# Unknown Holstonia: Southwest Virginia Before the Settling of Jamestown

by

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#### Abstract

The conventional wisdom that recorded Virginia history began at or near Jamestown is wrong. The first encounters between Europeans and Native Virginians actually occurred in the far west of the state. Native Americans had established a cultured society, with abundant material goods and well-developed trade networks in the Holston River valleys long before the Europeans arrived in the sixteenth century. Those Natives are not a lost people, they are not a forgotten people, they are simply an unknown people—but they were an important people and their story has never been told. This paper will tell about those unknown people, about the arrival of the Spaniards, about the first recorded battle in Virginia that took place in Saltville, and about the Native American *caçica* from Saltville who married a Spanish soldier and became the first Virginia princess forty years before Pocahontas.

#### Introduction

Many years ago, when its large chemical plant was forced to close, I became deeply interested in the small Southwest Virginia town of Saltville (Glanville 1970, 1971, 1973). In retirement, I planned to tell the important, historic, and fascinating story of the chemical industry that for many years dominated the town. But fate intervened when I discovered the magnificent culture of Native Americans who lived in protohistoric times (1300-1600 AD) in Saltville and the nearby valleys of the forks of the Holston River. Their story too is important, historic, and fascinating. It is also tragic.

So I am here today to announce a pre-Columbian Virginian people and tell the amazing story of a Southwest Virginia culture that was abruptly and brutally changed by the arrival of Spanish Conquistadors in 1567.

Although I had a long professional career as a scientist, I come to this forum avocationally. I have had no formal training in archeology or history. Nonetheless, significant portions of my story have already appeared in a refereed history journal (Glanville 2004, 2005), and more will follow. Furthermore, some parts of the tale have already reached a Virginia history textbook (Wallenstein 2007).

Having stumbled on the story more-or-less by accident I developed it the old-fashioned way: lots of time and hard work. In addition to reading widely in the scholarly literature, I work extensively in the field, where I follow the methods of the detective, the journalist, and the oral historian. I call my field work "improper archeology."

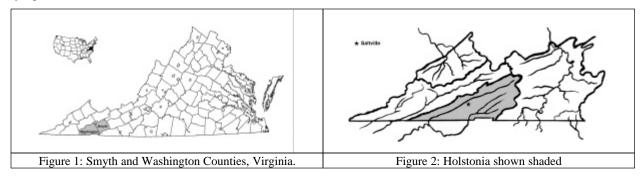
Archeological evidence about the Holstonians and their lifestyles remains preserved in their dwelling sites and in the cultural artifacts they left behind—particularly in the intricately engraved marine shell artifacts called gorgets, that they made and wore suspended around their necks. The social role of gorgets is not fully understood, but quite likely gorgets "would symbolize membership in a high ranking family or descent group and therefore serve as regalia" (Ottesen, 1979).

Ethnographic evidence about the Holstonians comes from written records preserved in Spanish archives. It is those records that tell of the 1567 attack on them. Unfortunately, the same records tell us very little about the people who suffered that attack.

Of necessity, in this forum, I must omit almost all the story's details and simply sketch out its essential form.

We begin with geography. See Figures 1 and 2.

Geographically, Holstonia consists of the watersheds of the three forks of the Holston River in Virginia. They lie principally in Smyth, Washington, and Scott Counties, and touch on Bland and Wythe Counties at their headwaters. The town of Saltville lies on the North Fork, bridging the counties of Smyth and Washington and lying near the heart of Holstonia.



## **Culture and Gorgets**

Much of culture is non-material: language, values, political organization, class ranking, religious beliefs, etc. Much of culture is perishable: wood, feathers, hides, textiles, basketry, etc. To reconstruct culture we must perforce rely on the artifacts we can discover: artifacts such as stone spear points, arrow heads, and axes; pottery; copper objects; pipes made of various materials; and shell beads and gorgets. Of these, engraved shell gorgets are the single most useful artifact category because their styles reveal valuable cultural information, even when located out of context. For gorgets: "style is culture" (Muller 1966a).

The great, inherent artistic value of gorgets has been long appreciated. Many years ago the director of the US Bureau of Ethnology published a lengthy article describing Native American shell art (Holmes 1883). In it, he illustrated the manner in which blank gorgets are cut from large mollusk shells of the type popularly called whelks or conches (Figure 3).

