Conquistadors at Saltville in 1567 Revisited

Jim Glanville © 2014

Introduction

This article continues and extends its author's study of the interaction between the archeological and documentary evidence for the Spanish period of sixteenth century Virginia history.

In 2004, the author published in the *Smithfield Review* an article titled "Conquistadors at Saltville in 1567? A Review of the Archeological and Documentary Evidence," ¹ which was footnoted in a review of sixteenth century Florida historiography published in 2012 in connection with the 500-year anniversary of Juan Ponce de León's exploration of the Florida coast in 1513.² Today, the story of the Spanish attack in Southwest Virginia is a part of mainstream Virginia history.³

The author subsequently published three follow up articles about the conquistadors. The first of these described a metal blade found in Smyth County, Virginia, that its finder speculated might have a Spanish connection (it did not).⁴ The second article was a brief progress report.⁵ The third article discussed the modern background to the story of the conquistadors and how that story developed.⁶

The present article reviews the routes of the Hernando de Soto (1539– 1542) and Juan Pardo (1566–1568) *entradas* into the American Southeast as revealed by the combination of archeological and documentary evidence. It also describes ongoing archeological studies at the conquistadors' base camp at present-day Morganton, North Carolina; it cites two recently-found 145-year old newspaper reports (reproduced in the Appendix) of a buried Spanish soldier—who lies just a few miles outside the southern boundary of modern-day Virginia; and, via an examination of documentary evidence for the *entradas*, it compares with a modern map the region of Virginia shown in the third (1584) edition of the first-ever printed world atlas.

The 2004 article introduced two themes for the study of early Virginia history that had previously been lagely neglected. First, it closely examined the relationship between the archeological and documentary evidence for sixteenth century Spanish activity in southwestern Virginia, in nearby north central North Carolina, and in Eastern Tennessee. Second, it highlighted the significance of Spanish activities for Virginia history at a time when the future commonwealth of Virginia was a far flung, frontier corner of a large Spanish territorial claim to the greater American Southeast called *La Florida*. Virginia historians tend to overlook the fact that Virginia was Florida before it was Virginia.⁸

Spaniards were at Saltville in 1567, only 75 years after Columbus' s first crossing of the Atlantic. As summarized in Figure 1, their route led them north from Cuba, which they reached in 1514, to St. Augustine in 1565, to Santa Elena in 1566, and to Saltville (called Maniatique by the Spanish) the following year. The extent of the Spanish claim in the Southeast circa 1567 is shown on the map in Figure 2. The finger-shaped region of Spanish-claimed land pointing to the northwest of Santa Elena, labeled Joada, is the focus of this article.

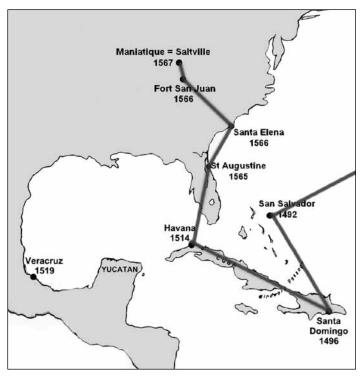


Figure 1. The chronology of Spanish advance into North America. Principal Spanish stopping places and their dates along the path from the Old World to Saltville are shown. Note that the arrival of Spaniards at Saltville came only 75 years after Columbus first reached the New World. Modified from the map on page 254 of Eugene Lyon's book on the history of early Florida.⁹

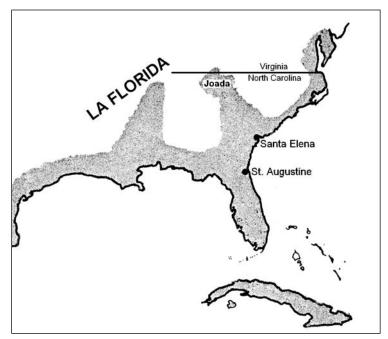


Figure 2. *La Florida* circa 1567. The shaded regions show the land claims of Governor Pedro Menéndez de Avilés. Modified from the map on page 52 of Albert C. Manucy's biography of Menéndez.¹⁰ The map shows Joada as the province where the American Indian town of Joara was located.

Luisa Menéndez, the American Indian woman from Maniatique discussed in the author's 2004 article, has remained obscure. She married a Spanish soldier around the time of the Saltville attack and eventually moved to St. Augustine.¹¹ It does, however, now seem certain that she is the second person from Virginia we can name and the first woman. Only Paquiquineo, the slayer of the Jesuits near the Chesapeake Bay in 1571, predates her as a named Virginian.¹²

During the past ten years, many reports have appeared that confirm the value of archeological evidence in explicating the Spanish documents that describe the Soto and Pardo *entradas*. Some of those reports are discussed here.

Also discussed are two recently found newspaper reports which resurfaced only in March 2013. The author interprets these two reports as describing the interment of one of Juan Pardo's soldiers close to the present Virginia–Tennessee state line about seventeen miles east of the linestraddling town of Bristol. While these reports are at best slender positive evidence for the Spanish attack at Saltville, they are fully consistent with the previously known evidence for that attack. More important, when the report of the buried soldier appeared, it suggested a new, additional geographic datum point for sixteenth century Spaniards being in southwest Virginia. Prompted by that realization, the author reviewed the earliest sixteenth century maps of the American Southeast. Perhaps the value of the 1869 newspaper reports derives less from what they say themselves than from the new line of inquiry they prompted.

The new line of inquiry has been a detailed analysis of the map of the American Southeast published in 1584 in the third edition of the first-ever printed world atlas. This article describes the interpretation of a modified segment of that atlas map and its use to test the value of archeological evidence in interpreting Spanish documentary records of the *entradas*. Analysis of the map segment reported here shows that the archeologically identified locations of the American Indian towns on the segment are mostly well-fitted.

The Routes of the Soto and Pardo Entradas

As an introduction to the map analysis that comes later in this article, this section describes the routes of the Soto and Pardæ*ntradas* and provides some background to the long-standing academic debate about the precise paths taken by Soto and Pardo. Soto's first European penetration into the American Southeast during the years 1539–1543 took him through ten modern states along a winding path of several thousand miles. Soto died in May 1542. The survivors of the expedition reached a Spanish settlement at the mouth of the Pánuco Riveron the Gulf of Mexico more thana year later.

The 1560 expedition of Tristan de Luna y Arellana was a third sixteenth century Spanish entrada into the Southeast.¹³ However, other than perhaps contributing some Spanish artifacts to the archeological record, it had little to do with Virginia.

The Soto route has been a matter of intense study and speculation during the more than four and a half centuries since it happened. It was, of course, the time when began the documented history of the inlandAmerican South. Perhaps most famously, the United States Congress attempted onceand-for-all to decide the Soto route. Prompted by local chauvinism and the search for advantage in the tourist trade, the Congress created a so-called study commission in the 1930s. ¹⁴ The Commission's report published a map showing what is popularly called the "Swanton route."

In the decades since the Swanton report, hundreds of articles and dozens of books have been published about the Soto expedition. The author has labeled this phenomenon "the De Soto Industry" and recommends Hudson's afterword in *Knights of Spain, Warriors of the Sun*¹⁵ as a starting point for anyone interested in learning more about it. In 1985 the state of

Alabama established a commission to study the Soto route through that state, and a popular articledescribing that commission provides an excellent survey of Soto studies.¹⁶

Our knowledge of the Soto *entrada* comes from the written accounts of the Gentleman of Elvas, Rodrigo Ranjel, Luys Hernández de Biedma, and by the Inca, Garcilaso de la Vega. Translations of these accounts along with much collateral information are described, translated, and annotated in the collective work of modern scholarship titled *The De Soto Chronicles*.¹⁷

Figure 3 shows the so-called "Hudson route," ¹⁸ which is today well accepted by historians. Many of Hudson's students and many other historians have contributed to refining the Hudson route—an effort that continues to the present. For the eight American Indian towns in the northeast corner of the map in Figure 3, this articleoffers a precise comparison of their Spanish mapped location with their modern, archeologically identified locations.

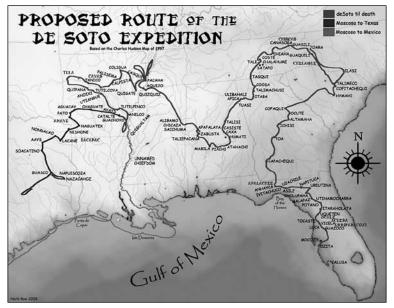


Figure 3. The "Hudson route" proposed for the Soto *entrada*. This Wiki map by Herb Roe¹⁹ is here reproduced with modification under a Creative Commons license.

Roe's map is an artist' s interpretation of the map titled "De Soto's Route from Apalachee to Apafalaya," shown on page 148 of Charles Hudson's book *Knights of Spain, Warriors of the Sun.*²⁰

The present article draws heavily on Hudson's book in its interpretation of the archeological sites along the Soto route in the upper right hand region of the map shown here. In the 1980s, Hudson and his students at the University of Georgia made a breakthrough in Soto route studies in the region of southwe& trginia, north central North Carolina, and eastern Tennessee when they realized that the relatively obscure (at that time) Pardo entrada had traversed some of the same ground as Soto's army had transited a quarter century earlier. Consequently, at the request of Hudson, the Spanish primary documents relating to the Pardo explorations were freshly translated by Paul Hoffman.²¹ Thus by the early 1990s, for those interested in Spanish Virginia, Soto and Pardo studies had become effectively consolidated.

In the years 1566–1568, Juan Pardo led two expediti ons from Santa Elena (today's Parris Island, South Carolina) into what is now northeast Tennessee and southwestern Virginia. Figure 4 shows a modern depiction of the Pardo route. This depiction was prepared by the author by highlighting the spaces between the American Indian towns that Pardo visited. The base map in Figure 4 comes from the recent and detailed National Science Foundation (NSF) report of excavations at Morganton.²² Figure 5 is the author's simplified sketch that shows the overlap of the Soto and Pardo routes in the region south of Saltville.

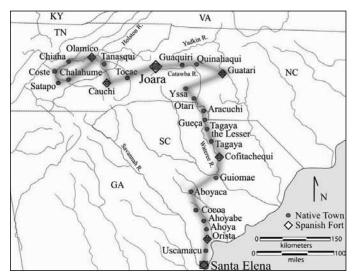


Figure 4. Juan Pardo's route. Map taken from Figure 2 of the 2010 National Science Foundation Berry Site report and highlighted by the author.



Figure 5. Sketch by the author showing the general relationship between the Soto and Pardo routes. This figure combines and simplifies Figures 3 and 4.

