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Author(s): Heather Trigg

Source: *Journal of the Southwest*, Vol. 46, No. 2, Scholarship from the William P. Clements Center for Southwest Studies (Summer, 2004), pp. 223-252

Published by: Journal of the Southwest

Stable URL: <https://www.jstor.org/stable/40170289>

Accessed: 03-05-2019 20:18 UTC

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Food Choice and Social Identity in Early Colonial New Mexico

HEATHER TRIGG

In 1601, three years after Spain established the colony of New Mexico, one settler described the land as “sterile, lacking in everything necessary to support human life” (Hammond and Rey 1953: 688). In 1669, Franciscan priest Juan Bernal again complained that “for three years no crops [had] been harvested . . . and . . . a great many Indians perished of hunger, lying dead along the roads, in the ravines, and in their huts.” He continued in a similar vein stating, “The greatest misfortune of all is that they [the colonists] can no longer find a bit of leather to eat, for their herds are dying” (Hackett 1937: 272). Despite these cries of distress, colonists throughout the early colonial period (AD 1598–1680) managed to construct homes, *estancias* (ranches), the capital (Santa Fe), and Franciscan *conventos* (missions) in Pueblo villages. Although the colony was not particularly robust, it did persist for nearly one hundred years and was not abandoned until the Pueblo Rebellion when native peoples rose up in revolt, destroyed the *conventos* and *estancias*, and forcibly expelled the colonists.

During the early colonial period, Spanish colonists settled among Pueblo villages; planted crops; raised livestock; and imported cloth, ceramics, and tools. Some fortunate individuals ate imported sugar, cinnamon, wine, and chocolate (Ivey 1993; Scholes 1936: 329, 1937; D. Snow 1993), and most consumed the Old World crops they grew, as well as foods appropriated from native peoples. Colonists not only created a functioning society for themselves, but also attempted to incorporate the Pueblo peoples into their social and economic systems. Although they had a well-established cuisine based largely on maize, the Pueblos eventually adopted European-introduced crops such as wheat, peaches, and watermelons and today consider some of these introductions to be traditional foods.

HEATHER TRIGG is a senior scientist at the Andrew Fiske Center for Archaeological Research and Center for Cultural and Environmental History, University of Massachusetts, Boston.

Reports from colonists, such as those quoted previously, suggest that finding sufficient food to meet the caloric needs of the colonists and Pueblo peoples was a challenging aspect of early colonial life, but perhaps nearly as important as the nutrients were the social meanings that their foods imparted (Douglas 1997). The choices that colonists and Pueblo peoples made regarding the foods they ate and how they prepared meals had important implications for their social identities. Since social structures in colonial situations are often flexible, an examination of the foods that people prepared and consumed allows us to explore the changing cultural relations accompanying colonization. Using archaeological and documentary analyses of food and cuisine, we can begin to investigate such changes in early colonial New Mexico.

SOCIAL MOBILITY AND CROSS-CULTURAL INTERACTIONS

For colonizers around the world, colonization represented an opportunity for upward social mobility, an escape from economic or social problems at home, and a chance to develop a new social identity (Elliott 1989; A. Smith 1994). New Mexico offered such possibilities because the Spanish government gave colonists land for raising livestock and crops, two enterprises that had proven lucrative to colonists in Mexico. In addition, some settlers who agreed to provide military service were granted an *encomienda*—the right to collect tribute from converted indigenous peoples. Finally, those original colonists who resided in New Mexico for five years were granted the rank of *hidalgo*, or nobleman, not a small concession in a hierarchically organized society such as Spain's where such status was valued. Historian Marc Simmons (1991: 65) observed that the privilege associated with *hidalgo* standing was "something which all commoners craved with unquenchable passion." Although colonists sought upward social mobility, they were faced with novel physical and social environments that challenged their abilities to reproduce Spanish culture. Other than the governors' wives, many of the women colonists in New Mexico were mestizas (women of mixed Spanish and Native American parentage), who brought aspects of their Native American heritage to their families' lifestyles. There were few educational opportunities through which colonists could formally learn about Spanish history, culture, and values, and most New Mexicans were illiterate and

unschooled (Scholes 1935: 100). Commenting on life in the seventeenth century, historian France Scholes (1935: 99) notes, "New Mexican life was characterized by a roughness, a lack of luxury and refinement, a crudeness, and a striking degree of ignorance." Because colonial women were unaware of aspects of peninsular Spanish culture (through lack of personal experience or education) and added their own native cultural practices and preferences, archaeologist David Snow (1992:188) argues that "[the women's] ability to recreate and maintain in the Rio Grande a typical or traditional 'Spanish' household or lifestyle can be doubted." In addition to the social difficulties in maintaining Spanish ideals, the harsh environment and the patchy distribution of natural resources such as water and arable soils posed a challenge to the successful production of crops, particularly the European introductions such as wheat, which could be grown only under irrigation. Although Spanish culture helped to define the foods colonists considered palatable, individuals adapted to the novel conditions in the colony by modifying their food choices and the social structures that guided those choices.

Pueblo peoples were also faced with a situation that challenged their traditional values. In contrast to some colonizing countries, Spain considered the indigenous peoples in its dominion to be subjects, although they lacked some of the privileges of the Spaniards (Cutter 1986; Elliott 1989: 52). Since they were incorporated into the empire, native peoples were expected to become "civilized," which meant behaving according to ideal Spanish standards in manners, dress, and customs. Priests, particularly those living at the *conventos* in Pueblo villages, were aggressive in challenging aspects of Pueblo life that were fundamental to their cultures, such as labor roles and religious practices.¹

Many of the interactions between the Pueblo peoples and the colonists generated substantial disruptions in the Pueblos' ways of life (Lycett 1989, 2002). The introduction of Old World diseases, for example, devastated their numbers, which had profound effects on their societies. The rapid population loss may have compromised the functioning of their religious structures, which were intimately tied to the political control within communities (Gutiérrez 1991). Gutiérrez has argued, moreover, that the priests' efforts to convert young men to Catholicism by giving them livestock had a substantial impact on traditional power relations within villages. "The Franciscans' assault on the religious (political) structure of the Indian community to impose their charismatic authority was consciously coupled with an effort to disrupt the system of cal-

culated gift exchange between juniors and seniors that structure inequality in Pueblo society" (Gutiérrez 1991: 66). There is no doubt that the colonization of New Mexico substantially altered the Pueblo peoples' traditional values.

While colonization frequently resulted in exploitation, some native peoples were able to manipulate the situation to their benefit. In her analysis of the colonization of the Aztecs in Mexico, anthropologist June Nash (1980: 136) wrote, "Indian women became wives and concubines of the conquerors and often enjoyed treatment preferential to that of the men." Further, "Some women took advantage of the opportunities offered by marriage or concubinage to the Spaniards during the first few decades of colonization when the scarcity of European women enhanced their value among the conquerors" (139). Pueblo individuals, both women and men, wishing to enhance their standing with the colonists may have chosen to take on the trappings of Spanish culture, including its cuisine. Spanish officials may have facilitated this transformation by favoring the most compliant Pueblo people, regardless of their standing in the village, with political roles.

Many Spanish customs and legal practices encouraged close contact between the colonists and Pueblo peoples. The Franciscans constructed *conventos* in Pueblo villages and lived among the people, forcing them to engage in Spanish pursuits and encouraging them to adopt Spanish customs and Christianity. The priests also established *estancias* for cultivating crops and livestock, and indigenous people provided much of the labor to staff both the *conventos* and the *estancias*. Recognizing that native peoples' labor was critical to the success of the colony, the viceroy specifically encouraged Governor Oñate to treat the Pueblos with kindness so that they would willingly provide labor for constructing buildings, irrigation canals, herding, plowing, planting, and harvesting. The Pueblos did provide some of this labor for wages, but those who were reluctant could be legally forced to work in the colonists' households and in the *conventos*. As punishment for crimes, such as theft or the uprisings at Las Humanas and Acoma, Indians were enslaved to individual colonists. Work in the colonists' households provided what archaeologist David Snow (1992: 187) has called a "microfrontier of interactions."

