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RITE AND CROP IN THE INCA STATE

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VASSAR COLLEGE

AS ONE READS the sixteenth-century European sources on Inca ceremonialism one becomes aware of a curious and unexpected discrepancy: the ritual crop calendar reported does not reflect either the agricultural realities of that period or the modern patterns of expressing concern over the fate of the crops. The chroniclers of the European invasion and early settlement fill many pages describing peasant- and statesponsored ceremonies and sacrifices accompanying the planting, irrigating, weeding, and harvesting of malze; they report little if any ritual connected with the many Andean root crops.

Such a discrepancy in reporting focuses attention on the botanical and ecological differences between the two sets of crops: one a locally domesticated, high-altitude series of frost-resistant tubers, of which the potato is only the most celebrated; the other a warm weather grain, of Pan-American distribution, maize. I hope to show that the chroniclers' discrepancy is also a hint to important cultural and social differences.

At the upper levels of the Andean Altiplano the alpine root cropsthe potato, the oca, the ulluco-are the only ones at home. Juzepezuk found one wild species of potato blooming at 16,400 feet (5,000 meters) in an 18-degree frost,1 and many of the cultivated varieties bear tubers regularly at 14,000 feet. Without them human occupancy in this area would be impossible; "half the Indians do not have any other bread."2 In pre-Columbian times they were the mountain peasant's staple food crops, so common in the diet that time was measured in units equivalent to a potato's boiling time. In the cold, high steppe known as the puna, around Lake Titicaca, the chroniclers were surprised to find no grains; they report the area's dependence upon alpine crops.4 This does not condemn this area to culture-historical marginality: long before the Tiahuanaco and Inca expansions, the Collao made the most basic contribution to the possibilities of civilizational development in the Andes through the domestication of the llama and the alpaca as well as the tubers.

In our time, LaBarre collected over 220 named varieties of potatoes in the Collao alone; most of the names, after four hundred years of European occupation, show no trace of European influence. While some diploid varieties, which botanists consider the more primitive, stick to the quišwa, the protected slopes of Andean valleys, most of the domesticated varieties are true puna specimens—hardy, frost-resistant and closely dependent on man. In fact, the most frost-resistant, the bitter luki, are sterile triploids which will not grow below 8,200 feet (2,500 meters) and cannot propagate themselves without human intervention. The large number of these hybrid, high-altitude varieties would indicate that throughout most of the history of human occupancy in the Andes, the pressure has been on taming the high puna; the steep, lower slopes, which would seem more inviting on first glance, can seriously be utilized only when large-scale public works provide terraces and irrigation.

Elsewhere in the world, root crops cannot usually be kept for any length of time. Some of the Andean varieties keep seven, ten, and twelve months under puna conditions, which have a mummifying effect not only on vegetables but also on llama meat and other tissues. In addition, several processes were developed here which took advantage of the climate to increase storing capacity. Most potatoes could be made into chuñu, a substance derived from tubers alternately frozen and dried soon after harvest. The slow-ripening, bitter, high-altitude varieties are grown exclusively for chuñu, which can be kept for much longer periods than the potatoes themselves. Unfortunately, it has not been possible to determine exactly how long chuñu could be kept, though Cobo talks of "many years." The process itself is closely dependent on puna conditions: cold nights, warm days, and a dry climate. There is no chuñu in Ecuador, which lacks a true puna, nor was Sapper able to make it experimentally in Germany.

While potatoes have this neat zonal distribution, maize is found on both highland and coast. This has masked the essentially warm climate character of maize; it requires a good deal of humidity and warmth and has a relatively long growing season. The Andean highlands are dry and given to frequent frosts, and it is only on the quišwa slopes, and then not everywhere, that maize can be found as a field crop.

We still do not know when maize reached the highlands; there is no reason to doubt that it was long before the Inca conquest, though it

probably was after the domestication of alpine tubers. Even on the coast it was relatively late; archaeology shows that it appears there only after a thousand years of root-crop, bean, and cotton agriculture. According to Carbon 14 dates, corn was introduced ca. 900-700 B.C. in the Chicama valley. It is hard to think of it ripening here without irrigation, although archaeologists tell us that artificial watering does not begin till considerably after the introduction of maize. It is possible that corn was first grown in pukios, the sunken cultivation plots which use some of the subsurface seepage. This early association, or lack of it, between maize and irrigation on the coast, needs additional investigation.

As one moves from coast to highlands, the situation becomes clear-cut: in the Andes maize and irrigation were closely correlated. Despite the adaptation of certain varieties in the Callejón de Huaylas and the Urubamba valley, maize in the Andes is a handicapped plant: it cannot grow in the hot valley bottoms, where the desert has a way of reaching up to 5,000 and even 8,000 feet in the Apurimae valley, nor can it grow above 9,000 feet in northern Peru and 11,500 feet in the south, since above these altitudes frost can be expected any month of the year¹⁴ with disastrous effects on the corn crop. In both Inca and modern times, irrigation was considered highly desirable wherever maize was grown, ¹⁵ even where there was no acute shortage of rainfall. ¹⁰ Garcilaso de la Vega tells us that "not a single grain of maize was planted without irrigation," and that given steady watering and the use of fertilizers corn fields "were like a garden." ¹⁷ Irrigated fields need no crop rotation, nor must they be left to lie fallow. ¹⁸

There is some indication that the famous Andean terraces so laboriously constructed on the quišwa slopes were meant to produce maize. The terrace of Colleamapata, the garden of the Sun, was planted to corn and Garcilaso had seen it worked in his youth. He is also specific when discussing terraces in general: "this is how industrious the Inca were in expanding the lands for maize planting." Pedro Pizarro, an eyewitness to the invasion, claims that "all were planted to maize." 29

While irrigation is one of the factors making it possible to raise the upper limit of corn cultivation, it was rarely applied to potatocs and other alpine crops. In part, this is due to the topographic characteristics of the puna, a high plateau, with the rivers flowing in deep gorges far below it. As Garcilaso puts it, where irrigation did not reach "they

planted grains and vegetables of great importance... potatoes, añus, oca." ²¹ Cieza de León saw no irrigation in the Collao within twenty years of the European invasion, ²² and most of our chroniclers similarly make no mention of alpine crops when discussing irrigation. ²³ In modern times, the geographer Schwalm, who did considerable field work in the area, reports that irrigation and fertilizers were applied to maize, while potatoes were grown de temporal, depending on rain. ²⁴ LaBarre tells us that in Bolivia the high-altitude luki varieties receive no irrigation or fertilizers, although some of the others apparently do get assistance today. ²⁵ Such rainfall cultivation means that lands must rest between crops; Schwalm reports for Titicaca that a field was cultivated for four years and lay fallow for seven. ²⁶ This matches what Garcilaso tells us of sixteenth-century conditions: alpine crops had to be rotated, and lands left fallow, every year or two. ²⁷

Despite their adaptation and probable domestication in high altitudes, even these alpine crops failed frequently through hail, frost, and drought. Polo de Ondegardo, who was for many years an administrator in the puna, claims that three years in five saw crop failures, but it is unclear which of the crops he is talking about; the chances are he means maize.²⁸ Even so, the subsistence margin was quite narrow; in the nineteenth century Tschudi reports that one good harvest in three is normal for the puna.²⁰ Cabello Valboa, an independent sixteenth-century source, indicates that famine stalked the land in years when the potato crop failed.²⁰ At such times the peasants are wild roots or grasses. Fasting, sacrifices, and scapegoating were all employed in an effort to mitigate frosts and water shortages.

In such circumstances we note again how little potato or other alpine crop ritual has been recorded by our chroniclers. As indicated, their ceremonial calendars deal almost exclusively with maize. In our time there are elaborate ceremonies to protect and encourage the potato crop; these have been described in some detail by contemporary observers. Of course, it could be that such practices are post-Columbian; the absence of recorded sixteenth-century alpine crop rituals may indicate lack of anxiety over a local, well-adapted crop. However, this is unlikely since the ceclesiastic writers and idol-burners like Avila, Arriaga, and others who turned their attention to the Andean peasant community after 1600, report numerous instances of ritual concern over highland crops, quite similar to modern ceremonialism. Such

parallels are also present in the unique early report to have broken through the chroniclers' disinterest: only fifteen years after the invasion a priest gave in to the urging of his communicants and allowed a potato planting ceremony in his village. There was music and dancing with digging tools and some competitive behavior between the two moieties. A llama was sacrificed, and selected large seed potatoes were dipped in its blood. At this point the priest intervened and stopped what had apparently gone too far. Soon after Cieza de León came through the area and recorded the priest's story, 38 but it took the chronicler consistently most sensitive to ethnographic detail to get it.

