

**Coronado National Memorial Historical Research Project
Research Topics**

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Spanish Colonial Research Center
A Partnership between the University of New Mexico and the National Park Service

[Version Date: May 20, 2014]

Coronado National Memorial Coronado Expedition Research Topics

- 1) **Research the lasting effects of the expedition in regard to exchanges of cultures, Native American and Spanish. Was the shaping of the American Southwest a direct result of the Coronado Expedition's meetings with natives?**

The answer to this question is embedded throughout the other topics. However, by 1575, the Spanish Crown declared that the conquest was over and the new policy of pacification would be in force. Still, the next phase that would shape the American Southwest involved settlement, missionization, and expansion for valuable resources such as iron, tin, copper, tar, salt, lumber, etc. Francisco Vázquez de Coronado's expedition did set the Native American wariness toward the Spanish occupation of areas close to them. Rebellions were the corrective to their displeasure over colonial injustices and institutions as well as the mission system that threatened their beliefs and spiritualism. In the end, a kind of syncretism and symbiosis resulted. Today, given that the Spanish colonial system recognized that the Pueblos and mission Indians had a legal status, land grants issued during that period protects their lands against the new settlement pattern that followed: that of the Anglo-American. The Pueblos base their land holdings on Spanish law, and apply it to Anglo-American legal procedures. Under Spanish governance, the "cane of authority" is still the symbol of authority, the once a year election of governors, the council and the written law are a part of the colonial heritage among the Pueblo Indians. Christianity is practiced among the Pueblos along with their religious and spiritual beliefs. Foods, language, governance, technology (and weaponry), farming techniques and irrigation systems and cultural exchanges today define the Native American domain that was once held by Spain and, later, Mexico.

- 2) **Identify/discuss native peoples living in the San Pedro River Valley during the 16th century.**

Early Native American Settlement Patterns in present Southwestern U.S. prior to Coronado's Expedition

Of all migrations (inclusive of Spanish, Mexican and Anglo-American) into the area, today commonly known as the Greater Southwest, none can match the slow but epochal marches of Native American tribes. Over many centuries, the ancestors of Native American tribes probed each valley for hundreds of years prior to the coming of Europeans, built towns, and spread their cultures beyond the confines of a vast territory within the Greater Southwest. Indeed, not only are they the first settlers of the Americas, they are the longest termed occupants of the land for thousands of years.

When Spaniards first saw the Indian villages along the Río Grande, they commented that they lived in "pueblos" or villages, some of which were made of adobe or stone. The word "pueblo" distinguished these tribes from Plains Indians who lived in teepees. From west to east, the Pueblo People occupied a large area of land from northeastern Arizona to the Pecos River in eastern New Mexico. From north to south, many pueblos were located along

the Río Grande from Taos to El Paso. In western New Mexico, Hopi, Zuni, Acoma, Jemez, Santa Ana, and Zia maintained their cultures from times immemorial. Similarly, straddling the Great Plains of eastern New Mexico, Pueblo cultures ranged from the Piro and Tompiro villages behind the Manzano Mountain Range to the ancient pueblos at Paako, Galisteo, and Pecos as far north as Picuris and Taos.

It is possible that the initial waves of migrants from northeast Asia began their movements toward North America earlier than 30,000 years ago. The first tangible evidence, a leaf-shaped flint spear point with fluted faces or grooves on both sides, has been dated to 12,000 years ago. It was found near Clovis, New Mexico, for which the Clovis Period site is named. The first spear points were discovered along with bones of a large prehistoric mammals. Since then other points have been widely discovered over much of North America in sites dating to at least 11,500 years.

Other sites have been carbon-14 dated to 12,000 and 14,000 years ago. Sites in Mexico, such as that at Tepexpan, indicate a slightly different date, yet contemporary to the Clovis Period culture. Sites in Brazil and Chile indicate that stone tool and hearth remains may possibly date as far back as 30,000 years ago. Given the conclusive dating of Clovis and Tepexpan period cultures, and until a more remote date can be proven, however, most anthropologist hold to the conservative dating of 12,000 years ago.

The earliest known documented occupation of North America reaches back 10,000 to 15,000 years, and other evidence indicates that a change from hunting and gathering cultures took place about 3,000 years ago with the domestication of corn. Farming became a new way of life for many cultures leading to more sedentary lifestyles. Thus, in the final centuries before Christ, the ability to grow and harvest plants year after year made permanent settlements near small streams or rivers possible. Early settlements date to about 800 B.C. at a point when settlements began to spread throughout the continent. Nearly 1,000 years later, about 200 B.C., early settlers in Mexico moved from basket making to pottery. Given the durability of pots, the settlers used them for cooking and for storing water and foodstuffs. Slowly basketry and pottery spread from Mexico northward to the settlements within the present Southwest of the United States.

Over the centuries, several prehistoric cultures, largely in Arizona, evolved in the Southwest: Sinagua, Mogollon, Hohokam, Hakataya, and Western and Eastern Anasazi. The Sinagua and Hakataya sites share many cultural traits with the Mogollon, Hohokam, and Anasazi. The Sinagua, Spanish for "without water," were located in central Arizona and represent the development of an 8th to 12th century Pueblo Period culture. A volcanic eruption in the 1060s forced them to evacuate the area, but they returned. Like the Hohokam, the Sinagua borrowed from their neighbors inclusive of such innovations as irrigation systems, ceremonial ball courts, and flag stone masonry to build their homes. By the 1300s, the Sinagua appear to have abandoned the area and their culture either disappeared or melded into other larger cultures in the area. Examples of their architectural styles are evident at Sunset Crater Volcano National Monument and at Wupatki National Monument near Flagstaff, Arizona. Also called Patayan, the Hakataya, a Yuman name for the Colorado River, occupied sites in present western Arizona, Baja California, southeastern California and southern Nevada. Both the Sinagua and the Hakataya, displayed varied stages of farming,

basket making, and the production of stone, shell, and turquoise ornaments for jewelry and other artistic or ceremonial purposes.

The Mogollon culture appeared about 200-300 A.D. and had become virtually extinct by the time the first Spanish explorers passed through the area in 1540. The Mogollon culture is named for the Mogollon Mountains in southeastern Arizona and southwestern New Mexico as well as southwestern Texas and northern Chihuahua. The Mogollon people lived in pit houses on high mesas for protection. Pit houses roofed with poles, brush and dirt, were dug several feet into the ground for good insulation against the cold of winter and the heat of summer. The Mogollon people were farmers and grew corn, squash and beans. They ground corn in metates (stone grinding slabs) with manos (stone grinders). They were also hunters, fishermen, and gatherers. They were also among the early pottery makers and decorated their ware with geometrical figures and stylized wild animal figures such as mountain lions, fish, birds, rabbits, deer, Mountain Sheep and frogs. Sometimes their art included human forms.

The Hohokam people made their home in an area that stretched from southern Arizona between present Phoenix and Tucson then south into western Sonora to a point near Flagstaff in the north. Similar to the Mogollon culture, the Hohokam spanned a time period from 200 A.D. to the middle 1400s. The Pimas and Papagos referred to them as Hohokam or "those who have gone." The perplexing Casa Grande Ruins National Monument, believed to be a Hohokam site near Phoenix, preserves the ruins of a massive four-story structure built of high-lime desert soil nearly 700 years ago.

The Hohokam were farmers. They constructed canals to bring irrigation waters from streams or rivers to their small fields. They cultivated corn, squash, beans, and cotton. They also, similar to Mesoamerican cultures, played a ball game with ball courts and mounds. Their homes, constructed above ground were primitive, at first, made of waddle and daub. As their culture progressed, they constructed their homes of adobe.

The Hohokam made jewelry, pottery and clay figurines. They used shells from the Gulf of California and the Pacific Coast, which they mostly acquired by trade. It is possible they undertook trips to collect shells for their decorative jewelry such as pendants. They made beads, rings, and bracelets. Like other cultures, they used animal and human figures on their designs.

The Anasazi were largely located in northeastern Arizona, northwestern New Mexico and adjoining parts of Colorado and Utah. Originally, the Anasazi were hunter-gathers who, by 3,000 years ago, began planting corn, squash, beans and other crops. Anthropologists commonly refer to the Pueblo pre-agricultural period as the Basket Maker I stage lasting up to 3,000 years ago. Like most early farming cultures, they supplemented their diets by fishing, hunting and gathering berries, seeds, piñon, and wild plants. In time, they made baskets and pottery to store foodstuffs.

The period identified as Basket Maker II (1000 B.C. to 400 A.D.) is characterized as the time when the early Anasazi began farming but hunted and gathered foodstuffs to supplement their meager harvest yields. Remains of their tools reveal that they made spear-throwers to increase the power and range of their spears to hunt deer and mountain goats. During this period the Anasazi lived in shelters built in hollows or caves along escarpments that gave them a clear view of the ground below them for defense purposes.

Cliff Palace at Mesa Verde National Park in southwestern Colorado is the best-known example of a cliff-dwelling site. Cliff Palace was occupied from 1100 AD to 1275 AD. It contains over 200 rooms, 24 round underground kivas, and numerous other rooms probably used for storage. Perhaps an ecological crisis such as a drought ended the occupation of Cliff Palace. Other cliff dwelling sites preserved by the National Park Service are Betatakin, Keet Seel, and Inscription House at Navajo National Monument, and others at Bandelier National Monument and at Gila Cliff Dwellings.

In the succeeding centuries following the Basket Maker II stage, the Anasazi evolved to the next stage called Basket Maker III. During that period they began to make pottery, constructed pit houses, and continued to farm, hunt and gather. Weapon-wise, the Anasazi shifted from spears to the more accurate bows and arrows for hunting and war.

Following the Basket Maker stages, the Anasazi moved from cliff dwellings to pit houses and gradually evolved into the Pueblo Stage of development. During that time, their settlements were closer to streams and rivers. Their dwellings, built of stone and adobe, were adjoining rectangular structures. The pueblos contained small rooms grouped together in irregular patterns. There were no doors to the exteriors of the structures. Entrances to the rooms, accessed by ladders, were on the roofs, which were supported by strong timbers. Once the ladders were drawn up and the trapdoors to the rooms secured, the occupants were better protected against their enemies and wild animals.

The massive structures, however, did not survive the ravages of time, attacks by Apache, Navajo, Ute and Comanche warriors, and abandonment in fear of their enemies and other natural catastrophes such as drought. It is believed that certain structures at some present day Pueblos, such as those at Taos, Acoma and Old Oraibi, still inhabited today, are the only ones seen by early 16th century explorers. Others, in the passing centuries, have either been rebuilt or have been moved, several times, to other locations.

Pre-Columbian Pueblo sites are scattered throughout the Southwest and Mexico. Although some are in private ownership, others are managed by national, state and local entities. The National Park Service, for example, preserves thirteen major structures and hundreds of smaller dwellings at Chaco Culture National Historical Park. Chaco Canyon represents the highest point of Pueblo pre-Columbian civilizations within the United States. Another important pre-Columbian site representing a large 12th-century Pueblo Indian community, along with the above ground kiva, is preserved at Aztec National Monument in northwestern New Mexico. Other prehistoric and Spanish Contact period sites include Pecos National Historic Park, El Morro National Monument, and Salinas Pueblo Missions National Monument.

The most common characteristic of the Pueblos were the *kivas*, ceremonial chambers built for each clan within Pueblo society. The *kivas*, called *estufas* by the Spaniards, were round, square or D-shaped, generally underground, although some were above ground, and were entered by ladders through trapdoors on top. They were heated in cold weather by vented fires built in a pit in the center or off center on the *kiva* floor. Each *kiva* had a *sipapu* or small symbolic pit in the ground as a reminder that their early people had emerged from underground. The *kiva* was the center of life for the clan where men assembled to prepare for their ceremonies or other purposes. Women were not allowed in *kivas*.

Upon the arrival of the Spaniards, the pueblos had fully evolved from the Basket I, II, and III stages to the Pueblo stages and had formed larger communities with multi-story structures. The early Spanish explorers noted their farm fields with irrigation systems, industries such as weaving cotton for clothing and blankets, pottery and basket making, weaponry with strong bows and arrows with flint-tipped projectiles and shields and bucklers of buffalo hide. Their projectile weapons were strong enough to pierce chain mail worn by the Spaniards. The Pueblo people wore clothing made of deerskin and coarse cotton cloth.

Spanish settlers introduced new crops and animals to the Pueblo Peoples' diets. Soon after the arrival of the Spaniards and the introduction of sheep, the Pueblos also began to make clothing and blankets from wool. New crops and new varieties of similarly grown Pueblo crops were introduced such as onions, pumpkins, melons, chile, wheat, peaches, and apples. Cattle, sheep, goats, horses and mules were new domesticated animals introduced to the Pueblo People who already had domesticated certain animals such as turkeys, which they herded into rudely constructed pens. The Spanish also introduced new methods of irrigation with included massive irrigation canals, called *acequias*, with laterals that ran for tens of miles connecting multiple farming lands. Many of the historical *acequias*, and later spin offs of the originals, are still in use today.

Beyond the settled areas of the Pueblos were a number of tribes between the Great Salt Lakes and the Great Plains. In prehistoric, and later in the historic period, Athapaskan and southern Uto-Aztecan speaking tribes raided the more sedentary, agricultural pueblos. The Utes in the northwest, the Navajos to the west, the Apache from all directions, and the Comanche from the northeast were constant enemies of the Pueblo People. Such longstanding grievances against them led the Pueblos to ally themselves with Spanish settlers who carried out punitive expeditions against the raiding tribes.

Before the arrival of the Spaniards, the eastern Pueblos, particularly Pecos, were at war with the Plains tribes. Upon the arrival of Spanish settlers, Plains Indian tribe escalated their raids against both Pueblo and Spanish settlements. Such warfare continued well into the 19th century when Anglo-American farmers, ranchers, and homesteaders entered the area. Punitive expeditions against Athapaskan, Ute, and Comanche raiders were usually comprised of Anglo and Hispanic militiamen and Pueblo auxiliaries.

Anthropologists conclude that the Navajos and the closely related Apache as well as other Athapaskan tribes entered the Southwest from western Canada. The Navajo seems to have formed its distinct identity thousands of years ago. The Navajo proudly call themselves *Diné*, "The People." Like many other Athapaskan tribes, the Navajo crossed into the present Southwest by way of the Rocky Mountains as well as along the edge of the Great Plains just east of cordilleras. While it is not known when that migration took place or what was its duration in terms of long stretches of time, Spanish frontiersmen noted that the Navajo were centered in the northern portions of present Arizona and New Mexico. Because of their familiarity with Apaches and their notable Athapaskan similarities, Spanish settlers called the Navajos, *Apaches de Navajos*. Their sphere of influence lay in the Four Corners area mostly within New Mexico and western Colorado.

In the 18th century, New Mexican settlers referred to the Navajo homeland as the "Centro de Navajo," a large area between Oraibe and lands south of the San Francisco Peaks

near Flagstaff. The area extended west of there beyond the Little Colorado River toward present Chinle and Mount Taylor. Present day Navajo refer to their homeland as *Dinetah*.

Both Navajos and Apaches were hunters, fishermen, and gatherers. When Spanish explorers first saw Athapaskan tribes on the Great Plains in the 16th century, they were following the large buffalo herds from sunrise to sunset. Women loaded their tents and belongings on large dogs. The men were effectively armed with long bows, and, in summer, were either naked or dressed in breechcloths. In cooler weather, their fine buckskin clothing made from buffalo and antelope hides were adorned with porcupine quills. In spring, the tribes, had, since time immemorial, migrated south as far as present Brownsville, Texas, to gather prickly pears, which they gathered and preserved.

The Navajos, furthermore, evolved from a hunter gatherer nomadic lifestyle to a more settled agrarian and herdsman people, particularly after the Spanish introduction of sheep and other farm animals. In time, they became expert silversmiths and weavers of blankets. Their winter homes were round, cone-shaped lodges called "hogans," made of poles leaned together at the top and covered with brush, bark, earth and other materials. In summer, they lived under a lean-to type of shelter made of poles covered with brush.

Probably because of their longstanding contact with the Pueblo People, the Navajo seemed to be more settled and had adopted farming methods to grow corn and other crops. Still, while they traded with the pueblos, they often raided their villages for their stores and captives. Later, the Navajo attacked Hispanic villages from Socorro to Albuquerque and Bernalillo along the Río Grande taking harvested crops, horses, mules, sheep, cattle and captives. Thus, Hispanic settlers and Pueblo warriors joined to track down and attack the marauders in order to rescue captives and recover the livestock taken in the raids. Oftentimes, the campaigns against the Navajo led them to canyonlands and mountain strongholds in the *Centro de Navajo*.

The Apache, on the other hand, tended to break up into several independent groups with different Athapaskan dialects. Aside from the Navajo, other Athapaskan-speaking tribes in the Southwest were the Chiricahua, Jicarilla, Lipan, Mescalero, and Western Apache. The Chiricahua and the Western Apache, like the Navajo, were hunters and gatherers, but once in contact with the Pueblos, they learned to supplement their diets by growing corn, melons, squash, and beans. At the time of Spanish contact, the Jicarilla, Lipan and Mescalero were living on the edge of the Great Plains among other Plains tribes. Although Spanish militarists enumerated twelve distinct tribes among the Apache, some of which were divided into smaller sub-groups, modern day identifications are largely reduced to the above divisions as they evolved historically.

Like their counterparts, the Apache hunted buffalo and lived in teepees made of buffalo hides. Once the Spaniards introduced horse into the area, the Apache became extremely mobile. Eventually, because of their excellent horsemanship, they became a military power throughout the southwest. Their famed athleticism and ability to suffer extreme deprivation often stunned their enemies who were amazed how patiently they suffered hunger and thirst in critical moments of calamity and scarcity. Like their Athapaskan cousins, thousands of years of sacrifice had taught the Apache to endure incredible sufferings without faltering in strength and resolve.

The Apache were fearless warriors. Spanish frontiersmen and Pueblo warriors respected and feared them. The Apache defended their territories against all comers. After the annexation of Mexican territories in Texas, New Mexico, Arizona and California by the United States in 1848, the Apache continued to resist Anglo-American trespassers on their land. Cochise, Geronimo, Mangas Coloradas and Victorio resisted Anglo-American dominance and became legendary historical figures in their day.

The Western Apache include the San Carlos Apache, White Mountain Apache, Cibecue Apache and Northern and Southern Tonto Apache. Today, their reservations are largely in southern Arizona. Typical among Athapaskans as hunters and gatherers, they too learned agricultural techniques in the 17th century from Pueblos and herding from Spanish frontiersmen. They were active traders, but their proclivity for raiding cut a wide swath from Hopi to El Paso.

Among the last of the Great Plains tribes to enter the present Southwest in the 18th century were the Comanches. They lived on mountains and plains north and northeast of New Mexico. The Spanish recorded that the Comanches consisted of four closely-knit groups called Cuchanticas, Jupes, Yamparicas, and Orientales. Like the Apache, the Comanche lived in teepees, hunted and fished, and, had learned to suffer through great hardships. Spanish frontiersmen knew them to be highly disciplined and intrepid warriors. By the 18th century, the horse had revolutionized their culture, and like the Apache, the Comanche had become extremely mobile. Their raids into New Mexico terrorized Pueblos and Hispanic villagers. Their attacks into northern New Mexico did not diminish until late in the 18th century when a combined Spanish, Ute and Pueblo army attacked them and, momentarily, stunned their morale but not their pride.

Far to the northwest of New Mexico were the Utes, called *Yutas* by Hispanic New Mexican settlers during the Spanish colonial period. Ute tribes were largely located in southeastern Nevada, southeastern California, throughout southern Utah, northern Arizona and southwestern Colorado. Linguistically, they are of the Uto-Aztecan stock. While the Paiutes occupied certain areas of the Great Basin in Utah, Nevada and California, the Utes lived throughout northwestern New Mexico, southwestern Colorado, and Utah. Generally, they were hunters, gatherers, and fishers, but more often, in their contact with New Mexico Spanish villages and Indian pueblos, they were traders.

Like the Apache, Navajo, and Comanche, the Utes raided northern New Mexican villages particularly in the Chama-Tierra Amarilla-Ojo Caliente-Abiquiu-Española area. They struck as far east as Taos and Mora. In peaceful times, New Mexican traders often ventured as far northwest as the Great Salt Lake to trade with Paiute and Ute tribesmen.

Like their Athapaskan and Pueblo counterparts, the Utes had similar genesis stories. Their origins were also tied to mythical places near the Great Salt Lake, similar to Teguayo and Timpanogos, where they too believed that the first humans emerged from below the earth. In the late 17th century, the search for Teguayo took Spanish traders from New Mexico into the land of the Yuta as far as the Great Salt Lake. They did not find Teguayo, but they did find a people who called themselves "Timpanogos."

Prehistory and history meld into one component in the late 1520s when Spanish explorers reach the northern edges of present Sonora, Chihuahua, Nuevo León, and Coahuila. By then, the great traditions and cultures of the tribes beyond the last Spanish settlements in

northern New Spain (Mexico), were fully developed. The clash of cultures would result in yet another evolutionary step for all tribes in the Western Hemisphere; and, the tribes of North America would be no different. They quickly became enveloped, for better or worse, by European colonial cultures introduced by Spain, France, England, and Portugal, and the subsequent nation-states that evolved from them.

The question revolving around the route of the Coronado Expedition re-emerged in 1954, when the National Park Service revisited the question regarding the expedition's entry into the United States. Two topics of interest revolved around the expedition's route and the location of Native American tribes in lands explored by Coronado and his men. The authors of the Master Plan for Coronado National Memorial (1954) needed to know where the expedition crossed into present United States from Mexico. In order to do that, they needed to know more about the tribes the expedition had encountered. For example, they wished to determine accurately each segment of the route because it was essential toward understanding where the expedition went next. For example, the location of San Gerónimo de los Corazones is predicated on where the expedition was previous to getting there; and, by the same token, once the explorers left San Gerónimo de los Corazones, where did they go? By identifying tribes and locating Indian towns or settlements, they believed they could determine Coronado's line of march. They hoped, for example, that they could "determine the location of San Heronimo (Gerónimo), the site founded for the main portion of Coronado's army, believed to have been located close to the international border." They also knew that their question would not easily be answered.

Other writers had attempted to answer that question. In 1907, Frederick Hodge and Theodore H. Lewis had identified San Gerónimo de los Corazones as present day Ures, some distance from the border. In 1940, George P. Hammond and Agapito Rey wrote that San Gerónimo was located "At Corazones in the Sonora valley, about where the river emerges from the canyon known locally as La Tescalma, the army settled down to await orders from Coronado. There in the distant new land the Spaniards constructed dwellings and established a town, naming it San Gerónimo de los Corazones (St. Jerome of the Hearts)."

Pedro de Castañeda, a member of the 1540 expedition, recalled that Coronado's men had, after considerable difficulty,

reached, by stages a province which Cabeza de Vaca [1536] had named Corazones, because there the natives had offered him many hearts of animals. Without delay [Tristán de] Arellano proceeded to establish a town there, naming it San Hierónimo de los Corazones, and began at once to settle it. Later, seeing that it could not be maintained, he moved it to a valley called Persona—I mean Señora—and the Spaniards called it Señora, and so I shall call it from now on.

Thus, the first site of San Gerónimo de los Corazones is not necessarily a mystery as it is identified with present Ures. Therefore, it is considered a spot on Coronado's route that pointed toward the San Pedro River as part of the places the expedition passed through in its trajectory to Cíbola.

The subsequent history and the attendant historiography of San Gerónimo, which had been moved to a place called Suya (40 leagues from Corazones), however, presents a different story to that of Ures. Thus, San Gerónimo de los Corazones likely had three locations: the site at present Ures, the site at Señora, and the site at Suya.

At Suya, the second or third site (depending on which historian one reads) of San Gerónimo de los Corazones, trouble brewed. Concerned that the main body of the expedition that had gone forward would reap the benefits derived from the conquest of another rich civilization, the men at that outpost mutinied. The remaining men, under Captain Diego de Alcaraz, were too few to defend themselves against the natives of the area. Already, there had been conflicts, and warriors had hit some of his men with poisoned arrows. The poison was deadly, and the natives knew that the Spaniards were becoming too weak and too few to defend themselves.

On one occasion, the warriors attacked killing three Spaniards, one of them Captain Alcaraz, several servants, and more than twenty horses in the melee. The day after the attack, the Spaniards decided to abandon the area and return to Culiacán, which they reached. The location of Suya as the second or third site of San Gerónimo de los Corazones remains a mystery.

Castañeda wrote, “The town was situated near a small river.” The “small river” and the fact that the second site was 40 leagues closer to Cibola could have placed it 120 miles to 200 miles depending if the factor is a 3-mile league or a 5-mile league. Both measurements were used during that period.

Where was Suya? Historians have argued and hypothesized about its location. It is possible that present Bacoachi, at the northern end of the Río Sonora, is a candidate for consideration as San Gerónimo in the Suya Valley. If so, then, Coronado’s expeditionary force could easily have been within reach of the headwaters of the Río San Pedro. The question regarding the location of Suya, however, opened a historical Pandora’s Box.

Charles Di Peso argued that a different hypothetical model for the location of Suya is possible. He concluded that there were three San Gerónimos. Di Peso suggested that Corazones (San Gerónimo, I) was the first base camp for the expedition. It, he argued, was located in the middle Cedros Valley. Accordingly, Di Peso posited that the second base camp in the “Señora Valley” (San Gerónimo, II) was actually in the Nuri Chico Valley. Slightly north and westward from there, Di Peso argued, was the third base camp (San Gerónimo, III) in the Suya Valley, not far from the confluence of the Río Batepito and the Río Bavispe—near present Colonia Morelos. In so arguing, Di Peso departed from the Río San Pedro hypothesis and concluded that Coronado, upon leaving Suya, continued toward the Río San Bernardino, then crossed over Antelope Pass on his way to Cibola. Of the route leading to Cibola from Suya, Di Peso wrote:

Padre de Niza, Melchior Diaz, and Coronado’s troops all traveled along this section of the old Acoma road seeking Cibola. From the Río Batepito junction the army may have gone N by NW up this river to the San Bernardino junction, 43 km, and then up the San Bernardino in a northerly direction, keeping the Sierra de San Luis on the right (E), to the vicinity of the modern Slaughter Ranch another 17 km. Next they would have

continued up the San Bernardino Valley, traveling NE past the site of present-day Rodeo, New Mexico, and keeping the Chiricahua Mountains on the left (W) and the Peloncillos on the right (E), finally arriving at what is now called Antelope Pass in the latter range, an additional 65 km.