In addition to labor, the Pueblos supplied colonists with provisions, which were especially important during early years of the colony when the colonists could not produce enough food to support themselves. Throughout the early colonial period, *encomenderos*, a small group of

colonists who were allowed to collect tribute in exchange for past service and future military support, received additional subsistence goods. “Each Indian repairs once a year to his *encomendero* with a *fanega* of maize, which is worth four *reales*, one cotton blanket a *vara* and a half square, which is valued at one peso, or, in lieu thereof, a raw buffalo hide or deer skin, either of which has the same value” (Petition of Francisco Martínez de Baez, 1639 in Hackett 1937: 120). These goods provided the foundation of the colonists’ barter economy and perhaps allowed the *encomenderos* to achieve even greater standing in the colony (Snow 1983).

These interactions—the deliberate attempts to change Pueblo cultures, the labor provided by native peoples for crop and livestock production in the colonists’ households, and the provisioning of colonists with Pueblo food stores—allowed for knowledge of and perhaps access to one another’s cuisines. This does not mean, however, that individuals automatically adopted new foods, because such additions needed to be evaluated and brought into concordance with each culture’s values. In discussing this process among the Hopi, anthropologist Hartman Lomawaima (1989: 97) states, “The synthesizing process by which an idea or thing became imbued with Hopi values may be called ‘Hopification.’ This is a process by which Hopi view, test, analyze, and make decisions about the actions or impositions of alien cultures or elements.” This filtering process occurred among the Spanish colonists as well as the Pueblo peoples (Weber 1992: 314).

ROLE OF FOOD IN SOCIAL IDENTITY

The role of a cuisine in society is not limited to the foods eaten, but also includes the ways they are prepared, served, and consumed, and anthropologists have long recognized that cuisine has a social component. Food choice is often thought of as conservative, resistant to change because attitudes toward foods are powerfully influenced by culture (Hartbottle 1997). Although the items a society perceives as edible are indeed constrained by cultural values (Douglas 1984; Lévi-Strauss 1969), cuisine is not immutable; new foods and preparation methods are added and others lapse. Because foods play an important role in simultaneously reflecting existing cultural practices and shaping those values, cuisine has an influence on social relations (Wiessner 1996; Wilk 1999). As

anthropologist Mary Douglas has argued, meals “encode social events. . . . The message is about different degrees of hierarchy, inclusion and exclusion, boundaries and transactions across the boundaries” (Douglas 1997: 36). Cuisine is important for displays of power—for example, competitive feasting or potlatches—and these power relations can be manipulated (Dietler 1996: 87). The choice of foods produced and prepared and the context in which they are consumed reflect a great deal about the social standing of the individuals involved (Harbottle 1997; Wiessner 1996). In this way, cuisine is important for constructing and maintaining a social identity.

DOCUMENTARY AND ARCHAEOLOGICAL DATA

The investigation of peoples' food consumption in seventeenth-century New Mexico is aided by the presence of both documentary and archaeological data. Although the documentary record is meager because all texts held within the colony were destroyed during the Pueblo Rebellion in 1680, we do know that as part of his contract for colonizing New Mexico, Oñate was required to supply provisions for the journey and seed for crops and extra livestock for herds once the colony was founded. He furnished wheat, lentils, beans, maize, oxen, cattle, horses, sheep, goats, and a small number of pigs. During the initial colonizing expedition, an incredible variety of plant extracts and oils were imported as medicines: chamomile, dill, rue, myrtle, citrus, fennel, quince, rose, borage, and marshmallow (Hammond and Rey 1953: 104–6). The second expedition to supply New Mexico brought additional goods, and colonists included in their inventory four pounds of saffron, aniseed, sesame, almonds, hazelnuts, walnuts, rosemary, lavender, sweetmeats, lard, honey, wine, Jamaica tree fruit, native and Castilian spices, pennyroyal, marjoram, pepper, capers, raisins, olives, cinnamon, and coriander (Hammond and Rey 1953: 523–39). Whether the colonists grew many of these plants once they reached New Mexico is unknown, but their accounts indicate that they were raising onions, cabbage, lettuce, radishes, garlic, cucumbers, carrots, and artichokes, at least during the early years of the colony (Ayer 1965). More goods were imported via the triennial mission supply caravans, which the Spanish crown sponsored to support the *conventos*. Among the many items the crown sent were chickens, oil, cheese, shrimp, wine, spices, livestock, and several types

of fish. In addition to supplies sent to the colony, priests were able to purchase chocolate and vanilla in Mexico using the proceeds of their livestock exports (C. Snow 1993).

Although colonists made varying estimates of crop production levels during the first few years of the colony, extant documents do not reveal precise levels of production or consumption. Because of its visibility in both the archaeological and documentary records, we know somewhat more about livestock production and the consumption of meat than about crop production and the consumption of plant foods. Archaeological data from several seventeenth-century sites in New Mexico provide information about the colonists' production and consumption of plant foods, however.

Analysis of plant remains from seventeenth-century New Mexican sites began in the 1940s with Volney Jones's identification of botanical specimens from the Franciscan *convento* at Abó. More recently, excavations at several contemporaneous sites in north central New Mexico—San Marcos Pueblo, portions of downtown Santa Fe, Paako Pueblo, and the Sanchez site (LA 20,000) have yielded evidence of continuity and change in Spanish and Pueblo cuisine. The Sanchez site—a seventeenth-century secular *estancia* with a house, barn, and corral—is located about twenty-five miles southwest of Santa Fe (Snow 1992). Mission San Marcos is a Franciscan *convento* located in a very large Pueblo village about twenty miles south of Santa Fe. In recent years, David Hurst Thomas of the American Museum of Natural History has undertaken excavations of the church and adjacent convento compound (housing the living quarters of the priests, workshops, storage rooms, and the kitchen), conducting systematic sampling for plant remains within and around the church and convento compound. Archaeological reconnaissance within Santa Fe has turned up only limited seventeenth-century deposits that have not been mixed with later materials. Excavations at the Palace of the Governors have yielded a wealth of botanical materials from many periods in Santa Fe's history, but perhaps the most securely defined seventeenth-century deposits come from work at the La Fonda Hotel. The La Fonda Garage Project, conducted by John Ware and the Laboratory of Anthropology along with volunteers, yielded ceramics, bones, metal, glass, textile fragments, and some very well-preserved plant remains from the seventeenth-century Spanish occupation of the town (Trigg 1999a; Wiseman 1992). The final archaeological site used in this research is Paako, a large Pueblo village located on the eastern slopes of the San-

dia Mountains near Albuquerque. During the seventeenth century, there was little Spanish presence at the village—a small *visita* church has tentatively been identified at the site (Lycett, personal communication), but there is no indication in either the documentary or the archaeological records of a large convento complex like those found at Abó and San Marcos. Archaeologists have been examining Paako since 1914, but the most recent excavations undertaken by Mark Lycett of the University of Chicago have included comprehensive sampling for botanical remains, both pollen and macrobotanicals. Although there is no evidence of a permanent Spanish presence at or near the seventeenth-century site, artifacts clearly demonstrate contact between Pueblo villagers and Spanish colonists.

Examination of the plant remains at these sites sheds light on the foods of New Mexican peoples in a range of social situations. Although we do not have textual information concerning the Sanchez site, documents from the rebellion indicate that most colonists' households had native people (Apaches and Pueblos) serving as domestics or day laborers or helping with agricultural production. The *estancia* at Sanchez probably housed an extended family of colonists along with native peoples who worked as domestics. Santa Fe was where some of the highest status colonists lived, while Paako, with little constant Spanish presence, represents perhaps the opposite end of the continuum of cultural interactions. The *conventos* at Abó and San Marcos provide contexts of a few priests (one or two for each *convento*) dwelling among and served by Pueblo peoples. The deposits excavated and the botanical materials recovered from San Marcos come from the convento compound and thus represent the priests' and possibly the neophytes' uses of plants. Although the priests took vows of poverty, they controlled perhaps the greatest concentrations of wealth in the colony through their extensive livestock herds and participation in the export trade to Mexico (Ivey 1994). Ivey has also noted that food production at the missions was sufficiently great to sustain Pueblo people and even some settlers during times of famine.

