### NATIVE CULTURE OF THE SOUTHWEST

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#### A. L. KROEBER

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#### NATIVE CULTURE OF THE SOUTHWEST

## BY A. L. KROEBER

Anthropology has been pursued in the Southwest for a couple of generations. The railroad surveys and early geological explorations brought back descriptions, specimens, and photographs, both of ruins and pueblos, some of which have never been surpassed. Excavations soon followed, and in some cases work was done which will stand for all time: Mindeleff's on architecture, for instance. Meanwhile Cushing laid the foundation of ethnological study in his residence at Zuñi. Materials kept piling up decade by decade.

Fifteen to twenty years ago inquiries took a new turn. The older investigators had been content to describe or, if they explained, felt confident that they could derive origins immediately from their particular data. In time, objectives shifted from origins to development, from ultimate to nearer antecedents, and even these, it was recognized, could ordinarily be determined only through comparative treatment of a wide body of data. In archaeology the tremendous evidential weight of superimposition of remains began to be perceived, and with the stratigraphic discoveries of Nelson and Kidder<sup>1</sup> Southwestern archaeology entered the field of the modern sciences. Site after site was explored under the new point of view; until, basing on the long continued excavations at Pecos, Kidder, in his Southwestern Archaeology, was able to weld the prehistory of the most distinctive part of the area into a comprehensive and continuous whole of two Basket Maker and five Pueblo periods. This fundamental work will no doubt be corrected in detail, enriched and intensified, and certainly is in need of areal extension; but its framework promises to be permanent.

Ethnology has not progressed quite so far, but is emerging from the descriptive stage. When Parsons' long promised monograph appears, we shall have an analytic comparison and partial historic interpretation of at least the important ritual side of Southwestern

<sup>&</sup>lt;sup>1</sup> N. C. Nelson, Chronology of the Tano Ruins, Am. Anthrop., n. s., 18:159-80, 1916. A. V. Kidder and S. J. Guernsey, Archaeol. Explor. in N.E. Arizona, Bur. Am. Ethn., Bull. 65, 1919. A non-stratigraphic attack on the sequential problem was made by Kidder in Pottery of the Pajarito Plateau, Mem. Am. Anthrop. Assoc., 2:407-62, 1915.

<sup>&</sup>lt;sup>2</sup> An Introduction to the Study of Southwestern Archaeology, 1924.

culture; and studies of its other aspects may be expected to follow. Strong has already made a beginning of an interpretation for the forms of society.<sup>3</sup>

It is opportune, accordingly, to review the problems of cultural anthropology in the native Southwest as they shape themselves at present.

First of all, it must be admitted that we recognize several different The archaeologists mean Pueblo and the agricultural antecessors of the Pueblo, when they say Southwest. **Ethnologists** mostly have in mind Pueblo and Navaho, with the Pima-Papago as a sort of annex. The Apache are little known, the Havasupai remain undescribed in print, 3a on Walapai, Yavapai, Maricopa there is nothing. Haeberlin long ago did not hesitate to treat the southern Californians as outright Southwestern,4 but in most discussions they are still left out, as if they were ethnically Californian. Wissler<sup>5</sup> and I,<sup>6</sup> in continental classifications, both extend the Southwest culture south nearly to the Tropic, so that half of it lies in Mexico. No one appears to have challenged this classification, perhaps because data from northern Mexico are so scant. At the same time, it is clear that if this larger Southwest is a true cultural entity, the old Pueblo or even Arizona-New Mexico Southwest is but a fragment, whose functioning is intelligible only in terms of the larger growth. What is the common element in all the tribal cultures of the area? What the substratum from which they have developed divergently, and what the interrelations between the developments? Considerations of this sort are perhaps being faced in many quarters. They have not yet been attacked as problems.

What is needed first of all is a more intensive comprehension of the area as a setting; of the human ecology of the native Southwest. Wissler has pointed out that the modern Pueblo region falls wholly within a region which geographical botanists describe as a semi-desert bordering on plains, forest, and desert. For the remainder of the Southwest even such preliminary correlation has scarcely been attempted.

<sup>&</sup>lt;sup>3</sup> W. D. Strong, An Analysis of Southwestern Society, Am. Anthrop., n.s., 29:1-61, 1927.

<sup>&</sup>lt;sup>3a</sup> L. Spier's Havasupai Ethnography, Anthrop. Papers Am. Mus. Nat. History, 29:81-392, 1928, has appeared since the above was written.

<sup>4</sup> H. K. Haeberlin, Mem. Am. Anthrop. Assoc., 3:1-55, 1916; pp. 14, 17, etc.

<sup>&</sup>lt;sup>5</sup> The American Indian, ed. 2, 1922, map fig. 58, p. 219.

<sup>6</sup> Anthropology, map fig. 34, p. 337, 1923.

<sup>&</sup>lt;sup>7</sup> The Relation of Nature to Man in Aboriginal America, 213, 1926.

Maps of botanical distributions, however, show as a well defined area of desert, characterized by creosote bush and cactaceae, the territory occupied by almost the whole Yuman family and the Pima, Papago, and Sonoran tribes, in other words, those Southwestern peoples who might be described as sub-Pueblo. On the other hand, the semi-desert in which the Pueblo range falls, extends northwestward into the Great Basin. This fact, at first sight seemingly subversive of a correlation between Pueblo culture and environment, nevertheless accords with the extension into Nevada of a form of the Basket Maker culture of which the Pueblo was an outgrowth.

In this matter of ecology it is of course not enough to know that an area is arid and that the agricultural natives evinced skill in finding water holes or spots in which their corn would grow. The local variations of season, temperature, precipitation, physiography, soil, plant cover, and dependent fauna mean an inevitable adjustment of the local cultures. We have unduly neglected ecology in almost all North American ethnological studies. Attention has been directed to cultural forms; the land, and those aspects of culture most directly dependent on it, economics and politics, have been slighted. lend themselves less readily to systematization than society, ritual, tradition, and art, and their patterns are hence more plastic and harder to follow. But they are no less significant to the understanding of culture processes, and the Southwest, a land that is open and boldly characterized, offers particular opportunity for a modern, nonsimplistic environmental study, which would almost certainly stimulate analogous research elsewhere. What seems to be most needed at the outset is a review and ordering of the geographical data available.

The historic imports of the spatial relations of the various culture types in the Southwest have been little examined except in so far as Kidder has dealt with the southward retraction of the true Pueblo area in its third or Great period,<sup>8</sup> its abandonment of its original focus, the San Juan drainage, at the end of that period, and its gradual northward and eastward shrinkage since. Equally interesting are likely to be inductions based on the space and time distribution of traits transcending the special Pueblo culture: pottery, for instance.

