Inter-Indian Exchange in the Southwest

RICHARD I. FORD

General discussions of Southwestern exchange are numerous, but detailed studies have been rare. Bandelier (1890–1892, 1) and Parsons (1939) both recognized the vast array of goods that circulated throughout the Southwest by a variety of means, and Beaglehole (1937), Spier (1928, 1933), Hill (1948), and Ford (1972a) have all focused on traditional exchange conducted by a particular tribe or linguistic group. Most studies have failed to quantify the amount of each good exchanged, to mention the frequency of intercommunity contacts for purposes of trade, or to identify why economic interaction occurred.

Intercommunity exchange is a complex of social and economic processes. It may involve the physical transfer of raw materials and finished goods or it may entail social and ceremonial services that are rewarded by immediate payment, continuous hospitality and obligations, or deferred expressions of gratitude. A variety of social mechanisms may be employed to consummate exchange. The participants may travel over great distance or only to a neighboring camp, the routes may be well-marked or expedient, and communication may range from fluency between friends to a few words or signs barely intelligible to total strangers. The exchange of goods and services in the Southwest encompassed great variation from prehistoric times until the early twentieth century, and despite changes in transportation and economics, it continued to be a vital part of Indian interaction in the 1980s.

Traditional Southwestern exchange was conditioned by differentiated biological productivity, scarce natural resources, and contrasting social and ceremonial organizations. Within a framework of environmental heterogeneity, exchange was an equalizer and at times a means to survival.

The physical environment for every Southwest society was typified by unpredictability and great variation. A good piñon nut harvest by the Navajo or Havasupai might not be followed by another for five years, while a bumper crop of corn might precede several years of drought or destruction. Under these conditions a basis of exchange—the good will of trade partners and friends—was a requisite for survival. Moreover, these social contacts were reinforced on a regular basis, leading to dependence upon another's crafts. Certainly this was the case with Jemez supplying Zia with surplus food in exchange for its domestic pottery (Stevenson 1894:11).

Since not all products could be stored for prolonged periods of time, some exchange was for the purpose of "banking." Commodities that were nonperishable, universally convertible, and always desired were used for this purpose. Shell beads, turquoise, silver jewelry, buckskins, and blankets fell into this category. When one had a surplus of some good, it was traded for these; when other wants were great, they were reconverted into food and necessities.

Finally, dependency upon other tribes for ritual paraphernalia was universal in the Southwest, and at the same time it helped to maintain contacts for obtaining other essential items. The Tewa ceremonially used Ute red ocher, Comanche and Taos buffalo hides, and feathers and shells from the Keresans; Cochiti required Comanche buffalo chin beards; Zia needed Jicarilla coiled baskets in naming ceremonies; Navajo ceremonial objects came from the Southern Ute, Hopi, and Zuni. The need for foreign goods was so pervasive that the individual costumes worn in every Indian dance had items obtained from outside the tribal territory. Only through trade could these ritual symbols be obtained. As they were consumed, trade was reinforced.

Prehistoric Exchange

Archeologists have unearthed the antiquity of trade in the Southwest. Obsidian from west of the Rio Grande has been identified in the Paleo-Indian Clovis area, and long-distance trade for saltwater shells is known in Archaic times ("Prehistory: Hohokam," figs. 6–7, "Prehistory: Southern Periphery," figs. 10–11, vol. 9). With the advent of sedentary horticultural villages and later the adoption of ceramics, evidence from sites for nonlocal material goods increased. Cotton textiles were traded from southern Arizona to the Colorado plateau for several hundred years before cotton was grown by the Anasazi. Pottery was exchanged throughout the Southwest (cf. Shepard 1965 and Warren 1969), and by A.D. 1000 turquoise, copper, and macaws were added to the continuing exchange of stone, marine shell, and ceramics.

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The mechanisms of this prehistoric exchange are under investigation. Schroeder (1965a) regards the earlier patterns of exchange as a result of informal contacts and Ruby (1968) has applied a similar model based on egalitarian groups using trade partners to explain the long-recognized trade between southern California and the Southwest. This model is not universally applicable if Di Peso (1974) is correct in supposing that the Southwest was linked by *pochteca*-type traders to centers in Mexico. The northernmost of these centers was Casas Grandes where Di Peso revealed storage areas for many exotic items and pens for raising macaws and turkeys. The stockpiles found in this ruin suggest a regulated trade with monopolistic control by resident middlemen. Similar interpretations have been offered for the Hohokam (Schroeder 1966) and for Chaco Canyon, which is reputed to have possessed an actual resident *pochteca* colony (T.R. Frisbie 1971).The extent of these possible Mesoamerican contacts has been detailed by Schroeder (1981). The presence of nonlocal exports in limited quantity elsewhere supports the idea that several mechanisms operated simultaneously.

Early Historic Observations

Explorers to the Southwest were impressed by the amount of trade they witnessed and the distances walked by Indian traders. On the eastern periphery contrasting adaptations brought Plains nomads with buffalo hides and dried meat to Taos, Pecos, and the Piro Pueblos where they obtained corn, cloth, and turquoise, and where they sometimes wintered (Kenner 1969). Below Yuma, Arizona, Spaniards interviewed well-traveled Indians who were familiar with the Zuni. They saw Hopi cotton textiles worn by lower Colorado River Yuman farmers and the ubiquitous buffalo-skin robes available throughout the area. Sonoran Indians knew that parrot feathers were traded to the Pueblos for turquoise (Hammond and Rey 1940:140–151).

It appears that some Indian traders traveled the breadth of the Southwest from Pecos to the Colorado River and often down into Mexico. Certainly the late prehistoric trade routes in west Mexico, across southern California, and to Pecos and the Plains that enabled the distribution of marine shells, parrot and macaw feathers, buffalo robes and meat, and turquoise in the Southwest were observed by the Spaniards before depopulation and international conflict disrupted these contacts.

Goods

A plethora of raw materials and handicrafts was exchanged between villages. Wild and cultivated plant products, animal body parts, birds, shells, minerals, and an array of finished goods were produced in one village and were desired by another community because they were not locally available or because they confirmed social bonds.

