

Chapter 2

Culture, Corn, and Complexity

People have inhabited the Greater Southwest for approximately 13,000 years with Clovis technology found at sites like Murray Springs (Haynes et al. 2010). The earliest evidence of humans in this region is known as the Paleo-Indian period, which is characterized by highly mobile hunter and gatherers (Irwin-Williams 1979). The earliest Paleo-Indian tradition known as the Clovis Culture lasted until around 8500 BC or 10,500 BP and is characterized by hunting of big game animals like mammoth, bison, and other large Pleistocene megafauna living in the Southwest when it was environmentally similar to the Plains (Irwin-Williams 1979; Irwin-Williams and Haynes 1970:61). The periods that followed are also generally referred to as Paleo-Indian cultures because the people were still primarily hunting the large animals, but the geographic distribution of these cultures was much smaller (Irwin-Williams and Haynes 1970:63). The later Paleo-Indian cultural traditions included Folsom, Plano, and Cody or Eden complexes (Huckell 1996; Irwin-Williams 1979; Irwin-Williams and Haynes 1970). The Paleo-Indian period comes to an end when the environment changed during the Pleistocene to Holocene transition. During this period, the desert grasslands gradually disappeared and megafauna species went extinct or were on the verge of extinction (Huckell 1996; Irwin-Williams 1979; Irwin-Williams and Haynes 1970).

Following the Paleo-Indian period is the Archaic period, which is broken down into three periods, the Early Archaic, the Middle Archaic, and the Late Archaic, and begins around 8500 BP and ends around 2000 BP (Huckell 1996:323). The Archaic period is historically not well understood due to a focus on the more complex post-agricultural period (Huckell 1996; Simmons et al. 1989). The subsistence strategy during the Early and Middle Archaic periods is a little more diverse than the Paleo-Indian period with the discovery of new tool technologies and the earliest evidence of maize in the Late Archaic (Roth 2016). Citing the work of Irwin-Williams (1973) in the Southwest and Grayson (1993) in the Great Basin, Bruce Huckell (1996:328) suggests that the Archaic and the Paleo-Indian cultures may have overlapped and the Archaic groups might have come into the Southwest from the Great Basin.

Some researchers include the period of transition to agriculture as part of the Archaic, but Francis Smiley avoids including early agricultural periods because the adoption of a subsistence strategy based on corn or maize resulted in a fundamental change in the cultures found in the Southwest (Smiley 2002:26). For this book, the introduction of maize was very important because it fundamentally changed the US Southwest. Aside from being a just another food resource, maize can be stored, which creates a surplus that would lead to larger populations and the development of sociopolitical complexity. The arrival of more people and complexity requires the development of a rigid system of social control. However, the inclusion of groups transitioning to maize is important because this transformation happens at different rates in the US Southwest (Huckell 1996). Some researchers suggest Maize was first introduced to the Southwest from Mesoamerica around 4000 years ago based on dates from cobs at McEuen and Bat Cave (da Fonseca et al. 2015) and three sites in Chaco Canyon (Simmons 2006). Despite an early arrival, agricultural dependence was not instantaneous and took hold at the end of the Late Archaic period or around 2000 BP (Huckell 1996:343; Roth 2016:32).

There is considerable debate with how and through what route maize came to the Southwest (see the following for an discussion of this debate Hard et al. 2006; Merrill et al. 2009; Roth 2016; Washburn 2012). In general, some researchers argue that the maize was brought into the Southwest by migrating Mesoamerican farmers (Hill 2001, 2002, 2010, 2013; LeBlanc 2008, 2013; Matson 2002; Washburn 2012), while others suggest it was a process of diffusion without the need for migration (Merrill et al. 2009). The idea that people migrated from the south is not new, but ties into the notion of Pochteca or Puchteca traders introduced by Edwin Ferdon (1955) and Charles Di Peso (1968).

Following the adoption of maize, group identity in the region begins to diversify, and we see the emergence of a number of distinct cultural groups or ethnicities. A number of archaeological traditions have been identified including the Ancestral Pueblo (“Anasazi”), Hohokam, Mogollon, Sinagua, Patayan, Athabascan groups (Navajo and Apache), and the Numic (Comanche, Paiute, and Ute) (Cordell 1997; Cordell and McBrinn 2012).