<sup>8</sup> The terminology is that advocated by the archaeological conference held at Pecos, August, 1927, namely: Basket Maker 1, hypothetical, non-agricultural; BM 2, the classic BM with maize; BM 3, "Post-Basket Maker"; Pueblo 1, "Pre-Pueblo"; P2, Early or small ruin Pueblo; P3, Great period; P4, late prehistoric, including period of discovery; P5, after Spanish settlement or the Pueblo rebellion. See Kidder, Science, 66:489-91, 1927.

Except perhaps for some of the Athabascans and Yumans, every Southwestern people seems to have been pottery-making. To the west of the trichrome and glazing art of the Pueblos, pottery becomes twocolor on the lower Gila and Colorado, monochrome in California. This indicates a relation of marginal dependence on the Pueblo art. But a direct dependence of these peripheral areas on the Pueblo center is not borne out by other considerations. The middle ("Lower") Gila region has to date shown two styles of pottery, recognized but misinterpreted many years ago by Cushing:9 a red-white-black, and a two-color called variously red on yellow, red on gray, red on red, or, most appropriately, red on buff. This bichrome ware is, as Kidder has pointed out, 10 "so radically unlike . . . . all other Southwestern (read Pueblo) pottery that it gives rise to the suspicion that it may be the result of an intrusion from some hitherto unlocated culture centre." As to the distinctness of this ware in texture, color, pattern, and probably shape, there can be no question; although the smallelement designs figured by Kidder represent only one strain in the style. There can also be no question as to the essential survival of this style in the pottery art of the recent Colorado river tribes, the Yuma and Mohave; and beyond them, in a simplified, usually patternless stage, among the southern California groups. Mohave pottery is almost identical with ancient middle Gila red on buff ware in texture and color; even the designs, although of a somewhat new cast, show indubitable relationship. Modern Pima and Maricopa ware would seem to represent a somewhat more altered making over of the same tradition, with the substitution of black vegetable paint for the dull red in the designs. From Fresnal, in southern Arizona, Lumholtz<sup>11</sup> has figured two ancient bowls closely similar to the red on buff of the Gila. Seri pottery, according to McGee's description and illustrations, 12 belongs to the same tradition, without more simplification, or more quality of archaic survival, than the ware of southern California. The style thus has a distribution embracing at least northwestern Sonora, southwestern Arizona, southern California, perhaps northern Baja California-an area roughly as large as the Pueblo area at the time of its greatest extension. These two pottery traditions in the main abutted on and excluded each other.

<sup>9</sup> Internat. Congr. Americanists, Berlin, 1888, 7:151-94, 1890.

<sup>10</sup> Southwestern Archaeology, 112.

<sup>11</sup> C. Lumholtz, New Trails in Mexico, 170, 1912.

<sup>&</sup>lt;sup>12</sup> Bur. Am. Ethn. Rept., 17:9-296\*, 1898. See pp. 173\*-75\*, 182\*-85\*, pls. 32, 33, figs. 17, 18, 39.

They did however geographically overlap in the middle Gila drainage. Kidder was able to place the Pueblo-like middle Gila trichrome toward the end of the Pueblo great period (P3),<sup>13</sup> without having the evidence to place red on buff temporally. Schmidt, who subsequently excavated in the region, showed by stratification and cross-tying of stray sherds that the red on buff is the earlier of the two styles.<sup>14</sup> This brings to the fore the interesting fact that the red on buff, although temporarily displaced by a Pueblo style on the Gila, has maintained itself with relatively little change over most of its area at least since early Pueblo-3 times, whereas during the same period black on white went out, glaze developed and decayed, and modern styles arose in the Pueblo area.

This vitality of the red on buff style reenforces the inferences drawn from its distinctness and extension. It represents a movement no doubt ultimately related but largely independent of Pueblo pottery growth and approximately equal to it in historical and geographical significance. It is merely the fact that we have approached the ancient contact manifestations of this separate growth from the angle of Pueblo development and hesitated to connect it with its natural survivals, which has obscured the picture. We can accordingly no longer with propriety substantially equate Pueblo and Southwestern in speaking of pottery. Southwestern pottery history consists of at least two developments and their interrelations: Pueblo and Gila-Sonora.

This recognition raises the presumption that Southwestern culture in general is to be viewed in the same way. If we could feel sure of doing so legitimately, the anomalous position of the Pima as a sort of irrelevant appendix would at once be done away with. Just as corrugating, black on white, and glazing characterize the pottery of the distinctive Pueblo unit of this larger culture mass, so would storied masonry, community construction, the kiva, cotton, the matrilineate, direction-color symbolism, perhaps priesthood by learning to fill a recognized office, altars, masks, ancestor impersonation, the importance of the ideas of emergence from the underworld and of sex fertilization, characterize Pueblo culture. The Gila-Sonora culture growth is as yet too little known to be equally well definable; but it would seem to lack most or all of the cited Pueblo trends, and to possess instead patrilinear institutions, a fighting tradition and war

<sup>&</sup>lt;sup>13</sup> Southwestern Archaeology, 127, fig. 25. Page 113 seems to suggest early P4.

<sup>&</sup>lt;sup>14</sup> E. F. Schmidt, A Stratigraphic Study in the Gila-Salt Region, Proc. Nat. Acad. Sci., 13:291-98, 1927.

legends, village as opposed to town organization, prevailingly shamanistic control of ritual, probably irrigation. The environmental reflection of the divergence is that the Pueblo area is semi-desert, the Gila-Yuman-Sonoran area true desert.

This view would explain the isolated Casa Grande culture as a transient contact phenomenon of the two major culture growths. It might also go far to clear up the puzzling cultural status of the lower Colorado tribes, who on the one hand are specialized away from what it has been customary to regard as "Southwestern" features, and on the other hand lack a number of traits common to the Pueblos and the littoral groups of southern California: the kiva-sweat-house, for instance, group fetishes, initiation ceremonies, sand-painting altars, moiety organization. Strong, who recognizes in California older Pueblo and later Colorado river influences, 15 has suggested 6 a migrational irruption of the Yuman tribes to account for the geographical break in recent cultural continuity. It would be less hypothetical to find the explanation in a northward extension of Sonoran culture influences cutting across an earlier westward radiation of Pueblo influences, without commitment as to populational shifts. No doubt the Yuman river tribes specialized considerably the Sonoran culture which reached them. Almost certainly, too, part of the southern culture elements received were passed on by them to the southern Californians—pottery, for example, perhaps the Dying God concept, and the tale of the hero who recovered the bones of his father who had been killed when he lost a game, or whose bones were being played with by his slayers—two myth ideas that it is difficult not to connect with their occurrences in southern Mexico. 17 Such secondary growths and diffusions, however, enrich rather than break the picture which the history of the larger Southwest is beginning to reveal in outline.