Native plants required for ceremonies, cures, charms, crafts, and food were supplied by villages with access to them. Picuris, for example, provided Taos, San Juan, and San Felipe with ceremonial plants. San Juan and Santa Clara obtained osha (*Ligusticum porteri*), an indispensable medicine and charm, from the Jicarilla Apache. Isleta, Cochiti, and San Juan received another powerful plant, cachana (*Liatris* sp.), from Jemez. Comanches supplied Santa Clara with redbean charms (*Sophora secundiflora*), and all the Tewa Pueblos with walnuts. Plant fibers constituted trade items in the Colorado and Gila river drainages. Cotton was traded by the Pima and Hopi to the Papago and Navajo, respectively. The Pima also sent devil's-claw pods to the Quechan while the Papago supplied their neighbors with agave fibers. Furthermore, native plant foods were commonly exchanged. All the Western Apache and Upland Yumans people supplied dried mescal (*Agave* spp.) sheets to the Mohave, Papago, Maricopa, Hopi villages, Zuni, and Navajo. Saguaro cactus syrup, fruit, and seeds were primarily traded by the Papago to the Pima and Maricopa, and by the Yavapai to the Western Apache. Acorns reached the Mohave from the Ipai-Tipai, the Quechan from the Tipai, and the Cocopa from the Paipai. Mesquite pods went from the Pima to the Maricopa. Piñon nuts were supplied to Hopi by Upland Yumans and Navajos, and Western Apache brought sunflower seeds to Zuni. Finally, the wood from depleted Hopi mesas was supplemented by firewood brought by Santo Domingo Pueblo, Navajo, and Paiute traders.

Domesticated plant trade included prehistoric cultigens and Spanish-introduced wheat and fruits. Wheat bread was a common product of the irrigated fields in the Eastern Pueblos for the Comanche, Kiowa, Ute, and Jicarilla Apache and from the Pima for the Papago. Hopi-grown peaches were exchanged with the Navajo and other fruits raised by Eastern Pueblos went to nomadic groups to the east. The Tewa Pueblos provided the Jicarilla Apache and northern Tiwa with chile peppers. Corn was the most popular pre-Hispanic trade food. All the Pueblos had a regular commerce for maize with their nomadic neighbors and with one another when crops failed. Farther west the Havasupai, Sonoran Desert people, and Colorado River Yumans traded corn to Walapai, Yavapai, Western Apache, and Paipai. The Papago got tepary beans from the Pima. Gourds also were traded. The Mohave gave gourds to the Quechan who then exchanged gourd seeds to the Ipai-Tipai and rattles to the Cahuilla. The eastern Navajos received gourd rattles from Zuni and Laguna while Picuris and Taos were dependent upon San Juan and Santa Clara traders.

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Unfortunately, most ethnographies do not specify the species of tobacco that were traded or the part of the plant involved. In the Eastern Pueblos the Tewas and Keresans grew *Nicotiana rustica* and traded its leaves widely. Taos and Picuris collected wild *N. attenuata* and exchanged its capsules and leaves to the Rio Grande Pueblos. Elsewhere the Hopi received tobacco from the Havasupai, the Pima produced surplus tobacco for the Maricopa and Halchidhoma, and an unknown species came to the Quechan from the Tipai and to the Cocopa from the Paipai and Ipai-Tipai.

Hide trade was extensive in the Southwest ("Taos Pueblo," fig. 3, vol. 9). Buffalo robes originating with the Comanche and some Eastern Pueblo hunters reached every group including the Colorado River tribes and northern Mexico. Buckskin was produced by the northern Tiwa, Tewa, Navajo, Apaches, Utes, and Upland Yuman people for the southern Pueblos, Zuni, Hopi, Papago, and Colorado River tribes. Mountain lion skins came to the Navajo from Tonto Apache and Yavapai. Rabbitskin blankets were made by the Yavapai, Hopi, Paiute, and Jemez; mountain sheep skins were prepared by the Walapai and Havasupai; beaver skins were processed by the Havasupai; and elk skins came from the Utes.

Jerked buffalo meat, tallow, and pemmican were brought by Plains tribes and Eastern Pueblos to western groups and deer meat followed the same trade networks as buckskin.

The exchange of live birds and feathers awaits fuller documentation. Macaws and parrot feathers reached the northern Rio Grande Pueblos from Opata, Zuni, and Santo Domingo traders. Most groups exchanged eagle feathers with friends in other tribes, although this exchange was quite intensive in the Colorado River area. Western Apache supplied turkey-feather caps to the Navajo and Yavapai and turkey feathers to Zuni. San Juan provided the Jicarilla with songbird feathers, and the Papago supplied the Maricopa with doves.

Saltwater shells came into the Southwest from coastal California groups, the Cocopa, Seri, and Papago. They were traded to all groups although Zuni and Santo Domingo traders were most influential in their dispersal as well as in the production of shell beads and ceremonial objects (T.R. Frisbie 1974).

Minerals for food, ceremonial use, and crafts were common exchange items. Salt was in great demand and was supplied from four major sources. Isleta obtained it from the Estancia basin in eastern New Mexico, Laguna and Zuni from their own salt lakes (fig. 1), and the Papago from the Gulf of California. From these groups most other tribes obtained this seasoning. Pigments and stone for rituals came from a number of sources. The Utes, Havasupai, Papago, and Quechan were major sources of red ocher. Nambe Pueblo provided other Tewas with mica for kachina dancers. The Quechan supplied a black paint to the Pima, and the Mohave were a source of yellow paint for the Havasupai and Walapai. Laguna made travertine rod fetishes for other villages. Certainly for craft production turquoise and clay were important in Southwest commerce. Turquoise from the Cerrillos mines in New Mexico was quarried primarily by Santo Domingo and Cochiti men. It was worked in most Pueblos into beads, pendants, and fetishes and traded as a finished product as well. Acoma traded a white kaolin pottery slip and San Felipe a black mineral pottery paint to Zuni and other pottery-producing Pueblos. Of the remaining minerals, jet from the Navajo was used in jewelry.

Finished goods were identifiable to individual villages and in some cases to a particular artisan. Pottery, basketry, textiles (fig. 2), leather goods, and utensils all circulated among groups. Taos, Picuris, and the Jicarilla Apache specialized in micaceous cooking pots, the other Pueblos made a variety of distinctly decorated vessel forms, and Papago, Maricopa, and Mohave produced trade wares for tribes in the western area. Basketry was almost universally produced and traded because different people made different functional types. The Jicarilla, Navajo, and Utes coiled baskets, San Juan produced a wicker form, the Yavapai made dippers and parching trays, Jemez made yucca wheat-washing baskets, the Western Apache made burden baskets and pitch-covered canteens, the Pima made trays, and the Papago wove storage jars. The weaving industry was dominated by Hopi textile blankets, mantas, sashes, leggings, and other ceremonial items. By the end of the nineteenth century Navajo blankets also were highly prized. Belts were woven in many Eastern Pueblos for trade. Leather clothing and bags were commonly made by the Upland Yumans, Utes, Comanche, and Apache. Various wooden and bone items were made for inter-

Southwest Mus., Los Angeles: 20,926.