A Decade of Ongoing Investigations at the Berry Site (Town of Joara and Fort San Juan)

The American Indian town of Joara is in the upper right of the map in Figure 3 and at the upper center of the map in Figure 4. Joara is the Berry archeological site, located about six miles north-northwest of Morganton, in Burke County, North Carolina, and archeologically designated as site 31BK22. Berry (shown in Figure 6) is a four-and-a-half acre site located on a terrace above Upper Creek, a small tributary of the Catawba River. Juan Pardo located Fort San Juan at Joara.

Since their beginning in 1986, ongoing and continuing excavations at Berry have made it one of the best investigated archeological sites in the eastern United States. Its identification as Joara (also called Xuala or Xualla) and Fort San Juan is in this author's opinion unquestionably correct. The Berry site has yielded many sixteenth century Spanish artifacts but none from the seventeenth or eighteenth century.²³ During the past decade, it has been the scene of intense and well-funded archeological activity.

The most extensive single source of information about the Berry site is to be found in the 2010-published 112-page National Science Foundation report, cited above and from which Figure 4 has been taken?⁴ The past decade has seen much growth in studies at Berry, and the drawing into the research program of a large number of specialists expert in archeological sub fields such as wood and cane analysis, paleoethnobotany (studies of pollen and other plant matter) analysis, radiocarbon dating, faunal analysis (identification of animal bones), and lithic analysis (studies of stone and ceramic objects).

At the center of the Berry site are five burned buildings arranged in an oval pattern around a central area that the excavators have concluded was probably a courtyard . These buildings are eac h about eight meters



Figure 6. Excavation of Structure 1 at the Berry site, 2007–2008. This is Figure 22 (page 31) from the 2010 National Science Foundation Final Report on the Berry Site.

square and, while unusually large, were apparently built in a typical local American Indian style.²⁵

The interpretation of the Berry site as a base for the attak on the Indian town of Maniatique (located at present-day Saltville, Virginia) was first proffered by Robin Beck in 1997.²⁶ That interpretation is further developed in the afterword added to the second edition of the Smithsonian-published book about the Pardo expeditions.²⁷ A major, formal archeological report on the Berry site was published by its investigators in 2006. ²⁸ Reports of the Berry site are now frequently included in collec tions of essays about sixteenth century Spanish–Indian interactions.²⁹

Very recently, an account of Fort San Juan at the Berry site appeared n the science column of the *New York Times*, saying in part: "In the Appalachian foothills of western North Carolina, archaeologists have discovered remains of a 16th-century fort, the earliest one built by Europeans deep in the interior of what is now the United States. The fort is a reminder of a neglected period in colonial history, when Spain's expansive ambitions ran high and wide, as yet unmatched by England."³⁰

A book of essays about Joara and the Berry site is scheduled for publication in 2014.³¹ Also, searching for "the Berry site" at YouTube generates links to many videos about the studies and excavation there.

In summary, the study of Joara has become a minor archeological industry and has been very well conducted. The scientific quality and intellectual integrity of the ongoing work at Berry is admirable.³²

Combining Archeological Evidence with Documentary Evidence

The study of the Spanish period of southwest Virginia history by relating its archeological and documentary evidence is only a small part of the same study along the Soto and Pardo routes across the entire American Southeast (Figure 1). This section sketches that relationship broadly, describes its history, and praises its evolution over the past two decades into a symbiotic one.

David Barreis has written ³³ that the earliest use of the method of combining early historical narratives with the results of archaeological excavations goes back more than a century and can be attributed to Alonson Skinner in his studies of the aborigina people of Staten Island and their early contact with Dutchmen and Britons.³⁴ Barreis concluded: "For archaeology, an ethnohistoric approach serves as a means whereby a fundamental link in the broad narrative of man's culture history is achieved."

The earliest archeological evidence known to the author that hints of a sixteenth century Spanish presence not far from Virginia comes from the confluence of the Holston and French Broad Rivers, about 4-5 miles east-southeast of Knoxville, Tennessee. Here, 1869 excavations, which were organized by the Peabody Museum of Yale University at a mound site attributed by their archeologists to the American Indian Dallas Culture, yielded a "rusty sword-blade of steel found by the side of a human skeleton." It is a ready speculationthat the sword was brought to the region by a Soto or Pardo soldier.³⁵ However, it is also possible that the sword was brought by American Indians to this spot from some far away place. The long distance transport of objects in pre-Columbian North America is demonstrated by *Olivella* marine shell objects found at the Spiro Mound site in Arkansas. At Spiro, *Olivella* shell originating on the west and east coasts in both the Gulf of California and in the Gulf of Mexico has been identified.³⁶

More recently, Jeffrey Brain and his colleagues in 1974 proposed the name "ethnohistoric archaeology" for the combined use of archeological and documentary evidence, and defined the term via the statement, "In ethnohistoric archaeology, a multi-discipline approach is applied to historic contact situations operating in a native context. The special problem chosen as a case study to illustrate the approach is the Soto *entrada* into the Lower Mississippi Valley in 1541."³⁷ Their choice of exemplar was fortunate for the present study. Florida historian Michael Gannon wrote in 1992 of a

new alliance between history and archeology for studying the early Spanish period of North American history.³⁸

Over the past two deca des, the archeological studies at Joara described above have categorically demonstrated the value of those studies as an indispensable adjunct to explicating the sixteenth century Spanish documentary records of the Soto and Pardo expeditionsinto the present-day states of North Carolina and Tennessee. The conclusions and interpretations of the Joara studies are widely accepted by archeologists and historians.

However, the larger study of the relationship between archeological and documentary evidence for the Soto route along its entire length (and at sites other than Joara) has had a stormy history. Until fairly recently the value of archeological studies as an aid to interpreting the documents and judging the Soto route was controversial, and the use of such archeological studies was hotly contested by some scholars.

To cite just a couple of early examples of the controversy, John Swanton, the principal author of the 1939 Report of the Soto Expedition commission, found himself more than a decade later ruefully defending the report against challenges by archeologists to the place where the Commission located Soto's crossing of the Mississippi.³⁹ Three decades after the Report's publication, Floridians were still arguing about exactly where Soto landed on their peninsula, and some who thought the report got it in the wrong place were writing book-length rebuttals.⁴⁰ Twenty-first century Floridians today are apparently less inclined to argue about the landing place, though for reasons beyond our scope here, the De Soto National Memorial in Bradenton, Florida, is located some twenty miles southwest of the modern, consensus Soto landing place on the Little Manatee River.⁴¹

Around 1990, the efforts of Charles Hudson and his collaborators to settle the Soto route attracted vigorous, polemical detractors. In a strongly critical article, W. S. Eubanks labeled the Hudson route through Georgia a "House of Cards."⁴² Hudson *et al.* replied a year later, denying the existence north of the Alabama state line of a "sinister cabal plotting to deceive the American public."⁴³ Another vituperative Hudson route critic was David Henige,⁴⁴ who wrote a review criticizing Hudson's 1990 book about the Pardo expedition and in a lengthy article asked (and answered no to) the question "can there be a correlation" between "modern archeological sites and the [Soto] expedition."Henige wrote with a particular focus on the town of Chiaha which is discussed in the present article. Hudson *et al.* replied to Henige with a lengthy defense of their siting of Chiaha⁴⁵ and wondered why Henige was "expending a great deal of time and energy contesting every word written by [them] about de Soto [and] Pardo."⁴⁶

The present author, who is about to embark on an analysis of the Soto route later in this paper, is thus acutely aware of the ancient minefield he is entering. Like Jon Muller, he does not wish to "join the long list of combatants concerning de Soto's route."⁴⁷ He also recognizes and agrees with Patricia Galloway, who, in her study of the origins of the Choctaw Nation of Indians, noted that such origin studies cannot be undertaken without the use of archeological evidence, despite, as she says, the fact that the archeological research suffers from inherent biases.⁴⁸

By the end of the 1990s, the tide of academic opinion had turned to embrace properly-evaluated archeological studies as suitable evidence for the Soto and Pardo routes. For the purposes of the present study, one of the pieces of evidence that turned the tide was the discovery of the 1584 pension application of the soldier and translator Domingo de León, who had fought at the battle of Saltville in 1567, or at Maniatique as he recorded in his pension application.

In 2003, John Worth personally provided the author with a copy of the still-un published pension application, which was a key piece of documentary evidence in establishing that conquistadors fought at Saltville, and which the author used in his 2004 paper. The author has been told that a published translation of the Domingo de León pension application will at long last appear in the forthcoming book about Joara as the Berry site.⁴⁹

Describing the Domingo de León document at a 1994 conference, Worth wrote in support of the Hudson route (as confirmed by the archeology at the Berry site): "the similarity between Hudson's map, constructed without the benefit of the León account, and Domingo de León's 'mental map,' is uncanny." Worth concluded, "I believe the newly discovered Domingo de León account to represent substantial proof for Charles Hudson's reconstruction of Juan Pardo' s route and thus for his Hernando de Soto route."⁵⁰

The Present Status of Archeological Studies along the Soto and Pardo Routes

This section sketches the present situation regarding archeological evidence for the Soto route along its entire path at sites other than the Berry. A later section will describe the author's mapping of the portion of the Soto route that passed to the south of Saltville in the late spring and early summer of 1540 and compare that map with the archeological evidence for the route.

Typical sixteenth century Spanish objects found in archeological contexts in the Southeast include items made of iron such as nails, links from chain mail, wedges, and blades, and even the occasional silver coin.

Ceramic objects include pottery fragments, such as those characteristically from broken olive jars, and colored glass beads.⁵¹

Credible archeological evidence for the passage of the Soto army has been reported from the following places (listed chronologically as Soto would have successively reached them): Orange Lake, Florida (the Potano site)⁵²; Tallahassee, Florida (the Governor Martin Site) ⁵³; Jacksonville (Telfair County), Georgia (the Glass site)⁵⁴; Floyd County, Georgia (the King site)⁵⁵; and Chattanooga, Tennessee, (the Hampton Place site). ⁵⁶ The Mabila site, in Wilcox County (or a nearby county) in Geogia, seems likely to be archeologically identified in the not too distant future. The presently unknown site of the meeting between the Mico (Chief) of Chicaza and Soto near Columbus, Mississippi, also seems capable of being archeologically identified.⁵⁷

A significant site from which sixteenth century Spanish artifacts have been recovered from American Indian burials is at Safety Harbor (Tampa area), Florida, (the Tatham Mound site). This site is interpreted as a place where native people accumulated prized European objects as funerary accompaniments for their dead. In consequence of their mortuary association, these objects are not considered to be evidence for the presence of the Soto army at precisely that location.⁵⁸

The most perplexing "missing" archeological site along the entire Soto route is the location where the Battle of Mabila was fought. This battle, between Soto's force and American Indians, has been called by a book publicist, "One of the most profound events in sixteenth-century North America." In a major collaborative effort, nineteen scholars met in a 2006 conference in a search for the site, which resulted in the publication of a book of essays to which the publicist referred. ^{59.} Despite a considerable effort to identify it, the site of the Battle of Mabila remains an unsolved archeological mystery.⁶⁰

In 1993, the *De Soto Chronicles* concluded, "The Martin site [in Tallahassee] is the only one in the southeastern United States where there is compelling, direct evidence of the presence of De Soto's army."⁶¹ With hindsight, one could add that compelling direct evidence had already also been reported just a year or two earlier from the King site.