Beyond cultural or group identity, we have to consider the role each person plays in each of these cultures. People obviously are the ones that create this larger group identity, and we cannot view culture as something that exists beyond the individual (Durkheim 1950 [1895]; Kroeber 1917). The importance of this is the need to recognize that group identity shifts because people have individual agency, and they maintain their own autonomous identities. Margarita Díaz-Andreu and Sam Lucy (Díaz-Andreu and Lucy 2005:1–2) state that identity is something that people consciously choose and as such it is never constant but changes throughout the life of an individual. Given the complex, abstract, and fluid nature of identity, it is challenging to reconstruct these kinds of self-identifications from human remains. However people “live” their identities, and as such, there are huge social/cultural forces that affect the body. Methods for the analysis of human remains

offer insight into aspects of identity such as the age-at-death, sex/gender, stature, pathology, trauma, and activity that in turn provides unique and nuanced information about the lived experience of the person who died. The reconstruction of biocultural identity involves looking at as many skeletal indicators as possible but with emphasis placed on the contextualization of these indicators. Similarly, John Chenoweth (2009:320) argues that the notion of identity is not easily defined as it could refer to the individual (i.e., who someone was or who someone thought they were) or it could refer to a group (e.g., religious or ethnic identity). Archaeologists have used many other markers to analyze identity in past populations. Prior research looking at identity have relied on several methods, including the analysis of the technological design of material remains (Dobres 2000; Hegmon 1998; Sofaer Derevenski 2000), as well as the spatial organization of sites and material within sites (LeMoine 2003; Lowell 2010; Roth 2010). Cultural identity can also be established by evaluating shifts in stylistic changes to the material remains (Graves 1982; Sackett 1990; Washburn 1995; Wiessner 1983) and the maintenance of or divergence in architectural style or site layout (Cameron and Duff 2008; Cordell 1998; Duff and Schachner 2007).

Group affiliation, ethnicity, and even more so archaeologically defined cultural groups are concepts that in many ways are too fluid to be assigned to a population. One approach is to look at biological relatedness or genetic affinity to identify people in the same population. However, while biological inheritance is important, it is also crucial to realize that people migrate, intermarry, trade, and generally interact in a myriad of ways that can potentially alter their affiliation with any particular group. The result is that these cultures are created using archaeological indicators that include a particular subsistence strategy, material remains, architecture, and geographical location.

Some researchers argue that the ability to distinguish between different cultures in the Southwest is difficult because of the lack of clearly defined cultural boundaries, the tendency for some traditions to adapt to the ever-changing world, and cultural patterns that are a reflection of social and economic responses to a particular regional system of interaction (Tainter and Plog 1994). Given the difficulty associated with defining a culture from an archaeological perspective, some researchers question the validity of creating cultural identities like the Hohokam, Mogollon, or Ancestral Pueblo in the first place (Speth 1988; Tainter and Plog 1994).

However according to Riggs (2005:342), “discrete suites of material traits represent different cultural traditions as much in the past as they continue to do today.” Identifying the larger culture tradition typically relies on residence pattern, stylistics changes to the material remains, and material correlates of subsistence strategy and exchange networks, while the identification of individuals and small social groups, such as kinship and corporate groups, can be deciphered from technological design of material remains. For example, masonry versus adobe architecture or paddle-anvil versus corrugated ceramic design. It can be identified through spatial organization within a site.

Life in the Post-Agriculture US Southwest

Given the size and complexity of the Southwest culture area, many of these cultures will only be discussed in the most superficial of ways. The book is bioarchaeological in nature, so the focus will be on archaeologically defined cultural groups, but oral traditions of extant populations in the region will be used to bring the archaeology to life and give a voice to the people the bodies represent. Figure 2.1 depicts the recognized reservation lands of Native Americans living in the Southwest today.

The following is a brief overview of some but not all of the cultures in the US Southwest, including the Ancestral Pueblo, Hohokam, Mogollon, Salado and Sinagua, and the Athabascan. The goal is to demonstrate that close evaluation of the various cultures in this part of the North America reveals that even though they possessed unique traditions, inhabited different ecological regions, and likely had distinct ideologies, they were agrarian societies and part of a larger regional interaction sphere (Lekson and Cameron 1995; Lipe 1995; Mills 2002; Neitzel 2000).

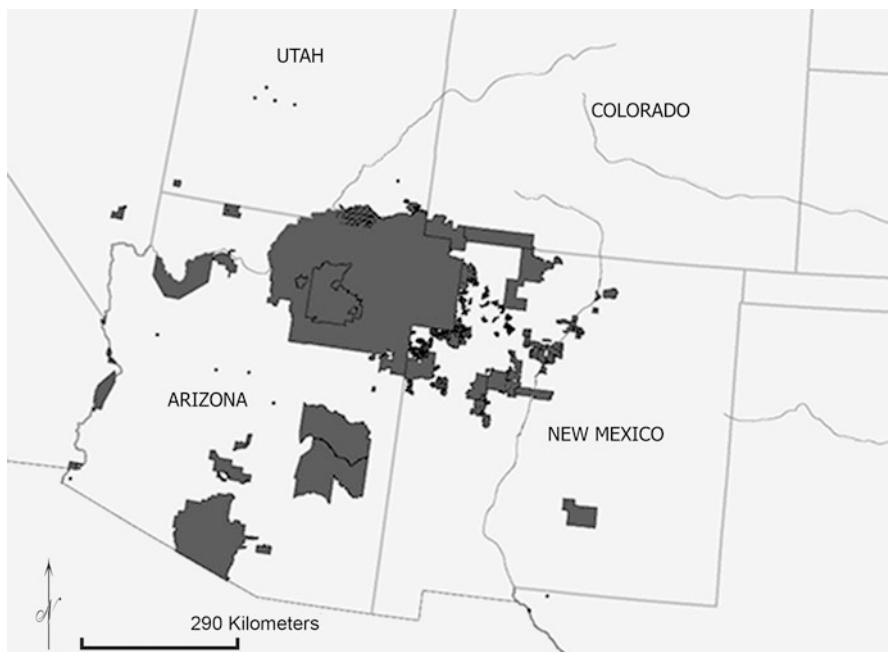


Fig. 2.1 Reservations in the US Southwest (Adapted from American Indian Reservations (US Census Bureau 2006), courtesy of Wikimedia Commons)

