folk-tales), that their people formerly lived in huts of reeds and of boughs, that they were as wild as the Apaches, and knew not how to dwell in houses nor how to

irrigate and till the land as they do now. They confess that their present mode of life, their arts and knowledge of to-day, are due to "Los Padres" and to the Spaniards. On the other hand, they recognize the Pueblo Indians of New Mexico as their relatives, without, however, being able to designate one particular stock as their ancestry. They have two so called Caciques, and, as well as in other Indian villages, there has been strife between them on the score of "legitimacy," the second Cacique claiming to be more legitimate than the first. This quarrel has lately ended by an elopement! Cacique No. 2 (over sixty years of age) has fled with the spouse of Cacique No. I (the lady is over fifty). The claim of legitimacy rests on grounds which are quite instructive, and which should be known to the future student of the Mansos. Cacique No. 1 is by descent through his mother a Tigua Indian. His wife is a Manso. Cacique No. 2, however, is pure Manso. Therefore the latter has, in his opinion, a just claim to the principal office. This shows in the first place to what extent the Mansos are intermarried with other tribes, and next it proves that the peculiar functions of the Cacique (which I shall hereafter explain) were so closely similar among the Mansos and the New Mexican Pueblos that one of the latter could officiate for the former. The dance on the feast of Nuestra Señora de Guadalupe at El Paso del Norte, in front of the church, is an ordinary dance of the Pueblos; but the few Indians who participate in it lack the accoutrements that make of the dance such a weird performance among more northern tribes.

At least four clans are still in existence among the Mansos. They are the white, yellow, blue, and red corn people. There are also traces of the water clan. The four colors of the corn clan are very prominent among the New Mexican Tiguas, and there is a possibility that my informant may have indi-

cated gentes of the Tiguas rather than gentes of the Mansos. Still, there is no doubt about the existence of the clans among the Mansos also. I did not have sufficient time to make investigations about creed and rituals. But the formal reception to which I had to submit in the house of the first Cacique showed, that, like the Pueblos, they know the six sacred regions, as well as the seventh, which is the emblem of the whole; that sacred meal is, among them, in use for the same purposes as among the Pueblos; and that tobacco also serves as a means for incantation and as an offering. Otherwise, the Mansos have nothing to distinguish them from the lower classes of country people in Mexico. They still enjoy a communal tract, have their governor (Tsham-ue-i-mere), whom they annually elect, their war-captain (Tshere-hue-pama) and call the first Cacique Tsho-re-hue. That the sun is looked upon by them in the double light of the orb and of a sacred being residing in that orb, is hinted at in the words by which they designate it, Hi-ue Tata-i-ue; and that the moon stands in a similar relation towards a female deity is also indicated by the Manso term, Hi-mama Pa-o. The Mansos cultivate the grape and make wine; they also fabricate pottery, sometimes rudely painted.

These few details, some of which need confirmation, are sufficient, however, to warrant a closer study of the remnants of the tribe while it is yet time. They are fast disappearing so far as they are Mansos, through intermarriage and dispersion. In 1883 I heard the bitter complaint, on their part, that they had no medicine-men (Shamans), and that consequently they were unprotected. But they recognized also, that, while most of the implements of their ancient cult were gone, they would only have to apply to the Pueblos of New Mexico in order to replace them.

That there is still one Suma Indian alive, I have already

stated. In consequence of the rule of descent, this individual is indeed the last one of his tribe, as there are no females left.

Turning from the Indians of Chihuahua to those of Arizona, we meet, in regard to the latter, at least with attempts at giving their numbers as exactly as possible. Not that the figures are absolutely reliable. To obtain their precise number is practically impossible with Indian tribes, owing to their reluctance to allow themselves to be counted. But repeated endeavors, made in an official manner and under favorable circumstances, have afforded means of reaching approximately correct estimates. Thus, the total number of the Indians of Arizona, excluding the Navajos, who are constantly shifting over their extensive reservation from New Mexico into Arizona and back, is given at 18,000 about. Among these appear the Papagos with 6,000. But this includes certainly some, if not all, of the Papagos living across the Mexican border in Sonora. The Papagos of Arizona are Pimas by language, although with a dialectical variation. They are less agricultural than herding Indians, for the Papagueria is a barren stretch, where water is scarce, and what there is better serves to supply cattle and sheep and horses than to irrigate even the smallest region of arable soil. The Papagos therefore mostly dwell in so called Ranchos, not in villages, the settlement at San Xavier del Bac, near Tucson, excepted. There, as the Rio de Santa Cruz is conveniently near, there are farming lands on the limited scale peculiar to Indian agriculture. There also they dwell in adobe houses, which is seldom the case in other parts of their hot and arid country. They have their chiefs and spokesmen, their war captains, and, above all, their medicine-men. The last are all powerful within their sphere of action. The Papago is a fair Indian Christian; he clings to his church, and also holds on to

his ancient beliefs, according as he considers the one or the other more suitable to his actual needs. But no outsider should meddle with either. They are generally tall, stronglimbed, and of dark complexion. They dress as much as possible in refuse civilized clothing when outside of their homes and in centres like Tucson, for instance, but at home the aboriginal undress is common, and indeed the fierce heat of the Papagueria is a fair excuse for nudity. Dances are numerous among them, and carried on with barbaric display. After the massacre of Arivaypa the scalp dance was performed with considerable pomp, and the few Apache prisoners (mostly children) had to take part in the ceremony where the trophies of their parents were triumphantly flaunted by the murderers. The Papago is not as much afraid of the Apache as other sedentary Indians. He is more accustomed to their mode of warfare, and can travel, lie in ambush, or wait in that unprepossessing country better than other Indians, who have not been reared amidst burning sands and shadeless rocks. As to their creed, I have had opportunity to ascertain hardly anything. It would seem that they have a conception of the four cardinal points as mythic regions, and a folk-tale, in which a great lagune appears that they had to cross ere reaching the promised land in which they are now scorching, in company with the people of southern Arizona in general. Their burial customs can easily be observed, at San Xavier, for instance. The dead body is neither burned nor entombed. It is enclosed, in a sitting posture, by a rude hut or bower, built of rubble or stones, and covered with a primitive roof of branches. Whatever the deceased owned and used during his lifetime is either placed with him or heaped on his tomb. If a man, his gun or bow and arrows are broken over the small house; if a woman, pottery is fractured, perforated (killed as the Indian saying is) over it.

Ornaments, trinkets, plumes of various kinds, are added to the other articles that shall accompany the departed one beyond the limits of this earthly world. Wherever the fast decaying roof exposes the inside of these funeral monuments, we see its occupant, shrivelled to a black skeleton, either sitting with chest erect and knees drawn upwards, or the frame of the body has already tumbled to one side and the hideous face, muscles and skin shrunk to a distorted ghastly mask, gazes upward eyeless, from amidst a heap of decayed matter, or through strands of dishevelled hair streaming from a shrivelled scalp. Although it is often stated that the Pimas cremate their dead, the Papagos certainly do not.

The Pimas proper occupy the banks of the Gila River. They live in small villages, extending from east of Riverside to near Tempe, and also north of the Gila, on the delta between this stream and the Rio Salado. The number of the Arizonian Pimas is estimated at about 5,000, including the Maricopas, which latter are of Yuma origin, although settled near the Pimas, and intermingled and intermarried with them. I believe this estimate to be above the reality. The villages of the Pimas make some pretence to permanence. These Indians irrigate their land, and they dwell in two kinds of houses, one kind of which, at least, are far from being unsubstantial, although at first sight they seem but frail huts. A Pima winter house is round, and formed like a beehive somewhat flattened, not a regular dome. Four posts, supporting a rough frame of boards or branches, form the basis of this structure. Long poles, bent like quadrants, are so placed as to meet above this rude platform, to which they are tied. Hoops encircle the bows, and hold them laterally. Over this skeleton, earth is placed.' Sometimes a layer of grass or brush is first applied to the frame. The whole is nothing else but one of the well known "dirt roofs" that

can be seen in any pueblo building of New Mexico, with the difference, however, that the dirt-roof of the pueblo rests on a wall of stones or mud (adobes), whereas the Pima roof rests on the ground, and forms a compact cupola-like shell. Comparing this contrivance with what is left of the ceilings of the ruin at Casa Grande, (claimed by the Pimas to have been one of their former abodes,) one can scarcely help thinking that the roof of to-day is a reminiscence, in composition, of former prosperous times, and that only its shape has been modified to suit a more humble existence.

Beside the winter house the Pima has his sheds for the summer, equivalent in purpose to the "Ranchos" of the Pueblos. For this he has used but the central four posts and scanty roofing of the nucleus around which his more substantial winter abode is reared. The summer dwelling has therefore scarcely any side walls, and if there are such, they are most primitive and temporary. Still, the whole family reside there, in proximity to their crops. Another kind of structure is the storehouse. This is square or rectangular, and has a flat roof of similar material to that of the winter abode.

The Pimas of the Gila River are rather a strong-built stock. The men are often tall, the women not unprepossessing. Their dress of predilection is scant. A striped close-fitting shirt, the breech-clout, and paint applied to the face in slender stripes and dashes, or in a few arabesques on the cheeks, satisfy them in summer, provided the side-locks are carefully plaited in a long tress hanging down on each side of the head. If attainable, a little bell, or a string of beads, or some gaudy ribbon, or bright plumelets, are suspended to these strands that take the place of the shaggy Melenas of the Rio Grande Pueblos, and are the equivalent of the bunches of colored worsted, or rabbit fur, braided into the side-locks of the northern Pueblo stocks of the Tehuas and Taos. The women have the hair cut short over the forehead, like a prototype of civilized "bangs." A white chemise, a flashy skirt, necklaces and collars, constitute the usual accoutrement. Children, as usual, wear no clothing whatever.

The Pimas are essentially an agricultural tribe. Their wheat is noted for its good quality. They raise corn, beans, and other vegetables, and originally planted cotton; but this staple has now fallen into disuse. They irrigate in two ways. First, from the waters of the Gila through the usual "Acequias," or ditches; and in those sections where fertile spots lie at some distance from the watercourse, and at the foot of steep and forbidding mountains, they have dug rills or channels from the dry gulches (Arroyos) down to their fields, in order to lead the torrents rushing down these arroyos after every shower into the cultivated plots. This is particularly the case where, as in the vicinity of Casa Blanca and towards the Sierra Maricopa, rain sometimes fails for a whole year. Showers flood the surrounding mountains daily during the months of July and August, but only the surplus that the denuded and abrupt slopes cannot hoard floods the bottom below.

The Pimas, so I am informed by my friend, Mr. J. D. Walker (the best living authority on the subject of this tribe) have the gentile organization. Thus, there is a buzzard gens, Ni-ue Uöm O-kai. Uöm signifies offspring of two sisters. This is indicative of descent in the female line. There is also the gens of the coyote, or prairie-wolf, Pan. Nearly every village, so Mr. Walker informed me while at his hospitable home at Casa Grande, has a separate building, called Tyi-in Ki, or house of speech. They have public criers called Amok O-tam (people of loud speech), who publish everything officially in the morning, just as among the Pueblos. Their officers are elected, but due deference is given to the descendants of former chiefs, provided they are capable. Some time ago there was a central war-chief, which indicates the existence of a league between the various villages. Now there is still a civil chieftain called Ko-e, who has military functions besides. In case he dies, an election is held, and the old leading men who form the chief council select the successor.

Of arts and industries, the Pimas have not many, except their admirable basket-work, which is unsurpassed in any part of North America, and in which the Papagos also excel. Among their baskets, the large Ki-jo, or carrying hod for women, deserves attention. It is neatly tressed of indigenous twine, painted blue, or red, or in various colors, and has the appearance of a large quadrangular funnel, each of the sides of which is fastened to a long stick or pole. Only a drawing could give a fair idea of this singular contrivance, which is the peculiar utensil and head ornament of the women. It is evident that the ki-jo serves as an ornament only incidentally, and as a matter of aboriginal taste, but it is mentioned as such in the tradition of Civano Ki (Casa Grande), to which I shall hereafter refer.

Pottery is manufactured by the Pimas, but although they attempt to decorate it with colors and designs, the attempt recalls the worst efforts of the New Mexican village Indians in this direction. In comparison with ancient Pima pottery there is a marked decline. This decline antedates the sixteenth century. It must have been coeval with the abandonment of house life in buildings of mud, and consequent impoverishment. Still, some of the decorations recall well known symbols. The whirlwind or spiral is well defined, and some designs resemble strikingly the paintings of the original symbol of the clouds made on pottery by the Mansos and Piros of Chihuahua. Basket-work seems to have supplanted, among the Pimas, elaborate display in ceramics.

The Pimas have done good service against the Apaches. They are able to cope with these formidable foes of sedentary races. It was only ten years ago that a party of Pimas ventured to visit the Apaches with the view of trading. It was a daring experiment, for the savages were in favor of killing them at the outset. Better counsels, however, prevailed, and a limited intercourse has sprung up since. Formerly, as often as a war-party was organized, one diviner, or shaman, of the kind called "Ma-gi," went with it, and in the nightly councils he took his seat at the extremity of the arc of a circle formed by all present. The leader of the party sat in front of the fire, facing the direction whither they intended to move, a master of ceremonies sat on the extreme left. The latter opened the meeting with a chant in low measured tones, at the conclusion of which a prominent brave rose, placed himself between the men and the fire, facing the latter, and recited an ancient song in archaic language, called the Sava-nyo-kap. When the ritual songs were sung, the chief spoke about the campaign, and finally called upon the shaman to foretell its result. Every one present turned to the diviner, saluting him according to the degree of relationship, and he answered. At the close of his talk, he was again saluted in the same way. This, says Mr. Walker, to whom I owe the information, is a common custom among the Pimas. They salute each other before and after a speech or conversation of any kind.