The rarity of potato rituals in our sources may perhaps be due to the fact that the Andean crops, while they may have been staple, were also low status food. In the legends from Huarochiri collected by Avila in the early seventeenth-century, potato-eating was considered evidence of low status; a raggedy beggar was known as Huatyacuri, potato-eater. In another story, recorded by Cabello Valboa, the hero is hiding from his enemies among "very poor herders" who cultivate "potatoes, ulluco, other roots and grasses. In describing the punadwelling Colla, Huamán Poma calls them "Indians of little strength and courage, with large bodies, fat and tallowy because they eat only chuñu" and contrasts them with the Chinchaysuyus (northern and coastal Peruvians), "who, although small in stature, are brave, as they are fed on maize and drink maize chicha, which gives strength."

Despite such attitudes, from all we can gather potato ceremonialism was early and general in the Andes. Why then should our sources miss it?

There is no likelihood that our chroniclers would ignore maize. Grain eaters themselves, familiarized with corn in the Caribbean and Mexico, they reported early and in detail the Pan-American distribution of this crop. Its absence in any given area was noted. The Some of them thought of maize as the Andean staple, which is clearly erroneous given the ecologic picture; as Sauer has pointed out, "nowhere south of Honduras is maize the staple foodstuff it was further north." In most of South America it was grown primarily for beer-making and ceremonial purposes.

The chroniclers communicate the feeling that in the highlands maize was a desirable, special, and even holiday food as compared with potatoes and chuñu. Maize was offered at village shrines. The An-

dean writer Huamán Poma gives us the text of a lament recited by the villagers "during frost or hail if it [the crop] be maize, when no water comes from the sky." At harvest time the corn was brought home amidst great celebration; men and women came singing, begging the maize to last a long time. The villagers drank and ate and sang and for three nights kept vigil over Mama Zara, Mother Maize, a shrine erected in "every house" by wrapping the best cobs in the family's best blankets. 44

At the village level, corn is also an integral part of life cycle rituals, even if it is not locally grown. At the initiation of a peasant youth, when his hair was ceremonially cut and his name changed, maize, llamas, and cloth were among the gifts offered by his kinfolk. At marriage, the families of the couple exchanged "seeds" along with cloth, spindles, pots, and ornaments. Murúa, the sixteenth-century writer with the best information about women in the Andes, specifics corneobs as gifts to the bride. At death, corn meal was sprinkled around the deceased. On the fifth day, the widow and other survivors would wash at the meeting point of two rivers where sacrifices were also offered after sowing.

The real contrast between the two crops and their associated ceremonials emerges as we move from the peasant community, where both are known though differentially valued, to the state, Inca level.

A considerable effort, both technologic and magic, was made by the state and its various agencies to ensure the propagation and harvest of corn. The Inca state origin myth gives credit to the royal lineage for the introduction of this grain into the Cuzco basin and refers to it as "the seed of the [Paqaritampu] cave" from which the dynasty was supposed to have emerged.47 Mama Wako, the wife of the first (legendary) king, is reported to have taught the people how to plant it;48 ever after, a plot near Cuzco called Sausero was devoted to the production of maize to feed the queen's mummy and her retainers. The annual cultivating cycle was ceremonially inaugurated by the king himself, who on the appropriate date during August-September⁴⁸ went to Mama Wako's field to break the ground for the planting, with the help of the royal kin. Poma illustrates this inauguration: the king is working, assisted by three relatives to form the usual Inca quartet; an equal number of royal women are kneeling, facing the men, to break the clods, much as peasant women are shown doing it elsewhere. A hanchbacked retainer is bringing refreshments to the royal workers.⁵⁰ The king's contribution was accompanied by vigorous singing of digging songs, on a triumphal, military refrain.⁵¹

The national church and its priesthood, whose top hierarchy belonged to the same royal lineage, also had many duties in and about maize agriculture. Each year the gods were asked if crops should be planted that year; "the answer was always affirmative." Priests were assigned to watch the movements of the shadow at a seasonal sundial near Cuzco to determine the right time for plowing, irrigation, or plantingse and to notify the peasantry of the approaching chore. If one missed the proper moment, the maize crop was in danger. Priests also kept khipus, knot records of past seasons showing the succession of wet years and dry.64 One group of clerics fasted from the moment maize was planted until the shoots were finger high. Cobo reports that the priests gathered at the sundial observatory and "begged the Sun to get there on time."55 Processions were organized, the participants armed, beating drums, and shouting war cries to scare away drought and frost which threatened the maize more than any other crop.66 The official state harvest began with the year's royal initiates going to reap on Mama Wako's terrace; then came the fields of the Sun, those of the king and queen. Sacrifices of llamas, fasting, thanksgiving offerings, and requests for future favors were all part of the harvest.87

A perceptive observer, Polo noted that there were many more observances and anxious rituals in "advanced" areas, where the population was dense and state exactions numerous, than there were in marginal territories like Chiriguanas or Diaguita. At the symbolic center of the state, at Intiwasi, the House of the Sun, the priests had planted among the living cornstalks golden reproductions, complete with leaves and cobs, to "encourage" the maize. The temple's harvest was kept in heavy silver storage jars. Such attention and "nursery" care made it possible for the priests to cultivate maize at 12,700 feet, at the shrines near Lake Titicaca. They did not do as much for Andean crops; virtually all references to Cuzco ceremonials are about maize; there are none to potatoes in this context.

The existence and survival of a sociopolitical structure like the Inca state depends technologically on an agriculture capable of producing systematic surpluses beyond the subsistence needs of the peasantry. Under Andean ecologic conditions the anxiety of the state is understandable, and the solution devised is not always ceremonial. The irrigated coast was a major producer of maize and probably supplied an important and worry-free quota to the state warehouses. Unfortunately, we lack many details about the special features of coastal land alienation under Inca rule and the extent of maize-growing corvée.41 But most everybody has heard of the mitmag colonists resettled by the Inca for what are usually considered security reasons. I have elsewhere presented some evidence that a major function of this population transfer was actually the expansion of the maize-growing area.42 Bernabé Cobo tells us that wherever populations lived too high up on the puna they were "provided" with maize lands on the coast or in the montaña. Colonists and their families took up permanent residence in the new maize country. Such transplanted settlements remained within the jurisdiction of their traditional ethnic leader and provided their kin with corn, peppers, fruit, and other tropical produce in exchange for flamas, jerked meat, and chuñu.61

Terracing of the steep quiswa slopes, irrigation works, and coastal fertilizer delivered to the highlands were all similar measures, providing revenues of all kinds but with an emphasis on corn. Potatoes and the other root crops may have produced the necessary surpluses, and chaña may have allowed their storage. However, the keeping qualities of maize are superior to those of chuña; so is its higher prestige. Grains and stockpiling and the redistribution of status are basic state preoccupations everywhere. In the Inca state many factors made stockpiling a major necessity: a growing court made up of ten to twelve royal families and their thousands of retainers, a bureaucratic and ecclesiastic hierarchy, the military needs of the numerous campaigns which expanded the kingdom from Ecuador to Chile within barely a century. And the army also "preferred" maize to other rations.

It is clear that in the minds of those who encouraged the production of corn there were also those other, redistributive considerations: the higher, semi-ceremonial status of maize, inherited from pre-Inca times, would add to the state's eagerness to obtain this commodity in the highlands. An issue of the rarer corn porridge would mean more than a dish of potatoes to a conscript soldier, and a mug of crown corn beer was a morale-building dispensation in a society where patterns of reciprocal generosity were still operative.

It is my contention in this article that in dealing with Inca times in the Andes we find not only two sets of crops grown in different climatic zones, but also actually two systems of agriculture. The staple crop and mainstay of the diet is autochthonous⁸⁵ and carlier in the highlands; grown by Andean mountaineers, it consists of plants domesticated locally, laboriously adapted to alpine conditions, grown on fallowed land and dependent on rainfall. The other crop is newer, imported; its culture is of holiday significance and centers around maize, an essentially warm weather crop, clinging to the lower and protected reaches of the highlands, handicapped though highly valued in Andean circumstances.⁸⁶

It is my further contention that tuber cultivation was essentially a subsistence agriculture practiced by lineage (ayllu) members who became peasants after the Inca conquest. Maize was undoubtedly known, in a ceremonial way, to the peasant ayllu for many hundred of years before the Inca, but its large-scale, economic field cultivation in the highlands becomes feasible only when the emergence of a state makes possible such public works as irrigation, terraces, fertilizer from the faraway coast, and gingerly priestly concern. In Inca times maize was a state crop.

The original under-reporting of Indian highland crop ritual, which prompted this inquiry, has become under the circumstances a hint to cultural and structural matters way beyond the actual rites.

