Alkaline Glazed Stoneware Origins

Carl Steen

When Abner Landrum reported in 1809 (Figure 1) that high quality kaolin had been discovered in the Edgefield District it marked the beginning of a stoneware pottery tradition that lasted more than a century, and spread across the south as far as Texas (e.g., Brackner 1983; Burrison 1983; Greer 1970, 1980; South 1970). Before him only a handful of Euro-Americans are known to have made pottery of any kind in South Carolina (Rauschenburg 1991a, 1991b, 1991d). Here, a society developed where the focus of the economy was the mass production of agricultural commodities (Weir 1983: 161). Pottery making and manufacturing in general were not significant in the Carolina colony because the cost of the labor usually outweighed the value of the goods manufactured. This differed from the Northern colonies in which the European settlers, mostly British, brought an entire society with them, including farmers, traders, workmen and artisans, such as potters (Bridenbaugh 1950).

South Carolina, on the other hand, was settled as an agricultural enterprise by plantation owners from Barbados, along with British and French immigrants who followed their lead (Lesser 1995; South Carolina Historical Society 2000:29-49; Wallace 1951). The enslaved outnumbered Euro-Americans by 1708 (Menard 1995). Fearing slave revolts and attack by Native Americans, the colonial governor devised a Township system in the 1730s in which large settlements of white Europeans would be established (Meriwether 1940). Free land and a degree of start-up encouragement drew settlers to six townships, which were arranged on the frontier encircling Charleston (Figure 2). This provided a buffer between the more wealthy Lowcountry and the increasingly hostile Indians of the interior, and provided militia troops in the event of a slave revolt.

The intent was to bring self-sufficient communities with a full range of occupants, but attempts at growing mulberries for silk, and flax and cotton for linen and

fine cloth faltered. Andrew Grenier of Purrysburg, John Hershinger of Saxe-Gotha, and Henry Gossman of New Windsor were identified as potters in the documentary record (Rauschenberg 1991b) but no details were given and nothing firm is known of their contribution. Their identity as potters was simply mentioned in passing. At frontier sites in Purrysburg, Ebenezer (Daniel Elliott 2010, personal communication), Fort Moore (38AK4 artifact collection) and Saxe-Gotha (Adams 2000) similar earthenwares with light red bodies and thin green lead glazes have been found. These are anomalous in the collections. The surfaces are not as smooth, and the glazes are not as thick and vitreous as is typical on English and European wares. This is not "proof" that they are local products, and this is a case where petrographic analysis could be applied to settle the question, but they may be locally made.

The earliest well documented Colonial era potter working in the European tradition, (producing glazed ceramics on a wheel, fired in a kiln) is Andrew Duche, the son of Anthony Duche, one of Philadelphia's most successful colonial stoneware potters (Bower 1985; Rauschenburg 1991a). Andrew Duche came south and is known to have attempted pottery making in Charleston in 1734 to 1735, and in Savannah in 1736 to 1742. It is also known that he exported kaolin clay to England, and is thought to have met with English potters who were experimenting with porcelain (Ramsay et al. 2004: 65; Rauschenberg 1991c). A redware vessel marked AD has been attributed to him, but his kiln sites have not been identified (Rauschenberg 1991a).

The next known European style potter was John Bartlam, who came to Charleston in 1763 (Rauschenburg 1991d:6). He set up a pottery shop in the city, then apparently moved his operation to Cain Hoy, a small settlement on the Wando River about seven miles from the city. Bartlam was a trained master potter from Staffordshire Doctor Landrum has lately discovered a Chalk in Edgefield district in this state, which is represented to be of superior quality—equal at least to that which Edgeworth manufactures near Liverpeol—there is a great body of this chalky substance in said district, and will soon become highly useful to the country and profitable to the

Figure 1. Augusta Chronicle, July 15 1809.