Where knowledge is most needed, of course, is on northern Mexico. An intensive modern study of the ethnology of a single Sonoran tribe, for instance, would go far to confirm, modify, or overthrow the views just outlined. To date, the international boundary has proved an almost complete barrier to the broader understanding of the Southwest. And yet the new background, the somewhat diverse technique of field approach, the different language medium, are not great diffi-

<sup>15</sup> Work cited in fn. 3, 49.

<sup>16</sup> Ibid., 52, 53, chart 2.

<sup>17</sup> E. Seler, Gesammelte Abhandlungen, 3:133, 1908 (Tarascan); A. L. Kroeber, Bur. Am. Ethn., Bull. 78:764, 1925 (Mohave: Chuhuecha, Satukhota tales); C. G. DuBois, Jour. Am. Folk-Lore, 17:217-42, 1904 (Diegueño).

culties; certainly not sufficient to warrant continuing to deal with the Southwest as if it consisted essentially of its Pueblo sub-area. Certain problems that have already arisen may very likely find a prompt solution as soon as the southern half of the Southwest is taken cognizance of: the apparently local invention of Southwestern pottery in the Basket Maker era, for instance.<sup>18</sup> On general grounds this invention seems improbable, as Morris recognizes. Yet, as long as a Mexican origin means a substantially direct derivation from the well particularized Archaic of the valley of Mexico, specialists in the Southwest are sound in preferring to consider an independent origin of pottery in their own area. With nearer Mexican types in their ken, and the possibility of tracing stimuli as well as imitations, they might feel differently.

Unusually interesting is the cultural position of the Seri, of which McGee's monograph evidently gives a warped or considerably misinterpreted picture. As he saw the Seri, they do not fit into any historic or cultural scheme, but stand apart to a degree unparalleled in North American experience. It is indicated that McGee's work is in need of reviewing on the basis of much fuller evidence. The Seri language, for instance, is not only not isolated, but reasonably similar to Yuman. Their pottery, as already mentioned, seems to have Yuman affinities. There is not a single specific fact in McGee's monograph that compels the acceptance of the Seri as matrilineal and matriarchal; he seems never to have got real evidence as to how they reckoned descent.

The sanest interpretation of the anomalies of the Seri would seem to be that they are a Yuman group that crossed the relatively narrow<sup>20</sup> part of the Gulf of California from the Peninsula to Tiburon island and adjacent tracts which the Sonoran agricultural populations had left waste, but to which they could transfer without much change of their mid-Peninsular culture. In direct contact with more advanced peoples, especially after the Spanish occupation, they became half predatory, half parasitic; perhaps with an accompanying tendency to cultural degeneration. There is at any rate nothing romantic in such a view; and if it has foundation, the analysis of Seri culture will prove extremely interesting.

<sup>&</sup>lt;sup>18</sup> E. H. Morris, The Beginnings of Pottery Making in the San Juan Area, Anthrop. Papers Am. Mus. Nat. Hist., 28:125-98, 1927.

<sup>19</sup> This series, 11:279-90, 1915. Brinton made the first identification.

<sup>&</sup>lt;sup>20</sup> Series of islands lead from both the Peninsula and Angel de la Guarda island to Tiburon with intervals of open water probably nowhere exceeding a dozen miles in width—not an impossible distance to traverse in a balsa such as the Seri use in crossing back and forth between Tiburon and the mainland.

Recently Loeb has construed the culture of the Pomo of north central California as marginal to that of the Pueblos on the basis of their matrilineal tendencies, meal offerings, ritual pole-climbing, rattle-snake ceremony, spirit impersonations, and shamanistic societies. This seems a slender list of traits for the interpretation of Pomo culture as historically dependent on that of the Pueblos, especially as half of the list is lacking in nearer south central California, among the Yokuts. At the same time a historical connection does seem indicated for at least some of the more specific traits. The nature and route of the transmission may become clear with fuller knowledge of the intervening groups.

Recently also the pottery of south central California has become better known, and proves to extend from the San Joaquin valley to southern Nevada.<sup>22</sup> In spite of its outward crudity, it is a true pottery, made by coiling. The easterly area which it is now known to have occupied brings it nearly in contact with lower Colorado river pottery. It no longer seems likely, however, that the Virgin-Muddy drainage pottery in Nevada represents a taking over of the art from the Mohave, for the characteristic color and designs of the latter are lacking, and the similarities are with central California, according to the description of M. R. Harrington. At the same time, some relation is almost necessarily to be assumed. It begins to look as if there had been two flows of pottery art westward into California: one from the lower Colorado into the southern part of the state, the other from the area north of the middle Colorado into the central part, the intervening highland tract — Tehachapi to Santa Barbara — accepting neither.

This intervening area shows several other features that interrupt what would otherwise be continuous distributions: absence of moieties, burial instead of cremation, bottle-neck basketry.<sup>23</sup> It is not unthinkable that the solitary spear-thrower recorded from California, the Santa Barbara specimen brought home by Vancouver, which is so strikingly aberrant in form,<sup>24</sup> represents a survival somehow connected with what happened in this potteryless tract. The cotton Pueblo cloth, cylinder-headed club, Mohave style hair curls, found at Buena Vista lake in the San Joaquin-Tulare valley,<sup>25</sup> seem rather to

<sup>&</sup>lt;sup>21</sup> Pomo Folkways, this series, 19:149-405, 1926; see p. 399.

<sup>22</sup> Field information of J. H. Steward and M. R. Harrington.

<sup>23</sup> Bur. Am. Ethn., Bull. 78:900, 1925.

<sup>&</sup>lt;sup>24</sup> The same, 559.

<sup>&</sup>lt;sup>25</sup> The same, pls. 63, 72, 81; E. W. Gifford and W. E. Schenck, this series, 23:41, 49-52, 99-109, pls. 1-13, 1926.

be the result of a flow or transport northwestward across the area in question. This unique lot of material is likely to remain puzzling for a long time, both because it is unaccompanied by age indications and because its affiliations are heterogeneous as to area and period.