The aesthetic qualities of engraved shell gorgets are much admired in the art world, and attractive, high quality images of gorgets appear in the glossy publications that record important public exhibitions of Native American art. Notable among these are the lavishly illustrated catalogs of exhibits at the Detroit Institute of Arts (Brose et al 1985) and the Art Institute of Chicago (Townsend et al 2004).

Engraved marine shell gorgets are widely recognized as symbols of Native American culture. For example a 6" diameter rattlesnake (Citico style) gorget from the Dallas culture (located 200-odd miles down river from Holstonia) is on display in the British Museum in London (Figure 4). Many gorgets are displayed in the Museum of the Cherokee Indian in Cherokee, NC, and, as a cultural icon, the Museum uses a spider style gorget for its logo (Figure 5).

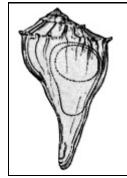


Figure 3: Gorgets *in situ*. Holmes, 1883, Plate XXIX, detail.

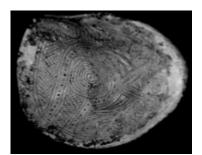


Figure 4: Rattlesnake gorget of the Tennessee Dallas culture (1200-1500 AD) in the British Museum, London. Picture credit: Amy Coyne, 2006



Figure 5: The five-foot diameter spider gorget logo on the front wall of the Museum of the Cherokee Indian in Cherokee, NC. Author, 2006

The presence of an important culture in Holstonia would have been quickly recognized by anthropologists had the abundance of gorgets from the region become known; however there has never been a professional report of the excavation of a marine shell gorget in Holstonia (MacCord 1998). On the rare occasions that gorgets from Holstonia have been professionally described, it was by an anthropologist who briefly visited the region and saw and photographed specimens in the possession of local people who had dug them up (Wedel 1940, McCary 1951, Muller 1966b, Holland 1970). Many gorgets left the region soon after being recovered. They were sought after by relic dealers and collectors. Even today, gorgets acquired many years ago continue to reach the market place.

The most important of the peripatetic gorget anthropologists was Jon Muller. He pioneered the naming and cataloging of gorget styles, including the "Saltville style," about which I will have more to say later. Thirty years after Muller, and based in large measure on his pioneering work, a national catalog of the then publicly known 1000-odd marine shell gorgets was published by the Peabody Museum of Harvard University (Brain and Phillips 1996).

#### **Gorget Counts**

The remarkable significance of Holstonian culture can be demonstrated simply by counting its engraved marine shell gorgets. Table 1 shows the US state gorget counts tabulated from the data in the Brain and Phillips catalog.

My current Holstonia gorget count is approaching 200. That total places Virginia second in rank behind Tennessee and well ahead of four states famous for their mound sites: Oklahoma with the Spiro site, Georgia with the Etowah site, Alabama with the Moundville site, and Illinois with the Cahokia site.

Approximately 90% of Holstonia's gorgets come from just the two counties of Smyth and Washington.

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Rank	State	Count	Percent
1	Tennessee	379	39.1
2	Oklahoma	130	13.4
3	Georgia	111	11.5
4	Alabama	90	9.3
5	Illinois	46	4.7
6	Virginia	37	3.8
7	North Carolina	35	3.6
8	Arkansas	28	2.9
9	Missouri	22	2.2
10	Kentucky	21	2.2
11	Texas	16	1.7
		54	5.5
	All others	969	99.9
			-



Courtesy S. S. Thomas

# **Examples of Gorgets from Holstonia**

Most gorgets from Southwest Virginia are in private collections and can be seen only with their owners' permission. Some can be studied via the collectors literature. For example, the published collection of the late Fred Sharpe (at left) of Marion, Virginia, is seen to the right in Figure 6 (Sharpe 1972). Shell artifacts line the hearth with gorgets at the far right.

Figure 6

Courtesy S. S. Thomas

Relic sales catalogs and relic shows are additional sources of gorget information. The author's study of the relic collectors' literature and activities is almost certainly the first time that anyone has made a scholarly study of these fields with the intent of learning something about a particular Indian culture.

A few gorgets are in rare public displays, such as those seen in a New Jersey museum in Figure 7 (Glanville 2007).

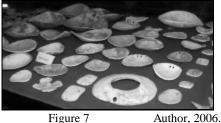




Figure 8 shows a 6" tall mask style gorget that was found in 1875 just west of Holstonia in Lee County (Holmes 1883). It is now in the Peabody Museum at Harvard and for over a hundred years it has been the only documented mask gorget from the region. The author's research has documented twenty more, all so far unpublished.

