groups. Clark Wissler, for many years curator of Anthropology at the American Museum of Natural History, elaborated and popularized essentially the same pattern of culture areas as has been used to organize this book. It should be noted that Wissler himself was well aware that culture areas are, to a large degree, artificial constructs. Boundaries of most areas, for example, are impossible to delineate, as one culture area normally blends into others. Nonetheless, the notion of the “culture area” has served as a very useful tool in the study of American Indians.

2 Clark Wissler

NORTH AMERICAN CULTURE AREAS*

CULTURE AREAS

It is customary to divide the continent into culture areas the boundaries to which are provisional and transitional, but which taken in the large enable us to make convenient distinctions. North of Mexico we have nine culture areas: the Southwest, California, the Plateaus, the Plains, the Southeast, the Eastern Woodlands, the Mackenzie, the North Pacific Coast, and the Arctic areas. Each of these is conceived as the home of a distinct type of culture; but when we take a detailed view of the various tribal groups within such an area we find a complex condition not easily adjusted to a generalized type.

Plains Area

In the Plains area we have at least thirty-one tribal groups, of which eleven may be considered as manifesting the typical material culture of the area: the Assiniboine, Arapaho, Blackfoot, Crow, Cheyenne, Comanche, Gros Ventre, Kiowa, Kiowa-Apache, Sarsi, and Teton-Dakota. The chief traits of this culture are the dependence upon the buffalo and the very limited use of roots and berries; absence of fishing; lack of agriculture; the tipi as a movable dwelling; transportation by land only with the dog and the travois (in historic times with the horse); want of

basketry and pottery; no true weaving; clothing of buffalo and deer-skins; a special bead technique; high development of work in skins; special rawhide work (parfleche, cylindrical bag, etc.); use of a circular shield; weak development of work in wood, stone, and bone.

In historic times these tribes ranged from north to south in the heart of the area. On the eastern border were some fourteen tribes having most of the positive traits enumerated above and in addition some of the negative ones, as a limited use of pottery and basketry, some spinning and weaving of bags, rather extensive agriculture and alternating the tipi with larger and more permanent houses covered with grass, bark, or earth, some attempts at water transportation. These tribes are: the Arikara, Hidatsa, Iowa, Kansa, Mandan, Missouri, Omaha, Osage, Oto, Pawnee, Ponca, Santee-Dakota, Yankton-Dakota, and the Wichita.

On the western border were other tribes (the Wind River Shoshone, Uinta, and Uncompahgre Ute) lacking pottery, but producing a rather high type of basketry, depending far less on the buffalo but more on deer and small game, making large use of wild grass seeds, or grain, alternating tipis with brush and mat-covered shelters.

Also on the northeastern border are the Plains-Ojibway and Plains-Cree who have many traits of the forest hunting tribes as well as most of those found in the Plains. Possibly a few of the little-known bands of Canadian Assiniboine should be included in this group in distinction from the Assiniboine proper.

These variations from the type are, as we shall see, typical traits of the adjoining areas, the possible exception being the earth-lodges of the Mandan, Pawnee, etc. On the other hand, the tribes of the area as a whole have in common practically all the traits of the typical group. For example, the Mandan made some use of tipis, hunted buffalo, used the travois, worked in skins and rawhide, and armed and clothes themselves like the typical Plains tribes, but also added other traits, pottery, basketry, agriculture, and earth-lodges. Thus we see that while in this area there are marked culture differences, the traits constituting these differences tend to be typical of other areas and that, hence, we are quite justified in taking the cultures of the central group as the type for the area as a whole.