Fig. 1. Zuni Indians bagging salt, an item traded to many groups, at Zuni Salt Lake, an important sacred area. Photograph by Donald Cadzow about 1921.

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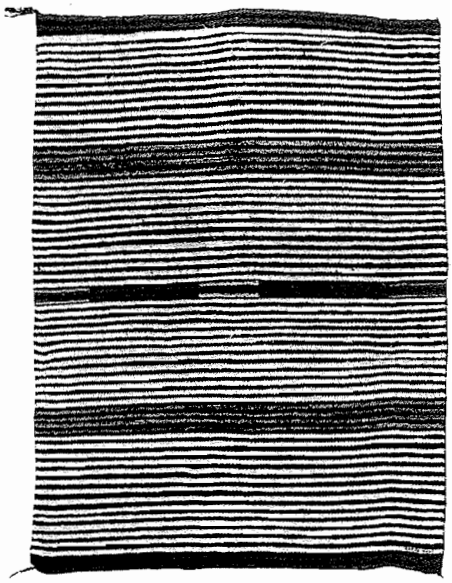

left, Smithsonian, NAA: 34011-B; right, Smithsonian, Dept. of Anthr.: 22,976.

Fig. 2. Striped blankets, a common type throughout the Southwest (Kent 1976:90). left, Chiricahua Apache camp, with trade blanket, probably Navajo, on brush shelter. Photograph by A.T. Willcox or A.F. Randall, probably 1880s. right, Blanket, probably Navajo, with modified woman's pattern has blue and dark brown stripes at the ends and center (which also has red blocks); the body is alternating dark brown and white stripes with 2 bands of a gray and dark brown. Size 116.0 cm by 162.5 cm, collected from the Hopi at Tusayan, Ariz., in 1876.

community exchange. Cochiti drums were found in all the Pueblos. Osage-orange bows from the Comanche were familiar to the Eastern Pueblos. Bows and arrows were given in trade by the White Mountain Apache and Yavapai.

The complexity of intercommunity exchange is exemplified by the Hopi villages (table 1). Numerous goods and linguistic groups were involved in these interactions, and the Hopi depended upon this vast network of contacts.

References that discuss trade goods are, for Taos, Curtis (1907–1930, 17), Ford (1972a), Parsons (1936); for Picuris, Ford (1972); for Sandia, U.S. Census Office. 11th Census (1893); for Isleta, Bloom (1936), Curtis (1907–1930, 12), Ford (1972a), Parsons (1932); for Tewa, Ford (1972a); for Jemez, Ford (1972a), Parsons (1925); for Cochiti, Curtis (1907–1930, 17), Eickemeyer and Eickemeyer (1895), Goldfrank (1927), Lange (1959); for Santo Domingo, Densmore (1938), Ford (1972a), White (1935); for San Felipe, Densmore (1938), White (1935); for Santa Ana, White (1942); for Zia, Stevenson (1894), White (1962); for Laguna, Ford (1972a), Hill (1948); for Acoma, Beaglehole (1937), Parsons (1939). Among the Apache, sources are, for the Jicarilla, Ford (1972a), Gifford (1940), Opler (1971a); for the Mescalero, Basehart (1974); for the Chiricahua, Gifford (1940), Opler (1941); for the Western Apache, Goodwin (1942); for the Tonto, Gifford (1940), Goodwin (1942); for the San Carlos, Gifford (1940). References that discuss Navajo exchange are, Gifford (1936), Hill (1948), Kluckhohn and Leighton (1946), Kluckhohn and Wyman (1940), Kroeber (1925), Spier (1928), Tschopik (1941). Zuni trade is treated by Bandelier (1890–1892), Bunzel (1932b), Curtis (1907–1930, 17), Cushing (1896, 1920). Items exchanged by the Yumans are given for Havasupai, Cushing (1882), Ewing (1960), Spier (1928); Walapai, Curtis (1907–1930, 2), Kroeber (1925), Spier (1928); Yavapai, Gifford (1936), Goodwin (1942); Mohave, Kroeber (1925), Spier (1933); Halchidhoma, Spier (1933), Forbes (1965); Quechan, Curtis (1907–1930, 2), Forbes (1965), Forde (1931), Gifford (1936); Cocopa, Castetter and Bell (1951), Gifford (1933); Maricopa, Spier (1933). Trade goods among the Pima are discussed by Russell (1908); among the Papago, by Castetter and Bell (1942), Gifford (1936), Underhill (1939, 1946).

Services

Just as each community was not self-sufficient in raw materials and craft production, it often lacked the proper complement of ceremonial specialists and eligible marriage partners. Here, again, intercommunity cooperation was indispensable.

Marriage between communities was sometimes essential as well as beneficial. Small Pueblos, like Picuris, which frequently married San Juan and Jicarilla mates, and Sandia, which sought Isleta partners, had to maintain themselves and to avoid incest violations by means of exogamy. In the Eastern Keresan and Western Pueblos incoming female partners were the genesis of new

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Table 1. Hopi Exchange With Other Tribes

Hopi Products	*Items Traded to Hopis (Tribe Received From)*
maize	silver (Eastern Pueblos, Navajo, Zuni)
foodstuffs, peaches	turquoise (Zuni, Keresans, Jemez, Sandia)
rabbitskin robes	shell beads (Zuni, Acoma, Eastern Keresans, Jemez)
skin pouches	salt (Zuni)
spoons	buckskin (Zuni, Havasupai, Walapai, Northern and Southern Tonto)
pottery (First Mesa)	buffalo skins (Zuni, Eastern Pueblos)
coiled baskets (Second Mesa)	mountain lion quivers (Navajo, Paiute, Northern Tonto)
wicker baskets (Third Mesa)	firewood (Navajo, Paiute)
salt	vigas, sheep, mutton, blankets, antelope skins, water (Navajo)
cooking pots	horses (Navajo, Paiute, Havasupai)
bottles	bows, arrows (Havasupai, Paiute)
yucca sieves	mescal (Havasupai, White Mountain Apache, Walapai)
shell beads	piñon nuts (Havasupai, Walapai)
buckskin	baskets, leather clothing, horn ladles, sea shells, abalone, red ocher, copper stones, tobacco, grass, willows, cottonwood roots, yellow pigment, mountain sheep skins (Havasupai)
mantas, kilts, belts	green bows, arrows, moccasins (White Mountain Apache)
leggings, yarn	cotton (Pima, Zuni)
blankets	macaw feathers (Pima, Havasupai)
buffalo hides	deer meat (Paiute, Jemez)
turquoise	piñon gum (Paiute)
silver	maize (Isleta, Santo Domingo, San Felipe)
livestock	tools (Eastern Pueblos)
red ocher	feather caps (Southern Tonto)
iron tools	
tinklers	
ceremonial items	