Figure 9 shows a 4<sup>1</sup>/<sub>2</sub>" diameter Saltville style gorget from Smyth County bearing a stylized rattlesnake design. Originally donated in 1934 to the Heye Foundation, this specimen comes now from the National Museum of the American Indian (NMAI) collection, and is here published (with permission) for the first time. Eleven Saltville style gorgets have been published. The author's research has documented approximately twenty-five more. All currently known gorgets in the Saltville style come either from in or around Saltville or from a three-county region northeast of Winston-Salem, NC. The style almost certainly originated in Saltville.

Figure 10 shows a 5" diameter Citico style gorget from the Sproles site in Washington County. Its stylized rattlesnake design closely matches that of the gorget from Tennessee on display in the British Museum. This specimen was excavated in October 1945 (Slattery 2005), and is today on display at the Fenimore Art Museum of the New York State Historical Association, in Cooperstown. Citico style gorgets strongly link Holstonia to the Dallas culture of Tennessee.



Figure 8

Figure 9

Figure 10

Figure 11 shows a 2<sup>1</sup>/<sub>2</sub>" wide quadrilobed or "Mickey Mouse" gorget, with a center square cross from an uncertain find site. It links the culture of Holstonia to the South Appalachian Mississippian culture near Asheville, NC. This specimen is in a private collection. Only one cross style gorget has ever been reported from Southwest Virginia; the author's work will add eighteen more including one discovered only five weeks ago in a just-published auction catalog.

Figure 12 shows a 5<sup>1</sup>/<sub>2</sub>" diameter star style gorget from Smyth County. Star gorgets are unique to Holstonia. This one is in the same private collection as the preceding specimen. It appeared in the December 1995 issue of the Quarterly Bulletin of the Archeological Society of Virginia (Egloff 1995). Star style gorgets are apparently unique to Holstonia.

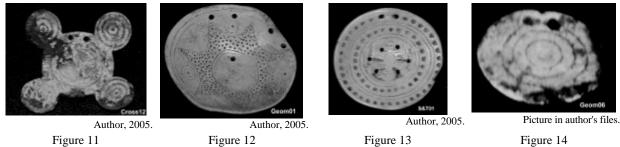


Figure 11

Figure 13



Figure 13 shows a 5<sup>1</sup>/<sub>2</sub>" diameter spider gorget in the Orton style published here for the first time. This particularly fine example was found near the headwaters of the North Fork of the Holston and is today in a private collection in North Carolina. The Orton style is typical of eastern Tennessee (Esarey 1990). In total, only forty-nine spider gorgets are known (Esarey 2006). Holstonia now adds three more.

Spider web gorgets are rarer still, only four are known: three are from Spiro, Oklahoma, and one is from Illinois. Saltville now adds a fifth.

Figure 14 shows a 2" bullseye style gorget published here for the first time. Its provenience and present location are unknown. The image here comes from a photograph taken about thirty years ago by Tom Totten of gorgets in the Robey Maiden collection in Saltville. Bullseye gorgets while not unique to Holstonia are clearly culturally characteristic of Holstonia. Three are known from Saltville, two from Tennessee, and one from Florida.

## How Did the Story Get Missed?

"How did such a culture get missed?" is an obvious question. It has no single answer. Here are five factors:

- First, Holstonia has no mounds, and it was mounds that attracted the early American archeologists.
- Second, there were no large-scale federally-sponsored archeology investigations on the Upper Holston, unlike in down river Tennessee, where there was extensive WPA and TVA archeology.
- Third, no influential "dominant archeologist" emerged at a Virginia museum or university in the 1930s, 40s, or 50s. In contrast, such figures did emerge in adjacent Kentucky, Tennessee, and North Carolina.
- Fourth, Virginia history traditionally looks eastward to Jamestown and to the Native Americans of its coast.
- Fifth, as it was put to me by a local Marion newspaperman, the "hillbilly factor."

## The Spanish Attack

I have already published this part of my story in a lengthy review article covering both the archeological background and all the relevant archival documents (Glanville 2004). So here, I will present just a bare outline, mentioning only the key references and adding several recent ones.

There were two sixteenth century Spanish entradas into the US Southeast from which forays entered Virginia.