More definite is the rich cave material from north central Nevada being described by Loud and Harrington.<sup>26</sup> This shows general central Californian affinities, but in its lower levels, so far as these were determinable, specific Basket Maker resemblances also: spear-throwers, for instance. Of further importance in this connection are the positive determinations of specific Pueblo culture being made, especially by Harrington, in southern Nevada. 26a These seem to be fairly early, probably Pueblo 2. The upshot of these discoveries appears to be that an early connection of California with the northern Southwest through the southern Great Basin, which has long been suspected for the Basket Maker period, was succeeded, either immediately or after an intermission, by a northwestward raying out of early Pueblo culture at a time when its northwest extension was greater than subsequently. Even the modern pottery of southern Nevada and central California may represent an echo of this Pueblo expansion. Later, as the true Pueblo area contracted, there may have been transient protrusions or proliferations from it, which, coupled with the losses due to transmission into another set of cultural forms, may account for the apparent sporadic nature of Southwestern traits in central California and beyond. From the point of view of the Southwest, we are here at the very borders of its area if not influence, and history is likely to have been tangled. Yet it is already clear that events in the Southwest cannot be disregarded in understanding what happened well within an area reckoned as distinct. This accords with environment: phytogeographically the Basin and the Pueblo portion of the Southwest form part of one major area of semi-desert.

Returning to territory that is well within the Southwest, we find Strong<sup>27</sup> describing the southern California Indians—other than those of the Colorado river—as organized into small, land-owning, politically autonomous groups, each constituting a male lineage with a patriarchal head who has in his custody, in his house, a fetish bundle containing the more important ceremonial paraphernalia of the group. This type of society holds among the poorer tribes, such as the Desert

<sup>26</sup> The Lovelock Cave, in press, this series.

<sup>&</sup>lt;sup>26a</sup> Now on record in Mus. Am. Indian, Heye Foundation, Indian Notes, 5:235-40, 1928.

<sup>&</sup>lt;sup>27</sup> Work cited in fn. 3; also Aboriginal Society in Southern California, in press, this series.

Cahuilla. In the more prosperous tribes close to the coast, the small unit groups combined into villages. Gifford<sup>28</sup> has shown that there is considerable warrant for assuming lineages, prevailingly paternal and land-owning, as the basis of society in all of California, the larger organizations, such as clans, moieties, villages, and tribes, having been built out of or upon them. In central and northern California, the group is without a fetish bundle; but among the Pueblos the fetish concept reappears with important functions and associated both with houses and with groups. The lineage is also easily traced within the Pueblo clan, although often nameless, and matrilineal. Strong therefore concludes with every appearance of reason that Pueblo and perhaps all Southwestern society in the United States grew out of a status approximately represented by the modern Shoshonean tribes of southern California.

Apparently this growth among the Pueblo has to be pictured as a process of union of lineages into clans and clans into towns; a loss of most of the political autonomy of the lineages, and of territorial propriety except perhaps for farm-land tracts; the elaboration of ritual organization with differentiation of official functions; partial segregation of religious and profane houses; and multiplication of initiating cult societies. Hand in hand went an extension of the fetish concept until not only every group, ritual as well as socially hereditary, but in some cases the individual members of cult societies, possessed their own fetishes. Meanwhile too the lineages had reconstituted themselves on a maternal instead of paternal basis of reckoning descent. This presumably would have happened in connection with the permanent attachment of women to houses, or their coming to own houses, however one prefers to view the relation.

There is nothing in recent Pueblo society to contravene such a resolution of its history, and much to support it. For instance, among the California Shoshoneans initiated members of the cults and shamans are unusually difficult to distinguish. The Pueblo counterpart is that shamanism as such is practically absent, its functions being largely taken over by curing cult societies. It even seems possible to reconstruct conjecturally something of the history of Southwestern ceremonialism by analogy with the southern Californians. Sand-painting altars, for instance, should be older than masks or kachina gods. Other questions would be raised rather than answered. Thus, the problem whether the Pueblo tribal kachina society or the

<sup>&</sup>lt;sup>28</sup> E. W. Gifford, Miwok Lineages and the Political Unit in Aboriginal California, Am. Anthrop., n.s., 28:389-401, 1926.

curing societies are older, would not be specially illuminated by southern California conditions, because the one cult organization there is both concerned with tribal status and shamanistically colored. Nor, in other cases, could an inference be ventured, because of the possibilities of local influencing by a third set of populations. Importance of use of Datura—toloache—for instance, could by no means be construed as having once characterized Pueblo religion as it now characterizes that of southern California. Still, the relation of the two areas does open potentialities of inferring backward in time; if not to ancient Pueblo, then to ancient Sonora.

The coastal Shoshonean organization should therefore match approximately that in vogue in one or more periods of Pueblo archaeology. Basket Maker 2 or 3 is at once suggested, possibly Pueblo 1—eras of small groups essentially restricting themselves to limited tracts; sedentary in the sense of not roaming widely and of spending part of each year at a site that was home; unsettled, however, in comparison with historic Pueblo town groups. Pueblo 1, more likely 2, would have been the period of first drawing together of lineages into groups, which, by Pueblo 3, the Great period, had consolidated still farther into large pueblos each presumably containing several multiple-lineage clans. In this era of Pueblo 2 and 3 there would also have been taking place the shift from patrilineal to matrilineal reckoning: if this was connected with women's house ownership, it may be assumed to have been most likely to occur at a time of marked alteration of house use, and this would have been at the inception of town life, with its relatively stable and large concentrations. There would be no implication that particular lineages continued unbroken through the shift from male to female reckoning. Such a continuance is hard to imagine. With the change of descent, the lineages as such would dissolve into a status of confused or ambiguous definition of the adherence of individuals, from which, perhaps within a couple of generations, new lineages with changed descent would crystallize out, the idea or pattern of grouping by unilateral descent having continued.

These reconstructions may savor too heavily of the hypothetical. If so, it is because they are premature. When based on sufficiently full knowledge, they need not be less sound than other and more familiar historical reconstructions based on inferences. They illustrate the possibility of cooperative relation between the archaeological and ethnological approaches. In the field of intangibles, there is no

reason why the archaeologist should refrain from using the distributional inductions of ethnology; nor why the ethnologist should hesitate to buttress his findings as to the history of culture forms and organization by converting, as well as may be, the tangibles actually established by the excavator, into their corresponding intangibles.