Plateau Area

The Plateau area joins the Plains on the west. It is far less uniform in its topography, the south being a veritable desert while the north is
moist and fertile. To add to the difficulties in systematically characterizing this culture, arising from lack of geographical unity, is the want of definite information for many important tribes. Our readily available sources are Teit’s Thompson, Shushwap, and Lillooet; Spinden’s Nez Percé; and Lowie’s Northern Shoshone; but there is also an excellent summary of the miscellaneous historical information by Lewis. In a general way, these three intense tribal studies give us the cultural nuclei of as many groups, the Interior Salish, the Shahaptian, and the Shoshone. Of these the Salish seem the typical group because both the Nez Percé and the Shoshone show marked Plains traits. It is also the largest, having sixteen or more dialectic divisions and considerable territorial extent. Of these the Thompson, Shushwap, Okanagan (Colville, Nespelim, Sanpoil, Senijixtia), and Lillooet seem to be the most typical. The traits may be summarized as: extensive use of salmon, deer, roots (especially camas), and berries; the use of a handled digging-stick, cooking with hot stones in holes and baskets; the pulverization of dried salmon and roots for storage; winter houses, semi-subterranean, a circular pit with a conical roof and smoke hole entrance; summer houses, movable or transient, mat- or rush-covered tents and the lean-to, double and single; the dog sometimes used as a pack animal; water transportation weakly developed, crude dug-outs and bark canoes being used; pottery not known; basketry highly developed, coil, rectangular shapes, imbricated technique; twine weaving in flexible bags and mats; some simple weaving of bark fiber for clothing; clothing for the entire body usually of deerskins; skin caps for the men, and in some cases basket caps for women; blankets of woven rabbitskin; the sinew-backed bow prevailed; clubs, lances, and knives, and rod and slat armor were used in war, also heavy leather shirts; fish spears, hooks, traps, and bag nets were used; dressing of deerskins highly developed but other skin work weak; upright stretching frames and straight long handled scrapers; while wood work was more advanced than among the Plains tribes it was insignificant as compared to the North Pacific Coast area; stone work was confined to the making of tools and points, battering and flaking, some jadeite tools; work in bone, metal, and feathers very weak.

The Shahaptian group includes tribes of the Wailapatuan stock. The underground house seems to be wanting here, but the Nez Percé used a form of it for a young men’s lodge. However, the permanent house seems to be a form of the double lean-to of the North. In other respects the differences are almost wholly due to the intrusion of traits from the Plains. Skin work is more highly developed and no attempts at the
weaving of cloth are made, but there is a high development of basketry and soft bags.

The Northern Shoshonean tribes were even farther removed toward Plains culture, though they used a dome-shaped brush shelter before the tipi became general; thus, they used canoes not at all, carried the Plains shield; deer being scarce in their country they made more use of the buffalo than the Nez Percé, depended more upon small game and especially made extensive use of wild grass seeds, though as everywhere in the area, roots and salmon formed an important food; in addition to the universal sagebrush bark weaving they made rabbitskin blankets; their basketry was coil and twine, but the shapes were round; they had some steatite jars and possibly pottery, but usually cooked in baskets; their clothing was quite Plains-like and work in rawhide was well developed; in historic times they were great horse Indians but seem not to have used the travois either for dogs or horses. The remaining Shoshone of western Utah and Nevada were in a more arid region and so out of both the salmon and the buffalo country, but otherwise their fundamental culture was much the same, though far less modified by Plains traits. The Wind River division, the Uinta or Uncompahgre Ute, it should be noted, belong more to the Plains area than here, and have been so classed. In the extreme western part of Nevada we have the Washo, a small tribe and linguistic stock, who in common with some of the little-known Shoshonean Mono-Paviotsu groups seem to have been influenced by California culture. Among other variants, their occasional use of insects as food may be noted. On the north of our area are the Athapaskan Chilcotin whose material culture was quite like that of the Salish, and to the northeast the Kutenai with some individualities and some inclinations toward the Plains.

In general, it appears that in choice of foods, textile arts, quantity of clothing, forms of utensils, fishing appliances, methods of cooking and preparing foods, there was great uniformity throughout the entire area, while in houses, transportation, weapons, cut and style of clothing, the groups designated above presented some important differences. As in the Plains area, we find certain border tribes strongly influenced by the cultures of the adjoining areas.