SOURCES: Beaglehole 1937; Colton 1938; Curtis 1926; Hill 1948; Parsons 1939; Stephen 1936.

clans or a means to augment underpopulated clans. Sometimes marriage partners from outside introduced new songs, dances, and societies. The Ant society was brought to Santo Domingo by a Zuni, and eventually it was petitioned to cure in other Eastern Keresan villages (White 1935:68).

Mutual assistance by ritualists was commonplace in the conduct of ceremonies and the initiation of new members. The caciques at Jemez and Cochiti aided each other, and the winter cacique at Tesuque initiated his counterpart at Nambe. Tewa Koshares frequently performed together, while the Quiranas at Cochiti had ties with Tesuque, Nambe, and San Ildefonso (Ford 1972a:37; Lange 1959:350). Ceremonial participation between Hopi-Tewa and First Mesa Hopi villages provides an example of village interdependence through ceremonial service (Dozier 1954:364).

Individuals or troupes of dancers frequently performed in other communities. Zuni dancers came to First Mesa in the past (Parsons 1936), and most large-scale dances in the Rio Grande Pueblos have a component of nonresident performers. In return for their participation they received not only the benefit of the ceremony but also food and ritual items.

Specialists aided individuals in neighboring communities. Navajo and Hopi-Tewa exchanged cures. San Juan Bear medicine men cured Picuris and Taos patients; the Taos employed Ute doctors as well. Chiricahua treated other Apache. Furthermore, San Juan and Tesuque midwives were called upon by other Tewa villagers. Each practitioner was remunerated with food or goods by the patient's family according to its ability to pay.

Another intercommunity service was the teaching of new songs and dances. To accomplish this, one requested permission to learn the song or dance. The village owning it was not obligated to agree, as when Zunis were rebuked by First Mesa Hopis in their attempt to purchase the Snake-Antelope ceremony (Stephen 1936:679). If they did agree, a price was established and instruction began. Possibly by this method Taos obtained the Southern Ute Dog Dance, San Ildefonso learned the Jicarilla Basket Dance, Nambe obtained the Ute Serpent Dance, the Jicarilla Apache derived the Holiness rite from Taos, and the Navajo started the Ute Circle Dance. These dances were recognized as distinct from older, more sacred dances among the Pueblos and their performance was an occasion when fancy trade goods could be worn. Certainly this practice pertained when the Tewa presented the Comanche Dance ("San Ildefonso Pueblo," fig. 13, vol. 9) and Cochiti performed a Navajo Dance ("Cochiti Pueblo," fig. 14, vol. 9).

Exchange Mechanisms

The means for exchanging goods and services varied along a dimension of social distance. One series of rules and conventions applied to fellow villagers, while another affected relations with nonrelatives in neighboring communities. Long-distance trade required several alternative mechanisms to guarantee peace of trade under less than ideal circumstances.

Within a village or encampment four general methods of exchange were recognized: mutual assistance, gambling and gaming, ceremonial redistribution, and trading parties. Sharing was continuous, gambling was spontaneous or seasonal, while the other two occurred less frequently. Yet each gave everyone access to food raised in the village and materials imported from afar.

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Milwaukee Public Mus., Wis.: 44433.
Fig. 3. Isleta woman offering bread and melons at a shrine dedicated to St. Stephen. Later the food will be shared among the dancers. Photograph by Sumner W. Matteson, 1899–1905.

Intracommunity lending, borrowing, and sharing was constant. Children ate with grandparents or unrelated neighbors. Tools were borrowed or ceremonial costumes lent upon request. The fundamental characteristic of these reciprocal interactions was that repayment was equalized only in the long run.

Gambling and games of skill were informal and voluntary mechanisms by means of which possessions circulated throughout a community and often allowed booty or newly acquired trade goods to pass to new owners. Opler (1941:398) noted this mechanism worked for the Chiricahua of all ages and both sexes, but the same applies to all Southwestern groups. Horse racing and cañute and other hand games (cf. Culin 1907) permitted informal redistribution of goods and food.

Ceremonial redistributions were familiar to all Southwestern tribes. At times of life crisis rites, relatives contributed payment for feasts and for specialists performing the ceremony. Among the Tewa the initiation of a new society member required the contribution of cornmeal, feathers, and other items from near kinsmen. But their generosity was not without recompense because once the initiate became an active participant in ceremonial affairs, payment in food for his services was shared with them. At the Mohave mourning ceremony food and presents were given to visitors. Similar fetes attended namings and weddings elsewhere. Ceremonies organized for the benefit of the community, such as calendrical rites, included contributions of food and other items to be consumed by participants, families, and friends (figs. 3–4; "San Ildefonso Pueblo," fig. 3, "Acoma Pueblo," fig. 16, vol. 9). These periodic rituals were often essential in providing food to those in need (Ford 1972a).

The intravillage mechanism of the trading party was probably more extensive than the literature suggests. Only the Hopi-Tewa, Hopi, and Zuni have been described as employing variants of this neighborly general exchange. Although individuals did trade privately, it was more common for Hopi to engage in a quasi-market (*nâ·mi hî·yaya* 'they sell to one another') (fig. 5). Conducted principally by women, it consisted of goods displayed outside the house in the plaza. Stephen (1936:245–246) saw trays of dried peaches, salt, beans, cornmeal, mescal, and mealing stones offered in return for specific items. He was struck by the lack of bargaining. Dozier (1954:365) noted that a friendly, noncompetitive atmosphere prevailed among the Hopi-Tewa also. Here a household initiated the party but anyone could join. Women were most active, while men were expected to pay with meat. The Zuni variety was called auctioneering by Stevenson (1904:379). On these occasions, which sometimes lasted three days, goods were brought into the plaza and the auctioneer who conducted it announced what the owner desired, usually food. Visitors from other villages were always welcome participants.