Of the religious beliefs of the Gila Pimas little is definitely known. They have adopted the idea of one individual maker of the earth, Työ-uöt A-mak, from Työ-uöt, earth, and Mak,

prophet, or shaman. This idea of a great prophet for the earth is a Christian importation most assuredly, and due to the influence of the Jesuits. Together with these reminiscences, there exists a strong belief in witchcraft, and at least two of the secret orders or societies which Mr. Cushing discovered at Zuñi are found among them also. The medicine-men proper, called in their language Say-tyo-kap, hold secret meetings at night and in the mountains, and are said to be a fully organized body. The Maki, or diviners or prophets, appear to correspond to the Ka-ka of the Zuñis, and the Ya-ya of the Queres, or the highest class of wizards, - those who include in their knowledge the sum and substance of all the others. One of the Maki accompanies war-parties, as above stated, but he may send a substitute, in which case one of the medicine-men goes along; a further analogy, as we shall hereafter see, with the customs of the Pueblos. In place of the sacred or medicine bowls of New Mexican villagers, the Pimas use sacred baskets adorned with plumes, appropriately painted with designs resembling developments or variations of Pueblo symbols.

Of the traditions of the Pimas, so far as communicated to me by the authority stated, I shall speak in the archæological section of this Report. There is among them a tale of a local flood, and they have quite definite recollections about the Vip-i-set, or great-grandparents, and Ho-hok-om, the extinct ones.

The Maricopas are usually included among the Pimas, for they are allied with them, owe their salvation and survival to the assistance which the Pimas in former times lent them against the Yumas, who were threatening the Maricopas with destruction, are intermarried with them, and the children speak both idioms in most cases. The Maricopas make pottery similar to that of the Pimas, and have very analogous customs. Still they are a Yuma tribe, and as such belong to another linguistic group. I have not seen the Yumas, neither have I been able to visit any of the Colorado River Indians, such as the Mojaves, Cocopas, etc. The number of all these Indians of Yuma stock on Arizonian soil was estimated at one thousand in 1881, and, as they live on both banks of the Colorado and shift occasionally from one side to the other, I leave them out here, referring the reader to the publications of the Bureau of Ethnology and to the works of Mr. Albert S. Gatschet on the subject.

Neither have I, as yet, visited the Moquis. Here also I must refer to other sources, such as the publications of Captain Bourke and of the Bureau of Ethnology. The Moquis live in six villages, called, respectively, Gualpi, Sichomivi, Mishonginivi, Shipauiluvi, Shimopavi, and Oraybi. These are the villages that may be regarded as specifically Moqui, or Shinumo, as the Moquis call themselves. There is a seventh one, Tehua, situated on the most easterly promontory of the much indented Mesa system that bears the habitations of the Moqui tribe; but in this village the Tehua language is spoken, and its people are mostly Tanos, who retired thither at intervals after the reconquest in 1694, and have preserved their language, as well as the customs by which Pueblo tribes are locally differentiated. Even among the other Moquis there is a sprinkling of New Mexican Pueblo blood : Tiguas, Jemez, Zuñis, Queres, etc., as well as Navajos and Yutas, have married into their tribe, or settled among them. I call attention to these mixtures, since they influence customs as well as creed. Myths peculiar to one tribe filter into the folk-lore of another, becoming in course of time assimilated in distorted forms. Even idols are adopted from outsiders. In addition to this,

there must be elements of Christian origin in the beliefs and rites of the Moquis. They were not subject to Christianity for a century without absorbing at least some notions, however faint these may have become since, and however misshapen. So it is with agriculture and industry. The flocks of the Moquis, and their orchards of degenerated peach trees, are due to Spanish importation. In 1881, the Moquis were counted at 1,813 souls all told. This includes of course the Tehuas.

It would appear to be the place here to treat of that most numerous tribe of the Southwest, the Navajos, or, as they call themselves, Dinne. But, properly, they should not be separated from the Apaches, or N'De, and as I intend to devote to these a few pages towards the close of this section, I prefer to consider the Navajos on the same occasion. This naturally applies to the Arizonian Apaches also, called White Mountain Apaches. I may only state, that the numbers of the latter were, in 1881, given at 4,578, whereas the aggregate of Navajos occupying northeastern Arizona and northwestern New Mexico was estimated in the same year at twenty-one thousand. These figures seem to be as correct as can be obtained.

Leaving aside for the present the aforesaid numerous, but rather erratic tribes, I turn to the Pueblo Indians of New Mexico. The transition is natural from the Moquis to them, since the Moquis are, in habits and customs, legitimate Pueblos; that is, village Indians, dwelling in houses of stone and mud. The linguistical position of the Moquis is better defined than that of the New Mexican villagers; they have been recognized as Numas or Shoshonees, whereas the Pueblo idioms await yet the sentence of philologists in regard to their true position among the languages of the continent.

ARCHÆOLOGICAL INSTITUTE.

The aggregate number of Pueblo Indians on New Mexican soil, in 1887, was figured at 8,337. These are divided into five linguistical branches: Tiguas, Tehuas, Queres, Jemez, and Zuñis. The relative strength of these groups, and the number of villages occupied by each, are as follows, beginning with the northern extremity: —

Tiguas of the North, villages of Taos and Picuries	485
Tehuas, five villages, or rather six, although one (Pojuaque)	
is next to extinct: San Juan, Santa Clara, San Ildefonso,	
Nambé, Pojuaque, and Tezuque	881
Queres, eastern branch, on the Rio Grande and Rio de Jemez,	
five villages : Cochiti, Santo Domingo, San Felipe, Santa	
Ana, and Cia	2,030
Queres, western branch : Acoma and Laguna	
Tiguas, southern branch : Sandia and Isleta	1,142
Jemez (with the remnants of the Pecos included)	518
Zuñi, one village 1	1,547

This census is not absolutely exact. The population of San Ildefonso, San Felipe, Nambé, Acoma, and especially of Santa Ana, is certainly underrated, whereas that of Laguna appears to be in excess. This is not the fault of the officers so much as of the Indians. At Santa Ana, for instance, the people are unusually suspicious about being counted, and there, as well as at Nambé, it is next to impossible to obtain correct figures. There is too much superstition

 1 It may not be out of place here to give the aboriginal names of these different villages : —

Taos, Te-uat-ha. Picuries, Ualana, also Ping-ul-tha.

San Juan, Jyuo-tyu-te Oj-ke. Santa Clara, Ka-po. San Ildefonso, P'Hojuo-ge. Pojuaque, P'Ho-zuang-ge. Tezuque, Te-tzo-ge. Nambe, Na-im-be.

Cochiti, Kot-ji-ti. Santo Domingo, Ki-ua, San Felipe, Kat-isht-ya. Santa Ana, Ta-ma-ya. Cia, Tzi-a. Laguna, Ka-uay-ko. Acoma, A-ko.

Sandia, Na-fi-ap. Isleta, Tshya-ui-pa.

Jemez, Uala-to-hua ("Village of the Bear," and not a corruption of Valladolid, as Mr. Loew has imagined).

Zuñi, Hal-on-aua.

among the Indians yet. Still enough is positive to show that the Queres is the most numerous, and the Jemez the least numerous stock; that Zuñi is the largest, and Pojuaque the smallest village; and that the Pueblo Indians have remained about the same in numbers since the great uprising of 1680.¹

In the whole number of Pueblo Indians above given, there are 4,068 males and 4,269 females, of all ages. The number of children between the ages of five and sixteen is 2,101. The proportion of males over eighteen years of age to the whole number of souls is as I to $3\frac{66}{100}$. This is a further confirmation of the scale which I always adopted in estimating the population of a tribe from the number of warriors given, when no other criterion could be obtained, namely, I: $3\frac{1}{2}$.

It is rather difficult to treat of the Pueblo Indian, anthropologically, as a special stock, basing conclusions upon the features, etc., of the Pueblo Indian of to-day. We ought to consider that, for instance, the Indians of Zuñi have largely intermarried with and plentifully absorbed Navajo, Tigua, and Jemez blood; that the people of Nambé are a compound of original Tehuas, of Navajos, and of Jicarrilla Apaches; and that at Santa Clara the Yutas, at San Juan the Yutas and Apaches, and at Pecos the Comanches, have

¹ According to Rivera (*Diario y Derrotero*, p. 32), the number of Pueblo Indians in 1725 was 9,747. This included the Indians of El Paso, who are, of course, not comprised in any census made under the government of the United States. In 1749, the number is given at 11,942. *Relacion del Informe de las Misiones del Nuevo México* (MS.). In 1793, it is stated at 7,455, from a volume of *Misiones* in the Archives of Mexico (MS.). The anonymous report entitled *Certificaciones de las Misiones que son al Cargo de la Provincia del Sto Evangelio de N. & P. S. Franco de la Ciudad de México*, etc., 1794 (MS.), was 9,495. Allowing for inevitable inaccuracies, it results that the Pueblos have neither increased nor decreased within the past two hundred years to any noticeable extent.

assiduously contributed to the propagation of the species. Jemez is more than half Navajo, and one of their leading men, whom unsophisticated American Indian-worshippers are wont to admire as a typical and genuine Pueblo, the famous Nazlé, was Navajo by birth, education, and inclination. The same was the case with Toya, the popular Pecos chief. He was a full-blooded Comanche. Such mixtures should be taken into account by anthropological investigators. They have had their influence upon language, and, in a certain sense, upon customs. In addition there is a large proportion of quarter, half, and whole Spanish blood in the Rio Grande villages. To regard the Pueblos of today as anything else but a mongrel breed, physically speaking, would be a grave mistake. It is also quite unsafe to assume that all the words and phrases of Pueblo idioms, as spoken to-day, are original. Aside from the positively established fact of the existence of archaic terms, which the Pueblo Indian uses without knowing any longer their signification, there are intrusions from various sources. Thus, the Tehua has filtered into all the other idioms through various words disseminated by the Spaniards. Ko-ye for interior room, Ca-china for symbolical dance, Gua-je for a gourd or rattle, An-ta for the side-leather taken from a buffalo-hide, are Tehua words adopted now in almost all other Pueblo speech. It would not be difficult to trace other terms to the Apache, Yuta, and Comanche languages, and still others to the Spanish, - as, for instance, in Queres, Mero-nyi for melon, Motätza and Makatza for the Spanish Muchacho and Muchacha for boy and girl, not to speak of Ua-cash for cow, Vuro for donkey, and the like. Even the Mexican Nahuatl language has left positive traces, through the Indians from Central Mexico and the Spaniards themselves who brought them to New

Mexico as their servants. Thus Chalchihuite is often used in current speech in place of the Queres word Shyu-a-mo, and the Tehua Cu-na; Tecolote for Cocope, Pichi-cuate (sand-viper) for Yai Shru-y. The same has occurred in dances. Not only have the various pueblos borrowed from one another, (as, for instance, at Jemez, the dance of the Chac-ui-na from Laguna,) but also from roaming tribes. The Sar-it-ye Jia-re, or dance of the French, of the Tehuas, was imported from the Kiowas. The people of Santa Clara (Tehuas) to-day dance a variety of the eagle dance, borrowed from the Yutas of Colorado. From time to time we hear of certain "medicines" (charms) derived from such and such a roaming tribe. The Osh-tzit-e (a powerful charm) of the Queres is ascribed to the Navajos, and if we inquire for the origin of some specially striking jugglery trick, we are not unlikely to be referred to the Navajos as its original performers. To separate the primitive from the historically imported is already a very difficult task, but to sift the mass of customs, of beliefs and rites, methodically, and find out where each belongs in fact, is an undertaking of herculean proportions. We should be very cautious in every assertion concerning the Indian's arts, habits, and creed, and never be sweeping in any of our deductions, so far as detail is concerned. The facility with which such details are adopted by widely distinct tribes (geographically speaking) shows that they are adapted to the ethnic degree of development of the peoples, and that there is an underlying harmony in thought, sentiment, and speculation among tribes within a certain compass. It will not be difficult through further ethnological studies to establish that such is the case in both Americas. North and South, and that aboriginal culture everywhere bears the same character; to wit, that of long seclusion and

isolation, brought about by natural causes, but as rigid and inflexible as the type of seclusion ascribed to the culture of China.

Among the Pueblos, those with whom I have more particularly become acquainted are the Queres of the Rio Grande valley, and the Tehuas. The Western Queres did not escape my attention. I lived at Acoma for some weeks, and have been to the much more recent village of Laguna. In fact, I have visited every Indian village of New Mexico, and improved my stay there, whether long or short, for ethnological information. After comparing notes with Mr. Cushing at Zuñi in 1883, and since, I became satisfied that certain features would serve as guideposts among all these tribes, and furnish a key to the understanding of their whole system of life, material as well as intellectual and moral. To describe the variations in detail from pueblo to pueblo, would become tedious, and of practical value only in so far as a detailed local history of each could be attempted. The main features are alike in every New Mexican group.

Pueblo architecture still bears the type of that honeycombed communal agglomeration of many-storied dwellings, with the stories retreating like steps of a staircase from the bottom to the top, by which it was characterized in the sixteenth century, and which so many ruins still display. Yet modifications are noticeable in many ways. The Spaniard had already changed the small airhole or vent to a larger opening, and taught the Indian to close this opening with pieces of -transparent, or at least translucent, mica or gypsum; window-glass being unattainable except with excessive cost and at great risk. The Spaniard also introduced the door with hinges, generally of wood, in place of the low and narrow doorway





ACOMA: NORTHERN ROW OF HOUSES.

protected by a robe or mat. At the present day, a further step has been taken: the iron hinge, the moulded door-panel, the modern window-frame with panes of glass, begin to make their appearance in the pueblos. As a consequence of greater security, the houses have more numerous entrances on the ground floor, and the antique ladder has fallen gradually into disuse. For a similar reason, the number of the stories is diminished, and consequently the height of the houses. Taos and Zuñi are the only pueblos with four and five storied buildings, and the former may be called the old-fashioned pueblo par excellence, with its two tall houses sheltering the entire tribe of four hundred souls. Acoma still may be called a regular three-storied village, since almost every one of its long buildings counts three floors, of which only the upper two are inhabited. On the other hand, Isleta has lost the pueblo character completely, and resembles a Mexican settlement. As a general rule, the single houses have become more numerous and of less extent, while the rooms have grown in size. As to the plan of the villages, it varies according to topography and surroundings. Since all of the pueblos now extant (those of the Moquis excepted) date from after the reconquest of 1694, the amount of insecurity to which the people were exposed in the eighteenth century guided them largely in their location of the houses.1 San Ildefonso forms a hollow quadrilateral; Jemez, Santa Clara, and San Felipe are each a double quadrangle with two squares; Santo Domingo, San Juan, Santa Ana, and especially Acoma, consist of several parallel rows of houses forming one to three streets. Zuñi is in fact one gigan-

¹ This is very clearly stated by Rivera, *Diario*, p. 33: "Y dichos quarteles estan los unos al frente de los otros, para que todos esten flanqueados y que los enemigos no puedan mantenerse en el intervalo."

tic building, very irregularly disposed, traversed by alleys called streets, and interspersed with several interior squares. Taos has two tall houses facing each other, one on each side of the little stream, and communicating across it by means of wooden foot-bridges. The material of which the houses are constructed varies with the nature of the surroundings. Acoma is of stone and rubble; Isleta, Santo Domingo, Cochiti, etc., are of adobe, and very often one and the same pueblo, not unfrequently one and the same long house, displays both kinds of material. The Indian now mixes his mud with straw, and forms the bricks in a rectangular mould. There are still occasional traces of the ancient custom by which the women were required to rear the walls, while the males attend to the woodwork, that is, to cutting and bringing in beams, poles, etc. The roofs need no description, they have been described often enough. Hewn, even sawed rafters, become more and more common, although they still are exceptional, and where they are used the ceiling is of planks instead of poles or brush. The floors are invariably of mud, - mud often soaked with blood and smoothed, which makes a tolerably solid floor. Porches are not unfrequent, but mostly on the ground floor, although the second story also has an occasional projection for purposes of shelter and shade. Stables for the animals are almost unknown. The so called corrales, enclosures of palisade-work reared on the outskirts of the villages, one corner of which is sometimes covered with a provisional roof of poles and corn-stalks, are the only contrivance for sheltering domestic animals indispensable about the home. The majority of horses and cattle are left to the tender mercies of winter in the mountain gorges.