California Area

In California we have a marginal or coast area, which Kroeber divides into four sub-culture areas. However, by far the most extensive is the central group to which belongs the typical culture. Its main characteris-
tics are: acorns, the chief vegetable food, supplemented by wild seeds, roots and berries scarcely used; acorns made into bread by a roundabout process; hunting mostly for small game and fishing where possible; houses of many forms, but all simple shelters of brush or tule, or more substantial conical lean-to structures of poles; the dog was not used for packing and there were no canoes, but used rafts of tule for ferrying; no pottery but high development of basketry, both coil and twine; bags and mats very scanty; cloth or other weaving of twisted elements not known; clothing was simple, and scanty, feet generally bare; the bow, the only weapon, sinew-backed usually; work in skins very weak; work in wood, bone, etc., weak; metals not at all; stone work not advanced. With the single exception of basketry we have here a series of simple traits which tend to great uniformity.

As with the preceding areas, we must again consider intermediate groups. In the south the characteristic linguistic individuality vanishes to make room for large groups of Yuman and Shoshonean tribes; here we find some pottery, sandals, wooden war clubs, and even curved rabbit sticks, all intrusive. The extinct Santa Barbara were at least variants, living upon sea food, having some wood work, making plank canoes, and excellent workers of stone, bone, and shell. In northern California are again the Karok, Yurok, Wishosk, Shasta, and Hupa, and other Athapascan tribes; here sea food on the coast and salmon in the interior rival acorns and other foods; dug-out canoes; rectangular gabled houses of planks with circular doors; basketry almost exclusively twined; elk-horn and wooden trinket boxes; elk-horn spoons; stone work superior to that of central California; the occasional use of rod, slat, and elkskin armor and also basket hats of the northern type. These all suggest the culture farther north.

North Pacific Coast Area

Ranging northward from California to the Alaskan peninsula we have an ethnic coast belt, known as the North Pacific Coast area. This culture is rather complex and presents highly individualized tribal variations, but can be consistently treated under three subdivisions: (a) the northern group, Tlingit, Haida, and Tsimshian; (b) the central group, the Kwakiutl tribes and the Bella Coola; and (c) the southern group, the Coast Salish, the Nootka, the Chinook, Kalapooian, Wailatpuan, Chimakuan, and some Athapascan tribes. The first of these seem to be the type and are characterized by: the great dependence upon sea food, some hunting upon the mainland, large use of berries; dried fish, clams,
and berries are the staple food; cooking with hot stones in boxes and baskets; large rectangular gabled houses of upright cedar planks with carved posts and totem poles; travel chiefly by water in large sea-going dug-out canoes some of which had sails; no pottery or stone vessels, except mortars; baskets in checker, those in twine reaching a high state of excellence among the Tlingit; coil basketry not made; mats of cedar bark and soft bags in abundance; the Chilkat, a Tlingit tribe, specialized in the weaving of a blanket of goat hair; there was no true loom, the warp hanging from a bar and weaving with the fingers, downward; clothing rather scanty, chiefly of skin, a wide basket hat (only one of the kind on the continent and apparently for rain protection); feet usually bare, but skin moccasins and leggings were occasionally made; for weapons the bow, club, and a peculiar dagger, no lances; slat, rod, and skin armor; wooden helmets, no shields; practically no chipped stone tools, but nephrite or green stone used; wood work highly developed, splitting and dressing of planks, peculiar bending for boxes, joining by securing with concealed stitches, high development of carving technique; work in copper may have been aboriginal, but, if so, very weakly developed.

The central group differs in a few minor points; used a hand stone hammer instead of a hafted one, practically no use of skin clothing but twisted and loosely woven bark or wool; no coil or twined basketry, all checker work.

Among the southern group appears a strong tendency to use stone arrowheads in contrast to the north; a peculiar flat club, vaguely similar to the New Zealand type, the occasional use of the Plains war club, greater use of edible roots (camas, etc.) and berries, some use of acorns as in California, the handled digging-stick, roasting in holes (especially camas) and the pounding of dried salmon, a temporary summer house of bark or rushes, twine basketry prevailed, the sewed rush mat, costume like the central group.

Eskimo Area

The chief résumés of Eskimo culture have been made by Boas who divides them into nine or more groups, but his distinctions are based largely upon non-material traits. When we consider the fact that the Eskimo are confined to the coast line and stretch from the Aleutian is- lands to eastern Greenland, we should expect lack of contact in many parts of this long chain to give rise to many differences. While many differences do exist, the similarities are striking, equal if not superior in
uniformity to those of any other culture area. However, our knowledge of these people is far from satisfactory, making even this brief survey quite provisional.