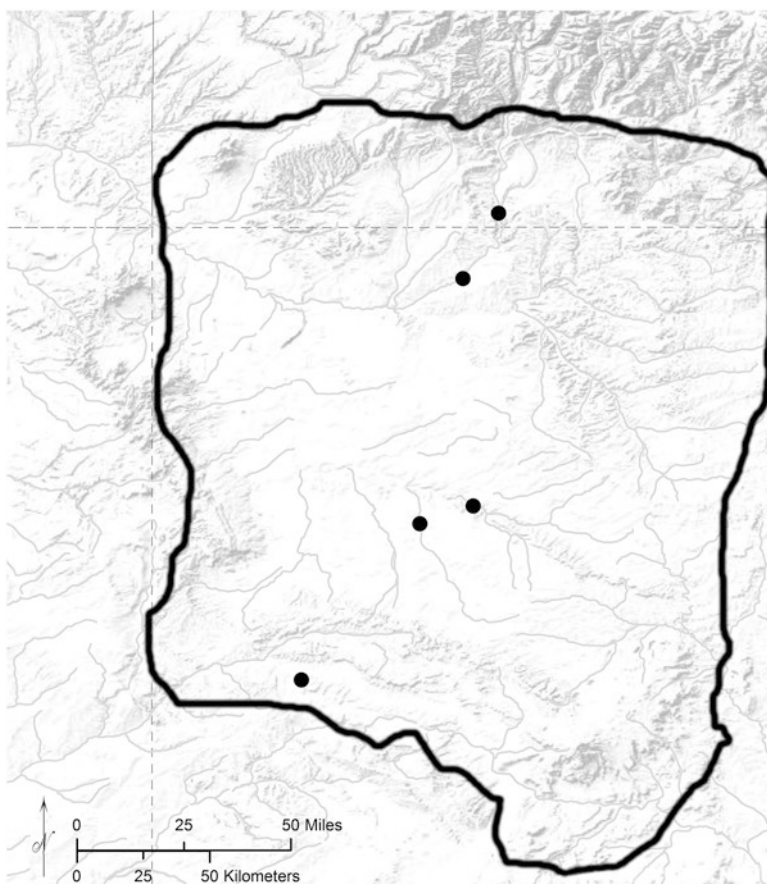


Fig. 2.2 Map of San Juan Basin (Base map created by Margan Grover, 2016, boundary adapted from the US Geological Survey (2008) courtesy of Wikimedia Commons; Source: Esri, USGS, NOAA)

Ancestral Pueblo

The Ancestral Pueblo people, sometimes still referred to as the “Anasazi,” a Navajo word for “ancient ones,” are located in a geological region of the US Southwest known as the San Juan Basin (Fig. 2.2).

The use of the term San Juan Basin is somewhat problematic, however, because the boundaries have been defined differently by geologists and archaeologists (Toll 2008:312–313). There have been broad regions identified within the San Juan Basin, such as the Upper San Juan, the Middle San Juan, or the more general Northern San Juan (sometimes referred to as Mesa Verde). However, there are also smaller geographically defined cultural areas, such as La Plata District (Morris 1939) or the Chuska Valley (Harris et al. 1967) that are identified within the San Juan Basin. For

the purposes of this study, the term “San Juan Basin” will be used to describe the area in the Four Corners region that includes the modern counties of McKinley, Rio Arriba, San Juan, and Sandoval in New Mexico as well as the counties of Archuleta and La Plata in Colorado (Fassett 2000:Q2). However, within the San Juan Basin, three areas are identified: (1) Mesa Verde in the northwest, (2) Chaco in the south, and (3) Totah in the middle. Toll (2008:311) describes the Totah region as encompassing the area traditionally called the Middle San Juan, the area surrounding Aztec Ruins and La Plata District. Some researchers include Totah in the Mesa Verde region because some of the sites in both regions share ceramic typology, but Mesa Verde is a distinct region further north (Toll 2008:313).