In addition to the dwellings, a pueblo contains two other classes of buildings, the church and convent, or priest's



PUEBLO OF TAOS : SOUTH HOUSE.

house, and the estufa. The churches are sometimes large, nearly always of adobe, and the convents nearly always in ruins since the missions were transferred from the pueblos to Mexican villages. Not one of the pueblo churches, that of Cia perhaps excepted, can lay claim to real antiquity.¹ All were built either in the last or the present century. There is always a low belfry with a rickety bell, cast in Mexico, and a dingy sacristy appended to one side of the choir. The ornaments inside are scant, a few of the paintings, one of which was presented to each church by the King of Spain after 1694, are still extant; many have either been removed by the clergy, in order to prevent them from falling into the hands of ruthless American curiosity seekers, or they have fallen a prey to the latter. A few images, often the product of home industry and art, and accordingly misshapen, a chancel from the last century decorated by native artists in a manner frightful to behold, sometimes a ceiling daubed over with Indian and Christian symbols mixed in dismal array, a bare floor, a cumbrous sculptured wooden door, and windows with coarsely carved wooden railing in place of frames, and no panes, - these constitute a typical pueblo church in New Mexico. On the whole, these edifices fare no worse than the homes of the aborigines themselves, considering the fact that the curates often dwell long distances from their missions, and in more central localities of their extensive parishes, and that the Indian has to keep the temple in repair.² The great size of

¹ The Indians state that the outer walls of this church are those of the old mission temple, which was reared previously to 1680. The church of Santa Clara was first used in 1761, that of San Ildefonso is posterior to 1700; the church at Zuñi was completed in 1780, and so on.

 $^{^2}$ The duty of keeping the church in repair is one of the obligations of the Indian parishioner. How they comply with it is shown by the condition of the edifices.

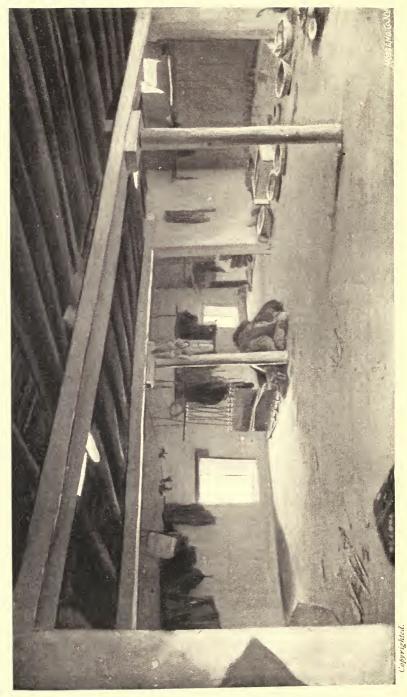
the churches, and the material of which they are constructed, make it quite onerous to maintain them in good condition. There are local differences from pueblo to pueblo: some Indians are more careless and lazy than others.¹

The estufa is not kept in a better state of repairs than the church, but it is easier to manage, since the building is much smaller, and, furthermore, mostly underground, therefore less exposed to decay. Not all estufas are circular, and not all are subterraneous. Those of San Juan and Santa Clara, for instance, are rectangular and above the surface, whereas in another village, inhabited by people, of the same (Tehua) stock, the estufa is circular, and partly underground. At Acoma, where the houses rest on the naked rock, the estufas do not form isolated structures; they are merely chambers within the buildings, mostly on the first floor, and distinguishable from the outside by the long ladders protruding from the hatchway, and serving as entrances. At Zuñi and Jemez the estufas are similar to those of Acoma. At Taos the estufas are completely subterraneous, the hatchways being at the level of the ground. The number of estufas varies also greatly. In the Queres villages of the Rio Grande there are invariably two, at San Juan one, at Acoma six, at Taos seven, and so on. The interior of the estufa, unless there is some ceremony to take place, or after the performance of some rites, has nothing peculiar. It is a bare room; the usual floor shows only a rude hearth, the hatchway above allows ingress to. the lower half of a tall ladder, whose end rests on the floor about the centre of the apartment, and light pene-

¹ Thus, for instance, the churches at San Felipe, Cochiti, and Acoma are comparatively in good repair. At San Juan, all the work done was performed by the priest, Rev. Father Seux, at his own expense, and almost against the will of the Indians, who, while they would not allow any outsider to touch the edifice, still refused to make even the most indispensable repairs.

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INTERIOR OF A HOUSE AT ZUÑI.

trates into this dingy chamber from above, or from oneor two side vents opened near the level of the ground outside. The walls are usually whitewashed. Not a seat, not a single piece of furniture, the hearth excepted, breaks the dusky bleakness of the chamber.

Furniture, in a pueblo house, in the shape of chairs, tables, bedsteads, wardrobes, etc., is a quite modern feature. As yet, the majority of dwellings are poorly provided. Many have still the coarse low stool, hewn out of a block of wood, no table, or the low rickety toy-table-like contrivance, fitting, in height, the primitive stool mentioned; in place of bedsteads, the floor, on which blankets, hides, or a wool mattress, are spread every night; a cord or rope stretched across one corner of the room, over which garments, ancient and modern, buckskin, and similar material, are thrown; weapons dangling from wooden pegs driven into the white-washed wall, perhaps a dance-ornament or a leather satchel concealing some fetich; - this constitutes the furniture of a pueblo room of to-day, with exception of the inevitable and essential fire-place. There is no doubt that the present form of the fire-place - with a projection of adobe or stone on which rests the flue, made either of perforated jars placed one on top of the other and covered with a thin coating of white-washed mud, or pieces of wood laid crosswise and protected in a similar manner, or of regular courses of adobe bricks - is also of Spanish introduction. The same is the case with the kitchen hearth and its big "hat," sometimes occupying the entire width of an apartment. Kitchen utensils are equally modest in variety and appearance. Iron pots and pans are found in most households, but the black "olla," and the painted bowl, or "caxete," of aboriginal make, are still in general use, the one for cooking, the other for serving the food. The

painted urn cr "tinaja" is used for carrying and keeping drinking water, and the huge round-bottomed "tinajon" for storing grain and beans. Forks, knives, and metallic spoons are of recent introduction, as well as China cups, saucers, and plates. The same is the case with a sporadic looking-glass, and, for decorative purposes, "retratos" (pictures). Representations of saints, on wood or hide or paper, are looked upon with great veneration; they hang on the wall beside the wallet or sheath containing the fetich of the hunt, or the idol of Ma-se-ua or Ke O-jua.

Some of the older Indians, as well as some of the younger ones, can read and write. It is almost melancholy to hear the tales of those who, in the third and fourth decade of this century, were taught the first letters in the "Pueblo schools "maintained by the Franciscans. Writing paper was too scarce to be within reach of the teachers, so they covered a wooden frame with thin sheepskin, suffered the latter to dry, and afterwards "ruled" this improvised parchment by means of a leaden bullet which was sharpened to a point. Ink was also home-made: pulverized charcoal diluted in water and fixed with saliva. A deer prong, or the horn of a cow, scooped out and fastened to a piece of plank, served as inkstand. Turkey, or crow, or eagle quills were the pens. With these contrivances the children were taught to write. The catechisms, and the "Arte de bien morir," were used to teach spelling and reading. It was not neglect nor indifference, it was the impossibility of obtaining any better materials except with enormous expense, and having them transported to New Mexico through the ring of blood and death that nature and hostile Indians had built around it, which reduced the parish teacher of the Pueblo mission to such indigence in utensils of teaching. At the present day, schools have sprung up in nearly every pueblo, and there are

large government schools at Santa Fé, as well as at Albuquerque. It is yet too early to determine the value of these institutions for the education of the aborigines.

The separation of the sexes in their dwellings having been abolished during Spanish times, the Pueblo Indian is to-day acquainted with home life and the idea of the family. Still there is a trace left of the former division in the custom (at least theoretically acknowledged) which makes the wife, or, in case of a widower, the housekeeper, owner and master of the house and whatever it contains, the personal effects of the males excepted. Crops once housed are only to be sold by the woman, or with her consent. This custom is indeed not always observed, but it is certainly recognized. The man who works the field controls the field; the woman, who, formerly at least, reared the walls of the house, controls the house and what it may contain. Nevertheless, there is a great change in the customs of inheritance. The children all inherit equally from the father, the wife can have plots of ground and buildings of her own, and can will her property at her pleasure. This is not the primitive custom, by which the sons took the plot which the father had tilled, and, whenever that plot did not suffice, might obtain as much land as they needed in the neighborhood of the village. In localities where the area was naturally limited, each of the clans held its tract of fields, and the male members had lots assigned to them out of this tract. Now, the clan, while still in full vigor, plays no part in the allotment of arable tracts: whoever wants land applies to the tribal officials for a share of the communal range, and this share becomes his own as long as he works it. He can exchange it with or sell it to other members of the tribe, but he cannot dispose of it in favor of any outsider. The title to the four square leagues originally assigned to each pueblo by the Spanish Crown is vested in

the tribe; and while that tribe may, through its officials authorized thereto by the male adults in a general meeting, sell and convey the communal real estate, alienate it, and give good and valid deeds to it,¹ the individual cannot part with his share except to born or adopted members of his pueblo. Further, if he fails to cultivate it, or to have it cultivated for the space of a year, the tract reverts to the commonalty, and is at the disposal of the next applicant for tillable soil.

Marriage is still strictly exogamous; the children belong to the gens or clan of the mother, consequently the clan is, in reality, the unit of pueblo society.

The number of clans in each village varies. It is not always easy, besides, to obtain fully accurate lists. I cannot

¹ This is not in conformity with the accepted view in legal circles. It is true nevertheless. In the first place, under the government of Spain, the Pueblos were regarded as vassals, with all the rights and prerogatives of such. Their position is generally confounded with that of the Indians on the so called "Reducciones," where a body of them was collected, and a tract of land specially assigned to it as inalienable without the consent of the government. Such was not the case with the Pueblos. They held the lands occupied by them by an anterior right, recognized by the Crown, and the so-called "Pueblo grants," subsequently made under direction of the King, were only limitations, or reductions of a hitherto undefined expanse to metes and bounds. Under the Mexican Republic the Pueblos were declared citizens, and as such (although the Indians never consented to exercise their rights of citizens) the United States took them in charge. According to their ancient customs, the lands pertained to the adult males, and what their representatives, the tribal government, decided in regard to the soil, was law. Minors and women did not come into play at all. The plea that Pueblo territory cannot be sold except with the consent of every member of the tribe, whether of age or not, is therefore of no force whatever. The Pueblo custom is law for the Pueblo, and even the original statutes of New Mexico have recognized this fact, by acknowledging the pueblos to stand in the position of bodies corporate and politic, whose duly constituted officers have the faculty of representing them in court and elsewhere. If therefore a pueblo decides upon selling or bartering any portion of its territory, and the adult males thereof empower certain officers to do so, any documents signed by the latter should have due validity. Unanimity of the male adults is, however, indispensable, and such a disposal can in no manner affect the houses. These, according to the old custom, properly belong to the females.

273

guarantee, for instance, the catalogue which I give below, of the clans of those pueblos where I made special investigations on the subject.

Taos, thirteen gentes. I obtained the translation of the Indian names of but six of them, which are : the bead, water, axe, feather, sun, and knife clans.

San Juan de los Caballeros, fourteen gentes : sun, moon, stone, bead or coral, marten (?), earth, turquoise, eagle, painted eagle, mountain tree (?), cloud, calabash, grass, corn. The translation of some of these is doubtful.

Cochiti, at least thirteen: sun, water, cottonwood, turquoise, panther, bear, calabash, Mexican sage, coyote, corn, scrub-oak, fire, and ivy.

San Felipe, five: tobacco, eagle, water, coyote, and one the name of which I am unable to translate; and two which are dying out, sun and ivy.

Laguna, fourteen gentes: water, bear, sun, snake (rattlesnake), parrot, turquoise, coyote, eagle, pheasant (road-runner), corn, antelope, badger, and two more, with names which I am unable to translate.

Acoma, seventeen gentes: water, eagle, parrot, yellow, red, blue, and brown corn, bear, sun, rattlesnake, piñon-eater,¹ calabash, ivy, antelope, pheasant, turkey, and one the name of which I do not attempt to render in English.

Isleta, fourteen gentes at least: corn (white, yellow, red, and blue), deer, antelope, bear, elk, sun, moon, water, eagle, goose, duck. This list is neither complete nor absolutely reliable, except in such names as are common to most, if not all, of the Pueblos.

Zuñi, fifteen gentes : parrot, corn, badger, eagle, sun, deer, bear, coyote, frog (or water), crane, grouse, turkey, yellowtop plant, yellow-wood, rattlesnake.