The bulk of sixteenth-century writers associated with few Andeans beyond the royal families, the bureaucracy, the Ouisling palace guards. These informants emphasized inevitably the recently obliterated glories of the past, particularly the state machinery; in the process they ignored the Andean village and aytlu, and their lack of interest matched that of most of the chroniclers. Only the most inquisitive, men like Cieza and Polo, tried to get beyond this idealized statement of bureaucratic claim. It is only later, when Andean writers begin to comment directly on their own past and when village descriptive material becomes available, that we get a glimpse of what agricultural ritual reveals: not only two systems of agriculture, but significant differences between two ways of life, one of which—the power-wielding linea state—was in the process of incorporating and transforming the other, a process far from completed when the European invasion arrested its course.

NOTES

Note. For an explanation of the bibliographic system followed below, see Appendix to John H. Rowe, "The Origins of Creator Worship among the Incas," pp. 424-25 in this book.

¹ LaBarre, 1947, p. 102.

² Cobo [1653], IV.viii. Acosta reports one variety "accustomed" to coastal heat ([1590], IV.xvii; 1940, p. 270), and Salaman quotes Russian botanists who found wild varieties in the lowlands (1949, p. 34). While potatoes are known on the coast and are reproduced in coastal art (Salaman, 1949, pp. 15, 19; Yacovleff and Herrera, 1934, p. 299), there is no indication that they were a significant element in the food supply or the economy.

S Cobo [1653], XII.xxxvii; 1890-93, p. 295.

- ¹ P. Pizatro [1570], 1844, pp. 279-80; Cicza [1550], LxCix; 1862, p. 442; R.G.I., 1881-97, II, 14, 21, 41, 59; Polo [1571], 1916b, p. 63; Garcilaso [1604], V.I. IV; 1943, pp. 226, 233-34.
- ⁶ LaBarre, 1947. For additional details on potato cultivation see Muelle, 1935, pp. 137-39.
 - ⁶ Latcham, 1936, pp. 81-82, 167; LaBarre, 1947; Salaman, 1949, pp. 54-55.
- ⁷ On botanical grounds, Troll anticipated the current expansion of Andean chronology. In 1931 he already felt that the chronologies of Uhle and Means did not allow enough time for the development of Andean agriculture. See p. 271,

8 Troll, 1931, p. 268; Sapper, 1936, p. 64.

The best description of chira making will be found in Cobo [1653], IV.von. Additional details in Schwalm, 1927, p. 186; Yacovleff and Herrera, 1934, pp. 297-98; Mejia Xesspe, 1931, p. 17; Latcham, 1936, pp. 175-77; LaBarre, 1947, pp. 91, 96 ff; Valcárcel, 1943-48, pp. 85-86; Salaman, 1949, pp. 11, 35; Sauer, 1950, pp. 514-16.

10 Troll, 1931, p. 268; Sapper, 1936, p. 64.

- ¹⁷ Bennett and Bird, 1949, pp. 29, 114-20, 126; Strong and Evans, 1952, pp. 22-45, 353.
- ¹² This is the Cupisnique period when Chavin influences are strong on the north coast (Junius Bird in Bennett, 1948, p. 27). The suggestion has been made, after Tello, that maize, like the feline deity characteristic of this era, is of ultimate montaña derivation (Strong and Evans, 1952, p. 237; Valcárcel, 1945, pp. 66 71).
 - 18 Strong and Evans. 1952, p. 9; Willey, 1953b, pp. 16-17, 367, 394, Plate 54.
- ¹⁴ James, 1942, p. 150. In the protected bowl of Lake liticaca, maize was grown in Inca and modern times even above the 12,540 foot level of the lake.

¹⁵ Schwalm, 1927, p. 180; Quelle, 1931, p. 163; Latcham, 1936, pp. 115, 139-40;

Cutler, 1946, pp. 265, 281, 286; Sauer, 1950, pp. 490-91.

- ¹⁸ Schwalm, 1927, p. 176; some varieties of quick-ripening maize, not requiring irrigation, were known even before the European invasion: Poma talks of cochaca or michica sura, rainfall maize ([1615], 1936, p. 1164; see also pp. 260, 1137-38; Garcilaso, [1604], H.XXII; 1943, p. 112; see also Latcham, 1936, pp. 139-40). Cutter found one modern variety that went from seed to silk in forty-four days (1946, p. 265), and Sauer reminds Mangelsdorf that in the rainy Urubamba valley, east of the Andes, irrigation is not required (1950, p. 493). See also Mejia Xesspe, 1931, pp. 13-14.
- ¹⁷ Garcilaso [1604], V.I. III; 1943, pp. 226-27, 229-30; Avita [1608], chap. xxxi; 1942, fols. 104r-105r.
 - ¹⁸ B. Ramirez [1597], 1936, p. 38; see also Latcham, 1936, p. 295.

- ¹² Garcilaso [1604], V.I; 1943, p. 226. See also III.xxv; 1943, p. 183.
- ²⁰ P. Pizarro [1570], 1844, pp. 291-92.
- 21 Garcilaso [1604], V.1; 1943, p. 226.
- 24 Cieza de León [1550], I.xxix; 1862. p. 442.
- See the highly revealing legend collected around 1600 by Avila in Huarochiri: Collquiri, a local waka connected with maize and irrigation, tried to reward his affinal relatives by emerging as a spring near their fields. But there was too much water; it threatened to flood their fields and all their oga and kinowa which had been laid out to dry. Everyhody was very mad, shouting "We are used to little water!"; his wife's tolk begged him to stop. Collquiri finally stuffed some of his clothes in the spring to stop it (Avila [1608], chap. xxxi; 1942, fols. 103v 104r).
- ²⁴ Schwalm, 1927, p. 184. See also C. M. Rick and Edgar Anderson, 1949, p. 406. This may not check with reports that artificial watering was used in pastures (Garcilaso [1604], V.I. XXIV; 1943, pp. 225-26 and 276-77; Poma [1615], 1936, p. 944) which were usually located at putato-growing altitudes. See also Quelle, 1931, p. 165 and Schwalm, 1927, pp. 186-87.
 - 26 1947, pp. 94-95, but see also p. 91.
 - 23 1927, p. 186. See also Bandelier, 1910, p. 80; McBride, 1921, p. 7. [1904]
 - *7 Garcilaso [1604], V.I; 1943, p. 226.
 - ²⁸ Polo [1571], 1916b, p. 156; [1561], 1940, p. 168.
 - ²⁹ Tschudi, 1918, L, 222.
 - ⁴⁰ Cabello Valboa [1586], 1H.v; 1951, p. 223.
- ⁸¹ See Bandelier, 1910; Paredes, 1936; LaBarre, 1948; Salaman, 1949; Karsten, 1949; Tschopik, 1951.
 - ³² Malinowski, 1948, pp. 30-31; see also Homans, 1941.
 - 83 Cicza de León [1550], Lexvii, ci; 1862, pp. 454, 444.
 - M Avila [1608], chap. v; 1942, fol. 67r.
 - ³⁵ Cabello Valhoa [1586], III.xxxi; 1951, pp. 451-52.
 - 36 Poma [1615], 1936, p. 336.
- ⁸⁷ Cicza de León [1550], Lexxxin; 1862, p. 431; see also Latcham's compilation from R. G. I. reports, 1936, p. 151.
 - ³⁸ Valverde [1539], 1865, p. 98.
 - 09 Sauer, 1950, p. 495.
- Willey dates the beginning of the "Perovian co-tradition" from the "advent of maize agriculture" (1953a, p. 374). This may indicate some support for my proposed separation of alpine crops from corn agriculture, which is likely to seem culturally artificial to some, particularly North American archaeologists who have done most of their field work on the coast and who tend to think of maize and potatoes as part of a single "complex of traits" (Bennett, 1948, pp. 2-4).
- ⁴¹ Avila [1608], chap. xxxr; 1942, fols. 102v, 105r; Arriaga [1621], chaps. n, IV, IX, XV; 1920, pp. 19, 46, 83, 193.
- 48 Poma [1615], 1936, pp. 190-91; see also Arriaga [1621], chap. v; 1920, pp. 52-53; Cobo [1653], XIII.xxi; 1890-93, p. 77.
- ⁴⁸ Polo [1559], 1916a, pp. 20-21; this passage has been frequently copied by our other sources. Pomu [1615], 1936, p. 245.
 - 44 Arriaga [1621], chap. vi; 1920, p. 58.
 - 45 R.G.I., 1881-97, H. 60; Murúa [1590], HLXXXII; 1946, pp. 240-41.
 - 48 Poma [1615], 1936, p. 297; Arriaga [1621], chaps. v, vi; 1920, pp. 51, 59-60.
- Betanzos (1551), chap. iv; 1880, p. 15; Molina [1575], 1943, pp. 66-67;
 Cabello Vafboa [1586], III.ix, x; 1951, pp. 260, 269-70; Cobo [1653], XII.ii;
 1890-93, p. 121; Montesinos [1642], II.i; 1882, p. 6.