(Barker 1991; Rauschenburg 1991d). After facing financial problems he was induced to come to Charleston. He came with molds, tools and trained workers. Excavations at the Cain Hoy site (South and Steen 1993) show that Bartlam was apparently trying to make nearly everything that Greatbatch and the other Staffordshire potters were making, from early style creamware and green and splattered glaze Whieldon type wares to soft paste porcelain (Barker 1991, 2001; Hunter 2007:193; Noel Hume 1970). The earthenwares include plates made on common white salt glazed stoneware motif molds, teapots in "cauliflower ware" type molds, and wheel turned redware pitchers and mugs. Numerous wasters were found at the Cain Hoy site, but no kiln or kiln remnants like firebrick were found. It is interesting that Bartlam moved to Camden, SC, because the year after he died another Englishman with a porcelain and pottery connection moved there: Richard Champion. Champion's name is often mentioned in connection with the origin of alkaline glazes for stoneware (Baldwin 1993; Burrison 1983; Greer 1970), which will be discussed below. William Cookworthy was a Bristol chemist who, in the late 1750s, partnered with businessman Richard Champion. The two held the patent on the formula for hard paste porcelain until the 1770's. Ceramics thought to have been made by Bartlam have been found in Camden (Lewis 1976) but no kiln site has been identified (and this is a meaningful distinction).

Making Pottery in the Old Edgefield District

The Old Edgefield District (Figure 3) encompassed the modern counties of Edgefield, Aiken, McCormick, and Saluda. As we have seen, pottery making before about 1810 in South Carolina remains a mystery. There are hints, but although the materials were available for making earthenwares, stonewares and porcelains, no kiln sites from this period have been found. But by around 1810, a new industry had emerged which made use of glazes consisting of silica and alumina in the form of sand and clay, with an alkaline flux derived from lime or wood ash (Figure 4).

The use of this variant of ash and lime based alkaline glazes on stoneware is a tradition shared by South Carolinians and Asians that seems to have bypassed England and Europe. Considerable discussion and speculation surround the origin of the alkaline glazes used in Edgefield, but an empirically

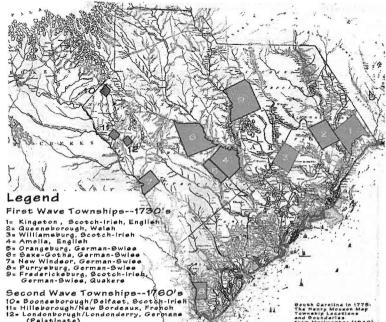


Figure 2. South Carolina Townships. The Henry Mouzon Map of 1780.

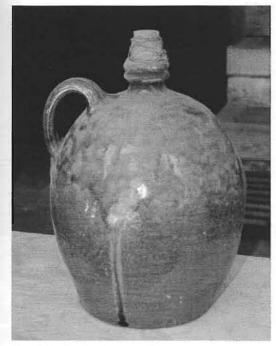


Figure 3. Alkaline glazed stoneware jug.

verifiable explanation remains to be found. In 1825, Robert Mills credited Abner Landrum with the introduction of stoneware manufacturing in South Carolina (Figure 5), and most researchers accept this. But how did he come up with this innovation? Georgianna Greer (1970, 1980) began this speculation with the Cookworthy-Champion line of reasoning previously mentioned. She believed that during his attempts to make porcelain William Cookworthy may have discovered their utility and adapted alkaline glazes for stoneware, which Richard Champion passed on to some-

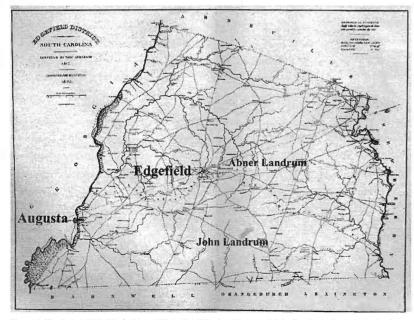


Figure 4. The Robert Mills Map of the old Edgefield District, Abner and John Landrum sites emphasized.

one in South Carolina. Both potters and information about pottery making were transferred between the continents, so this is reasonable. However, Champion is not known to have made pottery himself, and no documentary evidence has been found linking him to pottery making in South Carolina.

John Burrison (1983) took up the issue next, with the more conservative view that since alkaline / ash glaze recipes and porcelain manufacture were discussed in Du Halde's 1738 General History of China, and since Du Halde's book was excerpted in Charleston newspapers, and available in the colony, that someone had read it and put the recipes to use. For Landrum to read of a glaze recipe in a book or newspaper, and then put it to work seems unrealistic. Making even simple unglazed hand made pottery requires training. And it has long been recognized that even experienced potters have a period of uncertainty and experimentation when they start a new operation, as will be discussed below.