Ethnobotanist Volney Jones analyzed the botanical materials from Abó in the 1940s, whereas I identified the plant remains from the other sites examined here. The plants from Paako used in this study are limited to two seasons' collection of macrobotanical (seeds, fruits, and wood) materials. Sampling for plant parts at Paako, La Fonda, Mission San Marcos, and Sanchez involved taking soil samples and separating the

plants from the matrix using manual flotation (Pearsall 1989). Each sample was poured into a bucket of water and stirred to break up the matrix. Because plant parts are buoyant, they float to the surface while the matrix sinks. The floating seeds, wood, and rootlets were decanted into a cloth and dried. Each sample was then scanned using a dissecting microscope, and the recovered seeds, fruits, and wood were identified by comparison with modern plant materials housed at the University of Michigan Ethnobotanical Laboratory and published reference photographs (Martin and Barkley 1961).

From the Sanchez site, I found evidence that colonists consumed Old World crops, including the seeds from two types of wheat (bread wheat and emmer), peas, apricots, and peaches (see table 1). At the La Fonda excavations in Santa Fe, the data indicate that the colonists consumed many of the same crops: two types of wheat (bread and emmer), lentils, peas, watermelons, muskmelons, and peaches. Wheat rachis fragments (the part of the plant that holds the kernel to the stalk) were also recovered, indicating that wheat was threshed and probably grown nearby. In addition to the foods associated with European cuisine, there was evidence that colonists were consuming chilis, a crop they introduced from Mexico. That colonists were consuming maize, perhaps grown by the Pueblos, was evident at both sites. At Santa Fe, I recovered beans and pumpkins, also components of Pueblo peoples' diets. The assemblages at both La Fonda in Santa Fe and Sanchez produced large numbers of goosefoot, purslane, and ground-cherry seeds and some piñon nuts—non-domesticated plants commonly eaten by the Pueblos. At Santa Fe, I recovered a number of other non-domesticates—filaree, sage, sunflower, and indigenous grapes (*Vitis arizonica*; Trigg 1999a).

At Paako I identified plenty of seeds suggesting the plants used for food but found little evidence for the consumption of Old World domesticates. Only a single kernel of wheat was recovered, but maize, squash, and beans (which frequently do not preserve), were found (Trigg 1999b). The seeds recovered during the recent excavations at Paako Pueblo show continuity in the Pueblo diet, either because the Pueblos declined to embrace the new foods of the Spanish colonists or because, in their isolation, they lacked the opportunity. The suite of plants found at Paako is similar to that found in prehistoric sites in the Southwest and indicates a reliance on a mixture of the common domesticates, corn, beans, and squash, supplemented with noncultivated plants such as goosefoot, piñon nuts, and yucca. One unusual find in one of the historic plaza surfaces

Table 1. Plant foods mentioned in various seventeenth-century sources

Plant	Docu- ments	Paako Pueblo	Mission San Marcos	Abó Convento	Sanchez Estancia	La Fonda (Santa Fe)
Old World						
Wheat	+	1	1	many	some	many
Peas	+	—	—	—	+	+
Lentils	+	—	—	—	—	+
Watermelons	+	—	—	+	—	+
Muskmelons	+	—	—	+	—	+
Coriander	+	—	—	+	—	—
Grapes	+	—	—	+	—	—
Apricots	+	—	—	—	+	—
Plums	+	—	—	+	—	—
Peaches	+	—	—	+	+	+
Mexican						
Chilis	+	—	—	—	—	+
Indigenous						
Maize	+	+	+	+	+	+
Beans	+	+	+	+	—	+
Squash	+	+	+	—	—	+
Cheno/Ams	+	+	+	+	+	+
Piñon nuts	+	+	+	+	+	+
Cholla	—	+	+	+	+	+
Juniper	—	+	—	+	—	—
Wild rice	—	+	—	—	—	—
Ground-cherries	—	+	+	—	+	—
Sunflowers	—	+	+	—	—	+
Purslane	+	+	+	—	+	+
Yucca	—	+	—	+	—	—
Blueberries	—	—	+	—	—	—
Ricegrass	—	+	—	—	—	—
Wild grapes	+	—	—	—	—	+

+ presence

— absence

is wild rice grains (*Zizania aquatica*), a plant found in the northern Plains and eastern North America.

Within the *convento* compound at Abó, Volney Jones (1949) found evidence for a wide range of plant foods. As was the case in Santa Fe,

plants associated with European cuisine, such as wheat, muskmelons, watermelons, apricots, and plums were well represented, but unique finds include coriander and the pips of wine grapes (*Vitis vinifera*). He also found chili seeds and plants associated with Pueblo cuisine: maize, pumpkins, quelites (amaranth), yucca, prickly pear, juniper, and piñon nuts.

At the church and convento at Mission San Marcos, I found plant parts associated with food, but the area may have been cleaned before it was abandoned and the remains were sparse. I found evidence for the use of a variety of gathered plants—goosefoot, sunflowers, two types of cactus, ground-cherries, and blueberries—as well as crops of maize and beans. The only evidence for the European-introduced crops that must have been consumed there was the presence of two cereal grains, only one of which could be identified as wheat. The low number of plants associated with Iberian cuisine and the broad spectrum of native gathered foods is similar to the constellation found at the Pueblo village of Paako but contrasts sharply with the abundance of European foods in the *convento* at Abó.

The plants found at the *conventos* indicate interesting contrasts in priests' choices of foods. Whereas the *convento* at Abó yielded evidence of the most diverse use of Old World crops of any site, Mission San Marcos yielded evidence of a narrow range of these crops. Comparisons between these two sites must be made cautiously because preservation conditions at the two sites were different. The plants from Abó were recovered from dung deposits, which preserve fragile parts, whereas the San Marcos samples came from open areas where decay is more rapid. Moreover, the church may have been cleaned, removing stray plant parts, before it was abandoned. On the other hand, the variation between Abó and San Marcos may represent differences in the foods available to the priests. Local environmental conditions did affect the growth of Old World crops, and Ivey (1994) notes that the priests' ability to grow wheat at Las Humanas was tenuous because of its reliance on rainwater. Other locations produced a surplus of crops, and at times Jemez, Taos, and a few other *conventos* were shipping their extra food to villages in need (Ivey 1994: 84). Alternatively, the differences we see may be indicative of the priests' varying approaches to life in New Mexico. At Abó it is clear that the priests consumed Spanish (or Mexican/Spanish) cuisine, but the priests at Mission San Marcos apparently consumed more Pueblo foods. The priests at San Marcos may deliberately have chosen to consume the foods of the people to whom they ministered, or perhaps they

relied on Pueblo cooks and were not fussy about their food. Due to the poor preservation at San Marcos, these interpretations are tentative, but the data suggest the priests' willingness to adapt to Pueblo life rather than impose their own sensibilities.

In 1598, the colonists brought livestock to start herds in New Mexico (Hammond and Rey 1953). Livestock production and overproduction was a contentious issue among the colonists, clergy, and governors, and was, therefore, discussed in the documents. Moreover, the architecture at many Spanish *estancias*, specifically the barns and corals (which have been identified at most excavated sites), manifests the importance of livestock. Although analogous faunal data are not available from all the sites used in the botanical analyses, large numbers of animal bones were found at some sites in New Mexico (see table 2), and their analysis provides more specific indications of colonists' meat consumption patterns. Snow and Bowen (n.d.) found that livestock comprised the vast majority of La Fonda's faunal assemblage—73.9% of the animals providing a striking 99.3% of the edible meat. This is in stark contrast to the Spanish colonies in Florida, where colonists consumed primarily deer, fish, and shellfish (Scarry and Reitz 1990). The former pattern is reflected at rural Spanish sites in New Mexico, where sheep, goats, cattle, and horses (generally in that order) outnumbered rabbits, deer, and other wild game (Alexander 1971; Harris 1973; D. Snow 1993; Snow and Bowen n.d.). Despite the importance of sheep for woolen textiles in New Mexico, analysis of kill-off patterns indicate that sheep were used primarily for meat. Snow and Bowen have argued that colonists' herds were more than sufficient to supply wool for textiles and still allow for the consumption of mutton. It is clear that the colonists preferred to consume the meat of their domestic animals. Even in times of famine, they did not or could not completely adopt Pueblo cuisine, which emphasized deer and small mammals.