In 1927 a conference was held in Pecos, New Mexico, at the field camp of the Philips Academy archaeological excavation to try to establish an agreed chronology for the rather rapid cultural change that happened after the intensification of maize in this region (Kidder 1927a:554). Kidder (1927a, b) defines eight distinct cultural periods based on shifts in maize subsistence, storage technology (baskets and ceramics), and architectural style. The eight periods in order are as follows: (1) Basket Maker I or Early Basket Maker; (2) Basket Maker II or Basket Maker; (3) Late Basket Maker, Basket Maker III, or Post-Basket Maker; (4) Pueblo I or Proto-Pueblo; (5) Pueblo II; (6) Pueblo III or Great period; (7) Pueblo IV or Proto-Historic; and (8) Pueblo V or Historic (Kidder 1927a:557–558). According to Richard Woodbury, these periods, which came to be called the “Pecos Classification” system, were originally designed to be used for all of the cultures in “. . . the entire Southwest, but eventually it was agreed that it was applicable only to the San Juan drainage [Basin] or at the most to the Anasazi culture” (Woodbury 1979:28). In fact, the chronology has been critiqued because it creates artificial periods that often do not reflect the actual cultural change at a given site (see Reed and Stein (1998) for a discussion of the limitations of the classification system). However, since the sites under discussion in this book are within the San Juan region, I have provided a table originally published by William Lipe (1993:2) that provides some general characteristics of each period (see Table 2.1). It should be noted that Basket Maker I was the original period used to describe the pre-agricultural period, the time depth of which was not well understood until Paleo-Indian sites with megafauna and projectile points associated with one another were discovered. The most famous sites were Folsom discovered by George McJunkin in 1908 and confirmed by Jesse Figgins in 1925 (Meltzer 2005) and Clovis discovered by Ridgley Whiteman in 1929 and confirmed by Edgar Howard in 1935 (Boldurian 2004). Additionally, the term Basket Maker is often written as Basketmaker in most contemporary chronologies.

What is unique about the Ancestral Pueblo is that they were not necessarily a homogeneous culture group. Archaeological reconstructions reveal that there was a great deal of variation in cultural traditions, material culture, subsistence strategies, and social complexity. The differences seen among the various Pueblo groups represented ideologies or worldview, and as such, these groups had to be considered and discussed as distinctive groups with unique histories and identities.

The first division of the Ancestral Pueblo is between groups living in the east and groups in the west. These two divisions differ dramatically in terms of culture, architecture, exchange, and migration (Reed 1946). However, the split between

Table 2.1 Description of Pecos Classification periods among the Ancestral Pueblo

Pecos classification		
Period	Date range	General characteristics
Basketmaker II	AD 50–500	Seasonal habitation; shifts from caves to pithouses Pottery is not present; atlatl hunting with maize and squash
Basketmaker III	AD 500–750	More settled pithouses; some small villages Appearance of pottery; bow and arrow hunting with maize, squash, and beans
Pueblo I	AD 750–900	Large villages; adobe or masonry unit pueblos Pottery styles diversify; evidence of a more emphasis on maize subsistence Some evidence of regional competition and warfare
Pueblo II	AD 900–1150	Large pueblos with numerous kivas constructed, with small unit pueblos nearby Pottery continues to diversify and more complex technologies and styles are present; intensive maize subsistence Evidence of regional exchange and cultural interaction
Pueblo III	AD 1150–1350	Large pueblos surrounded by unit pueblos and cliff dwellings and hilltop pueblos in other areas Shifting patterns of pottery technology and style; intensive maize subsistence Resembles Pueblo II but less regional similarity, numerous massacre sites, and regional depopulation
Pueblo IV	AD 1350–1600	Very large village pueblos with plazas, less kivas per room, and all pueblos are found outside of the San Juan Basin as people settled along the Rio Grande, on Hopi Mesa, and in the Zuni region Pottery style and technology differs from the early Pueblos; maize subsistence still intensive Possibly the development of a new ideology called the katsina religion

Adapted from Lipe (1993:2, Table 1.1)

eastern and western does not capture enough the variation that exists in the region, so we will look at what prior researchers describe as “branches” of the Ancestral Pueblo (Colton 1939, 1943; Gladwin and Gladwin 1934). According to Harold Colton (1943:265), branch is used in lieu of saying tribe for archaeologically defined cultures, and “. . . it is defined by all the surviving attributes of a prehistoric Indian tribe: (1) physical remains of individuals, (2) social organization, (3) religion, and (4) material culture.” These are all characteristics used in this book to describe the Ancestral Pueblo during the Chaco Phenomenon. The number and name of the branches of Ancestral Pueblo has shifted over time and by the area the research is focused on describing (e.g., Virgin River versus Mesa Verde). Four major branches of Ancestral Pueblo with their own traditions and cultural identities include the Virgin Branch, the Kayenta Branch, the Mesa Verde Branch, and the Chaco Branch. While these are largely archaeologically defined regional distinctions, the differences seen in the material remains were likely reflective of actual cultural,

political-economic, and ideological differences. The focus of this book is primarily on the Chaco Branch of the Pueblo. This branch is where the Chaco Phenomenon develops and has its biggest impact. However, the Mesa Verde Branch will also play an important role, which is discussed in more detail in Chap. 5.