Still, scholars concurred that the expedition entered Arizona through the San Pedro River Valley because it was most compatible with Spanish documentation and that the topography was the easiest route northward. The writers of the Master Plan had, indeed, grasped the significance of their questions: Where was San Gerónimo? Where did the expedition go after leaving San Gerónimo and after leaving the San Pedro Valley? Part of the question lies in the location of Chichilticale—did the expedition arrive there before or after the San Pedro Valley exploration?

After Coronado's expedition, forty years passed before the next expedition north from Mexico. A new line of direction was established that would make New Mexico a gateway to Texas and the Great Plains to the east, to Colorado as far as present Grand Junction, to Utah as far as the Great Salt Lakes, and to northern Arizona, as far west as the confluence of the Río Gila and the Río Colorado. Arizona's southern boundary was the Río Gila to the Hopi pueblos and the southern end of the Rocky Mountains near the present Four Corners area. From the 17th century to 1863 when the Arizona Territory was created, Arizona was a part of New Mexico. Until the promulgation of the Compromise of 1850, New Mexico also included Utah and Colorado. Its historic claim to Texas and the western portion of the Great Plains had been lost by 1819 with the Adams-Onís Treaty. Indeed, historically, New Mexico could claim that large area that encompassed a large geographic area that stretched as far as north as South Pass in Wyoming. To the south, Spanish travelers knew that New Mexico began somewhere south of El Paso del Norte in Chihuahua, Mexico, at a place called *La Toma del Río*, a point along the Río Grande where travelers turned north to New Mexico.

The question remains: how can the Coronado Expedition's route be accurately mapped? The answer could be in new discoveries by archaeologists which could be linked to the documents and thereby mapped.

- 3) **Identify/discuss appropriate journal entries referring to CORO and surrounding region based on Castañeda's account. [See historiographical essay for sections on Castañeda, quotations, and other pertinent sources cited in essay.]**
- 4) **Research the Coronado Expedition on a wider world history basis and its influence to modern times. What were the world wide events/influences that led to such explorations?**

Significance of the Coronado Expedition, 1540-1542

The expedition's reports gave Europeans their first glimpses of places and people in the interior of North America. Among the marvels seen by Coronado's men were the Grand Canyon, the southern Rocky Mountains, the Continental Divide, the Río Grande, and the many Indian pueblos along it from Taos to Socorro, and others from Zuni and Jemez to Pecos. Other places

included Cañon Blanco and Palo Duro Canyon, in the Texas Panhandle, and the Great Bend of the Arkansas River in Kansas. On the Great Plains they saw buffalo numbering in the thousands and Plains tribes, who lived off the land, seasonally following the herds from sunrise to sunset.

The significance of the expedition is based on the vast lands explored and the people with whom contact was made a mere forty-eight years after Columbus's First Voyage. The expedition began a literary history of the area explored, along with the first ethnological descriptions of tribes from Plains to Pueblo Indian Peoples. Scientifically, they wrote about the flora and fauna as well as other marvels they saw. The reports of the Coronado expedition by Juan de Jaramillo and Pedro de Castañeda, in particular, as well as letters to the king by Coronado, form the earliest literary descriptions of the greater Southwest and are part of the national stories of the United States and Mexico.

At the same time, between 1539 and 1543, two other explorations sallied forth. The first, led by Juan Rodríguez Cabrillo, explored the California coast from Baja California by sea reaching the southern coast of Oregon. Far to the east, Hernando de Soto led the second expedition from Georgia to the Mississippi River crossing through states known today as Florida, Alabama, Mississippi, Tennessee, Louisiana, and Arkansas. Some of Soto's men crossed into eastern Texas. As a result of their efforts, Europeans grasped the large extent of the continent measuring at least 3,000 miles across. Coronado's expedition inspired subsequent exploration of the interior inclusive of the founding expedition of New Mexico by 800 settlers led by Juan de Oñate in 1598.

Some of the contacts made by the three expeditions were friendly while others were antagonistic. For Native Americans, those expeditions left another legacy. In New Mexico, the pueblos at Tiguex along the Río Grande took the brunt of warfare against Coronado's expedition that had intruded upon them with demands for food and other items that, given their limited resources, they were not prepared to share. Coronado, on the other hand, had extended his supply line and the expedition was in desperate need of food. Zuni Pueblo was the first to experience the impact of the Spanish *entrada*. The belligerency of the expedition affected Spanish-Pueblo relationships throughout the latter 16th century, when other expeditions visited New Mexico.

Coronado is chiefly remembered as the leader of the expedition to Cíbola. Yet, little is popularly known about the man and his life. Francisco Vázquez de Coronado (1510-1554) was born in Salamanca, Spain, the son of the nobleman Juan Vázquez de Coronado and doña Isabel de Lujan. He was the youngest of six brothers and two sisters, and under the laws of primogeniture, the entire *mayorazgo*, or entailed estate, went to the eldest son, Gonzalo, when their father died. The younger brothers received substantial financial settlements, and endowments were made to convents where the two sisters had become nuns. Francisco and his younger brothers were forced to seek their fortunes elsewhere. One brother, Juan Vázquez de Coronado, became an *adelantado* (governor-general) in Costa Rica. Similarly, Francisco sought his fortunes in the viceroyalty of Mexico.

Coronado arrived in New Spain in October 1535 as a member of Viceroy Antonio Mendoza's entourage. As a favorite of Mendoza, Coronado gained prominence in Mexico City. In 1537 the viceroy sent him to Amatepeque in western Mexico to quell a rebellion by African slave miners, which Coronado quickly suppressed. With his star on the rise, Coronado was appointed to the city council of Mexico City in 1538, a post he held for the remainder of his life. He also became a member of the *Hermandad del Santísimo Sacramento de la Caridad*, a lay

charity society founded in 1538 to help the needy and educate orphan girls in Mexico City. In 1538, Coronado's land holdings expanded when he purchased the privately held half of Teutenango (thirty-one miles southwest of Mexico City) and Cuzamala (122 miles southwest of Mexico City). In August 1538, Mendoza appointed Coronado as governor of Nueva Galicia, which today comprises a large swath of land north of Guadalajara to Chihuahua and Coahuila. During his governorship (1539-1544), Coronado acquired more land in Mexico.

In 1537 Coronado married a wealthy heiress, Beatríz de Estrada, daughter of the deceased Alonso de Estrada, the royal treasurer in New Spain. In dowry from her mother, doña María Gutiérrez Flores de la Caballería, Beatríz de Estrada received half of Tlapa (140 miles south-southeast of Mexico City), which contained 6,802 tributaries in 1548. Coronado and doña Beatríz had five children. In 1597, forty-three years after Coronado's death, doña Beatríz was still listed as *encomendera* of half of Tlapa.

In 1540 Coronado embarked on his most famous undertaking, the Expedition to Cíbola. Upon their return to Mexico in 1542, the Crown investigated the conduct of the expedition after charges of mismanagement and cruelty to Indians were brought against Coronado and several of his lieutenants. The abuse of burden bearers on the expedition, the attack on Zuni Pueblo as well as pueblos on the Río Grande, and the mistreatment of certain Indian headmen were among allegations investigated by the commission under Judge Lorenzo de Tejada. Between the conquest of Tiguex and the investigation of it in 1544 by Spanish authorities in Mexico City, the inescapable conclusion was that Spanish-Indian relations in New Mexico had been damaged. In the end, the board of inquiry absolved Coronado of all charges against him. His second in command, García López de Cárdenas, however, was not as fortunate. He served seven years in prison, six of them in the fortress at Pinto, Spain, and one year at Vélez, Málaga, Spain. After the expedition, Coronado's life returned to that of a socialite, politician, and landowner. He lived in Mexico City and served as *regidor* (alderman) in the cabildo of Mexico City. Coronado died in 1554 and was buried in the Iglesia de Santo Domingo in Mexico City.

The Coronado Expedition is much more than an historical event; it is about legacy and an historical process that came full circle. To be sure, the history of the expedition was written centuries later by a modern generation that wrote with its own 20th-century cultural values. In a Eurocentric sense, Coronado's Expedition, like those of Sir Walter Raleigh and Jacques Cartier, were part of the historical process that evolved into countries known today as Canada, Mexico, and the United States. Thus, in 1940, the United States looked back on the Age of Discovery as a part of the legacy of its origins. The Coronado Cuarto Centennial Commission was established by the U.S. Congress with two major chapters in New Mexico and Arizona. At that historic moment, a plan to commemorate the expedition emerged. The history of the creation of Coronado National Monument in Arizona, along with Coronado State Monument, near Bernalillo, New Mexico, resulted from the commemorative efforts of the commissions in both states.

The geographic corridor of the route of the expedition led by Francisco Vázquez de Coronado in 1540-1542 has always been associated with human events far away that, in many ways, have influenced the geography of places associated with the event. Prehistoric tribes ranged far and wide within a sphere that would be known as Arizona and New Mexico, inclusive of the north Mexican states associated with them. In the Spanish colonial period (1540-1821), the geographic area encompassed the homelands of many tribes. Situated at the northeastern end of

Sonora and southwestern Arizona, Coronado National Memorial sits at a crossroad of a myriad of historical events that commenced with Christopher Columbus' first voyage to the Americas.

Early Spanish Exploration of New Mexico with references to Florida, Texas, and Arizona

Events in faraway places have always had an effect on New Mexico. The Spanish arrival in the Caribbean in 1492, triggered a period of exploration and conquest that had far reaching consequences for people who lived in what Spain later called "New Mexico." Forty-six years after Columbus' first voyage, four shipwrecked Spanish castaways from an ill-fated expedition to Florida made their way overland to the northern edge of present Chihuahua. Peering into the distance of the *tierra adentro* (the interior) beyond the Río Grande, they wondered about stories they heard about people, far to the north, who lived in houses and grew cotton. Once rescued, they told about what they had seen and heard. Before long, other Spaniards moved northward to explore the *tierra adentro*. By the end of the 16th century, New Mexico had been explored, conquered and settled by Spain. For over sixty years explorers had visited nearly every pueblo in New Mexico and gathered invaluable information about them, their rich cultures and resources.

Through traders and slavers, the pueblos received vague and varied words of events along the Gulf Coast, Mexico and interior lands south of them. Long before they beheld Alvarado's bearded visage and heard the snort and neigh of a Spanish horse, the pueblos knew of the white man and his terrible weapons. One story they heard was different. It was about four men, one of them "a black man," who had crossed the continent from the east to the southern end of the Río Grande. The Spaniards knew well the story of Alvar Nuñez Cabeza de Vaca, Estéban the Moor, and two other companions who, lost for eight years, had crossed the wilds of North America from Texas to Sonora, where they were rescued.

Pressed for information by Spanish officials, the men searched their memories for details about the *tierra adentro*. Finally, Cabeza de Vaca submitted a *Relación* [account] of his experiences in the wilds of North America to Viceroy Antonio de Mendoza. The *Relación* quickly became a primer for those interested in the *tierra adentro*. He recounted how, after Panfilo de Narváez' expedition to Florida had failed, the men attempted to make their way back to Cuba or New Spain on makeshift boats. Following the coastline westward from Florida, the explorers seemed successful until they were thrust farther out to sea by the mighty rush of the Mississippi River as it emptied into the Gulf of Mexico. Soon, a storm scattered the fleet and 150 survivors, half of the expedition, made it to shore along the Texas coast and nearby islands. Out of touch with one another, the scattered bands of Spaniards attempted to regroup. Many had lost their weapons, provisions and clothing to the sea.

It was bitter winter as "northers" on the mainland blew a mass of cold, humid air toward the islands. Few Spaniards survived the first winter, and were it not for friendly Indians, none would have lived to tell the tale of Narváez' ill-fated expedition. By the end of the first year, Cabeza de Vaca could account for only fifteen enslaved survivors. If there were others, they, too, had probably been captured by Indians and taken into the interior of Texas. Four years later, in 1532, Cabeza de Vaca, himself a slave to a wandering band, could count only five survivors. He planned to escape with them, and in time, found a way to contact them. All but one accepted the challenge to escape; the dissenter believed they would die in the attempt. To him, slavery was a

means of survival. Sometime in 1535, under cover of darkness, Cabeza de Vaca, Estéban and two others sneaked away from their captors and met at a predetermined place. Three years later, they reached Sonora where they learned that other Spaniards were nearby.

As Cabeza de Vaca and his companions traversed the land, sometimes as freemen, other times as slaves to different Indian groups, they were the first Europeans to catch a glimpse of North America's interior. They had seen the rolling plains of east and south Texas to the Río Grande and the arid prairies on the edge of the Chihuahua Desert. Once past the Pecos River, they made contact with different Indian bands and may have crossed and re-crossed the Río Grande where it makes its sweeping "Big Bend" on its way to the sea, hundreds of miles away. Somehow, the four men survived the hot summer months on the northern edge of the Chihuahua Desert, as they migrated westward toward the setting sun. Somewhere along the Río Grande, probably in southern New Mexico, they learned about the pueblos of the north. By the time they crossed the northern tip of the Sierra Madre Occidental, they realized that they had become Indian-like. Later, once safe among the Spaniards of New Spain, they became vocal opponents of the Spanish conquest. Yet, it was Cabeza de Vaca's *Relación* that inspired the Spanish exploration of the *tierra adentro*.

Not long after the rescue of Cabeza de Vaca and his companions, Spanish officials in Mexico City authorized a small expedition to reconnoiter the *tierra adentro*. Cabeza de Vaca and his partners declined offers to go north again, but Estéban the Moor was easily induced to guide a small party beyond Sonora. Coincidentally, in the spring of 1537, the bishop of Mexico, Juan de Zumárraga, brought a fellow Franciscan, Fray Marcos de Niza, to the viceregal palace in Mexico City. Niza, recently arrived from Guatemala with tales the bishop desired to share with Viceroy Mendoza, had spent time in Peru and had conversed with Francisco Pizarro, who was winning new kingdoms for the crown of Spain. Niza then traveled to Mexico City at the request of Zumárraga. From this interview Fray Marcos de Niza emerged as a leader in the viceroy's plan to explore and conquer the *tierra adentro*. Late in 1538, the viceroy commissioned Niza "to find a way to go on and penetrate the land in the interior." He was to make careful observations about the people, the land, the rivers and the flora and fauna of the interior.

The bearer of these instructions to Niza was none other than the young governor of Nueva Galicia, Francisco Vázquez de Coronado, a favorite of the Viceroy Mendoza. The two men met for the first time on November 20, 1538, at Tonalá, a village near Guadalajara. At Culiacán, on the edge of the Spanish frontier, Niza assembled his expedition. Besides Estéban, Fray Onorato, a Franciscan priest, and Indian friends of Estéban who had accompanied him during his lost years, formed the reconnaissance party.

By spring of 1539, Niza and his retinue were on their way. On March 21, he made a fateful decision. Restless about the slow progress the expedition was making, Estéban proposed to go as an advance scout and send back messages in the form of crosses regarding his finds. Estéban promised to wait for Niza near the pueblos so that they could proceed to Cíbola, the large kingdom they sought. Niza would never again see Estéban, for he was killed by the people at Háwikuh, a Zuñi pueblo in the province of Cíbola.

Meantime, Niza continued to receive crosses from Estéban's Indian messengers. When he received larger ones, his anticipation heightened because he thought the larger crosses meant that Estéban had discovered a rich city of gold. Niza's progress was slow because he was instructed to gather information about the land and people. Also, he had to determine his proximity "to the

sea." To do that, he took a side tour, away from Estéban's trail, which caused him further delay. The information he gathered, he believed, would be useful to Spaniards who were not clear on the coastal geography. They were unaware that the Baja California was a peninsula, not an island, and that the body of water along the Sonoran coastline was a gulf, not an ocean. Niza's information failed to clarify the subject and was useful only to determine the distance from the Sonoran coast to wherever Niza's route lay in the interior. Still, Niza wondered about the meaning of Estéban's large crosses.

Once out of the Valle de Sonora, Niza entered the *despoblado* [desert] of southeastern Arizona. There, in one of his lonely camps, Niza learned that Estéban was dead. What happened next has baffled historians for centuries. Apparently, most of Niza's retinue deserted him, but despite the desertions and the ill tidings regarding Estéban's death at Hawikuh, Niza continued northward until he got within sight of Cibola. In his account, Niza did not write that he saw a city of gold, instead he wrote:

I proceeded on my journey until coming within sight of Cibola, which is situated in a plain at the base of a round hill. The pueblo has a fine appearance, the best I have seen in these regions. The houses are...all of stone, with terraces and flat roofs, as it seemed to me from a hill where I stood....The city is larger than the city of Mexico....When I told the chieftain...how...impressed I was with Cibola, they told me that it was the smallest of seven cities, and that Totontecac is much larger and better than all seven, that it has so many houses and people that there is no end to it.

Returning to Compostela, Niza reported his details to Governor Vázquez de Coronado. Later, on September 2, 1539, Niza met with Viceroy Mendoza in Mexico City and retold his story, this time with some exaggeration. Convinced by Niza's stories, Mendoza decided to explore the north in hope of discovering another Tenochtitlan. In 1540, Vázquez de Coronado led a large expedition comprised of over 1,100 men and nearly 5,000 sheep, goats, cattle, and horses from Compostela on the west Mexican coast. In northern Sonora, he divided his force so that an advance guard could move faster to the pueblos of New Mexico. Along the San Pedro River valley, Vázquez de Coronado veered northward through the mountain ranges of eastern Arizona until they reached Hawikuh, a Zuni village.

5) Discuss the weaponry of the 16th century and its importance to expeditions and the peoples encountered.

The Muster Roll: Weaponry and Armor of the Coronado Expedition

Members of the Coronado Expedition joined voluntarily and usually paid for their own equipment and weaponry or received loans from wealthy men of New Spain who hoped to profit from the expedition. According to the muster roll, or *alarde*, compiled in Compostela, Mexico, on February 22, 1540, the Coronado Expedition consisted of 289 European men-at-arms. The muster roll lists six companies of horsemen totaling 226 men, while footmen totaled 63 men. According to the muster roll, in total, European members of the expedition brought 552 horses,

56 swords (only one of which was identified as a broadsword and the other a two-handed sword), 24 arquebus, 22 round shields, 20 crossbows, 12 daggers, and 2 lances. According to the muster roll, 260 of the members of the expedition either wholly substituted or partially supplemented their meager European-style arms with Native American-style arms. Indigenous weapons might have included obsidian-studded clubs, spears, slings, and bows and arrows.

The muster roll does not include all members of the expedition, whether European, African, or Native American. At least 80 additional men-at-arms joined the expedition later along the route. In addition to the men-at-arms found in the muster roll, approximately 1,300 Native American allies and their aides and families from central and central-western Mexico participated in the expedition. Not included in the muster roll, these native warriors were organized separately from the Spanish men-at-arms. Moreover, dozens of women, African slaves, retainers, and other servants and family members accompanied the Europeans and their Native American allies, and were responsible for the menial labor of cooking, washing, repairing weapons and armor, mending clothing, taking care of horses, and establishing and breaking down camps, among other activities.

The Coronado Expedition was a mid-16th century expeditionary force, but not an army in the modern sense of the word. Before the expedition departed Mexico City, Viceroy Antonio de Mendoza, who invested heavily in hope of great profit, reportedly handed out gold pieces as a loan for the humbler men to purchase goods, including weapons, armor, and supplies. However, each member of the expedition brought whatever clothing, equipment, and weaponry that he or she could afford to buy, some of which might have been obsolete or rarely used in Europe at the time.

Representing a mix of old and new European technologies, the Coronado *entrada* primarily carried *espadas* (swords), *rodela*s (shields), *ballestas* (crossbows), and arquebuses (firearms). Coronado's force would have been centered on his *ballesteros* (crossbowmen) and *espadachines* (single-handed swordsmen), with at least two known *caballeros lanceros* (mounted lancers) and two *montaneros* (two-handed swordsman). Not mentioned in the muster roll at Compostela, the expedition brought along six small-bore (8-10 caliber) cannon, or *pedreros*, which launched small stone ordnance. In the documentation of the expedition, these cannon are referred to as *versillos*. Despite their complexity in loading and firing, firearms and artillery would have played an important role, used either for effect or at relatively close range. These European technologies would have been used in conjunction with indigenous weaponry. Taken together, Coronado's tactics were simple: the crossbows and arquebuses shot from a distance, men on horses disorganized the masses of warriors, and the swordsmen, clubmen, and spearmen fought at close quarters.

Interestingly, the Coronado Expedition took place at the beginning of a revolution in military technology and tactics that occurred in Europe during the 16th and 17th centuries. Among the changes, firearms replaced the pike and lance, the size of armies and their professionalization increased, and society at large began to be impacted more significantly by warfare. Importantly, the technology of gunpowder and the firearm brought changes to military tactics, as projectiles could pierce plate armor, thus rendering the suit of armor useless and ended the chivalric era of the knight on horseback. As a result of the impact of firearms, soldiers utilized only one or two pieces of armor, such as a helmet or breastplate, which helped to protect the head and torso from mortal wounds. Rapid advances in the technology of firearms had been

continuous since their general introduction in the 1370s. From 1520 to 1650, the arquebus was the predominant firearm in use, after which the musket dominated.

Weapons

Even with its limitations, the muster roll is one of the only sources that provide actual and specific information on weapons and armor, if only for the Europeans. As attested by the muster roll, the sword (*espada*) and the dagger (*puñal*) were the primary and most common blade weapons carried by the members of the Coronado Expedition. The sword was the most effective weapon for hand-to-hand fighting, while the dagger was useful as both a weapon of last resort and as a tool for everyday use. As with armor and other weapons, each member of the expedition carried the sword or dagger that fell within his means. However, during this time, most swords fabricated in New Spain were simple in design, favored function, and were of medium to low quality. Higher quality swords were imported from Europe.

The muster roll of the expedition makes little distinction between the various swords, only singling out one “broadsword” and one “two-handed sword” (*montante* or *espadon*). In flux at the time, swords increasingly could be purchased in a variety of lengths, widths, weights, blade and hilt styles, and level of ornamentation. However, generally speaking, three primary styles of swords existed at the time: first, the *espada ropera*; second, the basket-hilted sword (“broadsword”); and third, the rapier. The swords mentioned in the muster roll most likely included the *espada ropera*, a long, double-edged “dress” sword developed first in Spain in the mid-15th century and carried by civilians. In Italy and Europe, this weapon was referred to as a “side-sword,” or *spada da lato*. Manufactured in Toledo (Spain), the single-handed *espada ropera* was much lighter and narrower than the “broadsword” and the substantial two-handed sword, both of which were intended for military use. The *espada ropera* had an average length of 44 inches, a width of 1.2-2 inches, and weighed an average of 2 lbs. In contrast, the basket-hilted sword, or “broadsword,” developed in the 16th century and got its name by comparison to the increasingly popular rapier, or slender dueling sword designed for thrusting, which gained dominance in the early 17th century.

As in the case with swords, the muster roll also makes little distinction between types of shields carried by members of the expedition, only noting their round shape. At the time of the expedition, round shields came in several forms. First, the *buckler* was a small, fist-gripped shield used along with the sword in hand-to-hand combat. Made of steel, this shield measured 6-18 inches in diameter. Used for centuries in the Medieval and into the Renaissance periods, the shield’s primary function was to deflect the blows of opponents, to protect the sword hand, or to punch or grapple with an opponent. In Spain and New Spain, when the buckler was used along with the *espada ropera*, the swordsmen became known as *rodeleros*, or shield bearers. During the invasion of Mexico in 1520, Hernán Cortés relied heavily on his forces of *rodaleros*, in addition to smaller contingents of arquebuses and crossbows. Second, a larger shield measuring 27-32 inches, known as an *adarga*, was made of hardened hide leather and had been developed by the Moors and adopted by the Spanish for use on horseback in conjunction with the lance. Over time, the shape of the *adarga* transformed from circular to a double-oval form. Giving the ranching culture of New Spain, the leather shield might have been more readily available as a

source material, and thus more prevalent among members of the expedition. Larger shields made of iron or iron-plated wood had various names, such as the *targe*.

Twenty-four *ballestas* or crossbows are listed on the muster roll. The Spanish crossbow of the 16th century was a powerful weapon capable of hurling an iron-tipped wooden dart or arrow, called a *cuadriello* in Spanish and a quarrel in English, a distance of more than 350 yards. The secret of its great power was a steel bow (*verga*) that had to be bent by mechanical means. Reflecting advances in technology, bows were cocked with a lever (*gafa*), a windlass (*armatoste*), or a pulley mechanism. Bowstrings (*cuerdas*) were made of hemp or flax, which frequently broke under stress. However, the greatest drawback to the crossbow was the time required to cock it.

Crossbowmen normally carried 24 *cuadriellos* (arrows) in a quiver that hung from their waists. The term *cuadriello*, or quarrel, originated with the French word *quarreau*, meaning diamond-shaped or squared faces, and was applied to the head of crossbow projectiles. In time the word was applied to the entire dart or arrow. There were different types of quarrels for specialized purposes. Pointed war bolts were made to pierce armor, others were bladed to cut cords and rope, and some were made to whistle through the air as signaling devices. The "feathers" of quarrels were made of wood or leather and offset so that the projectile would spin for a longer and truer course.

In Europe, crossbows were designed to be used by ranks of bowmen, who fired high volleys against ranks of armored foes lined up at long range. However, in general, crossbows proved to be ineffective against Native American adversaries in northern New Spain. There, Native Americans did not form in neat European-style ranks, wore no armor, and moved quickly, discharging three or four arrows from their bows before Spanish crossbowmen could fire a single volley. In addition, Spanish siege tactics were frequently useless against Indian Pueblos: instead of staying in their villages long enough for the Spanish to lay siege, most Pueblo Indians simply fled to the mountains or mesas, leading their attackers on futile chases. No crossbows are listed in Spanish expeditionary records after the Coronado expedition of 1540-1542.