So how did the practice originate? If we take a different approach, still assuming that the glaze was produced as a corollary of experimentation with porcelain manufacture then it is still possible to say that Abner Landrum was responsible for developing the glaze and spreading its use, but where exactly he obtained his knowledge remains a matter of speculation. A recently discovered document (Hardman 2010; Smedley 1883) from the 1880s says he visited potters in Pennsylvania seeking advice on making porcelain and "fine wares" but does not name anyone he consulted with specifically. The potter named in the document, John Vickers, is thought to have made earthenwares primarily, though he also made creamwares early in the

19th century, and at least some porcelain after the 1830s (James 1978:165-185).

Landrum himself said that he could make porcelain. In his newspaper, the Edgefield Hive, he said that he would "manufacture a specimen of the upcountry porcelain" for the inspection of the editors of the Charleston Courier (Edgefield Hive 4-9-1830) and discusses the difference between "upcountry porcelain" and imported wares. None of his "upcountry porcelain" has been found to date (Castille et al. 1988; Steen 1994), but planned excavations at his Pottersville kiln site may produce clues (Fennell 2010). Artifacts recovered at Landrum family sites, discussed below, provide evidence of experimentation with glazes, clays and firing techniques but no translucent or even pure white sherds have been found.

Potter J. Simkins and perm sville Arth Sumkins Sen. Esg. GEFIELD 0 con Esq andsborron

There is another village of sixteen or seventcen houses, and as many families, within a mile and a half of Edgefield court-house, called the Pottery, or Pottersville, but which should be called Landrumville, from its ingenious and scientific founder, Dr. Abner Landrum. This village is altogether supported by the manufacture of stoneware, carried on by this gentleman; and which, by his own discoveries is made much stronger, better, and cheaper than any European or American ware of the same kind. This manufacture of stoneware may be increased to almost any extent; in case of war, &c. its usefulness can hardly be estimated.

Figure 5. The Robert Mills Map of the old Edgefield Dis trict, Abner and John Landrum sites emphasized.

Abner Landrum may have attended the Willington Academy in Mt. Carmel, near Abbeville (Baldwing 1993:199n 48) for his primary education. In the first decade of the 19th century, he is known to have studied medicine in Augusta, forming a partnership with Dr. Benjamin Harris in 1807 (*Augusta Chronicle* 1807). This is significant because research by Bradford Rauschenburg (1991b:102-119) has brought to light the presence of a pottery in Augusta during the first decade of the 19th century owned by Virginia native Nathanael Durkee. In the August 7, 1801 issue of the *Augusta Chronicle*, he advertised pottery for sale:

Pottery

The subscriber begs leave to inform the public that he has been at a very considerable expense in establishing this business, as it required time to find out the temperature of the different clays in this climate, he flatters himself that now he can furnish as good ware as any on the continent, if not better, as he has found out clay of a superior quality. He has on hand an assortment of ware, consisting of jugs of different sizes, milk pans, pickle pots, sweet meat jars, butter pots, bowls, mugs, flour pots, pitchers of all sizes, SC. which he is determined to sell on very low terms, and at one uniform price: Country store keepers can be supplied to great advantage and their orders will be attended to; any kind of produce will be received in payment. Those persons who want ware, will please apply at the old Academy, on the River Bank, where the manufactory is established, and constant attendance will be given.

N. Durkee.

August 7

N.B. Tyle for covering houses can be furnished at short notice, and warranted as good quality as any from Hamburg, Liverpool, or Holland--A few thousand now on hand.

N.D. TWO apprentices wanted.