For the passage of Pardo and his soldiers through the American Southeast, in addition to the Berry site described at length above, there is considerable archeological Spanish evidence from South Carolina(the Parris Island site).⁶² There is no doubt that Soto, too, was at Joara (the Berry Site), though all the Spanish artifacts so far recovered from Berry are attributed to Pardo and none to Soto. The significance of the Berry site as an indicator for the Soto route was revealed in 1994 as a result of a symposium on Spanish and Native Contact in Western North Carolina, held in conjunction with the Southeastern Archaeological Conference meeting in Lexington, Kentucky, that year.

In summation, the first archeological study that confirmed a location along the Soto route was initiated in 1987. Since then, such studies have continued with increasing intensity and at more and more sites. Future studies, most likely, will continue to bring further insight into where exactly Soto went on his long journey. In North Carolina and Tennessee, the Soto route studies are complemented by the Pardo route studies. Sites such as Berry (North Carolina) and Glass (Georgia) are today among the best archeologically studied places in the Southeast.

The Buried Conquistador

In April 1567, Hernando Moyano de Morales led a detachment of Juan Pardo's Spanish soldiers northwards from Fort San Juan at present-day Morganton, North Carolina, and attacked an Indian village in Southwest Virginia.⁶³ As previously noted, here in 1997 the archeologist Robin Beck identified the place of Moyano's attack as the town of Maniatique, which Beck situated at modern-day Saltville.⁶⁴ Because of the attack's implications for Virginia history in general and for Saltville in particular, the author, in his 2004 article, wrote a good deal about Moyano's attack and cited many primary documentary sources describing it.

While the documentary evidence for the Saltville attack is persuasive, archeological evidence for a Spanish presence at or near Saltville has been problematic. Of the various anecdotal reports that have come to the author's attention over the years, a description of the finding of brightly-colored glass beads from a funerary context in Chilhowie, Virginia, offered one of the few hints.⁶⁵

Finally, plausible evidence for a sixteenth-century Spanish presence near Saltville came in March 2013, when the author's attention was unexpectedly called to an 1869 issue of the Bristol (V irginia-Tennessee) newspaper that mentioned "De Soto."⁶⁶ That report (the second of the two articles in the appendix to this article) quickly led to the finding of another article published in the previous week's issue of the newspaper (the first of the two articles in the appendix to this article) that described the excavation by a hunting party of a mound containing the body of a "Caucasian," whose corpse wore a medal or coin inscribed with the word "Espa" on one side, while "on the reverse the figure of a cross could be plainly seen."⁶⁷ With the corpse, "[d]ecayed implements evidently those of war were found intermingled."⁶⁸

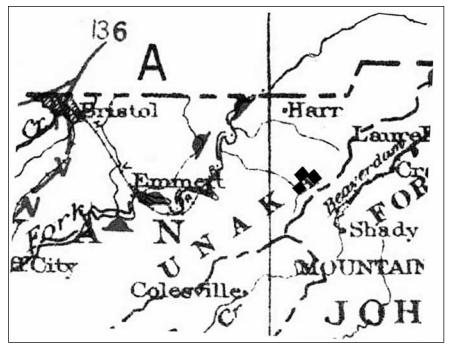


Figure 7. The Site of the Cairn. Detail fromWilliam Myer's 1923 "Archaeological Map of the State [of Tennessee]."

The dashed line running across the figure is the Virginia–Tennessee state boundary line. The "jump" in the boundary shows the western edge of the so-called Denton Valley offset.

Myer shows the cairn by the symbol composed of three squares superimposed on the second letter "A" in the word UNAKAlocated directly below the word "Harr."

From the "B" in the word Bristol to the cairn is 17 miles. From the settlement of Harr to the cairn is 4 miles.

The bowler hat-like symbols along the course of the Holston River were used by Myer to depict and locate American Indian mounds.

The exact site of the mound, colorfully described by T. C. King as "a deep and gloomy gorge, flanked on either side by beetling walls of granite," remains undetermined. Judging from King's report, the site is less than 5 miles from Holston Knob on the Appalachian Trail, or about 17 miles east of Bristol.

The author recognized that this newspaper report could be interpreted as locating a buried Spanish soldier who had participated in the Moyanoled raid on Maniatique in 1567. Collateral support for the evidence of the newspapers articles comes from a well-known map published nearly 100 years ago by the Bureau of American Ethnology. Thus, the mound reported in the 1869 newspaper is also shown onWilliam Myer's 1923 map of Tennessee archeology, where it is described as a cairn. ⁶⁹ The location of the cairn as specified by Myer is shown in Figure 7. The two independent reports of the burial site, the newspaper and Myer's map, appear to be in full agreement. Myer's map shows that his trail No. 36 passes about 15 miles west of the cairn, while his trail No. 37 passes about 15 miles east of the cairn.

Armed with a new and identifiable sixteenth century location, the author reexamined sixteenth century Spanish maps of America, and the 1584 Chaves–Ortelius map "La Florida" in particular. The following, concluding sections of this article present an interpretation of the northeast portion of the Chaves–Ortelius map that links that segment to modern geography and thereby explicates the Soto route.

Patricia Galloway is one of the few scholars who has specifically emphasized the potential of maps as a source of cartographic documentary evidence.⁷⁰ In what follows, the author introduces a novel method for comparing documentary and archeological evidence by studying and adjusting an old map and testing his result using modern archeological knowledge.⁷¹

The "De Soto" and Chaves–Ortelius Maps

For the first five decades after Columbus' arrival in the New World, Spanish interest was focused first on the Caribbean, then on Mexico, and next on Peru. Spanish exploration of inland North America finally commenced only in 1539 with the Soto *entrada* described above. Thus, while Spanish geographic knowledge of the Gulf Coast was fairly well-developed in those early decades,⁷² inland knowledge of the American Southeast was slower in coming and of much poorer quality.

The generally acknowledged earliest extant map of the inland Southeast is the so-called "De Soto" map shown in Figure 8.⁷³ Its maker is believed by a majority of scholars to have been Alonso de Santa Cruz, the cosmographer to the Spanish crown who was based in Sevilleat the Casa de Contratación and who was one of the officials responsible for maintaining the *Padrón General*—the official and secret Spanish master map for the copies carried on sixteenth-century Spanish vessels. The map was found among the cosmographer's papers after his death in 1572. Robert Weddle says: "[The "De Soto" map] 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."⁷⁴

Because of its obvious importance for American history, the "De Soto" map has received extensive scholarly attention. It was first printed in a book

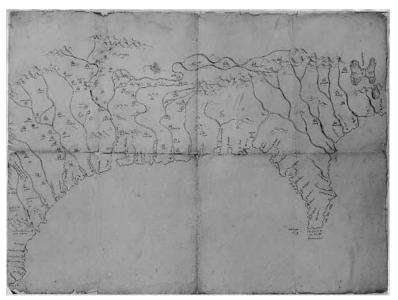


Figure 8. The so-called "De Soto" Map.

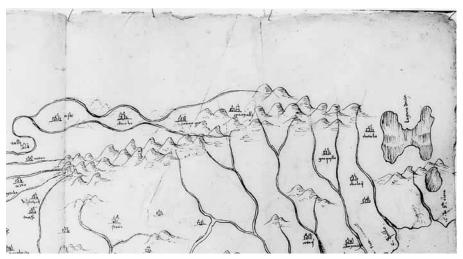


Figure 9. Detail in the author's region of interest from the so-called "De Soto" Map. The icons for the towns discussed in this study can be seen on this map.

in the United States in 1892.⁷⁵ In a 1941 study, Barbara Boston concluded that Santa Cruz was the "probable author" and dated it between 1544 and 1561.⁷⁶ Boston's latter date derived from the absence of information on the map from the 1560 expedition of Tristan de Luna y Arellana. Modern authoritative opinion holds that the map was "almost certainly" made by Santa Cruz and also that it almost certainly "incorporated Indian information."⁷⁷

A feature of the "De Soto" map that is of considerable importance for the present study is the map's use of icons to represent American Indian towns. The towns of interest here, in the northeast quadrant of the "De Soto" map, can be seen in Figure 9. The use of such icons on maps was in its infancy in the early sixteenth century.⁷⁸ Galloway has variously referred to these conventionalized cartographic symbols as "fortified city" icons or "town" icons or "Indian town symbols." She asserts that it was the "De Soto" map and its presumed author Alonso de Santa Cruz who introduced this iconographic convention for the Spanish pictorial representation of a "standard Indian polity."⁷⁹

The "De Soto" map leads us directly to the closely related 1584 Chaves-Ortelius map, which is the map to be analyzed here. The 1584 Chaves–Ortelius map (Figure 10) first appeared with the title "La Florida" in a triptych (three maps on one page) in the *Additamentum* (supplement) in the third edition of Abraham Ortelius's atlas Theatrum Orbis Terrarum.⁸⁰ The map "La Florida" is variously described as "[one] of the half-dozen most important mother maps of southeastern North America³⁸¹; "a mother map of the first importance, for its general geographical outline is found in many maps, in which the details were revised and corrected upon occasion as additions to geographical knowledge were acquired, until the beginning of the eighteenth century."⁸²; and "an historical document of major significance."83 The 1584 Chaves–Ortelius map provided Europeans with their first detailed, albeit distorted, image of the present southeastern interior of the United States. The manner in which publisher Ortelius obtained information about the Chesapeake Bay from correspondence with Englishmen has been described by William Wooldridge.84

The notation "Cum Priuilegio," in the cartouche (the prominent decorative element in the map's upper right hand corner) means "with privilege." That is to say, Ortelius printed Chaves's map under license from the Spanish authorities then ruling in Antwerp, where he worked.⁸⁵ The Chaves– Ortelius map is published online at the website of the Library of Congress.⁸⁶

The precise relationship between the "De Soto" map and the 1584 Chaves–Ortelius map has never been definitely ascertained nor satisfactorily explained. Both maps cover the same broad geographic region, both name rivers and Indian towns, both use standardized icons to show town locations, and both show inland features. To some earlier students it has seemed clear that the Chaves–Ortelius map derives from the "De Soto" map. A comprehensive comparison of the two maps lies beyond the scope of this paper.⁸⁷ However, the present author prefers to leave open the question of their exact relationship in the absence of a firm dating of either map. The

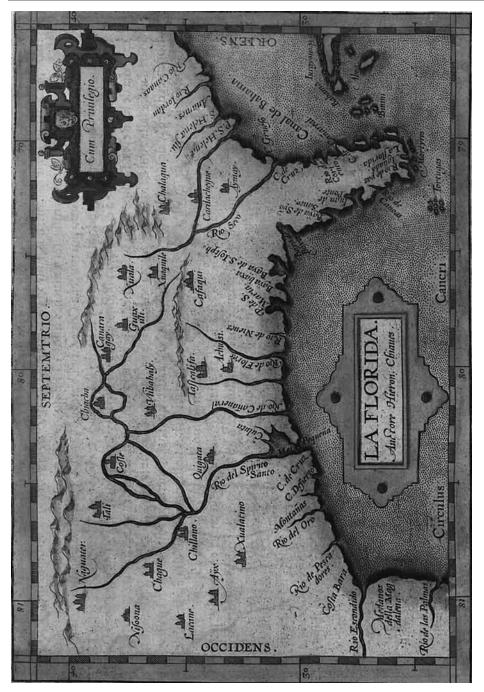


Figure 10. The Chaves–Ortelius Map, 1584.

analysis here shows that, like the "De Soto" map, the Chaves–Ortelius map contains only information from the Soto *entrada* and not from any other *entrada*, including those of Pardo and Moyano. Perhaps the two maps were independently taken from a third, original map. Whatever their precise relationship, they are the first two maps known to show inland features in the future United States.