The mere fact that they live by the sea and chiefly upon sea food, will not of itself differentiate them from the tribes of the North Pacific coast; but the habit of camping in winter upon sea ice and living upon seal, and in the summer upon land animals, will serve us. Among other traits the kayak and “woman’s boat,” the lamp, the harpoon, the float, woman’s knife, bowdrill, snow goggles, the trussed-bow, and dog traction, are almost universal and taken in their entirety rather sharply differentiate Eskimo culture from the remainder of the continent. The type of winter shelter varies considerably, but the skin tent is quite universal in summer, and the snow house, as a more or less permanent winter house, prevails east of Point Barrow. Intrusive traits are also present: basketry of coil and twine is common in Alaska; pottery also extended eastward to Cape Parry; the Asiatic pipe occurs in Alaska and the Indian pipe on the west side of Hudson Bay; likewise some costumes beaded in general Indian style have been noted west of Hudson Bay. All Eskimo are rather ingenious workers with tools, in this respect strikingly like the tribes of the North Pacific coast. In Alaska where wood is available the Eskimo carve masks, small boxes, and bowls with great cleverness.

Mackenzie Area

Skirting the Eskimo area from east to west is a great interior belt of semi-Arctic lands, including the greater part of the interior of Canada. Hudson Bay almost cuts it into two parts, the western or larger part occupied by the Déné tribes, the eastern by Algonkins, the Saulteaux, Cree, Montagnais, and Naskapi. The fauna, flora, and climate are quite uniform for corresponding latitudes which is reflected to some extent in material culture so that we should be justified in considering it one great area; this would, however, not be consistent with less material traits according to which the Déné country is considered as a distinct area. For this reason we shall treat the region under two areas.

Our knowledge of the Déné tribes is rather fragmentary, for scarcely a single tribe has been seriously studied. Aside from the work of Father Morice we have only the random observations of explorers and fur traders. It is believed that the Déné tribes fall into three culture groups. The eastern group: the Yellow Knives, Dog Rib, Hares, Slavey, Chipewyan, and Beaver; the southwestern group: the Nahane,
Sekani, Babine, and Carrier; the northwestern group comprising the Kutenak, Loucheux, Ahtena, and Khotana. The Chilcotin are so far removed culturally that we have placed them in the Plateau group and the Tahltan seem to be intermediate to the North Pacific center.

Of these three groups the southwestern is the largest and occupies the most favorable habitat. From the writings of Father Morice a fairly satisfactory statement of their material cultures can be made, as follows: All the tribes are hunters of large and small game, caribou are often driven into enclosures; small game taken in snares and traps; a few of the tribes on the headwaters of the Pacific drainage take salmon, but other kinds of fish are largely used; large use of berries is made, they are mashed and dried by a special process; edible roots and other vegetable foods are used to some extent; utensils are of wood and bark; no pottery; bark vessels for boiling with and without use of stones; travel in summer largely by canoe, in winter by snowshoe; dog sleds used to some extent, but chiefly since trade days, the toboggan form prevailing; clothing of skins; mittens and caps; no weaving except rabbit-skin garments, but fine network in snowshoes, bags, and fish nets, materials of bark fiber, sinew, and babiche; there is also a special form of woven quill work; the typical habitation seems to be the double lean-to, though many intrusive forms occur; fish-hooks and spears; limited use of copper; work in stone weak.

Unfortunately, the data available on the other groups are less definite, so that we cannot decisively classify the tribes. From Hearne, Mackenzie, and others it appears that the following traits prevailed over the entire Dene area: the twisting of bark fiber without spindle and its general use, reminding one of sennit; snares and nets for all kinds of game; the use of spruce and birchbark for vessels and canoes; basketry of split spruce root (watap) for cooking with hot stones noted by early observers; the toboggan; in summer the use of the dog to carry tents and other baggage; extensive use of babiche; the short-handled stone adze; iron pyrites instead of the firedrill and fungus for touch-wood; the use of the cache; and above all, dependence upon the caribou. These seem to be the most characteristic traits of the Dene as a whole and while neither numerous nor complex are still quite distinctive.