⁴⁸ Women, and particularly the queens are credited throughout the Inca version of history, with the invention of onerous, new obligations to the state....

40 Garcilaso [1604], V.n; 1943, p. 228; Cobo [1653], XiII.xxvin; 1890-93,

pp. 112-13.

50 Poma [1615], 1936, pp. 250, 1153, 1156.

N Valera or the Jesuita Anonimo [?], 1945, pp. 49-50.

King Pachakuti (see John H. Rowe's article, this collection) is credited by most sources not only with reforming the ceremonial calendar but also with the erection of Intiwatana, the seasonal sundial in Cuzco (Polo, 1940, pp. 131-32; contrast with dating by Cabello Vallooa [1586], Hixxx; 1951, p. 136, who assigns it to Pachakuti's son, Thupa). It is likely that such sundials are pre-linea; see Avila's text which reports that villages in the Huarochiri area had men assigned to watch the sun's shadow and notify the inhabitants. Pachakuti may have set up a state observatory which could ignore the different planting times varying according to allitude and ecology. In the Cuzco valley Angust-September was "right," and it thus assumed the special features of a national event, much as the seeds and tubers from Cuzco enjoyed special prestige in the provinces. Garcilaso [1604], III.xx; 1943, p. 171.

68 Poma [1615], 1936, p. 1152.

4) Roman [1575], H.xvi; 1897, p. 68; Murúa [1590], HLxxv; 1946, p. 225.

⁸⁸ Cobo [1653], XIII.xm; 1890-93, p. 19.

88 Murúa [1590], HLxix; 1946, p. 210; Poma [1615], 1936, p. 285.

⁵⁷ Retanzos [1551], chap. xv; 1880, p. 102; 'Frimborn's Anonimo [7], 1934, fol. 457v; Román [1575], Lxx; 1897, pp. 226-30; Poma [1615], 1936, p. 243; Avila [1608], chap. xiii; 1942, fol. 78r.

8 Polo [1559], 1916a, pp. 36-37.

⁸⁰ P. Pizarro [1570], 1844, p. 266; Cieza de León [1550]. H.XXVII; 1943, pp. 107-8; Relación de muchas cosas acaecidas en el Perú [after 1552]. 1943, p. 37; Garcilaso [1604], HLXXIV. VI.II; 1943, 1, 179, and H, 9; Cobo [1653], XIII.XII; 1890-93, p. 9. Gold and silver were ceremonial metals in the Andex.

Though it may be significant that Garcilaso de la Vega does mention kinowa, the alpine grain, as being reproduced in the golden botanical garden of the Sun ([1604] V.; 1943, p. 227) which matches his assertion that maize and kinowa

were grown in the same fields.

"This point is discussed in Chapter II, "Land Tenurc," of the author's unpublished dissertation, "The Economic Organization of the Inca State," the University of Chicago.

See ibid., Chapter VIII, "From Corvée to Retainership." pp. 288-303.
 Cobo 116531, XII.xxiii: 1890-93, pp. 226-27; see also Sancho [1534].

68 Cobo [1653], XII.xxii; 1890-93, pp. 226-27; see also Sancho [1534], 1917, p. 196; Cieza de León [1550], Lenu-civ; 1862, pp. 445-46; [1550], H.xvii; 1943, p. 63; P. Pizarro [1570], 1884, p. 280; Morales [7], 1868, p. 467 n. 1; Polo [1571], 1916b, p. 156; [1561] 1940, p. 177; Poma [1615] 1936, p. 852. One wonders if such contacts and trade in corn with the coast did not exist before the Inca conquest; it is likely that the kings took over the institution by expanding the maize-growing colonies and by incorporating the earlier trade within their redistributive apparatus.

64 Garcilaso [1604], VII.1; 1943, pp. 86-87. In contrast Latcham states that the army are cocari, a kind of chana, but indicates no sixteenth-contary references.

(1936, p. 176).

See indications of content in Inca warehouses; of 287 references to storage by 28 chroniclers, 86 deal with food. (The actual percentage is lower, as not every one of these is an independent source; several also list more than one crop. It was

nevertheless assumed that the actual naming of a particular crop was significant.) Nine are rather general; of the remaining 77, 29 deal with maize and 7 with maize beer, 36 in all. Seven more list chuifu, and one mentions scarcity of maize but abundance of "vegetables and roots." There is only one specific reference to potatoes in the warehouse context. Of nourse, potatoes as such do not keep well and cannot be stored at the state level, but 7 chana references to 36 for maize when describing the state warehouses, is suggestive.

55 Similar views of this historical relationship, based on different criteria, can be found in Tello, 1920; Valcárcel, 1925a, pp. 74, 90; 1925b, pp. 164-65; 1937-41, I, 27-28, and It. 23, 76-80; 1945, pp. 38, 68; 1943-48, II, 97-101; Trimborn, 1928.

" One should not confuse ceremonial limits, such as achieved by the priests at Titicaca (12,700 feet) with altitude of effective cultivation. The upper limit of any given crop, and particularly maize, is affected by many factors not all of which are evological; the dryness of the southern Andes raises the upper limit at which annuals will grow; topographic features like protection against winds or good exposure to daylight may have a good deal to do with the effective upper limit, but none of these compare with cultural motivation; if tended like a rose, maize will of course grow anywhere. See Weberbauer, 1945. p. 624; Howman, 1916, pp. 52-54; Schwalm, 1927, p. 183; Troll, 1931, p. 270.

REFERENCES

Aposta, José de la. 1940. Historia natural y moral de las Indias ... [1590]. Mexico.

Arriaga, Pablo José de. 1920. Excirpación de la Idolatria del Perú [1621]. Cofección de libros y documentos referentes a la Historia del Perú, Series 2, Vol. 1.

Avila, Francisco de, ed. 1942. De Priscorum Huarochiriensium Origine et Institutis [1608]. Ed. by Hipólito Galante. Madrid.

Bandelier, A. F. A. 1910. The Islands of Titicaca and Koati. New York.

Bennett, Wendell C., ed. 1948. A Reappraisal of Peruvian Archaeology. Memoir, American Antiquity, Vol. 13, No. 4, Part 2.

Bennett, W. C., and Junius Bird. 1949. Andean Culture History. American Museum of Natural History, Handbook No. 5. New York.

Betanzos, Juan de. 1880. Suma y Narración de los Inças . . . [1551]. Bibliotçea Hispana-Ultramarina, Vol. V. Madrid.

Bowman, Isaiah. 1916. The Andes of Southern Peru. New York.

Cabello Valboa, Miguel. 1951. Miscelánea antártica [1586], una historia del Perú antiguo . . . Universidad Nacional Mayor de San Marcos, Facultad de Letras, Instituto de Etnología. Lima.

Cieza de León, Pedro de. 1862. Primera parte de la erónica del Perú . . . [1550]. Biblioteca de autores españoles. Historiadores primitivos de Indias, Vol. 2.

Cobo, Bernabé. 1890-93. Historia del Nuevo Mundo [1653], ed. by Marcos liménez de la Espada. Sociedad de Bibliófilos Andaluces. Seville.

Cutler, Hugh C. 1946. "Races of Maize in South America," Bosanical Museum Leaflets, Harvard University, 12:No. 8:257-91.

Garcilaso de la Vega. 1943. Comentarios Reales [1604], ed. by Angel Rosenblatt. Buenos Aires.

Homans, George C. 1941. "Anxiety and Ritual: The Theories of Malinowski and Radcliffe-Brown," American Anthropologist, 43:No. 2:164-72.

James, Preston. 1942. Latin America. New York.

Jiménez de la Espada, Marcos, ed. 1881-97. Relaciones Geográficas des Indias. 4 vols. Madrid.

Karsten, Rafael. 1949. A Totalitarian State of the Past. Societas Scientiarum Fennica, Comentatione Humanarum Litterarum, Vol. 16, No. 1. Helsinki.

LaBarre, Weston. 1947. "Potato Taxonomy among the Aymara Indians of Bolivia," Acto Americana, 6:Nos. 1-2:83-103.

Latcham, Ricardo E. 1936. La Agricultura pre-Colombina en Chile. Santiago, Chile.

McBride, George McC. 1921. The Agricultural Indian Communities of Highland
 Bolivia. American Geographical Society, Research Series, No. 5. New York.
 Malinowski, Bronislaw. 1948. Magic, Science and Religion. Glencoc, Illinois.
 Mcjia Xesspe, M. Toribio. 1931. "Kausay: Alimentación de los Indios," Wira Kocho, 1:No. 1:9-24.