In one respect the heart of the American Southwest is unique in This is its possession of two parallel and heavily interinfluencing streams of culture, the agricultural and non-agricultural. These evidently behave toward each other somewhat like classes in a single society. Navaho and Hopi, to be sure, feel toward each other like two adjacent European nationalities of separate cultural tradition. But, also like these, they impart culture material to each other. And the economic base of society is so thoroughly different that a remarkable contrast has become established between the essential uniformity in the formal or upper levels of the two cultures and the diversity in the underlying ones. The Navaho sand-painting altars and meteorological and fertilization symbolism, for instance, must inevitably have been taken over from the agricultural Pueblos, and fitted into an old anarchic, priestless scheme of more or less shamanistic curing ritual, with little other effect than to invest this with vividness and picturesque interest. In fact, freed from the close intent and official tradition of the Pueblos, the painting of the Navaho took on aesthetic quality superior to that of their masters. Navaho myth and legend are similarly filled with Pueblo material, again treated with a freedom which the better defined purposes of the Pueblos did not allow. The matrilineal reckoning of the Navaho, so anomalous in combination with their unsettled life and patrilocal residence, is also almost certainly taken over from the Pueblos; and so with their weaving—a strange art to occur among a people practically without baskets and pottery. Apache culture will probably reveal similar borrowings, though more random ones. How far there was reaction upon the Pueblos is as yet less clear. Their culture has been avowedly on the defensive for three or four centuries, and probably so in the grain for as long before. Yet some discernible interaction is expectable.

The relation of the two sets of peoples has numerous parallels: in modern east Africa, in India, between ancient Canaanite and Israelite, between still older Mesopotamian valley and hill or desert dweller. It seems to begin to reappear in parts of Central and South America. It does seem unique for North America. The antecedent condition

appears to be a culture of long and settled tradition, town or at least soil bound, self-centered and non-expansive, differentiating from a more generalized culture.

When it comes to external relations of the Southwest, the outstanding problem of course is the connection with southern Mexico. Everyone has always been aware of this; and yet almost no progress has been made in understanding the relation. There are two reasons.

The first reason is anthropological ignorance of northern Mexico. The result is that almost all our distributions are interrupted by blanks, which an occasional report for the Tarahumare or Huichol, or of a border ruin like La Quemada and Chalchihuites, does not seriously dissipate. It is the remote northern half of the Southwest which we are compelled to compare with the Mexican center of higher culture.

Perhaps still more important is the chaos of understanding of southern Mexico. There has been valuable work by specialists, under the leadership of Seler. There has been no real attempt to order the older ethnological data and to comprehend them in all their relationsdata which are easily the fullest and most valuable left by the conquerors and colonizers of any area in the hemisphere. The archaeology is in equally bad shape. The one brilliant exception is the progress made in the unraveling of Maya history. And yet, granting the exactness of the chronology—and this is not yet beyond dispute—there is a danger, perhaps an illusion, in the beam of illumination that streams down the vista of Maya history.' It shows us dates, linked with and corroborated by developments in art, architecture, and calendar. The dates are probably linkable with stages in other phases of Maya culture—pottery and textiles, agriculture and trade, perhaps ritual and institutions. But the linkage has not yet been made. And as soon as we pass beyond the Maya, defined relations are random; largely limited to the vague concept of Toltec, in fact. Not that the results of work in Maya chronology are unimportant. They constitute easily the most significant line of historical evidence available for the history of pre-Columbian America. But their full significance lies in the light they will shed on Mexico as a whole, and through this serve as a scale by which the remainder of the culture of the hemisphere will be measurable. And Mexico cannot be really illumined by Maya chronology until its own house is put in order. Reciprocally, the Maya growth, so obviously an integral part of the larger Mexican one, will get its complete meaning, to which dates can contribute only one

element, out of this relation. The danger lies in overestimating the proportion of the whole task already accomplished. The remedy is systematic attack of the Mexican situation as a whole in one aspect after another.

How little knowledge we really control is clear as soon as we turn attention to any one people or any one activity of culture. Seler and Krickeberg have shown what information can be assembled on even the so-called lesser populations such as the Tarasca and Totonac. But there is nothing comparable available on the Otomi, on the important Nahua-speaking groups outside the valley of Mexico, nor even on the Zapotecan area, generally recognized as the most advanced after Maya and Mexican proper. On the side of separate lines of culture, the obscurity prevailing as to metallurgy and ceramic types is sufficient reminder of the situation. In pottery we are still dealing with the vague and locally variable concepts of Archaic, Toltec-Teotihuacan, and Aztec horizons, while Pueblo prehistory is organized into seven well defined successions. Finds of Mexican pottery and metal in Pueblo ruins of known period lose most of their significance for comparison because there is as yet no real Mexican prehistory.

In fact, there is a possibility of Southwestern coming to the rescue of Mexican chronology through such cross-tying specimens. Douglass, in his work on tree growth,29 has carried a year identification system for the American Southwest back to 1300. Beyond this by an unknown interval, he has a floating block of several centuries of identifiable year growths. In this block belong rafters from Pueblo ruins, such as Aztec and Bonito, of the third or Great Pueblo period. As it is the fourth period into which the Spanish conquest falls, and the beginning of this period can scarcely be assumed to lie more than a few centuries earlier, it seems probable that the end of the floating block in which the third-period ruins fall, cannot be much anterior to 1300. A reasonable supply of timbers from late third or early fourth period ruins would therefore in all probability close the gap and give a year by year record back to at least 1000 A.D., into which rafterbearing ruins could be tied. This record in turn, through occasional Mexican trade pieces associated with such ruins, would reflect on Mexican conditions of general Toltec era, and perhaps enable confirmation of one or more of the conflicting legendary chronologies that have come down to us through the Aztecs. It will be necessary, however, for the tree-growth dating record to be published in full, and

<sup>&</sup>lt;sup>29</sup> A. E. Douglass, Natural History, 21:27-30, 1921; Scientific Monthly, 15:5-22, 1922; also oral communication to Pecos Conference, 1927.

for its technique to be controllable by several investigators, before its results are likely to be accepted without reservation.

As regards progress in its relating to the higher Mexican center, then, the Southwest is primarily dependent on further study of Mexico. As regards relations of the Southwest to the remainder of the continent, the situation is different.

On account of the geographical position of the Southwest, its relative degree of general cultural advancement, and certain specific similarities with Mexico, such as masonry, painted pottery, clothweaving, rain ceremonies, priesthood, and the like, it has been customary to regard the Southwest as the gateway through which passed or filtered most of the cultural flow from the higher centers of Middle America to the remoter portions of the continent. As to the reality of this flow as regards most pre-Columbian advancement, Boas, Wissler, in fact practically all American students, seem in agreement. Independent local evolutions along this or that line have of course been recognized; also reciprocal influences between northwestern America and northeastern Asia; and some flow via the Antilles into the Southeast of the United States.<sup>30</sup> But in the main the concept seems to have been, at least implicitly, of a radiating transmission to and through the Southwest.