Some writers have commented upon the relative poverty of distinctive traits and the preponderance of borrowed, or intrusive ones. For example, the double lean-to is peculiarly their own, though used slightly in parts of the Plateau area; but among the southwestern
Déné we frequently find houses like those of the Tsimshian among the Babine and northern Carrier, while the Skena and southern Carrier use the underground houses of the Salish, and among the Chipewyan, Beaver, and most of the eastern group, the skin or bark-covered tipi of the Cree is common. Similar differences have been noted in costume and doubtless hold for other traits. Pemmican was made by the eastern group. According to Hearne some of them painted their shields with Plains-like devices. In the northwestern group we find some sleds of Eskimo pattern. Such borrowing of traits from other areas is, however, not peculiar to the Déné, and while it may be more prevalent among them, it should be noted that our best data is from tribes marginal to the area. It is just in the geographical center of this area that data fail us. Therefore, the inference is that there is a distinct type of Déné culture and that their lack of individuality has been over-estimated.

Eastern Woodland Area

We come now to the so-called Eastern Woodland area, the characterization of which is difficult. As just noted, its northern border extends to the Arctic and all the territory between the Eskimo above and Lakes Superior and Huron below and eastward to the St. Lawrence is the home of a culture whose material traits are comparable to those of the Déné. In brief, the traits are the taking of caribou in pens; the snaring of game; the considerable use of small game and fish; the use of berry food; the weaving of rabbitskins; the birch canoe; the toboggan; the conical skin or bark-covered shelter; the absence of basketry and pottery; use of bark and wooden utensils. The tribes most distinctly of this culture are the Ojibway north of the Lakes, including the Saulteaux, the Wood Cree, the Montagnais, and the Naskapi.

Taking the above as the northern group we find the main body falls into three large divisions:

1. The Iroquoian tribes (Huron, Wyandot, Erie, Susquehanna, and the Five Nations) extending from north to south and thus dividing the Algonkin tribes.

2. The Central Algonkin, west of the Iroquois: Some Ojibway, the Ottawa, Menomini, Sauk and Fox, Potawatomi, Peoria, Illinois, Kickapoo, Miami, Piankashaw, Shawnee, also the Siouan Winnebago.

3. The Eastern Algonkin: The Abnaki group, and the Micmac, not to be distinguished from the northern border group save by their feeble cultivation of maize; the New England tribes, and the Delawares.
While the Iroquoian tribes seem to have been predominant, their material culture suggests a southern origin, thus disqualifying them for places in the type group. The Eastern tribes are not well known, many of them being extinct, but they also seem to have been strongly influenced by the Iroquois and by southern culture. We must therefore turn to the Central group for the type. Even here the data are far from adequate, for the Peoria, Illinois, Miami, and Piankashaw have almost faded away. Little is known of the Kickapoo and Ottawa, and no serious studies of the Shawnee are available. The latter, however, seem to belong with the transitional tribes of the eastern group, if not actually to the Southeastern area. Our discussions therefore must be based on the Ojibway, Menomini, Sauk and Fox, and Winnebago.

Maize, squashes, and beans were cultivated (though weakly by the Ojibway), wild rice where available was a great staple, maple sugar was manufactured; deer, bear, and even buffalo were hunted, also wild fowl; fishing was fairly developed, especially sturgeon fishing on the lakes; pottery was weakly developed but formerly used for cooking vessels; vessels of wood and bark were common; some splint basketry; two types of shelter prevailed, a dome-shaped bark or mat-covered lodge for winter, a rectangular bark house for summer, though the Ojibway tended to use the conical type of the northern border group instead of the latter; canoes of bark and dug-out were used where possible; the toboggan was occasionally used, snowshoes were common; dog traction rare; weaving of bark fiber downward with fingers; soft bags; pack lines; and fish nets; clothing of skins, soft-soled moccasins with drooping flaps, leggings, breech-cloth, and sleeved shirts for men, for women a skirt and jacket, though a one-piece dress was known; skin robes, some woven of rabbit skin; no armor, bows of plain wood, no lances, both the ball-ended and gun-shaped wooden club; in trade days the tomahawk; deer were often driven into the water and killed from canoes (the use of the jack-light should be noted); fish taken with hooks, spears, and nets, small game trapped and snared; work in skins confined to clothing; bags usually woven and other receptacles made of birchbark; mats of reed and cedar bark common; work in wood, stone, and bone weakly developed; probably considerable use of copper in prehistoric times; feather-work rare.