Mus. of N. Mex., Santa Fe: Parkhurst Coll.
Fig. 4. San Ildefonso women's dance, with participants wearing stocking masks and carrying bread later distributed within the community. Photograph by T. Harmon Parkhurst, about 1935.

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Sometimes one had a relative in another community to provide shelter and protection and to whom one could turn for assistance, but intercommunity exchange with nonrelatives generally had an accompanying expectation of immediate return. Visitors brought gifts; yet no gift was freely received. By accepting it, exchange transactions were assured. Bartering was minimal between "friends," but a return was always made before a guest departed. These visitations frequently occurred during dances or fiestas (fig. 7). At Hopi as elsewhere a guest might remain beyond the time of the dance for the purpose of trading. The host was obligated to go from door to door announcing the guest's intention. Beaglehole (1935:82) reported that women primarily did this.

The next degree removed from this guest-host relation was best observed in the Eastern Pueblos where the close proximity of neighboring villages permitted itinerant traders, usually with very specific items such as specialty foods, plant medicines, or jewelry, to visit several Pueblos on the same day and to trade their products at a seemingly fixed rate.

Milwaukee Public Mus., Wis.: 44744.
Fig. 5. Hopi women gathered at a quasi-market in Oraibi. Photograph by Sumner W. Matteson, 1901.

Smithsonian, NAA: Judd Coll.
Fig. 6. A Hopi wagon store selling goods to visitors to the Snake ceremony. Photograph by Neil M. Judd at Hotevilla, Aug. 1920.

Other forms of intercommunity exchange were more formal, scheduled, and involved many more participants. Saint's day fiestas brought traders from many tribes together. With the peace of the market assured by the host Pueblo, the solemnity of the dances contrasted with the joyous market atmosphere beyond the plaza punctuated by earnest haggling. While trading was in progress, other visitors danced or assisted in the conduct of the ceremonial. They were given food and sometimes ceremonial ornaments in return for their service.

In the arid Sonoran Desert and along the Colorado River intervillage entertainment was rewarded with food and gifts. Papago villages had a method for "investing" against the dire effects of harvest losses. A ceremony lasting two or three days was arranged after the harvest by sending a messenger with a bundle of sticks to the host village, with each stick representing a "singing" family. These were distributed to the local households. When the singers arrived, they sang and danced for rain, fertility, and general good fortune, and were hosted by local families (Underhill 1939:106). This mechanism of ceremonially singing for food extended to other tribes along the Gila and Colorado rivers. Periodically Cocopas danced in Quechan villages at harvest time and returned with maize and various foods (Gifford 1933:262). The Pimas, Papagos, and Maricopas sang in one another's villages in times of need. A Pima family gave its guest 50 to 100 pounds of wheat following the two- or three-day performance (Castetter and Bell 1942:43). These ceremonial services had two ecologically significant results. First, the visitors, who may have had a poor year, would materially benefit from their more fortunate neighbors. Second, these ceremonies created trading friendships. Some remained gift-exchanging partners for several generations, and other friendships became permanent through marriage. In subsequent years the guest village became the host, reciprocating hospitality and friendship, and receiving the benefits of the ritual.

Long-distance trade linked tribes who were not immediate neighbors. Since the farther from home one traveled, the more perilous the journey, women rarely went on these trips, ceremonialists were often forbidden to go, and many men preferred to send their goods with others. Attacks and accidents could waylay even the most experienced trader, despite superb knowledge about the trails, water supplies, and pasturage.

Major trails connecting villages were well-known (fig. 8) and sometimes marked by shrines, petroglyphs, and debris (potsherds). Many trails originating in antiquity became the routes followed by early explorers and settlers, and have become highways. The marine-shell trails are among the better documented. One originated near Los Angeles and crossed the desert to Needles and then followed the Gila before branching to major vil-

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Mus. of N. Mex., Santa Fe.
Fig. 7. Navajos encamped at Laguna Pueblo, perhaps to attend the Fiesta of San José on Sept. 19 (see Goggin 1964:21–22). Photograph by T. Harmon Parkhurst, about 1935.

lages and Pueblos (Farmer 1935). A second trail began near Guasave and came up the west coast of Mexico before crossing the Sierras and heading north to the Pueblos (Di Peso 1974). Brand (1938) and Colton (1941) have shown how these trails formed a network of interaction in the Southwest. Indeed, an impressive network of trails linked the Plains, Great Basin, Sonora, and California with all areas of the Southwest. Although individual traders did go considerable distances along them, mostly the trails were maintained by a trade-chain linking one group to the next. To illustrate, Hopi blankets reached the Quechan through exchange from the Havasupai, Walapai, and Mohave. Sea shells, on the other hand, reached Hopi through the Chumash, Mohave, Walapai, and Havasupai. Coming from the east, Comanche buffalo robes passed from Eastern Pueblo traders to Zuni, Hopi, Navajo, and then along the old shell trade networks to the Colorado River Yuman tribes and into Mexico.

The time needed to reach another group created logistic problems even with Spanish-introduced horses and burros. Zuni was four days away from Hopi, Acoma six days away, and Jemez a week. Cocopas required 10 days to reach the Pacific, while Rio Grande traders allowed several weeks to locate a Comanche band. In each case food was carried for the traders to eat on the way, to be supplemented along the trail. For the return trip, food had to be purchased or conserved.

The visitor placed himself into the custody of a stranger. This was done by making an initial gift. Since each gift was actually a request to trade, to accept the gift obligated the recipient to feed and protect his guest. The two might trade or the host might inform others about his guest's desires. Upon the visitor's leaving, the host would give a present. If he wanted to obligate his visitor in the future, he might give something of greater value than the initial gift. Conversely, he could guarantee the termination of the association by giving something of lesser value. This type of visitation was common throughout the Southwest, and the process of making a formal friend is well illustrated by the Hopi. Although the Hopi preferred traders to come to them, some men did gather woven textiles, baskets, buckskins, or ocher from their fellow villagers and go in winter to other Pueblos to trade. Arriving after six days of travel at Acoma to the public announcement of the war chief, the Hopi displayed his goods in the plaza for all to see. During this episode he made a "friend" by symbolically becoming one when he and his sponsor "put their arms around one another and mutually inhaled each other's breath" (Beaglehole 1937:84).