Molina, Cristóbal de. 1943. Relación de las fábulas y ritos de los Indios [1575], ed. by F. Loayza. Los Pequeños Grandes Libros de Historia Americana, Series I, Vol. 4. Lima.

Montesinos, Fernando de. 1882. Memorias Antiguas Historiales del Perú [1642]. Colección de Libros Españoles Raros y Curiosos, Vol. XVI. Madrid.

Morales, Luis (?) de. 1868. Letter in Colección de Documentos inéditos del Archivo des Indias, ed. by Torres de Mendoza. Madrid. Vol. 7, pp. 467-68.

Muelle, Jorge C. 1935. "Restos hallados en una tumba en Nievería," Revista del Museo Nacional de Lima, 4:No. 1:135-82.

Murra, John V. 1956. "The Economic Organization of the Inca State." (Unpublished Ph. D. dissertation, University of Chicago.)

Murúa, Martin de. 1946. Historia del origen y de la genealogía real de los Incas [1590], ed. by Constantino Bayle. Madrid.

Paredes, Manuel R. 1936. Mitos, Supersticiones y Supervivencias Populares de Bolivia. 2 vols. La Paz.

Pizarro, Pedro. 1844. Relación del Descubrimiento y Conquista de los Reynos del Perú [1570]. Colección de documentos inéditos para la historia de España, Vol. V. Madrid.

Polo de Ondegurdo, Juan. 1916a. Errores y Supersticiones; Linaje de km Incas; Ceremonias y Ritos.... Colección de Libros y documentos referentes a la Historia del Peró, Series 1, Vols. III-IV. Lima.

Poma de Ayala, Huamán. 1936. Nueva Corónica y Buen Gobierno [1615]. - Institut d'Ethnologie. Paris.

Quelle, Otto. 1931. "Kfinstliche Bewässerung in Süd Amerika," Ibero-Amerikanisches Archiv, 5:No. 2.

Ramirez, Baltasar. 1936. Descriptión del Reyno del Pirú [1591], ed. by H. Trimborn. Quellen zur Kulturgeschichte des präkolumbischen Amerika; Studien zur Kulturkunde, Vol. 3. Stuttgart.

Rick, C. M., and Edgar Anderson. 1949. "On some Uses of Maize in the Sierra
of Ancash," Annals of the Missouri Botanteal Gardens, 36:No. 4:405-42.
 Román y Zamora, Jerónimo. 1897. Repúblicas de Indias [1575]. Colección de

Libros Raros o curiosos que tratau de America, Vols. XIV-XV. Madrid. Salaman, Redeliffe N. 1949. The History and Social Influence of the Potato.

Cambridge, England.

Sancho de la Hoz, Pedro. 1917. Relación de lo Sucedido en la Conquista [1534]. Colección de Libros y documentos referentes a la Historia del Perú, Series I, Vol. V. Lima. Sapper, Karl T. 1936. Geographic und Geschichte der Indianischen Landwirt-

schaft. Hamburg. Sauer, Carl O. 1950. "Cultivated Plants of South and Central America," in Handbook of South American Indians, VI, 319-45. Bull. 143, Bureau of American Ethnology. Washington, D.C.

Schwalm, H. 1927. "Klima, Besiedlung und Landwirtschaft in den Peru-nord Bolivianischen Anden," Ihero-Amerikanisches Archiv, 2:17-74, 150-96.

Strong, W. Duncan, and Clifford Evans, Ir. 1952. Cultural Stratigraphy in the Virú Valley. Columbia Studies in Archaeology and Ethnology, Vol. IV. New

Tello, Julio C. 1920. Introduction to Peruvian translation of C. R. Markham's The Incas of Perú. Lima.

1942. "Origen y Desarollo de las Civilizaciones Prehistoricas Andinas,"

Papers, 27th Congress of Americanists. Lima. Trimborn, Hermann. 1928. "Die kultur-historische Stellung der Lamazucht," Anthropos. pp. 656-64.

Trimborn, Anonimo. 1934. "A Letter to the King [?]," with facsimile reproduction. Published by H. Trimborn in Zeitschrift für Ethnologie.

Troll, Karl. 1931-32. "Die geografische Grundlagen der Andinen Kulturen und des Inka-reiches," Ibero-Amerikanisches Archiv, 5:258-94.

Tschopik, Harry, Jr. 1951. The Aymara of Chucuito, Penn Part I, Magic, Anthropological Papers, American Museum of Natural History, 44:2. New York.

Tschudi, J. J. 1918. Kulturhistorische und sprächliche Beitragungen [1891]. Vienna. Peruvian translation in Colección de Libros y documentos referentes a la Historia del Porú. 2 vols. Lima.

Valcárcel, Luis E. 1925a. De la vida Incaica. Lima.

- 1925b. Del aillu al imperio. Lima.

 1937-41. Mirador Indio: Apuntes para una filosofía de la cultura incaica. Lima.

- 1945. La Ruta Cultural del Perú. Mexico.

- 1943 48. Historia de la Cultura Antigua del Perú. 2 vols. Lima.

Valera, Blas (also known as Jesuita Anónimo). 1945. Relación de las Costumbres antiguas [?]. Los Pequeños Grandes Libros de Historia Americana, ed. by F. Loayza. Lima.

Valvorde, Vicente. 1865. "Letter to Carlos V [1539]," in Colección de Documentos Inéditos del Archivo de Indias, 3:pp. 92-137. Madrid.

Weberbauer, August. 1945. Bl Mundo Vegetal de los Andes Pernanos, Lima. Peruvian translation of Die Pflunzenwelt der Peruanischen Anden (1911, Leip-

Willey, Gordon R. 1953a. "Archaeological Theories and Interpretations: New World," in Kroeber et al., Anthropology Today, pp. 361-85.

1953b. Prehistoric Settlement Patterns in the Virú Valley. Bulletin,

Burcau of American Ethnology, Washington, D.C.

Yacovleff, Eugenio, and F. L. Herrera. 1934. "El Mundo Vegetal de los Antiguos Peruanos," Revista del Museo Nacional de Lima, 3:No. 3:241-322.

Social Structural And Economic Themes In Andean Ethnohistory

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SOCIAL STRUCTURAL AND ECONOMIC THEMES IN ANDEAN ETHNOHISTORY

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Although Andcan ethnohistory has long been the source of much speculation about the region's social and economic structure, paradoxically, this very concern has made it difficult to raise some of the questions which in other areas are taken for granted. It has been particularly difficult to achieve a setting for the discussion where preoccupations derived from European economic history—whether the Inca were socialist or feudal, a welfare state or one with "patriarchal" slavery—give way to an anthropological analysis, based on what we have learned ethnographically, in the field, about non-European civilizations, with cities, state controls and public revenue systems but also with kinship institutions and ethnic values enduring and functioning at all levels of the society.¹

The search for Utopia in the Andes is in part due to the sources at hand. Misunderstanding the internal organization of the ethnic peasant community, the continued vitality of reciprocity and kinship bonds, and relying too heavily on their informants among the Inca clite, the European chroniclers consistently attributed to the Inca state what were actually age-old peasant reciprocity functions. This was strengthened early in the seventeenth century when Garcilaso de la Vega, the most widely read and translated of our sources, wrote his *Commentaries** to impress his European readers with the excellence of the system his maternal ancestors had created and his paternal kin had destroyed.

There is no need to undertake a survey of our sources. They have frequently been classified and evaluated by others. If one is primarily interested in the European invasion and what in Peru is called "colonial history", obviously one's evaluation of the

¹The original breakthrough in this field came in the late XIX century when Heinrich Gunew (1891, 1896, 1937) thought of looking at the Inca in the light of ethnography. See also Trimborn, 1927; Rowe, 1946; Kirchhoff, 1949; Murra, 1958a.

²Carcilaso de la Vega, [1604], 1943.

Means, 1928; Rowe, 1946; Porras Barrenechea, 1955.

various sources will be quite different from that of a student concerned with Andean social and economic structures.

However, I would like to call attention to two kinds of sources in Andean ethnohistory which seem to me not to have received

all the study they deserve:

1) Those describing a particular valley, a tribe, a town or a set of villages as opposed to those trying to "explain" what "the Incas" as a whole were like. Descriptions like those collected in the four volumes of the Relaciones Geográficas de Indias* were made most frequently within a bureaucratic setting, being answers to questionnaires circulated by the European colonial administration. Some of the earlier ones were made soon enough after the invasion for many of the respondents to have been functioning adults under the Inca regime.