When we come to the Eastern group we find agriculture more intensive (except in the extreme north) and pottery more highly developed. Woven feather cloaks seem to have been common, a southern trait. Work in stone also seems a little more complex; a special development of steatite work. More use was made of edible roots.
The Iroquoian tribes were even more intensive agriculturists and potters, they made some use of the blowgun, developed corn-husk weaving, carved elaborate masks from wood, lived in rectangular long houses of peculiar pattern, built fortifications, and were superior in bone work.

Southeastern Area

The Southeastern area is conveniently divided by the Mississippi river, the typical culture occurring in the east. As we have noted, the Powhatan group and perhaps the Shawnee are quite intermediate. These eliminated we have the Muskogean and Iroquoian tribes (Cherokee and Tuscarora) as the chief groups, also the Yuchi, Eastern Siouan, Tunican, and Quapaw. The Chitimacha and Atakapa differ chiefly in the greater use of aquatic foods. The Caddoan tribes had a different type of shelter and were otherwise slightly deflected toward the Plains culture. We have little data for the Tonkawa, Karankawa, and Carrizo, but they seem not to have been agriculturists and some of them seem to have lived in tipis like the Lipan, being almost true buffalo Indians. These thus stand as intermediate and may belong with the Plains or the Southwest area. The Biloxi of the east, the extinct Timuqua, and the Florida Seminole are also variants from the type. They were far less dependent upon agriculture and made considerable use of aquatic food. The Timuqua lived in circular houses and, as did the Seminole, made use of bread made of coonti roots (Zamia primila), the method of preparing suggesting West Indian influence. The eating of human flesh is also set down as a trait of several Gulf Coast tribes. Our typical culture then may be found at its best among the Muskogean, Yuchi, and Cherokee.

The following are the most distinctive traits: great use of vegetable food and intensive agriculture; raised maize, cane (a kind of millet), pumpkins, watermelons, tobacco, and after contact with Europeans quickly took up peaches, figs, etc.; large use of wild vegetables also; dogs eaten, the only domestic animal, but chickens, hogs, horses, and even cattle were adopted quickly; deer, bear, and bison in the west were the large game, for deer the stalking and surround methods were used; turkeys and small game were hunted and fish taken when convenient (fish poisons were in use); of manufactured foods bears' oil, hickory nut oil, persimmon bread, and hominy are noteworthy, to which we may add the famous “black drink”; houses were generally rectangular with curved roofs, covered with thatch or bark, also often provided with plaster walls reinforced with wicker work; towns were well fortified with palisades, dug-out canoes; costume was moderate, chiefly of deerskins,
robes of bison, etc., shirt-like garments for men, skirts and toga-like upper garments for women, boot-like moccasins for winter; some woven fabrics of bark fiber, and fine netted feather cloaks, some buffalo-hair weaving in the west; weaving downward with the fingers; fine mats of cane and some corn-husk work; baskets of cane and splints, the double or netted basket and the basket meal sieve are special forms; knives of cane, darts of cane and bone; blowguns in general use; good potters, coil process, paddle decorations; skin dressing by slightly different method from elsewhere (macerated in mortars) and straight scrapers of hafted stone; work in stone of a high order but no true sculpture; little metal work.

