

**SPANISH MAPPING OF TEXAS.** Early in 1520 the pilots who had sailed the previous year with Alonso Álvarez de Pineda<sup>qv</sup> laid before the Spanish crown an outline sketch of the Gulf of Mexico.<sup>qv</sup> This crude rendering, which survives in the Archivo General de Indias in Seville, represents the beginning of the Spanish mapping of Texas. A true cartographic landmark, it was the first European map portrayal of the Gulf based on actual exploration, as well as the first to show any part of what is now the state of Texas—hypothetical concepts of the Gulf of Mexico before its actual discovery notwithstanding. The Álvarez de Pineda sketch gave representation to the Mississippi River (called Río del Espíritu Santo) and to the Río Pánuco, which enters the Gulf at the site of present-day Tampico, dividing the Mexican states of Tamaulipas and Vera Cruz. While showing several river mouths along the Texas coast, it names none of them. Yet, before there was another known voyage to the northern Gulf, maps<sup>qv</sup> began appearing with names attached to the Texas features, descriptive of what Álvarez de Pineda's crew had observed, or imagined. Virtually the only record of what the explorers reported after the voyage is a summary contained in a royal patent granting Francisco de Garay<sup>qv</sup> (governor of Jamaica and Álvarez de Pineda's patron) authority to settle the area of the discovery, which was named Amichel.<sup>qv</sup> The patent relates that the voyagers had seen gold-bearing rivers and natives wearing gold ornaments on their noses and earlobes; some were giants almost eight feet tall, others like pygmies. Some of the things reported were fanciful, but others were real. Both the real and fancied soon began appearing on maps produced in Spain.

Reflecting Álvarez de Pineda's claim of gold-bearing rivers, Juan Vespucci introduced the name Río del Oro ("River of Gold") on his 1526 planisphere, on what appears to be the Texas shore. In 1527 an anonymous map, believed to have been the work of Diogo Ribeiro, placed the Río Escondido ("Hidden River") about where the mouth of the Nueces River of today is concealed from the sea by barrier islands. On two 1529 world maps Ribeiro brought forth another feature related to Álvarez de Pineda's voyage: the Río de los Gigantes, or "Giants' River," an apparent reference to the eight-foot Indians described by the explorer, possibly the Karankawas of the middle Texas coast. Ribeiro's Weimar map contains notations describing the Texas coast in terms that still hold true: *playa baxa* and *anegadizo*, suggesting a low, level beach subject to flooding. In the Padre Island<sup>qv</sup> vicinity, where three Spanish ships ran aground in a storm a quarter century later, Ribeiro notes *malabrigo*, indicating lack of shelter for ships or an unsafe anchorage. Thus the early maps reflect the explorers' remarkable understanding of Texas coastal geography.

The first map of the Gulf of Mexico to be printed appeared with a 1524 edition of Hernán Cortés's second letter to the crown. The authorship of this map is not known, but it seems fairly certain that it was not Cortés. Quite likely, it was drawn in Spain, on the basis of information from the Álvarez de Pineda voyage. Were Cortés the author, he certainly would have shown Villa Rica de la Vera Cruz, the town he himself had founded. He would have omitted the "Provincia de Amichel," which represented Garay's rival claim. The map is the first to show the Río de las Palmas ("R. la Palma")—the Soto la Marina River of Tamaulipas, which has often been confused with the Rio Grande.<sup>qv</sup> It names two

Texas or Louisiana features, P[unta] de Arrecifes and R[ío] de Arboledas, names occasionally repeated by later mapmakers.

Until the so-called "De Soto map" came to light, nothing was known of the Texas interior. This map, attributed to Alonso de Santa Cruz, was found among the cosmographer's papers after his death in 1572. It is often given the date of 1544, about the time some of Soto's men returned to Spain. In truth, both its authorship and the date are uncertain, its popular label misleading. Obviously, the date it was drawn can be no more than a guess. There is a marked difference between the style of this map and another found among Santa Cruz's papers at the same time, a general map of the Caribbean Sea, the Gulf of Mexico, and the east coast of North America. It is misleading to call it the Soto map, because it contains data from other explorers, including Juan Ponce de León and Lucas Vázquez de Ayllón, in the east, and Álvar Núñez Cabeza de Vaca<sup>qv</sup> and Francisco Vázquez de Coronado<sup>qv</sup> in the west. The map shows the mountains of northeastern Mexico, too far from the coast to have been seen by Soto's men as they sailed along the coast toward Pánuco but surely seen by Cabeza de Vaca on his trek west from the Texas coast. It notes, just below the "Río Solo" (Rio Grande,) the herds of buffalo<sup>qv</sup> seen "from Quivira to this point," suggesting information from Andrés do Campo,<sup>qv</sup> the Portuguese gardener of the Coronado expedition<sup>qv</sup> who had escaped the Indians after the death of Fray Juan Padilla.<sup>qv</sup> The "Soto" map was the first to show the courses of North American rivers, albeit somewhat inaccurately. There is a semblance of accuracy to some of those west of the Mississippi that were seen on the march led by Luis de Moscoso Alvarado<sup>qv</sup> into eastern Texas and again from the Gulf. Of some sixty Indian towns shown on the map, fourteen are identifiable with those named in the three primary accounts of the Soto expedition; a few, like the Ays (Eyeish) and Guassa (Guasco), are identifiable with the Caddoan tribes of eastern Texas.