Written reports of the Soto expedition, the well-known Ranjel, Biedma, and Elvas accounts, were becoming available in Spain as early as 1544. The 250 survivors from the Soto expedition, some of whom had returned to Spain, would have been able to provide personal oral histories of the *entrada*.⁸⁸ These reports and accounts would doubtless have been closely monitored by the officials responsible for maintaining the *Padrón General*.

The map maker Geronimo Chaves was born in Seville in 1524. His father, Alonso de Chaves, was examinerof pilots and tester of instruments at the Casa de Contratación. Geronimo Chaves succeeded Sebastian Cabot in the Chair of Cartography and Nautical Science in the Casa in 1552 and was Cosmographer-Royal to King Philip II. Chaves died in 1572. The original map from which the printed version shown in Figure 10 was made was found in Chaves's papers after his death and is now lost.⁸⁹

Map authority William Cumming regards Chaves's publisher Abraham Ortelius as being second only to Gerardus Mercator as the greatest geographer of the sixteenth century. Ortelius's collection of printed maps, issued beginning in 1570, was the first-ever world atlas.⁹⁰ The atlas has been the subject of a book-length history .⁹¹ It presented the whole known world and all its regions and offered its readers an opportunity for the first time ever to see planet earth as an integrated whole. Frans Koks says about the atlas: "More than an original concept, the Theatrum was also the most authoritative and successful such work during the late sixteenth and early seventeenth centuries." Because it was frequently revised to reflect new geographical and historical insights, contemporary scholars in western Europe praised the *Theatrum* highly for its accuracy, even as they embraced the atlas' concept. The *Theatrum* continued to be published until 1612."⁹² Cumming and De Vorsey suggest that Ortelius obtained the copy of Chaves's map that he published only shortly before publishing it. Had Ortelius obtained it earlier, they argue, he would have published it in the first or second edition of his atlas.93

What was the date Chaves drew his map? While it is not possible to precisely date the Chaves–Ortelius map, the original copy of which is not known to have survived, it is possible to give it bracketing dates with some confidence. Obviously, it must date earlier than 1572, the year of Chaves's death and later than 1554 based on the internal evidence of the map. It shows in its lower left corner the "Médanos dellaMadalena," which are the Padre Island dunes named by salvagers of Spanish shipwrecks that occurred in 1554.⁹⁴ Peter Cowdrey observes that on the Chaves–Ortelius map, "There is no mention of St. Augustine, San Mateo, Santa Elena or any of the Spanish missions or coastal forts, perhaps for reasons of security."⁹⁵ Certainly security was a factor for the Spanish officials,⁹⁶ but it may simply be that the map was prepared before news reached Seville of the September 1565 settlement of St. Augustine by Pedro Menéndez de Avilés. Settlement at San Mateo and Santa Elena, came even later.

The author estimates that Geronimo Chaves drew his now lost map within a year or two of 1560. Speculatively, if the map were already two decades old when the Spanish authorities gave Ortelius permission to publish it, they would have known by that time that it was well out-of-date and not a security risk.

Historian Alison Sandman has pointed out that Spanish geographical knowledge had two aspects: general knowledge of latitudes and longitudes, which they wished to publicize to support their territorial claims, and specific navigational knowledge which they wished to suppress. She has concluded that the Spanish cosmographers' "interest in latitude and longitude and their lack of interest in the sorts of local knowledge learned best through experience came to define navigation. ... [while the information] that was still somewhat secret, the details of ports and currents and sandbanks and reefs, was written out of the discussions of navigation, [and] the secrets of the pilots, learned only at sea, remained secret (insofar as they did) primarily by being unspoken and unwritten.²⁹⁷

Adjusting a Segment of the Chaves–Ortelius Map

Maps from the late sixteenth century are so-called sign systems that show the approximate or relative relationships of various "important" (to the cartographer or his audience) features and thus do not usually match up with modern cartographic maps or projections and their latitudes and longitudes.⁹⁸ Thus, the author decided that the Chaves–Ortelius map needed to be manipulated to make it relevant for a study of Virginia history.

The first step in that manipulation was to adjust the corners of the map. For unknown reasons, perhaps as a consequence of copying errors, ⁹⁹ perhaps because the engraver of the map was unsophisticated, the latitudes and longitudes marked along the edges of the Chaves–Ortelius map are unreasonable. Spanish knowledge of latitude was good in the sixteenth century, and knowledge of longitude improving. It is certain that the deficiencies of the latitude/longitude grid on the Chaves–Ortelius map derive from a copying or engraving error and not from simply a measurement error. In Figure 11, the perimeter defined by the as-marked Chaves–Ortelius corner coordinates is shown in outline on a modern map using Greenwich as the reference point. It will be seen that the map perimeter nominally defines an approximately 150-mile wide strip of land running north-south from roughly Cuba to Cleveland. The corners of the Chaves–Ortelius map obviously require adjustment.

Adjustment of the corner coordinates was accomplished by judging where they should be placed in order to make the general aspect of the Chaves–Ortelius map (Figure 10) look like a modern map. Making these corner adjustments generated the perimeter shown in Figure 12. These corner adjustments were the first step in adapting the Chaves–Ortelius map for interpretation.

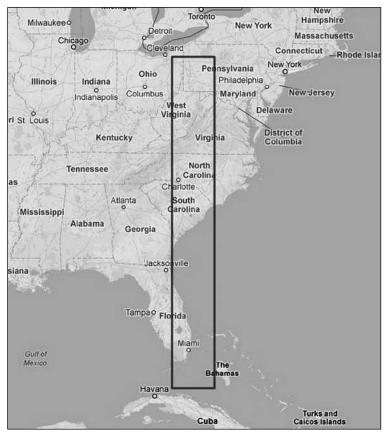


Figure 11. Plotted corners of the Chaves–Ortelius Map, 1584. Prepared May 13, 2013 using GPS Visualizer (www.gpsvisualizer. com). Latitudes: top edge 41.42°, bottom edge 23.58°; longitudes: left edge -81.25°, right edge -78.53°.

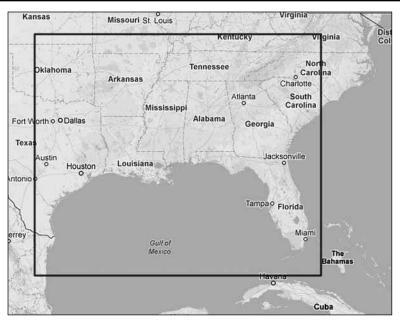


Figure 12. Adjusted corners of the Chaves–Ortelius Map, 1584. Prepared May 13, 2013 using GPS Visualizer (www.gpsvisualizer.com). Latitudes: top edge 37.54°, bottom edge 23.58°; longitudes: left edge -98.53°, right edge -79.14°.

Examination of the corner-adjusted Chaves-Ortelius map led to the conclusion that its northern and southern portions are incompatible. The southern portion traverses almost twenty degrees of longitude, while the equally-sized northern portion traverses only four degrees of longitude. This incompatibility means that locations in the upper region of the map known to be in East Tennessee are placed due north of locations in the lower region of the map known to be in Texas. In reality, the Texas locations are actually 500 miles to the west of those in Tennessee. This discrepancy accords with the well-known sixteenth century Spanish misconception that the silver mines of Zacatecas, in Mexico, were located at about the vicinity of Knoxville, Tennessee. For example, the Jesuit authors Clifford Lewis and Albert Loomie sixty years ago pointed out the misconception and illustrated it with a map titled "The Geography of Pedro Menéndez de Avilés."¹⁰⁰ One of the objectives of Juan Pardo's entradas was to find an overland route to the mines to establish a pack animal route to Santa Elena. A successful overland route would substitute a safer journey for the silver than the ship-borne journey from Havana north through the constricted Bahaman Channel, where English and French vessels could easily find and attack the Spanish treasure fleets.

So the Chaves–Ortelius map can be regarded as two separate maps uncomfortably meshed together. This nonconformity of the upper and lower regions is no doubt explained by the different kinds of cartographic data used by Chaves. In the south, Chaves had decades of nautical information from Spanish mariners. The shore line and the islands are well-placed: modern eyes accommodate readily to the locations of Bimini, the Tortugas, the Florida Peninsula and its outline, the Mississippi River (Rio del Spirito Santo), and the trend of the north coast of the Gulf of Mexico. In contrast, Chaves's cartographic information for the north of the map came from the written and oral records of the Soto expedition. Modern eyes find nothing readily recognizable in this region.

For the present study of the Spanish in Virginia, the author extracted an upper right hand rectangular segment of the map, specifically the rightmost twothirds and the upper one-third of the map, or about one-quarter of the map's area. That segment (Figure 13) includes the map's cartouche. The Chaves map segment contains eight American Indian towns as depicted by their icons.

The next step was to adjust the segment's axes so that the north-south (N-S) scale became comparable to the east-west (E-W) scale. This adjustment



Figure 13. The northeast segment of the Chaves-Ortelius map selected for use in this study.

was an iterative process. Using its upper right hand corner as a reference point, and relating it to features such as the locations of Xuala and the buried conquistador, and to archeologically identified places such as Chiaha and Coste, various fits were tested. As a result of this iterative fitting, the length of the N-S axis was increased (stretched) by a factor of 2.34 to make the N-S scale consistent with the E-Wscale.¹⁰¹ The stretched version of the segment of the Chaves–Ortelius map is shown in Figure 14. An alternative way to view this adjustment would be to consider that the E-Wscale has been shortened or squeezed by a factor of 2.34 to compensate for latitude error.