The Chaco Branch differs from the Virgin, Kayenta, and Mesa Verde Branches in that there appears to be more rigid organization in the planning of the architecture and site layout (Cameron 1999; Cordell 1998). This planning may have been a precursor to the elaborate cultural tradition that developed in Chaco Canyon during the Pueblo II period. There was a distinct pattern of development, stability, and mass emigration at these large centers and this has been well studied (Lekson 1999; Lekson and Cameron 1995), but the data from the human remains has not fully been correlated with these events. Study of the impact of this rigid organization on human demography and health (circa AD 900 to 1350) could offer important insights into the ways that humans were able to adapt to an environment that was continually fluctuating, had marginal resources, and was characterized by political centralization. We will look at the Chaco Branch of the Ancestral Pueblo in more detail in Chap. 4. However, to compare them against their neighbors, it is important to understand that the features that define a site as part of the Chaco Branch Pueblo include aboveground masonry architecture, Great Kiva (large circular ceremonial spaces), and large room blocks (Lekson 2007:31–32; Windes 2007:52).

Hohokam

The culture known as the Hohokam is primarily centered around the Gila River and Salt River in south-central Arizona (Kidder 2000:37). According to Frank Roberts Jr. (1935:7), the name Hohokam means the “ancient ones” among the Pima, which is better being called the “Red-on-Buff culture” as was the case in the early years of archaeology in the region. The classification system for the Hohokam (Gladwin and Gladwin 1929; Haury 1932) was described shortly after the Pecos Classification because the temporal development of the style and technology of material remains along with the design and layout of the sites was different than what was seen in the San Juan Basin (Elson 1985; Reid and Whittlesey 2005). Like the conference at Pecos Pueblo, the Gila Pueblo conference in 1931 would help to define a Hohokam classification system that included Colonial, Sedentary, and Classic periods (Reid and Whittlesey 2005; Roberts 1935). The general range of each period was as follows: Colonial period (AD 750–950), Sedentary period (AD 950–1150), and Classic period (AD 1150–1375) (Abbott 2000:28–29).

Some of the distinguishing characteristics of the Hohokam culture that set them apart from their Ancestral Pueblo neighbors includes the following: (1) their impressive system of irrigation canals developed for intensive maize production (Hill et al. 2015; Woodbury 1961), (2) the presence of ball courts (Haury 1937; Schroeder 1949) and platform mounds (Elson 1985), and (3) the practice of cremating human remains (Birkby 1976; Cerezo-Román 2015; Mitchell and Brunson-Hadley 2001;

Reinhard and Shipman 1978). Several of these distinguishing characteristics are the reason that the Hohokam is often the Southwestern culture most closely associated with Mesoamerica. In addition to the archaeological similarities, there are also certain exotic trade items and some ideological similarities that connect the Hohokam to Mesoamerica (Doyel 1991; Gumerman and Gell-Mann 1994; Gumerman and Haury 1979; Wilcox and Sternberg 1982). The importance of the Hohokam similarities to Mesoamerican groups is that it has led to the suggestion that they were a major trade center for redistribution of goods and ideas for the rest of the Southwest, including the Ancestral Pueblo (Colton 1941; Gladwin et al. 1937). “Once established, the Hohokam/Mesoamerican connection is best exemplified by (1) direct imports and (2) ideas and practices that led to their replication and adoption” (Vélez-Ibáñez 1996:24). Accepting the existence of a trade relationship with Mesoamerican cultures should not be misinterpreted as evidence of some sort of a colonial encounter. While originally debated, there seems to be little evidence of replacement of other groups along the Gila and Salt rivers by large-scale population movement or settlement by outsiders (Doyel 1991:227).

The Hohokam are often cited as another regional power in the US Southwest (Crown and Judge 1991; Neitzel 2000) because of the apparent connection to Mesoamerica, the presence of ball courts, dense settlement patterns, and an elaborate system of irrigation canals. Conducting a social network analysis looking at archaeological features at the site of Cerro Prieto that are representative of Hohokam corporate groups, Matthew Pailles (2014) suggests that social inequality was also present in this culture. The interaction between the Hohokam and Ancestral Pueblo cultures is not entirely known as little evidence exists to indicate they were actively exchanging goods and ideas aside from exotic goods like turquoise, shell, and possibly copper (Toll 1991:82–84, 104). However, though the two cultures do differ from one another in a number of ways, they appear to have had some contact where they bordered one another. At the site of Wupatki, the presence of a masonry ball court and a Great Kiva suggests that they were interacting with one another (Vokes and Gregory 2007:351).

Mogollon

The Mogollon culture is located in a region that covers the mountainous regions of east-central Arizona, southwest New Mexico, and the northern parts of Mexico (Reid 1989). Emil Haury (1936a) described the Mogollon culture after working at the Harris and Mogollon sites in southern New Mexico (Wheat 1955:7). However, Mogollon as a cultural tradition would not be accepted by some researchers like Paul Nesbitt (1938) and Alfred Kidder (1939), who suggested that this culture was just an offshoot or mixture of the Ancestral Pueblo and Hohokam (Reid and Whittlesey 2005:53–54). Haury (1936a) and other researchers like Paul Martin found a number of key differences that suggested that the sites represented an independent culture (Diehl 2007; Reid and Whittlesey 2005). The differences were

evident in pueblo and pithouse construction, ceramic technology and design, and general settlement pattern (Riggs 2005; Roth and Stokes 2007; Shafer 2003).