The Soto map influenced mapmakers of Spain and other nations for half a century. Gerónimo Chaves's 1584 map, "La Florida," reflected the Soto map's style and much of its content, while adding some new coastal toponyms and altering configurations here and there. It repeated names from the 1520 Ribeiro maps, such as Río del Oro and Río Escondido, and showed the Médanos de Madalena, the Padre Island dunes named by salvagers of the Padre Island Spanish shipwrecks of 1554.<sup>qv</sup> Chaves's map, like several others of the period, failed to show the Río Grande, or Río Bravo, as it is called in Mexico. That river, in fact, came late to the maps and took even longer to be given its recognizable form. Since the Río de las Palmas often appeared as the first river south of the Río Escondido, it was natural for historians to mistake it for the Río Grande.

For most of the sixteenth century, there was little exploration of Texas on which maps might have been based. The situation changed abruptly in 1685, when the Spaniards learned that René Robert Cavelier, Sieur de La Salle,<sup>qv</sup> had landed on the northern Gulf shore, in Spanish territory. As part of the Spaniards' search for La Salle's colony, Juan Enríquez Barroto,<sup>qv</sup> on the 1686-87 Rivas-Iriarte expedition,<sup>qv</sup> mapped the coast in detail and affixed place names to Texas features that found their way onto maps of many nations. Enríquez's maps have been lost, but it is believed that the manuscript portolans of Juan Bisente (Vicente) derive from them. Bisente and the Mexican savant Carlos de

Sigüenza y Góngora, who used the pilot's data on sketch maps pertaining to expeditions into Texas in 1689 and 1690, were largely responsible for dissemination of Enríquez's toponyms. The La Salle episode brought forth several small-area French maps of the Texas coast around Matagorda Bay<sup>qv</sup> (by the engineer Minet<sup>qv</sup>) and also gave rise to Spanish maps of the interior. Sigüenza y Góngora depicted Alonso De León's<sup>qv</sup> track across southern Texas in 1689, when he found La Salle's ruined Fort St. Louis, in what is now Victoria County. This drawing has been called perhaps the first Spanish map to show the course of the Río Bravo and to label it as such. Yet, if a sketch map drawn in Coahuila a year or two previously is considered, this is not so. It is not known who made the sketch, which is based on the confused testimony of the Frenchman Jean Jarry;<sup>qv</sup> De León's lieutenant, Diego Ramón, or León himself may have done it. Below the "Río Bravo or del Norte" the sketch shows the settlements of Coahuila (Monclova), Monterrey, and San Gregorio (Cerralvo). Beyond the "Paso del Río," it locates the "Rancho of the Frenchman M. Jean Jarry," several other Indian *rancherías*, and, on the left bank of a large river paralleling the Río Bravo and entering the Gulf through the Bay of Espíritu Santo, the "1684 Castillo" of "M. Felipe" (La Salle). To the left of the Río Bravo, slightly above the mouth of the Río de San Juan, is a salt lake that corresponds with La Sal del Rey<sup>qv</sup> or Sal Viejo in the lower Río Grande Valley. In the map's margin is a list of forty-four Indian "nations" living on both sides of the Río Bravo. Though this cartographic doodle is of doubtful value to the history of mapmaking, it offers an interesting sidelight to the Spanish quest for La Salle's colony. The Sigüenza-León map details the inland courses of Texas rivers that De León crossed, with understandable inaccuracy. It also includes the coast, borrowing place names and configuration from Enríquez Barroto's map and diary. It shows the Laguna Madre<sup>qv</sup> and other lagoons within the barrier islands as Enríquez Barroto describes them: "a river running along the coast." Presumably, it was also Sigüenza who traced De León's 1690 route to eastern Texas, when the first mission was founded among the Hasinai. The detail presented in the first map is omitted. Out of the La Salle episode also came the 1690 exploration of Matagorda Bay by Francisco de Llanos<sup>qv</sup> and the map of the bay area by Manuel José de Cárdenas y Magaña.<sup>qv</sup> But almost a century had to pass before the feature, often seen in isolation, was be connected to the whole.