Crossbows were replaced entirely by firearms by the end of the 16th century. The arquebus, a muzzle-loaded firearm, was first developed in the early 16th century and remained in use until around 1650. Characteristic features of the weapon included a 3-foot long muzzle with a smooth-bore and a matchlock (trigger) firing mechanism. Ammunition came in the form of lead balls propelled by a powder charge. Each shot required at least two minutes to properly load the gunpowder and lead ball. Early forms of the weapon only had an effective range of 100 yards. Unlike the crossbow, loading the arquebus did not depend on the physical strength or health of the man, required less training, and was less effected by wind. Matchlock and subsequent wheel-lock muskets had drawbacks as great as those of the crossbow, but they offered the psychological advantage of noise, smoke, and fire. As the technology improved over the years, firearms became more effective and deadly weapons.

Armor

As seen in the muster roll, from among the 289 European men-at-arms, 260 of them either wholly substituted or partially supplemented their meager European-style armor with "armas de la tierra," or Native American-style arms and armor. Indigenous armor included

quilted shirts, rounded shields, feathered headgear, while their weapons included obsidian-studded clubs, spears, slings, and bows and arrows. Native auxiliaries would have relied exclusively on these forms of body armor and weaponry.

Among the 289 men listed on the muster roll of the Coronado Expedition, only 61 men are shown to have carried European-style metal armor. However, 70 of the men reported on the muster roll carried a jacket made of animal leather, which they used as a basic form of armor. As listed in the muster roll, Martín Hernández, for his part, brought only his horse and a jacket made of animal leather. The most common metal body armor was a vest of mail, which for many was the only piece of metal body armor they wore. Only 45 men reported possessing a helmet. Various others were listed as carrying just one or two miscellaneous pieces of metal armor, such as a gorget (collar) or visor.

A few men of high rank had what might be considered a full suit of armor, such as a mail vest with sleeves and breeches, a breastplate, gorget, gauntlets, and a helmet. Perhaps the best outfitted member of the expedition was Captain Tristán de Arellano, who brought “eight horses, a jacket, sleeves and wide breeches of mail, native arms and armor, some plate armor, a sallet, a beaver, an arquebus, two crossbows, a two-handed sword, three other swords, and other arms and armor for himself and his kin.” Moreover, the better outfitted members also brought horse armor, or *barda*.

Coronado’s expedition occurred at a point between the development of 15th century Gothic (German) plate armor and the rounded, Italian influenced 16th century “Maximillian armor.” The affluent members of Coronado’s party probably had some of the fashionable Maximillian armor, characterized by enclosed helmets, while there would have been more pieces of Gothic armor among the lower status members. Hence, the muster rolls report fewer pieces of Maximillian armor. In New Spain, few pieces of armor were imported from manufacturing centers in Germany and Italy.

The *bacinete* or *sallet*, a light helmet often with a detachable visor, was a common variety used by European foot soldiers and cavalrymen between 1530 and 1700. The *coraza*, or cuirass, was chest armor consisting of a *peto* (breastplate) and *espaldar* (backplate). Mail trousers (*zaragüelles de malla*) were rare and undoubtedly very expensive when originally purchased. Originally, mail was intended to protect foot soldiers, who could not afford the more expensive plate armor, from deadly wounds in the chest and lower torso. In practice, lesser officers and enlisted men wore leather armor quilted with cotton augmented with some mail. In the Coronado expedition, only the highest ranking men had mail trousers, though many men of all ranks had mail vests.

Full, three-quarter, and half-suits of armor were very expensive and were worn only by ranking officers and noblemen. Suits of armor were composed of individual bands, called *lames*, fastened together by sliding rivets that permitted the wearer a greater freedom of movement. The elongated chest shape was in imitation of a doublet, a cloth garment popular in Europe at the time. One of the persistent myths about armor is that knights dressed in full or three-quarters suits had little freedom of movement and had to be placed in the saddle with a winch and rope. In reality, a full suit of armor weighed between 65 and 80 pounds and was evenly distributed over the entire body. A knight in armor was quite capable of mounting his horse without assistance and, if knocked to the ground, could rise by himself.

Little evidence remains of the original arms and armor brought by the conquistadores and their native allies. Archaeological sites have yielded a few rusted fragments of chain mail, plate armor, swords, lances, and firearms. Few examples of leather and cloth garments have survived: no quilted leather jackets, shirts, trousers, or boots can be located outside the great museums of Mexico and Europe.

Horses

The muster roll only lists the number of horses brought by each man joining the expedition, but provides no further detail about this strategic resource. Horses gave the Spanish expedition a decided advantage over the Native American warriors of the New World by providing them with speed, agility, and the leverage of height. These horses belonged to a breed known today as the Spanish Barb (or Berber), whose origins are not entirely known, but it is thought that they were first introduced to Spain by the Moors after the conquest of A.D. 711. Barbs are exceptionally intelligent and agile horses standing 55 to 57 inches in height and weighing approximately 800 to 975 pounds. Their short legs, well-muscled chests and sturdy frames made them ideal for cavalrymen. Horses represented a significant expense and, while it is unclear whether or not members of the Coronado expedition utilized cloth, leather, or steel horse armor, they might have done so to preserve their investment.

The greatest compliment one could bestow upon a 16th-century Spanish caballero was to say that he rode well *en ambas sillars*, meaning “in both saddles” or riding styles. The horsemanship of the conquistadores was legendary, based upon the *a la jineta* style, a light cavalry system introduced to Spain by the Moors, and the *a la brida* style, the tradition of the heavily armored European knights. Horsemen mounted in the *a la brida* fashion dressed in full or partial armor and rode in high saddles with their legs held straight. However, caballeros who rode in the *a la jineta* style wore little armor or chain mail, rode low saddles sometimes amounting to little more than pads, and held their legs bent in short stirrups. Coronado personally brought with him 22 horses and three, possibly four, sets of horse armor with both long (*la brida*) and short stirrups (*la jineta*). By the time of Coronado Expedition, the *a la brida* system was becoming outmoded in Europe. Firearms and crossbows had made the armored knight vulnerable to attack by the infantrymen. However, the Native Americans in New Spain had no firearms, crossbows, or steel, and thus the *a la brida* style still offered the Spanish a distinct advantage in battle.

Three types of spurs were in use during the 16th century: long-shank, short-rowel spurs (used in the *a la brida* system of riding), Moorish style prick spurs, and the *espuela grande* (a long-roweled great spur). The long-shank, short-rowel type were designed so that a *la brida* caballero, with his legs straight in the stirrups, could reach the flanks of his horse. Prick spurs were believed to have been introduced to Spain by the Moors as a component of the *a la jineta* style of horsemanship. The true form of the spur has a sharp point, although 16th- and 17th-century examples are found with the points turned up. The *espuela grande* is representative of the largest and most elaborate variety of rowel spurs, worn more for show than actual use, as spurring would have seriously injured costly horses.

- 6) **Explore and compile information on members of the expedition, soldiers, priests, etc. and their motivations to join the expedition.**

Motivations of the Expedition and its Members

Although it did not directly finance or outfit the expedition, the Spanish Crown had an interest in its success. Primarily, the expedition would bring new vassals to the king. Through the *requerimiento*, a formal demand to submit to the Spanish king and Catholic missionaries, all new land traversed and peoples encountered were declared to be part of the Spanish empire and subjects of the king. Moreover, vassal states generated new sources of income in the form of tribute and taxes to the royal treasury. Also of importance to the Crown, religious personnel would convert Native Americans to the Catholic faith, thus fulfilling Spain's papal mandate to evangelize in exchange for the right to colonize the New World. As such, a component of the expedition related to determining the number of Native Americans and where they lived.

The financial backers of the expedition, including wealthy merchants and even the viceroy of New Spain, sought to profit from their investments in and loans to members of the expedition. In addition, these men hoped that financial services would win them favor with and rewards from the Spanish Crown. One such financier of the expedition, Guido de Lavezaris, played a crucial part in the planning and outfitting of the expedition from New Spain. A wealthy man in 1539, Lavezaris provided loans and goods in the sum of twenty thousand pesos, and sent a retainer along with the expedition. However, the *entrada* produced little wealth for the members of the expedition, and Lavezaris did not recoup the total of his investment. Some members of the Coronado expedition, in debt to Lavezaris when they returned to Mexico, participated in his subsequent ventures.

Wealthy men, known as the *hombres libres* or *hidalgos* (lesser nobility), voluntarily joined the expedition in the hopes that their investment in arms and armor might lead to appointments to administrative posts with a royal salary or the granting of an *encomienda* in new territories. In newly conquered territory, the grantee of an *encomienda*, known as an *encomendero*, received an allotment of natives from which he extracted tribute and labor that formed the basis for his and his family's wealth. In return, the *encomendero* pledged to protect and Christianize the natives associated with the grant and to pay taxes to and loyally serve the king and the Spanish Crown. In short, control of native populations' labor and commodities was the key to social and economic success for this class of men. However, none of the *hidalgos* on the Coronado expedition ever received *encomiendas* in the lands explored during the expedition. Given their status, much more is known about the lives of these men, as they appear more often in the historical record.

The lowest ranking members of the expedition, as common foot soldiers or horsemen, joined in the hope of securing a better life in a new land and the potential for economic gain. For those men with artisan skills or a profession, at the very least they were employed in the short term during the expedition and, in the long term, might find employment in any new colonies established. Thus, for the common men, without title or rank, the expedition provided work and a source of income. Unlike the higher ranking members or lesser nobility on the expedition, much less is known about the lives of these men. In most cases, no biographical information is known

except for his name and, thanks only to the surviving muster roll, what items he brought with him on the expedition.

Five Franciscan friars accompanied the Vázquez de Coronado Expedition. The primary motivation of Catholic Church personnel was to proselytize the Native Americans that they encountered during the expedition. The Franciscans on the expedition mostly were millenarians who believed the destruction of the world and the return of Christ to be imminent. For his part, Fray Marcos de Niza believed that these events would occur only after the Christian message and faith had been brought to everyone on Earth. He saw the expedition as a way to bring Christianity to the people inhabiting the region beyond the northern frontier of New Spain. Moreover, popular stories circulating at the time also motivated some of the men. For example, Fray Juan de Padilla was interested in finding the so-called Seven Cities of Antilla, which were believed to have been founded by Catholic bishops fleeing the Iberian Peninsula as a result of the invasion of the Moors of North Africa. Everywhere he went, Fray Padilla searched for evidence of the existence of the cities.

Very little is known about the Native Americans, who served as auxiliaries or guides, and their family members. Only 11 Native Americans are specifically mentioned in the documentation. Most of them are known by their first names, though two are known only as the wives of male expedition members. For each of these eight men and three women, the only additional information known is his or her place of origin. No information is known about his or her age, occupation, residence, or any other facts. While native guides were critical to the expedition, very little biographical information is known about them. Although he features prominently in the narrative, the man known as “El Turco,” who guided the expedition across the Great Plains remains an obscure figure. El Turco might have been from a pueblo known as Haraee. The other native guide, Ysopete is believed to be a native of Quivira on the Great Plains.

Hidalgos or High-Ranking Members

Hernando de Alvarado was a native of Las Montañas in northern Spain. As a high-status hidalgo, Alvarado had been inducted into the Order of Santiago, a prestigious military-religious organization, as a *caballero*. It is not known exactly when he arrived in New Spain. On the Vázquez de Coronado Expedition, he served as captain of the artillery, consisting of six small-bore cannon firing stone ordinance. A man of means, Alvarado might have provided the funds to organize and outfit the company of artillery. Vázquez de Coronado sent Alvarado and his men on a reconnaissance mission to explore the east and north of Hawikuh (Zuni Pueblo). On the reconnaissance expedition, which lasted 80 days, he and his men passed through Acoma Pueblo, Tiguex Pueblo, and the Pecos Pueblo. At Pecos Pueblo, he recruited “El Turco” to serve as a guide to the Great Plains. He and his men were the first Europeans to visit the High Plains region of North America and to see the buffalo herds. After the Vázquez de Coronado Expedition, Alvarado became a *vecino* of Mexico City by or before 1547. He died on 16 July 1550.

Hernando Martín Bermejo was originally from Fuente del Arco in Extramadura, Spain, and arrived to New Spain in 1535. He served as the principal scribe (*escribano*) and personal secretary to Vázquez de Coronado prior to and during the expedition. By the mid-1540s, he was a *vecino* in the town of Santiago in Guatemala.

Melchior Díaz' primary role was as leader of exploratory parties during the Vázquez de Coronado Expedition. Little information is known about his birthplace or early life. He served under Nuño de Guzmán during the conquest of Nueva Galicia, was the *alcalde mayor* of Culiacán in Sinaloa and the lieutenant governor of Compostela. In 1536, at Culiacán, he received the survivors of the Narváez Expedition. On the Vázquez de Coronado Expedition, Díaz served as the leader of reconnaissance missions through present-day Sonora, Arizona, and southeast California. Vázquez de Coronado sent him to intercept Hernando de Alarcón's resupply ships in the Sea of Cortez. In 1541, Díaz was severely injured in an accident which ruptured his bladder. Twenty days later, he died and was buried somewhere near present-day Caborca, Sonora.

Diego de Guevara was the son of the Conde de Oñate and was married to Isabel de Barrios. When his father died in 1548, Guevara received the *encomienda*, which consisted of half of Meztitlán, located north of Mexico City. In 1539, Viceroy Mendoza appointed him as *corregidor*. In 1547, Guevara was appointed *alcalde mayor* of Nueva Galicia.

Diego López was born in Sevilla, Spain, and arrived in New Spain in 1538. In Spain, López served as a regidor of Sevilla. By 1545, he was serving as *estante* of the mines in Nuestra Señora de los Remedios in Culiacán. By the time of his death, he was the *encomendero* of nineteen pueblos in the province of Culiacán. López died in 1567.

García López de Cárdenas served as the *maestre de campo* for the expedition after the death of Lope de Samaniego. A native of Madrid, Spain, he arrived in New Spain in 1535 on the same fleet as Viceroy Mendoza and Vázquez de Coronado. Before the expedition, he served as *alguacil mayor* of the Audiencia of Mexico. During the expedition, he led a small group of men from the Hopi villages to the Colorado River and to the south rim of the Grand Canyon, the first Europeans to see these natural features. After the expedition, he was held accountable for the violence against the Native Americans at Tiguex Pueblo and served out his sentence in Spain.

Tristán de Luna y Arellano was from Borobia, Spain, and arrived in New Spain in 1530. He was the cousin of Viceroy Mendoza and of Juana de Zúñiga, the wife of Hernán Cortés. He served on various legs of the expedition as the "captain of the horse," the person in charge of the people, livestock, and some of the native auxiliaries. He became the *maestre de campo* of the expedition in the summer of 1541 after the injury to García López de Cárdenas. By the end of the expedition, he held the post of lieutenant general. After the expedition, he married the wealthy widow, Isabel de Rojas, through whom he acquired several *encomiendas*, an estancia, and a sugar mill, and became a *vecino* of Antequera in Oaxaca. In 1559-1561, he served as captain general of an expedition to La Florida, which ended in failure. He was called to Spain in 1561 to directly report to the king. Destitute and disabled, he died in 1573 in Mexico City.

Rodrigo Maldonado was born in Guadalajara, Spain, and arrived in New Spain in 1535. He served as a captain of the cavalry on the Vázquez de Coronado Expedition and as a member of Vázquez de Coronado's personal staff. Maldonado testified at the trial of García López de Cárdenas, the expedition's *maestre de campo*, in 1547 and as a witness for Juan Troyano, a soldier on the expedition, in 1560. After the expedition, he became an *encomendero* as a result of his marriage to Isabel de Aux.

Pedro Méndez de Sotomayor was the expedition's official chronicler. He was married to Catalina de Sotomayor, a *vecina* of Michoacán, Mexico. He died in 1546, shortly after the conclusion of the expedition. Unfortunately, Méndez de Sotomayor never produced a narrative of the expedition before his death.

Melchior Pérez de la Torre was born in Badajoz, Spain, and arrived in New Spain in 1530. His father was the interim governor and *residencia* judge in Nueva Galicia. On the Vázquez de Coronado Expedition, Pérez de la Torre served as *alguacil mayor* and *apostentador* under the command of Juan de Zaldívar.

Lope de Samaniego was a native of Segovia, Spain. Prior to the expedition, Samaniego had served as *regidor* and as *alcalde* of Mexico City. Viceroy Mendoza appointed Lope de Samaniego as the expedition's *maestre de campo*, or master of the camp. On the Vázquez de Coronado Expedition, he died in skirmish with Native Americans.

Pedro de Tovar was born in Villamartín, Spain, and had arrived in Mexico City by 1529. A *caballero* in his own right, he was the youngest son of a Spanish nobleman. He was one of the first settlers of Guadalajara in 1531 and a founder of San Miguel de Culiacán. His brother was the *regidor* of Sahagún and his wife was a daughter of the governor of Cuba. On the Vázquez de Coronado Expedition, he served as the chief standard-bearer. Tovar led a small group of men on an exploratory side-mission to the Hopi villages located on the Colorado Plateau. Tovar wrote an account of his experiences, which he deposited in the Franciscan archives in Culiacán. The Mexican historian, Matías Ángel de la Mota Padilla, used this account in his *Historia de Nueva Galicia* (1742). However, Tovar's account has since been lost.

Regular Men

Tomás Blaque (Blake) was born in Scotland. He had participated in earlier expeditions.

Jaco de Brujas was a native of Bruges, Belgium, and most likely served under the command of Tristán de Luna y Arellano.

Pedro de Castañeda served as a foot soldier. After the expedition, he settled in Culiacán. Later, he wrote the most detailed account of the Vázquez de Coronado Expedition.

Miguel de Entrambasaguas was born in Burgos, Spain, and arrived in New Spain in 1537. After the Vázquez de Coronado Expedition, he became a *vecino* of San Francisco in Quito and married Isabel Pizarro, daughter of Pedro Pizarro.

Juanes de Guernica (also Juan Vizcaíno) was born in Guernica y Luno, Vizcaya. In 1538, he was serving in the personal guard of Viceroy Mendoza. On the Vázquez de Coronado Expedition, he served as a footman under the command of Pablo de Melgosa.

Juan Jaramillo served as a captain during the Vázquez de Coronado Expedition. He was a veteran of wars in Italy and North Africa. After the expedition, Jaramillo wrote a brief account of events.

Alfonso Manrique de Lara was born in Valladolid, Spain. Before joining the Vázquez de Coronado Expedition, he lived in Buenos Aires, Tabasco, and the Yucatán.

Pablo de Melgosa served as captain of the footman.

Juan Pérez de Vergara was a native of Guipúzcoa, Basque province. On the expedition, he served as Vázquez de Coronado's *mayordomo*.

Cristóbal de Quesada was a painter. None of his work has survived.

Francisco Santillán worked as a blacksmith and veterinarian. During the expedition, he was wounded by an arrow to his eye.

Juan de Villegas was born in Zafra, Spain, and arrived in New Spain in 1538. His brother was the *regidor* of Mexico City.

Religious Personnel

Born in Nice, France, in 1495, Fray Marcos de Niza was orphaned as a child and later took vows with the Franciscan order. He was in Peru, Guatemala, and Hispaniola from 1532-1536. In Peru, De Niza served as *superior* of the Franciscans and corresponded with Fray Bartolomé de las Casas, the champion of the rights of indigenous peoples of the Americas. De Niza arrived to New Spain in 1537. In 1538, De Niza was sent by Viceroy Mendoza to investigate the frontier region north of New Spain and returned to Mexico City with favorable reports of wealthy and populous cities. Subsequently, given his supposed familiarity of the region, De Niza acted as the lead friar and guide for the Coronado expedition. However, after reaching the Zuni pueblo in July 1540, Coronado proclaimed De Niza a liar and dismissed him from the expedition, partly for his own safety. Back in Mexico City, De Niza held the office of *provincial* of the Franciscans and, due to poor health in the last decade of his life, secluded himself in a monastery where he died in 1558.

Fray Juan de Padilla arrived in New Spain in 1529 from Andalucía, Spain. In Mexico, he served in the post of guardian of the Franciscan convents at Tulancingo, Hidalgo, and Zapotlán in Jalisco. Fray Padilla was known as a fervent believer and proselytizer and for his lack of tolerance for those persons who did not strictly follow Christian principles. Moreover, he often reported abuses against the Native Americans to the king. He joined in Hernán Cortés' exploration of the Pacific Ocean prior to his personal request to join the Coronado Expedition. As the second most senior religious member on the expedition, Fray Padilla took over control of the religious personnel after the departure of Fray Marcos de Niza, who, in the company of Fray Daniel, had returned to Mexico City. In De Niza's absence, Fray Padilla advised Coronado in religious matters and also weighed in regarding pivotal events during the expedition, such as the attacks on Cíbola and Tiguex, the interrogation of Bigotes, and the decision to put to death El Turco of Cicúique (Pecos) pueblo. When the expedition returned to Mexico City, Fray Padilla decided to return to Quivira. Padilla took along with him Andrés de Campos, a member of Coronado's guard, and others, including an African, a mestizo, and several Tarascan natives from Mexico named Andrés, Sebastián, and Lucas. The latter were lay religious assistants from Jalisco, where Fray Padilla earlier had served as *superior*. Fray Padilla and his entourage returned to Quivira where they worked for two years. In 1544, while exploring beyond Quivira into the territory of a neighboring tribe, Fray Padilla, Campos, and the Tarascans were attacked by a party of Native Americans on the plains. Fray Padilla was killed and Campos and the Tarascans were held captive briefly before they escaped, eventually making their way to Pánuco in Veracruz, Mexico, where they recounted the story of Fray Padilla's martyrdom.

Fray Luis de Úbeda (also de Escalona) most likely was born in Úbeda in Andalucía, Spain. He arrived in New Spain in 1535 as part of the entourage of Fray Juan de Zumárraga, the first bishop of Mexico, in whose house he served before his assignment to the Coronado expedition. A lay brother, Fray Úbeda was known for his extreme meekness, poverty, and devotion to prayer. During the expedition, Úbeda had the task of erecting crosses in the indigenous communities along the route. When the expedition decided to return to Mexico City, Fray Úbeda insisted on returning to Cicúique (Pecos) Pueblo. In order to support Fray Úbeda at Cicúique, several African slaves (two of whose names, Cristóbal and Sebastián, are known) were donated by members of the expedition, while the unnamed African slave also brought along his

wife and children. The fate of these men, women, and children are not known, though they are believed to have been killed at Pecos in or around 1544.

Fray Antonio Castilblanco was from Los Angeles in Castille, Spain, arriving in New Spain sometime before 1536. On the expedition, he served as Coronado's personal confessor. He broke his leg early in the expedition and returned to the main body of the expedition at Culiacán, eventually rejoining Coronado and his advance party at Tiguex Pueblo. Fray Castilblanco was the only friar to complete the entire expedition.

Fray Daniel, a Franciscan lay brother, had arrived in New Spain by 1525 from Santiago, Spain. Prior to the expedition, he was a resident of Tuxpán in Michoacán and one of the first Franciscans present in Jalisco, where he became fluent in Nahuatl. He was described as large, barefooted, and pious. He is known for his embroidery of liturgical vestments in Mexico and his religious fervor. He returned to Mexico City with the disgraced Fray Marcos de Niza.

Native Americans

After the capture of Hawikuh (Zuni) Pueblo, Vázquez de Coronado sought to find a guide that was familiar with the terrain that lied eastward. Just days after taking control of Hawikuh, a group of natives arrived to the pueblo from Cicúique (Pecos) Pueblo. One of these men, whom the Spanish named "Bigotes" due to his mustache, offered his service to the expedition. Bigotes was multilingual and had extensive knowledge of the terrain from Hawikuh to his native pueblo of Cicúique. Bigotes told Vázquez de Coronado of the people who inhabited the Rio Grande River valley and of the bison that roamed the Great Plains. Bigotes directed an advance force from Hawikuh through Acoma Pueblo, Tiguex Pueblo, Taos Pueblo, and finally stopped at Cicúique (Pecos) Pueblo. However, Bigotes did not want to accompany the expedition onto the Great Plains. In his place, Bigotes suggested an alternative, a man his people held as a captive, whom the Spanish named "El Turco" due to his physical appearance.

El Turco is thought to have been a native of a tribe of Native Americans from present-day south-central Kansas. El Turco was released to Hernando de Alvarado to serve as a guide to the Great Plains and to Quivira. According to reports, El Turco communicated through signs that the Spanish interpreted as evidence of great wealth of the native communities, which encouraged the expedition to continue eastward. El Turco successfully guided the expedition to Quivira. At Quivira, several members of the expedition accused El Turco of conspiring with the Quivirans to withhold food from the men and their horses. Vázquez de Coronado ordered El Turco to be investigated, during which he confessed to misleading the expedition and lying about the great wealth of Quivira. Supposedly, under torture, he also implicated fellow native guides Bigotes and Cacique as accomplices in a plot to lead astray the Spanish. Subsequently, El Turco was killed and secretly buried under one of the tents of the Spanish camp at Quivira.

- 7) **What happened after the expedition? How do early expeditions relate to the later movement of people to settle in what is now the Greater Southwest of the United States?**

Early Spanish Exploration of New Mexico, 1539-1598

After Coronado's expedition, forty years would go by before a new interest in the lands visited in 1540 would emerge. In that time, the Indians of the *tierra adentro* (the interior) had almost been forgotten, or at least had given their encounters with the first wave of Spaniards the form of a vague, oral tradition with a portent. For the most part, the Spaniards, too, had forgotten much about the accomplishments of their forebears as they expanded the Spanish frontier line northward along the silver-mining districts of the central Mexican corridor.

From time to time, however, rumors of mysterious cities in the *tierra adentro* flitted among Spanish frontiersmen. Occasionally, Vázquez de Coronado was remembered, or someone claimed to have heard of an account given in a book concerning the lands to the north. To remind them of the details, the *archivo* of the viceroy was filled with accounts, diaries, reports, and correspondence that described the tribes and Great Plains of North America. There was yet another source for inspiration. As the frontier extended from Nueva Galicia, a large area north of Mexico City to southern Chihuahua, Spanish slavers crossed the Río Grande chasing "thieving Indians," they said. Looking northward into the *despoblado* (uninhabited lands), they wondered about what lay beyond them. At Santa Bárbara, on the edge of the Spanish northern frontier, they told tales about the *tierra adentro*.