Cuisine is more than just the foods consumed; it also encompasses the ways in which foods are prepared and served. Information relevant to examining foodways comes not only from plant remains and animal bones, but also from cooking and serving implements, and consequently, artifacts and features from the sites also illuminate the inhabitants' food practices. At the Sanchez site, a Spanish-style *horno*—a large domed oven used to bake wheat bread—was located adjacent to the house, and numerous *comal* fragments (cooking stones), used to make maize tortillas, were found in the midden (Snow 1992; Trigg 1999a). The investment of labor

Table 2. Animals mentioned in documents and identified through faunal remains from seventeenth-century archaeological sites

Animal	Docu- ments	Estancias	Santa Fe	Abó Convento	Awatovi Convento	Hopi Village
Cow	+	+	+	—	—	+
Sheep	+	+	+	+	+	+
Goat	+	+	+	+	+	+
Horse/ass	+	+	+		+	+
Pig	+	—	+	+	+	+
Chicken	+	+	+	—	—	—
Indigenous						
Deer	+	+	+	+	+	+
Antelope	+	+	—	—	+	+
Elk	—	+	—	—	—	—
Bighorn sheep	—	—	—	—	+	+
Mountain goat	—	+	—	—	—	—
Bison	+	+	—	+	+	—
Rabbit	—	+	+	+	+	+
Fish	+	+	+	—	—	—
Bird	+	—	+	+	—	+
Wood rat	—	—	—	+	—	+
Rodent	—	—	+	—	—	+
Lynx	—	—	—	+	—	—
Ground squirrel	—	—	+	+	—	—
Dog	—	—	+	—	+	+
Coyote	—	—	+	—	+	+
Porcupine	—	—	—	—	+	+
Mouse	—	—	—	—	+	+
Cat	—	—	—	—	+	—

+ presence

— absence

Source: Data from Snow 1977; Alexander 1971; Toulouse 1949; Snow and Bowen n.d.; Harris 1973; and Chapin-Pyritz 2000.

in constructing the *horno* provides an additional indication of the importance of wheat bread and Spanish cuisine to the inhabitants; however, the *comal* fragments suggest either native peoples' presence as cooks in the household or the colonists' adoption of Pueblo cooking methods.

Colonists certainly came to New Mexico eating maize tortillas, a staple throughout Mexico, but inventories of their belongings indicate they brought copper or iron *comales* (Hammond and Rey 1953: 232, 235). Like Mexicans, Pueblo people used *comales* to prepare tortillas or piki bread, but they used shaped and smoothed sandstone rather than metal or ceramic implements. The colonists must have quickly switched to using the sandstone *comales* of the Pueblo peoples because these have been recovered from every seventeenth-century Spanish colonial site (Alexander 1971; C. Snow 1977; D. Snow 1971, 1973, n.d; Tichy 1939; Toulouse 1976). Since the practice of cooking with sandstone *comales* appears to have been the standard among Pueblo peoples, the colonists apparently adopted Puebloan techniques, married Pueblo peoples, or had them preparing meals in their kitchens. Finally, the presence of goose-foot and purslane (known to the colonists as quelites) at all the Spanish-occupied sites suggests that these native foods may have been a regular part of the colonists' diet, despite the fact that they were ostensibly considered famine foods.

“HERE CORN IS GOD”

Prior to colonization, the Pueblos had an extensive tradition of cultivating maize, beans, and squash, but they also collected quelites from their fields and gathered noncultivated plants such as piñon nuts and wild grapes. They hunted deer, rabbits, and other small mammals, and traded with Plains peoples for bison meat and hides, but maize was perhaps the most important Pueblo food. In 1601 Fray Juan reported that “here corn is God” (Hammond and Rey 1953: 692), because not only did Pueblo cuisine center on maize, but it was an integral part of religious life. Despite the pivotal role of maize in their societies, the Pueblos eventually adopted European-introduced crops (Ford 1987). Writing early in the seventeenth century, chronicler Gaspar Pérez de Villagr  suggested that this adoption was rapid:

After coming in contact with them they [the Pueblos] readily adopted such vegetables as we brought them, such as lettuce, cabbage, peas, chick-peas, cumin-seed, carrots, turnips, garlic, onions, artichokes, radishes, and cucumbers. (Villagr  1933: 143–44)

While Villagr  conveyed the impression that the Pueblos were eager to embrace things Spanish, the archaeological record does not. The lack

of European foods at Paako suggests that the residents either did not have access to Old World crops or preferred to maintain their traditional cuisine.

The leader of the Pueblo Rebellion, Popé, encouraged the Pueblos to destroy everything associated with the Spanish colonists, including the European-introduced crops. After the rebellion one Pueblo man, Juan, reported, "They were ordered likewise not to teach the Castilian language in any pueblo and to burn the seeds which the Spaniards sowed and to plant only maize and beans, which were the crops of their ancestors" (Hackett and Shelby 1942: II:235). It may have been a similar attitude toward things Spanish that discouraged the people of Paako from modifying their cuisine. While we do not have evidence for the widespread adoption of European-introduced crops at Paako, other Pueblo villages may have been more amenable to change, because Juan continued, "All the nations obeyed in everything except in the command concerning Spanish seeds, which some of them sowed because of their fondness for the Spanish" (*ibid*). Clearly, we need more studies of seventeenth-century Pueblo sites before firm generalizations can emerge. Given the autonomy of Pueblo villages, we can assume that some villages, and indeed, some households were more amenable to change than others.

"SORROWS ARE NOT SORROWS WHERE THERE IS BREAD"

The evidence from La Fonda and Sanchez and from seventeenth-century documents indicates that New Mexico's secular colonists preferred the domestic meat and Old World crops associated with Spanish cuisine. Just as the original colonists brought livestock from Mexico to start their own herds, New Mexico's first governor, don Juan de Oñate, began his colonizing expedition complete with stores of wheat to aid in transferring Spanish cuisine to New Mexico (Hammond and Rey 1953: 44). Colonists were soon growing Old World crops—fruits and vegetables, fruit trees, and grains. Production of these crops was time-consuming and more labor intensive than animal husbandry (Slicher van Bath 1963; Super 1988), and some have suggested that Spanish crops required considerably more care and effort than indigenous crops of maize, beans, and pumpkins (Lopinot 1986). European-introduced grains required plowing, sowing, harvesting, threshing, winnowing, and hand sorting, and in New Mexico, wheat and barley could be grown only under irrigation.

New Mexico's physical environment limited the types of crops that could be grown and the fecundity of the livestock. The patchy environment limited the irrigable land to a narrow band along Rio Grande and its tributaries, which restricted the colonists' production of wheat and barley to this area (Pratt and Snow 1988). In contrast to the situation in Spain's colonies in Florida, New Mexican wheat, when irrigated, apparently did well. While cattle and sheep increased in numbers, pigs apparently did not thrive in the hot, dry scrublands of New Mexico. One of the priests at Pecos Pueblo complained that the cold winters there reduced yields of wheat and fertility of the sheep. In addition, some plants that the Spanish desired could not be grown in the colony because of the aridity of the region and the low winter temperatures. These included citrus, olives, chocolate, and certain spices, and there is no indication that New Mexico's colonists attempted to introduce such plants. Despite the additional effort needed to cultivate the introduced crops, the presence of the bread oven at the Sanchez site and wheat kernels and other Old World crops at seventeenth-century Spanish sites provide concrete evidence that colonists clearly were able to do so.

We can see desire for Spanish foods in the colonists' attitudes toward famines, when the shortage of food drove them to eat things they preferred not to consume. In 1601, one colonist, describing the harsh conditions of New Mexico, stated, "Any Spaniard who gets his fill of tortillas here feels as if he has obtained a grant of nobility" (Hammond and Rey 1953: 693). Six decades later, in 1661 Captain Andrés Hurtado stated that colonists were eating "bran, *quelites*, green barley, and other herbs which they happily were able to find, after much searching, and which they ate, it appears, in the whole villa of Santa Fé" (Hackett 1937: 187, *italics in the original*). A few years later, in 1669, Fray Juan Bernal claimed, "There is not a fanega of corn or of wheat in the whole kingdom, so that for two years the food of Spaniards, men and women alike, has been the hides of cattle which they had in their houses. To make them edible they toast them, and then eat them" (Hackett 1937: 272).