Southwestern Area

In the Southwestern area we have a small portion of the United States (New Mexico and Arizona) and an indefinite portion of Mexico. For convenience, we shall ignore all tribes south of the international boundary. Within these limits we have what appear to be two types of culture: the Pueblos and the nomadic tribes, but from our point of view (material culture) this seems not wholly justifiable since the differences are chiefly those of architecture and not unlike those already noted in the Eastern Woodland area. On account of its highly developed state and its prehistoric antecedents, the Pueblo culture appears as the type. The cultures of the different villages are far from uniform, but ignoring minor variations fall into three geographical groups: the Hopi (Walpi, Sichumovi, Hano [Tewa], Shipaulovi, Mishongnovi, Shunopovi, and Oraibi); Zuñi (Zuñi proper, Pescado, Nutria, and Ojo Caliente); and the Rio Grande (Taos, Picuris, San Juan, Santa Clara, San Ildefonso, Tesuque, Pojoaque, Nambe, Jemez, Pecos, Sandia, Isleta, all of Tanoan stock; San Felipe, Cochiti, Santo Domingo, Santa Ana, Sia, Laguna, and Acoma, Keresan stock). The culture of the whole may be characterized first by certain traits not yet found in our survey of the continent; viz., the main dependence upon maize and other cultivated foods (men did the cultivating and weaving of cloth instead of women as above); the use of a grinding stone instead of a mortar; the art of masonry; loom or upward weaving; cultivated cotton as textile material; pottery decorated in color; a unique type of building; and the domestication of the turkey. These certainly serve to sharply differentiate this culture.

While the main dependence was placed on vegetable food there was some hunting; the eastern villages hunted buffalo and deer, especially Taos. The most unique hunting weapon is the flat, curved rabbit stick.
Drives of rabbits and antelope were practiced. The principal wild vegetable food was the piñon nut. Of manufactured foods piki bread is the most unique. In former times the villages often traded for meat with the more nomadic tribes. Taos, Pecos, and a few of the frontier villages used buffalo robes and often dressed in deerskins, but woven robes were usual. Men wore aprons and a robe when needed. In addition to cloth robes, some were woven of rabbitskin and some netted with turkey feathers. Women wore a woven garment reaching from the shoulder to the knees, fastened over right shoulder only. For the feet hard-soled moccasins, those for women having long strips of deerskin wound around the leg. Pottery was highly developed and served other uses than the practical. Basketry was known, but not so highly developed as among the non-Pueblo tribes. The dog was kept but not used in transportation and there were no boats. The mechanical arts were not highly developed; their stone work and work in wood while of an advanced type does not excel that of some other areas; some work in turquoise but nothing in metal.

The Pima once lived in adobe houses but not of the Pueblo type, they developed irrigation but also made extensive use of wild plants (mesquite, saguaro, etc.). They raised cotton and wove cloth, were indifferent potters, but experts in basketry. The kindred Papago were similar, though less advanced. The Mohave, Yuma, Cocopa, Maricopa, and Yavapai used a square, flat-roofed house of wood, did not practice irrigation, were not good basket makers (excepting the Yavapai), but otherwise similar to the Pima. The Walapai and Havasupai were somewhat more nomadic.

The preceding appear to be transitional to the Pueblo type, but when we come to the Athapascan-speaking tribes of the eastern side of the area we find some intermediate cultures. Thus, the Jicarilla and Mescalero used the Plains tipi, they raised but little, gathered wild vegetable foods and hunted buffalo and other animals, no weaving but costumes of skin in the Plains type, made a little pottery, good coil baskets, used glass-bead technique of the Plains. The southern Ute were also in this class. The western Apache differed little from these, but rarely used tipis and gave a little more attention to agriculture. All used shields of buffalo hide and roasted certain roots in holes. In general while the Apache have certain undoubted Pueblo traits they also remind one of the Plains, the Plateaus, and, in a lean-to like shelter, of the Mackenzie area.

The Navaho seem to have taken on their most striking traits under
European influence, but their shelter is again the up-ended stick type of the north, while their costume, pottery, and feeble attempts at basketry and formerly at agriculture suggest Pueblo influence.

Thus in the widely diffused traits of agriculture, metate, pottery, and to a less degree the weaving of cloth with loom and spindle, former use of sandals, we have common cultural bonds between all the tribes of the Southwest, uniting them in one culture area. In all these the Pueblos lead. The non-Pueblo tribes skirting the Plains and Plateaus occupy an intermediate position, as doubtless do the tribes to the southwest, from which it appears that after all we have but one distinct type of material culture for this area.