Until the late 1570s, few had given Vázquez de Coronado's "discovery" serious thought. At that time, a group of men, among them Francisco Sánchez Chamuscado, met in Santa Bárbara near Parral and for more than two years planned a journey to the *tierra adentro*. An Indian had told them that far beyond Santa Bárbara "was a certain settlement of Indians, who had cotton and made cloth with which they clothed themselves." Another member of the group was Fray Agustín Rodríguez, a Franciscan who had gone beyond the Río Conchos to minister to certain Indians. Having read Cabeza de Vaca's *Relación*, Fray Agustín had a different view about the "people who made cloth." In 1579, he petitioned the viceroy for authority to explore and convert the settlements of the *tierra adentro*.

Although King Felipe II of Spain had forbidden new *entradas* (explorations), except with royal permission, Rodríguez received approval from the viceroy and permission from the Franciscan Father Provincial to go to the *tierra adentro*. The expedition would not exceed twenty men and would be permitted to carry some articles for barter.

On June 5, 1580, Fray Juan de Santa María, Fray Francisco López, and Fray Agustín Rodríguez, and eight soldiers led by Francisco Sánchez Chamuscado left Santa Bárbara. They went northward to the Río Conchos, then eastward to the Río Grande. Near the river, they met a group of Indians who told them that "there were more settlements beyond."

Moving northward along the Río Grande, they reached the area of present Socorro and encountered other pueblos. Somewhere north of the Tiguas, they heard of pueblos to the east of them, including a place they called San Mateo, in present Galisteo Basin south of Santa Fe. Before visiting San Mateo, Sánchez Chamuscado made Puaray, one of the Tigua pueblos in the valley, his headquarters. The friars remained there while the soldiers explored to the east, beyond the purple Sierra de Puaray (Sandia), a sacred mountain to the pueblos. Once at San Mateo, they learned of mines with "coppery steel-like ores." The Pueblos, however, were quick to add that similar ores could be obtained from Indians "in the region of the buffalo." The people of San Mateo hoped the Spaniards would go to the plains and, wishfully, never return. They would go, but as sage travelers, they returned unharmed.

The soldiers went to the Plains because the Puebloans had told the Spaniards that the Plains Indians had knowledge of mineral wealth. The Spaniards would be disappointed, for the tribes of that region did not have houses, they hunted and ate mostly buffalo meat, they were enemies of their pueblo informants, they traded buffalo meat for corn and blankets and they were warlike.

Returning to San Mateo, the curious Spaniards learned why the Puebloans lived in the Galisteo Basin. "We asked them why they lived so far from the herds, and they replied that it was on account of their corn fields and cultivated lands, so that the buffalo would not eat their crops." They learned that during certain times of the year, the buffalo were two day's journey away. The Puebloans were keenly aware that the Indians who followed the buffalo were brave hunters and able bowsmen who would kill them. Thus, the Spaniards gained insight into the delicate relationship between the Pueblo and the Plains Indians. Other pueblos on the edge of the Great Plains formed a line from Taos in the north to Picuris, Cicuye (Pecos), and the Salinas pueblos to the south.

The explorers had seen enough of the land and its people. Meeting in council with the priests, the soldiers decided to return to Santa Bárbara and asked the priests to come with them. The Franciscans, ever hopeful of their spiritual conquest over the Tiguas, decided to stay, even if it meant martyrdom. Amid prayers, hugs, and handshakes, Sánchez Chamuscado and his men headed south without the priests. Somewhere on the northern Chihuahua Desert, the ailing Spanish leader's health worsened. Along the way, he died, and his soldiers buried him with a prayer that his soul rest in eternal peace.

Nearly a year after the expedition had begun, the tired and dust-covered soldiers returned to Santa Bárbara. By May 1582, Hernán Gallegos and others traveled to Mexico City and presented their reports of the *tierra adentro* to the viceroy's notaries. Their testimony, although sparse in its mention of riches in that land, caused speculation that the priests who remained among the pueblos were still alive and should be rescued. Soon curiosity gave way to twisted rumors that the land of the pueblos contained rich mineral deposits if only one knew where to look. Several entrepreneurs stepped forward and pledged to risk life and fortune to go and rescue Fray Rodríguez and his subordinates.

Antonio de Espejo, who had been in New Spain for eleven years, offered to outfit a small military escort, provided he be permitted to explore the *tierra adentro* for signs of mineral wealth. His expedition hoped to rescue any of the friars of the Sanchez-Chamuscado expedition that had been left behind.

Espejo was a successful cattleman until one day his brother, Pedro de Espejo, shot it out with two ranch hands who had refused to work during a cattle roundup. As the argument involved Antonio de Espejo, he was charged with complicity in the homicide of the ranch hands. Pedro de Espejo was convicted and received a heavy punishment, but Antonio, refusing to pay the fine levied against him, fled northward with whatever assets he could take. Thus, using his influence with the mayor of Cuatro Ciénegas, south of Santa Bárbara, and hoping for a pardon, Espejo gained authorization in the name of the king to accompany, at his own expense, Fray Bernardino Beltrán.

On November 10, 1582, the expedition set out driving a herd of 115 horses, mules and cattle. Aside from Espejo, Father Beltrán, and three of his brethren, along with fourteen soldiers

and servants carrying quantities of munitions and provisions departed the Valle de San Gregorio bound for “Nuevo México.”

Suffering hardships, the expedition reached the Río Grande in December. They moved forward reaching the first pueblos in January. By mid-February 1583, the small Spanish party had reached the valley of the large Sierra Morena (Sandia-Manzano ranges). They were impressed with the number of pueblos that stretched from one end of the valley to the next. Espejo noted that the memory of Vázquez de Coronado’s attack on their pueblos forty-one years previous was still fresh in the lore of the pueblos of the Río Grande.

At February’s end, Espejo had visited San Felipe Pueblo and Cochiti and traded hawks’ bells and small iron articles for buffalo hides, corn, tortillas, turkeys, and pinole. In their view, there was little difference between them and the pueblos of Puaray.

From there, the expedition went to Zia and Jemez. From there, they traveled to Zuni via Acoma. Just east of the Sierra de Cebolleta (Mount Taylor), they picked up the trail to Acoma and arrived as the weather turned colder. From Acoma, they pushed westward until snow forced them to camp on the *malpaís* (present El Malpais National Monument) in a large pine forest that protected them from the snowfall. It was March 11, 1583, when they reached a place they named El Estanque del Peñol (the pond at the rock). In the shelter of the sandstone promontory of present El Morro National Monument, they camped just as Indians of yore and probably some of Vázquez de Coronado’s men had done. Once rested, Espejo and his people marched westward. A few days later they reached Zuni.

At Hawikuh, Alona, Cana, Quaquina and Mazaque, they found well-constructed wooden crosses. They also met Mexican Indians, a number of them from Guadalajara, whom Vázquez de Coronado had left behind. Although they served as translators, they spoke Spanish with difficulty, as they had been absent for four decades from New Spain. “Here,” wrote Luján, “we found a book and a small trunk left by Vázquez de Coronado.” The influence of the Mexican Indians was evident in the crosses and other signs, which the Spaniards saw among the Zuni. Three of them, Andrés of Coyoacan, Antón of Guadalajara and Gaspar of Mexico told Espejo about the land and its people.

At Zuni, Espejo and the friars argued over continuing the expedition. As far as Father Beltrán was concerned, the expedition’s purpose—to rescue Fray Rodríguez and his brothers—had been met at Puaray when it was learned that they were dead.

Espejo departed Zuni with four soldiers to explore westward into present Arizona. After exploring over 200 miles, probably as far as present Prescott, Espejo and eight loyal soldiers returned to the Río Grande, where they skirmished with the people of Puaray. With Puaray up in arms, they could not remain on the Río Grande, so they marched east, beyond Pecos, through a forest of white pine and juniper. They marched through rough terrain to get to the Pecos River. Fleeing down the Pecos, it took them two months to return to San Bartolomé in Chihuahua. It had been a long year for the explorers who, lucky to escape the *tierra adentro* with their lives, had nonetheless come home empty handed. As autumn gave way to the winter of 1584, Espejo, the friars and the soldiers had many tales to tell of their adventures and many descriptions of the people of the north. Such tales would only stimulate the imaginations of those who would dream of conquering the *tierra adentro*. It was only a matter of time.

Meanwhile, in Nuevo León, south of Texas, a drama unfolded which would have far-reaching consequences for the settlement of New Mexico. In 1590, the Holy Office of the

Inquisition jailed Luis de Carbajal, governor of Nuevo León, and charged him with practicing Judaism. Gaspar Castaño de Sosa, his lieutenant governor, decided to move the colony at Nuevo León to another place within the large land grant they believed included New Mexico. Despite the viceroy's warnings, Castaño de Sosa and several hundred men, women and children, left Nueva Almadén in late July 1590 bound for New Mexico.

Driving herds of goats, pigs, cattle and other livestock, the expedition, after six weeks, reached the Río Grande near present Ciudad Acuña on the United States-Mexico border. Weeks later, the expedition crossed the *despoblado* to the Pecos River, and followed the river northwestwardly. In December, Spanish scouts reached Pecos Pueblo. Soon after, the settlers reached Pecos in a snowstorm. The Indians denied them entrance.

On December 31, 1590, after six hours of trying to persuade the pueblo to surrender, Castaño de Sosa realized his people would perish in the freezing cold if they did not enter the village. Finally, he attacked the pueblo, which fell after several of their warriors were killed. The expedition entered Pecos and settled there for several months.

By March 1591, the Spaniards had moved from Pecos to the Galisteo Basin pueblos. From there, they explored the Río Grande and settled at Santo Domingo. During that year, they traded with the pueblos along the Río Grande.

In spring 1592, Juan de Morlete was sent by the viceroy to arrest Castaño de Sosa for having led an illegal expedition to New Mexico. In the end, all of the settlers were forced to return to Nuevo León. After a trial, Castaño de Sosa was found guilty and sentenced to perform duty in the Philippines, where he died in a slave uprising a few years later. Castaño de Sosa's illegal expedition had alerted Spanish officials to the possibility of an uncontrolled rush to New Mexico.

In 1593, while on a punitive expedition against marauding Indians who had fled northward, Captain Leyva led a company of soldiers out of southern Chihuahua. Somewhere in the desert of northern Chihuahua, after they had completed their mission, Leyva told his men of his desire to explore the *tierra adentro*. Six soldiers refused to join the party, but the rest of them were intrigued about what lay ahead. Led by Leyva and Antonio Gutiérrez de Humaña, the horsemen crossed the Río Grande and headed to the pueblos of New Mexico. After spending some months among the pueblos, they marched to the northernmost Indian villages, probably Taos or Picuris, and made another decision.

Perhaps while trading at Taos or at Pecos with the Plains Indians, they learned about the Great Plains and decided to go there in hope that some great civilization similar to the Aztec kingdom existed. After all, they reasoned, Vázquez de Coronado, Sánchez Chamuscado and Espejo probably did not go far enough in the correct direction to find it. Leyva and Gutiérrez headed northeastward into what is now Kansas. They may have reached the Nebraska plains—farther than any European had heretofore dared to venture into the North American heartland. Somewhere on those lonely plains, Leyva and Gutiérrez argued and, in the fight that followed, Gutiérrez killed his captain. Antonio Gutiérrez de Humaña now found himself in command of the troops in hostile territory.

Soon after Leyva's death, Plains Indians ambushed Gutiérrez and his men. They attacked at daybreak under cover of a grass fire. All the Spaniards and their Indian allies were slain except for a Mexican Indian named Jusepe. In 1598, Jusepe, then living in New Mexico, told Governor Juan de Oñate what had happened to Leyva and Gutiérrez.

The illegal expeditions of Castaño de Sosa and Leyva de Bonilla caused Spanish officials in Mexico City to plan the settlement of New Mexico. In 1595, fearing other restless frontiersmen would dare strike out on their own and possibly ruin conditions for a royal enterprise, the viceroy authorized Juan de Oñate to settle New Mexico. On July 4, 1598, Oñate and his men arrived at the confluence of the Rio Grande and Chama River. At Caypa, which he renamed San Juan de los Caballeros, Oñate set up a camp for the settlers who arrived there in mid-August, after seven months on the trail.

While the settlers were moving into San Juan, Governor Oñate undertook an inspection of New Mexico. He visited the northern and eastern pueblos. At Taos, known to the Spaniards as Braba, Tayberon or San Miguel, and at Picuris Pueblo, Oñate got his first glimpse of the plains Indians, who had come to trade there. From there, he wended his way southward to the Galisteo Basin and stopped at a pueblo called San Cristóbal. Moving northeast, Oñate visited Pecos before returning to San Juan at the end of summer.

In September 1598, Sargento Mayor Vicente de Zaldívar and his men marched past Galisteo to the plains. From there he went southward, past the Sandia Mountains and headed south to the Salinas Pueblos. The people of Salinas rebuked Zaldívar and his troops, who had been gathering foodstuffs from the pueblo on their march to the plains. Once out on the plains, along the Canadian River beyond the Texas Panhandle, Zaldívar found many buffalo. He visited the Querechos and Teyas and hunted buffalo for 54 days. After nearly two months, Zaldívar, the consummate explorer of the Great Plains, returned to San Juan.

If explorers pointed the way to New Mexico between 1535 and 1593, the Oñate period in New Mexico (1598-1609) set the pattern for the effective Hispanic settlement of the province. Oñate and his settlers established a significant portion of the Camino Real de Tierra Adentro from Mexico City to San Gabriel. In 1610, the new capital of New Mexico at Santa Fe became the terminus of the trail for the rest of the Spanish colonial period. Religious conversion of the pueblos was another enterprise that had begun in earnest during the Oñate period. Missionization of the pueblos would run its course until the end of the colonial period. Governor Oñate's establishment of San Juan de los Caballeros and San Gabriel, had, indeed, changed the course of history of the *tierra adentro*.

After Coronado: Southeastern Arizona-northwestern Sonora Heritage

Arizona and Sonora historically contain world class mineral deposits. For nearly most of the 20th century, Arizona produced half the nation's copper and appreciable amounts of gold and silver. From atop Montezuma Pass, within Coronado National Memorial, the breathtaking view to the south is sometimes marked by the haze from smoke rising from copper smelters in Cananea, Sonora. To the east are the Mule Mountains and Bisbee. Both played a role in Arizona's mining history. North of there are the remnants of the legendary Tombstone silver district. Ghost towns abound in the mountainous terrain throughout Arizona. They are stark reminders of the boom and bust mining strikes which left remnants of mining operations and mine sites, some dating to the 17th century. Still, Mexico's aura is easily perceived in the land, the architecture, and the people, for, historically, they were the first modern settlers, stockraisers, farmers, and miners of the area.

In writing the historical background portion of her report concerning the State of Texas Mines within Montezuma Canyon in 1959, Grace Sparkes matter-of-factly noted that her “Property was worked by Spaniards and early drill holes may be seen [as well as] old antiqua [sic] on property.” Earlier, in his report on the State of Texas Mines in 1951, Axel L. Johnson, an engineer for the State of Arizona Department of Mines and Minerals, concluded that Spanish-Mexican period miners had extracted 500 tons of ore from that site. A 1905 mining publication stated, “the lands include at least one Antigua, worked for silver-lead ores by the Spaniards, probably as early as 300 years ago.”

Anglo-American miners working claims in Montezuma Canyon in early 1877 noted ancient mine shafts, called “antiguas,” with remnants of crumbling adobe furnaces, collapsing stone dwellings, and other “Spanish” period workings. As the story goes, early Anglo-American miners believed some of the workings were made by the Aztecs and, therefore, gave the name Montezuma to the canyon. “Location notices” filed with the county recorder reveal examples of Mexican or Spanish period workings.

David B. Rea, who filed one of the first mining claim notices in Montezuma Canyon, on May 20, 1877, noted an old shaft adjacent to his claim stake and a “cupel” or furnace camp three quarters of a mile southeast from his claim. The cupel was probably a small Mexican “adobe furnace” used to smelt ore. Not far from Rea’s claim stood the “old Elías hacienda” said to be ten miles away toward the southeast. Rea, who knew the Elías family and their abandonment of their land holdings, apparently also knew about the mines or prospects they had worked over the years in Montezuma Canyon. Other sources indicated that the Elías family mine was “fifty feet from old house ruins.” They made reference to the “Old Elias Mine” and the “Mission Mine” at the mouth of the canyon, which other prospectors later sought to claim. Curiously, the authors of the documents also noted that “there is an old Fort built of stone near the entrance to the shaft or opening to the mine.” It is possible that Mexican miners used the stone “fort,” if indeed it was a defensive structure, to defend themselves against Apache raiders. Rea’s claim included the earlier Hispanic workings, then called the “Wade Hampton.” Subsequent owners patented it as the “State of Texas” mine, complete with the “Antiqua”[sic] mentioned by Grace Sparkes.

Such sources and tales show that Spanish and Mexican period mining occurred in the Montezuma canyon, especially at the State of Texas mine site. In the 17th and 18th century northern Sonora and southern Arizona were known for their silver mines. Hispanic miners were interested in high-grade deposits of silver and gold, and towards the end of the period, lead, and copper. The Spanish and Mexican mining tradition in the region and within the boundaries of Coronado National Memorial, particularly at Montezuma Canyon, commenced when Sonoran settlers came into the area in the 1600s.

The settlement of Pimería Alta, present southern Arizona, was spurred by mining exploration. The first mines in Sonora date to the 1640s. As early as 1680, José Romo de Vivar, settled and founded the town of Bacanuchi. He also claimed land in Cananea, Cocospéra, and at the southern end of the Huachuca Mountains. The business of Romo de Vivar's settlers combined subsistence farming with stockraising and mining in the area. Contrary to historians who claim that the Jesuit Father Francisco Eusebio Kino was the first cattleman in Pimería Alta, his contemporary Romo de Vivar had, by 1680, introduced the first cattle herds into Bacanuchi and Cananea on the south bank of the San Pedro River. It should also be noted that Romo de Vivar and his settlers were probably the first serious miners in the area.

During the 17th century, Spanish settlements sprang up along the Santa Cruz and San Pedro river valleys. In the 1680s and 1690s, Bacanuchi and Cocospéra served as bases for the expansion of missions northward along the San Pedro River Valley. On both sides of the present U.S.-Mexico border in that area, the Jesuits established missions at places like Cocóspera, Terrenate, Cananea, San Joaquín de Basosucan (also known as San Joaquín de Huachuca), Santa Cruz de Gaybanipitea (Jauanipicta), and Quiburi. The latter two missions were along the San Pedro River north of the Memorial. San Joaquín de Basosucan was at the north end of the Huachacas along Babocómari Creek (today Rancho Babocómari). Later, a fortification was constructed nearby to protect the area. Near Indian villages and missions, Spanish settlers often established towns and introduced ranching, farming, and mining in northern Sonora and Pimería Alta. In the 18th century, the region was known for its silver mines.

By 1700, the Spanish frontier had advanced to places just below the present International Boundary between present Mexico and the United States. In the 18th century, Apaches and other warlike tribes continued to raid Spanish settlements in Chihuahua and Sonora. Some Apache plunder trails emanated from their Huachuca Mountains strongholds. Although Apache raiders forced the temporary abandonment of many places, a line of presidios was established along the northern Sonoran frontier that served to prevent the permanent abandonment of the entire region. As a result, settlements were reestablished and new mines were constantly discovered and worked under occasional military protection. Rich placers of gold had been found in Sonora and in Chihuahua that attracted settlers into the area.

One of the most famous mining settlements was a place called Arizonac, active in 1736-41. The name Arizona probably originated from the name Arizonac, which was east of modern Nogales, just below today's International Boundary. In 1736, miners discovered, what came to be known as the famous "bolas or planchas de plata" or nuggets or slabs of silver. The heretofore unparalleled claim to untold riches created a rush to the area. Word about the find of the silver of Arizonac soon reached Madrid where the king reasserted his claim as sovereign to subsoil mineral rights. If the find were, indeed, a mine, then the king would collect 20% of the income from it. If it were a treasure, then the king's cut would be 50%. Thus, when a royal mine inspector, Juan Bautista de Anza, visited the site, he declared it to be a treasure. In a few years, the silver at Arizonac had all but been played out. The discovery, however, encouraged further prospecting, eventually leading to Sonora becoming the richest mining region in Mexico's northern frontier. Arizonac represented the northernmost mining area in mid-18th century and was the beginning of significant, major European mining traditions in Pimería Alta.

In his *Descripción Geográfica, Natural y Curiosa de la Provincia de Sonora* in 1764, Father Juan Nentvig, S.J., wrote that after he had reached the pueblo of Chinapa, in northeastern Sonora, he traveled to the mines of Basochuca. Four leagues (about 10 miles) from there, he arrived at Bacanuchi, another mining settlement. He wrote that "eight leagues (about 20 miles) toward the northeast are the mines of Cananea." The area along the San Pedro River leading north past the Huachuca Mountains and beyond were not only areas worked by Jesuit missionaries, they were also areas of interest to settlers and miners living in the Cananea area. Jesuit missionaries also worked at Quiburi and Santa Cruz along the San Pedro. Since the 1680s, settlers had moved into northeastern Sonora and established settlements that had, since the days of Romo de Vivar, introduced cattle, horses, mules, sheep and goats into the area. From these

settlements, especially Cananea, the Spanish could have easily explored Montezuma Canyon in the Huachuca Mountains.

In 1766, the Marqués de Rubí led an expedition to inspect military conditions on the north Mexican frontier. Nicolas de Lafora, an engineer on the expedition remarked about the advancing settlements along the San Pedro River, and the silver mines in the Huachuca Mountains, most likely in Montezuma Canyon. Lafora recommended moving the fort at San Felipe de Jesús de Guebabi northward to the San Pedro. He justified his proposal by writing:

Its [San Felipe de Jesús de Guebabi] climate is unhealthy and the water is not at all good, nor are there any farm lands nearby. For this reason and despite the danger, settlers plant on the banks of the San Pedro river in the Sobaipuris valley, five leagues away [roughly ten miles]. They maintain a storehouse there which has been burned two or three times by the enemy. This valley [San Pedro] is very suitable for settlement and it would be well to move the presidio there so that settlers might gather under its protection. Undoubtedly they would be attracted by the good and abundant land there. In time this would facilitate and encourage work in the mines in the adjacent mountains, especially in the Guachuca Mountains, which are now producing good silver, notwithstanding the scarcity of people and the excessive risk.

Mining activities during the Spanish and Mexican periods in Arizona along the Huachuca Mountains date to the second half of the 18th century.

Lafora's description leaves little doubt about the location of mining activities in that area. He wrote:

One league from the San Pedro River, we crossed the Terrenate River at the place called Las Nutrias. The latter forms a lagoon one league above the said crossing. The river resumes its course and gushes out again lower down. A creek coming from the northern part of Guachuca sierra three leagues away also empties into the lagoon. Here there are many silver mines producing very good ore.

Thus the history of mining in that area, while little known, heretofore, dates from this period and explains the "antiguas" found during the early Anglo-American period, particularly in the late 19th century.

The gold strike of 1771 at La Cieneguilla, near present Altar in northwestern Sonora, attracted a new migration to the north. Many of the settlers—ranchers and miners—who went there, eventually moved northward in 1776 to the newly established settlements and presidio at Tucson. Settlers from Tubac and Tucson explored for mineral wealth in the surrounding mountains including the Santa Ritas, Santa Catalinas, and Huachucas.

In 1777 Manuel Barragua, Francisco Castro and Antonio Romero from Tubac reported to Captain Pedro de Allande Saavedra about "watering places, land for cornfields, pastures for horses and cattle, and minerals of the region." They also mentioned "routes taken by the Apaches for their attacks and escapes and places where they camp." Regarding mining in the area in the vicinity of Tubac, they wrote:

There are many mines of very rich metals some of these mines are especially productive. One yields eight ounces of pure silver to every twenty-five pounds of ore....Ten to fifteen miles further on, in the Babocómari Valley, there are excellent gold placers. These were examined by José Torres and all of the Tubac settlers....Ten miles east of Tubac, in the Santa Rita Mountains, two silver mines have been worked with smelters and three more with quicksilver, all with a tolerable yield. Though these mines are common knowledge to all of the Tubac settlers, they cannot be worked on a permanent basis because of the Apaches, who have pastures and encampments in that vicinity.

The mining traditions in Pimería Alta were already old in 1777, as Tubac was founded in 1752 and the mines at Cananea were known since the 1680s. For a quarter of a century, Tubac's settlers had explored the entire area and continually opened new mines. They would have been more prosperous had not Apache raiders intermittently forced them away from the mines.

Throughout the 1780s, Apache raiders disrupted the daily lives of Spanish settlers along the Santa Cruz and San Pedro rivers, and undoubtedly miners in the Huachuca Mountains. Tucson was attacked in 1782, as were other settlements in the area. In March 1785, Pedro de Allande y Saavedra, commander of the Royal Presidio of San Agustín de Tucson, led a force against the Apache in the mountainous terrain of Babocómari, Huachucas, Santa Catalina, and Santa Rita. His victories resulted in the recovery of horses and mules from mining settlements, including those from as far west as La Cieneguilla, as well as in the surrender of an appreciable number Apache warriors.

From the 1790s and continuing for twenty or thirty years, there was intermittent peace between Spanish settlers and Apache raiders in Pimería Alta. Doubtless, during that period, many mines were opened from time to time. Mines in the area stretched south from Tucson to Tubac, Arivaca, Santa Rita (about 11 miles from Tubac) and Babocómari near the north end of the Huachucas. Mine inspectors verified the existence of gold, silver, and copper mines in claims throughout the region. Some claims were made as far west as the Colorado River. Quicksilver mines were discovered as far north as Oraibi in northern Arizona, which then was considered part of New Mexico. Iron was discovered in the Madre Mountains between Tucson and Tubac. Certainly, in present Pima County, many mines were found and worked. The Huachuca Mountains and general vicinity in present Cochise County are similarly dotted with sites worked by Spanish and Mexican period miners.

The history of mining in southern Arizona, nonetheless, generally supports the lore of lost mines and treasures surrounding nearly every place where Hispanic miners trod in present Southwestern United States. The history of the "Bolas de Plata" and similar traditions are likely responsible for exaggerated stories of lost Spanish and Mexican mines in the area. The Huachucas are no different.