From his advertisements in the *Chronicle*, Nathanael Durkee appears to have been an investor and speculator, which is one of the most common of the false leads that plagues studies of Edgefield pottery and potters. It is possible that he never dirtied his hands in the pottery shop. Indeed another ad for a newly opened pasture states: "those who wish to put in their horses, will please to leave a line at my pottery, at the old Academy, with Mr. Fouts, the head workman" (*Augusta Chronicle* 1801). Durkee must have moved his pottery operation outside of town because in 1803 he advertised his plantation, Summerville, for sale:

It contains upwards of five thousand acres of land, about one hundred of which are under cultivation, and mostly enclosed by a new fence, there is a comfortable two story house, with several out houses, a stone springhouse, an excellent, and never failing spring of water, a large garden, containing two acres, in which upwards of 100 bearing quince trees, and about 30 apple trees of excellent fruit, a few choice pear trees, plumbs and Dansons -a peach orchard containing 1000 peach trees, 500 of which are in perfection; there is a saw mill in complete order, that now cuts near 1000 feet of lumber per day, and several more mill seats on the tract; and it is the opinion of some of the best mill wrights that each mill might saw from 150 to 200,000 feet a ber [?]--a Grist Mill in good order, a distillery, a brewery, and pottery are all at work on the premises... (Augusta Chronicle 1803).

He sold the property to Henry Evans and in 1804 he advertised his new "City Hotel" downtown in Augusta. Durkee does not show up as a potter after selling Summerville, so it is entirely possible that before he left he sold the shop and equipment, and taught the buyer the trade – or, more likely, the potters working at the site stayed on.

Thus a pottery shop owned by Henry Evans, with Hightower Davis serving as his manager, seems to have been in operation in Augusta at the time that Abner Landrum was developing his alkaline glaze. However, nothing clearly attributed to this shop has been found. No marked pieces are known and the kilns remain undiscovered. In an 1813 newspaper ad, Evans stated that he was making earthenwares, presumably lead glazed (Rauschenberg 1991b:108; Smith 1986:51).

A final judgment about a connection between the Durkee/Evans pottery and the development of alkaline glazed stoneware manufacture will have to be withheld until we find the Durkee pottery site and see what was being made there. It seems clear that Abner Landrum was instrumental in the introduction of alkaline glazing, but I do not believe that someone without a thorough knowledge of pottery making could adapt the DuHalde recipe or any other printed formula without help and training. Even Durkee alluded to a period of experimentation with the local clays in the previous ad: "it takes time to find out the temperature of the different clays in this climate" (*Augusta Chronicle* 1801).

A safer bet may lie in a Durkee, Fouts, Evans or Davis connection. The recently discovered document from the 1880s opens another possibility. Through local connections Landrum could have become familiar with pottery making and clay. Through his interest in science, he may indeed have read of alkaline glazes and stoneware making. Philadelphia, home of the American Philosophical Society and the American Society for Promoting Useful Knowledge, was the center of learning for the developing Industrial Revolution in the United States at the turn of the 19th century (Myers 1989). His partner Dr. Brazier studied under the nation's leading medical scholar, Dr. Benjamin Rush, in Philadelphia (Baldwin 1993). With Brazier's introduction, Landrum may have made a trip there to learn more, and induced a stoneware potter from the north to come south and set up his shop.

This is off of the subject of pottery making, but is presented as an example of Landrum's intelligence, free thinking, and his interest in manufactures and science: the enabling factor that allowed him to innovate while his neighbors stubbornly stuck to plantation agriculture. In my opinion, it is entirely conceivable that Abner Landrum learned about making pottery in Augusta as a teenager. Perhaps he only learned enough about the process to recognize good clays and hire a potter. Then through his reading, spurred by progressive views regarding manufacturing, he learned of a cheap way of making pottery using only locally available materials.

This fits in with trends in society at large and in the pottery industry of the times as well. By the turn of the 19th century the deleterious effects of lead in pottery glazes was well known, and methods of reducing the amount needed were a matter of constant discussion. Folklorist Charles Zug (1986) provides a valuable clue to the mystery of how alkaline glazed stoneware may have come to South Carolina that fits well with the present line of reasoning. Two American accounts published in 1801—one in Philadelphia, and one in Baltimore — well illustrate the increasing desire for a lead substitute. John Beale Bordley (1801) observed: "Lead requiring but little fuel to melt it, is the cheapest or earliest material for producing common glazing..." Lead was dangerous to the potters who used it, and to consumers. As an alternative, Bordley continued: "our own country abounds in materials for producing the most perfect, durable, and wholesome glazing. These materials are wood ash and sand". He goes on to say that he had a Philadelphia brickmaker named Cook experiment with the glaze on earthenware and stoneware bodies and "the glazing was very satisfactory to him." So alkaline glazes were known and had been used in Philadelphia by 1801.