The Mogollon are further subdivided into different branches. Wheat (1955) originally identified six branches, but a seventh branch was proposed a couple of years later by Robert Lister (1958). The original six were the Black River (Wheat 1954), Cibola (Danson 1952, 1957; Gladwin and Gladwin 1934), Forestdale (Haury 1941; Haury and Sayles 1947), Jornada (Lehmer 1948), Mimbres (Haury 1936a, b), and San Simon (Sayles 1945) branches (Wheat 1955:8). The Chihuahua Branch of the Pueblo (Sayles 1936) was suggested by Lister (1958) to represent a branch of the Mogollon (Kelley and MacWilliams 2005; Whalen and Minnis 2001). While identified as Mogollon, Lister (1958:110) still thought that this group was unique because they were influenced by the Ancestral Pueblo, which is a view later promoted by a couple of other researchers trying to understand the socio-politically complex site in the region known as Paquimé or Casas Grandes (Di Peso 1968, 1974; Lekson 1999, 2015).

Like the Ancestral Pueblo and Hohokam cultures, branches of the Mogollon adopted maize, developed semipermanent pithouse settlements, and then transitioned to living in aboveground structures or pueblos (Hegmon 2002:322–323). There is a rather dramatic shift in the Mogollon culture between AD 950 and 1150 that has caused some researchers to question if the culture is still Mogollon (Cordell 1997) as it was at least partially influenced by neighboring cultures (Reed 1948). This period of drastic change among the Mogollon has been described as “Anasazization” because it is believed that the Mogollon were either being actively replaced by, or incorporated into, the Ancestral Pueblo or “Anasazi” (Gregory and Wilcox 2007; Haury 1985; Lekson 1988).

According to Cordell (1997), this shift includes three changes, the adoption of aboveground structure or pueblos, the transition from red-on-brown pottery to black-on-white, and the expansion both in terms of population size and area. This expansion is especially noteworthy because it involved the establishment of sites where agricultural productivity was less than ideal (i.e., similar to Ancestral Pueblo settlements like Chaco Canyon).

Among the Ancestral Pueblo, the shift in complexity is not the same among all of the Mogollon. Many of the cultural changes are related to the development of Ancestral Pueblo-like characteristics associated with the Mimbres Branch of the Mogollon (AD 1000 and 1300) (Diehl 2007:156; Hegmon 2002:313). “This picture of cultural replacement can be challenged by examining the changes in pottery and architecture separately in different Mogollon localities” (Cordell 1997:207). Looking at other sites in the Forestdale Branch region where there also appears to be evidence of contact with Ancestral Pueblo like the earlier (ca. AD 1100s) Tla Kii and later (ca AD 1300s) Grasshopper Pueblo and Q Ranch, there is evidence of the retention of a strong Mogollon identity (Reid 1989). For example, there is evidence that the focal community structure remained important (Reid 1989:75–76) and a retention of local ceramics like brown ware and red slips (Reid 1989:77; Wilson 2007:240–241).

Grasshopper is especially interesting because it is a site where there are clear signatures of immigration to the site on the material culture, architecture, and human

skeletal remains (Ezzo and Price 2002; Longacre 1975; Lowell 2010; Reid and Whittlesey 1999; Riggs 2001, 2005). Looking specifically at the work of Julie Lowell (2007, 2010), who compared archaeological data on women and the household structure from the sites of Chodistaas Pueblo, Grasshopper Spring, and Grasshopper Pueblo, which are all neighboring sites, there is some evidence that the immigrant Ancestral Pueblo were primarily women and children. She believes these individuals were war refugees in the sense that they were trying to escape the violence that was rampant in the San Juan Basin at the time. According to Lowell (2010:191), even though the households resembled one another, there are clear indications of Ancestral Pueblo cultural traditions. Some of the material remains that indicate Ancestral Pueblo identity include: the introduction of rectangular slab-lined over circular clay-lined hearths and construction of smaller rooms that lack the front-to-back patterning of rooms built by the Mogollon (Lowell 2010). Additionally, analysis of the spatial organization of the room blocks suggests a degree of separation between the groups (Lowell 2010; Riggs 2005). My colleagues and I reanalyzed the bodies from Grasshopper Pueblo and did not find significant differences in traumatic injuries between individuals recovered in the Ancestral Pueblo and Mogollon households (Baustian et al. 2012). We suggested that lack of difference between the two populations may indicate a high rate of social cohesion (Baustian et al. 2012). This cooperation may not be entirely peaceful as evidence of violence in the form of antemortem head trauma and scalping is present. The trauma was the highest among the younger adults at the site. In a recent publication Debra Martin and I (Harrod and Martin 2015) suggested that this might represent a system of raiding where younger people were exposed to violence as they were forcibly brought to the site; however it could be that the violence supports the refugee narrative presented by Lowell (2007, 2010).