More importantly, the mining traditions, technology, and laws of Spain and Mexico are evident in the Greater Southwest. Indeed, the Spanish crown owned all topsoil and subsoil rights to the parts of the Americas under its claim. Thus, during the Spanish colonial period, ownership of land and mines, as with other resources, were greatly regulated. The long arm of Spanish law reached every nook and cranny of the empire, including those in New Spain's remote frontiers stretching from California to Florida, and including the Huachuca Mountains of Pimería Alta.

Spanish and Mexican mining law in North America predated, and later influenced, those of the budding United States in the late 18th and early 19th centuries. Based on ancient Spanish legal traditions, the *Ordenanzas de Minería de 1783* (Mining Ordinances of 1783), submitted by the *Tribunal General de la Minería* in Spain, revised mining law throughout the Spanish empire. The *Ordenanzas de Minería de 1783*, compiled by don Joaquín de Velázquez Cárdenas de León and don Lucas de Lessaga, president of the Tribunal, consisted of nineteen titles and many other sections to support and explain the law. The *Ordenanzas de Minería de 1783* also dealt with the reorganization of the *Tribunal General de la Minería*.

The laws covered many topics including the appointment of judges and inspectors of mines, the legal processes in adjudicating disputes, the rights of mine owners, mine operators, and miners. More specifically, the *Ordenanzas de Minería de 1783* explained the process for claiming a mine, making new discoveries, and registering lodes. The laws provided guidance in dealing with abandoned and lost mines, defense of mines, mining companies, inundated mines, as well as water rights pertaining to mines. Additionally, the laws covered land grants and *demasías* (excess lands outside of but contiguous to the land grant) and mines, the sale of minerals, the education and teaching of mining techniques, and the operations of mills and processes. As with all countries, the sovereign's ownership of subsoil and topsoil rights form the basis of mining practices, tradition, and law since time immemorial.

Spain's sovereign title to all rights dealing with land and resources was explicit and resided within the absolute powers of the monarchy. Only the king of Spain, as the sovereign, had the power and authority to grant to his vassals the privilege of using the land and/or extracting minerals from the land within Spain and the Empire. The age-old prerogatives of the sovereign were detailed in the earlier codes of the *Recopilación de las leyes de los Reynos de las Indias*. Book IV, Title XIX of the *Recopilación* (Compilation) is entitled "Concerning the discovery and labor of the mines." In royal terms, the sovereign explained the written law that had been promulgated for use in the Americas on December 9, 1526 by King Carlos V, and reiterated on June 19, 1568, by King Phillip II. Emphasizing the royal prerogative, the law stated:

It is our pleasure and will that all persons from whatever station, condition, rank, or dignity, Spaniards and Indians, our vassals may extract gold, silver, quicksilver, and other metals, by themselves, or through their servants or slaves in all mines that they may find wherever they may wish. And so that they may well possess and hold, and work them freely without any kind of impediment, having given an account to the governor and royal officials in accordance with the law...[they] have been confirmed by us.

Thus, the law clearly stated that the king's vassals could discover and work mines using whatever labor available to them provided they register the locations of their mines.

The law also reinforced the tradition and practice that prohibited civil officials, that is, ministers, governors, mayors, scribes working for mines, or lesser officials, from participating in mining ventures or enterprises whatsoever. This practice carried over into the post Spanish Period following Mexican Independence in 1821. Mexican laws naturally built on earlier Spanish laws, particularly in regard to mining and other land uses.

Similarly, Title V of the *Ordenanzas de Minería de 1783* explicitly stated that “The mines are rightfully the property of the Crown.” The *Ordenanzas* took their precedence from laws of Spain, specifically the *Nueva Recopilación*, particularly, Ley IV, Title XIII, Book VI, Art. 2 and Art 3, which provided that

(Art. 2) Without alienating them from my Royal Patronage, I grant to my vassals in both ownership and possession, in such a way that they may sell them, modify them, donate them, bequeath them...(Art.3) They are granted under two conditions: First that they contribute to my Royal Treasury and second, that the mines are worked and enjoyed in complement to the conditions stated in these Ordinances.

The *Ordenanzas de Minería de 1783* covered many situations concerning the mining industry. Education was a priority, and the *Ordenanzas* provided legislation for the establishment of a school of mines called the Real Seminario de Minería.

Potable water was a concern to mining communities who complained about miners dumping pollutants into nearby streams. Among the regulations, therefore, the law prohibited the pumping of water from mines into arroyos, aqueducts, or streams leading to settled areas. Among other issues, security and safety at mines were provided by trained surveyors, called “*peritos*” also known in New Spain (Mexico) as “mineros” (miners) or “guardaminas” (guards).

The law stated that it was “prohibited to construct mines without the direction and continued assistance of one of the learned and practiced *peritos*.” The *peritos* were given special privileges enjoyed by miners in terms of education and training in mineralogy. They were permitted to mine and keep what they found. They were allowed to use mining tools, mills, vats, and other facilities of the mine. In general, the mining laws of the late 18th century awakened interest in mining. Spanish mining laws passed into Mexican law after 1821.

Although the Spanish legal tradition pertaining to mining influenced that of the Mexican Nation, the laws applied to situations as they occurred. In areas where full-scale mining operations were evident, the traditions, practices, and laws served those communities. In areas where new mines were starting up, the sovereign exercised its power in reminding claimants to follow all procedures in registering their claims. Indeed, an entire section of the *Ordenanzas de Minería de 1783* was dedicated to the acquisition mines. Of specific interest to claimants in the remote northern areas of Mexico, Chapter VI of the *Ordenanzas* is specifically entitled “Concerning the Manner of Acquiring Mines, New Discoveries; Registration of Veins, and Denouncements of Mines Abandoned and Lost.” Similarly, the *Laws of the Indies* had spelled out procedures for the acquisition of land, particularly land grants that contained mineral wealth. During the early years of Mexican nationhood, bureaucrats adhered to earlier legal traditions based on Spanish law, and worked through newly revised versions of the same as Mexico instituted new procedures regarding the acquisition of land and mines.

The *Ordenanzas de Minería de 1783* would have pertained to small-scale mining that took place in the Huachucas during the Spanish and Mexican periods. Indeed, the *Ordenanzas de Minería de 1783* were quoted and used as a source in the litigation of land grants in southern Arizona by the Surveyor General in the 19th and early 20th centuries. Such mining ventures were limited by many factors. Distance, technology, few laborers, and danger from Apache

raiders, which tended to discourage mining in the area. Owners of the San Rafael del Valle and San Pedro land grants, discussed in a subsequent chapter, worked mining sites in the Huachucas and in the area of the State of Texas Mines. Given their times, technologies, and economies, Spaniards mined for silver and copper and whatever gold ores they could find. In all, they pointed the way for future mining in that area; and, they influenced, in many ways, where later mines would be located.

Mining traditions between the Gila River and the present International Boundary with Mexico continued into the Mexican Period, 1821-1853. Near present Nogales, for example, the San Rafael del la Sanja grant contained mines and minerals. During the Mexican Period, large land grants were established in and near the area of Coronado National Memorial. In 1827, the San Juan de las Boquillas y Nogales grant and the San Rafael del Valle grant operated ranches in the area. A third, the San Pedro Land Grant ran between the Huachuca Mountains and Bisbee along the border in the southwestern part of Arizona. The San Pedro grant was issued in 1833 to Rafael Gonzalez, the owner of the San Rafael del Valle grant.

The Elías family, as owners of the grant, also considered the lands within Montezuma Canyon as part of their property. Without the discovery of specific records or documents, likely in Mexican archives, the extent of their mining activities is unknown at this time. That they, like many speculators in northern Sonora, operated the mines is highly probable. The smelter, stone houses, and mine works mentioned by Anglo-American miners in 1877 may date from the Mexican period, especially the workings they staked as the “old Elias” mine. Increased Apache raids in the later 1830s-1840s also caused their abandonment of their claims in Montezuma Canyon and other places in Pimería Alta.

8) **What members, if any, of the expedition stayed in the new found areas or the general regions explored? [Please see entry for #6 as well]**

Before the Coronado Expedition returned to Mexico, Fray Juan Padilla, one of the missionaries, and Andrés do Campo, a soldier, remained with two Indian lay brothers, Lucas and Sebastián, from Zapotlan, Mexico, along with a mestizo, a free black interpreter and a few other servants not identified. Coronado also gave Fray Padilla six Kiowa guides to take him out to the Plains. They hoped to convert Plains Indians to Christianity and reached the vicinity of present Lyons, Kansas. Within a short time, all were killed except for Campo, Lucas and Sebastian, who escaped to Panuco, reaching there sometime three years later.

As the expedition pulled out of New Mexico, Coronado’s men escorted Fray Luis Escalona de Ubeda to Pecos who wished to stay and Christianize them. Fray Luis and a young slave, Cristóbal, were left at Pecos. One soldier wrote that after they were some distance, he looked back and saw Indians chasing Fray Luis, whom they apparently killed.

- 9) **Discuss the historiography associated with the Coronado Expedition inclusive of an annotated bibliography. [Please note: The annotated bibliography was sent Sept. 9, 2013]**

The Route of the Expedition of Francisco Vázquez de Coronado: A Historiographical Overview

Introduction

The route of the Expedition of Francisco Vázquez de Coronado, 1540-1542, had for centuries intrigued colonial officials and explorers as it has perplexed modern day historians and archaeologists. Although historical documentary sources report extensively about the expedition, exact details of the route are few, vague and sometimes contradictory. Archaeological evidence is scant, for the expedition left few physical traces. Even when found, Spanish colonial artifacts can seldom be dated precisely, and, given the intense Spanish activity throughout the Greater Southwest, especially between 1540 and 1680, they are extremely difficult to identify in relation to each of the expeditions of the period. Ethnohistoric evidence is likewise vague and confusing, for the sedentary and semi-sedentary Indian groups encountered by the Vázquez de Coronado Expedition have experienced considerable movement since 1540. The tribes of the Great Plains, for example, abandoned sites in migrating from one locale to another, or were driven out during the Indian Wars by the United States Army in the 19th century. Pueblos, on the other hand, were abandoned and new ones built, or new pueblos emerged as a result of consolidation. To add to the obscurity of such places on our modern maps their names changed or were forgotten. So too, in many instances, were Spanish tribal designations lost in time. Topography, botany, ethnohistory, archaeology, linguistics, and toponymy are some of the factors used by historians and archaeologists to analyze the data related to the expedition's route. Still the route is elusive.

With few exceptions, however, theories about the route have been presented as fact by several researchers, but proof for hypothetical conclusions concerning the actual line of march by the expedition will never be satisfactorily attained. The purpose of this historiographical essay about the Expedition of Francisco Vázquez de Coronado, 1540-1542, is to examine the data in the literature concerning the route so that future researchers and interested readers may express their theories with the wisdom of those who came before them, and so that they may be able to provide a reasonable alternative to the route or even a corridor designating a line of march between certain known places visited by the expedition. The scholarship of the selected literature examined herein focuses on one specific problem: the tracing of the route of the expedition. It should be noted that the literature surrounding the expedition is massive. However, the selections contained in this study are representative of the issues that surround the location of the route.

The Expedition of Francisco Vázquez de Coronado was the first major European exploration to penetrate the interior of the present United States. Exploring from Compostela on the west coast of Mexico, northward through Sonora, eastern Arizona, across central New Mexico to the Rio Grande, the expedition moved eastward across the Texas Panhandle, marched through Oklahoma and reached the Great Bend of the Arkansas River in central Kansas.

Narrative accounts of the expedition describe its many encounters with the native inhabitants and contain a wealth of information about certain societies and their cultures while

they were still in a pristine state of development. Likewise, descriptions of the flora and fauna and other natural resources were written by these explorers. They were the first Europeans to describe the Grand Canyon of Arizona, the large herds of buffalo on the Great Plains, the name we give today to the vast treeless plains that stretch from the Arctic coast to South Texas and from eastern New Mexico almost to the Mississippi River. The expedition members noted mountains, valleys, rivers, saltbeds, lakes, forests and other topographical features including the Continental Divide, the watershed that separates rivers flowing toward the Pacific Ocean or the Gulf of Mexico and the Atlantic.

During the period 1539 to 1545, two other expeditions, one led by Hernando de Soto who explored from Florida to Texas, and the other commanded by Juan Rodriguez Cabrillo who sailed up the California coast as far north as Cape Blanco in Oregon, aided Spanish officials in evaluating the widest geographic expanse of North America from coast to coast. Indeed, the Spaniards were the first Europeans to leave a written record of their deeds in North America, thus beginning a literary heritage about a large geographic area from California to Florida.

The traditional consensus regarding the route, however, is that it lies close to that proposed by A. Grove Day and Herbert Eugene Bolton. Both men popularized portions of the route through western Mexico, Arizona, New Mexico, Texas, Oklahoma and central Kansas. Although the route they proposed is not the object of this analysis, it plays an important role in the historiography of the expedition led by Francisco Vázquez de Coronado. The Bolton-Day route is presented herein with other issues related to the expedition's route through a large portion of North America.

In recent years, nonetheless, researchers have debated portions of the route proposed by Day and Bolton and some have even gone as far as to propose new ones. There are reasons for the disparities between some of the hypotheses. Day and Bolton dealt with the larger picture of the route. They were able to connect known places visited by the expedition with theories explaining how it reached them. Later researchers, concerned only with portions of the route, began to discover other hypothetical alternatives by concentrating on specific topographical and cultural features in certain areas believed crossed by the expedition. It should be noted that Day and Bolton actually tested their hypothetical routes on the ground, as have other researchers. Unlike Day and Bolton who visited the Spanish colonial archives in Spain and Mexico, plying their skills in reading the original manuscripts of the expedition, some of the early writers of the route lacked access to the documentation and used translations which precluded certain perspectives about what the expedition had seen. Other writers, it is apparent, lacked geographical knowledge about the areas traveled by the expedition or did not read carefully the sources available to them.

THE SONORA-ARIZONA CONNECTION

The singlemost important leg of the expedition is that from Compostela through Sonora. Without a fundamental understanding of that portion of the route it is impossible to determine exactly where the expedition entered present Arizona and what direction it took beyond that point. The literature suggests two viable points through which the expedition passed upon entering present Arizona: the San Pedro and San Bernardino River valleys. Because the route from Compostela to either of those two points is vague, a third line of march, one farther east, is

possible. A fourth alternative, a western route through the Santa Cruz valley, has been discounted in recent years by scholars. In any case, finding the location of the expedition's entry into the present United States depends wholly on determining the route taken through Sonora.

Although Bolton and Day presented a route through Sonora based on observation and analogy of their readings of the documents and what they perceived to be on the ground, Charles DiPeso approached the problem by utilizing available archaeological data and pertinent historical documentation. The historical problem lay in part with the lack of identity of rivers in Sonora for the early Spanish period. DiPeso wrote, "when modern historians attempt to correlate present-day names, such as Yaqui or Sonora River, with names used by early explorers who had no maps and often were inconvenienced by a lack of interpreters, and who used such terms as Yaqui and Senora, then distances and travel times are sacrificed and misconceptions are bound to arise. As just mentioned, a league was accepted as being a specific distance, and wherever possible was used to determine distances between points." (DiPeso, 1974:37). By comparing the accounts from various expeditions, DiPeso arrived at a certain determination of place-names in Sonora. For example, he determined the first river crossed by Vázquez de Coronado to be the Río Evora de Mocorito. Using the Villa de San Miguel de Culiacán as the beginning point, his methodology involved comparing terminology and distances or time of travel reported by Diego de Guzmán, nephew of Nuño de Guzmán, (1533), Cabeza de Vaca (1536), Marcos de Niza (1539), Vázquez de Coronado (1540) and Francisco de Ibarra (1565), sources that agreed on the 16th century location of Culiacán and on the historic name of the Río Evora de Mocorito.

Testing his hypothesis to determine that the first river was indeed the Mocorito, DiPeso discovered that Vázquez de Coronado's Río Petatlan, the first river north of Culiacán matched with Guzmán's Petatla and Niza's Petatlan. So too, he determined, the Río Petatlan had been renamed Río San Sebastian de Eborra during Ibarra's time. Hence evolved the modern name Río Evora de Mocorito. Next, following the same methodology, DiPeso concluded that the second river crossed by the expedition was the Río Sinaloa, for Vázquez de Coronado knew it by Guzmán's old name "Río Cinaloa." But here, DiPeso noted a discrepancy that he resolved by accepting Guzmán's and Vázquez de Coronado's "Río Cinaloa." Guzmán also referred to the Río Sinaloa as the Río Santiago, and Ibarra called it the Río Petatlan. The third river, the Río del Fuerte, was known by Guzmán as the Río San Miguel as well as the Río Mayomo; by Vázquez de Coronado as Arroyo de los Cedros; and by Ibarra as the Río Cinaro. The variations, explained DiPeso, were inconsequential because their singular locations were determined by Indian settlements along them, and their names were constant. Besides, he argued, the distance between them was a controlling factor, for the explorers had given estimated figures of time taken to travel between them and/or measurements in leagues. Vázquez de Coronado went so far as to have a man count the steps between the expedition's daily campsites (Hammond and Rey, 1940:240).

For DiPeso, locations of Indian settlements along the rivers or their tributaries were of paramount consideration. For example, on the first river was the village of Mocorito, on the second Guasave and Sinaloa de Leyva, and on the third El Fuerte. The fourth river, Río del Mayo, had an Indian town called Conicari. Guzmán called this river Río San Francisco de Yaquimi or simply, Río Yaquimi; Vázquez de Coronado referred to it as Lachimi; and Ibarra said it was the Río Mayomo or Río Mayonbo. On one of its tributaries north of Conicari was Tesocoma, referred to by Guzmán as Nebame, by Cabeza de Vaca as Corazones and by Vázquez

de Coronado as Corazones. And finally, north of Corazones was the Río Yaqui, whose tributary Coronado knew as Río de Senora and Ibarra as Río Oera. Ibarra knew the Río Yaqui as the Río Yaquimi. Crossing to another tributary of the Río Yaqui, the expedition came to the Indian village of Guisamopa, known to Vázquez de Coronado as Ispa. Beyond there, and still on the Río Yaqui drainage, near the Arroyo Babaco, was Vázquez de Coronado's Suya or Ibarra's Senora.

DiPeso's analysis could very well be the key to the historical conundrum concerning Vázquez de Coronado's route through Sonora. By following the documentation almost to a fault, DiPeso determined that the route of Vázquez de Coronado veered northwestward to the Río Bavispe and its confluence with the Río Batepito which he followed to the Río San Bernardino that originates in southwestern Arizona considerably west of the San Pedro River. DiPeso made a strong case for the expedition crossing into Arizona at present Slaughter Ranch not far westward from the Arizona-New Mexico border. He concluded that the expedition entered New Mexico crossing into the Animas Valley through Antelope Pass and then straddled the Arizona-New Mexico boundary until reaching Zuni Pueblo. DiPeso wrote,

Padre de Niza, Melchior Diaz, and Coronado's troops all traveled along this section of the old Acoma road seeking Cibola. From the Rio Batepito junction the army may have gone N-by-NW up this river to the San Bernardino junction, 43 km., and then up the San Bernardino in a northerly direction, keeping the Sierra de San Luis on the right (E), to the vicinity of the modern Slaughter Ranch, another 17 km. Next they would have continued up the San Bernardino Valley, traveling NE past the site of present-day Rodeo, New Mexico, and keeping the Chiricahua Mountains on the left (W) and the Peloncillos on the right (E), finally arriving at what is now called Antelope Pass in the latter range, an additional 65 km (DiPeso, 1975:100).

Earlier, in 1872, Brig. General J.H. Simpson, one of the first to attempt to trace Vázquez de Coronado's route in southern Arizona, had assumed that the Spaniards had entered the present United States through the Santa Cruz Valley, stopping at Chichilticale, which he reckoned to be Casa Grande on the Gila River, and then turned northeast across the Pinal and Mogollon Mountains to Zuni. Simpson's account, filled with errors, suggested the westernmost theory of the expedition through Arizona. His discussion of the route through the Mogollon Rim, however, lacks substantive detail (Simpson, 1872:329). The notion persisted for almost seventy years, however, for in 1939, archaeologist Charlie Steen suggested that Fray Marcos de Niza's preliminary expedition in 1539 had entered Arizona through the Santa Cruz River valley and turned northwestward somewhere between Tucson and Phoenix, entering the mountains probably beyond Florence near the Salt River (Steen, 1939). Niza was one of the guides of the Vázquez de Coronado Expedition in 1540.

Other scholars contended that the expedition entered Arizona through the San Pedro River valley because it was most compatible with Spanish documentation and topography, being the easiest route northward. Frederick W. Hodge argued that the expedition traveled north along the Rio Sonora and entered Arizona through the San Pedro River valley, then crossed the Pinaleno Mountains over Railroad Pass, followed the San Simeon valley to a point near present Solomonsville and the Gila River, south of the present White Mountain Apache Reservation

(Hodge, 1895:142-152). Hodge's route took the expedition directly on a northeastward path to the Zuni River. Of this portion of the route, Hodge's explanation, likewise, lacks sufficient detail for analysis. The debate over the location of the expedition's crossing into Arizona from Sonora was only beginning. Hodge had raised a point which would cause much speculation concerning the San Pedro River valley hypothesis.

In 1947 George J. Undreiner re-examined Fray Marcos de Niza's journey to Cibola and proposed that Niza had entered Arizona on April 13, 1539 by following a route north along the Pima road about 15 miles east of Lochiel soon after which he reached Quiburi, a Sobaipuri village on the San Pedro River. Three days later, Niza visited Baicatcan, another village on the San Pedro, which DiPeso had dated pre-1698. Herein was the riddle. Pedro de Castañeda, chronicler of the Vázquez de Coronado expedition, stated that after visiting a certain Indian town, the expedition encountered a four-day despoblado (desert) north of there. Undreiner pointed out that in his preliminary expedition of 1539, Niza, probably at Baicatcan, or at least at Quiburi, learned that two more days of travel would bring him to a despoblado which would take four days to cross. He contended that Niza, after two days of travel, had reached the northernmost Sobaipuri village on the San Pedro and that it was probably near Aravaipa Creek (Undreiner, 1947:415-486).

On that same point, Albert H. Schroeder responded to historians who had suggested that Vázquez de Coronado's expedition went down the San Pedro River in southeastern Arizona, and, on the basis that Juan Jaramillo, chronicler of the expedition, indicated that the expedition turned east, had routed Niza and Vázquez de Coronado either up Aravaipa Creek or east from the Tres Alamos region (See Bandelier, 1881:1; 1892, pt. II:407; Winship, 1896:387; Bolton, 1949:105; Sauer, 1932:36). Schroeder wrote, "If the former route is accepted it would imply that that portion of the middle San Pedro River, more that two days travel south of the junction with the Aravaipa, would not have been occupied, since it would then be the four-day despoblado. This is the very area in which DiPeso has suggested, on the basis of archaeological evidence, that occupation may have been unbroken from late prehistoric into historic (1690s) times. Thus, the old routes appear to be in error." (Schroeder, 1955:265). In support of Hodge's hypothesis, Schroeder defends Niza, commenting that "the evidence presented herein not only indicates the good father was telling the truth, but that Coronado and his chroniclers knowingly supported much of his relation pertaining to the trip through this area." (Schroeder, 1955:267). Thus, Schroeder casts his lot with the San Pedro River valley entrance hypothesis.

CHICHILTICALE

The debate surrounding the San Pedro River Valley entrance is tied to the location of Chichilticale (sometimes spelled Chichilticalli). Of Chichilticale, Vázquez de Coronado wrote, "I rested for two days at Chichilticale, and there was no chance to rest further, because the food was giving out." (Hammond and Rey, 1940:166). In his account, Pedro de Castañeda reported, "The land changes again at Chichilticale and the thorny trees disappear. The reason is that since the gulf extends as far as that place and the coast turns, so also the ridge of the sierra turns. Here one comes to cross the ridge and it breaks to pass into the plains of the land." (Hammond and Rey, 1940:251). What was Chichilticale? At times the documents refer to it as a valley, other times it appears as a mountain range, a port, or even a despoblado, and finally, as a place or a village.

Vázquez de Coronado and Melchior Díaz mentioned the “people of Chichiltcale” (Hammond and Rey, 1940:165). After careful consideration, DiPeso concluded that it was south of the Arizona-Sonora border closer to the Río Batepito and the San Bernardino valley. He wrote, “Ruins which might be ascribed to those of the ‘red house’ of Chichiltcale occur up and down the San Bernardino Valley, and the Stevens Ranch site contains pottery fragments which indicate a trade relationship with the N and the Little Colorado” (DiPeso, 1940:100). By placing Chichiltcale in that area, DiPeso suggested that north of the confluence of the San Bernardino River valley was a fifteen day despoblado.

DiPeso’s analysis is fairly thorough and deserves lengthy quotation:

De Niza did not mention “Chichiltcale” in his narrative, but Coronado, in his letter to Mendoza... did, and said that it was “fifteen days” journey distant from the sea, although the father provincial had said that it was only five leagues distant and that he had seen it ... [and] which the father said was at thirty-five degrees....” Either Coronado referred to the journal of place names and locations which de Niza had mentioned (Baldwin, 1926, p. 206) or he was given this information verbally by the priest while on the trail E of Bacadehuachi. The latter had previously scouted out the coast and mentioned the fact that the coast turned W at latitude 35 degrees. It would seem that Coronado’s “port of Chichiltcale” was that referred to by de Niza after crossing the second despoblado of four days. De Niza mentioned entering a town at the end of this trip in which he was given food. Coronado, in turn, questioned the Indians of Chichiltcale (Hammond and Rey, 1940, p. 165) and was told that “they go to the sea for fish, or for anything else that they need, they go across the country, and that it takes them ten days....”

Melchior Díaz, who was sent to check de Niza’s report, spent the winter in Chichiltcale and said it was 220 leagues from Culiacán (Bolton, 1949, p. 87). Using the proposed routing, this distance would have taken him by way of the Bavispe, a distance of 221.3 leagues. In this Castaneda confirmed the distance (Hammond and Rey, 1940, p. 198).

Castaneda (*ibid.*, pp. 212, 251-252) wrote that the priests (de Niza and his party) named Chichiltcale because of an abandoned mud fortress which had been built by people who broke away from Cibola and which was later destroyed by folk who hunted and lived in rancherías without permanent settlements. He went on to say that the gulf extended as far as this area and turned W at the head of the Gulf of California, which it does on the latitude several minutes above 31 degrees N. This latitude falls across the San Bernardino Valley.