While colonists' tastes ran toward the production and consumption of European-introduced crops, they were pragmatic and incorporated non-Spanish foods into their diet. Despite their preference for wheat, the importance of maize and other indigenous foods cannot be discounted. With the exception of green barley, bran, and animal hides, famine foods were indigenous plant foods, perhaps a manifestation of indigenous women's influences on household cooking.

MODIFICATIONS TO SPANISH CUISINE

Iberians had a long history of modifying their cuisine and adding new foods to their diets. In portions of Spain, Muslim influences from the Moorish occupation during the Middle Ages led to the adoption of new foods and cooking styles. Muslims introduced “rice dishes, stuffed vegetables, savory pastries, and sweets. Their preferred cooking styles were cubed meat or meat balls with chickpeas or lentils.” (Chabráñ 2002: 132). Seasonings associated with Arab cuisine also became part of the medieval Spanish diet. These included cinnamon, cumin, ginger, turmeric, mastic, saffron, caraway, sesame, as well as mint, orange blossom, and rose waters (Chabráñ 2002). Some of these items are among the goods the colonists brought to New Mexico. In other regions of Spain, wealthy and noble families also consumed foods that followed the cooking styles of the royal courts of France, Germany, and Italy.

In the fifteenth and sixteenth centuries, the European nobility’s penchant for hunted game and fowl gave way to courtly customs and a preference for white and light meats (Montanari 1994: 90–91). Such dishes included roasted meats and fowl with elaborate sauces, sugared fruits, and ornate pastries. Fish, perhaps considered a famine food by colonists in sixteenth-century Florida (Scarry and Reitz 1990), was an appropriate dish to serve to the nobility at feasts. The diet of the affluent in Spain in the sixteenth and seventeenth centuries consisted largely of bread, meat, fruits, cheese, and vegetables. Cookbooks written during this period indicate that the wealthy consumed a wide variety of food-stuffs: rabbit, venison, eels, and lampreys, in addition to the livestock, bread, pastries, and delicacies made of milk and cheese.

Like the wealthy, the poor ate bread, meat, cheese, and vegetables; however, they consumed these items in different proportions, and frequently the food was of lower quality. The poor consumed less meat, more vegetables of low status (such as onions), and lower-quality bread, sometimes made of barley rather than wheat. Despite these differences, bread was the staple of most meals the poor and the wealthy alike (Alves 1994). In early modern Spain, the differences in diet between high-status individuals and the masses may have been less the plants and animals eaten than the relative proportions of meat and bread, the cuts of meat, the preparation methods and seasonings used, and especially the freshness of the ingredients.

For the Spanish colonizers of the New World, reproduction of Spanish cuisine was considered a moral imperative (Super 1988). "To the Spaniards who followed the conquistadors to New Spain, the food of their home country meant health, status, religion, and race. The well-to-do there ate wheat bread, drank wine, and could afford the most desirable domesticated meats, lamb and kid" (Laudan and Pilcher 1999: 61). The colonists expended much energy to introduce these foods because of their association with high status and because the colonists desired meals with familiar tastes and textures. Although some conquistadors were impressed with the foods available in the New World, the colonists disparaged many indigenous foods. Among early colonists, maize was considered more appropriate for "swine than for men" (Laudan and Pilcher 1999: 62). Likewise, conquistadors in sixteenth-century Mexico reviled quelites as "wretched stuff" (Díaz del Castillo 1963: 365).

The context of food production and consumption was different in the New World than in Spain. Re-creating European-style agriculture and livestock production not only provided the desired Iberian cuisine, but also was one way for the colonists to control the land and establish civilization. At the time of colonization, there was much more open land in the New World than in Europe. The forests of Spain had largely been cleared for agriculture (Super 1988), and game animals had become relatively unimportant foods to high-status individuals (Montanari 1994). These two factors may explain the importance of domestic meat to the colonists' cuisine in New Spain. By the sixteenth and seventeenth centuries, livestock ranches were well established in New Spain and were producing large quantities of domesticated animal meat. Beef and mutton were so plentiful they were fed in large quantities to slaves and mine workers (West 1949). "By the middle of the sixteenth century, almost everybody—Spanish immigrant, English freebooter, Aztec farmer, black slave—ate meat, and plenty of it" (Super 1988: 29).

Whereas in Spain the quantity of meat in the diet reflected an individual's status, in New Spain it was the staple grains, maize and wheat, that served to shape an identity. In colonial Mexico, "Wheat served to distinguish those possessing refinement and Spanish culture from the mass of "brute" Indian laborers (Alves 1994: 69). In Zacatecas, the homeland of Oñate and other New Mexican colonizers, the Spaniards ate wheat bread. Mestizos may have consumed a mix of wheat and maize, but the Native Americans certainly subsisted primarily on maize (Bakewell 1971). In contrast to the situation in Spain, wheat bread in New Spain was more expensive than meat (Super 1988).

Bringing this history of modification of cuisine and adoption of new foods, colonists entered New Mexico already consuming New World plants. As Oñate's contract for the colonization of New Mexico and the archaeological data reveal, maize and chili peppers from Mexico were among the foods that the colonists brought with them (Hammond and Rey 1953: 44). At times, the adoption of New World crops such as maize may have been due to a lack of alternatives, but the Spaniards adopted chilies because the chilies filled the same niche as black pepper for creating hot dishes (Laudan and Pilcher 1999: 64). Adopting new foods or new preparation methods associated with Pueblo cultures may not have been difficult for the New Mexican colonists because they had a history of modifying their cuisine.

Like other trappings of Spanish culture that were highly desired, European foods were important to New Mexico's colonists. Despite their pragmatism, colonists expended a great deal of effort to maintain the foods to which they had become accustomed—perhaps the seventeenth-century equivalent of comfort foods. In Mexico at this time, wheat bread was highly sought after and cost as much as four times the price of meat, making it a food for the rich (Super 1988: 38). New Mexico's colonists did pay the price, however, for they grumbled that Pedro Durán y Chávez became rich, excessively so, from his bakery operations near Albuquerque (Hackett and Shelby 1942: 173). Wheat was desired not only for its food value, but because it was a religious necessity as the main ingredient in Communion wafers. Colonists in Sinaloa, Mexico, described its importance:

The raising of wheat which the priests have undertaken there was begun in order to supply and provide all the fathers with sacrament wafers, for if they did not have this provision, so necessary for the masses and communions of so many Christians, notable would be the lack which they would have for the sacrament, which is so important for the salvation of souls. (Hackett 1937: 123)

Although Ivey (2000) indicated that Communion was infrequently given even to the colonists in New Mexico, its symbolic value was important because of the role that Catholicism played in the national identity. Prior to the reign of Isabella of Castile and Ferdinand of Aragón (AD 1479), Spain was not a unified nation, and portions of the country were still occupied by the Muslims until 1492. Isabella was devoutly religious, and she used Catholicism to unite the various autonomous regions of Spain. Her piety also provided additional incentive to complete the

Reconquista—the reconquering of Spain from the Muslim Moors—and made Catholicism integral to Spanish identity (Elliott 1989). Beyond its use for Communion wafers, wheat was critical for constructing and maintaining the colonists' ethnic identity. One scholar has stated, "Wheat was a cultural imperative, a driving force that shaped the social and physical landscape. Lack of wheat was just as important to note, for without it Spaniards lost a valued part of the culture" (Super 1988: 32).