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<sup>1</sup> The Sho-hak-ka, — Picicorvus Columbinus.
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Jemez: I obtained the names of but a few, among them the eagle, the coyote, the corn, sun, and a bitter plant of the genus dandelion.

However imperfect these lists are (and as such only I wish them to be regarded) they reveal to us one quite interesting fact; namely, that, among all of the five linguistic stocks or groups of which the Pueblos are composed, the majority at least of the clans are the same, and bear the same name in a distinct idiom. Also, that among villages of the same language there is more similarity than among others, and that among the Pueblos who are locally close to each other, although the idioms they speak are distinct, there is still a resemblance in the names of the gentes. Thus the parrot gens is found at Zuñi, Acoma, and Laguna. The parrot is known in every pueblo, and its bright plumes are sported in dances and otherwise, but the parrot gens seems to be a feature of villages west of the Rio Grande. Certain clans are found everywhere, like the sun, water, corn, and eagle; the corn divides, in addition, into certain colors; the coyote, and the calabash or gourd or squash (all three names or terms being practically synonymous among the Indians), are also very frequent. In some pueblos there are distinct recollections of such and such gentes having immigrated from another place; as, for instance, the clans of the coyote and the parrot having come from Zuñi to Laguna, and probably to Acoma. In short, a close investigation of the gentes, much closer than that to which I had to limit myself owing to insufficiency of time and means, would undoubtedly reveal facts of local history preceding the Spanish explorations and settlement. The history of the gentes is an equivalent of the genealogy of families in civilized society. The Indian has, in his native tongue, only a personal name; there is no family appellative, except in so far as a Spanish family name may have been

adopted; the man or the woman is called so and so, and *belongs* to such or such a gens, by which he or she is recognized among the tribe.

Of the former authorities of the clans, and of the old men whose gatherings composed the council of the tribe while each one of them represented in particular one of the gentes, there are hardly any traces left. Still, there are evidences of the clan system in matters of government, and in this respect the divisions according to estufas, prevalent among the Pueblos on the Rio Grande, is instructive. The question of the government of the single clans is, however, less important than that of the tribal government, which I have now to consider.

On the surface, this government consists of a set of officers, annually elective, and playing the part of an executive, and of a permanent council, whose decrees are the "law of the land," that is, for the village or tribe. We often hear of another officer whose functions are represented as being of a somewhat occult religious nature, and who is said to be really the ruling power in the pueblo. This is the Cacique, whose true position has never been clearly defined. Thus much is certain : the Council (U-uit-yam in Queres) is permanent and its decrees are the law; the Governor (Ta-pop in Queres, Tu-yo in Tehua, Ta-bu-de in southern, Ta-bu-na in northern Tigua, Ta-pu-pu in Zuñi), the Captain, or War Captain (Maseua or Tzia-u-yu-kiu in Queres, A-kong-ge Tuyo in Tehua, Ca-ve-de in southern Tigua, Jum-bla-ua Dun-ana in Taos), and their assistants, are annually selected (not elected) and installed about the first of each year, and they are the executive officers of the pueblo; but the relative positions of all these branches of government cannot be understood without intimate knowledge of the ancient religious organization of the Pueblos as it is still kept up. Where that organization

is best known is at Zuñi; and if I have succeeded in discovering some of its details among the Queres, the Tehuas, and among the Jemez, it is owing to the advice and friendly guidance that I received from Mr. Cushing in that field of ethnologic investigation. I cannot sufficiently insist upon the fact, that what the work of the late Lewis H. Morgan has been for the social organization of the Indians and their system of civil life, the work of Mr. Cushing is for their religious organization and customs.

To the religious organization of the Zuñis I shall refer only so far as it presents analogies with that of the three tribes mentioned, or interesting differences. To that of the Taos and southern Tiguas (Sandia and Isleta), I can refer but incidentally, since I have not as yet had opportunity of penetrating into their secrets.

Among the Queres, the typical form of their religious government and religious "Sociology" (if this term is permissible) consists of four esoteric clusters, whose members are selected from the standpoint of fitness, and educated by degrees for the various tasks they are destined to perform. These clusters or societies are: —

The hunters, Shya-yak in Queres. They are fast dying out, however, and have almost disappeared in several villages.

The warriors, called Uak-anyi, and, when they go on the war-path, Na-uanyi Ko-sa.

The medicine-men, Tshay-anyi.

The Ya-ya, or mothers.

Each of these clusters divides into a number of branches. Every one of the first named three esoteric groups cultivates a certain side of life, and cultivates it with the specifically Indian idea, that the spiritual and physical worlds are intimately linked, that the former rules the latter in its smallest details, that inanimate objects have souls, or obtain them so

soon as they become subservient to mankind, or connected with it, and that all these spiritual individualities scattered throughout the visible world require careful attention on the part of man in order to become useful to him, or at least to prevent them from proving hurtful or dangerous. This doctrine may be illustrated as follows. Every Indian is of course a hunter by nature, inclination, and for subsistence, but only those who own the charms and spells, the "medicine" (in Indian speech) wherewith to subdue and overpower the spirits of game, — those only are Shya-yak. Every Indian must go to war, but only those who have learned how to cow the soul of the enemy, to lead him astray, and to make himself invulnerable, are Uakanyi. Any Indian, male or female, can heal and cure, but only the Tshayanyi possess the magic remedies and charms which, while propping up the body, are intended to work either on the soul of the patient directly, or on the soul that is attributed to the medicine also.

Such beliefs, stereotyped in a complicated organization, cannot be otherwise than exceedingly old, and their origin must have been a succession of empirical discoveries, around each of which a group of "adepts," or "such as had knowledge," gradually clustered, to perpetuate the discovery and secure it to the tribe forever. At the same time, such an organization cannot be otherwise than very powerful. It represents every branch of life in its relations to the supernatural, for whatever the hunters, the warriors, the medicinemen, cannot reach with their arts, the highest Shamans, mothers, or Yaya, devote their life to secure.

The Yaya are a small group, and as only certain religious functionaries can belong to them it results that their number has a limit which cannot be exceeded. Thus there cannot be, among the Queres, more than six of them. These are:— The Ho-Tshanyi, or principal Cacique.

The Uisht-Yakka and the Shay-ka-tze, his two assistants.

The Hishtanyi-Tshayanyi, the Shkui-Tshayanyi, and the Shikama-Tshayanyi.

The office of the three Caciques is that of penitents. Their duty is to do penance for the people. On every important occasion they are called upon to pray and to fast, sometimes for a day, again for as many as four days and nights. Commonly they are allowed to partake of a meal once in twentyfour hours; again, their nourishment is limited to a large bivalve shell full of corn-meal diluted in water, once a day. On very strong fasts they must remain four days without any kind of food, and also without sleep. The dignity of Cacique is therefore one which nobody expressly covets, for it is painful and exhausting. The common saying is, and it is true, that few caciques last long. The underlying thought of these fasts is, that penance of this sort weakens the body, and correspondingly frees the soul from physical fetters, and brings it nearer to the highest deities, who are purely spiritual beings, and distinct from the fetiches, although there are fetiches intended to represent some of them. Another underlying idea is, that the greater the control which one is able to exercise over his body, the stronger his mind, and the more capable of discerning the will of those who need no material form for displaying their powers. A third, and perhaps the most common thought, is that penance is the sacrifice most agreeable to the gods, since no human being can bring a sacrifice greater than that of his own self.

To become cacique, long education is necessary. He has to undergo a careful training in physical endurance, and, above all, in knowledge of the main arts or artifices peculiar to the higher branches of the three minor esoteric orders. In addition to it, he must know what constitute

the real secrets of his office. What these are, I am unable to say. No cacique, unless he should be very depraved, will reveal these secrets to any but him whom he looks upon as his successor, and perhaps to his assistants. It is to be supposed that these secrets consist of matters essentially unimportant, - a few tricks and sortileges, and maxims embodied in prayers and traditions of historical value, which often take at the present time the form of incantations. The end and object of all these performances are to maintain peace and harmony among the tribe, so that the caciques are, properly speaking, the keepers of the peace. It is often suggested, when any question arises between a pueblo and outsiders, to apply to the caciques for easy settlement of the difficulty, under the impression that a word from them is sufficient to determine the action of the pueblo. It is true that the caciques are also augurs or prophets, - that they consult the gods frequently, and communicate the answers they fancy they have received indirectly to the people. Yet it is futile to address them in any matter of strife and guarrel. The peace-keepers are not allowed even to hear anything calculated to disturb the harmony among their constituents; that is, they can hear of it, but without entering into any discussion thereof. If the announcement is made officially at a general meeting, the three caciques listen, and then retire to watch and pray. Their word of warning is communicated to the tribe afterwards, through channels sometimes outside of the pale of religion.

The caciques therefore are by no means the "monarchs" of the pueblos, as which they are sometimes popularly designated. They exert a great influence without any doubt, but they themselves are under control, and far from independent in their official capacity and position. In the first place, the war captain is their warden; he invests them

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with the dignity, and has the right to punish them in case they are derelict or aggressive. Their selection is based upon fitness, and in this respect the wish of an incumbent often determines the choice of his successor. But not only the war captain, the other Yaya also have their voice in it. These three leading shamans are each the head of a branch of the minor orders. Thus the Hishtanyi is also the head shaman of war; the Shkuy, the chief medicine-man of the hunt; and the Shikama may be considered as the leader of the shamans of medicine. All these offices are for life, - being based upon actual possession of secret arts and "tricks," - or during good behavior. The caciqueship may be - I am not yet positive - hereditary in a certain gens ;, but if this is the case, I hold it to be so only among the Tehuas, and not among the Queres. We hear, in intimate intercourse with Pueblo Indians, of caciques ad interim, until a legitimate one shall be old enough to exercise the functions of his office. This gives color to the assumption of heredity; still, legitimacy in this case results only from a choice expressed by the previous incumbent, in which choice he is in no manner debarred from designating his son as the one to succeed him. The duties of a cacique are so arduous, so trying to the body, that only a strong, or at least a hardy individual, and one trained for the task, can expect to fulfil them and survive any length of time. Besides, he must know a good deal, and a child must therefore be educated for the purpose. This education is conducted by the substitute, by the assistants, by the other Yaya, and by the war captain. If, however, the so called "legitimate" cacique refuses to accept the position, he is free to do it, and a new choice is made; almost always the Hishtanyi-Tshayanyi is selected, because of his greater knowledge of the essential "secrets."

The cacique receives a compensation for his services. In every pueblo in former times, and often to-day, a tract of land is set apart which the community tills, attending to it before all other tracts in spring, and housing its crops first in autumn. The caciques are also exempt from work on the communal enterprises, like the irrigation ditches, hunts, and the like. Of tribute I have not heard, unless the rabbit skins gathered at the frequent rabbit hunts, — a festival-rite of great rejoicing for the whole village, — which are turned over to the great penitents, should be regarded in that light, about which, however, I am not certain.

But still the caciques have the faculty of creating for themselves a sort of income. Their fasting and intercession are not merely applied for in favor of the "general public." Single individuals or families can and do ask their intercession in case of illness or other woes. Such services are not gratuituously rendered; the official faster must be paid for them, and many are the jars full of grain, the pieces of buckskin, the shell beads and turquoises, that wander into the possession of the penitent for his treasured work. This little "outside business" allows the cacique and his family to lead a comparatively easy life, although, on the other hand, he has a duty to perform which may become onerous, although less so now than in former times. Any stranger arriving at a pueblo may, if he chooses, apply to the cacique for hospitality. Whether he be a Pueblo Indian, or a savage, or a white man, the cacique must receive, feed, and lodge him. This old custom is falling into disuse; but in theory it subsists, and the cacique cannot refuse to receive the applicant, provided he has no relatives in the village. Another duty of the caciques is, in case of war on a large scale, to attend to the wounded. They are the surgeons and nurses.

This is, so far as I have been able to discover, the rôle of the caciques among the Queres, at least in theory, as the Indian understands it. In reality, there are modifications, often local, or temporary. Thus the three caciques, or main cacique and assistants, are not found in every village. To my knowledge, the set is full only at San Felipe. At Cochiti, until two years ago, there was but a cacique *ad interim.* Now the "legitimate" chief penitent has succeeded, but there is no trace of the two assistants.

The caciques constitute, together with the three great shamans, the heart and centre of religious life of the tribe. The former have no vote in the tribal council, but the latter occupy in that body a prominent position. The Hishtanyi opens the council with a speech, and only after his prayer is the real cause of the meeting revealed to the assembly; thereupon the caciques retire. Still this archaic form is not always rigorously observed, and I have been present at councils where the cacique remained and gave his opinion like the other members.

The Hishtanyi Tshayanyi is the great medicine-man of war. He holds the Yerba del Manso, the pulverized leaves and stems of which give strength to the brave and strike the enemy's heart with terror. He paints the warriors with powder of manganese ore, in order to render their appearance frightful and their bodies invulnerable in a measure. He also has the "medicine" that preserves peace among the people and makes them "rich." He has a number of other similar charms, too numerous to mention here, in which the Indian implicitly believes. He is also the head of a particular branch of medicine-men, and keeps the time-honored idols which, at a certain season of the year, are taken from their sheaths, and exposed in the inner private room of his abode, there to work beneficial results

for the people. The Hishtanyi also must fast and do penance, but only for certain objects, not as the caciques, for general interests. He is a powerful doctor, and may derive considerable income from his cures.

The Shkuy is more properly the charmer of game, the magician of the hunt. As such, his importance has rather decreased since the great communal hunts are no longer practised on a large scale, the rabbit hunt excepted. The duties of the Shikama are those of a medicine-man of note. But in case of extreme need, any of these may take a prominent position without interfering with the domain of the others. All of them may appear as oracles, although the caciques are of course most listened to. The difference consists in that the caciques are the regular intercessors for the people at large, whose chief duty it is to sacrifice themselves for the general good, while the other three have special fields assigned them in which to promote, through sacrifice, prayer, and incantation, the common welfare.