Melchior Díaz attested to the cold (*ibid.*, p. 157). Although he did not mention Chichiltcale directly in his letter to Mendoza, he spoke of the despoblado which separated him from Cibola and recounted his interview with the Cibolans of Chichiltcale, who, after Esteban was killed advised the people of that town not to respect the Christians but to kill them (*ibid.*, p. 160).

Schroeder correctly surmised the critical need to define the location of Chichiltcale because, for one of many reasons, it determined where the expedition went next. He countered any argument that suggests that Chichiltcale lay south of the Arizona-Sonora border by stating,

“The ethnological traits reported by the early Spanish who recorded their travels of 1539 and 1540 through Arizona point to the Yavapai as the people who occupied the area on the north side of the four-day despoblado, where Chichilticale was located. Internal evidence within these early documents also indicates that Fray Marcos and Coronado followed the San Pedro to its mouth, not just to Tres Alamos or Aravaipa on the San Pedro, and that from there they crossed the Gila and went over to the Salt River as Undreiner suggests.” (Schroeder, 1956:32). Schroeder is emphatic about the significance of this point writing, “Thus, the Yavapai remain as the only possible group, separated by four days’ travel, that bordered the Sobaipuri on the north in 1539 and 1540.” (Schroeder, 1956:33). Furthermore, in contrast to DiPeso’s and Hodge’s routes from Arizona to New Mexico, he proposed that after departing the mouth of the San Pedro River, the expedition proceeded down the Salt River “almost to the mouth of Tonto Creek, then up Salome Creek and over the north end of the Sierra Anchas and then generally northeast over the Mogollon Rim across to Zuni. There is little or no evidence to indicate they went east from the San Pedro at Tres Alamos or via Aravaipa Creek and then across the present day San Carlos Apache country to Zuni. Such a trail would necessitate a route directed to the north or north-north-east, rather than northeast as the documents state.” (Schroeder, 1956:32).

Carroll L. Riley and Joni L. Manson also agree, without specifying their argument, that Chichilticale was in southern Arizona or New Mexico (Riley and Manson, 1983:349). Riley, on the basis of historical, anthropological and botanical evidence revolving around linguistics, argued that the location of Chichiltacale was at one of two probable locations: one on the lower Salt River, the other on the upper Gila River (Riley, 1985:153).

FROM THE DESPOBLADO TO CIBOLA: THE ARIZONA-NEW MEXICO RIDDLE

Having crossed the despoblado, the anonymous writer of the *Relación del Suceso* (Hammond and Rey, 1940:284) commented that “the entire route up to within fifty leagues of Cibola is inhabited, although in some places at a distance from the road.” This and other commentaries by the members of the expedition are open to interpretation. The route to Cibola from the despoblado is fraught with a dearth of information leaving the researcher often with little more than his imagination. The most accepted route of the expedition through Arizona is that proposed by Herbert E. Bolton. Since 1949, the Bolton route has gained in venerability, partly because of his scholarly influence and partly because his field research almost rivaled that of Francisco Vázquez de Coronado’s epic march across a large portion of North America. Bolton built on the work of earlier researchers, and was probably influenced, although he denied it, by A. Grove Day’s work which was published in 1940.

Day favored the Sonora Valley as a probable point from which Arizona was reached. Furthermore, he opted for the San Pedro River route, specifying that Vázquez de Coronado had entered Arizona through a plain extending to the headwaters of the San Pedro River near present-day Naco. Somewhere near there, he explained, was the point of departure for crossing the despoblado. Day went on to propose that the expedition crossed the Gila and Salt Rivers by means of an old Indian trail, and then proceeded through the White Mountains to the upper drainage of the Little Colorado near St. Johns to the Zuni River. Although Day did not

specifically tell how the expedition crossed the area, he deferred to the work by Sauer and Winship for his information.

Like Day, Bolton relied on Winship and other sources to define his proposed route which he then set out to prove through his fieldwork. Generally, Bolton's route has the expedition leaving the traditionally mentioned Compostela to Culiacán where they followed the coastal plain, veering northeastward between the Gulf of California and the Sierra Madre Occidental crossing rivers until they reached the Sonora River valley. From there, deduced Bolton, they entered Arizona through the San Pedro River Valley. The Bolton route placed the expedition's point of departure through the despoblado near Benson, Arizona, from where it marched northeast through the Galiuro range and crossed the Arivaipa valley, passing through Eagle Pass between the Pinaleno and Santa Teresa mountains. The line of march through the despoblado ran along the Gila River, crossing it at present-day Bylas, after which it forded the Salt River near Bonito Creek. Next, Bolton proposed that they continued northward, crossed the White River near Fort Apache, and ascended the Mogollon Rim by following small streams before emerging on the Little Colorado River near its confluence with the Zuni River. Shortly, the expedition reached Hawikuh (Bolton, 1949:108-117).

The route has been accepted by some historians, modified by others and contested by yet another group of researchers who offer their own conclusions markedly different from Bolton's. Researchers, namely R.M. Wagstaff, have criticized the Bolton proposal by noting that the distances traveled by the expedition do not conform to Bolton's conclusions. Also, Bolton's identification of rivers, which often appear to be juxtaposed to fit the narrative are misleading. Although Wagstaff did not adequately support the discrepancies he cited, DiPeso attempted to propose an alternative route in which he accounted for rivers and distances.

Employing the same methodology as he had on the rivers in Sonora, DiPeso suggested that the expedition traveled from Antelope Pass to Cibola, meandering in and out of Arizona and New Mexico until they reached Cibola. DiPeso argued that from Antelope Pass the expedition crossed into New Mexico, then veered northwest into Arizona passing present-day Duncan, Guthrie, and Clifton northward beyond the San Francisco River to Stray Horse Creek which it crossed following the Blue River into New Mexico. Passing through Luna, New Mexico, DiPeso's proposed route placed the expedition near Spur Lake from where they followed a line, almost straight north across Carrizo Wash and beyond the west side of Zuni Plateau to the Zuni River before reaching Cibola (DiPeso, 1974:102).

Preceding Bolton, Carl Sauer's interpretation of the route through Arizona is traced from the San Pedro River to a point north of Benson, around the Galiuro mountains into the upper basin of Arivaipa Creek north to the Gila River by way of Eagle Pass between the Pinaleno and Santa Teresa ranges. Following the San Carlos River, the expedition turned northeast crossing the Natanes plateau and the Black River to a point on the White River near present-day Fort Apache from where Vázquez de Coronado passed near present McNary. From there, they crossed the Colorado Plateau to the Little Colorado River, thence to the Zuni before reaching Hawikuh (Sauer, 1932:36-37).

Carroll L. Riley and Joni L. Manson retraced the expedition from San Miguel de Culiacán, first through the eyes of the Marcos de Niza preliminary exploration of 1539, then through the sources of the Vázquez de Coronado expedition. Reanalyzing the Niza route of 1539, Riley and Manson concluded that he reached "a settlement called Vacapa in the Altar-Magdalena

drainage of northwestern Sonora” (Riley and Manson, 1983:348). They proposed that Niza had taken the westernmost path through central Sonora, and traveling north, he had entered Arizona “at some point in the lower San Pedro or perhaps Santa Cruz valley” (Riley and Manson, 1983:348). Also in 1539, Melchior Díaz led a scouting party from Culiacán to northern Sonora and “the ruin of Chichilticale in southern Arizona or New Mexico, but did not try to cross the mountains to Cibola.” (Riley and Manson, 1983:349). The two events influenced the route Vázquez de Coronado would take north to Chichilticale. After leaving Culiacán, suggest Riley and Manson, Vázquez de Coronado retraced Díaz’s inland route, passed Corazones, the valley of Senora and Chichilticale.

Although Riley and Manson do not offer detail regarding this portion of the route, they proposed two routes leading through Arizona to New Mexico. The first route is based on a series of aboriginal trails that served as a “great trunk road that linked Cibola-Zuni—and through it, all the Southwest—with Mesoamerica. A second great route tied Cibola to Tusayan and eventually to the Pacific coast. The southern trunk road has long been called the Camino Real. Several sections of the route are uncertain; it has been argued, for example, that in Sonora major trails ran through the Sonora valley, the Yaqui valley or both.” (Riley and Manson, 1983:350). They cautioned the reader regarding the route of the southern portion of the “great trunk road” through Arizona to New Mexico: “No agreement exists as to the route of the Camino Real in the upper Southwest, although it undoubtedly terminated at Cibola.” (Riley and Manson, 1983:350). The point made by Riley and Manson is that the existence of these trails was known to the Indian guides of Niza, Díaz and Vázquez de Coronado and that they are the key to understanding where the expedition entered Arizona and subsequently influenced the direction taken after Chichilticale, as well as the route the Spaniards took after they had established themselves at Zuni.

As a result of their study regarding the “great trunk road,” Riley and Manson clarify that the valleys of the Santa Cruz River, the San Pedro River and the San Bernardino River were part of this major Mesoamerican trade route which was also utilized by explorers associated with the expedition of Vázquez de Coronado. By defining the corridors of the “great trunk road,” Riley and Manson narrow down two possibilities: the first running from San Pedro River valley, north to the Gila River, across the Salt River and the Little Colorado to the Zuni River and beyond to Zuni, and the second, following a line proposed by DiPeso from the San Bernardino River valley to the southeastern corner of Arizona, thence into New Mexico where the route meanders in and out of Arizona and New Mexico until it reaches the Zuni River and then to Zuni (Riley and Manson, 1983:352).

ZUNI TO TIGUEX ON THE RIO GRANDE

In late summer of 1540, Vázquez de Coronado ordered Hernando de Alvarado to go east and investigate what villages lay before them and to see the land where the *cíbolo* or buffalo roamed. With a small contingent of men and Indian guides, Alvarado set out. Of this leg of the expedition, he wrote:

We set out from Granada [Zuni] toward Coco [Acoma] on Sunday, August 29, 1540....After marching two leagues we reached an old building resembling a

fortress; a league farther on we found another one, and a little farther on still another. Beyond them we came to an old city, quite large....Half a league farther on, about a league from the latter, we found the ruins of another city. Its wall must have been very good, about an estado high, built of very large granite stones, and above this of very fine hewn blocks of stone.

Two roads branch out here, one to Chiah [Zia], the other to Coco. We followed the latter, and reached the said place, which was one of the strongest ever seen, because the city is built on a very high rock (Hammond and Rey, 1940:184).

Alvarado's statement is the first view of the route from Zuni to Acoma to the Rio Grande. However, it also includes a number of perplexing details, especially those related to time and distance traveled as well as the descriptions of ruins along his route.

Having established their thesis regarding the "great trunk road," Riley and Manson marshalled all the archaeological and documentary evidence at their disposal to establish a route from Zuni to the Rio Grande. Their hypothesis is that the expedition followed the best-known route of the protohistoric period in the upper Southwest: the complex trunk route that ran from Zuni to the Tiguex pueblos of the Rio Grande (Riley and Manson, 1983:351). Following this route, Alvarado was able to reach Acoma, via El Morro and the Malpais. However, Riley and Manson questioned the distances mentioned by Alvarado. They wrote:

If Alvarado left from Hawikuh (Granada), he reached the Chia or Zia road after four leagues plus "a little farther," a distance of about fifteen miles. If he went east from Hawikuh, perhaps working his way through the Plumasano wash area, he would have reached no farther than about the line of modern New Mexico State Highway 32. There are ruins in this area, especially along the ridge that runs south of Ojo Caliente, but nothing as impressive as those described. If Alvarado marched north and east, toward the main Cibolan settlements, fifteen miles would have brought him the Halona area. Most likely the Alvarado party was measuring not from Hawikuh but from the Cibolan towns around Dowa Yallane. In such a case, the four to five leagues would put Alvarado in the Ramah area where, at a later time the trail forked, one route going to El Morro and onward to Agua Fria Spring and to Acoma, more or less following the line of New Mexico Highway 53. There are ruins in this general area, although Alvarado's descriptions seem exaggerated. The other route crossed the Zuni Mountains and Agua Fria Canyon and proceeded down Zuni Canyon to present-day Grants. The fork in the trail could have been as far west as Pescado or as far east as El Morro. Actually, these routes do not lead respectively to Zia and to Acoma, for they join a few miles east of Zuni Canyon where a break in the malpais occurs. Thus, it seems reasonable that Alvarado with his mounted Spaniards and perhaps a cart or two may have preferred the flatter and easier road past the mouths of Agua Fria and Bonito

Canyons. The Indians, on the other hand, may normally have used the shorter trail down Zuni Canyon (Riley and Manson, 1983: 355-356).

Meanwhile, Vázquez de Coronado departed Zuni, taking a different route than that of Alvarado. The documentary references are vague, however; Riley and Manson speculate that it is likely he veered to the southeast to visit Tutahaco, possibly near Socorro, although its location is also in dispute. By analogy with later expeditions, they suggest the possibility that Vázquez de Coronado may have swung south and east from El Morro to a point near Socorro by way of Techado Mesa and Pietown, or may have detoured toward present-day Datil (Riley and Manson, 1983:356).

A. Grove Day suggested that the expedition may have swung through Ceboletta Canyon and followed the San José River to reach Tutahaco, which he describes as a Tiwa province in the vicinity of Isleta on the Rio Grande (Day, 1940:353). From there the general consensus is that he traveled up the Rio Grande to rendezvous with the rest of the army which had set up winter quarters near present-day Bernalillo.

VAZQUEZ DE CORONADO'S TIGUEX: THE BERNALILLO CAMPSITE

Identification of Vázquez de Coronado's winter campsite of 1540-1541 is part of the long list of unresolved locations of the expedition. The documentary sources state that the expedition occupied the pueblo of Coofer or Alcanfor (Hammond and Rey, 1940:326-347). The exact location of Coofer is unknown. Riley suggested that it was on the west bank of the Rio Grande (Riley, 1981:207). However, Bradley J. Vierra throughout the summer of 1986 excavated a site (LA54147) west of Santiago Pueblo in which 16th century Spanish colonial artifacts were identified (Vierra, 1986), leading to the speculation of a possible campsite related to the Vázquez de Coronado expedition. Vierra was careful to state that the site was clearly 16th century Spanish colonial without specifying which expedition may be associated with it.

The Tiguex province sites have never been positively identified and much speculation surrounds their locations. Riley suggested that the prehistoric pueblo of Puaray/Arenal may be the archaeological site LA 717 or LA 677 on the open, flat land near the east bank of the Rio Grande. He also proposed that Alcanfor or Coofer may be Kuaua or that it may possibly be Bandelier's Puaray (LA 326) almost two and a half kilometers south of Kuaua on the west side of the river from present Bernalillo. Riley further speculated that Alameda lay between Alcanfor and Arenal (Hammond and Rey, 1940:335 and Riley, 1981:206). Basing his conclusions on later expeditions, Charles Wilson Hackett suggested that Alameda was on the west bank (Hackett, 1915:391).

The events surrounding the expedition's stay along the Rio Grande are well known. Although mistrust of Spanish intentions among the Tiwa was evident because of events at Pecos and Zuni, the cold winter weather was a factor resulting in the Tiguex war of 1540-1541 (Sanchez, 1988:13). The ill feeling was aggravated by Vázquez de Coronado's desire to gather clothing to distribute among his men as cold weather with snow and wind occurred. For that purpose he requested that the Indians furnish "three hundred or more pieces of clothing" which the Spaniards needed to keep warm. The attacks on Moho, Arenal and several other villages in

Tiguex province by Vázquez de Coronado's men did not go unnoticed by Spanish officials who investigated the matter after the expedition had returned to Mexico.

FROM TIGUEX TO PECOS AND BEYOND, SPRING 1541

Although the Spaniards had traveled from the Rio Grande to Pecos several times, no clear route to it is mentioned. One may speculate that they traveled from Tiguex to the Galisteo Pueblos, which they had explored previously, then northeast to Pecos, or that the expedition marched north along the Rio Grande to Quirix, that is, the Keresan Pueblos south of present La Bajada, picking up supplies there before veering east around the Sangre de Cristo Mountains and then to Glorieta Pass to Pecos. In preparation for leaving Tiguex, Vázquez de Coronado did send his men north along the Rio Grande to collect supplies and one detachment west as far west as Zia Pueblo for provisions (Bolton, 1949: 234-239).

The route from Tiguex to Galisteo was known. Castañeda described it thus: "Between Cicuye [Pecos] and the province of Quirix [Keres] there is a small, strong pueblo, which the Spaniards named Ximena, and another pueblo, almost deserted, for only one of its sections is inhabited. This pueblo must have been large, to judge by its site, and it seemed to have been destroyed recently. This was called the town of Los Silos, because big maize silos were found in it." (Hammond and Rey, 1940:257). The Spaniards were aware of warfare between the various pueblos and their Plains tribes enemies. As best they could determine, the Spaniards learned that a large body of Teyas had besieged Cicuye sixteen years previously but could not take the powerful pueblo. Just beyond Los Silos the Spaniards found another large pueblo completely destroyed. "The patios," wrote Castañeda, "were covered with numerous stone balls as large as jugs of one arroba. It looked as if the stones had been hurled from catapults or guns with which an enemy had destroyed the pueblo." (Hammond and Rey, 1940:258).

Bolton suggested that the first phase of the march was covered in four days between Tiguex and Pecos. They went, he wrote, "north up the Rio Grande, around the end of Sandia Mountains, and eastward through Galisteo Valley, passing the famous turquoise mines. On the way they noted several towns similar to those of Tiguex, some of whose ruins are still to be seen today. The first pueblo, reached after one day's travel, had about thirty inhabited houses. Coronado stopped here in passing, embraced the chief, and instructed the people to tell their neighbors to remain quiet in their homes...the implication is that these people had joined in the Tiguex rebellion but were now forgiven." (Bolton, 1949:239). Next they passed through Los Silos, evidently picking up corn from its storage rooms, before proceeding north. Bolton suggested they went northeast "presumably through Lamy Canyon and Glorieta Pass, or perhaps more directly over the mountains, to Cicuique, or Pecos." (Bolton, 1949:240). Juan de Jaramillo corroborated the itinerary, writing, "After leaving this settlement and the river, we passed two other pueblos whose names I do not know, and in four days we came to Cicuique...this route was to the northeast" (Hammond and Rey, 1940:300).

That they went to Pecos and camped there is a given. Castañeda's description of the pueblo has become a classic statement. Of it he wrote:

Cicuye is a pueblo containing about 500 warriors. It is feared throughout that land. It is square, perched on a rock in the center of a vast patio or plaza, with

its estufas. The houses are all alike, four stories high. One can walk on the roofs over the whole pueblo, there being no streets to prevent this. The second terrace is all surrounded with lanes which enable one to circle the whole pueblo. These lanes are like balconies which project out, and under which one may find shelter. The houses have ladders to climb to the corridors on this terrace. These corridors are used as streets. The houses facing the open country are back to back with those on the patio, and in time of war they are entered through the interior ones. The pueblo is surrounded by a low stone wall. Inside there is a water spring, which can be diverted from them. The people of this town pride themselves because only one has been able to subjugate them, while they dominate the pueblos they wish. The inhabitants [of Cicuye] are of the same type and have the same customs as those in the other pueblos. The maidens here also go about naked until they take a husband. For they say that if they do anything wrong it will soon be noticed and so they will not do it. They need not feel ashamed, either, that they go about as they were born (Hammond and Rey, 1940:257).

Castañeda did leave some clues with reference to the geographic perspective regarding New Mexico's location and how far they had traveled to that point. Given his knowledge of the Sierra Madre Occidental and the Sierra Madre Oriental, he believed that the Sierra Madre Occidental curved westward following the configuration of the coast and that possibly the two ranges widened out to the north, and within them lay the Great Plains. Castañeda recorded his observations as follows:

We have already told of the terraced settlements, which, it seems, were located in the center of the cordillera, in the most level and spacious portion of it, for it is 150 leagues across to the plains located between the two mountain ranges. I refer to the one along the North sea and the one on the South sea, which on this coast could be more properly called West sea. This cordillera is the one at the South sea. Thus to better understand how the settlements I am describing extend along the middle of the cordillera, I will state that from Chichilticale, which is the beginning of this stretch, to Cibola, there is a distance of eighty leagues. From Cibola, which is the first pueblo to Cicuye, which is the last one on the way across, is seventy leagues; from Cicuye to the beginning of the plains it is thirty leagues. Perhaps we did not cross them directly but at an angle so that the land seemed more extensive than if it had been crossed at the center. The latter route might have been more difficult and rough. One can not determine this very clearly because of the bend which the cordillera makes along the coast of the gulf of the Tizon river (Hammond and Rey, 1940:260-261).

Having departed Pecos led by Indian guides who hoped to lose the expedition in the wilderness before them, the Spaniards proceeded for several days until they reached a river "we Spaniards called Cicuique," wrote Jaramillo. Castañeda reported that the Spaniards "traveled in

the direction of the plains, which are on the other side of the mountain range. After four days' march, they came to a deep river carrying a large volume of water flowing from the direction of Cicuye. The general named it the Cicuye River." How the expedition reached the Pecos River is unknown.

Bolton suggested that Vázquez de Coronado left Pecos Pueblo, "situated on an arroyo tributary to Pecos River" (Bolton, 1949:242), and followed a route paralleling the present-day highway to Las Vegas. Descending the valley, the expedition kept Glorieta Mesa to its right. On their left was the Pecos River. Passing past present-day Rowe, speculated Bolton, the expedition proceeded to present-day San José before reaching the Pecos River where today's highway crosses it. From there, the expedition followed the river downstream, past present-day Ribera, San Miguel, Pueblo and Villanueva. They proceeded along this route until they reached Anton Chico, where Vázquez de Coronado ordered a bridge to be built across the Pecos River. Once across the river, the expedition began a new phase of their search for Quivira which, they supposed, was on the Buffalo Plains.

THE SEARCH FOR CORONADO'S BRIDGE

"If I remember correctly, it seems to me that to reach this river, at the point where we crossed it, we went somewhat more to the northeast. Upon crossing it we turned more to the left, which must be more to the northeast, and we began to enter the plains where the cattle roam," wrote Jaramillo (Hammond and Rey, 1940:300). Was Jaramillo mistaken about the direction of march? Could it have been a slip of memory or a typographical error in transcription by the 16th century copyist? Other accounts of the expedition such as the *Relación del Suceso* (See Hammond and Rey, 1940:289) clearly state that the line of march was southeast. The error, if indeed it is one, has confounded historians and searchers for Coronado's bridge for over a century.

Working with great dedication for eight years to determine the route from Pecos Pueblo to the Pecos River, Richard and Shirley Flint have proposed an alternative to the Bolton hypothesis. Thoroughly analyzing primary and secondary sources, the Flints have discounted many other hypotheses regarding the route to the Pecos River. With great methodological skill, they examined the hypotheses advanced by proponents of the following bridge sites: the Rio Grande, the Gallinas River, the Canadian and the Pecos Rivers (Flint and Flint, 1990:6). Their assessments of the various hypotheses are based on four critical elements: the location of Cicuye; the direction of the expedition's line of march from Cicuye; the distance of march to the Rio de Cicuye's bridge site; and the identity of the Rio de Cicuye (Flint and Flint, 1990:8).

In regard to the Rio Grande hypothesis, the Flints immediately discounted it because it is obviously the wrong river (Flint and Flint, 1990:6). It is, however, worth mentioning Brackenridge's proposal because it represents part of the historiography of the search for the bridge. As early as 1857, wrote the Flints, H.M. Brackenridge suggested that the Pecos River was bridged "probably above Taos." The Brackenridge suggestion was mistaken in regard to the location of Cicuye and the line of march and the river. Likewise, the Flints discounted the Gallinas River hypothesis because of its lack of documentary support.

In 1871, H. Simpson suggested that the bridge was located along the Gallinas River, at or near Las Vegas, New Mexico, about 50 miles from Pecos Pueblo, and in 1916, Michael Shine

proposed that it was constructed on the Gallinas River at or near Chaperito, New Mexico, over 45 miles from the pueblo. Based on topographic criteria, the Flints concluded that the Gallinas River hypothesis could not be supported because it was based on the wrong direction of march and therefore on the wrong river (Flint and Flint, 1990:6).

The Canadian River hypothesis held better hope, but after examining several proposals, the Flints discounted its possibility. For example, Adolph F. Bandelier in 1893 proposed the Canadian River as a candidate; and George P. Winship in 1896 suggested the Canadian River “a little to the east of the present river and settlement of Mora.” Both scholars estimated that the bridge was constructed somewhere over 75 miles from Pecos Pueblo. In 1962, Albert Schroeder reconsidered the Bandelier and Winship hypotheses and determined that the bridge could have been constructed on the Canadian River near Conchas Dam, New Mexico. Based on the direction of march taken by the expedition and the great distance and terrain covered, the Flints felt that the Canadian River theory did not fit the distance criteria established by the expedition’s chroniclers (Flint and Flint, 1990:6).

The Pecos River hypothesis has the best possibilities, but the Flints are cautious because of the distance factor. For example, Frederick S. Dellenbaugh, in 1897, proposed a Pecos River crossing near Roswell, New Mexico. However, the information he used was erroneous. He had mistakenly placed Cicuye at Nogal, 15 miles northwest of Fort Stanton in southern New Mexico. A more reasonable proposal was advanced by Frederick W. Hodge in 1899, namely, that Pecos Pueblo was the beginning point, with a line of march in a southeasterly direction and a distance of 75 to 80 miles. Hodge proposed that the crossing was made on the Pecos River at or a little south of Puerto de Luna, New Mexico. And Carl Sauer supported that claim, suggesting that the expedition descended the west bank of the Pecos River, made its crossing at Puerto de Luna and turned east across the Llano Estacado (Sauer, 1932:page). In 1944, W.C. Holden took a middle-of-the-road approach in support of the army’s southeastern direction from Pecos Pueblo, but concluded that the bridge was constructed north of Santa Rosa (Holden, 1944:7). In one part of his analysis, he wrote, “It is probable that the bridge was built at Anton Chico.” (Holden, 1944:7). Later in his study, he alluded to the expedition having passed “not very far north of Santa Rosa,” and started across the plains to the east of there. “It is our opinion,” continued Holden, “that Coronado stayed on the Llano Estacado from Santa Rosa to the Querecho village.” (Holden, 1944:9). Thus he proposed a route from Pecos Pueblo to the High Plains via the Pecos River by following a line along the west side of the Pecos River valley to Anton Chico where the Spaniards built a bridge. Once across the river, Holden suggested that the expedition proceeded in an east-southeast direction paralleling the river on its east side until it reached the vicinity of Santa Rosa. Before it reached Santa Rosa, the expedition veered to the east and reached the High Plains at Frio Draw to the south of Tukumcari.