The second article, published in the Baltimore American and Daily Advertiser, offers a somewhat more complex fritted borax glaze formula. Frits are glazes made of a combination of ingredients that were melted, cooled, and finely ground for application. This formula was put forth by a Professor Fuchs, of the Academy of Useful Science in Erfurt, Germany (Figure 6). Zug (1986:73) continues by saying that "although the folk potter did not use fritted glazes, most of the ingredients here are familiar enough". The latter recipe is for a type of glaze more common on refined tablewares, and thus is not entirely relevant - or is it? During our 1987 survey, a storage jar base filled with unground frit (Figure 7) was, in fact, found at the John Landrum site (38AK497). Further, the John Landrum site and the Amos Landrum site examined in 1993 both produced kiln furniture and tablewares and other forms in bisque indicating that at the early sites at least, experimentation with "non-folk" forms, methods, and glazes did take place. Later potters focused on utilitarian vessels and storage wares.

Zug (1986) also makes a convincing case for potters learning of alkaline glazes from glassmakers, who used many of the same raw materials. So, as Dr. Zug said years ago, Southern potters did not necessarily have to rely on foreign sources, and thus it is possible that the letters in Du Halde, and all of Champion and Cookworthy's discoveries had a peripheral role in the adoption of alkaline glazes in South Carolina pottery.

Further evidence for local innovation lies in our knowledge of society at the time. The period leading up to the War of 1812 was one where reliance on domestic goods took on a new life, with non-importation movements growing just as they had before the American Revolution (Myers 1989; Steen 1989). The United States had managed to stay neutral, and even profited by providing neutral shipping for the warring nations, but in 1807 President Jefferson imposed an embargo prohibiting the buying or 4:5

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feveral days, to take nothing but scatter coded with ice, forest oranges, and iced fronts.--lead with, fenite, elsewhar, and other iced visual, are found in moli of their towns. They prefer force, as it is more easily preferved than ice. The force is digity pathed togethar, and covered with firms."

POTTERT

The entlien ware made in America, is gland with had and the glaving composition is laid on very faringly, this and flight : fo that it is not only worn away by vegetables and every thing acidalaus, but is apt to feate off and be fullowed with ment, greens, and drinks. It is pure lead, and confequantly a frong popler. The effect of lead on the health of glaziers and house painters, is daily feen. A ionimeyman or working pilmer may live, costimully dying, fix or eight years as a large allowance. The maller who lies that the work is done, and works but little, liver langer. All are growing and pining, under colicks, gripes, cramps, cheumatifms, aches and pains, who continue to tour up and infule the vapours of lead for fome time ;, or who gradually fullow fault persions of it with their milk, preent, eider and duicks, diffuled from the glazing mule of hush. The people of New England, drink much eider, and the much vinegar, in country fami-

Figure 6. J.B. Bordley, Dr. Fuchs observations.

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lies 3 and there have been inflances of whole families afflicted as above.

Lead requiring but little fuel to melt it, is the cheapeft or easieft material for producing common glazing. It is therefore impoled on the inattentive people of the country, who buy the ware without knowing its had qualities, or without caring for them: and this lead is imported from foreign countries; whilft our own country abounds in materials for producing the most perfect, durable, and wholefome glazing. These materials are used other and find. On converting with a potter in Philadelphia, his objection to the use of these materials was their requiring more labour and fuel; but if I would prepare them for glazing any pieces I might want, he would hay them on, and find a place in his kilu, for giving a good glazing. If legillators were duly fentible of all this, their energy might find means for causing the change from lead to fand, for glazing earthen ware ; and of courfe, for protecting the health of the people.

A young man of the name of Cook, a brickmaker, in the time of the revolution war, informed me he would creft an earthen ware manufactory, if he knew how to glaze the ware. Having a finall sit furnace, for my anufement, he made finall chy cakes, and the glazing materials were prepared and laid on the dry NOTES AND

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dry cakes: and being fluxed in the furnace, the glazing was very fatisfactory to him. He then got fome fine potters day out of my bank, and made a number of little cakes of it, mixt with various proportions of graund fand. Thefe were burnt in the furnace 1 and one effectively was a functioned of a very recellent concreter which is sailly preferable, in its qualities, to earthen ware ; and is greatly wanted in America. The heavy freight paid on fo bulky and elsap an article of imported merchandize, readers stoneware faces : and gives an inviting opening to induffrious manufacturers of floweware, in America.