With a Bourbon on the Spanish throne, France and Spain bound together in the initial Family Compact, and the French entrenched in Louisiana, there was considerable interchange of French and Spanish map data. Spanish secrecy denied the most authentic information to cartographic centers in other European countries; hence, printed maps of the period parroted traditional place names and added imaginary configurations. After the opening of the French colony of Louisiana by Pierre Le Moyne d'Iberville, information drifted across the Louisiana-Texas boundary in both directions. Louis Juchereau de St. Denis,<sup>qv</sup> after twice traveling from Mobile to San Juan Bautista<sup>qv</sup> and thence to Mexico, imparted geographical information that found its way onto maps of both France and Spain. In Mexico he shared data with his interrogator, Juan Manuel de Oliván Rebolledo,<sup>qv</sup> a judge of the royal *audiencia*. Oliván used the information in a series of map sketches that culminated in his 1717 "Mapa Geográfico," depicting the coastline from Veracruz to Pensacola and river courses between the Rio Grande and the Mississippi. The geographical information amassed by St. Denis, at the same time, was

transmitted through François Le Maire, a priest at Mobile, to Guillaume Delisle, who used it on his famous 1718 *Carte de la Louisiane et du cours du Mississipi*. Even though the Spanish desire for secrecy prohibited the circulation of large numbers of printed maps, Spanish data formed the basis for the work of vaunted mapmakers of other nations such as Delisle.

Among the more notable efforts in Texas and Borderlands cartography is that of Francisco Álvarez Barreiro,<sup>qv</sup> a military engineer with the inspection expedition of Pedro de Rivera y Villalón<sup>qv</sup> (1724-28). Álvarez Barreiro drew a series of six maps depicting the northern and western provinces of New Spain that were visited by the Rivera inspection. This group constitutes "the first detailed mapping of the region from actual observations by a trained mapmaker." Texas is included on an overall map, "Plano corográfico é hidrográfico," which reflects Álvarez's visit to the province with Rivera in 1727 and his personal exploration from La Bahía<sup>qv</sup> to the southeastern corner of Texas. The map, owned by the Hispanic Society of America since 1907, was brought to scholarly attention only in 1992. A remarkable achievement for its day, it is especially noteworthy for its depiction of the upper Texas coast, which had scarcely been explored previously. Leaning heavily on the Álvarez Barreiro map, José Antonio de Alzate y Ramírez published his *Nuevo Mapa Geográfico de la América Septentrional* (Madrid, 1768). Alzate repeats some of Álvarez Barreiro's inaccuracies, which had become known through more recent exploration. In the interim, in 1746 José Antonio de Villaseñor y Sánchez had drawn a map embracing most of the Gulf of Mexico littoral, nearly all of Mexico, and much of Texas. This map, entitled "Yconismo hidroterreo, ó Mapa Geográfico de la América Septentrional," appeared on the eve of José de Escandón's<sup>qv</sup> exploration and settlement of Nuevo Santander.<sup>qv</sup> This map improved on some of the Texas rivercourses but left much to be done. For the most part, Alzate y Ramírez passed up the opportunity; his work is noteworthy principally for its rarity as a printed Spanish map.

Escandón, with his 1747 "Mapa de la Sierra Gorda y costa de el Seno Mexicano," documented the routes of the various explorations made of his jurisdiction in conjunction with his colonization effort. Including the present Mexican state of Tamaulipas and extreme southern Texas, the work also reflects new hydrographical information. It was used as the base for an anonymous redraft in 1792, with the same title, showing locations of presidios, missions, and settlements. A manuscript map in the Museo Naval, Madrid, reflects the 1766 exploration of the lower Texas coast by Diego Ortiz Parrilla<sup>qv</sup> (*see* ORTIZ PARRILLA GULF COAST EXPEDITION). It represents that specific area more accurately than its predecessors. Ortiz, with instructions to examine the coast as far as San Agustín de Ahumada Presidio on the lower Trinity River, was prevented from doing so by a September hurricane that swamped the coast and devastated San Agustín. He nevertheless included the middle and upper coasts on his map, from information he was able to gather at Presidio la Bahía (Nuestra Señora de Loreto Presidio). The result was that, while half the map broke new ground, the other half was confusing and inaccurate, inferior to Álvarez Barreiro's work of forty years earlier. Only the best-informed observer could make the distinction between the disparate parts. Nicolás de Lafora,<sup>qv</sup> unfortunately, could not. When the Marqués de Rubí<sup>qv</sup> entered Texas in 1767 on his

inspection tour, he brought with him Captain Lafora of the Royal Engineers and Ensign Joseph de Urrutia,<sup>qv</sup> cartographer. Urrutia drew plans of the presidios and collaborated with Lafora on the preliminary map of the territory covered by the inspection, although his name was dropped from the final version. Lafora, in portraying the province of Texas and the coastal region, seized little advantage from his travels. His portrayal of southeastern Texas and its coast is straight from the conjectural portion of Ortiz Parrilla's. Worse, he rejected the valuable part of the Ortiz map, the lower Texas coast, in favor of the outmoded 1747 Escandón rendering. The greatest cartographic contribution by Lafora and Urrutia, therefore, lies not in the general map but in their plans of the presidios and small-area maps of the bastions' environs.