In 1937, Paul A. Jones supported the Pecos River crossing but made no determination as to its location other than suggesting that the bridge was constructed 40-50 miles from Pecos Pueblo. He did, however, support a southeasterly line of march (Jones, 1937:46). Bolton (1949:242-243) corroborated the Pecos River hypothesis and placed the crossing at 45-50 miles near Anton Chico, New Mexico. Although Hodge, Jones, Holden and Bolton appear correct in their conclusion that the direction of march was southeast, the Flints concluded that Hodge went too far; Jones is too vague; they expressed no opinion on Holden; and they surmised that Bolton

had the expedition meeting the river too soon, though his is the most likely of the previous hypotheses (Flint and Flint, 1990:6).

In summary, they advanced a new theory, as follows:

Upon leaving Cicuye in the first week of May 1541, the Coronado expedition proceeded south to the area of modern Rowe, New Mexico. At that point they ascended a relatively gentle natural ramp onto Glorieta Mesa. Following the drainages of the mesa's gently tilted surface, they traveled south and slightly east to the vicinity of modern Leyba, New Mexico, and into Cañon Blanco. The canyon then served as a roadway all the way east to its junction with the Pecos River. The army then followed the river east and slightly south to its confluence with the Gallinas River. Not far downstream from there (roughly 65 miles southeast of Cicuye) a bridge was built across the Pecos River and the whole company of people and animals crossed over.

The Flints convincingly put forward their hypothesis based on agreement with the Pecos River proponents. Their suggestion is that the bridge was built below La Junta. They agree that Cicuye is Pecos Pueblo; that the Rio Cicuye is the Pecos River; that the line of march is southeasterly; that the distance of march is between 47 and 73 miles; that the expedition ascended Glorieta Mesa by way of Rowe Rincon because it is the easiest egress from the Pecos Valley and the only easy way out before cliffs close in enough to force traffic to the river; and that Cañon Blanco offers the best likelihood of water and pasturage for the large herds in the expedition (Flint and Flint, 1990:10).

WITH THE MAIN ARMY FROM THE BRIDGE ON THE RIO DE CICUYE TO THE LLANO ESTACADO AND BACK

Having crossed the bridge, which could have been anything from an actual wooden structure to a low water crossing, the expedition traveled four or five days to where they encountered large herds of buffalo. Bolton concluded they went "eastward across a wide plateau broken by boldly scarped mesas sprinkled with scrub juniper, cactus, and other desert plants." (Bolton 1949:243). Jones contended that "the route did turn to the northeast but the Turk, chief guide, kept bearing more to the east and finally turned to a southerly direction (Jones, 1937:46). Bolton's route had the expedition moving northeasterly for a distance of a hundred miles or more along the southern drainage of the Canadian River until they reached the Texas Panhandle.

The Bolton route, in modern times, led north after the expedition crossed the Pecos River but turned eastward following the Rock Island Railroad line and Highway 54-66. The expedition entered the Pajarito Creek basin by way of Cuervo near Newkirk. Near there they could see the rampart-like cliffs for which the Llano Estacado or Palisaded Plain is named. "They were called Stockaded Plains," wrote Bolton, "from the rim-rock which at a distance looks like a stone fortification. The usual explanation about driving down stakes to avoid getting lost, is an engaging folk tale." (Bolton, 1949:243). The expedition was within sight of Tucumcari Peak.

The caprock and its canyonlands comprise the notable features of the Llano Estacado. Of the intriguing formation, Dan Flores wrote, “The old-time New Mexicans had a saying: ‘Hay las sierras debajo de los llanos’—There are mountains below the plains. Modern travelers crossing the Southern Plains on the interstates from Oklahoma City to Albuquerque or San Antonio to Santa Fe might doubt it, but the New Mexicans were right. Below the level of the flat horizon, great canyons carve mesas and buttes, spires and badlands through the architecture of the Llanos of West Texas and New Mexico.” (Flores, 1990:ix).

Through Spanish colonial eyes, Castañeda wrote:

Now we shall describe the plains, a vast level area of land more than 400 leagues wide in that part between the two cordilleras. The one was crossed by Francisco Vázquez de Coronado on his way to the South sea, the other by the men of Don Fernando de Soto when coming from Florida to the North sea. What we saw of these plains was all uninhabited. The opposite cordillera could not be seen, nor a hill or mountain as much as three estados high, although we traveled 250 leagues over them. Occasionally there were found some ponds, round like plates, a stone’s throw wide, or larger. Some contained fresh water, others salt. In these ponds some tall grass grows. Away from them it is all very short, a span long and less. The land is the shape of a ball, for wherever a man stands he is surrounded by the sky at the distance of a crossbow shot. There are no trees except along the rivers which there are in some barrancas. These rivers are so concealed that one does not see them until he is at their edge. They are of dead earth (son de tierra muerta), with approaches made by the cattle in order to reach the water which flows quite deep (Hammond and Rey, 1940:261).

On the Llano Estacado the Spaniards noticed marks on the ground as if someone had dragged lances through the area. Curious, they followed the lines and came upon a ranchería or settlement of semi-sedentary Indians. The lines were made by the poles mounted on large dogs used in dragging their goods like a travois. The Querechos, Apachean people, were among the first tribes contacted on the Great Plains by the Spaniards. The expedition was, according to Bolton, approaching a point just west of the New Mexico-Texas line “where the trail to Quivira crossed the Canadian River.” (Bolton, 1949:249).

W.C. Holden’s study of the route in 1944 offers a historiographical review of earlier literature about Vázquez de Coronado’s march through the Llano Estacado and beyond. In his critique, he discounted J.H. Simpson’s 1871 route because it is erroneous. Simpson ran the route from Pecos Pueblo in a north-easterly direction crossing the Colorado-New Mexico line near Raton, thence east following a line south of the Arkansas River to present day Kingman, Kansas. There, noted Simpson, Vázquez de Coronado, having been slowed by the large army, picked thirty men to go forward and turned the rest of the army back to the Rio Grande. He then proceeded to the extreme northeastern part of Kansas. The army, contended Simpson, returned through the northwestern corner of Oklahoma and marching in a southwestern direction crossed the Texas Panhandle by way of Hemphill, Roberts, Carson, Potter, Randall and Deaf Smith counties to the Pecos River near Fort Sumner, New Mexico. From there, wrote Simpson, the

army went northwest to a point near Mora, and presumably crossed the mountains to the southwest to Pecos Pueblo (Holden, 1944:4, and Simpson, 1872:336-337).

Holden also questioned the accuracy of Winship's conclusions. Winship argued that the expedition left Pecos Pueblo in a southeasterly direction and crossed the Pecos River ten or fifteen miles south of Fort Sumner. From there, he claimed, the Spaniards crossed Bailey, Cochran, Terry Lynn, Borden, Scurry, Mitchell, Crane, Runnels, and Coleman counties. There the expedition divided, with the main army retracing its tracks and Vázquez de Coronado proceeding north into southern Kansas. Winship, as Holden saw it, concluded that "after making a big circle into north central Kansas, where Quivira was, he returned to Cicuye in a southwesterly direction, keeping the same route that later became the Santa Fe Trail." (Holden, 1944:4, and Winship, 1896:400).

Seeking to support his hypothesis, Holden analyzed one more study. In 1929 David Donoghue suggested that the expedition had gone down the Pecos River on the west bank until reaching Santa Rosa where the bridge was constructed. From there the Spaniards went east onto the Llano Estacado. They passed through Quay county, New Mexico, across the southern portion of Deaf Smith and Randall counties to Tule Canyon in the northeast corner of Swisher county, Texas. At Tule Canyon or Palo Duro Canyon is where the army divided, Donoghue claimed. Of the route taken by the returning army, he proposed that it passed through northwestern Lamar county and Baily county to Fort Sumner and followed the east bank of the Pecos River to the bridge north of Santa Rosa where it crossed to the west bank and continued to Pecos Pueblo.

Meanwhile, wrote Donoghue, Vázquez de Coronado went north from Palo Duro Canyon, traversing western Armstrong and Carson counties into Hutchinson county where he crossed the Canadian River, which the Spaniards called the San Pedro y San Pablo. "Of this much I am certain," wrote Donoghue, "The expedition never left the Llano Estacado; Palo Duro Canyon and its tributaries are the only ravines that fit Castañeda's descriptions; the salt lakes are found only in the southern Llano Estacado: Quivira was on the Canadian, or some of its tributary creeks at the edge of the plains." (Holden, 1944:4-5, and Donoghue, 1929).

Holden declared that Simpson and Winship were in error and that Donoghue had "come closer to the truth," but disagreed with him on the location of Quivira. Still Holden was concerned with the route of the army after it crossed the Pecos River. Curiously, he remarked, "The New Mexico highway markers indicate that the army crossed the Pecos at Puerto de Luna, eleven miles south of Santa Rosa, and went northeast, keeping just north of the caprock, going by Montoya, Tukumcari, and San Jon and climbing onto the Llano Estacado near Glenrio about the Texas-New Mexico line. This route would have been practically the same traversed by Highway 66, and New Mexico has placed markers along the highway indicating that such was Coronado's route. Recently we went over this route, checked the topography against the accounts and were unable to find any evidence to support the claims." (Holden, 1944:10). Although the expedition crossed through the general area, it would be inaccurate to claim that the route was the same as the present highway. By the same token, it would be inaccurate to deny that the army passed somewhere within a corridor in the area 20 miles wide on either side of the highway.

Once across the New Mexico-Texas line, the expedition crossed the Canadian River, the stream whose tributaries they had been following (Bolton, 1949:249; Holden, 1944:14). Holden states that "the Spaniards crossed streams like the Canadian without being impressed" (Holden,

1944:14). Castañeda explained that “from there the general sent Don Rodrigo Maldonado ahead with his company; he traveled four days and came to a large barranca like those of Colima. At its bottom he found a large ranchería with people.” (Hammond and Rey, 1940:237). However, traveling to the second Querecho ranchería, the expedition appears to have left the Canadian River route. Holden concluded that “with the possible exception of the bridge on the Cicuye river, the most pivotal landmark mentioned in all of the original accounts was the ‘ravine like those of Colima.’” (Holden, 1944:13). Similarly, Bolton aptly stated, “The location of this second Querecho village was pivotal in the whole story of Coronado’s march to Quivira and back.” (Bolton, 1949:250).

Although most scholars agree that the expedition was following the southern branch of the Canadian River drainage, the question of the canyonlands presents another riddle concerning the line of march. The route across the Llano Estacado led to a series of canyons. Were these canyons along the Canadian River drainage as suggested by Albert Schroeder (1962:3) or were they, as proposed by H.E. Bolton (1940:237) part of the Red River system? Had the expedition entered the ravines near the Canadian Breaks? Or was the expedition in the Tule Canyon-Palo Duro Canyon system? If so, at which point did they leave the Canadian River and its tributaries?

THE TULE CANYON-PALO DURO CANYON HYPOTHESIS

Part of the Texas Panhandle is so flat, it is possible to pass through the area and not see the great canyons of the Red River. There are no mountains and very little relief to betray their presence. The canyons lie below the horizon so that they do not come into view until the traveler is upon them. Members of the expedition who were separated from the main force had to find the canyons by looking for the upper and lower ends of the canyon where the camp was located. Castañeda relates an episode in which a scouting party under Captain Diego López, who had been reconnoitering an area to the east of the main army’s camp just across the New Mexico-Texas line, approached a buffalo herd running in front of them. “As the animals were running away and jostling against one another,” wrote Castañeda, “they came to a barranca, and so many cattle fell into it that it was filled and the other cattle crossed over them. The men on horseback who followed them fell on top of the cattle, not knowing what had happened. Three of the horses that fell, disappeared, with their saddle and bridles, among the cattle, and were never recovered.” (Hammond and Rey, 1940:236). The incident apparently occurred not too far east of the New Mexico-Texas line.

In his book *Caprock Canyonlands* (1990), Dan Flores described the labyrinth formations of the Red River. He wrote: “Palo Duro Canyon is the main canyon of the Red River, but there are several others. Immediately to the north along the escarpment is Mulberry Canyon and beyond it the sand-filled valley of the Salt Fork of the Red. Wind-drift sand softens and inundates the escarpment line beyond so that of the Red River drainages that come off the Llano here only McClellan Creek furrows deeply enough to create a rock-walled canyon...Along the south wall of Palo Duro an eagle’s-eye view would reveal three canyons so large and distinctive as to have identities separate from Palo Duro. North and South Cita canyons are two. Tule Canyon, a slit 700 feet deep, only a half mile across at the top...is the third. Along the remaining 140 miles of the Caprock Escarpment, four additional canyons carry the waters of the Brazos and the Colorado off the Llano Estacado...Blanco and Yellow House canyons...Double Mountain

Fork canyon of Garza County...Muchaque Valley.” (Flores, 1990:5). Aside from the fifteen canyons in the area, Flores mentions Running Water Draw and Blackwater Draw as the two longest draws on the Llano originating in New Mexico.

The chief proponent of the Palo Duro Canyon route is Herbert E. Bolton. Although Holden, Donoghue, and others assumed earlier that Palo Duro Canyon was the ravine Castañeda mentions, Holden was convinced that the Blanco Canyon site was where the expedition encountered the second Querecho rancheria. His conclusion was as follows:

While the army rested in the ravine, Coronado and a party explored and ‘found another settlement four days from there.’ Four days would have been approximately sixty miles. We may speculate as to where the settlement was. Had he gone east he would have soon been off the Caprock, and looking back would have seen what looked like a long, flat mountain. This we know they did not do, because nowhere did they see a ‘hill or hillock three times the height of a man.’ It is probable that Coronado did not explore to the west, for he had come from that general direction. This leaves the north and the south. In all likelihood the Indian settlement was along a water course. The Canadian river could have been reached within four days by going slightly northwest into Potter county, north of Amarillo. The Blanco could have been reached in the vicinity of Plainview within the time allowed by going south. In our opinion the settlements were on the Blanco for reasons we shall give later...Assuming that the ravine in question was the Palo Duro, the return of the army from there to Cicuye can be traced with considerable accuracy. The landmarks, the distances, and the time element all fit in perfectly. The fact that this part of the route can be plotted so exactly lends to the evidence that the Palo Duro was the ‘ravine like that of Colima.’ (Holden, 1944:14-15)

After the return of Captain López to the main camp, the expedition followed the Querechos eastward for five days, probably in the Canadian River valley (Bolton, 1949:253). Having ascended to the plains from the Canadian River drainage near old Highway 66 west of Vega, Vázquez de Coronado “swung southward, leaving the Canadian River at his back, whereupon Sopete again tried to make himself heard, protesting that the Turk was misleading them and had enlisted the collusion of the Querechos. Quivira was northeast and not south, he insisted.” (Bolton, 1949:253). The army appeared to be headed south from the Canadian River drainage. Suddenly, the army was confronted with the first canyon, a giant slit on the flat terrain and north of there was a second canyon. Bolton proposed that the first barranca (ravine), where they encountered a Teya settlement, was Tule Canyon, east of Tulia near the Swisher-Briscoe counties line in Texas (Bolton, 1949:263), and that the second, deeper one was Palo Duro Canyon.

At Tule Canyon, the Turk was interrogated and the expedition changed its line of march. Within a day’s travel in a northerly direction, the army came to another, even deeper canyon that Bolton declared to be Palo Duro Canyon. It was there, he wrote, that Vázquez de Coronado decided to proceed with a small band of thirty men, while the main army returned to the Rio Grande.

Bolton was convinced he had identified the canyons the expedition had passed through. “Clearly,” he declared, “we must look for the two barrancas in the eastern edge of the Llano Estacado...the First Barranca...was Tule Canyon...[and] Palo Duro Canyon, now a State Park, was and is par excellence the ‘Barranca of the Plains.’” (Bolton, 1949:267). Although Tule and Palo Duro Canyon are impressive, not all scholars are as convinced as Bolton that they are the two barrancas seen by Vázquez de Coronado. Bolton, however, was more concerned with narration than with detail. In regard to the number of days Coronado had traveled between river drainages and ravines, he wrote, “The estimate of the eastward march was remarkably accurate, but for the southward distance it was a little too high, which should be no cause for surprise or censure. Our identification of the historic canyon rests upon topographical data, combined with the distances recorded, and upon contributory items as the story goes forward, that make the conclusion certain.” (Bolton, 1949:257).

Castañeda’s mention of flora in the barrancas is one of the criteria used to question Bolton’s hypothesis. Castañeda wrote, “Thus the army reached the last barranca, which extended a league from bank to bank. A small river flowed at the bottom, and there was a small valley covered with trees, and with plenty of grapes, mulberries, and rose bushes. This is a fruit found in France and which is used to make verjuice [sour grape juice]. In this barranca we found it ripe. There were nuts, and also chickens of the variety found in New Spain, and quantities of plums like those of Castile.” (Hammond and Rey, 1940:239). However, based on different information, J.W. Williams proposed that Palo Duro and Tule canyons were too far west to be the correct barrancas. Arguing that the flora of the area, inclusive of pecans, mulberries, and the date of ripening of wild grapes, had been almost totally ignored in prior studies, Williams wrote,

One of the accounts of the [Hernando] De Soto Expedition told of a ‘walnut’ found in the western part of the Southern States, but the words of explanation clearly described a pecan. Even if the historian of the Coronado trek could have referred to the dime-sized walnut, it should be pointed out that it does not grow in the canyon mentioned—Palo Duro and the others—or in the area that borders them on the east. The dime-sized walnut—except for a few trees on the creeks of Scurry County and a small mott [group] of three trees west of Quitaque—does not reach westward beyond the pecan country. Thus, whether the word means pecans or the small degenerate variety of the Western walnut, the conclusion must be the same—to have reached the area of native nut production, either walnut or pecans, Coronado must necessarily have gone some distance eastward of the Cap Rock of the High Plains. (Williams, 1959:6).

The more he studied the native flora of the region, the more emphatic Williams became. He stated, “Simply, it is this: Coronado reached the pecan country—the native pecans do not grow in Palo Duro Canyon, or Tule, or Quitaque, or in any of the canyons to the south or, with one minor exception, in any of the counties that border these canyons on the east. Coronado had to journey beyond the High Plains to reach the pecan country.” (Williams, 1959:5). Using the Abstract of the 1910 Census and local informants, he examined the counties on the Llano Estacado to determine the number of pecan trees in the area and insisted that Coronado could not

have reached the pecan country unless he travelled at least 200 miles east of the New Mexico line (Williams, 1959:8). Williams' argument would have been stronger had he corroborated his information with paleobotanists who could have informed him of other plants, fruits and nuts as well as climatic changes in the Texas Panhandle during the centuries since Vázquez de Coronado passed through the area.

In regard to Castañeda's observation that the expedition found a ripe fruit used to make verjuice, Williams concluded that the fruit was a wild grape. He surmised that because it was ripe, the expedition could not have been referring to its springtime march through the Texas Panhandle in April 1541, but to a time when fruit ripens, about August or September. Discovering that in the vicinity of the North Concho, further south than Palo Duro Canyon, wild grapes ripen as early as June, Williams proposed that the expedition having crossed about 200 miles beyond the New Mexico border had followed a southeasterly direction and reached the North Concho River (Williams, 1959:11). Of the geographical perspective, he wrote, "The North Concho might well have been the last ravine, not only because it was the lone point within the pecan country near enough to the Rio Grande to satisfy the known arithmetic of Coronado's journey, but it was far enough south to have been the place where this party of Spaniards could have found ripe grapes." (Williams, 1959:13). He went on to discuss the distribution of mulberry trees in West Texas and again concluded that Vázquez de Coronado had reached the North Conchos River southeast of Sterling City, Texas (Williams, 1959:16). Williams did find an ally in R.M. Wagstaff who also identified the first barranca as the valley of the North Concho or one of its tributaries near Sterling City. Still, Williams' efforts, either for lack of popular visibility or for lack of persuasiveness, were not enough to overcome the Bolton hypothesis that Palo Duro and Tule canyons were the ravines visited by Vázquez de Coronado.

MYSTERIOUS CONA: PLACE OR EVENT?

Although Williams made use of Holden's route from Pecos to Frio Draw, both scholars found themselves at opposite ends of the pole when they discussed the Palo Duro Canyon dilemma. Contrary to Williams' hypothesis, Holden voted for Palo Duro and Tule canyons, basing his proposal on two obvious themes found in the expedition's accounts: the ethnographical evidence and the expedition's consistent ability to find water in the area, presumably within the Texas Panhandle. He argued that both factors are related, in that Indian settlements contacted by the expedition were always near a water source (Holden, 1944:14). He, noted that while the army rested in the ravine, a Spanish party explored the country and located an Indian settlement four days from there. That settlement, he maintained, was that of the Teyas, and Vázquez de Coronado passed through the Teya settlement he called Cona for three days (Holden, 1944:14). It was from the people of CONA that the Spaniards learned that Quivira was far to the north. However, there are no absolutes in history and archaeology. Although most professionals have assumed that Cona was a place, it may have been an event. Of the Teya country, Jane Holden Kelley wrote, "It is possible that the large camp that the Spanish noted was an annual gathering of tribes, rather than a constant concentration of population." (Kelley, 1958:9).

Albert Schroeder disagreed with the Williams, Holden and Bolton theories and presented an impressive argument against them with his proposal that the Canadian River

drainage holds the secret to Vázquez de Coronado's route through the Texas Panhandle. Schroeder's route crosses into the Texas Panhandle a short distance north of the Canadian River. Accordingly, the expedition, moving northeasterly, encountered large buffalo herds as well as Querecho and Teya groups along the line of march. Schroeder noted that at a second Querecho village group, the expedition turned southeast until it reached the first barranca near the 101st meridian in the Canadian River valley. One day's march from there, the Spaniards reached the last barranca, either on the north fork of the Canadian or the Cimmaron River. Somewhere near the far northeastern corner of the Texas Panhandle, Schroeder believed, the expedition left Texas and crossed into Oklahoma on its way to Quivira.

In regard to the location of Teya sites, John Peterson, James Neely, Peter W. Nicholas, and S. Christian Caran (1988:1-133 *passim*.) added credence to the Schroeder proposal in their study which centered on Palo Duro Creek (not to be confused with Palo Duro Canyon) which flows from the northwestern part of the Texas Panhandle and then north to its confluence with the Beaver River in Oklahoma. Although they suggested that the Teya encountered by the Vázquez de Coronado Expedition were culturally similar to those at Palo Duro Creek, they did not argue conclusively that the Spaniards met them along the Canadian River drainage.

Schroeder disagreed with the proponents of the Palo Duro Canyon that the "southeasterly" direction of the expedition from the Canadian River drainage means that the Spaniards headed toward Palo Duro Canyon. Indeed, he maintained that the expedition traveled southeast along the Canadian River drainage, "since no change in direction is hinted in the documents and all suggest that the travel from the Querechos to the Teya rancherias was in the easterly or southeasterly direction, it is assumed that these Teya rancherias were four days travel down the Canadian River from the unnamed rancheria." (Shroeder, 1962:30).

All agreed that the expedition had visited the sedentary pueblos along the Rio Grande, the nomadic Querechos of the Southern Plains and had progressed to the sedentary plains village settlements. But precisely where were the specific Indian sites visited by the expedition? Disagreement exists on the location of some of the Rio Grande pueblos visited by the Spaniards as well as the point at which the Querechos were seen by them for the first time. However, the critical location of the Teya villages is even more controversial among historians and archaeologists. Was it the North Conchos? The Red River? Or the Canadian River? The inability of modern man to prove which river drainage the expedition visited leaves the route through the Texas Panhandle in limbo.

THE MAIN ARMY RETURNS TO THE RIO GRANDE

Once Vázquez de Coronado decided that the army on the Great Plains was too large to be supported logistically, he chose thirty men to proceed to Quivira under his command and sent the rest back to Tiguex under Tristan de Luna y Arellano. Arellano's route from Tule Canyon across the Llano Estacado, according to Bolton (1949:273), was almost due west over the treeless plains and salt lakes in the Texas Panhandle. After reaching New Mexico, Bolton surmised, the main army followed the Santa Fe Railroad which passes the salt lakes. Castañeda's account corroborates that by noting, "Along this route they found many salt lakes, for salt abounds there." (Hammond and Rey, 1940:242). Indeed, he mentioned that some of the salt "was crystalline salt."

Tracing the distribution of waterholes or springs in the area, Bolton speculated on the availability of water found by the main army as it meandered its way back. In the South Tule River, Bolton continued, Arellano found fresh water for twelve or fifteen miles beyond the present town of Tulia. More water was found at Running Water Draw, in the Upper Blanco Canyon, and in the North Fork of Yellowhouse Canyon as far as Abernethy. He theorized that Arellano ascended the North Fork of the Yellowhouse and found water at Sodhouse Spring north of Littlefield and at Spring Lake north of Amherst, and in Blackwater Draw at Muleshoe. The main army proceeded, as Bolton hypothesized, to Portales where it found a spring, and then found water again south of Melrose. Just before Arellano entered the valley of Taiban Creek, he descended the western escarpment of the Llano Estacado. Near the present town of Taiban, the main army found Taiban Spring, some fifteen miles from the Pecos River. Arellano crossed the Pecos River, Bolton asserted, seventy five miles below the bridge at Anton Chico that had been built on the outward journey. Castañeda corroborated the point by writing, "On its return the army arrived at the Cicuye river more than thirty leagues below the town—I mean below the bridge which had been built on the trip out." (Hammond and Rey, 1949:243). On this point, Bolton remarked that he was accompanied by George Hammond and that he had consulted W.C. Holden, "who knows the country as well as he knows his own dooryard." (Bolton, 1949:274).