Hand in hand with this concept, though not logically associated with it, has gone another: the picture of North American culture as divisible into some ten types or blocks, each contained in the regional frame of a culture area. The recognition of these areal types of culture began empirically, grew gradually without program or much methodological review, but was so general that when Wissler's definitive formulation was made,<sup>31</sup> it evoked neither dissent nor the enthusiasm of discovery. However, it is increasingly clear that the familiar culture areas are useful tools only up to a certain point. They are not equivalent in historic depth. The Plateau type of culture is obviously not to be put on a level with the Southwestern as regards either richness or productive originality. It represents a different level of development. It has been and is primarily passive or recep-

<sup>30</sup> Wissler, The American Indian, 237, 238, 265, 266 (ed. 1922); R. Linton, North American Maize Culture, Am. Anthrop., 26:345-49, 1924; J. R. Swanton, Southern Contacts of the Indians North of the Gulf of Mexico, Internat. Congr. Americanists, Rio de Janeiro, 1922, 20:53-59, 1924; P. Rivet, L'orfèvrerie précolombienne des Antilles, Jour. Soc. Américanistes de Paris, n.s., 15:183-213, 1923; W. H. Holmes, Am. Anthrop., 7:71-79, 1894. Since the above was written, C. D. Gower has reviewed the whole subject in Am. Anthrop. Assoc., Mem. no. 35, 1927: Northern and Southern Affiliations of Antillean Culture.

<sup>31</sup> The American Indian, 1917, 1922.

tive in its relations with the cultures of other areas. The northern or Columbia-Frazer portion of the Plateau is a hinterland to the Northwest Coast, and at the same time to the northern Plains.<sup>32</sup> The southern or Great Basin portion is similarly a hinterland or part of the central Californian culture, with Southwestern and central Plains traits in reduction also entering it from the south and east.<sup>33</sup> The two halves of the Plateau really have little in common other than a low level of undifferentiated culture. They resemble each other in lacks much more than in common specific traits. It is plain that the Plateau "culture area" therefore represents a formulation of a different order from the Northwest or Southwest.

Recognizing facts of this nature, Boas, Spinden, and some others see little significance in the culture area other than as a mechanism of transient convenience for descriptive classification. On the other hand, Wissler has made a pretty strong showing for the approximate coincidence of areas plotted independently from the archaeological and ethnological approach; in other words, the areal types are likely to be long lived. He has also defined environment as a factor stabilizing a culture in an area and tending to restrict it to that area.<sup>34</sup>

The issues thus raised involve deeper problems of historic method than justice can be done to in passing. It may be admitted however that there has been a lack of integration in Americanistic studies between the dealing with culture areas on the one hand, in which broader historic questions have been dimmed by the intensive local approach or by descriptive considerations; and on the other, inquiries into problems of continental history, which have either remained summary or have been limited to distributional investigations of one set of elements at a time. The culture aggregations defined by areas will by themselves of course never reconstruct the general American sequence of events. Yet they have proved themselves too well substantiated to make their ignoring wise or profitable in the larger task.

One way of breaking the deadlock is to accept the areas but refuse to treat them any longer as historic equivalents. The way has been pointed by Wissler in his recognition of culture centers rather than culture areas.<sup>35</sup> This approach can perhaps be carried out more consistently. Further, the concept of center can be applied to the relations between areas, instead of remaining restricted to the nuclei or

<sup>&</sup>lt;sup>32</sup> Internat. Congr. Americanists, Washington, 1915, 19:385-401, 1917; Am. Anthrop., n.s., 25:1-20, 1923.

<sup>33</sup> Bur. Am. Ethn., Bull. 78:916.

<sup>34</sup> The American Indian, 363, 374 (ed. 1922). 35 The same, 257.

focal points within areas. A whole area is conceivable as a center toward one or more other areas. There is nothing radically new in this concept. It has been quite generally held as regards the relation of Middle America to the remainder of the hemisphere. It is capable of application to areas like the Southwest in their historic relations to areas like the Plateau; just as it is applicable again to the relations of strains or sub-areas of culture within the Southwest—the Pueblo, the Gila-Sonoran, the southern California littoral, for instance. In this way the overly descriptive or static view of culture areas can be given a "dynamic" or processual or sequential significance and yet have its findings remain intensive and exact to a greater degree than the necessarily somewhat averaged and sketchy conclusions resulting from the broad continental approach.

Attempting then to see things from this viewpoint, we find north of southern Mexico three principal centers of cultural productivity and differentiation, each corresponding approximately to an accepted culture area. These three centers are the Northwest, Southwest, and Southeast. On these three the half-dozen other areas have been essentially dependent in much the same way that most of the continent has been dependent in a larger way on southern Mexico.

Of the three, the Northwest Coast stands most apart historically.<sup>36</sup> Its lack of the agriculture and pottery of Mexico and the two other centers, long recognized, is significant. But at point after point a similar distinctiveness is manifest: the use of adzes instead of axes for instance, the game forms and month counts, the technology and patterning of art, the basketry twining with superstructural ornamentation, the special local inceptions of weaving and the use of metal, the whole fabric of social valuing of the economics of life. Whatever is not simple and more or less universal or primitive in Northwest culture, is, generally speaking, of either local or Asiatic origin. Between these two possibilities, a decision cannot always be rendered at present. It seems likely that more and more of the material of Northwest culture will prove to rest upon Asiatic export, although mostly so thoroughly reworked on the spot in accord with local patterns, as to be identifiable only after considerable analysis. Less and less of its specific content, on the other hand, seems to point to origins from or even relation with the south.

The Southwest and Southeast belong admittedly to the great block of truly American culture culminating in the Middle or sub-Isthmian

<sup>36</sup> Am. Anthrop., n.s., 25:1-20, 1923.

region. They represent as it were limbs from the same trunk. It is their relations to this trunk and to each other that need elucidation.

The Southwest shares with southern Mexico the planter, metate, and tortilla elements of maize growing and use; the domesticated turkey; painted pottery; masonry; cotton, cloth-weaving, and textile clothing; and strong tendencies toward ritualization, including altars, priesthood, masks. It lacks totally metals, town courts and pyramidal substructures, ability to construct political fabrics, and oratory, all of which are not only Mexican but Southeastern.