The stretched segment map in Figure 14 is 247.5 miles N-S and 320 miles E-W. Its bounding latitudes are 37.515° (top edge) and 34.662° (bottom edge).

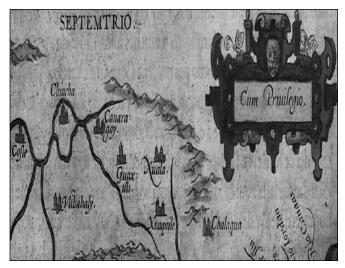


Figure 14. The "squeezed" segment of the Chaves– Ortelius map used as the basis for the hybrid map. This is the map in Figure 13 compressed along its E-W axis.

Its bounding longitudes are -83.796° (left edge) and -79.262° (right edge). These edge coordinates were chosen so that Xuala (Joara and the Berry site) on the stretched segment map exactly coincides with the geographic position of the Berry site.¹⁰² Its top and right edges are those of the Chaves–Ortelius map. In its electronic format, it is 2400 pixels wide and 1856 pixels high.

Table 1. Chronology of Soto's Travels in 1540 Through the Northeast Segment of the Chaves-Ortelius Map.									
To	wn	Expedition Chronology	Page*						
Chaves' Name	Hudson's Name								
Chalaqua	Chelaque**	Reached on 14 May	p. 186						
Xuaquile	Guaquili	There May 17-19	p. 187						
Xuala	Joara	Arrived May 21	p. 187 & 189						
Guaxuli	Guasili	Departed 31 May	p. 193 & 199						
Canaragay	Canasoga	Passed by June 1	p. 199						
Chiacha	Chiaha	There June 4-24	p. 204						
Coste	Coste	There July 2-9	p. 207						
Ulibahaly	Ulibihali	There August 31 - September 2	pp. 224-225						

*Page numbers from Hudson's Knights of Spain, Warriors of the Sun

**Hudson states Chalaque "must have been somewhere southwest of present-day Charlotte. The author arbitrarily selected York, South Carolina, as a point location for Chalaque. From the records of the Soto expedition, we are able to state with some precision when the expedition was at or near each American Indian town in the segment map. Table 1, which is based on the work of Charles Hudson, shows a chronology of the dates when the expedition was in (or near) the towns shown in Figure 14. Note that the spelling of the town names is inconsistent (the usual situation when dealing with the various Soto chronicles).

Chaves's "Canaragay" has been here interpreted by the author as Hudson's Canasoga, which is consistent with both the geography and the chronology (Pardo's name for Canaragay was Cauchi). The town of Ulibahaly on the Chaves–Ortelius map was apparently misplaced by Chaves (on the "De Soto" map, Ulibahaly is located nearer to its presently judged archeological location of Rome, Georgia). Chaves's misplacement of Ulibahaly is substantiated by the chronological sequence of Soto-visited towns shown in Table 1.

Documentary Evidence from a Sixteenth-Century Map Compared with Archeological Evidence: The Hybrid Map

This section describes how the "base" map illustrated in Figure 14 was combined with modern geographical information to prepare a hybrid map.

The hybrid map (Figure 15) was made by overlaying the base map (the stretched segment) with a printed, transparent, Google-derived map using the same four corner coordinates of the hybrid map. Doing this combined the sixteenth-century map with modern features. The town icons are large. For example, the Xuala town icon is 75 pixels wide, so with the map scale being 7.5 pixels per mile, it is 10 miles wide.

Location indicators on the hybrid map are modern state boundaries (shown by dotted lines) and modern towns. Historical places include Maniatique (modern Saltville), the newly discovered burial site of the conquistador near Holston Knob, and Phoebe Butt¹⁰³—in western Lee County near the present Tennessee state line. Phoebe Butt is where it is likely (though not proven) that, heading north from Chiacha in search of metals, the first Europeans (Juan de Villalobos from Seville and Francisco de Silvera from Galicia) ever to set foot in Virginia did so in 1540.¹⁰⁴

To test the hybrid map, the map coordinates of the American Indian towns were compared to the latitude/longitude coordinates of the ethnohistorical/archeological location of the town. The test data is summarized in Table 2. Of principal interest in this table are the error values in column 9.

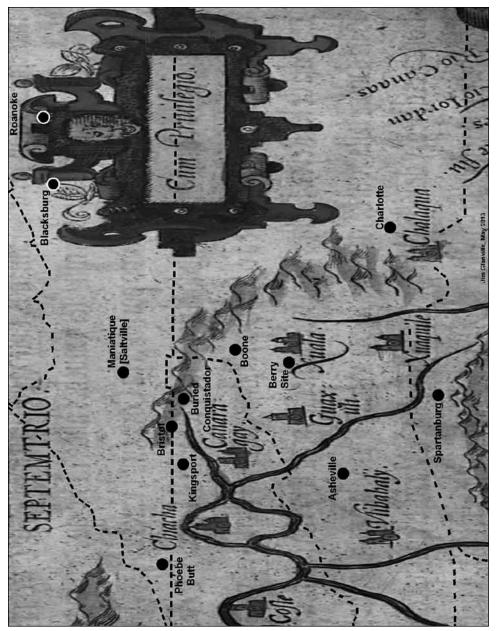


Figure 15. The hybrid map.

This map combines twenty-first century features such as towns and state boundary lines over a base map derived from the sixteenth century.

As described in the text, this map was adjusted so that the Xuala icon and the Berry site are at exactly the same place. Here, they are shown slightly separated for the convenience of the viewer. Map coordinates for the eight towns were obtained as follows: the stretched segment of the Chaves–Ortelius map was loaded into the Microsoft program Paint, and the cursor successivel y located at the midpoint of the building icon designating each town. The town's pixel position coordinates were then read from the bottom of the screen. Pixel position coordinates were converted to map coordinates using ratios from the known map coordinates of the corners.¹⁰⁵

Table 2. Comparison of Chaves's Indian Town positions and their Modern Locations											
Town	Pixels from top left corner down - right		Degrees Latitude/ Longitude calculated from pixels		Modern Location ethnohistory/ archeology	Degrees Latitude/Longitude Google Maps		Error in miles			
1	2	3	4	5	6	7	8	9			
Chalaqua	1661	1445	34.962	-81.066	York, SC	34.980	-81.270	10			
Xuaquile	1489	1095	35.226	-81.727	Hickory, NC	35.764	-81.361	43			
Xuala	1103	1089	35.819	-81.739	Berry Site, near Morganton, NC	35.819	-81.743	0			
Guaxuli	1116	810	35.799	-82.266	Embreeville, TN	36.179	-82.453	28			
Canaragay	902	652	36.128	-82.564	Hot Springs, NC ¹⁰⁶	35.895	-82.828	22			
Chiacha	814	390	36.264	-83.059	Dandridge, TN	36.015	-83.415	26			
Coste	961	71	36.038	-83.661	Bussell Island, TN	35.778	-84.260	38			
Ulibahaly	1466	346	35.261	-83.142	Rome, GA?	34.267	-85.175	133			

Columns 2 and 3 show the pixel coordinates of the eight Indian towns on the Chaves map with their computed latitude/longitude coordinates in columns 4 and 5. Column 6 shows where modern ethnohistory/archeology locates the town and columns 7 and 8 show the latitude/longitude of that place as obtained from Google Maps. Column 9 shows the error, i.e. the distance in miles from the Chaves–Ortelius mapped American Indian town to its modern location. The calculations are based on 69.172 miles per degree of longitude and 55.88 miles per degree of latitude (the latitude of Xuala).

To obtain an average mileage error between Chaves's Indian town positions and their modern locations the author used the five towns Xuaquile, Guaxuli, Canaragay, Chiacha, and Coste. The average error for these five towns is 31 miles. Xuala was excluded from the average because it was chosen in the method of analysis to be correct, Chalaqua was excluded because its exact (but not general) location is not known, and Ulibahaly was excluded because of its obvious misplacement.

Conclusions and Discussion

The combination of modern archeological studies with Spanish documentary evidence has proven itself to be a powerful tool for studies of the history of the sixteenthcentury American Southeast. The results obtained during the past decade open the prospect that further studies eventually will be able to quite closely define the Soto route. Studies of the portion of the Chaves–Ortelius map not examined here may assist in that ongoing effort.

The hybrid map developed in this article changes what Virginia historians have traditionally labeled as "English" America and "Spanish" America" and strongly challenges the traditional English and Low Countries view that Virginia in the sixteenth and seventeenth centuries extended almost to the Florida peninsula.

The 1869 newspaper report of the putative buried Spanish soldier found 17 miles east of Bristol is slim but tantalizing evidence for the 1567 Hernando Moyano attack on Saltville. The credibility of that report is much strengthened by the depiction of the soldier's burial cairn on the 1923 William Myer's map of Tennessee archeology. The author is of the opinion that this evidence is acceptable and correct.

A principal conclusion is that the measured positions of five Indian towns on the adjusted segment of the Chaves–Ortelius map agree with modern ethnohistorical/archeological estimates of their locations. The sixth town, Xuala, is by definition in the correct place because the hybrid map was constructed on that premise. The seventh town, Chalaqua, lacks a precise archeological identification. The eighth town, Ulibahaly, is misplaced on the Chaves–Ortelius map.

It is concluded that the segment of the Chaves–Ortelius map studied here depends entirely on Soto accounts for positioning the towns. There is no evidence on the studied map segment of any information deriving from the Pardo *entradas* of 1566–1568.

By combining sixteenth and twenty-first century information, the hybrid map demonstrates that the Chaves–Ortelius map is the earliest European depiction of inland Virginia. While none of the Chaves map towns is in Virginia, the two mountain peaks depicted immediately north of present-day Bristol in Figure 15 are the first inland Virginia features ever shown on a map.

The opinion of Patricia Galloway concerning the Chaves–Ortelius map is here questioned. She wrote of the map that it "show[s] so confused a notion of the hydrography and topography of the interior that only external evidence has permitted scholars to match the place names to those of historic tribes."¹⁰⁷ The conclusion here is that once the map is adjusted, it

becomes clear that, with the exception of Ulibahaly, Chaves and the officials at the Casa de Contratación did rather well. Soto chronicler Rodrigo Ranjel suggested that the French Broad River was a tributary of the Mississippi.¹⁰⁸ This suggestion elicited a response from David Duncan, who observed "Ranjel's reference to this geographic point should be of great interest to anyone who believes this expedition was poorly run from a navigational standpoint—or for those who believe Soto had no idea where he was, or where he going. Given that no European had yet explored much beyond the mouth of the Mississippi, it's remarkable that Ranjel and the expeditions geographers were able to conjecture (possibly in retrospect, after the entire journey was over) that the French Broad [river]eventually connects with the Mississippi, via hundreds of miles of twists and turns along the Tennessee and Ohio Rivers."¹⁰⁹ The analysis of the Chaves–Ortelius map offered here supports Duncan's conclusion.