Hernando de Soto marched an army through the Southeast for over three years (1539-1542). His route is shown by the gray line in Figure 15. He spread death, destruction, and European diseases and never found the gold he sought. But he "discovered" the Mississippi—and died there. Two of his marauders were in Lee County in 1540.

Juan Pardo (1566-1567) was charged to reach Mexico City overland, via the dotted line in Figure 13. Obviously, the geographic understanding of the time left much to be desired. From a base in Morganton, NC, Pardo's lieutenant (Alferez) Hernando Moyano marched to the mountains of Southwest Virginia seeking gold or a fight, probably both.



Figure 15: Routes of 16th century Spanish entradas into the SE US

The significance of the Juan Pardo *entrada* for Holstonia only developed during the past few years as a result of joint efforts by archaeologists working at the Berry site near Morganton and by ethnographers working with the Spanish archival literature. Berry is archeologically unimpeachable as a mid-sixteenth century Spanish domestic use site and the written records tell that from there a force led by Hernando Moyano traveled north and attacked a palisaded Native American village, now rather confidently identified as Saltville (Hudson and Hoffman 1990, Beck 1997, Moore 2002, Moore Beck and Rodning 2006, Beck Moore and Rodning 2006).

A year or so after the attack, a Native American "*caçica*" (chieftainess, princess?), whom we know only as Luisa Menendez, married a Spanish soldier. This information comes from testimony she gave in 1600 at St. Augustine. Her testimony, and that of others who testified contemporaneously, is documented in the Spanish archives (Ross 1928). Capstone evidence linking Luisa Menendez to Saltville comes from the pension application of an old soldier who fought alongside Moyano (Domingo 1584). The translation and study of this pension

application document (Worth 1994) cemented the archeological and ethnographic evidence in a compelling and symbiotic way.

Incidentally, the 1584 pension application spells out "Maniatique" as the place where the attack on the palisaded village occurred. It represents the first time that the name of a town in modern-day Virginia was written down.

# **Cultural Connections**

Connections among cultures as evidenced by the geographic distributions of gorgets are discussed in a well-known book by Jon Muller (1997). With our limited data we can just begin to see the dim outlines of the connections radiating in and out of Southwest Virginia and append some speculative dates by referring to Muller.

Comparing Holstonia's gorgets with those from surrounding regions (Figure 16) suggests the following: Around 1300 AD Citico style gorgets link to the Tennessee River cultures, while quadrilobed and Lick Creek style gorgets link to the Appalachian Summit cultures. By 1450 AD Holstonia is producing unique or characteristic gorget styles such as stars, bullseyes, and the Saltville style itself. Later, seven Saltville style gorgets appear near Upper Sauratown which is confidently dated by North Carolina specialists to 1450–1620 AD, neatly bracketing the 1567 date of Moyano's Saltville attack. A coincidence?

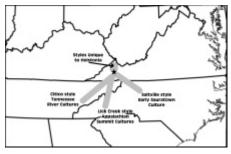


Figure 16: Cultural connections

#### Conclusions

• Certainly by early in the period 1200-1600 AD, Native Americans had established a cultured society, with abundant material goods and well-developed trade networks in the Holston River valleys. The quality and diversity of their shell gorgets are of the first rank.

- Gorget style comparisons show that society had clear links to down river Tennessee (Dallas culture) and to the Smoky Mountain highlands (South Appalachian Mississippian culture).
- Holstonians exploited a wide range of foods, possibly exchanged salt via trade networks, and achieved relatively large and settled populations with unknown political arrangements.
- Later, perhaps by around 1450 AD, they were an independent people with their own unique traditions and unique and distinctive cultural iconography.
- They were attacked by Spanish conquistadors in 1567 and the evidence of the gorgets hints at movement of people at about that time from Saltville to Sauratown in North Carolina.
- When the first English speakers entered Holstonia circa 1745 AD Native Americans had gone. Disease and departure had emptied it.

## A Postscript: Sauratown Woman



In January 1972, archeologists Keith Egloff and Bennie Keel discovered a pothunter looting the grave of a seventeenth century Native American woman at Sauratown, NC.

Some twenty years later, a team of archaeologists, anthropologists, artists, and curators created a full-figure forensic reconstruction of her to exhibit in a show called "North Carolina Women Making History." A bronze statue of that recreation today stands outside the North Carolina Museum of History<sup>3</sup> in the state capital, Raleigh.

She is wearing a gorget.