2) Those written or compiled later in the sixteenth or early in the seventeenth centuries by authors whose ancestors, or at least the maternal ones, were Andean Americans, as opposed to earlier writers who were mostly Europeans. Although differing enormously among themselves in aims, personality and sensitivity to their European readers, they frequently have in common an interest and a familiarity with local, village conditions which allows their use as supplements and checks to both the administrative records, above, and to the more familiar chroniclers.

I would like to illustrate the value of this new evidence by commenting on one document each from the two kinds of sources. The first is Iñigo Ortiz de Zúñiga's report on his inspection trip to Huánuco in 1562, just thirty years after the invasion; the other is a better known collection fo folklore from Huarochirí, in the mountains above Lima, collected in the first decade of the seventeenth century by a native of Cuzco, Francisco de Avila.⁵

Although the publication in the Revista del Archivo Nacional de Lima of Ortiz' survey and questionnaires began as long ago as 1920, it was interrupted for thirty years and was not renewed till 1955.* It is still incomplete, but enough is now available to allow

⁴Jimenez de la Espada, editor; 1881-1897. A writer like Rowe, 1946, has made most efficient use of this source.

⁶Trimborn, 1939, 1942, 1952. For additional comment on Avila see Polo, 1906; Porras Barrenechea, 1955, pp. 32-3, 54-5; Rowe, 1957, p. 185.

^{*}Ortiz de Zéñiga, 1920-25, 1955 to date. An even earlier 1549, report is available for this area, see Hilmer, 1955.

us to state that after Huaman Poma's Corónica' this is the most important single source on Inca social and economic structure published in the last forty years. Its virtue consists in recording the prudent but not unassertive statements of several score Huámuco chiefs of varying ranks, when asked by Ortiz to compare Inca conditions with those of 1562. The document also includes the first house-to-house census available to us from the Andes.

Since it will not be possible in a short space to present all the evidence dredged up by Iñigo Ortiz' questionnaire, I have selected one aspect of Inca and Andean social organization on which our information before was notoriously contradictory and incomplete: the status, functions and revenues of the kuraka, the traditional ethnic leadership in the Andes. After the Inca conquest these men were drawn into the administrative system of the state. What their duties, rights and privileges had been within the ethnic community remained a matter of speculation.8 There is no reason to assume a uniformity throughout the Andes of such duties and rights, for one expects to find cultural differences between coast and highlands, between herders' chiefs and those of irrigated oases; also because huraka is a rather vague term covering offices differing enormously in power and responsibilities, from men in charge of small valleys with a few settlements to the king of Chimú.

Our traditional sources have also been weak on the details of arrangements prevailing once the *kutaka* were incorporated in the Inca administrative, political and revenue-producing machinery. We knew that upon incorporation the *kutaka* lost some of their old privileges such as that of initiating warfare; we also knew that they were confirmed in their jobs by the conquerors if there was no reason to doubt their allegiance and that the lineage could expect to retain access to the position even though an individual did not manage to obtain Inca confirmation of the appointment.

The document under consideration is a lucky find in view of our

⁷Poma, [1615], 1936.

⁵See Rowe, 1946, p. 261; Kirchhoff, 1949, where distinction is drawn between "commoners" and "nobles" but where kurakn are neglected; Murra, 1956, Chapter H, Land Tenure; Chapter V, Peasant Corvée and the Revenues of the State; Chapter VI, Allocation of Surplus or the Redistributive State.

effort to understand these traditional ethnic leaders since the men interviewed were mostly local people, tied to the population of a relatively small area by an endless web of kinship, ethnic loyalties and obligations. They were of various ages and dispositions and the older make reference to personal experiences and travel to Cuzco in Inca times; several were obviously still enjoying many of the perquisites of their traditional rank.⁹

The Huánuco area was occupied in Inca times by four waranga, four census units of about a thousand households each.10 Within this arithmetic uniformity, familiar to us from the chroniclers but still a matter of conjecture when it comes to understanding the functions and nature of the decimal divisions," the visita of 1562 reveals a variety of populations. Many were local people—Chupachos or Yachas, which may well be ethnic names, since they do not refer to a particular settlement but to groups of villages and hamlets, with their dependent colonies in the warm kuka-growing country and pastures on the cold puna. But the waranga included also milmaq settlers transplanted by the crown for strategic and maize-growing purposes. Other groups took care of state herds grazing in the neighborhood. While the waranga chiefs were all local people, we discover that their functional jurisdiction did not really extend over the newcomers although the latter were enumerated with the indigenous population for census purposes: "the said mitimaes have their own chief, from Guzco, and never did the main chief of this division have any lordship or power over them, on the contrary the mitimaes had power over these since they were placed there as overseers of the Inca".12

The Huánuco questionnaire confirms the point that the ethnic leadership came to office along kinship lines: Joan Chuchuyaure, principal kuraka of Yachas succeeded his relatives on the job and it (the succession) "comes from very far back". There is no evidence here of the point made a decade later by Sarmiento de Gamboa and Francisco de Toledo that the Inca appointed out-

⁹Rowe, 1954, 1957.

¹⁰ Rowe, 1946, pp. 263-4; 1958.

¹¹ Матта, 1958а, рр. 33-34.

¹⁸Ortiz de Ziñiga, [1562], 1920, I, p. 162.

¹⁸Ortiz de Zóñiga, [1562], 1956, XX, pp. 302, 311.

siders to kuraka jobs; only nuitmaq settlements had non-local leadership.

One aspect of kuraka succession which receives its clearest statement in this document is the absence of primogeniture or any other method for the automatic devolution of the job—"the man who was the man for it" being picked among the lineage members. In discussing the top job soon to become vacant, Nina Paucar remarked to the interviewer that the lineage heir would be selected "if he were a man (fit) to rule and, if not, they will make another chief because in each waranqa there are chiefs' sons who could do it..."

Given the date when this information was recorded, the Huánuco material is no better than our standard sources on pre-Incaic functions of ethnic leaders—the bulk of the data deals with obligations to the state. However at least one informant mentions the distribution of "new" lands as well as those left ownerless, a kuraka duty till today. Welfare functions which the European and European-influenced chroniclers attribute to the king are here located where we think they belong—in the hands of the leaders of the kin group. Kuraka also saw to it that the lands of an old woman, alone and too old to work, were planted for her; at times they also distributed llamas, which were scarce but highly valued in Huánuco.

Chiefs were in turns the beneficiaries of traditional reciprocity: they had access to a variety of services from all households, including those of craftsmen. We are told that the community gathered and the work was divided among the households who provided farming, weaving, herding, house building and hauling services. The enumeration of these duties is not very different from the available sources. Its importance consists in confirming what some students have long suspected: the model for

¹⁴Ortiz de Zúñiga, [1562], 1920, I, pp. 184-5. We are obviously dealing here with administrative and political choice and not othnic or kinship leadership, since the four waranga were a territorial division including local groups of very distinct antecedents. This is the first time that a kuraka administering a quartet of waranga has been reported in our sources.

³⁵ Ortiz de Zöñiga, [1562], 1920, pp. 25, 45-6. For contemporary ethnography see Nuñez del Prado, 1949 and unpublished reports from elsewhere in Cuzco and Puno.

²⁶ Ortiz de Zúñiga, [1562], 1957, XXI, p. 327.

¹⁷Ortiz de Zúñiga, [1562], 1921, II, pp. 223, 227.

¹⁸Ortiz de Zúñiga, [1562], 1957, XXI, pp. 69-70.

the revenues of the state are the revenues of the *kuraka*; there are no contributions in kind, only in time or labor; like the *kuraka* the king will try to live up to the reciprocity expectations of the citizenry—all hands working for somebody else, including higher authority, must be wined and dined while on corvée; the wool for the cloth to be woven was supplied by the beneficiary.¹⁹

The most novel feature of kuraka privilege that emerges from Iñigo Ortiz' report is the presence in the community of chiefly retainers whose economic and social status differed from those of other villagers. The above mentioned Chuchuyaure, of Yachas (350) households in Inca times), declared that he had four men "de servicio", two young and two married. The bachelors were away (one with the llamas, the other in warm country) and are not enumerated; the married men turn up some pages later, in the house-to-house census. They are the only men in the community beyond the chief who are exempted from paying tribute to their European encomendero, since they are part of the personal, full-time staff of Chuchuyaure; even after thirty years of European control" the kuraka is free of corvée duties, just as he was in luca times, and able to protect his privileges and those of his domestic staff. One of these retainers, Liquira, in house no. 73, had not even bothered to be baptized; he had no lands of his own, but worked those of his master, and was able to feed two wives and four children with an unspecified share of the crop. To get the clothing needed for his family he bartered agricultural produce." He and his partner living in house no. 81, mention as their other duties weaving for Chuchuyaure's household and trading on his behalf at Chinchacocha. There is no indication where Liquira is from or how he got into his present circumstances. When questioned, he said he served of his own free will, but the question was a leading one and Liquira had been an adult at the time of the European invasion. There is no indication that these men suffered any disabilities. Furthermore their polygynous households, as well as the responsibilities entrusted to them, do not seem to imply that we are dealing here with a servile,

¹⁹ Murra, 1956, Chapter V, "Peasant Corvée and the Revenues of the State".