The number of "Spanish" colonists in seventeenth-century New Mexico was small, perhaps 2,000 individuals among as many as 64,500 Pueblo people (Schroeder 1992). Despite the numerical superiority of the Pueblos, their way of life was under attack through deliberate Spanish attempts to modify their ways of life. Nevertheless, foods such as watermelon and peaches may have been particularly attractive to the Pueblos because few local plants produced such sweet, succulent fruits (Lopinot 1986). The adoption of watermelon and muskmelon may also have been facilitated by their similarity to traditional Pueblo cultivars, pumpkins and gourds, as well as these plants' weedy growth habit (Gremillion 1993). Moreover, the lure of consuming wheat and other Spanish cuisine must have been great during times of famine when the priests would dole out supplies from the mission. It is telling, however, that Spanish crops were among the items that Popé specifically ordered destroyed during the Pueblo Rebellion, and that he ordered a return to traditional cuisine.

For the most part the colonists lived in dispersed settlements near Pueblo villages. Inter marriage and other sexual relations between colonists and native peoples were frequent, and through the early colonial period, the colonists were increasingly a population of mestizos (Scholes 1935). Particularly during the early years of the colony, the Spanish were dependent on the Pueblos for food, and later famines forced them to eat foods that they associated with Pueblo cuisine. Wheat bread and other European foods provided cultural markers for the colonists in the face of *mestizaje* (miscegenation) and the vast numerical superiority of indigenous peoples. One historian said of New Mexico, "The small European population labored to extract what meager rewards it could from the province's limited resources" (Simmons 1969: 10). His characterization makes one seventeenth-century New Mexican proverb all the more poignant: "Sorrows are not sorrows where there is bread" (Espinosa 1985: 162).

Recognizing similarities, differences, and exchanges between Pueblos and Spanish colonists is just one step in understanding changing food-

ways in colonial New Mexico. During this period, the cultural and ethnic situations were considerably more complex than the straightforward divisions of “Pueblo” and “Spaniard” imply. Among the estimated one hundred Pueblo villages occupied during the seventeenth century, at least six languages were spoken, and although many aspects of their subsistence strategies were similar, each village carefully maintained political autonomy. The near unity of villages achieved during the Pueblo Rebellion was an anomaly born of desperation and was not long-lived. Moreover, there appears to be some degree of social hierarchy based on clan or moiety affiliation within the villages. The Pueblos were a diverse group, and their responses to colonization, including the adoption of new foods or the maintenance of traditional cuisine, can be expected to vary from village to village and from household to household.

The “Spanish” culture brought by the colonists was also variable. Of the original colonists, only about half were peninsular Spaniards, the other men came from various colonies in the New World (Snow 1996). Governor Oñate himself was a *criollo*² born in Zacatecas, Mexico, and among the first colonists were one man each from Belgium, Italy, and Portugal (Snow 1996). It is clear that modifications to traditional Iberian culture, such as the widespread adoption of maize, began long before the colonization of New Mexico (Weber 1992: 314). The small number of Spanish women in the colony led to miscegenation and a weakening of the social classifications more strictly adhered to in Spain (Scholes 1935: 97), a common occurrence in other early colonial settings (Sutherland 1982). By the time of the Pueblo Rebellion, more than 80 percent of the “Spanish” population was born in New Mexico, where social status was flexible (Scholes 1935). *Mestizaje* was common, and even among the group of people identified as *mestizos*, there was a status hierarchy. Some achieved positions of authority in the colonial government while others apparently moved easily between Pueblo villages and colonists’ households, further blurring the distinction between Pueblo and Spaniard (Knaut 1999).

With the current level of archaeological analysis, our ability to recognize the status, such as ancestry and wealth, of individuals associated with any particular site is limited to fairly gross determinations, and surviving documents do little to help us in this regard. Perhaps a more concerted effort to link documents with archaeological sites will yield useful information for linking material correlates with ethnicity. When it comes to the manifestations evident in the archaeological record, we may well see the expression of a desired identity rather than an indication of ances-

try. Thus, tracing changes in foodways among an intermarrying group with flexible social identities is difficult.

Some archaeological indicators of cuisine may point to *mestizaje*. In colonial households, women's work, less visible tasks, and lower-status items often reflect influence from indigenous sources, while men's work and highly public and valued practices tend to reflect the culture of the colonizers (Deagan 1996; Weber 1992: 317). Cooking is one task that frequently reflected indigenous practices. Day-to-day food preparation in colonists' households, those activities performed outside the context of ceremonies or social feasting, may point to the indigenous food practices of the women, which may be one reason we see sandstone *comales* in all Spanish colonial households from this era. Although this and the consumption of quelites and other noncultivated plants are aspects of the colonists' cuisine reflecting the activities of indigenous women, other features clearly show Spanish influence: The presence of wheat and the labor investment in building the *horno* at the Sanchez site, and the near universal consumption of livestock at colonial sites, clearly demonstrate the continuation of aspects of Iberian cuisine regardless of the ethnic identity of the cooks. Just as Pueblo potters produced new ceramic styles (soup plates and candlesticks, for example) in response to the colonists' demands, indigenous women and *mestizas* may have learned to cook some European foods in colonial households. The ability to prepare European cuisine may have depended less on the ancestry of the cooks than on the affluence and desires of the household.

In addition to the differences in ethnicity and the blurring of cultural practices that may accompany *mestizaje*, differences in wealth and political power may have influenced individual households' cuisines. Access to wealth gave families the ability to maintain cherished aspects of their culture. Historian David Weber (1992: 314–15) noted, "In day-to-day life, however, and especially in the more isolated areas, only the upper and middle strata of society could afford to affect high style." In terms of cuisine, there were times in colonial Mexico when bread was more expensive than meat and was therefore a food for the rich. In times of famine, people often become more conservative in their subsistence strategies, switching to second-choice foods when desired ones became scarce (Colton 1979). In New Mexico, where many of the women were Pueblos or *mestizas*, this may have meant returning to the plant foods the Pueblos typically gathered. The wealthy colonists in New Mexico would have been better able to maintain some portion of Spanish food-

ways than less affluent households, which would have had to make do with products associated with Pueblo cuisine. Given the environmental and social challenges to producing food, their choices may have been extremely limited, but the colonists certainly expended a great deal of effort to preserve their lifestyle.

Similar challenges to identity played themselves out in colonial situations throughout the New World. In other colonies, Spaniards faced many of the same problems associated with re-creating Spanish culture in a new environment. In the Caribbean and tropical lowlands, colonists found that sheep and wheat did not thrive, and in Mexico, olive and grape production was limited (Crosby 1972). Spanish colonists in Florida, where wheat, grapes, and olives did not grow well, complained that they were eating “herbs, fish scum, and vermin” when they could not obtain Spanish cuisine and were forced to subsist on an indigenous diet of maize and fish (Scarry and Reitz 1990). Archaeological research indicates that their diets were adequate and nutritious, and that cries of famine stemmed from discontent with the unaccustomed diet rather than actual starvation (Scarry and Reitz 1990).

In New England and along the east coast of North America, northern European colonists also attempted to maintain their cuisine, introducing apples, wheat, and livestock, and like their Spanish counterparts, early English colonists were dependent on indigenous peoples for a portion of their food. When the Old World crops were difficult to establish, the colonists adopted the Native Americans’ Three Sisters—corn, beans, and squash. At first, the colonists were apparently unwilling to grow their own maize, but traded with local native peoples for indigenous crops, venison, and nuts (Kulikoff 2000: 89). Like the Pueblos, indigenous peoples in the English-occupied regions of North America experienced challenges to their ways of life. They eventually adopted European foods and in dramatic ways modified their traditional foodways to assert their identity. To the English, if lands were not planted with crops, if they were left open for hunting or gathering of wild resources, they were being squandered and could be seized. In the face of the constant encroachment of European colonists, the Mashantucket Pequot peoples of Connecticut planted orchards of European-introduced apples to lay claim to their lands in a way that the colonizers would acknowledge (Den Ouden n.d.).