The influence of such a powerful organization on the social and civil, not to say political, life of the people, is very evident. Through the esoteric societies, creed, belief, and fear pervade every household, weigh down on every clan. Through the oracular utterances of the Yayas, the popular mind is guided, and moves more or less according to the decisions of those higher powers whom the Indian reveres and is in dread of. Whatever the council decides, whatever the executive officers determine, is always subject to amendments from the upper world. Not a single important step can be taken without consulting first the invisible ones. Therefore the election of administrative and executive officers is not really performed by the delegates of the people. It is the caciques who choose the governors, and propound their choice to the people for

ratification. And rare are the occasions when the people do not accept blindly the choice of the chief penitents. The annual elections are a Spanish innovation, to which the Pueblos have submitted without yielding an iota of the original principle of selection.

If the higher offices of the religious organization were hereditary, there would long ago have been danger of the formation of castes and a change in the mode of government, a theocracy first, a military and religious despotism next. The separation of the family into two halves by exogamous marriage excluded all thought of heredity and dynasty. The organization of the esoteric clusters themselves, their number, and the numbers of those who constituted them, maintained the democratic principle in their midst, and rendered it impossible for one or a few to obtain more than a temporary and transient power. In fact, individuals have no power beyond that of the office which they fill, and only so long as they perform their duties faithfully. There is a check on every body and every dignity; not a barrier artificially raised through legislative enactment, but one unconsciously formed by the multiplicity of duties and faculties of the various religious functionaries. All these hang together, and yet they are on their guard against one another. I have already observed that the cacique can be punished in case of misdemeanor; he can also be removed if the tribe so directs in general council, or if the war captain or the leading shamans dispose. A degraded cacique seldom, if ever, lives long. There is too much danger in suffering him who is in possession of the most precious arts and knowledge to live while under a cloud. Shamans who dispose of idols or sell secrets are also got rid of in a similar manner. It is the war captain who, officially at least, attends to such executions. But nobody except

a few initiated ones ever knows more than that the person has simply "died."¹

Among the Queres the war captain occupies a singular position. He is annually selected by the cacique, yet he controls the latter to a certain extent. It may be said that he has him "in charge." This arises out of an old belief which makes of the war captain the direct representative upon earth of the divinity called Maseua, one of their chief gods. Therefore the war captain's lieutenant is called Ovoyä-uä, after Maseua's brother, another divinity of the Queres. Although the Pueblos have been at peace ever since the Navajos were repressed, war still remains theoretically their chief duty and occupation, and the war organization is kept up carefully. By the side of the captain and his assistant there stands the Hishtanyi Tshayanyi as spiritual adviser and magic aid. Whenever a campaign is organized, he goes with the force, or sends one of his own cluster of wizards. The war captain must take good care of this important personage, and should any harm befall the shaman in an engagement, the day would be lost for his people.

The relative positions, rights, and prerogatives of the governor and war captain are rather clearly defined. The former is really an administrative officer, the latter a military leader and "sheriff." In matters where the council has pronounced its sentence, the governor commands the captain; but in religious matters and matters of war, the war captain is superior to the former. That the captain's office is also a religious one is shown by the fact that, while

¹ Early in this year, 1889, an instance of deposition occurred, in which I succeeded, however, in averting the final catastrophe. It is the second time within nine years that I have been called upon to thwart a secret execution. The number of people who disappear among the Pueblos for alleged offences, or for misdemeanor, is much greater than would be supposed.

any of the great shamans who pertain to the Yayas can become governor, the war captain is never, to my knowledge, chosen from their number.

Among the Queres, the distinction is often made between "Principales," and "Principales Grandes." The former are always men who have once occupied the post of governor or of war captain. The latter are the Yaya and two other religious officers, less in power and rank, but still of considerable influence. These officers are the Ko-share Na-ua, or leader of an esoteric cluster belonging to the medicinemen, intermediate between them and the Hishtanyi Tshayanyi, and called the Kö-sha-re, and the Cui-ra-na Naua, or leader of the Cui-ra-na.

The Koshare are well known to all who, in New Mexico, have witnessed the strange spectacle of Pueblo Indian dances. They appear in many of these under the form of hideous, often obscene clowns or jesters, and they endeavor to provoke merriment by performances which deserve decided reprobation. This is, however, but one side of their duties. Their principal task consists in the furthering of growing fruit, by urging it on to maturity through prayers and incantations. The Cuirana have similar duties, but their work begins in spring, and the sprouting of plants is in their charge. The Koshare are summer people, the Cuirana winter men. This division is a very ancient one, - so ancient that its origin is reported as having coincided with the first appearance of the Pueblo Indians upon this earth. Both these groups belong to the medicine-men (Tshayanyi) also, but they are yet in a manner distinct, since, while attending to the art of healing and curing, they also make themselves useful in matters of greater moment to the general welfare. Therefore their leaders, or Naua, are counted among the great chiefs (principales grandes). We see that this term,

which we often meet with among other tribes, has nothing to do with heredity of caste or office. None of the dignities here mentioned are in the slightest manner hereditary; the son may succeed to the father through selection on account of personal fitness, but he has no birthright to the office. That the Koshare, for instance, through their connection with erotic features of life, can under given circumstances exercise a great influence, is plain; they may momentarily even outweigh the preponderance of the other Yaya, not excluding the caciques, but they also find their check as soon as their influence threatens to become excessive. The Cuirana are less prominent, as the sprouting of plants has not so many analogies in the life of mankind as the ripening of fruit; they are not obscene in their displays, and have less influence on the public life of the tribe.

The religous organization thus sketched in its outlines (for to enter into systematic detail would require much greater space) rests on beliefs and creeds as detailed and systematized as the organization itself. These beliefs have been gradually evolved, and the bulk of them may be said to have resulted from the formation of the esoteric groups, who, clustering around discoveries of apparent practical importance, and making of such discoveries a profound secret, finally, in the course of many centuries, lost sight of the physical facts. With oblivion, mystery set in, the discovery became a miracle, the miracle a god. Polytheism grew out of esoterism. Succession with the "knowing ones" being through selection and education, and not by birth, the esoteric clusters recruited themselves everywhere, and the beliefs grew common to all, whereas the means to make these beliefs practically useful remained in possession of an everchanging minority. Hence the fundamental creed of the Pueblo Indian is the same for all, but the details and the rituals are known only in sections, so to say, the Yaya alone holding the *résumé* of the whole.

The foundation of belief is strongly materialistic. No origin is thought of without the idea of sexual division being associated with it. Wherever we find traces of an omnipotent God, it is a reminiscence of Christianity, as, for instance, the holder of the paths of our lives among the Zuñis. The primitive Pueblo creed is very much like that of the Navajos, of which Dr. Washington Mathews excellently says: "It is a difficult task to determine which one of their gods is the most potent. Religion with them, as with many other peoples, reflects their own social conditions. Their government is a strict democracy. Chiefs are but elders, men of temporary and ill-defined influence, whom the youngest men in the tribe may contradict and defy. There is no highest chief of the tribe. Hence their gods, as their men, stand on a level of equality."¹ This applies equally well to the Pueblos.

Among the Queres, Pa-yat Ya-ma, the Sun-Father, and San-at Yaya, the Moon-Mother, are apparently the most prominent deities. It is not the sun which the Indian reveres, it is the spiritual being residing on or in it. That being is thought to be a male. His consort resides in the moon, and is called therefore the Moon-Mother. But I have not been able to detect, as yet, any myth touching the creation of the world. Creation myths begin with the origin of the human species, and the earth is supposed to have existed already. It is different with the sun. It seems that this luminary was, according to the Pueblo Indian, made only after man had risen out of the bowels of the earth to the earth's surface; for when the children of men came out upon the surface, it was dark,

¹ Some Deities and Demons of the Navajos, American Naturalist, October, 1886, p. 844.

cold, and moist. Light came to them only when they proceeded southward. With light came heat.

The conception of the Sun-Father at the present time seems to be that of a deity in rather passive enjoyment of the fruits of his labors. The Moon-Mother, however, is still in daily activity. Every household has an emblem of her, or rather a symbol of the thoughts of man rising to her in prayer. This is the so called Yaya or mother, a bunch of snow-white down, elegant in shape and quite tasteful. It would seem as if the Moon-Mother were like an intercessor, whom mankind implores to pray for them. But it is to be noted also, that most of the prayers are addressed, not to one divinity alone, but to several, — another evidence of the democratic nature of Indian mythology, reflecting the nature of Indian sociological conceptions.

Almost more prominent than the two deities just named are two personages whose names in Queres are respectively Ma-se-ua and Oyo-yä-uä, two brothers, probably children of the sun and moon gods. I have already stated that they are personified in the war captain and his lieutenant. They are frequently addressed, and one of the chief public dances of the Queres, the A-yash Tyu-cotz, is mainly directed to them now, whereas in former times it was rather in honor of the Sun-Father himself. The home of these two mythological parties is variously stated as the Sierra de Sandia, opposite Albuquerque, and the mountains north of Cochiti. It is believed that their meeting in the clouds causes the rain to fall, so that these divinities might pass for the gods of the winds were it not that the Shi-ua-na, or cloud spirits, distinctly play the part of bringers of rain or fine weather. It is very difficult to unravel the complicated and contradictory mass of statements and stories concerning these two individualities. Certain it seems, however, that they are, among

the Queres, the equivalents of Mai-tza La-ima and A-hu-iu-ta, the divine and powerful twins of Zuñi mythology. Of pictorial representations of the two gods among the Queres I have seen but one, a small figurine of Ma-se-ua. It represents a man in squatting posture.

I am unable to give the gradations through which the higher idols, or gods, merge into the numberless fetiches. Names like Sen-kuit-ye, and others, have been given to me, but I cannot vouch how far these are distinct personages, or synonyms for divinities already named. The Indian often gives two or three or more titles to his idols, according to the function he requires them to perform. Thus Pa-yatya-ma is also merely designated by the name of Osh-atsh, or the sun. Sa-nat Yaya is not unfrequently called simply Ta-Uatsh, the moon. In addition to the obstacles thrown in the way of the student by the reticence of the Indian on religious subjects, (which reticence is much greater among the Rio Grande Pueblos than among the more isolated tribes farther west,) the number of names given to one and the same deity, and the different names varying sometimes between one village of the same language and another, increase the difficulty of reaching absolutely clear conceptions. Only long residence with the Indians, and initiation into the highest of the esoteric clusters, can overcome this difficulty. How long, painful, and intricate it is to achieve initiation, the labors of Mr. Cushing will establish.

The worship of the Pueblos cannot be termed element worship. Mr. Cushing has admirably described that of the Zuñis: —

"The A-shi-wi, or Zuñis, suppose the sun, moon, and stars, the sky, earth, and sea, in all their phenomena and elements, and all inanimate objects, as well as plants, animals, and men, to belong to one great system of all-conscious and inter-

related life, in which the degrees of relationship seem to be determined largely, if not wholly, by the degrees of resemblance. In this system of life the starting point is man, the most finished, yet the lowest organism, --- actually the lowest, because most dependent and least mysterious. In just as far as an organism, actual or imaginary, resembles his, is it believed to be related to him, and correspondingly mortal. In just as far as it is mysterious is it considered removed from him, further advanced, powerful and immortal. It thus happens that the animals, because alike mortal and endowed with similar physical functions and organs, are considered more nearly related to man than are the gods; more nearly related to the gods than is man, because more mysterious, and characterized by specific instincts and powers which man does not of himself possess. Again, the elements and phenomena of nature, because more mysterious, powerful, and immortal, seem more closely related to the higher gods than are the animals; more closely related to the animals than are the higher gods, because their manifestations often resemble the operations of the former."¹

This is true also with the Queres, and exemplified in the plainest manner through their symbolism. The symbols of the Queres are the same as those of the Zuñis. The forked line not only indicates lightning, but also the serpent with forked tongue. The water has several symbols according to the form in which it appears. As cloudy vapor, it assumes the form of a double staircase, imitating the cumulus clouds which rise from the earth to the sky, or a group of arches, emitting rain streaks and lightning darts. As streams, or water resting or flowing on the surface, it is represented by the snake again, the snake with horns and without the rattle, the Tzitz-Shruy, or water-serpent, distinct from Shruy, the

¹ Zuñi Fetiches, Second Annual Report of the Bureau of Ethnology, p. 9.

rattlesnake. The Tzitz-Shruy is the spirit of the watery element, the horn is its head-dress or symbol of spiritual power. The entire symbolism of the Queres is derived very plainly from natural phenomena. The spiral, double or simple, in curves or angular lines, stands for the whirlwind; the cross, for the stars in general, and the white cross and red cross for the morning and evening stars respectively; the tracks of the pheasant (called road-runner), arranged in a circle, form a magic ring around the object or person they surround; and, as well as at Zuñi, certain animals symbolize certain regions or cardinal points. There are local shades in this symbolism that constitute differences: thus, the colors attributed to the six sacramental regions by the Queres are not the same as those attributed by the Tehuas or the Zuñis.

It is to Mr. Cushing that we owe our knowledge of this division of the world into six quarters, designated by six regions, which discovery is one of the most important recent achievements in American ethnology. The north (Titya-me in Queres), the south (Cuame), the west (Pun-ame), the east (Han-ame), the region above (Ti-nyi), and the region below (Chi-na), - these are gathered together in the conception of the whole. In the country of Zuñi, the four quarters or cardinal points are designated as so many mountains. This is a purely geographical thought, derived from the nature of the country. From the Zuñi basin, four prominent heights indeed attract the gaze of man. Among the Queres, it would require special study of each village to determine how far such striking objects have been used to designate the four sacramental regions. It is likely to be the case at Acoma, but the Rio Grande Queres are not surrounded by isolated peaks to an extent to influence myths. It is well to observe here, that "above" is distinct from the sky, "below" from the earth. The latter, "Ha-a-tze," is also

counted as a deity among the Queres, as well as among the Tehuas.