Sometimes these new friendships became enduring

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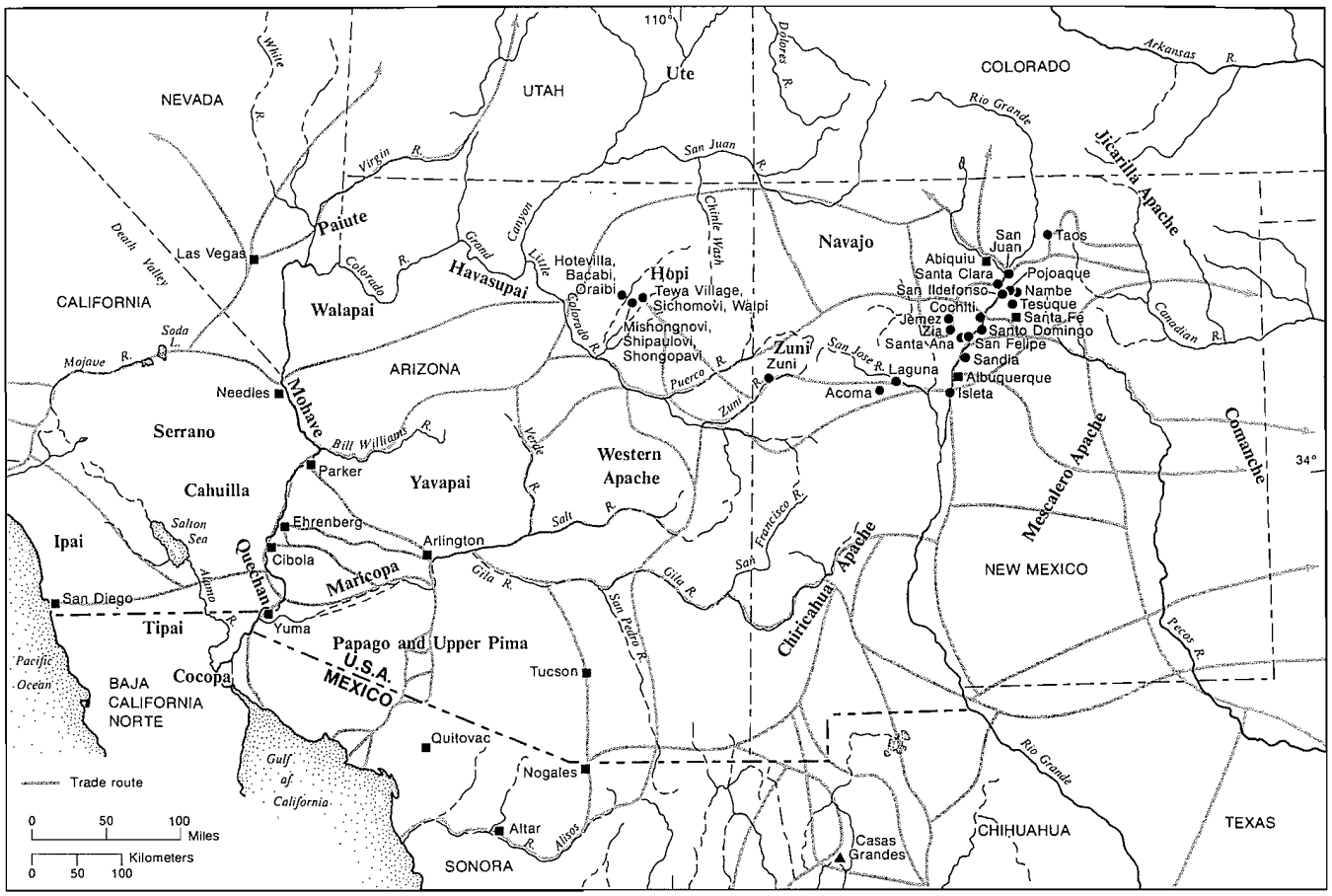

Fig. 8. Traditional trade routes in the Southwest.

and actually developed into recognizable trade partnerships. Quechan-Papago, Papago-Pima, and Maricopa-Pima sings often led to these individual arrangements. Navajo-Zuni family "friendships" have lasted two or three generations. In a spirit of quasi-kinship San Juan and Jicarilla partners rarely bargained and often "like brothers" let repayment lapse from one year to the next.

Strangers could also be enemies and a community kept a close watch for inauspicious signs to determine the intent of visitors. The Havasupai living in the lower recesses of the Grand Canyon watched for the smoke signals of friends and kinsmen as a sign of friendly relations (Spier 1928:246). The Hopi, who had periodic difficulties with Apache raiders yet welcomed traders, watched the sky in the south as Apaches approached. If a small raincloud hung over them, they were seen as coming in peace, but if no cloud was present, this was interpreted as a bad omen and they were forbidden to enter the village until peaceful intentions were proved (Beaglehole 1937:85). Within the community each member was protected by charms against potential harm brought by the stranger. This anxiety, a fear of involvement, was always present despite a proven need for maintaining trade relations.

Trade fairs were still another institution that brought distant traders together. Trade caravans from Mexico came under the auspices of Spanish officials, to obtain native products—hides, jerked meat, salt, horses, and slaves. Taos, Abiquiu, and Pima fairs were prominent places for inter-Indian contact and trade as well. However, unlike intertribal trade, rates were set by the Spaniards, to the disadvantage of the Indians, of course. These were also raucous affairs accentuated by drunkenness, brawls, and thievery (Thomas 1940).

Since many dangers haunted the trails, various supernatural precautions guided traders. Virtually every tribe had a ceremony to protect travelers before departing and a purification rite upon returning to protect the community from any bad spirits that might have accompanied the trader. Prayer feathers were carried by the Hopi for a safe trip. Each Tewa and Apache traveler carried a number of medicinal plant charms to ward off evil.

Trade Languages

Three modes of communication facilitated exchange between traders: the native language of one participant, a common third language, and sign language.

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Some community members engaged in distant trading ventures more frequently than did others and they learned basic words and phrases in the language of the people they visited. In each Eastern Pueblo, for example, someone knew Comanche and could negotiate for others in a trading party. A few people at Jemez and Zia knew Navajo, while many Hopi-Tewas, Hopiś, and Zunis were almost fluent in Navajo. Farther west, many Pimas and Maricopas spoke each other's language. Of course, many languages within a language family are mutually intelligible to some extent and this permitted easy communication among Keresan, Yuman, Tewa, or Tiwa traders.