Certain Southeastern traits seem either derived or due to stimulation from the Antilles and ultimately from South America: the quasimetallurgy, the hoe and wooden mortar in relation to maize, modeling and incising of pottery, the blow-gun.<sup>37</sup> So far as can be seen today, however, only part of Southeastern culture can be led back to a South The pyramid, confederacy, oratory, religiously American origin. founded caste distinctions and sun cult among the Natchez, scaffold sacrifice, perhaps the style of carved gorgets, point to Mexico. seems dubious that these traits came in via the Southwest and then were lost there; or that they entered analogously through the West Indies. The alternatives, unless coincidence be accepted, are sea communication from southern Mexico to the northern coast of the Gulf of Mexico, or transmission through Tamaulipas and Texas, a badly explored stretch to date not reported as containing evidences of remains that would serve as links.38

Primarily the unraveling of this problem concerns specialists in the Southeast. But it is bound to be of bearing also on the history of the Southwest. We scarcely know by direct evidence even the eastern limit of former Pueblo culture. General Southwestern radiations ought to be traceable farther than they are traceable. The pottery which the Texas coast seems to afford has not been placed in its relationships. In the Ozark region of Arkansas Harrington has recently found a "Bluff-dweller" culture showing Southeastern and

 $<sup>^{\</sup>rm 37}\,{\rm See}$  the works cited in fn. 30. In general the authors are conservative as to Antillean influence.

<sup>38</sup> Swanton, work cited in fn. 30, in a general discussion of the relations of the Southeast, leans toward transmission from Mexico via the Southwest, on the basis not so much of direct evidence as by inferred insufficiency of other routes. Linton, Origin of the Skidi Pawnee Sacrifice to the Morning Star, Am. Anthrop., n.s., 28:457-66, 1926, posits two centers of origin in Mexico, probably coastal and highland, from which diffusions reached respectively the Southeast and Southwest, the Pawnee ceremony being the result of a blending of the two influences analogous to a blending which occurred among the Aztecs just before the Conquest.

still more numerous Southwestern traits.<sup>39</sup> There may be more such linkage material, and if so it is historically important. Thus it is chiefly in and about the Arkansas area<sup>40</sup> that pottery of Southeastern type manifested an inclination toward painted decoration.

However, the cultural centers of the two areas lie respectively on or beyond the upper Rio Grande and the lower Mississippi; and in the long intervening stretch culture appears always to have been less differentiated and more simple. There is therefore little doubt that we are dealing with two essentially distinct hearths. Their behavior outward is also different. The Southwestern culture has been nonexpansive; its Pueblo form conspicuously so. Agriculture is ancient in the area—older than pueblos; yet has never become established even in southern California. Central California has received elements, but has not been impressed by the stamp of the Southwest. The Great Basin tribes appear to be about as simple culturally as they were several thousand years ago; and yet Paiute are virtual neighbors of In the Plains there are some traits that can presumably be led back to a Southwestern origin: earth altars, for instance, dicescoring on a circuit, perhaps the fetish bundle and shields. In the main, however, it is remarkable how little the Plains seem to have taken over from the Southwest. The reciprocal influence seems at least equal; since the introduction of the horse, probably more powerful. Taos, the frontier settlement, is counted Pueblo and essentially is such; but in material culture and dress it is half Plains. Taos has evidently absorbed Plains culture to much the degree that Acoma and Zuñi have absorbed Spanish Mexican culture. As normally it is the more advanced culture that affects the other most, Southwestern impulses are indicated as unusually self-contained, centripetal, perhaps weak in all respects except tenacity.

The Southeast, on the other hand, can be regarded as having the Northeast and Plains tributary to it; at any rate, as being that part of a large eastern area in which culture culminated. The distinction between Northeast and Southeast is constantly making trouble. The Northern Woodland is little else than a simplified copy of the Southern, practicing southern agriculture as far north as the geography permitted, and beyond that showing few positive traits unrepresented in Gulf drainage. The systematized archaeological results in

<sup>39</sup> The Ozark Bluff-Dwellers, Am. Anthrop., n.s., 26:1-21, 1924. On p. 14 he lists 11 Southwestern resemblances and 8 pointing to the Southeast or other eastern areas.

<sup>&</sup>lt;sup>40</sup> W. H. Holmes, Aboriginal Pottery of the Eastern United States, Bur. Am. Ethn. Rept., 20:67, 1903.

New York yield three horizons. 41 The first, called Algonkin, is similar to that of the historic peripheral tribes. The second, or Mound Builder, is the northeastern outpost of a culture centering, in its specific form, in the Ohio valley, and connected thence with the middle and lower Mississippi and also with the headwaters of the Gulf drainage to the south, as for instance Moorehead's distribution maps of stone ornaments make conveniently clear. 42 The third or Iroquoian horizon is that of a people proved to have southern speech relatives in the Cherokee, and possessing a culture that at point after point is still southeastern: confederate organization, pottery types, blow-gun, and so forth. Evidently then there have been a series of waves northward out of the Gulf region, some migrational, some perhaps essentially and actively cultural, which, with a diffusing seepage in the same direction, have given the Northeast what it has other than of The historical situation is best represented by the the simplest. employment for both Southeast and Northeast of the single term Woodland—as indeed its frequent usage suggests. Recognition of southern, northern, and perhaps other sub-areas or phases amplifies without disturbing recognition of the substantial unity of this Eastern or Woodland culture.

In the Plains a relatively recent shift seems to have partly disguised the underlying relationship. The largely negative results of archaeology indicate the Plains as only sparsely or intermittently inhabited for a long time. The population was probably in the main a Woodland one along the eastern margin. These peoples presumably at various times pushed westward along the timbered stream bottoms, learning more and more to hunt and travel after the bison, but chiefly seasonally, their residence and farming remaining in the bottoms. Offshoots occasionally wandered farther, and now and then remained as isolated "Village tribes" like the Mandan and Hidatsa. remembrance of such permanent adventures may have been kept alive to cause the Arikara to follow them, if indeed they did not set the The western Plains on the whole were still little utilized in this early period. Some Basin and Plateau groups had probably spilled over, but kept essentially to the base of the Rocky mountains. The highest development was almost certainly in the south, among Caddoans and southern Siouans or tribes that may have preceded them, in contact with the lower Mississippi groups.

<sup>&</sup>lt;sup>41</sup> A. C. Parker, The Archaeological History of New York, New York State Mus. Bull., nos. 235-238: 1-743, 1922.

<sup>42</sup> Stone Ornaments, 257, 1917.

Then, about 1650, came the horse, which could be taken over with immense profit and without serious readjustment by the bison-hunting, dog-traveling tribes. Population, wealth, and leisure increased rapidly, and there was a florescence of culture. The material side of life acquired a certain sumptuousness; the warfare of eastern type was made over into a specialized system with refined social values; rituals and societies multiplied and acquired some magnificence, or developed elaborations like age-grading. The western plains became as utilizable as the eastern, and before long the whole tract to the Rockies was occupied and a strong influence exerted on the nearer Basin and Plateau peoples. This change was still going on in the period of exploration and first white settlement. By the time ethnologists arrived it had begun to be succeeded by the phase of disintegration due to Caucasian contact, and the process, or even its recency, was no longer patent, so that the earlier scientific accounts are statically descriptive, in the main.