Maybe, just maybe, her great, great grandparents came from Saltville.

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## Acknowledgments

In Holstonia: The late Tom Totten, Harry Haynes, and Lawrence Richardson. In Saltville: Roger Allison, Chub Arnold, the late Helen Barbrow, Jim Bordwine, Jerry Catron, the late Kitty Cox, Charlie Bill Totten, Jeff Weaver. The family members: Patty Blackwell, Betty Brisco, Freda Chapman, Socorro Garcia, Carrie Golliher, Sue Johner, Melinda and Jim Hatfield, Betty and Linda Sproles, Janelle Taylor and S. S. Thomas. The professionals: Mike Barber, Gene Barfield, Robin Beck, Cliff Boyd, Ian Brown, Ann Early, Keith Egloff, Duane Esarey, Stuart Fiedel, David Fuerst, Paul Hoffman, Charles Hudson, Tom Klatka, Maureen Meyers, Howard MacCord, David Moore, Jon Muller (thanks Jon!), Billy Oliver, Ken Robinson, Chris Rodning, Darla Spencer, and John Worth. The collectors: Tony Adams, Dean Adams, Tommy Beutell, Charlie Burnette, Randy Harris, Jim Maus and all the others who wish to remain anonymous. The amateurs: Freddie Caudill, the late Tommy Hamm, the late Doug Heffinger, the late Danny Keith, the late Beardy Maloyed, Colonel Bob Maloyed, the late Cush Taylor, and all the others who wish to remain anonymous. In Blacksburg: The staff of Newman Library: at the interlibrary loan office, the reference librarians, the off-campus storage staff. Hugh Campbell and the Smithfield Review. Deena Flinchum. In Washington: Patricia Nietfeld, James Krakker, and Lou Stancari. In various places: The Smyth-Bland Regional Library Staff. The Richmond staff of the Virginia Department of Historic Resources. Harry Jaeger in Richmond. Fred Space and Lori Space Day in New Jersey, Dick Slattery in Iowa. James Cusick in Florida. Peter Wallenstein in Blacksburg heard an early reading of the paper. All my informants who preferred to remain anonymous. All mistakes and misunderstandings here are strictly my own.

#### References

Beck, Robin A., Jr. "From Joara to Chiaha: Spanish Exploration of the Appalachian Summit Area, 1540-1568." *Southeastern Archaeology*, 16(2): 162-169, 1997.

Beck, Robin A., 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(1): 65-77, 2006.

Brain J. P., and P. Phillips, *Shell Gorgets: Styles of the Late Prehistoric and Protohistoric Southeast.* Cambridge: Peabody Museum Press, 1996.

Brose, David S., James A. Brown, and David W. Penney. With photographs by Dirk Bakker. Ancient Art of the American Woodland Indians. New York: Harry N. Abrams, 1985.

Domingo, González de León. Letter to His Royal Catholic Majesty the King of Spain, October 13, 1584. Madrid: Archivo General de Indias, Santo Domingo 231, folios 316-8.

Esarey, Duane. "Style Geography and Symbolism of Mississippian Spiders." Paper presented at the 48th Annual Southeastern Archaeological Conference, Mobile, AL, November 7-10, 1990.

Esarey, Duane. Personal communication, 2006.

Egloff, Keith P. "Native American Funerary Objects: Issues Related to Research, Education, Repatriation and Reburial." *Quarterly Bulletin of the Archeological Society of Virginia*, 50(4): 18-26, 1995.

Glanville, Jim. "Did Olin Tell Whole Story?" Letter to the editor. Roanoke Times. Wednesday July 29, 1970. Page 6.

Glanville, Jim. "Comments on the Closing of the Olin Saltville Plant." The Chemist, 48(5): 127, 1971.

Glanville, Jim and Eric Rau. "Soda Ash Manufacture—An Example of What?" *Journal of Chemical Education*, 50: 64-65, 1973.

Glanville, Jim. "Conquistadors at Saltville in 1567? A Review of the Archeological and Documentary Evidence." *Smithfield Review*, VIII: 70-108, 2004.

Glanville, Jim. "Improper Archeology, 'Fabulous Saltville,' and the Ancient History of Southwest Virginia." *The Smithfield Review*, IX: 55-100, 2005.

Glanville, Jim. "The Space Farms Museum Collection of Southwest Virginia Artifacts." *Quarterly Bulletin of the* Archeological Society of Virginia, 62(1): 7-30, 2007.