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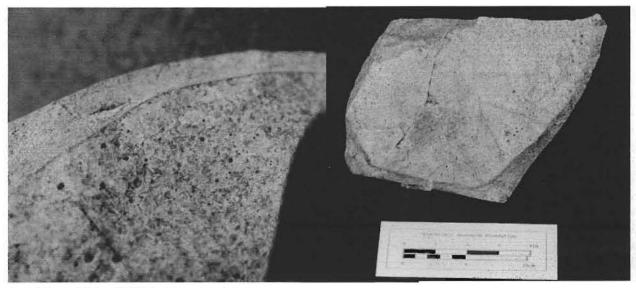


Figure 7. Unground frit from 38AK497 (the John Landrum site).

selling of goods from France, England, and the other European nations tied up in the Napoleonic wars.

In the cities of the north, local manufactures were encouraged. In response the Philadelphia merchant the firm of Binny and Ronaldson formed the Columbian Pottery, and in 1807 advertised in the *Savannah Public Intelligencer* for clay samples: A person who has been born and bred in Britain to the pottery business...being anxious to procure the best possible materials... hereby solicits the attention of such patriotic gentlemen throughout the union as may feel disposed to patronize his establishment, to such clays or flints as may be found in their respective neighborhoods and invites them to send specimens...to Messrs (Binny and Ronaldson in Myers 1989:6).

The Savannah newspaper would surely have been read in Augusta, so we can see that for anyone interested in manufacturing there would at the least have been access to ideas regarding clay and its uses and potential value. It is likely that the ad was placed in this particular paper because of the 18th century interest in Carolina clays discussed previously (see Ramsay et al. 2004; Rauschenburg 1991c:67-78). This advertisement may have served, even if his association with Nathanael Durkee had not, to raise Abner Landrum's consciousness regarding clay and pottery. At any rate, on July 15, 1809 it was announced in the Augusta Chronicle that he had discovered clay and associated it with making pottery, and in 1812 he requested a grant from the state legislature to "assist him in the manufacturing of China." (Charleston Gazette 1812).

John Vickers and Abner Landrum

Nearly everything presented up until now was written, to a degree, by 1994. The recent discovery of the Smedley (1883) document by researcher Samuel Hardman (2010) supports the line of reasoning outlined and refines it considerably while still not exactly answering the question of where Landrum learned of alkaline glazes.

Some discoveries are serendipitous. A colleague forwarded me an email on another subject entirely which just incidentally contained an email with a copy of a passage from a book (Figure 8) on the Underground Railroad concerning Chester County, Pennsylvania potter John Vickers. This passage discusses a visit by Abner Landrum. John Vickers was a Quaker abolitionist (James 1978; Smedley 1883). He learned the pottery trade from his father, Thomas Vickers. They are known for making redwares and Pennsylvania Queensware. Later in the 19th century, they began making porcelain. John Vickers started several potteries and eventually ended up near Liontown, Pennsylvania. His farm and shop were well known stops on the Underground Railroad. The farmhouse he built in 1823 is still standing, and today serves as an inn and tavern.

R.C. Smedley (1883:151-153) describes the meeting of John Vickers and Abner Landrum in his book (Figure 8) on the activities of the Underground Railroad in Chester County. The date of their meeting is not given, but Sarah

like Cuffy, " they could not bear to be slaves."

A young man named Abner Landram, son of a wealthy planter in Georgia, found a species of clay on their plantation, which it was thought would make very line porcelain ware. He came north to learn more of its quality, and of the manner of making it into fine ware. He was directed to John Vickers, as one of the most extensive and reliable manufacturers in the country. It was early in the morning when he arrived, The family had finished breakfast. As he had mit yet eaten they prepared a table for him. Sarah Vickers, then about sixteen, waited on him. She noticed as she moved around that his eyes followed her rather anneually, and after eating he turned pleasantly toward her and asked, "Do you ladies here North wait on the table?" "Oh, yes!" she replied, "we have no slaves horn."