In this Indian summer culmination of Plains culture it was the remoter tribes that forged ahead fastest: the Algonkins and north Possibly the southern groups participated less actively because they already possessed older, fuller, and richer culture patterns: they took on less because they had more to lose by the change. Perhaps too their culture had already begun to be undermined by indirect French and Spanish contacts. At any rate, the American settlement hit them first, they began to crumble, and field anthropologists turned their main attention to the less spoiled northern tribes. It is these factors that have made the focus of Plains culture appear to lie in the north and west about the upper Missouri and along the base of the Rockies, among Teton Dakota and Crow, Cheyenne and Arapaho, Blackfoot and Gros Ventre, Mandan and Hidatsa, as Wissler's reviews show.43 Two to four centuries earlier, it probably lay south of the Platte. It might even prove to have lain there as late as the nineteenth century if the data had been collected so as to enable our approaching the Plains complex from the point of view of its southern rather than its northern ingredients.

Granted the substantial correctness of this view, we see the most specific traits of Plains culture resolving into the products of a transitory development which lies wholly between the first stimulating indirect Caucasian influences and their final direct and destroying ones: the results of a cultural intoxication. The Plains traits that

<sup>43</sup> Am. Indian, 218-20 (ed. 1922); Relation of Nature to Man, 80-95.

have historic depth, on the other hand, seem Woodland, and date from the time when such Plains culture as there was constituted a margin at the fringe of a natural area. The forces which infused this marginal culture, like those of the northern and eastern margins, had their heads in the Southeast.

On this basis traits of Plains culture can be explained whose occurrence otherwise is random and meaningless. The matrilineate of the Pawnee and of the Hidatsa-Crow group, for instance, would be historically connected with that of the Natchez, Muskogi, and Cherokee in a distribution once continuous—like that of the Iroquois—instead of our having to explain the anomaly of four separate matrilinear areas east of the hundredth meridian.

With the facts arranged in this perspective, the relation of the Southeastern and Southwestern culture hearths presents a new set of problems.

The eastern Gulf coast region becomes the most intensive focus of a culture growth covering the continent east of the Rocky mountains up to the limits at which stringent environment has kept life simple, composed mainly of ancient elements, and relatively unsusceptible to foreign influences except such as have passed through the filter of cultures adjusted to a similar environment in Asia. The original sources of the growth at its center are composite: probably Antillean-South American, Mexican, and Mexican via the Southwest.

The Southwest, to the contrary, nearer the Mexican center, seems to have received material mainly or only from this center, to have evolved or modified from it essentially through internal causes, and to have had an unusually feeble sphere of direct influences, limited to partial transmissions, never dominant ones, into immediately adjacent Situated at the gateway out of Mexico, it has passed little culture through; or, if in greater amount, in such form that the origin of the material is disguised and difficult to recognize. Into the formation of the Southwestern culture has gone an ancient one, that of the Basket Makers, which is more or less represented also in the Basin and in California, is analogous at least in level and economic type to that of the Plateau, and may have extended much farther. Out of the blending of Basket Maker and Mexican material, the Southwest constructed its own special culture, without imparting the product to the outside on any notable scale. Southwest culture as such did not even come to extend over more than part of the area once occupied by the Basket Maker or Plateau type culture. Why

this areal restriction occurred, why the eastern growth behaved differently from the Southwestern, how far the two may after all have been interconnected under the surface, are problems before us.

Impingements from outside the continent on the Southwest seem few. So far as can be told in the present state of knowledge, little or nothing of ultimate South American origin reached our area. It shares with Mexico many of the Middle American traits which seem to be of south Mexican origin: maize and the rectangular metate, the turkey, rain rituals, are examples. To the contrary, metallurgy, which is beginning to be recognized as outstandingly a South American development, and which may have reached Mexico late, 44 is not represented in the Southwest at all. Similarly with the slit drum, the Pan's pipe, the blow-gun, the stool and the litter, perhaps certain weaving processes, whose distribution suggests their South American origin and some of which got a foothold in Mexico.

Asiatic culture traits also are practically absent in the Southwest. The sinew-backed bow, frequently accepted as a form of the Asiatic composite bow, has its farthest and somewhat hesitating occurrence in the Southwest. The magic flight and earth-diving tales, the conical or tripod-foundation dwelling, dog-traction, fitted clothing and in the main the moccasin, all of which have an Asiatic as well as American distribution, are not characteristic of the Southwest.

Trans-Pacific influences are hardly expectable for recognition in the Southwest as a whole; but there are one or two interesting possibilities in southern California. Outstanding is the cosmogony of the Luiseño and perhaps Gabrielino. It begins with semi-personifications of abstract states or qualities which continue in a succession of aeons or generation-like existences and finally incarnate in Heaven and Earth, from whom all beings are born in a long series of parturitions. The pattern is thoroughly Polynesian in character, and without parallel in America. Either an Oceanic influence or an extraordinary coincidence has therefore occurred. The Gabrielino and Chumash also had shell fishhooks of strictly Micronesian form. Here, however, specific resemblances seem to end; so that we have at most the remnant of a sporadic influence, not any determinant or essential molding of the culture from across the ocean.

The effect of the Caucasian has of course been a different story; but even toward him the Southwest has manifested its usual selfcentering and defensive tenacity. No region north of Mexico was so

<sup>44</sup> Rivet, as cited in fn. 30.

<sup>45</sup> C. B. DuBois, this series, 8:169-86, 1908.

early invaded and settled and has kept so much of its native culture intact as the Southwest. Pueblo and Navaho, Apache and Papago, Tarahumare and Yaqui have absorbed a great number of Latin traits, yet have maintained the fabric of their old life to a surprising extent. Occidental culture forms a large part of the content; native culture is still the container.

A careful analysis of this absorption or hybridization should yield unusually interesting results, both as an unfolding narrative and with reference to the processes involved. Ethnologists have called attention to many of the elements of Latin origin, even the less obvious ones; but they have done so primarily in order to clear the sought for picture of the old native culture from its late intrusions. Historians have also dealt with the contacts; but in the main the Indian, whether friend, foe, neighbor, subject, or convert, is to the documentary historian material on which Caucasian institutions have played in their local developments. In the one case the Spanish ingredient was something to be recognized in order to be discounted; in the other, the Indian was the occasion of the plot rather than its theme. A systematic sociological examination of the contact as such still remains to be made.

Such seem to be the more outstanding and immediate problems of the Southwest as the cumulative results of anthropological work in the last generation have brought them to the fore.

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