Despite the claims that the Mogollon were assimilated or even worse never existed at all, the reality is that though the Mogollon may resemble the Ancestral Pueblo superficially in the construction of large pueblo villages with large ceremonial structures (i.e., Great Kivas), at least in the Mimbres region, they still differ drastically.

Salado and Sinagua

The Salado culture appears to develop in the 1300s in southern Arizona and New Mexico and northern Mexico based on polychrome style pottery (Crown 1994; Dean 2000; Lekson 2002). Like the Mogollon, the Salado was recognized early on as a unique cultural tradition (Gladwin and Gladwin 1929, 1935; Hauray 1945). The origin and development of the Salado like the Hohokam or Mogollon has been debated over the years (Dean 2000; Lekson 2002). It was originally thought to be the product of the interaction between an outside group and the Hohokam during the classic period (Gladwin 1957; Weaver 1976). However, after decades of archaeological research, there is growing evidence to suggest that the Salado were not a

branch of the Hohokam but an independent cultural tradition (Reid and Whittlesey 1997:258). Accepting that it was a local development, there is still evidence that they were influenced by their neighbors (Lincoln 2000). According to Linda Cordell (1997:414), there is debate over which cultures interacted with one another to create the Salado (e.g., Ancestral Pueblo and Mogollon, Ancestral Pueblo and Hohokam, or Hohokam and Mogollon). Recent research supports the migration theory to explain the origin of the Salado (Gladwin and Gladwin 1935; Haury 1945), which argues that it probably developed as a hybrid culture after the great droughts at the end of the 1200s when people were migrating and reorganizing throughout the Southwest (Whittlesey and Reid 2001:86). The Kayenta Branch of Ancestral Pueblo played an especially important role as they migrated into the region and interacted with local groups to establish a new meta-identity that combined traditions from these previously independent cultures (Clark et al. 2013).

The culture in Sinagua which is Spanish for “without water” (“sin” and “agua”) is found in north-central Arizona (Colton 1946:9; Pilles 1996:59; Reid and Whittlesey 1997:9, 209). Like the Salado the Sinagua culture also seems to possess characteristics of the Ancestral Pueblo, Hohokam, and Mogollon (Reid and Whittlesey 1997:209). The traits of the other cultures become more dramatic later in time, which is why early theories suggested a replacement event. Colton was the first to describe the theory that a sequence of eruptions at Sunset Crater led to more fertile soil that in turn resulted in a population increase in the area after AD 1000 (Colton 1932:589). However, he thought that the Sinagua abandoned the region after the eruptions and were replaced by a new people (Colton 1946:311). Analysis of the sites and material culture suggest that the shift seen after the eruption was an increase in regional exchange in the Sinagua region (O’Hara 2012). The Sinagua did move and relocate following the series of eruptions between AD 1050 and 1080; they only relocated to the areas where the deposits created more fertile soil (Elson and Ort 2012; Elson et al. 2007; May 2008). Following the eruption larger settlements like Elden Pueblo, Turkey Hill, and Wupatki developed in the region (Colton 1932:588). Wupatki is an especially important site because it clearly demonstrates the increase in regional exchange in the Sinaguan region, as the site has both Hohokam-like ball courts and an Ancestral Pueblo-like kiva (Downum et al. 2012; Lekson 1999, 2015).

The Athabascan Cultures

The final cultures discussed in this chapter are the ancestors of the Apache and Navajo, who were much more recent migrants to the Southwest. Before discussing the impact that these traditionally mobile and foraging groups might have had in the Southwest, it is important to first understand who these people were and are in terms of their language and culture. Traditionally, they have been distinguished from the Pueblo people based on language and subsistence. The language the Navajo and Apache people speak is Athabascan (also spelled Athapascan, Athabaskan, and

Athapaskan) (Krauss 1987; Tanana Chiefs Conference 1997). Some researchers have suggested that Athabascan is part of a larger family of closely related languages identified as Na-Dene (Matson and Magne 2013; Sapir 1915), which can be traced back to the Yeniseian language family of central Siberia (Rubicz et al. 2002; Ruhlen 1998; Vajda 2013). Edward Sapir (1915) originally included the North American languages of Athabascan, Tlingit, and Haida as part of the Na-Dene family. Later linguists included the Eyak (Matson and Magne 2013:335). Haida, however, is not always included in the family as it is argued that it represents a language isolate (Levine 1979).

The Na-Dene language is divided into three groups, Northern, Pacific, and Southern Athabascan. The Northern Athabascans are composed of over a number of different cultural groups including the Ahtna, Beaver, Chipewyan, Carrier, Dena'ina, Dogrib, Gwich'in, Hare, Koyukon, Nicola, Tanana, Slave, and Tutchone, to name a few. The Pacific Coast groups include Native groups like the Hupa, Mattole, Tolowa, and Tututni. Finally, the Southern groups, the focus of this book since they live in the Southwest, are the modern-day Apache, Mescalero, Navajo, and Western Apache.