Once on the Pecos River, Arellano marched along its bank and rejoined the outgoing route at the bridge at Anton Chico (Bolton, 1949:274). Castañeda completed the narrative of the route by writing, "Thus, as I have said, the army went up the river until it reached the pueblo of Cicuye. They found it unfriendly, for the inhabitants would not come out peacefully nor furnish any aid in the way of provisions." (Hammond and Rey, 1940:243). From there, the main army returned to the Rio Grande by way of Galisteo, retracing their line of march followed on the outgoing trip.

There is one perplexing afterthought. It concerns the escape of an Indian woman in the barranca country when the main army under Arellano was returning from its easternmost point. Of that event, Castañeda wrote, "During this trip a painted Indian woman ran away from Juan de Zaldivar. She fled down the barrancas when she recognized the land, for she was a slave at Tiguex where they had obtained her. This Indian woman had come into possession of some Spaniards from Florida, who had penetrated as far as that region in their explorations. I heard our men say when they returned to New Spain that the Indian woman told them that she had fled from the others nine days before, and that she named the captains." (Hammond and Rey, 1940:243). It happened that Luis de Moscoso, who had taken over the leadership of the expedition to Florida (1539-1543) after the death of Hernando de Soto, had attempted to find Vázquez de Coronado and had reached the eastern end of the Red River in Texas. Could it be that this reference corroborates the hypothesis that the barrancas mentioned are Palo Duro and Tule canyons on the Red River?

NORTH BY THE NEEDLE THROUGH TEXAS AND OKLAHOMA

Because of great disagreements among scholars about where the main army separated from the "chosen thirty," it is difficult to know where Vázquez de Coronado's starting point was when he departed for Quivira. Without that crucial and pivotal information, no one can determine the direction and distance traveled to Quivira. A wide arc on the map could place

Quivira in Central Kansas near Lyons as some have suggested, or as far east as the vicinity of Tulsa, Oklahoma.

Vázquez de Coronado and his men reckoned distances and directions on the Great Plains by various methods. Often using the rising or setting sun as a guide, Vázquez de Coronado traced his direction towards it with a sea-compass (Hammond and Rey, 1940:236). Sometimes they marked their trail with bones and cow-dung so that they could follow each other when they got separated (Hammond and Rey, 1940:237). At one point they learned how Plains Indians had determined their direction. "Their method of guiding was as follows:" noted Castañeda, "early in the morning they watched where the sun rose, then, going in the direction they wanted to take they shot an arrow, and before coming to it they shot another over it, and in this manner they traveled the whole day until they reached some water where they were to stop for the night." About the expedition's way of determining distance, Castañeda wrote that "a man had been detailed to make the calculations and even to count the steps." (Hammond and Rey, 1940:240). It is the "sea-compass" that Vázquez de Coronado possessed that has been the subject of much speculation about the leg of the route from the "barrancas" to "Quivira."

A sample of opinions by scholars who have been obsessed with finding the route from the "barrancas" to "Quivira" is enough to show the disparity of thought on the subject. Relying on Van Bemmelen's 1600 chart, Wagstaff suggested that the magnetic declination in 1541 was approximately "0," and if so, then Vázquez went due north. He employed an interesting, yet convincing methodology. Basing his argument on a "reversal of calls from a known point," he backtracked from an identified point, the Great Bend of the Arkansas River, and concluded that the north from another identified point in the south proved the "by the needle hypothesis" was correct. Hodge reached a similar conclusion by drawing on his map a straight line from the North Conchos River to Quivira. A. Grove Day ran the route from the Texas border near the Canadian River, thence southward to the great ravines on one of the upper branches of the Brazos River in Texas. Leaving the main army there, Day speculated that Vázquez de Coronado and the "chosen thirty" proceeded northward along the 100th meridian (Day, 1940:247). In support of Hodge's proposal, Frank Hill (1936:35-44) hypothesized that the expedition reached the Concho River before heading due north. Frank Bryan (1940:21-37), like Donoghue, however, presumed that the expedition had gone north to Blanco Canyon where the main army was sent back, then the "chosen thirty" went north to Quivira which was someplace in northern Texas. John Peterson proposed that Vázquez de Coronado followed a northeasterly direction towards Kansas, based on a magnetic declination of 10 to 12 degrees from true north indicating that the Spaniards followed Wolf Creek between the Canadian and Palo Duro Creek (Peterson, 1988:30). W.H. Stephenson (1926:64-84) believed that he left the main army near the junction of Duck Creek and the Salt Fork in Kent county and traveled due north, crossing the Canadian River near Amarillo and then went north to the Great Bend of the Arkansas. Albert Schroeder (1962:2-23) proposed that the expedition entered the Texas Panhandle north of the Canadian River, and moved northeast where they encountered the Querecho. At the second Querecho village, the expedition veered southeast until it reached the first barranca in the Canadian River valley near the 101st meridian, thence to the last barranca one day's march from there on the north fork of the Canadian or the Cimarron rivers where the main army returned. The "chosen thirty" left Texas, according to Schroeder, near the far northeastern corner of the Panhandle.

However, no one will ever know whether Vázquez de Coronado and his “chosen thirty” referred to the magnetic north, true north as determined from their “sea-compass,” or a general “northerly” direction of march. As H.E. Bolton had done before her, Diane Rhodes examined the question of the magnetic declination, that is, the deviation between true north and magnetic north, and its un-uniform shifts through time as well as its irregular regional variations. For the early historical period, it is not a precise science. Rhodes, however, concluded that “it appears that the agonic linear line of zero declination in 1600 may have been close to [Vázquez de] Coronado’s route. In general, the magnetic declination in the southwestern United States during the period between 1400 and 1600 A.D. ranged from about 2 degrees west to 2 degrees east, so an estimate of 0 degrees declination as proposed by Wagstaff is feasible albeit admittedly scientifically imprecise. Archeomagnetic data collected from areas in New Mexico, and dated independently to the 1500s, indicates an average declination of about 4 degrees (east) plus or minus a degree.” (Rhodes, 1990:21). Ronald Ives agreed that the dearth of information regarding magnetic declination was a drawback. He wrote, “Needed for this study is not only a ‘state of the art’ knowledge of magnetic surveying in Spanish times, but also some specific values of magnetic declination at known times and places during this period.” (Ives, 1975:173).

Any conclusion on this segment of the route is, ironically, premature, given that interdisciplinary approaches and historical archaeological data bases are, relatively speaking, only at the incipient stages in that region of the Greater Southwest. More work by linguists, paleontologists, geographers and other workers in related fields is required before historians can rethink their hypotheses. However, the work of those who have gone before them will have played a key role in shaping their scholarly conclusions on the subject.

QUIVIRA—AT LAST

“The general followed his guides until he reached Quivira. This journey required forty-eight days because of the great deviation toward Florida which they had made. Francisco Vázquez and his men were peacefully received.” (Hammond and Rey, 1940:241). Before Bolton concluded that Quivira was in central Kansas, H. Bancroft (1884), A.F. Bandelier (1892), George P. Winship (1896), Frederick Webb Hodge (1895), and J.V. Brower (1898) had pointed out that Kansas was the most likely location where Vázquez de Coronado had ended his quest for the Seven Cities of Gold. One early writer, Colonel Henry Inman, who was an assistant quartermaster in the United States Army in Kansas, ventured a guess that the St. Peter and St. Paul River mentioned in the chronicles of the expedition was the “Big and Little Arkansas” (Inman, 1899:5). Along more scholarly lines, however, Johan August Udden was one of the first to collect and study artifacts from the Paint Creek Site on the Smokey Hill River in south-central Kansas between 1881 and 1889. By studying artifacts such as rusty chain mail found on the site, he was able to determine, at least, that the Paint Creek Site was populated during and after the arrival of Europeans in that region (Udden, 1900:66). Secondly, he was one of the first to show that the Spanish presence in Kansas was as old as the 16th century. By the same token, William B. Lees concluded that the few sites in Kansas that contain artifactual evidence of the Spanish colonial period are significant in contrast to those which do not because they represent a “relatively small number that have such evidence.” (Lees, 1990:1).

Archaeologist Waldo R. Wedel pondered the question of Vázquez de Coronado's Quivira for at least forty years. He concluded that the Quivira of the 16th century Spanish documents and the central Kansas archaeological sites were the habitat of the same native people; that Vázquez de Coronado in all likelihood reached Quivira situated in the locality of present day Rice and McPherson counties: and that the larger sites such as Malone, Saxman, Tobias and Paint Creek were very likely among the grass house villages whose Wichita-speaking inhabitants visited by the "chosen thirty" in 1541 (Wedel, 1990:149). His conclusions were based on archaeological field work, ethnographical studies, historical research and a touch of geographical intuition. In reviewing the literature associated with Quivira, Wedel wrote, "Once these scholars had accepted that the Quivira River, which Coronado had named the River of Saints Peter and Paul, was the Arkansas River, they could not easily come to any other conclusion." (Wedel, 1990:149). To him the conclusion was obvious, for 16th century Spanish material cultural items such as chain mail found en bloc at the Saxman site, and chain mail fragments from the Paint Creek site (Wedel, 1990:147-148) are among the indisputable evidence of the Spanish presence in Kansas, especially the sites associated with Quivira during the visitation by Vázquez de Coronado. Wedel was careful not to preclude other Spanish expeditions into Kansas later in the 16th century or the prospect that artifacts could be found in a site as a result of trade (Wedel, 1968:369-385). Indeed, Lees pointed out that the presence of European goods at sites in Kansas "helps identify the contact period settlement pattern, differences in the occurrence of different types of European goods, and significantly identifies a prominent archaeological feature, the 'council circles,' [wide shallow ditches 30 to 60 yards in diameter indicative of trading activities] as a significant contact period feature." (Lees, 1990:6-7). In his book *Coronado and Quivira*, Jones presented a curious footnote to the tale of chain mail in the Greater Southwest. He wrote, "In 1864 Colonel Kit Carson leading 400 cavalymen and 75 Ute and Jicarilla guides, came into conflict with Kiowas in the Texas Panhandle country and killed a number of them. Among the slain was a young brave clad in a Spanish coat of mail." (Jones, 1937:150). Although trade or movement by the possessors of the chain mail into the area at a later time cannot be ruled out, neither can the high probability of coincidence that thirty men wearing chain mail very likely visited sites along and near the Great Bend of the Arkansas in the year 1541.

Jaramillo related that at the furthest point reached by the "chosen thirty" in Quivira they made some decisions. "This place, as I have said," he wrote, "was the last place reached by us. The Turk, realizing that he had lied to us, called on all these people to fall upon us some night and kill us. We found it out and took precautions. He was garroted that night, so he never saw the dawn." (Hammond and Rey, 1940:304). Domingo Martín, a member of the expedition, testified in 1544 that el Turbo had been executed "in a pueblo called Tabas." (Martin, 1544, testimony 4). Fearing reprisals should the Quivirans discover the deed, the Spaniards decided to return to Tiguex by way of Cow Creek where they had visited on their way to Quivira (Bolton, 1949:306).

Where was Tabas? Bolton reiterated that el Turco was killed at a place called "Tabas" which he equated with teucarea and taovaias. He suspected that teucarea was a mistranscription of taovaias (Bolton, 1949:293). Mildred Mott Wedel offered an explanation based on linguistics:

Although Bolton equated both tabas and teucarea with the taovayas, i.e., Tawehash, today's linguists do not. David S. Rood (University of Colorado,

pers. comm.) states that from a linguistic point of view, ‘I would unhesitatingly identify [teucarea] with the Wichita name for Towakoni, tawa:khariw.’ On the other hand, linguist Rood would accept Bolton’s argument for tabas equating with Tawehash. Therefore, if Jaramillo can be trusted, it would seem that both of these Wichita bands were living just south of Smoky Hill River. The importance of teucarea may have resulted in part from their being considered, then and later, the foremost band of the Wichita. The concentration of population may have reflected the presence of the two subdivisions in the region and the fact that the Tawehash, at this time and later, composed the largest band. The Wichita who lived on Arkansas River tributaries in 1541 and 1601 are unidentified. (Wedel, 1982:121).

Possibly someday the site of el Turco’s execution will be located and the starting point of the “chosen thirty’s” return to Tiguex will be satisfactorily determined.

THE RETURN OF THE “CHOSEN THIRTY”

Jaramillo wrote, “We marched back—I do not know whether two or three days—to a place where we got provisions of shucked ears of green maize and dry maize for our return. At this place the general erected a cross, at the foot of which some letters were cut with a chisel, saying that Francisco Vázquez de Coronado, general of the army, had reached this place.” (Hammond and Rey, 1940:305). Jaramillo’s perplexing statement, perhaps a clue, could one day be an important source about the whereabouts of the “chosen thirty” after having reached the furthest point of their trek to Quivira. Of Jaramillo’s statement, Bolton surmised that “Presumably it [the cross] was made of wood, and was displayed in some conspicuous place along the trail. Since the carving was done with a chisel, and was at the foot of the cross, one infers that it was cut in rock on which the Christian symbol stood, although this is not certain.” (Bolton, 1949:305). He also concluded that “From all the known data it seems probable that the historic cross was erected at the village on Cow Creek near Lyons, Kansas, where Coronado had been welcomed by the Wichitas before he turned north from Arkansas River on his way to Tabas.” (Bolton, 1949:306).

It was probably mid-August 1541 when the “chosen thirty” reached the River of Saints Peter and Paul. Jaramillo related that after they left their trusted guide, Isopete, in Quivira where the cross had been erected, five or six Plains Indian guides led them back to the river. “Here,” he wrote, “they abandoned our previous route, and taking off to the right, they led us by watering places and among the cattle and over good road. Although there is not good road anywhere unless it be the paths of the cattle.” (Hammond and Rey, 1940:305). Finally they arrived at an area they recognized, of which Jaramillo narrated, “Finally we came to the region, and recognized it, as I said at the beginning, we found the rancheria where the Turk took us away from the route we should have followed. Thus omitting further details, we arrived in Tiguex where we found the rest of the army.” (Hammond and Rey, 1940:306).

From these words, Bolton presented a hypothesis of the return route from Quivira to Tiguex. He concluded that Jaramillo’s statement was the key to explaining the route from the crossing at the Arkansas to backtracking the route from Tiguex to the Plains and to the barrancas

(Bolton, 1949:307). He also concluded that the rancheria mentioned by Jaramillo was the “second Querecho village seen by Coronado on his journey to Quivira, and was situated on the Canadian River near the Texas-New Mexico boundary.” (Bolton, 1949:307). To Bolton, the statement solved a number of riddles: “It was the pivotal point in all three of the journeys east of Pecos River.” (Bolton, 1949:307). He felt that the ranchería was the place where the Turk had urged Alvarado to turn northeasterly toward Quivira in late summer 1540; it was the place where the Turk turned the expedition away from a direct route to Quivira in spring 1541; and it was the place where the “chosen thirty” returned in their march from Quivira in late summer 1541. Confident in his conclusions, Bolton hypothesized that the route “approximated” the railroad line run by the Chicago, Rock Island, and El Paso Railway. To him, the information revealed the location of two ends of the return route: one at the Great Bend of the Arkansas River near Ford; the other along the Canadian River near the New Mexico-Texas line (Bolton, 1949:307). He proceeded to outline the route as follows:

Leaving the Arkansas River at Ford, in Kansas he passed through or near the sites of Bloom, Minneola, Fowler, Plains, Kismet and Liberal; in the Oklahoma Panhandle, Tyrone, Hooker, Optima, Guymon and Goodwell can claim him as their discoverer; in the Texas Panhandle he passed the sites of Texhoma, Stratford, Conlen, Dalhart, Middlewater and Romero. Crossing the line in New Mexico he brought into history the sites of Nara-Visa, Obar, and Logan, on the north bank of Canadian River, opposite the place where the Turk first led him astray on his march to Quivira. For some distance after leaving the Arkansas River Coronado’s return route was not far west of his northward line of march to the same stream (Bolton, 1949:308).

W.C. Holden reviewed the same material as Bolton and concluded that the route from the Arkansas River to the site of the ranchería “would be extremely difficult to trace.” (Holden, 1944). He agreed that the “chosen thirty” crossed and “perhaps paralleled for some distance the Canadian River on one side or the other.” (Holden, 1944:20). Regarding Jaramillo’s comment about the “watering places,” he remarked “the water in the Canadian itself is brackish and unpalatable” (Holden, 1944:20). He did resolve the issue of potable water by observing that many creeks flow into the Canadian River from either side. He concluded, as had Bolton, that from the ranchería, Vázquez de Coronado “traveled the same route he had come by way of the bridge at Anton Chico to Cicuye, and on to Tiguex.” (Holden, 1944:20). Castañeda was certain that the “chosen thirty” had traveled forty days from Quivira to Tiguex.

THE EXPEDITION HEADS HOME

Once the army was reunited at Tiguex, it was decided to return to Mexico. Although few details and commentary are referenced in the historical literature, it appears that the entire army, less those who elected to remain in Cibola for missionary purposes, moved from Tiguex past Acoma westward over the Malpais, to El Morro, and then on to Zuni skirting Corn Mountain. From there they backtracked south of the Zuni River through the uninhabited mountainous terrain between there and Chichilticale. Two days beyond Chichiltacale, the

expedition met a supply caravan under Juan Gallego. Moving down the Sonora Valley, the retreating army reached Butaco. Because of Indian hostility in the area, the expedition hastened its return, crossing the Río Mayo, Río Fuerte, and the Río Sinaloa to Petatlan. Arrived at Culiacán the army was officially dismissed. Some of the explorers remained at Culiacán with their families, others dispersed elsewhere. Francisco Vázquez de Coronado returned to Mexico City (Bolton, 1949:345-349).

SUMMARY

A. Grove Day might just as well have written about the entire route when he penned his thoughts about the expedition's effort on the Great Plains:

It is impossible to locate with precision, four centuries later, the trail of Coronado's army from the Rio de Cicuye to the province of Quivira. Landmarks on the vast Staked Plains that they traversed are few; in fact the general was not far wrong when he wrote to his king afterward that there was 'not a stone, not a bit of rising ground, not a tree, not a shrub, nor anything to go by.' Furthermore, the reckonings of direction in those days were clumsy. Consequently the wake of the army in 1541 on the ocean of prairie has forever vanished, even through its point of departure and ultimate landfall are known with some degree of certainty.

There are known references to the route. Among them are obvious points on a given map: Mexico City, Compostela, Culiacán, Zuni Pueblo, the El Morro-Malpais area, Acoma, the Tiguex-Albuquerque-Bernalillo area, the Rio Grande Pueblos from Isleta to Taos, the non-Rio Grande Pueblos of Zia to the west, Galisteo to the east, and Pecos Pueblo as well as the location of some pertinent Quiviran sites in central Kansas. There are known topographic elements to the route whose specific points of reference are vague such as the Fuerte, Maya and Sonora River valleys, the Pecos River, the caprock of the Llano Estacado, the Canadian and Arkansas Rivers, the Palo Duro and Tule Canyons of Llano Estacado, and the area of the Buffalo Plains reached by the expedition. There are places such as Chichilticale, Cona and Tabas which may never be known. There are vast areas where the expedition's route is still to be determined with precision such as northern Sonora, the despoblado of southern and eastern Arizona, and the Oklahoma Panhandle. Ethnographic data may also be derived from the documentary sources, but anthropological and archaeological interpretive data and skills are required to arrive at conclusions which in some instances are at best debatable.

That there are no final answers to the precise location of the route is not a pessimistic conclusion but an optimistic observation based on the historiographical hope that more data must be gathered and analyzed before a cohesive hypothesis regarding the route can be formed and tested. Historians have offered their best efforts to date by locating pertinent documents, weaving narratives and analyses, proposing hypotheses and popularizing the expedition's endeavors four centuries after the event. There are, however, documents and maps related to the expedition that are yet to be found. Indeed, since Bolton published his "definitive" history of the expedition in 1949, historians have made few research efforts for new documentary sources. The colonial

archives of Spain, Mexico and Peru may one day yield such secrets. Archaeology may hold the key to unlocking the secrets the earth holds regarding the route. Because of possible archaeological discoveries related to the expedition, archaeologists offer the best hope for future studies. One recent discovery of a 16th century Spanish campsite near Bernalillo, New Mexico, is indicative of such possibilities.

Given the advancing technology of the Space Age, it is likely that, futuristically, an interdisciplinary effort between humanists and scientists may one day result in identifying more sites related to the expedition, thereby contributing precise locations of segments of the route until an acceptable line of march is brought to light. Even if an exact route that can be considered a "trail" cannot ever be established, a corridor along the line of march is the probable product of future research. It would seem that in the best of all cases, the corridor would include precise locations along certain segments; in other cases, the corridor would include a 10 to 50 mile-wide swath in which a probable route would be included. In any case, those who have spent their careers analyzing the available documentation and archaeological evidence have contributed much to our understanding of the expedition and its observations of the interior of North America. They have given us much to consider in the future discoveries yet to be made. For now, we should be grateful for what we have and what we know about the route.

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10) **Provide a few examples of the cartography of the exploration of the region.**

European mapmakers, who had never been to the *tierra adentro*, saw what is now the Greater Southwest through the eyes of explorers who had dared to enter the *terra incognita*, unknown territory, as a place of mystery. Abraham Ortelius, like other cartographers in the 16th century, mapped the course of each Spanish explorer across the New World with the studied eye of a scholar monk. Greek and Roman mythological figures, sea monsters, the four winds and ornate compass roses illuminated their maps and enhanced the mysterious place names of the real and imagined geography they recorded. The mapmakers sat by the hour and marveled at the strange stories behind each name. And now, one lifetime after Columbus' landing, Francisco Vázquez de Coronado and his men camped on the bank of yet another place: Tiguex, an Indian province in the large valley below the craggy mountain the Spaniards called Sierra Nevada, the Snowy Mountain. Later, the valley would host modern Albuquerque and the large, mountain would be renamed Sandía.

Ortelius was among the first to become interested in the geography of North America's interior. Through interviews with explorers, and through study of their letters, diaries and field maps, the famed cartographer received vague and varied descriptions of the New World. In 1587, he published his atlas of the world that featured a map of the Americas. Because so much was known of the Atlantic coastline of the New World, Ortelius drafted it with great accuracy, as he did the Pacific Coast of southern South America. But the land north of Acapulco on the

western Mexican coast was little known as no more than five expeditions had been to the far north of the *tierra adentro*. Ortelius, plagued with uncertainty, nonetheless published his map pocked with distortions and imaginary place names of the northwestern portion of North America.

Mistakenly, Ortelius showed the Río Nuestra Señora, now known as the Rio Grande, draining into the Pacific Ocean. To 16th-century geographers, however, other names on Ortelius' map raised many questions and piqued the curious mind. His maps were marked with strange names like Acuco for Acoma, Cicúye for Pecos, Tototeac, Marata, Cíbola, and Tiguex, and Gran Quivira, the legendary kingdom which the Spaniards sought in their explorations of the north. By the end of the 16th century, those names and others had earned a place in the annals of American history and European folklore.

**List of maps provided by Byron A. Johnson (formerly of the Albuquerque Museum),
Executive Director, Texas Ranger Hall of Fame and Museum**

Nueva Hispania Tabula Nova – New Map of New Spain
1561 – Italy
Girolomo Ruscelli

This was the first widely circulated chart of New Spain. Spain tried to keep accurate maps about the New World away from other European countries after the expeditions of Hernán Cortez and Francisco Vázquez de Coronado. Foreign map makers relied on smuggled copies of expeditionary reports, old charts, and rumor. Some countries even released maps with intentional errors to mislead competing European powers. *Nueva Hispania* contains places mentioned in the expedition led by explorer Fray Marcos de Niza. Two important features on this map are the empty northern frontier and the seven castles to the northwest representing the mythical seven cities of Cibola-the seven cities of gold.

Americae Sive Novi Orbis, Nova Description–America or the New World, New Description
1587 – Antwerp
Abraham Ortelius
Hand Illuminated Copperplate Engraving

Originally published in Latin, this map of the western hemisphere appeared in the most widely read atlas of the 16th and 17th centuries. Called the most spectacular atlas ever published, it went through 33 editions between 1570 and 1612.

The nature of navigation in the 16th century led to many errors. Instruments like astrolabes determined distance north to south, but no device accurately measured longitude, the east to west position.

Based upon the most recent reports and manuscript maps available, the reverse of the map contains a roster of the explorers used as sources. The location of Tiguex (Ti-wesh), Coronado's name for the region around modern Albuquerque, is west of the Baja peninsula. Quivira, the legendary golden city sought by Coronado in present-day Kansas, sits on the Pacific coast.

L'Hydrographie Ou Description de l'Eau – Hydrography or Description of the Waters
1692 – Paris, France
Nicolas Sanson D'Abbeville
Hand Illuminated Copperplate Engraving

A century after Abraham Ortelius published his monumental atlas, the Dutch lost their map making leadership to the French. While descendants of the famous Dutch cartographers reprinted out-of-date maps, the French issued new charts based on the latest information. D'Abbeville corrected many of the mistakes on Ortelius' map, but there are still significant errors in the geography of western North America, including the Northwest, California, and the “Vermillion Sea.”

Le Nouveau Mexique et la Floride – New Mexico and Florida
Circa 1656-1675 – Paris, France
Nicolas Sanson D'Abbeville
Hand Illuminated, Ink on Paper

Nicolas Sanson d'Abbeville's map of New Mexico and Florida ranks as one of the finest charts of the Southwest. Engraved between the founding of Santa Fe in 1610 and the Pueblo Revolt in 1680, its more important features include Santa Fe, the *Californie Isle*, the “Vermillion Sea” between California and the mainland, and the mythical lake north of Taos (Taosii) first reported by Antonio Espejo in 1583. The prominent placement of the various Apache tribes reflects the Spanish experience with Indian raids.

America Settentrionale – North America
1688 – Paris, France
Vicenzo Maria Coronelli
Hand Illuminated Copperplate Engraving

America Settentrionale, by the Franciscan Monk, Vicenzo Maria Coronelli, is one of the most accurate 16th century maps of New Mexico. Information for the New Mexico portion of the map came from a former governor of the province. After removal from office and an investigation before the Inquisition in Mexico City for alleged crimes, the former governor prepared maps and proposals for the governments of England and France to entice them to invade the colony.

Coronelli's map corrected the belief that the Rio Grande flowed into the Gulf of California with the firm statement, “The Rio del Norte flows to the Gulf of Mexico, not the Sea of California.” It continued, however, to perpetuate the myth of California as an island.