Interestingly, the portion of sixteenth-century Virginia on the hybrid map published in the first-ever World Atlas is more-or-less contiguous with the "Fighting Ninth" Congressional District running from Roanoke to the Cumberland Gap.

Acknowledgments

Thanks for comments on earlier versions of this article to Paul Hoffman, David Kiracofe, Ryan Mays, Harry Ward, and William Wooldridge. Thanks also to J. Thomas Touchton and Karen Finch. Thanks to several anonymous *Smithfield Review* referees. Thanks to the staff at Newman Library at Virginia Tech and particularly to the staff of the Newman Library Interlibrary Loan Office. As always, thanks to my wife Deena Flinchum. The author has not agreed in all particulars with those who have so generously advised him; final responsibility for the conclusions and interpretations of this article is his alone. Appendix: The Reports of the Buried Conquistador

Bristol News, December 24, 1869

Page 2, column 3

Mysterious Discovery in Iron Mountain—Opening of a Curious Sepulchre

Special Correspondence of the News

NEAR HOLSTON, Sullivan. co,

Tenn, Dec., 15th '69

Messrs. editors, Gents:- Knowing that you are interested in all matter of news and moreover that the greater part of your time is passed in catering to the reading public, I have determined to send you a short account of a very curious discovery that I, in company with some other gentlemen, had the good fortune of making, some days ago. Being in the mountains (Iron) on a hunting excursion chance led our party into a deep and gloomy gorge, flanked on either side by beetling walls of granite, adown [sic] whose side the "forked lightnings" have played these many centuries; with here and there a stunted tree, to relieve the vision, while at its base a littlestream flowed, or rather floundered on its way, here forming in a deep crystal pool, and the next moment creeping threadlike among the boulders. Whilst sitting near this little stream. I happened to cast my eye around and observing a rather singular mound at a short distance, I arose and on examination became convinced that it must have been erected by men at some period anterior to this. With the assistance of my companions I at once began to remove the earth and stones from the surface, and we were soon rewarded with a sight into its interior, for at the place where we began removing earth, &c., the crust, so to speak, was not exceeding 2 feet in thick ness. Having made a cavity of a foot or more in diameter, we could at first distinguish nothing in the interior save the decayed remains of bodies the nature of whichowing to the imperfect light-we could not determine, curiosity being excited we determined to unearth the mystery at all events. Accordingly we dispatched one of our party to the nearest house for implements and on his return set to work, and soon succeeded in removing totum jugum tumuli [the entire contents of the mound]; On enterin g this "habitation of the dead," for such it proved to be we found several human skeletons in various stages of decay; but with one exception all in a very imperfect state. This one underlying the others, at first presented the appearance of a corpse in complete preservation; but on examination the fleshy parts we found to be of a sort of cheesy consitence [sic], and readily yielded to the touch,

Decayed implements evidently those of war were found intermingled, and one medal or coin the inscription of which was so effaced that nothing could be deciphered, except the word "Espa," or , I should say part of a word for there was an appearance of other letters, on the reverse the figure of a cross could be plainly seen, its presence owing to the concavity of the side. One skull which I examined is evidently that of a Caucasian; or, at least differs widely from that of the aboriginal inhabitants of this country. You will probably aid in throwing a new light on the early history of this country by giving publication to this in your excellent paper.

This tumulus is near the residence of Mr F. Wright on Jacobs Creek, Sullivan County.

With respect, I remain yours,

T. C. KING

Bristol News, December 31, 1869

Page 3, column 1

The Iron Mountain Mystery.—The communication of Mr. T. C. King, in our last issue has attracted much attention. The remains found by him, in a gorge of the Iron Mountain, while very ancient are evidently those of European persons. That they must date their sepulture beyond the settlement of the County is plainly evident. It has been suggested that they are those of a portion of De Soto's party, in its journey to the Mississippi River in [blank space, 1541 intended?] and we regard this conjecture as not only plausible, but probably true. The spot will be visited by gentlemen of our town, and perhaps by one of the editors of the *News*.*

*No report in the *Bristol News* of such a follow up visit has been found.

The citations for this appendix are:

T. C. King, [Special Correspondence of the News], "Mysterious Discovery in Iron Mountain— Opening of a Curious Sepulchre," *Bristol News*, December 24, 1869, page 2, column 3. Online at *http://chroniclingamerica.loc.gov/lccn/sn85026955/1869-12-24/ed-1/seq-2/.*

Anonymous, "The Iron Mountain Mystery, *Bristol News*, December 31, 1869, page 3, column 1. Online at *http://chroniclingamerica.loc.gov/lccn/sn85026955/1869-12-31/ed-1/seq-3/*.

Endnotes

- 1. Jim Glanville, "Conquistadors at Saltville in 1567? A Review of the Archeological and Documentary Evidence," *Smithfield Review* 8 (2004), 70–108.
- Paul E. Hoffman, "The Historiography of Sixteenth-Century La Florida," *Florida Historical Quarterly* (Special Issue: 500 Years of Florida History—The Sixteenth Century), 91 (2012), 308–348. The citation is at footnote 94 page 335.
- Peter Wallenstein, Cradle of America: Four Centuries of Virginia History (Lawrence: University Press of Kansas, 2007), 7–8. The Library of Virginia website "Virginia Memory" states that in 1567 "A Spanish party under the command of Hernando Moyano attacked a Holstonia town at the site of Saltville in Washington County." Online at http://www.virginiamemory.com/reading_ room/chronology_by_period.
- 4. Jim Glanville, "The Blade from Glade," *Smithfield Review* 10 (2006), 33–37. The blade was actually from West Africa.
- 5. Jim Glanville, "Brief Note: Conquistadors at Saltville—An Interim Update," *Smithfield Review* XIII (2009), 137–39.
- Jim Glanville, "16th Century Spanish Invasions of Southwest Virginia," *Historical Society of Western Virginia Journal* 17 (2009), 34–42.
- 7. The author does not wish to join the thorny and distracting "De Soto" versus "de Soto" debate. He will follow Soto biographer David Ewing Duncan in referring to him as either simply "Soto" or "Hernando de Soto," except where otherwise dictated by context, direct quotations, and citations.
- 8. Patrick Foley, "Catholics of the South: Historical Perspectives," *Catholic Social Science Review* 13 (2008) 77–90. Foley comments "One noticeable tendency long present in the publishing of American history textbooks, for example, has been the over-focusing on the English heritage of the American story at the expense of a more in-depth and accurate look at the Spanish historical legacy. Thus the Protestant Anglican narrative, even today, oftentimes tends to be biased and over-stated. ... [T]he Roman Catholic history of the United States, particularly in the South, needs to be presented more accurately."
- 9. Eugene Lyon, *The Enterprise of Florida: Pedro Menéndez de Avilés and the Spanish Conquest of 1565–1568* (Gainesville: University Press of Florida, 1976).
- 10. Albert C. Manucy, *Florida's Menéndez: Captain General of the Ocean Sea* (St. Augustine: St. Augustine Historical Society, 1965).
- 11. Charles W. Arnade, *Florida on Trial, 1593–1602* (Coral Gables: University of Miami Press, 1959), 38.
- Brendan Wolfe, "Don Luís de Velasco / Paquiquineo (fl. 1561–1571)," Encyclopedia Virginia (Charlottesville: Virginia Foundation for the Humanities, nd), http://encyclopediavirginia.org/ don_lua. Modified 10 October 2013.
- 13. Paul E. Hoffman, Florida's Frontiers (Bloomington: Indiana University Press, 2002), 39-41.
- John R. Swanton, *Final Report of the United States De Soto Expedition Commission* [to the 76th U.S. Congress] (Washington: U.S. Government Printing Office, 1939). Reissued with an introduction by Jeffrey P. Brain and foreword by William C. Sturtevant (Washington, D.C.: Smithsonian Institution Press, 1985).
- 15. Charles Hudson, Knights of Spain, Warriors of the Sun: Hernando de Soto and the South's Ancient Chiefdoms (Athens: University of Georgia Press, 1997).
- 16. John C. Hall, "The Search for Hernando de Soto," *Alabama Heritage*, Spring 1987, 22–27. Online at *http://www.alabamaheritage.com/images/vaultimages/04desoto/whole.pdf*.
- 17. Lawrence A. Clayton, Vernon James Knight Jr., and Edward Moore, *The de Soto Chronicles: the Expedition of Hernando de Soto to North America in 1539–1543*, 2 vols. (Tuscaloosa: University of Alabama Press, 1993). Other useful single-volume books are: David Ewing Duncan, *Hernando de Soto: A Savage Quest in the Americas* (New York: Crown Publishers, 1996); Patricia Galloway, ed., *The Hernando De Soto Expedition: History, Historiography, and "Discovery" in the Southeast* (Lincoln: University of Nebraska Press, 1997); and, Hudson, *Knights of Spain.*