The most common languages used by Indians who did not know each other's language were Spanish and Navajo. Navajo was used by the Hopi-Tewa and Zuni to communicate with each other (Parsons 1936:xxvii). Spanish, known to some degree by people in the Rio Grande Pueblos and even by the Jicarilla, Mescalero, and some Comanche, was the lingua franca of New Mexico.

Hand signs common to the southern Plains were tried when a mutually intelligible language was lacking. Sign language was needed between Tewa and Ute traders, Navajos and Paiutes, and Navajo and Tolkapaya Yavapai. However, rarely did an individual know more than a few signs and many people, particularly women, knew none.

The stimulus to exchange resulted in extensive bilingualism, which aided information processing, thus establishing trust and reducing possible chicanery.

Rates of Exchange

No commodity actually became money but several were so universally desired that exchange rates were phrased in terms of these items (see table 2). Long and short strings of shell beads (hishi) were convertible into any good at any time. The Navajo and Pueblos in particular desired these and used them more often than did people to the west. T.R. Frisbie (1974) has argued that a standard 30-inch length was a form of money. By the end of the nineteenth century Navajo blankets (fig. 9) were highly esteemed throughout the Southwest, and most published data on equivalencies state them in terms of blankets (cf. Spier 1928).

Beaglehole (1937), Goodwin (1942), Hill (1948), and Spier (1928) have published long lists of rates of exchange. The lists, which demonstrate a remarkable homogeneity and near universal knowledge of the rates, suggest that bargaining was quite restricted, although not absent. Generally, a large Havasupai buckskin, a

Table 2. Equivalent Values of Selected Paired Goods

Items	*Tribes*	*Source*
1 buckskin :: 1 blanket	Yavapai—Navajo	Gifford 1936
2 buckskins :: 1 large blanket	Yavapai—Navajo	Gifford 1936
1 buckskin :: 1 blanket	Hopi—Navajo	Beaglehole 1937
2 buckskins :: 1 large blanket	Ute—Navajo	Hill 1948
1 small buckskin :: 1 saddle blanket	Havasupai—Hopi	Beaglehole 1937
3 buckskins :: 1 big blanket	Walapai—Havasupai	Spier 1928
1 buckskin :: 1 blanket	Havasupai—Navajo	James 1903
1 large buckskin :: 1 big blanket	Western Apache—Zuni	Goodwin 1942
1 buckskin :: 1 blanket	Western Apache—Navajo	Goodwin 1942
1 buckskin :: 1 manta	Eastern Pueblos—Hopi	Beaglehole 1937
2 large buckskins :: 1 saddle blanket	Paiute—Havasupai	Spier 1928
1 sack wheat :: 1 pony	Santa Clara—Comanche	Parsons 1939
1 burden basket corn :: 1 horse	Havasupai—Hopi	Iliff 1954
1 burden basket corn :: 1 horse	Havasupai—Navajo	Spier 1928
1 blanket :: 1 poor horse	Maricopa—Papago	Spier 1933:112
2 blankets :: 1 good horse	Maricopa—Papago	Spier 1933:112
1 "chief's" blanket :: 1 horse	Navajo—Ute	Hill 1948
1 buffalo skin :: 1 horse	Hopi—Havasupai, Paiute	Beaglehole 1937
1 buffalo robe :: 1 "chief's" blanket	Ute—Navajo	Hill 1948
1 large buckskin :: 1 pony	Havasupai—Navajo	James 1903
1 large buckskin :: 1 horse	Havasupai—Hopi	Iliff 1954
2 buckskins :: 1 horse	Southern Tonto—Navajo	Gifford 1940
1 shell necklace :: 1 wedding blanket	Havasupai—Hopi	Beaglehole 1937
1 long string shell beads :: 2 mantas	Eastern Pueblos—Hopi	Beaglehole 1937
1 string turquoise :: 1 large blanket	Pueblos—Navajo	Hill 1948
Few strands beads :: 1 horse	Cochiti—Navajo	Eickemeyer 1895
1 strand of beads :: 1 buckskin	Zuni—Western Apache	Goodwin 1942

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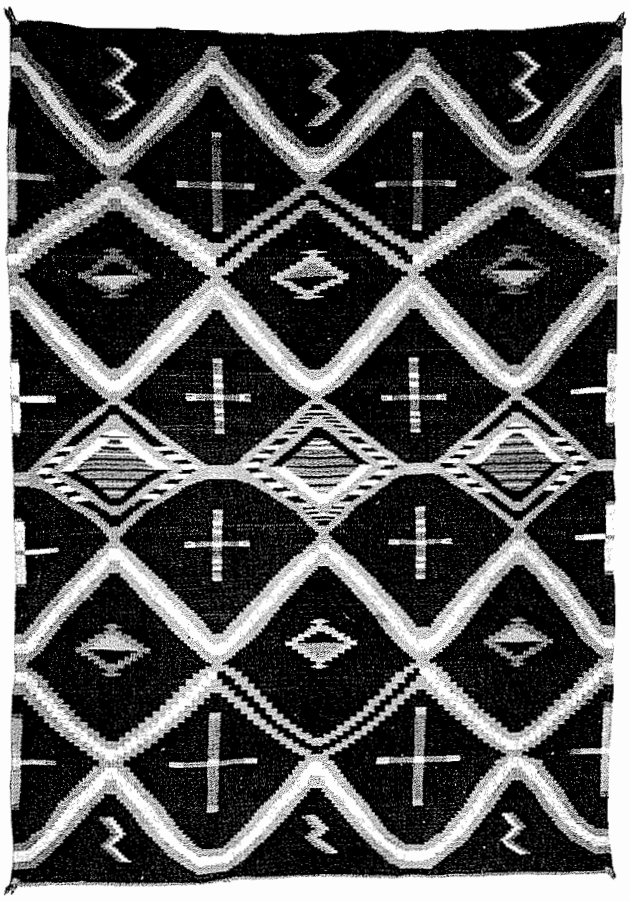

Smithsonian, Dept. of Anthr.: 220,194.
Fig. 9. Finely woven serape collected from a Ute chief in 1873. Navajo blankets were widely traded and used by Indians of other tribes. This one has a dark blue and black striped background with red, white, green, and yellow decorative elements. Size 195 cm by 140 cm, collected by Matilda C. Stevenson.

good-sized blanket, a buffalo skin or robe, a horse (fig. 10), and a large burden basket of shelled corn were interchangeable. A single gun could also be traded for any one of these items. These rates also recognized changes in the value of items resulting from processing. For example, undressed hides had half the value of a finished white buckskin. Thus two large buckskins brought by the Paiute would buy a Navajo saddle blanket from the Havasupai; the same skins refinished by the Havasupai would bring two blankets from the Navajo or Hopi.