Holland, C. G. An Archeological Survey of Southwest Virginia: Smithsonian Contributions to Anthropology Number 12. Washington, DC: Smithsonian Institution Press, 1970.

Holmes, William H. "Art in Shell of the Ancient Americans." Pp. 185-305 in Second Annual Report of the Bureau of Ethnology, 1880-1881. Washington, DC: Smithsonian Institution, 1883.

Hudson, Charles. *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. Hoffman. Washington, DC: Smithsonian Institution Press, 1990.

MacCord, Howard, W. Sr. "The Martin Site (44WY13), Wythe County Virginia. *Quarterly Bulletin of the Archeological Society of* Virginia, 53(4): 171-201, 1998." The engraved gorget found at this Martin site, just across the northern border of Holstonia, comes close to being a professional Holstonian find. MacCord tells in the article that the gorget has now disappeared from the site collection.

McCary, Ben C. "Additional Information on the Archaeology of the Saltville Area as Reported by Mr. Robey Maiden." *Quarterly Bulletin of the Archeological Society of Virginia*, 9(3): 7-11, 1955.

Moore, David G. Catawba Valley Mississippian: Ceramics, Chronology, and Catawba Indians. Tuscaloosa: University of Alabama Press, 2002. Pages 19-29.

Moore, David G., Robin A. Beck, Jr., and Christopher B. Rodning. "Afterword: Pardo, Joara, and Fort San Juan Revisited." Pp. 343-349 in Charles M. Hudson, *The Juan Pardo Expeditions: Exploration of the Carolinas and Tennessee*, 1566-1568. Reprint edition. University of Alabama Press, Tuscaloosa, 2006.

Muller, Jon. "Archaeological Analysis of Art Styles." Tennessee Archaeologist, 22(1): 25-39, 1966a.

Muller, Jon. An Experimental Theory of Stylistic Analysis. Harvard University, Department of Anthropology, Ph.D. Thesis, August 1966b.

Muller, Jon. Mississippian Political Economy. New York: Plenum Publishing Company, 1997. Especially chapters 6 and 7.

Ottesen, Ann. Acquisition of Exotic Raw Materials by Late Woodland and Mississippian Peoples. Ph.D. Thesis, New York University, 1979.

Ross, Mary L. "Enquiry made officially before Méndez de Canço, Governor of the Province of Florida, upon the situation of La Tama and its riches, and the English Settlement." Mary Letitia Ross Papers, folder 44 item 16. Atlanta: Georgia Department of Archives and History, undated, circa 1928.

Sharpe, Fred L. "My Relic Collection." Pp. 311-314 in Ben W. Thompson, ed., *Who's Who in Indian Relics No. 3.* St. Louis, Missouri: Parks and Thompson, 1972.

Slattery, Richard G. Personal communication, 2005. Figure 10 used by permission of Dick Slattery.

Townsend, Richard F., General Editor, Robert V. Sharp, Editor. *Hero, Hawk, and Open Hand: American Indian Art of the Ancient Midwest and South.* Chicago: Art Institute of Chicago, 2004.

Wallenstein, Peter. Cradle of America: Four Centuries of Virginia History. Lawrence: University Press of Kansas, 2007.

Wedel, Waldo. "Archeological Reconnaissance near Saltville, Virginia, in 1940." *Quarterly Bulletin of the Archeological Society of Virginia*, 45(3): 114-122, 1990.

Worth, John E. Recollections of the Juan Pardo Expeditions: The 1584 Domingo de Leon Account. Manuscript on file, Fernbank Museum of Natural History, Atlanta, 1994. Personal communication.

#### Footnotes

1. Read in this case means exactly that, literally. I actually made transparencies of the article and read from them at the forum. Doing this was not necessarily congenial for my audience. However, because it was my first-ever appearance in such an illustrious forum at such a heavyweight venue, I wanted to be se sure that I said precisely what I intended to say. I thought I might get booed for the first sentence of my abstract, but I was not. In the event, I received a very polite, if somewhat bemused, reception.

2. Posted on line as a pdf file [the file you are reading] on 25 May 2009 with no changes other than the addition of these footnotes, the updating of the acknowledgments section, and the single correction noted in footnote 3 below.

3. The paper I read stated Museum of Science. That was a mistake and it is here corrected. Thanks to Jeanne Marie Warzeski who pointed out this error.