- Charles Hudson (1932–2013) was for 35 years Professor of Anthropology and History at the University of Georgia.
- Herb Roe, "Proposed Route of the De Soto Expedition," online at *en.wikipedia.org/wiki/ File:De_Soto_Map_HRoe_2008.jpg*.
- 20. Hudson, Knights of Spain.
- 21. Charles M. Hudson, *The Juan Pardo Expeditions: Exploration of the Carolinas and Tennessee*, *1566–1568*, with documents relating to the Pardo Expeditions transcribed, translated, and annotated by Paul E. Hof fman. (Washington, D.C.: The Smithsonian Institution Press, 1990), reissued (Tuscaloosa: University of Alabama Press, 2005) with a new foreword by Charles Hudson (ix–x) and an afterword by Robin A. Beck Jr., David G. Moore, and Christopher B. Rodning, 343–49.
- 22. Robin A. Beck, David G. Moore, and Christopher B. Rodning, "Joara and Fort San Juan: Colonialism and Household Practice at the Berry Site, North Carolina," Final Report of Grant BCS-0542120 submitted to the National Science Foundation (NSF), 21 October 2010, 1–112, online at http://www.tulane.edu/~crodning/nsfreport2010.pdf.
- 23. David Moore, "The Berry Site and Upper Catawba Valley Archaeology," online at *http://www. warren-wilson.edu/~arch/berryhistory.* See also the website "Exploring *http://exploringjoara.org,* which includes a video about the Berry site.
- 24. NSF Report: Joara and Fort San Juan, 2010.
- 25. NSF Report: Joara and Fort San Juan, 2010, 8.
- 26. Robin A. Beck Jr., "From Joara to Chiaha: Spanish Exploration of the Appalachian Summit Area, 1540–1568," *Southeastern Archaeology* 16 no. 2 (1997), 162–169. The author agrees with Beck that the conquistadors' 1567 attack at the American Indian village of Maniatique occurred at present-day Saltville. However, a more cautious historian might consider Saltville as the place of the attack as a good working hypothesis rather than as an absolutely established fact.
- David G. Moore, Robin A. Beck Jr., and Christopher B. Rodning "Afterword: Pardo, Joara, and Fort San Juan Revisited" in Charles M. Hudson, *The Juan Pardo Expeditions: Exploration of the Carolinas and Tennessee*, 1566–1568 (University of Alabama Press, Tuscaloosa, 2005), 343–349.
- Robin A. Beck Jr., David G. Moore, and Christopher B. Rodning, "Identifying Fort San Juan: a Sixteenth-Century Spanish Occupation at the Berry Site, North Carolina," Southeastern Archaeology 25 (2006), 65–77.
- RobinA. Beck Jr, David G. Moore, and Christopher B. Rodning, "Limiting Resistance: Juan Pardo and the Shrinking of Spanish La Florida, 1566–1568," in *Enduring Conquests: Rethinking* the Archaeology of Resistance to Spanish Colonialism in the Americas, in Matthew Liebmann and Melissa Murphy eds. (Santa Fe: School for Advanced Research Press, 2011), 19–39; Christopher B. Rodning, Robin A. Beck Jr., and David G. Moore, "Conflict, Violence, and Warfare in La Florida," in Clay Mathers, Jef frey M. Mitchem, and Charles M. Haecker eds. Native and Spanish New Worlds: Sixteenth-century Entradas in the American Southwest and Southeast, (Tucson: University of Arizona Press, 2013), 231–50.
- John Noble Wilford, "Fort Tells of Spain's Early Ambitions," New York Times, July 22, 2013. Online at http://www.nytimes.com/2013/07/23/science/fort-tells-of-spains-early-ambitions.html.
- 31. Robin Beck, personal communication, conversation at the Berry site, June 8, 2013.
- 32. In the author 's opinion the archeological work at Berry has been exemplary . The author has elsewhere ("A Review of *Finders Keepers: A Tale of Archaeological Plunder and Obsession* by Craig Childs [New York: Little, Brown and Co., 2010]" *Central States Archaeological Journal*, 56 [2012], 45–46) been highly critical of the archeological neglect of Southwest Virginia and the contempt held by some archeologists forAmerican Indian relic collections and the activities of commercial relic hunters in the region. While these latter activities may be deplored, the information they provide cannot be excluded from consideration as powerful evidence for vanished people and their cultures.
- David A. Barreis, "The Ethnohistoric Approach and Archaeology," *Ethnohistory* 8 no. 1 (1961), 49–77.

- Alanson Skinner, "The Lenapé Indians of Staten Island," in Clark Wissler, ed., *The Indians of Greater New York and the Lower Hudson* (New York: The Trustees of the American Museum of Natural History, 1909), 1–62.
- George MacCurdy, "Some Mounds of East Tennessee," in *Proceedings of the 19th International Congress of Americanists, Washington, 1915*, ed. Frederick Webb Hodge (Washington, D.C.: Congress of Americanists, 1917), 59–74.
- 36. Laura Kozuch, "Olivella Beads from Spiro and the Plains," American Antiquity 67 no. 4 (2002), 697–709.
- 37. Jeffrey P. Brain, Alan Toth, and Antonio Rodriguez-Buckingham. "Ethnohistoric Archaeology and the De Soto Entrada into the lower Mississippi Valley," in Stanley South ed. The Conference on Historic Site Archaeology Papers, vol. 7, book 8 (Columbia: South Carolina Institute of Archaeology and Anthropology, 1974), 232–89, online at http://scholarcommons.sc.edu/ archanth_historic_site_arch_conf_papers/8/.
- 38. Michael Gannon, "The New Alliance of History and Archaeology in the Eastern Spanish Borderlands," *William and Mary Quarterly*, 3rd Ser., 49 no. 2 (1992), 321–334.
- John R. Swanton, "Hernando De Soto's Route through Arkansas," *American Antiquity*, 18 no. 2 (1952), 156–162.
- 40. Warren H. Wilkinson, Opening the Case against the U.S. De Soto Commission's Report: Being a "thoroughgoing Examination" of the Part in Re Present Florida of the Final Report of the U.S. De Soto Expedition Commission (Jacksonville Beach: Alliance for the Preservation of Florida Antiquities, 1960).
- 41. Telephone conversation August 16, 2013 with Daniel Stephens, Interpretive Ranger, National Park Service De Soto Memorial.
- W. S. Eubanks Jr, "Studying De Soto's Route: a Geogian House of Cards," *Florida Anthropologist* 42 (1989), 369–380.
- 43. Charles Hudson and MarvinT. Smith, "Reply to Eubanks, Florida Anthropologist 43 (1990), 36-42.
- 44. David Henige, "A Mismatched Pair: Hudson at the Feast of Hoffman. 'Review of *The Juan Pardo Expeditions: Exploration of the Carolinas and Tennessee, 1566–1568* by Charles Hudson, with documents relating to the Pardo expeditions, transcribed, translated, and annotated by Paul E. Hoffman (Washington: Smithsonian Institution Press, 1990)' "; David Henige, *Documentary Editing*, 13(2), 30–34, 1991; and David Henige, "Proxy Data, Historical Method, and the de Soto Expedition," in Gloria A. Young and Michael P. Hoffman eds. *The Expedition of Hernando De Soto West of the Mississippi, 1541–1543: Proceedings of the De Soto Symposia, 1988 and 1990* (Fayetteville: University of Arkansas Press, 1993), 155–172. See also David Henige, "Millennarian Archaeology, Double Discourse, and the Unending Quest for de Soto," *Midcontinental Journal of Archaeology* 21 no. 2 (1996), 191–215.
- 45. Charles Hudson, Chester B. DePratter, and Marvin T. Smith, "Appendix I: Reply to Henige," in Young, and Hoffman *The Expedition of Hernando De Soto West of the* Mississippi, 255–66.
- 46. Charles Hudson, Chester B. DePratter, Marvin T. Smith and David G. Anderson, "De Soto in Coosa: Another Reply to Henige," *Georgia Historical Quarterly* 78 no. 4 (1994), 716–34.
- 47. Jon Muller, *Mississippian Political Economy* (New York: Plenum Publishing Company, 1997). See the essay "The de Soto Expedition," 72–97. The cited quote comes from page 75.
- Patricia K. Galloway, *Choctaw Genesis*, 1500–1700 (Lincoln: University of Nebraska Press, 1995), 7–13.
- 49. Robin Beck, personal communication, conversation at the Berry site, June 8, 2013.
- 50. John E. Worth, "Exploration and Trade in the Deep Frontier of Spanish Florida: Possible Sources for 16th-Century Spanish Artifacts in Western North Carolina," paper presented in the symposium "A Consideration of Archaeological and Documentary Evidence for 16th- and 17th-Century Spanish and Native Contact in Western North Carolina" at the 51st annual meeting of the Southeastern Archaeological Conference, Lexington, 1994, online at http://uwf.edu/jworth/ WorthSEAC1994.pdf.

- Gregory A. Waselkov, "What Do Spanish Expeditionary Artifacts of Circa 1540 Look Like and How Often Are They Preserved?" in Vernon J. Knight, ed., *The Search for Mabila: The Decisive Battle between Hernando de Soto and Chief Tascalusa*, (Tuscaloosa: University of Alabama Press, 2009), 94–106.
- 52. Jerald Milanich, Ashley White, Bill Boston, Michele White, and Alan M. Stahl, "The Discovery of Conquistador Hernando de Soto's 1539 Encampment," Doug Engle, producer for the Florida Archaeological Survey, 2012, online at http://www.youtube.com/watch?v=L9I2d9cKKaI. See also Fred Hiers, "DelayedDe Soto Exhibit Reaches Farther Back into Sites Past," The Gainesville Sun, Thursday, February 7, 2013, online at http://www.gainesville.com/article/20130207/ ARTICLES/130209665. In the latter item journalist Hiers quotes Milanach as saying: "I looked at the archaeological evidence. There is absolutely no doubt that is a De Soto contact site, and I am 99.99 percent sure this is the town of Potano, the major Indian town. Until now, we really had no one location until all the way up to Tallahassee. Now we have a midway place."
- 53. Charles R. Ewen and John Hann Hernando de Soto Among the Apalachee: The Archaeology of the First Winter Encampment (Tallahassee: University Press of Florida, 1998); Florida Department of State, Division of Historical Resources "Hernando de Soto 1539–1540 Winter Encampment at Anhaica Apalachee," online at http://www.flheritage.com/archaeology/soto/ index.cfm. The Governor Martin site was first identified in 1987 by the state-employed Florida archeologist Calvin Jones, who made shovel tests while the site was being clearedby a contractor for construction. Jones immediately realized that he was finding a mixture of Apalache Indfian and Spanish artifacts, and a formal excavation was initiated. See also Florida Master Site File MS19749.
- 54. Dennis B. Blanton, with contributions by Wes Patterson, Jeffrey B. Glover, and Frankie Snow, *Point of Contact: Archaeological Evaluation of a Potential De Soto Encampment in Georgia* (Atlanta: Fernbank Museum of Natural History, 2013), copy in author's files. The Glass site is located on the north side of the Ocmulgee River in the south of Telfair County.
- 55. Robert L. Blakely and David S. Mathews, "Bioarchaeological Evidence for a Spanish-Native American Conflict in the Sixteenth-Century Southeast," *American Antiquity* 55 No. 4 (1990), 718–744. These authors conclude "We have shown that one in five Native Americans from the sixteenth-century village at the King site was either wounded or killed by soldiers in Hernando de Soto's expeditionary force." The King site is located on the Coosa River inside a large meander loop named Foster Bend, about seven miles west-south-west of Rome, Georgia. See also David J. Hally, *King: The Social Archaeology of a Late Mississippian Town in Northwestern Georgia* (Tuscaloosa: University of Alabama Press, 2008), 461–62. Hally concludes "I think it is probable that the iron implements in the King site burials were gifts from members of the De Soto and/or Luna expeditions to politically and socially important people."
- 56. George F. Fielder Jr., United States Department of the Interior, National Park Service: Nomination Form for the National Register of Historic Places for the Moccasin Bend (Chattanooga) Historic Area, Online at http://pdfhost.focus.nps.gov/docs/NRHP/Text/64000813.pdf. The author writes: "Hampton Place ... has been demonstrated to have intact burned houses containing late prehistoric artifacts and extensive quantities of Spanish artifacts dating from the sixteenth century." Spanish artifacts at Chattanooga (and other places) may also have originated with men from the expedition of Tristan de Luna y Arellana who traveled north from the Gulf Coast in 1560 as far as the vicinity of present-day Rome, Georgia. See also Kathryn E. Holland Braund, "The De Soto Map and the Luna Narratives: An Overview of Other Sixteenth-Century Sources," Knight ed. The Search for Mabila, 45–63.
- 57. Robbie Ethridge, *From Chicaza to Chickasaw* (Chapel Hill: University of North Carolina Press, 2010), 11, 31–32. Ethridge writes "Although the site of Chicaza has not been found, archaeologists agree that the both the town and province of Chicaza were likely located on the physiographic region known as the Black Prairie."
- 58. Blanton, Potential De Soto Encampment in Georgia.