During the early part of his visit he remarked that he saw a nigger boy going out of their lane with a basket,

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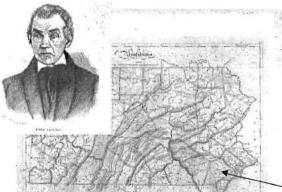
and a book under his arm, as if he was going to school. " Is my surmise correct?" he asked.

"It is," replied John, " we think colored people need education, and are entitled to it as well as white people."

He raised his hands and turned up his eyes for a moment as if struck with astonishment ; then with a look of thoughtfulness he slowly remarked, "Well, that is a new idea to me entirely. I never thought of such a thing as educating the colored race. It takes me by utter surprise. But, I declare, the idea pleases me."

There was something more than ordinarily good, congenial and kind in the heart of this young Southerner that pleased John, who was himself a young man at this time, and a warm mutual friendship was thereby established. He made the Vickers' house his home while visiting other places of interest in the vicinity, and a correspondence was kept up between them for many years. During his stay with this intelligent and benevalent abolition family, he became so imbued with the just and noble principle of liberty to all, and with a sense of the injustice and degradation of human slavery, that he would never afterwards own a slave, but was instrumental in many instances in modifying to some extent the harshness and crucity with which the slaves were generally treated in his section of the South,

A slave named Tom Jones was sent to John Vickers. He remained there several years, worked in summer and wint to school in winter. He married a girl who had been reared at Richard Thomas' in the valley, and who went to the same school that he did. They had a large family of children. Soon after his marriage he purchased a small property, about twenty or thirty acres,



Vickers, who in the passage is said to be "about 16" was born in 1794, so 1809-1810 sounds reasonable.

The passage itself is extremely valuable in a number of ways. Previously I discussed the speculation regarding the origin of alkaline glazing. I concluded that one could probably not read about making pottery in a book or newspaper and then start making and firing pots. Rather one would have to learn from an expert. This passage supports that argument: "A young man named Abner Landrum, son of a wealthy planter in Georgia found a species of clay on their plantation, which it was thought would make very fine porcelain ware. He came north to learn more of its quality, and of the manner of making it into fine ware" (Smedley 1883:151).

Porcelain, which has a highly refined alkaline glaze, was made in Philadelphia in the early 1770s, though the operation failed and was abandoned before the American Revolution (Hunter 2007). The knowledge of lead free glazing apparently survived though, as J.B. Bordley clearly described experiments with making alkaline ("wood ash and sand") glazed pottery in Philadelphia, including stoneware, in 1799 and 1801. So it would seem that Landrum would have learned about the practice there, perhaps in research at the Society for the Promotion of Useful Knowledge or from a local potter.

Stoneware was made in Philadelphia during the 18th century (Bower 1985) and in the first decade of the 19th century, but most Pennsylvania potters focused on lead glazed earthenwares before the 1830s as Bordley (1801) noted. Potters in New Jersey and New York were more likely to make stonewares (James 1978), and Landrum may have visited with them during his travels in the North. Likewise potters in Maryland and Virginia were making salt glazed stonewares at the time (see Hunter and Goodmand 2005:37-132, for example) and he may have visited them on his way to Philadelphia.

However, the New York stoneware potter Branch Green had moved to Philadelphia by 1809 (Bower 1985) so he may have been a contact for Abner Landrum. During his visit Landrum may have recruited an experienced stoneware potter, brought him south and experimented with the new glaze. Vessel forms from the potters of Virginia and Maryland referenced above, particularly the DuVal Pottery (Hunter and Goodman 2005) are very similar to early Landrum forms. So as stated above, we still cannot say precisely where Landrum found his glaze formula and stoneware medium for it, but we have narrowed it down considerably. The southern tradition in stoneware making probably has northern roots.

The 1809 announcement in the Augusta Chronicle is the earliest indication of Abner Landrum's interest in matters of clay. In my opinion it is no coincidence, because the Nonintercourse Act of 1809 led to the United States involvement in the War of 1812. Susan Myers (1989:5) notes "diminished imports led to rises in the price of manufactured goods, and many businessmen shifted their capital from shipping to developing American industries... American manufacturing launched upon a period of expansion that lasted until the end of the war in 1815". A severe recession followed the war, but the Industrial Revolution began in earnest in the 1820s.