Fetichism formerly reached, among the Queres, a degree of development analogous to that which the Zuñis display in their creed, but the constant contact with the Spaniards, and especially with the missionaries, has caused a gradual retrenchment. Fetiches are not so common as they were, and not openly displayed; but they are the same, in the main, as those of Zuñi. I have seen the panther (Mo-katsh), the bear (Ko-ha-yo), the eagle (Tya-me), and the wolf (Ka-kan). In addition to these, I have heard of the lynx (Tia-tui), and on sacrificial bowls have seen the dragon-fly, the frog, the fish, and the tadpole. Of these four "intercessors of rain," I shall speak more fully when I treat of the Tehuas, from whom I obtained more definite information in regard to mythology and symbolism in general. Notwithstanding a residence of over one year among the Queres, I never succeeded in penetrating their secrets more than partially. The village which for this purpose would be the most important of all, Santo Domingo, has closed its doors to me in consequence of one of those errors which the novice in ethnology is liable to commit, and which I committed at the very outset. To gain the confidence of the Indian, good will, unsophisticated sympathy, and the desire to learn are often the least efficacious means. Neither is money always successful. To buy information is, on the whole, not a good plan. Only the naturally corrupt among members of esoteric clusters will speak for the sake of money. Others may express themselves, but it is doubtful if what they say is true. By the majority, a tender of money is regarded as highly suspicious, and as a confession of weakness on the part of him who is so eager to penetrate the sacred interior of the Indian as to part with his wealth for that purpose. Personal affection

and confidence, long residence, and evidences of absolute disinterestedness, are the only means of securing a hold on the Indian, — a hold which sometimes even initiation into the secret societies does not afford. For among these 'esoteric clusters the failings inherent to man, be he Indian or Caucasian or African, cannot be eliminated. No society or kind of association is able to exclude egotism and suspicion. The adept in one branch is looked upon with distrust by the adept in another; each is jealous of the other's knowledge, arts, and tricks. Only the Yaya are, in a measure, above this; and yet what jealousy between the caciques and the shamans, what rivalry between the Yaya and the war captains! The same petty intrigues move the childish circle of Indian society that disturb civilized society and government, and they are even more prominent in the former, since it is much more limited in scope, and since every individual becomes more important in consequence. I say all this to give a basis upon which to rest my description of Pueblo life. At the same time, I wish to account for the vague manner in which I have to speak of many details. Subsequent students will do better, but they should be acquainted with the difficulties staring them in the face, in order to select a way by which these difficulties may be avoided.

The cause of this reticence is mostly a natural trait of character, resulting from isolation and from the division of the family, brought about by the exogamous customs' of marriage. Or, rather, it is due to the imperfect constitution of the family. Where man and wife are separated from each other by an insuperable barrier, man and man are still less inclined to be frank. Absolute frankness is a thing inconceivable to the Indian. In addition to this, secrecy is imposed by the rules of the orders. And, lastly, though its effect has not been so potent as commonly imagined,

the prohibition of a number of rites under the Spanish administration has contributed to the reticence of the Indian. Still, it was not fear so much as a desire to separate from each other what did not properly belong together that caused the Indian to shroud his rites in the depths of the estufa, or in the remote corners of the gorge and forest. He shrinks, as everybody will, from suffering uninitiated ones to see or hear what is specially sacred to him. This needs no imaginary previous persecution to bring it about. It is true that many of his dances have been strongly (and justly) condemned as shockingly obscene; many of his beliefs assailed, and with justice, as being contrary to the laws of humanity, let alone those of Christianity. But this has not been so much the cause of his secrecy as the education he has received for untold centuries, and which enjoins the husband to conceal from his wife matters of his own clan, brother from brother the secrets of their relative esoteric groups. Unconsciously, the result of this strange division, so multiple, so various, and so strict, has become the best example of the workings of the dreaded maxim, Divide et impera. Only the dividing principle works equally towards all; it subjects the whole to an inflexible despotism of thought.

The Indian, with all his democratic institutions, in society as in religion, nevertheless is the merest, most abject slave. His life is the best exemplification of what a many-headed tyranny can achieve. Every step is controlled by religious fear. He fancies himself surrounded by numberless supernatural agencies, and the more formulas he has against evil, the more magic he knows for producing good to himself, the safer, not the happier, he feels. There is no thought on his part of retribution in the future, that is, according to his aboriginal belief. He firmly believes in immortality

ARCHÆOLOGICAL INSTITUTE.

of the soul; but, as Mr. Cushing very judiciously remarks, only after death does man become a finished being, therefore a perfect one; consequently there is no distinct place for the good and the bad after death, except in as far as Christian teachings have tinged his original creed. He believes in hell, but as a Christian institution, and his soul after death, and after having performed a journey of four days and nights, goes to rest in the wonderful "estufa" at the bottom of the lagune of Shi-pap-u in the distant northern regions of Colorado, there to enjoy eternal bliss in the fold of "our mother" (Sa Naya). The evil ones go to the same place, or rather, according to the degree of importance attributed to Christian religion, they either go beneath to a nondescript locality called "el Infierno," or they wander about adrift as witches or sorcerers. His conceptions of what evil spirits imply, goes not beyond illegitimate witchcraft. As he fancies that the spirits of the good, of his own dead relatives, for instance, return to his vicinity floating on the wind, and he holds himself compelled to feed them by scattering sacred meal or pouring it on the water; so he is persuaded that evil spirits float about him, and hold communication with the hearts of living persons that are given to black magic. As I have already remarked, his secrets, his incantations, are practices which, having had once some empirical basis, have become distorted in the lapse of time to tricks and juggleries. Many of his most powerful "medicines" are really of no other value than as specimens of gross superstition. So it is with his witchcraft. Plumes of the owl, of the crow, of the woodpecker, tied to bundles and fastened sometimes to splinters of obsidian, - human excrements, black corn, bones, fungi, wreaths of yucca, --- are among the most dreaded implements of evil magic. And the Indian believes in their

INVESTIGATIONS IN THE SOUTHWEST. 297

efficacy for doing harm — provided the necessary incantations accompany their handling — as much as he believes in the power of the panther fetich to favor the chase, or of the frog fetich to provide timely rain, and in the power of an animal dance to cast a spell over game, causing it to fall an easy prey to mankind. But for all this elaborate system of sorcery the Indian knows of no spiritual head. Of course, at present, in conversation with our own race, the Devil (*cl Diablo*) is made answerable; but in his innermost thoughts the Indian has no clear idea of what a demon or a fiend is. The word Shu-at-yam means fiend, but in the plural, and no chief incarnation of the evil principle.¹

Frequent sacrifices are offered in the pueblos, although they are seldom visible. In general, the traveller or tourist will hardly see any of these practices among the Queres. They will, with the strongest emphasis, deny the fundamental portions of their beliefs to a stranger. Nevertheless, they perform sacrifice almost every day, but in secret. The usual form is strewing yellow corn-meal, first to the north, then to the west, to the south, to the east, throwing a pinch upwards, then directly downwards, and finally placing a pinch in the centre as symbolic of the whole.

Prayer-sticks or prayer-plumes are still much in use. The fundamental idea which underlies the use of these painted sticks with plumes attached to them seems to be as follows. The feather, plume, or down floats in the air, even in a

¹ Shu-at-yam means any kind of bad spirit, be it that of a living man, or a demon, or a spectre that works ill to the human race. I have suspected, with what degree of probability I cannot surmise, that it is a gradual corruption, in course of time, of the word "Sátanas," the Spanish for Satan or Devil. I have not been able to find in the older creed of the Queres any trace of a belief in an evil power. This, of course, does not prove its non-existence as yet. But as to the fact that there is no special place assigned to the bad ones after death, beyond their flitting about in the air as witches or sorcerers, there is no doubt; and even these have access to the place of bliss at the bottom of the lagune of Shi-pap-u! still atmosphere, and is therefore to the Indian the emblem of thought. A prayer is a thought, and often a suppressed sigh only, consequently the plume is above all the emblem of the prayer. Were it left to float at will, it might wander astray; therefore it is tied to the spot where it is uttered by being attached to a stick. These are only the rudiments of the prayer-plume system. Innumerable details complicate it, - details that have arisen in course of time. The colors with which the sticks are decorated are symbolical, and bear distinct relation to the colors of the cardinal points, etc. The Indian deposits his prayer-plume in shrines, or before rude painted altars in the estufas, as an evidence of worship, as an intercession, or as a votive offering, as the case may be. He still has another, a simpler way. Going out of his village or coming into it, he breaks off a twig, or a blade of grass, or some dry branch, and places it on the ground, and in order to secure it lays a stone over it. Where one has placed his offering, others are sure to add theirs in course of time, and this accounts for the stone heaps that are often seen around the pueblos.

There is another kind of sacrifice and prayer combined, of incantation linked with worship, — namely, the dances, the religious character of which has seldom been recognized. An Indian dance, a Pueblo dance, is not a diversion, like a dance among our own race; it is a sacrifice, an invocation, an incantation, a religious performance. The number of these dances is very great, but the visitor sees commonly but a single one, — the "Baile de la Tablita," which is most often performed on church festivals,¹ though it is fundamentally a

¹ A good representation of the appearance of the dancers is found in Captain Bourke's book on the Moquis, wherein he depicts a Santo Domingo (Queres) Indian in full costume. I refer to this work, as well as to the Bureau of Ethnology Reports, for pictorial representations of the paraphernalia.

practice of idolatry. The head-dress of the females is especially suggestive. Its triple pyramids, indented so as to present the appearance of a two-sloped staircase, symbolize the clouds. The sun, the moon, the rainbow, are painted on the boards from which the current term of Baile de la Tablita is derived. The paint on the naked chests of the men is symbolical; the twigs of "Pino Real," which their hands wave during the dance, are sacred; in short, it is a remnant of paganism, tolerated and softened to the extent of making its appearance not too directly offensive. But many, nay, the majority, of the other dances of the Pueblos are nothing but incantations, -- displays of sorcery. Thus the animal dances, the Tyame-ka-ash (eagle dance), the Moshatsh-kaash (buffalo dance), and others, are only so many reminiscences of old practices, when the spiritual power attributed to the eagle had to be invoked for the benefit of the tribe, or the spirit of the buffalo subdued previous to an expedition to the eastern plains, for the purpose of securing the meat and hides of the great quadruped. Such dances, like that of the deer, mountain sheep, and elk, for instance, were also performed for the sake of obtaining rain, or sunshine, or relief from woes; and for these last objects they are still practised, though communal hunts are in disuse, for, according as the animal imitated, and, through its representatives, subjected to a charm, stood in a certain apparent relation to the natural phenomenon dreaded or desired, he is either subdued through incantation, or appealed to as intercessor.

Among the more private dances of the Pueblos, there are several from which the reproach of gross obscenity cannot be withheld. These are also highly symbolical, and they furnish a deep insight into the real conceptions forming the bulk of what are called the religious ideas of the Indians. It cannot be otherwise where duality in sex is regarded as

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* essential to the idea of creation. There are other dances that are chaste, that is, they afford no room for offensive displays. But all are practices of magical import, sometimes performed with but an indistinct recollection of their former signification, frequently however with a definite purpose. Formerly, the hope of injuring the whites through this sort of out-door sorcery was indulged in; to-day, if any such hope still lurks, it is well concealed, and the dance is performed in secret. But generally it is done in the belief that the rite will benefit the Indian, that it is a sort of medicine adapted to the Indian alone, and whose blessings the white man is not entitled to or capable of being benefited by.

Two dances are falling gradually into disuse, the war dance and the scalp dance. Still I have seen the latter, or Ahtzeta-tanyi, performed at Cochiti. The Umpa, or man-killers, appeared with their badges, of which I have spoken as resembling those formerly worn by the Opatas in Sonora. Since war is no longer a necessity, or, rather, since the Indian is restrained from making war at his pleasure, - a restraint originally imposed by the Spaniards and now resulting naturally from the increase of foreign population, - the man-killer is rare. In place of him, the bear or puma slayers appear in the scalp dance with the same honors. This shows in what degree of estimation these beasts of prey are held by the Pueblos. Since life is regarded as having its seat in the blood, meat is looked upon as the chief life and strength giving aliment for man, and the large carnivorous beasts stand nearest to him and on a footing of equality with him, on that score.

Secret dances or rites are frequently performed in the estufa. Not always in the official estufas; for certain occasions, any larger room may be turned into a sacred place. For the occasion only the estufa is sacred, and is specially

decorated with symbolical paintings, and so long as the occasion lasts the place is respected. At Jemez, the decorations have remained permanent, elsewhere they are obliterated very soon after a festival is over. In this respect the estufa resembles the medicine lodge of other tribes. Between festivals it serves as an occasional meeting place, although the assemblies or councils are held at random in any conveniently large room. Among the Queres of the Rio Grande valley, the two estufas are named after two of the most prominent clans : the Turquoise, Shyu-amo, and the Calabash, or Gourd, Tanyi. On certain dances, the clans assort themselves respectively in these two meeting places. This appears like a rudiment of the Phratries, or like survivals of them. Recently, that is, since the beginning of this century, each of these estufas seems to represent also a certain tendency, or what might be called a party. Usually the people of Tanyi represent the progressive, the Shyu-amo the conservative element. Whether this division is accidental, or whether some religious conception underlies it, I am unable to say.

Even games rest on some basis connected with ancient creed and belief. The spring is the season when they are most played. When foot-races are held, the tribe divides into two parties. Story-telling is indulged in only during winter; it is almost impossible to get a Pueblo Indian to relate folk-tales at any other season. On a journey he may become talkative, but in the village the instances are rare when an Indian opens his mouth during summer to tell a tale of old. They have a popular saying, that as soon as the rattlesnake crawls out of his hole in spring it is dangerous to tell stories, lest he who speaks untruth be bitten.

In short, the daily life of the Pueblo Indian is a succession of performances that may be called religious, inasmuch as

they are intended to keep him on good terms with the supernatural world. He craves the good will of that world for purposes of material welfare, not for his moral good, except so far as the latter is visibly conducive to prosperity. Therefore his existence is, in reality, a miserable one, in constant dread and fear of things and forces around him, whose immediate connection with spiritual powers he exaggerates or misconceives.

What I have said of the Queres applies in the main to the Tehuas also. Having had special opportunities of becoming intimate with the latter, I may here add some details concerning them.

In customs and manner of living, there is no perceptible difference between the Tehuas and the Queres. But there is this difference in costume, that, while the Queres only tie their back hair in a short queue, most (not all) of the Tehuas braid the side-locks with worsted or fur of some kind. Otherwise the two tribes dress alike, and display the same fondness for blending their original costume with articles of modern wear.