- 59. Knight, ed., The Search for Mabila.
- 60. Ned J. Jenkins and Craig T. Sheldon Jr . "The Hernando De Soto Entrada through Central Alabama: September–November, 1540," paper presented at "Southeastern archaeological conference, Baton Rouge, Louisiana, November 9, 2012.
- 61. De Soto Chronicles, volume 1, 71.
- 62. Chester DePratter, "Santa Elena Update," *Legacy*, 13, no. 1, (2009), 14–15, online at *http://scholarcommons.sc.edu/leg/4/*.
- 63. Hudson, The Juan Pardo Expeditions, 26-29.
- 64. Beck, "From Joara to Chiaha." As noted, Beck inadvertently placed Saltville on the South Fork of the Holston River. It is on the North Fork.
- 65. Rufus W. Pickle, taped interview conducted by Thomas Warden Totten and Helen Virginia McCready Totten, May 21, 1975. Original tape and transcript in author's files. Small objects such as these beads would have traveled easily, and they do not prove (but merely hint) at a Spanish presence at present-day Chilhowie.
- 66. Bristol News, 31 December 1869, 3, "The Iron Mountain Mystery," Thanks to Amy Wright Fuller who discovered the reference and to Wilma Smith who called it to the author's attention.
- 67. Conversations with numismatists have convinced the author that numerous coins fitting this description and dating from the correct time period are known.
- 68. Bristol News, 24 December 1869, 2, "Mysterious Discovery in Iron Mountain—Opening of a Curious Sepulchre."
- 69. William E. Myer, "Indian Trails of the Southeast," 727–857, in *Forty-second Annual Report of the Bureau of American Ethnology to the Secretary of the Smithsonian Institution*, Washington, D.C.: Government Printing Office, 1928 plate 14, 751. Many thanks to Tom Rotenberry of Bristol, Virginia/Tennessee, who called the author's attention to the cairn depicted on Myer's map.
- 70. Galloway, Choctaw Genesis, 1500-1700, 21-24 and 205-217.
- 71. For a non-speaker of Spanish, who also lacks the specialized skills needed to interpret sixteenth century texts (such as the author), it is impossible assess independently the textual documentary evidence. However, when the documentary evidence is a map, no special Spanish language skills are needed.
- 72. Paul Hoffman, "Discovery and Early Cartography in the Northern Gulf Coast," in Alfred E. Lemmon, John T. Magill, Jason R. Wiese, and John R. Hébert, eds., *Charting Louisiana: Five Hundred Years of Maps* (New Orleans: Historic New Orleans Collection, 2003), 7–39.
- 73. Alonso de Santa Cruz [attributed], "Mapa del Golfo y costa de la Nueva España," photocopy of original in the Archives de las Indies, Seville.(Lowery Collection, Library of Congress Geography and Map Division, Washington, D.C.) online at http://hdl.loc.gov/loc.gmd/g3860.ct001033."
- 74. Robert S. Weddle, "Spanish Mapping of Texas," in *Handbook of Texas Online* (Np: Texas State Historical Association), online at *http://www.tshaonline.org/handbook/online/articles/uws01*.
- 75. Henry Harrisse, The Discovery of North America; a Critical, Documentary, and Historic Investigation. With an Essay on the Early Cartography of the New World (London: H. Stevens and Son, 1892), 643–45. The "De Soto" map had been exhibited in Madrid in 1881 and there incorrectly dated to 1521. Harrisse pointed out that the map indisputably had to be post Soton date.
- Barbara Boston, "The 'De Soto" Map," *Mid-America*, 23 (1941), 240–50. See also JeanDelanglez, "El Rio Del Espiritu Santo [Part] V," *Mid-America*, 26 (1944), 62–84.
- 77. G. Malcolm Lewis, "Maps, Mapmaking, and Map Use by Native North Americans," chapter 4, in David Woodward and G. Malcolm Lewis eds. *History of Cartography*, Volume 2, Book 3 (Chicago: University of Chicago Press, 1998), 51–182. Also published online and freely available at http:// www.press.uchicago.edu/books/HOC/HOC_V2_B3/HOC_VOLUME2_Book3_chapter4.pdf.
- Catherine Delano Smith, "Cartographic Signs on European Maps and Their Explanation before 1700," *Imago Mundi* 37 (1985), 9–29.
- 79. Galloway, Choctaw Genesis, 1500-1700, 23, 215-217.

- Geronimo Chaves and Abraham Ortelius, "La Florida / Peruviae Auriferae regionis Typus/ Guastecan" in *Theatrum Orbis Terrarum* [The Theater of the World], third edition (Antwerp: Christophorum Plantinum, 1584), supplement. Online at the Geography and Map Division, Library of Congress at *http://memory.loc.gov/gmd3/g3290/g3290/lg3290tiff/ct001038r.tif*.
- Phillip Burden, *The Mapping of North America* vol. 1, (Rickmansworth, Herts: Raleigh Publications, 1996) 71–73. Quoted by Dorothy Sloan at *http://www.dsloan.com/Auctions/A22/ item-map-ortelius-floridia.html.*
- 82. William P. Cumming, revised and enlarged by Louis De Vorsey Jr., *The Southeast in Early Maps*, third edition (Chapel Hill: University of North Carolina Press, 1998), 1.
- 83. Ralph E. Ehrenberg, "Marvellous Countries and Lands': Notable Maps of Florida, 1507–1846," online at *http://www.broward.org/library/bienes/lii14003.htm*.
- 84. William C. Wooldridge, "Ortelius's Chesapeake," *The Portolan, Journal of the Washington Map Society* (2004), no 4, issue 61, 37–40.
- 85. Paul Binding, *Imagined Corners: Exploring the World's First Atlas* (London: Review, 2003), 201. Ortelius had two licenses: one from the Secret Council of the Spanish Netherlands and one from the Council of Brabant.
- 86. Alonso de Santa Cruz, "Mapa del Golfo y costa."
- 87. Examining in detail the relationship between the "De Soto" and the Chaves–Ortelius maps lies beyond the scope of this article. A review assessing the large body of diverse scholarly opinion about the relationship between the "De Soto" and Chaves–Ortelius maps would be appropriate and welcome.
- Patricia K. Galloway, *Practicing Ethnohistory: Mining Archives, Hearing Testimony, Constructing Narrative* (Lincoln: University of Nebraska Press, 2006), 79. Weber, *Spanish Frontier*, 55, puts the number of survivors at 300, including one woman.
- Seymour I. Schwartz and Ralph E. Ehrenberg, *The Mapping of America* (New York: H. N.Abrams, 1980), 73, 79–81.
- William P. Cumming, *The Southeast in Early Maps* (Chapel Hill: University of North Carolina Press, 1962), 116–117. See also Peter A. Cowdrey Jr., "Catalogue Annotation to the Chaves– Ortelius Map" in Dana Ste. Claire ed. *Borders of Paradise: A History of Florida through New World Maps* (Gainesville: University Press of Florida, 1997), 28–29.
- 91. Binding, Imagined Corners.
- 92. Frans Koks, "Ortelius Atlas—Abraham Ortelius: *Theatrum Orbis Terrarum*. Online at the Library of Congress at *http://memory.loc.gov/ammem/gmdhtml/gnrlort.html*#1.
- 93. Cumming and De Vorsey, The Southeast in Early Maps, third edition, 43.
- 94. Weddle, "Spanish Mapping of Texas." Weddle incidentally notes that Chaves's map fails to show the Rio Grande.
- 95. Cowdrey, "Catalogue Annotation," 28, 32.
- 96. J. B. Harley, "Silences and Secrecy: The Hidden Agenda of Cartography in Early Modern Europe," *Imago Mundi* 40 (1988), 57–76.
- Alison Sandman, "Controlling Knowledge: Navigation, Cartography, and Secrecy in the Early Modern Spanish Atlantic," in Nicholas Dew and James Delbourgo, eds., *Science and Empire in the Atlantic World, [1500–1800]* (New York: Routledge, 2008), 31–51.
- 98. Denis Wood and John Fels, *The Natures of Maps: Cartographic Constructions of the Natural World* (Chicago: University of Chicago Press, 2008).
- 99. William Wooldridge (personal communication) suggested copying errors as the cause. Alison Sandman (personal communication) suggests that no one in Ortelius' publishing house had any special knowledge of latitudes and longitudes. Both of these informants are of the opinion that Spanish knowledge of latitudes and longitudes in 1584 far exceeded what the corner coordinates of the Chaves–Ortelius map would suggest.
- 100. Clifford Merle Lewis and Albert J. Loomie, *The Spanish Jesuit Mission in Virginia* 1570–1572 (Chapel Hill: University of North Carolina Press, 1953). The cited map is Plate III on page 19.

- 101. The value 2.34 was arrived at by experimentation to best fit the known locations. The test of that value is in the distances shown in the rightmost column of Table 2.,
- 102. In other words, the author used the precisely known longitude and latitude of the Berry site to establish the same identical longitude and latitude for the town of Joara on the Chaves–Ortelius map. The working segment of the Chaves–Ortelius map has been "normalized" around a point unambiguously known to us.
- 103. *Virginia Atlas & Gazetteer* (Yarmouth, Maine: DeLorme Mapping Co., sixth ed., 2005). Phoebe Butt is on page 19 at map square D5.
- 104. Glanville, "Conquistadors at Saltville."
- 105. The author has posted online the hybrid map at *www.holstonia.net/files/HybridMap.jpg* where it may be examined or downloaded for examination
- 106. Charles Hudson, Marvin T. Smith, and Chester B. DePratter"The Hernando De Soto Expedition: From Apalachee to Chiaha" *Southeastern Archaeology* 3 no. 1 (1984), 65–77. Here, the authors propose the Hot Springs location for Canasoga (Canaragay).
- 107. Patricia Galloway, "Confederacy as a Solution to Chiefdom Dissolution: Historical Evidence in the Choctaw Case," in Charles Hudson and Carmen Chaves Tesser, eds., *The Forgotten Centuries: Indians and Europeans in the American South*, 1521–1704 (Athens: University of Georgia Press, 1994), 403.
- 108. "[Our] navigation charts indicates [the French Broad River] is a tributary of the River of Spíritu Sancto." Duncan, *Hernando de Soto: A Savage Quest*, 345. The quote is Duncan's translation of the Ranjel–Oviedo account.
- 109. Duncan, Hernando de Soto: A Savage Quest, 345-46.