Food is a powerful tool, providing not only physical sustenance, but also social identity. During the expansion of early modern European states, colonists again and again attempted to re-create their familiar cui-

sine in new places. In these novel environments, finding sufficient food was often a challenge, which forced colonizers to be pragmatic about their cuisine and left them dependent on indigenous people. For their part, indigenous people coped with the changing social relations that accompanied an influx of people intent on acquiring their lands, the basis of their food production. The interplay between attempting to maintain socially important aspects of cuisine and the pragmatic adoption of new foods must have been a common phenomenon. ✚

NOTES

1. In their quest to civilize Pueblo peoples, the priests encouraged Pueblo women to undertake what in Spain were considered womanly crafts, in particular spinning and weaving. Prior to conquest, Pueblo men were the spinners and weavers. Women also traditionally did much of the construction of homes. Benavides recounts that when priests attempted to force the Pueblo men to construct buildings, the women laughed at them and they ran off (Forrestal 1954: 36).

2. A man born in the New World of two Spanish parents.

REFERENCES CITED

- Alexander, Robert. 1971 LA 9142: The Signal Site. Manuscript on file at the Laboratory of Anthropology, Museum of New Mexico, Santa Fe.
- Alves, Abel A. 1994. Of Peanuts and Bread: Images of the Raw and the Refined in the Sixteenth-Century Conquest of New Spain. In *Coded Encounters: Writing, Gender, and Ethnicity in Colonial Latin America*, ed. Francisco Javier Cevallos-Candau, Jeffrey A. Cole, Nina M. Scott, and Nicomedes Suárez-Araúz, 62–72. Amherst: University of Massachusetts Press.
- Ayer, A. E., trans. 1965. *The Memorial of Fray Alonso de Benavides, 1630*. Albuquerque: Horn and Wallace.
- Bakewell, Peter. 1971. *Silver Mining and Society in Colonial Mexico: Zacatecas 1546–1700*. Cambridge: Cambridge University Press.
- Chabrán, Rafael. 2002. Medieval Spain. In *Regional Cuisines of Medieval Europe: A Book of Essays*, ed. Melitta Weiss Adamson, 125–52. New York: Routledge.

- Chapin-Pyritz, Regina. 2000. The Effects of Spanish Contact on Hopi Faunal Utilization in the American Southwest. Ph.D. diss., University of Arizona, Department of Anthropology. University Microfilms, Ann Arbor.
- Colton, Elizabeth. 1979. "In Good Years and in Bad: Food Strategies of Self-Reliant Societies." *Journal of Anthropological Research* 35: 18–29.
- Crosby, Alfred W. Jr. 1972. *The Columbian Exchange: Biological and Cultural Consequences of 1492*. Westport, CT: Greenwood Press.
- Cutter, Charles. 1986. *The Protector de Indios in Colonial New Mexico, 1659–1821*. Albuquerque: University of New Mexico Press.
- Deagan, Kathleen. 1996. Colonial Transformation: Euro-American Cultural Genesis in the Early Spanish-American Colonies. *Journal of Anthropological Research* 52:135–60.
- Den Ouden, Amy. n.d. *Beyond Conquest: Native Peoples, Reservation Land, and the Struggle for History*. Lincoln: University of Nebraska Press, forthcoming.
- Díaz del Castillo, Bernal. 1963. *The Conquest of New Spain*. Translated by J. M. Cohen. Middlesex, U.K.: Penguin Books.
- Dietler, Michael. 1996. Feasts and Commensal Politics in the Political Economy: Food, Power, and Status in Prehistoric Europe. In *Food and the Status Quest: An Interdisciplinary Perspective*, eds. Polly Wiessner and Wulf Schiefelhövel, 87–125. Oxford: Berghahn Books.
- Douglas, Mary. 1984. *Food and the Social Order*. New York: Russell Sage Foundation
- . 1997. Deciphering a Meal. In *Food and Culture*, eds. Carole Counihan and Penny Van Esterik, 36–54. New York: Routledge.
- Elliott, J. H.
- . 1989. *Spain and Its World, 1500–1700*. New Haven: Yale University Press.
- Espinosa, Aurelio. 1985. *The Folklore of Spain in the American Southwest: Traditional Spanish Folk Literature in Northern New Mexico and Southern Colorado*, ed. J. Manuel Espinosa. Norman: University of Oklahoma Press.
- Ford, Richard I. 1987. The New Pueblo Economy. In *When Cultures Meet: Remembering San Gabriel del Yunge Oweenge*, comp. Herman Agoyo, 73–91. Papers from the October 20, 1984 conference held at San Juan Pueblo, New Mexico. Santa Fe: Sunstone Press.

- Forrestal, Peter, trans. 1954. Benavides' Memorial of 1630. Washington, DC: American Academy of Franciscan History.
- Gremillion, Kristin. 1993. Adoption of Old World Crops and Processes of Cultural Change in the Historic Southeast. *Southeastern Archaeology* 12:15–20.
- Gutiérrez, Ramón A. 1991. *When Jesus Came, the Corn Mothers Went Away: Marriage, Sexuality, and Power in New Mexico, 1500–1846*. Stanford, CA: Stanford University Press.
- Hackett, Charles. 1937. *Historical Documents Relating to New Mexico, Nueva Vizcaya, and Approaches Thereto, to 1773*. Baltimore: Lord Baltimore Press.
- Hackett, Charles, and Charmion Shelby. 1942. *Revolt of the Pueblo Indians of New Mexico and Otermin's Attempted Reconquest, 1680–1682*. Albuquerque: University of New Mexico Press.
- Hammond, George, and Agapito Rey. 1953. *Don Juan de Oñate: Colonizer of New Mexico, 1595–1628*. Albuquerque: University of New Mexico Press.
- Harbottle, Lynn. 1997. Taste and Embodiment: The Food Preferences of Iranians in Britain. In *Food Preferences and Taste: Continuity and Change*, ed. Helen Macbeth, 175–85. Oxford: Berghahn Books.
- Harris, Arthur H. 1973. The Vertebrate Fauna from LA 591. In *Cochiti Dam Salvage Project: Archaeological Excavation of the Las Majadas Site, LA 591, Cochiti Dam, New Mexico*, 38–39. Laboratory of Anthropology Note No. 75. Santa Fe: Museum of New Mexico.
- Ivey, James. 1993. Seventeenth-Century Mission Trade on the Camino Real. In *El Camino Real de Tierra Adentro*, comp. Gabrielle Palmer, 41–67. Santa Fe: New Mexico State Office, Bureau of Land Management.
- . 1994. "The Greatest Misfortune of All": Famine in the Province of New Mexico, *Journal of the Southwest* 36:76–100.
- . 2000. Ahijados: The Rite of Communion and Mission Status on the Seventeenth-Century Northern Frontier. *Catholic Southwest* 11:7–26.
- Jones, Volney. 1949. Notes on Some Organic remains from Abó Mission. In *A Mission of San Gregorio de Abó: A Report on the Excavation and Repair of a Seventeenth Century New Mexico Mission*, by Joseph Toulouse, 29–32. Monographs of the School of American Research No. 13.

- Knauf, Andrew L. 1999. Acculturation and Miscegenation: The Changing Face of the Spanish Presence in New Mexico. In *What Caused the Pueblo Revolt of 1680*, ed. David J. Weber, 115–27. Boston: Bedford Press.
- Kulikoff, Allan. 2000. *From British Peasants to Colonial American Farmers*. Chapel Hill: University of North Carolina Press.
- Laudan, Rachel, and Jeffrey Pilcher. 1999. Chiles, Chocolate, and Race in New Spain: Glancing Backward to Spain or Looking Forward to Mexico. *Eighteenth-Century Life* 24:59–70.
- Lévi-Strauss, Claude. 1969. *The Raw and the Cooked*. New York: Harper and Row.
- Lomawaima, Hartman H. 1989. Hopification: A Strategy for Cultural Preservation. In *Columbian Consequences*. Vol. 1: *Archaeological and Historical Perspectives on the Spanish Borderlands West*, ed. David Hurst Thomas, 93–99. Washington, DC: Smithsonian Institution Press.
- Lopinot, Neal. 1986. Early Spanish Introduction of Cultigens into the Greater Southwest. *Missouri Archaeologist* 47:61–84.
- Lycett, Mark. 1989. Spanish Contact and Pueblo Organization: Long-Term Implications of European Colonial Expansion in the Rio Grande Valley, New Mexico. In *Columbian Consequences*. Vol. 1: *Archaeological and Historical Perspectives on the Spanish Borderlands West*, ed. David Hurst Thomas, 115–25. Washington, DC: Smithsonian Institution Press.
- . 2002. Transformations of Place: Occupational History and Differential Persistence in Seventeenth-Century New Mexico. In *Archaeologies of the Pueblo Revolt: Identity, Meaning, and Renewal in the Pueblo World*, ed. Robert W. Preucel, 61–74. Albuquerque: University of New Mexico Press.
- Martin, Alexander, and William Barkley. 1961. *Seed Identification Manual*. Berkeley: University of California Press.
- Montanari, Massimo. 1994. *The Culture of Food*. Trans. Carl Ipsen. Oxford: Blackwell.
- Nash, June. 1980. Aztec Women: The Transition from Status to Class in Empire and Colony. In *Women and Colonization: Anthropological Perspectives*, eds. Mona Etienne and Eleanor Leacock, 135–48. New York: Praeger Scientific.
- Pearsall, Deborah. 1989. *Paleoethnobotany: A Handbook of Procedures*. New York: Academic Press.