An unauthorized sally west of the Mississippi by the British Admiralty surveyor and cartographer George Gauld may have prompted Louisiana governor Bernardo de Gálvez Galiardo's<sup>qv</sup> efforts to chart the same coast. In the summer of 1777, Gauld's companions, Lt. John Osborn and John Payne, surveyed and mapped the Texas coast to a point just west of Galveston Bay.<sup>qv</sup> Gauld himself turned back at Sabine Pass<sup>qv</sup> to concentrate on the Louisiana coast. From Gauld's later encounter with a Spanish ship sent by Gálvez to intercept him, it appears certain that Gálvez knew what the British survey crew had been up to. In December 1777, Gálvez dispatched a schooner captained by Luis Antonio Andry<sup>qv</sup> to map the Louisiana and Texas coast as far as Matagorda Bay. The expedition ended in disaster. Apostate Karankawas boarded the vessel at Matagorda Bay, massacred the crew, and burned the ship, along with maps and documents of the voyage. After the American Revolution, with Spain once again in possession of the entire Gulf Coast, Gálvez ordered a renewal of the coastal mapping effort. From 1783 to 1786, José Antonio de Evia surveyed the coast between the Florida Keys and Tampico, mapping the coast and its bays. Evia's work formed the basis for the Spanish Hydrographic Service's *Carta Esférica que comprehende las costas del Seno Mexicano* (1799), which superseded Tomás de Ugarte's "Carta esférica" dated two years earlier. The 1799 *Carta esférica* "remained for many years the prototype for maps of the Gulf." In 1807 came the *Carta particular de las Costas Setentrionales del Seno Mexicano*, based on the *Carta esférica*. Though showing only the coast between the Rio Grande and the Mississippi, it is said to be "the first large-scale printed chart of the Texas coast based on actual soundings and explorations."

Pedro Vial,<sup>qv</sup> meanwhile, began explorations between San Antonio and Natchitoches and Santa Fe in 1786. After his initial journey, from San Antonio, he sketched in Santa Fe his "Mapa et tierra qe yos pedro Vial taigo tranzitare," dated October 18, 1787. Showing the territory between Santa Fe and New Orleans and the Texas Gulf Coast, the map suggests that Vial traveled more widely than the record reveals. His 1789 "Mapa del territorio comprendido entre la Provincia de Nuevo Mexico y el Fuerte de Natchitoches y Texas" is only a track map.

The changing political scene in the late eighteenth century continued to provide the major incentive for Spanish exploration and mapping. Spain's retrocession of Louisiana to France and the almost immediate sale of the territory to the United States precipitated an enduring controversy over the Louisiana-Texas boundary. With the United States seeking

to extend the boundary westward as far as La Salle's colony, in the Matagorda Bay vicinity, the viceroy of New Spain strengthened his hand in the negotiations by delving into history. He authorized José Antonio Pichardo<sup>qv</sup> to compile a comprehensive report from government archives. In his four-year effort, Pichardo studied the records at his disposal and commissioned reports from the field. Among the more valuable contributions was that of a Franciscan friar at Nacogdoches, José María de Jesús Puelles, which included "the best map of Texas then available." Puelles's "Mapa Geográfico de las Provincias Septentrionales de esta Nueva España" showed the Texas rivercourses more accurately than any previous effort. The map stands in sharp contrast to Félix María Calleja's "Plano Geográfico de la Prouyncya de Texas," drawn around the same time. Pichardo added to Puelles's work information from other sources to form a large-scale map, "El Nuevo Mexico y Tierras Adyacentes," completed in 1811 but never published. Just a decade later, Spain relinquished control of Texas and Mexico to the new Mexican nation. Accurate assessment of the Spanish contribution to geography and cartography is made difficult by the jealousy with which Spain guarded its maps and geographical data. Yet there can be no doubt that the truly original sources for the early maps pertaining to Texas were Spanish, or that these sources were utilized by the widely known mapmakers of other European nations. *See also* SPANISH TEXAS, SPANISH MISSIONS, PRESIDIOS.

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