The religious organization shows some difference. Thus, in place of the three caciques, the Tehuas have in most of their villages but two, one of whom is in service every year from the vernal to the autumnal equinox, the other from autumn till spring. The first is therefore the summer cacique, called Pay-oj-ké, the other the winter cacique, called Oyi-ké. Both are chosen for life or during good behavior; the former from the summer people, the latter from the winter people. While on the whole equal in power, the summer cacique is also called Po-a-tuyo, or cacique *par excellence*, and he enjoys a certain pre-eminence over his colleague. This pre-eminence is explained as follows by the Tehuas.

Their ancestors, they say, came out upon the surface of the earth at a place called Ci-bo-be, now a lagune in Southern Colorado; thence they travelled south. On their slow migration they were guided by the two caciques, while the war captains stayed on the flanks to protect the tribe. The farther they proceeded, the deeper became the mud in the valley in which they were travelling, and at last they grew tired and refused to go farther, notwithstanding the pranks of the Koshare whom the gods had sent along to keep the people in good spirits on the march. So the Pay-oj-ké performed an incantation for the benefit of the people; but the ground only grew softer, and the mire deeper, for his province was that of summer warmth and moisture. Again he tried, and matters became worse. Then the Oyi-ké set to work and used a strong charm, and the following morning a slight frost had thrown a thin crust over the soil. This encouraged him to increase the force of the "medicine," and in the course of a few days the earth was frozen hard, so that the people could proceed on their journey. But the cold was such that no vegetable or animal food was obtainable, and the Tehuas hungered and thirsted, for the water also was frozen. They therefore again applied to the summer cacique for relief, who dispelled the charms of his colleague and caused a thaw. Thereupon strife arose, and the tribe divided into two factions, one of which followed the Oyi-ké to the great eastern plains, and subsisted upon the buffalo, while the others, guided by the Pay-oj ké, came into the Rio Grande valley, where they built pueblos, and, after numberless vicissitudes, were rejoined by their brethren, who had become tired of a roaming life and were glad to enjoy the benefits which agricultural pursuits, favored by the arts of the summer cacique, offered to them. Since that time the two have alternated in power annually; but

the Pay-oj-ké is the superior in some respects, for he undid once what the winter cacique had done, and furthermore it is during his term that all plants that feed man grow, and the game animals become fat for man to subsist upon their flesh.

It is in consequence of this old tradition or belief that each well regulated Tehua village is divided into the summer people, or Pay-oj-ké, and the winter people, or Oyi-ké. If either of the caciques dies, there is from one to two years' mourning for him, then his successor is chosen with the assistance of the surviving colleague, — or rather invested, for the selection has usually been made during the lifetime of the deceased incumbent. At Santa Clara it is the chief medicine-man of the hunt who has control of the election in the case of the summer cacique; and if at the end of the year of mourning he refuses to confirm the new officer, the latter is rejected. I have some reasons for believing that the shaman of war has the same privilege in the case of the winter cacique, but am not yet positive of the fact.

Whereas among the Queres the three caciques proclaim the selection of the executive officers of the pueblo, among the Tehuas proceedings are different. The annual appointment of these functionaries occurring in winter since the royal decree of 1620, it is the Oyi-ké who selects the first office, which is that of governor, or Tuyo; the Pay-oj-ké then names the war captain, or A-Kong-ge Tuyo, his colleague, the assistant governor; and so on alternately, until twelve officers are appointed. The choice is then submitted to the people, who are expected to accept it. The tribe might, however, reject it; but such a case is almost unheard of, for they see in the decision of the caciques the hand of "those above," and seldom refuse to bow to it. Still a cacique is not invulnerable, his person is not sacred in the eyes of his people. The judicial functions being vested in other functionaries, the religious heads must bow to these in turn. Not long since at Santa Clara the summer cacique was arrested at the order of the governor, and, as he resisted, severely beaten. Gross violence, however, towards a cacique, is looked upon unfavorably, and the dissensions that have disturbed the tribe for some time past are supposed by many to be a result (or punishment) of this high-handed action. True it is, again, that the cacique thus ill-treated was never regarded as "legitimate," he having been accepted by the people against the will of the Pay-oj-ké, and against the protest of the shaman of hunting.

Together with the two caciques, the Pato-abu, or highest esoteric order, corresponding to the Yaya of the Queres and the Ka-ka of the Zuñis, includes also the Tze-oj-ké, or shaman of war; the Sa-ma-yo Oj-ké, or medicine-man of the hunt, who controls the spirits of wild game; and the Tzi-hui, corresponding to the Shikama of the Queres.

I have lately discovered among the Tehuas the existence of another member of the cluster of "Pato-abu." This member is a woman. Her title is "Sa-jiu," and she wields a great, though strict'y occult power. The Tehuas are not the only Pueblo Indians among whom this office of a female chief exists. Mr. Cushing found it with the Zuñis. It stands in close relation to the now in a measure theoretical division of each village into six quarters, each with its own chiefs, while a seventh division, at whose head is a woman, represents the community as a whole. This division corresponds with the six sacramental regions which compose the Pueblo Indian world, and the fact of a woman being at the head of the last one indicates the

idea of the womb from which the whole creation is thought to have issued.

The Sa-jiu is the mother (figuratively or officially) of the Pato-abu, and therefore one of her titles is also "Pa-to-an." Although personally acquainted with one of the Sa-jiu of the Tehuas, I am far from being informed of the full attributes of her very occult office. One fact, however, has been stated to me, which is at least curious, if not perhaps very important. The woman in question is the keeper, in every village where the office exists, of a greenish liquid called "Frog water," (Ahuela Rana, a corruption of the Spanish,) which the Indians use as an infallible remedy against snake bites. That such a liquid exists cannot be doubted. The Moquis, who yet perform, every two years, the repulsive snake dance, in which live snakes of the most venomous kind are handled with impunity, and without previous extraction of the fangs, keep the same liquid and wash their bodies with it after, and also very probably before going through their disgusting performances with the dangerous reptiles. They are frequently bitten, but the bite proves harmless. What the liquid is, I am unable to tell.

The common belief in New Mexico, that the Pueblo Indians keep, or at least kept until recently, enormous rattlesnakes in their villages, treating them, if not with veneration, at least with particular care, is not unfounded. Gigantic rattlesnakes are killed now and then, — animals of enormous size. One of these, six feet long, was killed on the lower Rio Grande last year. In 1884, a rattlesnake, the body of which I saw myself, was killed at San Juan. It measured over seven feet in length. Tracks of gigantic snakes, or trails rather, have been met often. I saw a fresh one in the mountains west of Santa Fé that indicated a very large serpent. But

the Indians, though generally reticent concerning these facts, have confessed to me that there exists among the Tehuas a special office of "Keeper of the Snake." This office is in near relation with that of the Sa-jiu, and under her quasi control. Until not long ago (and perhaps to-day) eight large rattlesnakes were kept in a house at San Juan alive, very secretly, and it was the Po-a-nyu, or keeper, who had them in charge. When the one that I saw was killed, five years ago, the Indians of the pueblo showed both displeasure and alarm.

It will be very difficult to obtain definite information on this point, unless the snake dance of the Moquis is thoroughly studied, and the ideas underlying it become well understood. The fact of that dance, the impunity, nay, familiarity, with which the most poisonous among the reptiles are handled during its performance, as well as immediately before and after it, show that the tale of enormous rattlesnakes being kept secretly in villages is at least not improbable. Many of the snake stories current in New Mexico are, of course,. as little true as snake stories may be elsewhere, but the discovery of the offices of the Sa-jiu and of the snake-keeper, although the latter may in many localities have dwindled to a mere title, gives ground for supposing that a belief existed, and still in part exists, which causes the Pueblo Indian to look upon the hateful reptile as useful to him from the standpoint of his primitive creed.

By courtesy rather than by right, the leaders of the Koshare and the Cuirana, the Kosa-sendo and the Cuiranasendo, are also included among the Pato-abu. Both clusters possess, among the Tehuas, attributes similar to those held by them among the Queres. It is reported by tradition, that the Koshare came out of the cave or lagune at Cibobe as a special creation, made to lighten the "hearts of the

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people" through their jests and jokes, and thus to render them fit for the long and painful journey on which they were to proceed. The Koshare are for the summer people, and the Cuirana for the winter people. The ritual dress of both is nearly the same as among the Queres, and, as with these, the Koshare are coarse, sometimes very obscene, clowns in many public dances.

The esoteric group of the hunters, or the Ping-pang, is fast disappearing among the Tehuas.

The warriors, or Te-tuyo, are still represented in force.

The medicine-men, or Uo-kanyi, flourish in numbers, but for those among them who more particularly perform jugglery tricks and sortileges, the rather singular name of Chu-gé is used. It is not always sure that such appellatives are of genuine Pueblo origin. Many terms have of late been borrowed by the Tehuas from their roaming neighbors, the Yutas, Apaches, and Navajos.

The Tehuas call the sun T'han, and the moon Po; and their principal deities bear the names of T'han Sendo, sunfather, and P'ho Quio, or moon-woman. I have never seen representations of them, although they are said to exist. A powerful deity is T'anyi Sendo, who, so far as I am able to discern, presides over the movements and distribution of waters in every form. The morning star is the emblem of a god called Tzi-o-ueno Ojua, and the evening star that of another deity, brother of the former, bearing the name of Tzi-tzang Ojua. From my inquiries, and from what some of their leading shamans told me when I showed them the pictorial representations of Maitzalaima and Ahuiuta, the twin gods of Zuñi, I lean to the inference that the two Tehua deities last named correspond to the youthful hero-gods of Zuñi mythology; and, as such, Tzi-tzang Ojua also bears the title of Ojua-Tentu, whereas Tla-na-Ka Tza-ma

is one of the additional names of Tzi-o-ueno Ojua. Under these titles they correspond, respectively, to A-hiu-uta and Mai-tza-la-ima of the Zuñi mythology. There is another pair of Tehua gods which is called To-a-yah, and they are active twice a year, in spring and in fall. Their fetiches are clumsy human forms, made of stone, and painted brown and white, with black faces. At first glance, one might be tempted to take them for rude pictures of Franciscan monks.

Another idol that is worshipped mostly in autumn is called Ke-mang.

All these fetiches are in the special care of the Tzi-hui, who also possesses one of the fetiches of Tzi-o-ueno Ojua, or the morning star. It is of white alabaster, and represents a man in a sitting posture. It resembles somewhat the fetich of Maseua which I obtained among the Queres, and this is perhaps an indication that the Tehua deity may be identical with the Zuñi mythological hero.

These are only a few of the idols which the Tehuas worship in secret. Each of the secret societies and every subdivision of them has its array of divinities, and the leaders of these groups are keepers of their paraphernalia and fetiches. There is no difference in this respect between the Tehuas, Queres, Zuñis, and Jemez, and it is probable that this is true of the other Pueblo groups. My experience has proved that the leaders and chief officers in general hold everything of this kind in trust only, and that they are in no manner allowed to dispose of them, unless with the consent of the society, which consent is hardly to be obtained.

An interesting insight into the beliefs and practices of the Tehuas is obtained by a glimpse of the "medicines" proper, or charms, which the leading shamans have in their possession. I was fortunate enough to be introduced, through the kind assistance of my friend Samuel Eldodt, of San Juan, whose long residence in that village has placed him on a footing of intimacy with some of the wizards, into the arsenal of one of the Pato-abu. Thirteen powerful ingredients were shown to me in the form of powders of plants and minerals. There was a medicine for making the people happy, or rather prosperous, one for causing the tribe to increase, another against lightning strokes, still another against frost, one to make rain, one to avert hail, and so forth. Crystals, flint pieces, and belemnites were carefully kept with these powders as charms or fetiches. The mighty keeper of these magic weapons made good use of them at stated intervals, but he also employed them at particular request, accompanied by suitable remuneration, for cures, or for re-establishing friendships, or harmony in troubled families. Just as this shaman had his store of idols and medicines, so every one of his colleagues is similarly furnished. But I never was able to penetrate the secrets of the others, except in one point.

The Samayo, or shaman of the hunt, opened his heart to me in regard to a deity which belongs to his circle of supernatural protectors, and which at the same time plays a conspicuous part in Pueblo mythology in general. This is the god called Pose-yemo, and also, more properly, Pose-ueve, or the dew of heaven. He is the god around whose figure the story of Montezuma has latterly been woven. The Indian positively stated that the name of Montezuma has been given to Pose-ueve but very lately. Pose-ueve was, like the Mexican Quetzal-cohuatl, a man, an Indian shaman or successful wizard, subsequently deified. He is represented as having dwelt in the now ruined pueblo of Pose-uing-ge, at the hot springs belonging to the Hon. Antonio Joseph, the present Delegate to Congress from New Mexico. The tales of his birth and rise to the

dignity of cacique, the miracles performed by him, and his disappearance in a mysterious manner, are authentic Tehua folk-lore. Pose-ueve is said to have disappeared in wrath at the treatment he received from the inhabitants of the pueblo of Yuge-uing-ge, or Yunque, on the site of which the hamlet of Chamita (a station on the Denver and Rio Grande Railroad) now stands. That he went south is not positively stated, and the remainder of the Montezuma story is a modern addition, which my informant positively rejected. I have had the appearance of Pose-ueve described to me; the Samayo even appears (at the remarkable dance called Te-mbi Jiare) in a dress of buckskin, and with ornaments purporting to be an imitation of those worn by him. I was asked to copy, for my wizard friend, the pictorial representations of Montezuma as contained in Mexican pictographs, and he declared them to have not the slightest resemblance to the appearance ascribed to Pose-ueve by tradition.

The symbols of the Tehuas closely resemble those of the Queres and Zuñis in many points. The division into two main groups — summer and winter people — is expressed under the form of winter and summer symbols for several phenomena. Thus the winter rainbow is white, the summer rainbow tricolored; the summer sun is green, the winter sun yellow. The altar (Cen-te) used in the estufas is green for the summer months, yellow after the autumnal equinox. The clouds, the moon, lightning, and the whirlwind maintain the same hues all the year round. This brings me to speak of the symbolical colors of the six sacred regions, and their names in Tehua.

North (Pim-pi-i) is blue; east (Tam-pi-i), white; south (A-com-pi-i), red; west (Tzam-pi-i), yellow; above (O-pa-ma-con), black; below (Nan-so-ge-unge) has all colors. Here, as well as among the Queres, we must distinguish between

the heavens and the sky. The latter is a male deity called O-pat-y Sen. The earth a female deity, called Na-uat-ya Quio, and totally distinct from the conception of below.