²⁹ Rowe, 1957.

²⁷ Ortiz de Zéñiga, [1562], 1957, XXI, pp. 318, 326.

low-status group. The only hint of dissatisfaction emerges when Liquira indicated that although landless he had time to cultivate.**

The question which arises here, is: what relation is there between such full-time "servants" as Liquira and the yanu retainers of the king? Are we again confronted with a pre-Incaic pattern on which the later, state institution is modeled? The data are inconclusive, but the hint is worth remembering.

In addition to the four men, Joan Chuchuyaure had four women sharing his own house, no. 84: a senior wife with five children and three younger women "de servicio", with six more offspring by don Joan between them. They spun the wool and cotton to be woven by the male retainers." Four women were about par for a huraka in Huánuco. I have not yet had the time to study the composition of the many households enumerated by Ortiz, but my impression is that polygyny was not frequent and four women were clearly a sign of considerable status.

On another front kuruka intervened as judges and arbitrators in a variety of situations: land disputes, theft, violence, adultery. The information is unfortunately imbedded in a description of justice and administration in Inca times and emphasizes the fact that "federal", Cuzco officials frequently intervened in local judicial matters, confirming decisions and apparently acting "on appeal", ordering people to be lectured in public, whipped and even killed. It is hard to tell from the evidence how the jurisdiction was split; chances are that short of rebellion or refusal to work off one's corvée obligations, kuraka carried on as of old between the periodic visits of the Cuzco inspectors.

In general, the Huánuco material is most revealing in the area of kuraka-Inca relations. The ethnic leadership may have been selected along kinship lines and confirmed by their peers, but "they did not dare to sit on the "tiana" of rank until they received

²º ibid., p. 318.

²³Trimborn, 1927; Kirchhoff, 1949, pp. 299-300; Nuñez Anavitarte, 1955; Murra, 1956, Ch. VIII, "From Corvée to Retainership".

^{*}Ortiz de Zúñiga, [1562], 1957, XXI, p. 327.

^{21a}Since the answers of the kuraka are available to us only through the litter of the interpreter and the recording clerk, we cannot here corroborate the suggestive distinction drawn by Rowe between "provincial governors" or t'agrikaq and inspectors or tukuy-rikaq. See Rowe, 1946, p. 254 and Rowe, 1958, pp. 500-1.

the sanction of "the Inca." ²⁵ "Ability" or "skill in ruling" were now evaluated by the state as well as the community and we are told that leaders of all ranks required such sanction. Since such omniscience by the center is difficult to visualize, given the size and newness of the Inca state, one is pleased to hear from one of the informants that it was the local Inca "governor"—the inspector and representative of central authority—who did the actual confirming, a degree of decentralization which is not astonishing but which had not been documented previously. In the same context, we hear that sons of the *kuraka* in office spent one or two years at the "governor's mansion", matching the Cuzco indoctrination reported elsewhere.

While state confirmation was required to hold the job, and the inspector's visits are reported to have been frequent, our informants try to give the impression that they were removed from office only rarely. One of them says that it happened only "for very great effenses", " while another, Pulca of Auqimarca, insists, that only if a person were guilty of one or more of "five very principal lapses" did he lose his job. These five are listed as: disregarding orders from the Inca governor, attempted rebellion, neglect in collection or forwarding of crops raised on state lands, carelessness in organizing the sacrifices required three times a year, and to have used the peasants at weaving or other tasks beyond the customary labor services. Although Pulca is our only source for such a list, it is a suggestive one; we are beginning to get away from the idealized version of Inca social organization.

The details presented are sufficient, I think, to indicate that we are dealing here not only with new information but with a hitherto unused kind of source, one which illuminates the functioning of Inca society at the local level. Since there is every reason to be-

²⁵Ortiz de Zéñiga, [1562], 1920, I, pp. 38, 158 and 1955, XIX, p. 197.

Ortiz de Zúñiga, [1562], 1955, XIX, p. 207.
 Ortiz de Zúñiga, [1562], 1956, XX, p. 301.

²⁹Ortiz de Zéñiga, [1562], 1920, I, p. 157. The first three are expectable from other sources; the fourth is new and further details should shed much light on the relations of the state church to the conquered ethnic groups; the fifth is, in a way the most provocative: it indicates possible intervention of the crown into traditional covvée arrangements by acting as "protector" of the peasantry. It does confirm a claim of Garcilaso's which I must confess I always considered part of his apologetics. See Garcilaso, [1604], Bk V, ch. ii; 1943, p. 227.

lieve that additional questionnaires of this kind²⁸ for the period before the 1572 reorganization can be located, our hopes of someday reconstructing the local peasant version of face social struc-

ture are high.

My comments upon my second source need not be as elaborate since it is familiar to the anthropological world through the efforts of Prof. H. Trimborn, who has published the Quechua text collected by Avila, its German translation and several commentaries.²⁰ As a source on economic and social structure it is very different from the Huánuco report, since it is a collection of folk-lore. However, the two sources have one thing in common: they deal with life in a limited area and do not attempt any generalizations about the Andes as a whole. Thus, both provide a localized check on the broad canvass; both also give us unique material, unavailable in the chronicles.

One of the most controversial and poorest documented of Andean institutions is the *ayllu*, the kinship unit in the local social organization.³¹ The chief deficiency in our study is the absence of materials on the functioning of the *ayllu* in particular circumstances. In the Huarochiri material, the *ayllu* is taken for granted; it is, alas, insufficiently described, but it does appear in a wide variety of cultural contexts: ceremonial, economic, historical.

Tradition records which ayllu broke off from which; ** some kind of seniority was observed between maximal and minimal lineages: "the Tutayquiris... were the last born of the Quinti and the Chica treated them with contempt since they were the youngest"." Since many modern commentators see in the Inca ayllu primarily the localized, territorial community, it is interesting to

²⁷We are aware of at least one other document submitted to the oidorss of Lima in response to this questionnaire, that of Polo de Ondegardo, published by C. A. Romero, 1940. We do not know how many visitadores like Iñigo Ortiz were sent out; since the questionnaire came from the king, in Europe, and was meant to apply to the whole audiencia of Lima, there is no reason to suppose that the Huanuco virila was unique. Santillán was one of the oidores at the time. See Santillán, [1663-64], 1927.

⁵⁰ Trimborn, 1939, 1942, 1952. The folio references below are to the photostatic copy of Avila's manuscript published by Galante, 1942.

Rowe, 1946, pp. 253-56; Kirchhoff, 1949, pp. 294-99. A Peruvian historian Mrs. Maria R. de Diez Canseco is now engaged in an archival study of royal artiu or panaka. Information on such status lineages is more readily available than on peasant artiu, and should be very useful.

Avila, [1608], ch. VII, folio 71v; ch. XI, folio 77v.
 Avila, [1608], ch. XI, folio 77v; ch. XXXI, f. 105v.

note that Suica ayllu was reported to have died out at San Damian but was still surviving at Sucsacancha and Tumna." Various community-wide tasks such as cultivating shrine lands, or providing sacrificial flamas, were undertaken "ayflu by ayflu", on rotation.30 Avila notes that each ayllu and town was likely to have its own version of the folkloric material recorded.36

Marriage is another institution on which functional information is very rare. While Iñigo Ortiz' material does give support to the reports that the state intervened in marital matters, 37 in Huarochiri folklore there is no mention of such intervention. Marriage is here seen in the context of village and kin group initiative. A qhapaq hatun apu, a powerful kuraku, can treat his daughter as disposable and promised her in exchange for being cured of a chronic illness.48 In case of conflict over irrigation waters between two ayllu, marriage is a way of reconciling the conflicting claims. ** One should consult the woman's father before carrying her off, even with her consent. Her kin were indignant, and even promises. of houses, fields and llamas did not seem to mollify them. Eventually, the groom, who turns out to be a local deity, provided them with a subterranean canal for the irrigation of their crops.40 This also confirms the probability of bride wealth hinted at in other materials.41 Marriage with male outsiders did take place, but their foreign origin was remembered.42

Economic matters are also illuminated in this source. Access to land is established by kinship claims, and conquest is accompanied by efforts to wipe out the potential claimants.33 Agriculture is the object of considerable ritual observance, with major magical effort being exerted over irrigation and the llama herds.44 In addi-

^{*4}Avila, [1608], ch. XXVI, f. 96v. Since these texts were recorded seventy years after the invesion and thirty after Toledo's resettlement, it is possible that such dispersion of apile members is a post-European phenomenon,

⁸⁵Avila, [1608], ch. XIX, f. 84v; ch. XX ff. 84v-85r; ch. XXIV, f. 92v.