Thus we can see that the developments in the Old Edgefield District did not occur in a vacuum. Abner Landrum did not casually read about ash glazes in a newspaper and give it a try. Rather the innovations were spurred by national and global influences. The accelerated development of pottery manufacture and clay extraction in the Edgefield District after 1809 was not a result of a folk tradition growing naturally from roots hidden in time, but rather was the result of forward thinking businessmen, participating in the growing capitalist system and seeking to develop local manufactures. Pottery was a minor link in this development, as the 19th century also saw the growth of cotton mills and other industries in the Augusta/ Hamburg/Horse Creek Valley area that were far more important to the economy. But the alkaline glazed stonewares made in the area loom large in the archaeological record, as they are found all across the state, and the practice was carried west when the frontier was opened in the 1830s forming a cultural horizon that will be visible to archaeologists of the future (Winberry 1997).

But Abner Landrum learned other important lessons from John Vickers and his family. Landrum is said to have watched John's sister Sarah set the breakfast table and serve him, with bemusement. "Do you ladies here in the North wait on the table?" he asked. "Oh yes! We have no slaves here." she replied. He saw a black child leaving the house with a book under his arm, and asked if he was going to school. John Vickers replied that he was. "We think colored people need education and are entitled to it." To a southerner this was astonishing. "I never thought of such a thing as educating the colored race... But, I declare the idea pleases me."

The article goes on to say that Landrum "became so imbued with the just and noble principle of liberty to all ... that he would never afterwards own a slave." This is not precisely true, though compared to many of his social status, he owned few slaves. According to the U.S. Census, in 1820 his household contained a mulatto girl who was less than 14 years of age. In 1830, a male age 24–35, and another aged 10–23, along with a woman age 10–23 lived in his household. The woman is probably the same girl in the 1820 census. In 1840, she is aged 24–36, and seems to have children of her own, a boy and two girls less than ten years old. She is not seen in 1850, but her children, now said to be two females 17 and 20 and a boy 11, are still living in the Landrum household. So Abner Landrum seems never to have owned more than four slaves, and those he did own were women and children, for the most part. It does not appear that he relied on slave labor like his neighbors. Whether he affected the community or society at large in this regard is questionable, but in his own home it appears that Smedley's observation that he "was instrumental in modifying to some extent the harshness and cruelty with which the slaves were generally treated in this section of the South" seems to have merit.

As noted by Samuel Hardman (2010), the idea of educating slaves seems to have achieved fruition in the case of the famed potter Dave, who, according to a 19th century newspaper article (Koverman 1998), worked in Landrum's print shop and pottery. Dave is known for the inscribed signatures, lines of verse and dates with which he sometimes decorated his pots (Todd 2008). On hearing of Abner Landrum's death he marked one vessel with a memorial: "Over Noble Dr. Landrum's Head / May Guardian Angels Visit His Bed." Date April 14, 1859 (in Goldberg and Witkofski 2005). In this regard, Landrum's visit to the Vickers' home may have made a significant impact, as Dave's pots are owned by major institutions such as the Smithsonian, and are highly sought after by collectors and extensively studied by scholars. Dave, rather than Abner Landrum, is probably the best- known potter from Edgefield.

The question of precisely who taught Abner Landrum to make his alkaline glazed stonewares remains unanswered. The social and economic conditions of the early 19th century contributed to an atmosphere conducive to innovation and experimentation. Before he ventured north, Landrum had an interest in developing a pottery industry. His meeting with John Vickers and other potters along the road to Philadelphia provided him with the knowledge he needed, and probably allowed him to recruit a journeyman potter. His association with John Vickers and his family also seems to have influenced Landrum's views on slavery, perhaps showing him that it was possible to earn a living without being a large slaveholder like his neighbors. Whether it was he who taught Dave to read, write, and express himself in script is not known for sure, but he was clearly in a position to do so, and to create an atmosphere where Dave's gifts were encouraged.

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Jodi A. Barnes, Editor

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