This dualism in the ideas attached to one and the same object is illustrated also in the matter of the fetiches. A fetich in Tehua is Ta-ne, but the spirit which inhabits the fetich is Ojua, the equivalent of the Queres term Shi-uana. The Ojua are everywhere, but appear visibly above all in the cirro-cumuli scattered over an otherwise clear sky. At the close of the rainy season of the year 1885, and when the Tehuas of San Juan were preparing to dance the Te-mbi Jiare, or dance of the crops, the sky suddenly cleared, only a few groups of cirro-cumuli remaining in a sky of wonderful azure. One of their shamans called my attention to the snow-white cloudlets, smiling, and saying, "Look at the Ojua; they are good." Indeed, on the following day, a magnificent sky shone down on the weird performance.

The Tehuas have the same fetiches as the Queres. Jangojua is the panther, Ke-ojua the bear, Tze-ojua the eagle, and so forth. They have also figurines of the frog, the dragon-fly, the tadpole, and the fish. These fetiches they use on the approach of the rainy season, throwing them into the water-courses and irrigation ditches with prayers and incantations; for the four animals named are looked upon as intercessors for rain.

This conception arises from the intimate connection, real or apparent, which these animals have with the watery elements. The fish cannot live outside of water, neither can the tadpole. The dragon-fly always flits over stagnant pools or over water-courses, and on the approach of rain the frog cries loudly. "The frog," says the Indian, "prays for rain." So he attributes to these animals a spiritual power, makes them advocates of his in the important matter of moisture for his crops. The four intercessors are all "Ojua," or spirits, but are active only at the time when man needs them. This time, of course, coincides with the season when the animals display their greatest vitality.

Ojua is the generic name, but there are subdivisions. Thus Ka-tzina (corrupted into Cachina) are more especially the spirits of game animals; and as the animal dances are incantations destined to cast a spell over the beast which the Indian desires to prey upon, the name Cachina for these dances is not only appropriate, but quite significant. The Tehuas dance the same cachinas as the other Pueblos, but the names are different according to the idiom. They have also very obscene dances, but it is more difficult to see them than at Cochiti or other villages. Foot races seem to be more indulged in by the Tehuas than by the Rio Grande Pueblos.

A close study of the people of each village would, in addition to the differences between linguistic stocks, of which the preceding pages present a few examples, reveal many local varieties. But, on the whole, there is a fundamental similarity between all the Pueblos, in manners, customs, and beliefs, that is very striking. Their position towards the whites is the same everywhere, and, as far as mode of life is concerned, there is the same tendency to huddle together in winter for protection and shelter, the same inclination to a change of abode in summer, in every pueblo from Taos to Isleta, from Nambe to Zuñi and the Moquis. In summer, as is well known, the pueblos are nearly deserted. The Zuñis move to Pescado, to Aguas Calientes, to Nutria, etc., at distances of ten to twenty miles from their villages; the Acomas, to Acomita, fourteen miles away; all the other tribes emigrate into their fields, leaving but a few families at home, until the time comes for housing

ARCHÆOLOGICAL INSTITUTE.

the crops. Then the return begins; one after another the summer ranchos are abandoned; their inmates move the few household utensils they have taken with them in spring back to their original quarters; and the pueblo, quiet and almost forsaken during the period of life in physical nature, becomes the seat of animation while nature rests. These annual changes in the abodes of sedentary tribes are interesting in two ways. They show the facility with which the village Indian, for the sake of subsistence, still changes temporarily his home; they also explain many features in archæology. We often wonder how the aborigines of old could locate their dwellings so far from arable and irrigable lands, and manifold have been the explanations offered, - climatic changes being usually the last resort of the theorizer unacquainted with the real life of the Pueblo Indian. He overlooks the fact that the Indian seeks for a place of safety for all, but that in matters of subsistence he disregards danger for the males. This custom afforded the roaming tribes a great advantage over their sedentary neighbors; they were always sure, at stated seasons, to find some victim at work at a convenient distance from the village where he might have shelter and aid. Many are the instances where the corn patch or the wheat plot has become the scene of harrowing tragedies. At present, with peace reigning around him, the Pueblo seldom takes the bow or the rifle along to his daily work, but formerly he never went out to his "rancho," as the summer abodes are called, without a full armament. That armament was usually inferior to the one which the Comanche, the Yuta, or the Apache even, had at his disposal.

As a reminiscence of olden times, when insecurity was the rule, the emigration of whole villages to their fields, so as to be in proximity to each other in case of emergency,

may also be considered. An attack upon pueblo houses, even if poorly defended, was hardly ever attempted by savages. It required too long a time to gain success. With relative impunity, therefore, the Pueblo might abandon his solid winter dwelling for a time. But the instances are rare when a single family went to live on its fields. In most cases a number of them formed a temporary settlement, going out together and returning together also. Today the plots pertaining to each pueblo are dotted with what would be called "shanties," vacant in winter, alive with inmates in summer.

I add here a few terms picked up among the Jemeż, showing that, in the main, the religious organization noticed among the Queres and Tehuas also prevails with the Jemez, and presumably existed with the Pecos, as cousins of the latter, and now harmoniously living with them at their village: Ua-buna fui, Summer Cacique; Tzunta-jui, Winter Cacique; O-pe So-ma, the Shaman of War; Qui-iu To-ta, Shaman of the Hunt; Kui-co, Tzihui or Shikama; Kuensha-re, Koshare; Kui-rey-na, Cuirana.

They have therefore the division into summer and winter people, as well as the Tehuas. Of their two estufas, one is Pa-to-ua, the other is Ua-han-chana (calabash), as at Cochiti. There was a third one, which now is in ruins.

The Jemez also recognize descent in the female line. The names of clans, so far as I could obtain them, have already been given. They are said to have originated at a lagune called Ua-buna-tota, and the souls of the dead go to rest there. At Isleta (southern Tiguas) there are two clusters corresponding to the Koshare and Cuirana, the Shure and the Ship-hung. I had no opportunity of making full investigations among these Pueblos.

After what has been said of the religious organization

ARCHÆOLOGICAL INSTITUTE.

of the Pueblos, there can be little wonder at the slow progress of Christianity among them. The influence of the secret clusters, and the hold which their ancient beliefs have upon them, are so strongly rooted, that the power of resistance is as mighty as that opposed to Christian missions within the boundaries of China. Arbitrary suppression of their creed would have brought about extermination; persuasion and endurance under the most disheartening circumstances were the only means for exerting an influence upon the Indian. This persuasion, this patience, most poorly supported by the gradually waning power of Spain, have still brought some fruit. To these results I have alluded in the Introduction to this part of my Report, and I need not return to it again.

One fact seems certain : the Indian, as Indian, must disappear. He may keep his language and his traditions. But it is not so much the manner of speech, nor even his physical type, that constitutes the American Indian, as his social organization and his creed, which are so intimately interwoven as to have become inseparable. These are out of place in the march of civilization, and they must perish. But they are also rooted so deeply in the mental and moral nature of the Indian, so closely connected with his material existence, that no violent extirpation can be attempted without endangering also the purely human part of his being. To the latter he is entitled, and above all from our national standpoint, by the formal declaration "that all men are created equal; that they are endowed by their Creator with certain unalienable rights; that among these are life, liberty, and the pursuit of happiness." To enable the Indian to enjoy these rights with a view to his progressive culture, patience on the part of those who have this progress in trust is above all required. We must have patience with him and

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his ways. The Indian frequently becomes a criminal in the eyes of modern law, but in the great majority of cases his is unconscious guilt, resulting from natural aberration of mind. Spain recognized this and had patience. It behooves me not to enter into a discussion of recent events.

What applies to the Pueblo Indians applies in a still greater measure to the less permanently located tribes of New Mexico and Arizona, like the great Tinneh stock of the Navajos and Apaches. I place the Navajos before the Apaches, for the latter are but outlying bands of the former. To their respective numbers and location I have already alluded, and little have I to say concerning them that cannot be derived from other better informed sources. like the publications of Captain John G. Bourke and of Dr. Washington Mathews, both of the army of the United States. There exists great similarity between the religious traditions of the Navajos and those of the Pueblos; - the same absence of a supreme head for the religious figures peopling their Olympus; the same folk-lore about two herogods, twin brothers; the same emerging of the human race upon the surface through a lagune situated in the distant. North. But the Navajos are far more expert than the Pueblos, as I have already stated, in those striking tricks or sleight-of-hand performances that produce such a powerful effect upon the Indian mind. They have no compact civil organization, no stable government. At present they are becoming more and more permanently located, and it cannot be denied that these tribes show greater aptitude for progress in a material sense than many of the Pueblos. This results naturally from the effects of a shifting life. As the man who has travelled is, among us, generally superior to the one who has constantly lived in the same small circle of surroundings, so is the shifting Indian more

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wide awake than the villager whom custom and fear maintain spellbound in a single spot. The difference in this respect is strikingly marked in one and the same pueblo, between those who formerly took part in the annual expeditions to Sonora or to the plains, and the younger people, who grew up after the time of such journeys and before the construction of railways. Physically, there is also a difference. The Navajos especially have more of the strong build of the Northern Indian. They are more raw-boned, and, while not more enduring, still possess greater physical strength. Their mode of life, enjoying less protection from inclemencies of the weather, their lower degree of culture so far as the position of women is concerned, burdening the latter with field-work, which among the Pueblos the men perform, conspire to make them hardier and warier. The tendency to become eventually village Indians is very plain on the part of the Navajos ; it develops itself strongly to-day, under circumstances unusually favorable so far as improved implements, and other elements of progress, are concerned. As for the Apaches, they are more backward. Marauders for centuries, turned from sedentary life by their scattering on the plains with the buffalo as a guide and resource, or drifting over the mountains with the fascination which the existence of a robber has for untutored man, they are more loth to submit to the restrictions of progress. But a gradual education, to permanent settlement first, to the arts of peace afterwards, will overcome their reluctance. Both tribes enjoy over the Pueblos one great advantage. Their creed and customs have not become the sum and substance of their being so much as among the latter. Their opposition to civilization may be more violent at the outset, but the apparent docility and meekness of the Pueblos is but a blind for greater tenacity of resistance.

With these remarks, I close the first half of my Report to the Institute. The other half will be purely retrospective, inasmuch as it will contain the archæological results of my investigations, and some considerations of a more general nature, touching upon the past of Southwestern tribes, and upon their relations to other aboriginal inhabitants of the continent.

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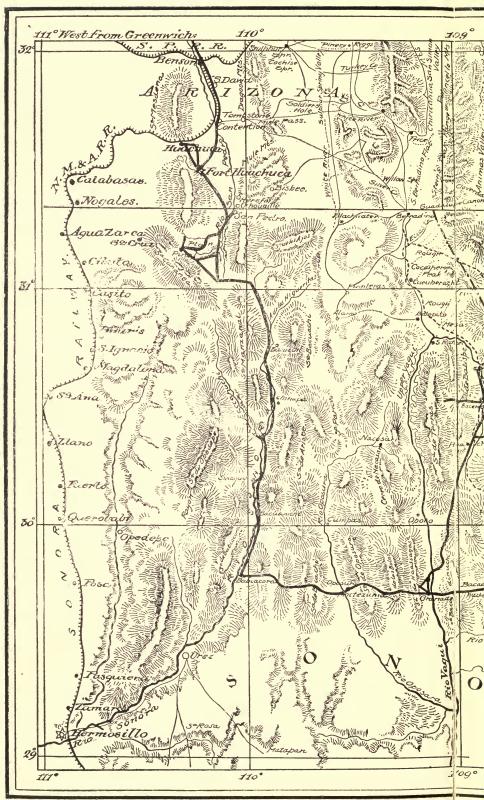
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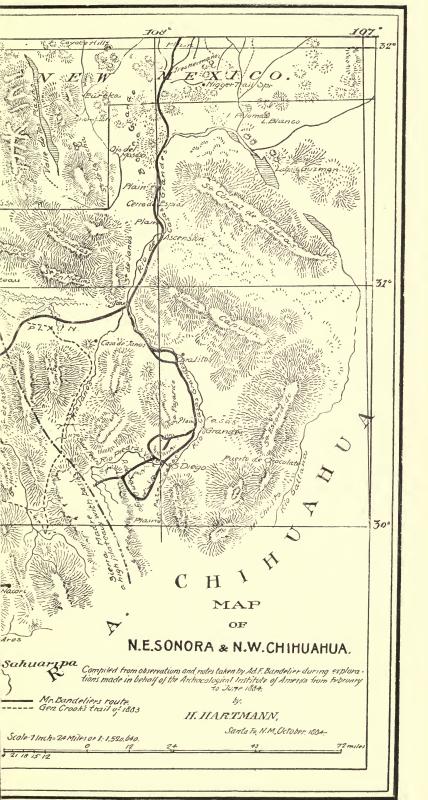
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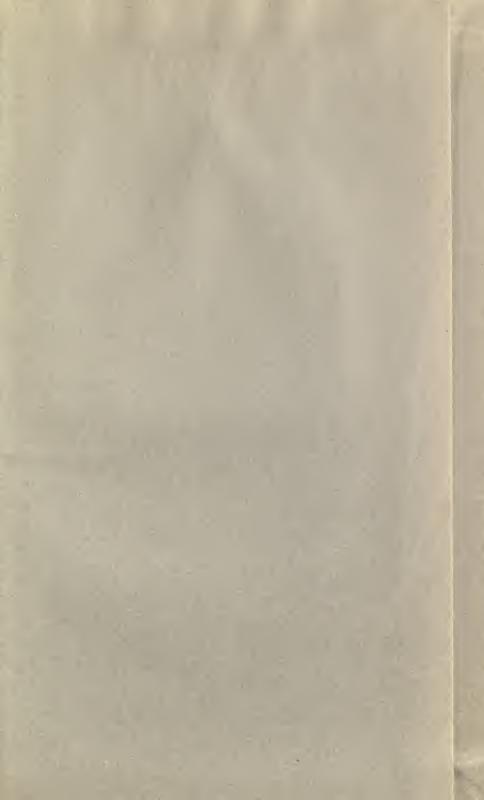


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