Between some groups other commodities had recognized, standard values. Yavapai saguaro fruit cakes were exchanged at an almost set rate for Western Apache buckskins, blankets, and handicrafts (Goodwin 1942:91). The Papago made measuring baskets whose spiral design formed three parallel levels within the basket (fig. 11). Cornmeal, beans, and other items were given according to the amount as measured by these levels. Women's carrying nets served the same purpose, being equal to two measuring baskets (Underhill 1939:101).

Theft

Raiding and plundering are forms of negative reciprocity by which goods and services are obtained without giving a return. For some Mescalero and Chiricahua Apaches raiding was a primary source of even basic commodities. In fact, the Chiricahua reinforced this by asserting "you are ashamed to borrow . . . for that shows you are not a real man and have not been on the raid and obtained things for yourself" (Opler 1941:399).

Smithsonian, NAA: 43,091-A.
Fig. 10. Navajos selling ponies and blankets to Apaches. Photograph by A. Miller at Ft. Apache, Ariz., about 1890s.

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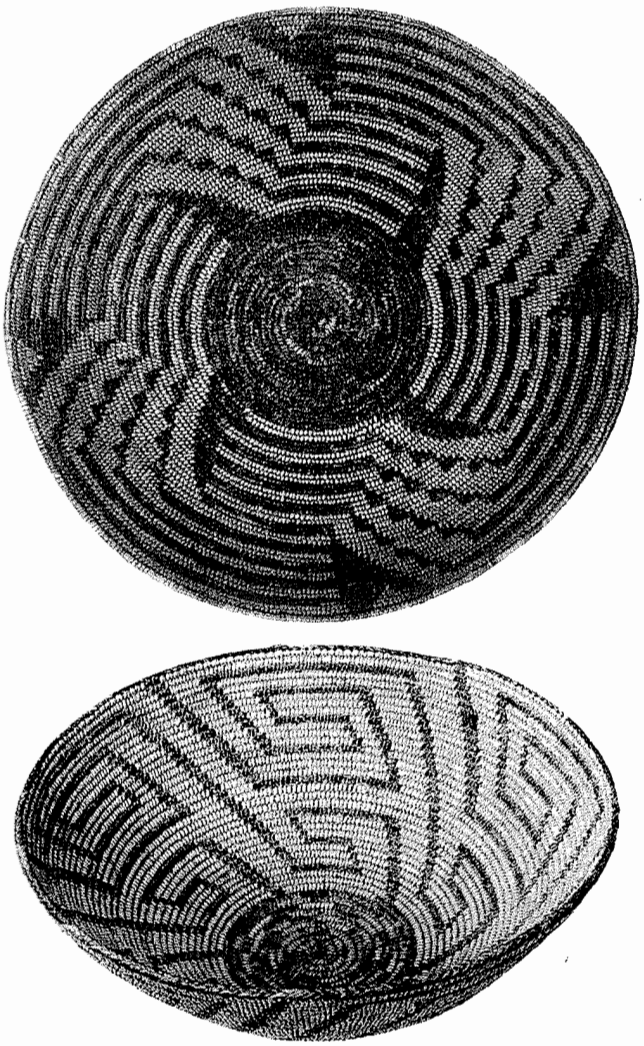

Smithsonian, Dept. of Anthr.: 174,529.
Fig. 11. Papago coiled basketry bowls. The horizontal lines created by the black patterns could serve to measure contents when goods were exchanged. bottom, Fret pattern with braided rim; top, whirlwind pattern with coiled rim. bottom, Width 39.5 cm, top, same scale. Both collected by WJ McGee at San Xavier, Ariz., 1894–1895.

But this attitude was the exception in the Southwest. Warfare was expensive; men were killed and retaliation was fearsome. Moreover, the results were often unpredictable since one's efforts might be thwarted or seeming success vanished when desired items were lacking. In addition, constant raiding could jeopardize future trading, so some precautions were present that actually reduced the possibility for theft.

Ritual was a major force in stymying promiscuous raiding. The Hopi warrior returning from hostilities was secluded in a kiva for 20 days (Beaglehole and Beaglehole 1935:23–24), and Tewa combatants and their booty also underwent purification (Ford 1972a).

Interestingly, the threat of unexpected attacks from enemies encouraged exchange. The Rio Grande Pueblos found it advantageous to trade with marauding Comanches and Navajos, even when they were ill-provisioned, in an effort to avoid crop thefts and wanton destruction (Ford 1972a:34).

Stolen livestock and slaves were traded to the Pueblos. Comanches brought horses to the Eastern Pueblos and Apaches disposed of burdensome Mexican cattle, sheep, and goats with the Navajo and at Zuni. Indian children and slaves taken in intertribal skirmishes were sold to individuals in various villages or to Spanish dealers at trade fairs; however, these commodities were not significant in most intervillage transactions.

Conclusion

Inter-Indian exchange was a complex of interactions among kinsmen, neighbors, formal friends, and distant strangers. The social and ceremonial fabric encouraged outside contacts, thus assuring that all had equal information about rates of exchange and access to goods. All groups provided some special resource or craft or functioned as middlemen for some commodities. However, a network of alternative sources for every good prohibited monopolistic and exclusionary practices. Contacts were most frequent in the fall and winter between the harvest and new field preparation. The ecology of the Southwest necessitated a variety of means to maintain a maximum number of trade contacts expressed through social relations.

Mechanisms facilitating exchange were perpetuated to overcome disparities in food production between families or within a subregion. Ceremonial distributions were a reward for ritual service. These accompanied intravillage rituals as well as intervillage singing and dancing. Throughout the area food was the appropriate reward for service to man and gods.

Exchange as a social aspect of foreign relations made friends of potential enemies. Each gift made a foreigner a quasi-kinsman. Kinsmen did not bargain and could defer payment; strangers bartered and paid immediately. A kinsman or trade partner was protected and provisioned; a stranger was feared as a potential enemy. Through the creation of social dependency, desired goods became easier to obtain and unrecognized ecological differences were corrected with a minimum necessity for theft, except for Apaches in conflict with Mexicans.

Traditional Southwestern exchange was a splendid example of multiple means for moving goods within an open communication network to insure the adequate provisioning of politically independent, egalitarian communities.

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