The three regional groups of languages all originally developed in Western Canada and Eastern Alaska before splitting off from one another (Magne 2012; Matson and Magne 2013). Archaeological, linguistic, and genetic research seems to suggest that the Pacific Athabascans split from the other Athabascan groups early and it is from the Northern group that the Southern Athabascans originate (Gordon 2012; Magne 2012; Malhi 2012). The importance of understanding the linguistic relationship between the various Na-Dene is that language comparisons as well as genetic studies show that even though these groups inhabit very different environments separated by great distances they remain closely related to one another (Malhi 2012). It could be inferred that since the language and genetics do not differ too much from one another (Malhi 2012; Matson and Magne 2013), then it is possible there is also a cultural continuity among the cultures, such as similarities in mobility patterns and ideologies of raiding and warfare (the importance of a raiding ideology is explored in Chap. 9). Some evidence of cultural continuity is provided by Martin Magne (2012:367–368), who describes an oral tradition of trails, dream states, and migration ideology recorded by Robin Ridington (1982) among the Northern Athabascan, Beaver culture, that has similarities with oral traditions of the Southern Athabascan, Apache culture, as noted by Henrietta Stockel (2007) and Deni Seymour (2008).

This notion that the early sites would be hard to identify is supported by archaeological research among the Northern Athabascan (Gordon 2012). The general consensus among Southwest archaeologists is that Athabascan groups do not arrive until approximately AD 1500 (Cordell 1997:305–306; Lipe and Varien 1999:341). Matson and Magne (2013:5) state that the consensus for the first Athabascan site is no earlier than AD 1450 at Tierra Blanca in Texas; however research looking beyond the Plains (Magne 2012; Seymour 2008, 2012, 2013) indicates there are a small number of landscape indicators and material remains that suggest the arrival date was earlier. Seymour (2009:268) explains that the problem is these “. . . small sites

in foothill settings near springs or along major rivers” are hard to detect unless you know what signatures to look for and the preservation is extremely good. The notion of an earlier arrival will be discussed in greater depth in Chap. 9.

Although there is much controversy over when they arrived in the American Southwest, and what kinds of interaction they had with the Ancestral Pueblo people, it is clear that at least by AD 1300 mobile foraging groups were in the area occupied by settled agriculturalists. By the time of the Spanish arrival, more is known about the relationships between the Athabascan cultures and the descendants of the Ancestral Pueblo. Navajo raids are well documented first against Spanish settlements in the 1700s and then against other Euro-America settlers during the American period between 1846 and 1864 (Kluckhohn and Leighton 1946:5, 8–9). However, they make a point to state that the Navajo were not a warlike society to the extent that is seen among Plains groups like the Ute and Comanche. “The Navahos, it should be noted, were primarily raiders, not fighters. They were interested in taking food, women, horses, or other booty; they waged war chiefly in reprisal” (Kluckhohn and Leighton 1946:5). However, if the Apache and Navajo did enter the Southwest much earlier than has traditionally been argued, it is possible that the intensity of warfare with neighboring groups had declined, and it was now the new raiders (i.e., Numic-speaking groups) who were seen as the new outsiders. In contrast to Clyde Kluckhohn and Dorothea Leighton (1946), Adolph Bandelier (1890) describes the Apache as formidable warriors, who were second only to the Iroquois at keeping a rival population on *qui vive* (a French phrase for being on alert). He makes an inappropriate comparison for the how the Pueblo perceive the Apache, which makes their interactions seem predatory in nature. “They stood towards the land-tilling Indians in the relation of a man-eating tiger to East Indian communities” (Bandelier 1890:183). Earlier in his report, he describes the relationship between Puebloan cultures and Apache and Navajo as “peculiar” because warfare was not the only way they interacted and trade was also common. He cites the Acoma trading with the Navajo (Athabascan), Taos with the Yutas (Numic), and Pecos with the Apache (Athabascan) (Bandelier 1890:164). However, the relations are still more often tense than they are friendly because even during times of trading the nomad or roving tribes could not be trusted not to “... murder to-morrow those with whom they bartered” (Bandelier 1890:165).

Discussed a little more in Chap. 9, however, we do find evidence that despite hostile encounters these two groups eventually have some degree of integration. Looking at ancient DNA studies, there is some degree of admixture between Athabascan groups and groups in the Southwest (Malhi 2012:244–245).

The Multicultural Southwest

The importance of having understanding the basics of each of these cultures is that they show that regional interaction and migration were an important part of the US Southwest prior to contact. To understand any particular cultural tradition, we must

realize that they were part of a much larger system, which will be more apparent in Chap. 4 when we talk about the rise and decline of Chaco Canyon.

In the next chapter, I will discuss the notion of social control and why it was important and how it may have functioned in the precontact Southwest, especially among the Ancestral Pueblo.

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