^{**}Avila, [1608], ch. XIII, f. 79r.

³⁷ Ortiz de Zéñiga, [1562], See also Murra, 1958a, p. 33.

²⁸ Avila, [1608], ch. v. f. 68c.

⁵⁹ Avila, [1608], ch. XXX, ff. 99v-100r.

⁴⁹ Avila, [1608], ch. XXXI, 103r.

⁴¹Murra, [1956], ch. I.

⁴²Avila, [1608], ch. XXIV, f. 92r.

Avila, [1608], ch. XXXI, ff. 101v-102r.

⁴⁴ Avila, [1606], ch. VII, f. 71v; ch. XXIV, ff. 91r-v.

tion to peasant holdings, we find, in Huarochiri, land apportioned to local shrines;45 Pachacamac, the well known coastal deity, had pastures reserved for him, and herds "in every town". Inca economic exactions are mentioned only casually but even here the information provides dimensions absent elsewhere. The Inca confirmed tenure in llamas and pastures claimed by local shrines;47 locally-grown state crops were used for offerings to these deities in addition to the libations and sacrifices of the community; so was state cloth woven by the local women.46

The Inca also intervened by assigning "scrvants" described as yana to the several local shrines. Pariacaca was granted fifty "servants" for helping the Inca king against his enemies." Elsewhere in the text we hear of thirty men from Yanyos who also worked for Pariacaca's shrine. Pachacamac had "many hundreds" of such retainers; 51 various religious specialists and waka carctakers are mentioned in an ayllu context, but it is impossible to say if full-time retainers are pre-Incaic or not.

Status differences are pronounced. The powerful (qhapaq) are people who can claim the assistance of many women and men for such various tasks as house building, dancing or hauling grass on llama-back.52 The weak (waqcha) are potato eaters and can be readily recognized by their torn and grimy clothing. To discover that the father of one's child was waqcha was enough to drive a female deity to suicide."

The points listed above should be enough to indicate the wealth of social and economic data to be found in such early folkloric material, collected in Quechua by the Andean writers of the turn of the seventeenth century. Even where their ostensible purpose was the destruction of Andean culture and religion, their intimate knowledge of the language and their roots in the culture they were destroying make them a very important source.

⁴⁵ Avila, [1608], ch. XIX, f. 84v, but see ch. XXIV, f. 105v, where the Concha, who were considered Parlacaca Tutayquiri's "youngest sons", were sparing with assigning lands to his shrine. See translation in Trimborn, 1942,

Avila, [1608], ch. XX, f. 85v; ch. XXII, f. 89r.

³⁰ Avila, [1608], ch. XVIII, f. 83r.

^{*} Avila, [1608], ch. XX, f. 85v. m Avila, [1608], ch. XXII, f. 89r. 48 Avila, [1608], ch. XVIII, f. 83v.

²² Avila, [1608], cb. V, ff. 68v-69v. 4 Avila, [1608], ch. XXII, f. 91v.

st Avila, [1608], ch. V. f. 67r. For status differences among crops and foods, see Murra, 1960.

⁵⁴ Avila, [1608], ch. II, ff. 64v-67r,

I am optimistic about our chances in years to come to extend our knowledge of the economic and social structure of the Inca state. We may not find any new Ciczas or Cobos; but I know that many more such local surveys as Iñigo Ortiz de Zuñiga's have been neglected and we have just begun to study the Quechua text of the sixteenth and early seventeenth centuries. I submit that we will find these sources to be even more revealing than the traditional ethnohistoric sources on the Andes.

BIBLIOGRAPHY

AVII.A. FRANCISCO DE-De Priscorum Huarochiricusium. . . 1608—All folio references are to Galance edition, Madrid, 1942. See below, Galante, 1942. First transcription was Trimborn, 1939.

GUNOW

ow, Hernerch 1891—Das Verwandschaftsistern und die Geschlechtsverhaende der Inka. Das Ausland, vol. 64. 1896—Soziale Verfassung des Inkareiches. 1937—Geschichte und Kultur des Inkareiches. Amsterdam.

GALANTE, HIPPOLYTUS

De Priscorum Huaruchiriensium. Bibliotecae Nationalis Matri-tensis edidit Hippolytus Galante. Consejo Superior de Investi-1942 gaciones Gientificas, Instituto Gonzalo Fernandez de Oviedo. Madrid.

GARGILASO DE LA VEGA, EL INCA. 1604—Primera parte de los Comentarios Reales . . . Angel Rosenblatt, editor. 1943 Buenos Aires edition.

HILMRR, MARTE 1955-Travaux, Tome v. Institut Français de Recherches Andines. Lima-Paris.

JIMENEZ DE LA ESPADA, MARCOS, (cd). 1881-97---Relaciones Geográficas de Indias. 4 volumes. Madrid.

KRICHHOFF, PAUL
1949—The Social and Political Organization of the Andean Peoples.
Handbook of South American Indians, volume V, pp. 293-311. Washington.

PHILIP A. 1998 Biblioteca Andina. Transactions, Connecticut Academy of Arts and Sciences, volume XXIX, pp. 271-525.

MURRA, JOHN V. 1956—The Economic Organization of the Inca State. Unpublished Ph.D. dissertation, University of Chicago. 1958a. "On Inca Political Structure", Systems of Political Control and

Burcaucracy in Human Societies. Proceedings, 1958 meeting, American Ethnological Society.

1958b Review of The Ancient Civilizations of Peru, by J. Alden Mason.

American Anthropologist, 60: 4. 1960—Rite and Crop in the Inca State. In Culture and History; Memorial Volume for Paul Radin.

NUÑEZ ANAVITARTE, CARLOS 1955-Teoria del Desarollo Incásico (interpretacion esclavista-patriarcal de su proceso historico-natural), Tomo I, partes i, ii. Cuzco.

NUNEZ DEL PRADO, OSCAR

1949—Chinchero, un pueblo andino del Sur. Revista Universitaria, Cuzco, volume XXXVIII, no. 97, pp. 177-230.

ORTIZ DE ZÚÑIGA, IÑIGO

1562—Visita fecha por mandado de su magestad... por Iñigo Ortiz de Zóñiga... 1562... Revista del Archivo Nacional del Peru, Lima, 1920-25, 1955 to date.

Polo, José T. 1906—Un Quechuista. Revista Histórica, Lima, I, no. 1, pp. 24-38.

POMA DE AVALA, HUAMÁN

1615-Neuva Corónica y Buen Gobierno. Paris edition, 1936.

Porras, Barreneghea, Raúl 1955 - Fuertes Históricas Peruanas, Lima.

ROMERO, CARLOS A.

1940-Informe del licenciado Juan Polo de Ondegardo al licenciado Briviesca de Muñatones sobre la perpetuidad de las encomiendas en el Perú, [1561] . . . Revista Histórica, volume XIII, pp. 125-96.

Rows, John Howland 1916—Inca Culture at the Time of the Spanish Conquest. In Handbook Inches Ladies and Ladies of South American Indians, volume II, pp. 183-330. Washing-

1954—El movimiento nacional inca del siglo XVIII. Revista Universitaria, Cuzco, No. 107.
1957—The Incas under Spanish Colonial Institutions. Vol. XXXVII, No. 2. Hispanic American Historical Review.
1958—The American Laboratoria Colonial Institutions and Proceedings of the Control of Control of the Control of Cont

1958—The Age-grades of the Inca Census. In Miscellanca Paul Rivet, pp. 499-522. Mexico.

Santullán, Hernando de 1563-64—Relación del origen, descendencia, política y gobierno de los Incas. In Colección de tibros y Documentos referentes a la historia del Perú. Serie 2, vol IX, 1927.

Taimborn, Hermann
1927—Die Gliederung der Staende im Inkareich. Journal de la Societé des Américanistes, vol. XIX, pp. 303-44. Paris.
1939—Dzemonen und Zauber im Inkareich, Leipzig.
1942—Daemonen und Zauber im Inkareich, Nachtraege zum Ketschuswerk des Francisco de Avila. Zeitschrift fuer Ethnologie, vol. 74.
1952—El Motivo Explanatorio en los mitos de Huarochiri, Mar del Sur, Lima, vol. VII, uo. 21, pp. 21-32.