- Pratt, Boyd, and David H. Snow. 1988. *The North Central Regional Overview: Strategies for the Comprehensive Survey of the Architectural and Historic Archaeological Resources of North Central New Mexico*. Vol. 1: *Historic Overview of North Central New Mexico*. Santa Fe: New Mexico State Historic Preservation Division.
- Scarry, C. Margaret, and Elizabeth J. Reitz. 1990. Herbs, Fish, Scum, and Vermin: Subsistence Strategies in Sixteenth-Century Spanish Florida. In *Columbian Consequences*. Vol. 2: *Archaeological and Historical Perspectives on the Spanish Borderlands East*, ed. David Hurst Thomas, 343–54. Washington, DC: Smithsonian Institution Press.
- Scholes, France. 1935. Civil Government and Society in New Mexico in the Seventeenth Century. *New Mexico Historical Review* 10:71–111.
- . 1936. Church and State in New Mexico 1610–1650. *New Mexico Historical Review* 11:9–76, 145–78, 283–94, 297–49.
- . 1937. Church and State in New Mexico 1610–1650. *New Mexico Historical Review* 12:78–106, 134–174, 380–452.
- Schroeder, Albert. 1992. Protohistoric Demographic Changes. In *Current Research on the Late Prehistory and Early History of New Mexico*, ed. Bradley Vierra, 29–35. Albuquerque: New Mexico Archaeological Council.
- Simmons, Marc. 1969. Settlement Patterns and Village Plans in Colonial New Mexico. *Journal of the West* 8:7–21.
- . 1991. *The Last Conquistador: Juan de Oñate and the Settling of the Far Southwest*. Norman: University of Oklahoma Press.
- Slicher van Bath, B. H. 1963. *Agrarian History of Western Europe A.D. 500–1850*. Trans Olive Ordish. London: Edward Arnold.
- Smith, Andrea. 1994. Colonialism and the Poisoning of Europe: Towards an Anthropology of Colonists. *Journal of Anthropological Research* 50:383–93.
- Snow, Cordelia Thomas. 1977. The Evolution of a Frontier: An Historical Interpretation of Archaeological Sites. In *Archaeological Investigations in Cochiti Reservoir, New Mexico*. Vol. 4: *Adaptive Change in the Northern Rio Grande Valley*, eds. Jan Biella and Richard Chapman, 217–34. Albuquerque: Office of Contract Archeology.
- . 1993. “A Headdress of Pearls” Luxury Goods Imported over the Camino Real during the Seventeenth Century. In *El Camino Real de Tierra Adentro*, comp. Gabrielle Palmer, 69–76. Santa Fe: New Mexico State Office, Bureau of Land Management.

- Snow, David H. 1971. LA 272, LA 9154, LA 34. *Excavations at Cochiti Dam, New Mexico, 1964–1966 Seasons*, vol. 1. Santa Fe: Laboratory of Anthropology, Museum of New Mexico.
- . 1973. *Cochiti Dam Salvage Project: Archaeological Excavation at the Las Majadas Site, LA 591, Cochiti Dam, New Mexico*. Laboratory of Anthropology Notes No. 76. Santa Fe: Museum of New Mexico.
- . 1996. *New Mexico's First Colonists: The 1597–1600 Enlistments for New Mexico under Juan de Oñate, Adelante and Gobernador*. Albuquerque: Hispanic Genealogical Research Center of New Mexico.
- . 1983A. Note on Encomienda Economics in Seventeenth-Century New Mexico. In *Hispanic Arts and Ethnohistory in the Southwest*, ed. Marta Weigle, 347–57. Albuquerque: Ancient City Press.
- . 1992A. Review of Spanish Colonial Archaeology in Northern New Mexico. In *Current Research on the Late Prehistory and Early History of New Mexico*, ed. Bradley Vierra, 185–206. Albuquerque: New Mexico Archaeological Council.
- . 1993. “Purchased in Chihuahua for Feasts.” In *El Camino Real de Tierra Adentro*, comp. Gabrielle Palmer, 133–46. Santa Fe: New Mexico State Office, Bureau of Land Management.
- . n.d. LA 4955. Notes on file at the Museum of New Mexico Laboratory of Anthropology, Santa Fe, New Mexico.
- Snow, David H., and Joanne Bowen. n.d. No Scum, No Vermin: Seventeenth-Century Faunal Remains from the Santa Fe, New Mexico, Downtown Historic District. Ms in possession of the author.
- Super, John C. 1988. *Food, Conquest, and Colonization in Sixteenth-Century Spanish America*. Albuquerque: University of New Mexico Press.
- Sutherland, Heather. 1982. Mestizos as Middlemen? Ethnicity and Access in Colonial Macassar. In *Papers of the Dutch-Indonesian Historical Conference held at Lage Vuursche, The Netherlands, 23–27 June 1980*, eds. Gerrit Schutte and Heather Sutherland, 250–77. Leiden: Bureau of Indonesian Studies.
- Tichy, Marjorie Ferguson. 1939. The Archaeology of Puaray. *El Palacio* 47:145–63.
- Toulouse, Joseph. 1949. *The Mission of San Gregorio de Abó: A Report on the Excavation and Repair of a Seventeenth-Century New Mexico*

- Mission*. Monograph of the School of American Research No. 13. Santa Fe: School of American Research.
- . 1976A. Spanish-Colonial Rancho in New Mexico. In *Collected Papers in Honor of Marjorie Ferguson Lambert*, ed. Albert Schroeder, 155–59. Papers of the Archaeological Society of New Mexico No. 3. Albuquerque: Archaeological Society of New Mexico.
- Trigg, Heather. 1999a. The Economy of Early Colonial New Mexico, AD 1598–1680: An Investigation of Social Structure and Human Agency Using Archaeological and Documentary Data. Ph.D. diss., Department of Anthropology, University of Michigan, Ann Arbor.
- . 1999b. Paleoethnobotanical Report on the Remains from Paako Pueblo. Report on file at the Department of Anthropology, University of Chicago.
- Villagr , Gaspar P rez de. 1933. *History of New Mexico by Gaspar P rez de Villagr  Alcal , 1610*, trans. Gilberto Espinosa. Los Angeles: Quivira Society.
- Weber, David J. 1992. *Spanish Frontier in North America*. New Haven: Yale University Press.
- West, Robert. 1949. The Mining Community in Northern New Spain: The Parral Mining District. *Ibero-Americana* 30:1–169.
- Wiessner, Polly. 1996. Introduction: Food, Status, Culture, and Nature. In *Food and the Status Quest: An Interdisciplinary Perspective*, ed. Polly Wiessner and Wulf Schiefenh vel, 1–18. Oxford: Berghahn Books.
- Wilk, Richard. 1999. “Real Belizean Food”: Building Local Identity in the Transnational Caribbean. *American Anthropologist* 101:244–55.
- Wiseman, Regge N. 1992. Early Spanish Colonial Occupation of Santa Fe: Excavations at the La Fonda Parking Lot Site (LA 54000). In *Current Research on the Late Prehistory and Early History of New Mexico*, ed. Bradley Vierra, 207–14. Albuquerque: New Mexico Archaeological Council.