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Missionaries, Artisans, and Transatlantic Exchange: Production and Distribution of Moravian Pottery in Pennsylvania and the Danish (U.S.) Virgin Islands

ABSTRACT

The international mission network created in the 18th century by the evangelical Protestant group known as the Unity of Brethren, or Moravians, sustained a consistent set of beliefs and daily practices across widely scattered communities. The spiritual unity among the dispersed but cohesive communities in the Moravian Atlantic missions was achieved through the circulated written accounts of each mission's activities. Material culture contributed to the communal approach adopted by the Moravians because the trades practiced in the North American and European communities funded mission work. This included potters who manufactured a slip-decorated, red earthenware, and the Moravian records document that these products were sent from Bethlehem, Pennsylvania, to the Danish Caribbean mission. The identification of fragments of this Moravian ware at six sites in the Virgin Islands demonstrates material aspects of this transatlantic community, as Moravian missionary ventures represented an intertwined web of religious belief and economics.

Introduction

The Moravians, or the Unity of Brethren, were the first evangelical Protestant group to engage in international mission work, starting in the 1730s. By the late 18th century, missionaries were active on six continents in a dispersed but cohesive network of closed communities, open congregations, and mission outposts that was directed from the main settlement in Herrnhut, Germany. Historians researching this 18th-century mission network have adopted an "Atlantic" or "transatlantic" approach to the spiritual unity of Moravian communities scattered around the Atlantic Ocean that maintained a consistent set of beliefs and daily routines. Documenting this transatlantic community are

records that circulated among the outposts, such as daily logs of each mission's activities, autobiographical accounts known as *Lebenslauf*, hymns, and various types of images. Records show that each community perceived itself as part of this Atlantic network, and both outlook and economic activities were designed accordingly (Thomas 1994; Fogleman 1996, 2007; Murtagh 1998; Engel 2003, 2009, 2010, 2012; Atwood 2004; Sensbach 2005; Vogt 2006; Gillespie and Beachy 2007b; Warner-Lewis 2007; Roeber 2008).

While the Moravians successfully attracted new converts as they maintained spiritual unity in their mission outposts, there were more worldly concerns about funding the towns and the missionaries. Donations from European elites initially provided support, but the Moravians sought self-sufficiency by practicing trades in their towns in Pennsylvania, North Carolina, and Germany. Producing goods for their own use reduced the need for cash, and the profits from selling goods funded the church's activities, as all community members, including the artisans, participated in mission work (Atwood 2004; Engel 2009). Epitomizing the Moravians' shared goals was the communitarian "General Oeconomy" that operated from 1741 to 1762 at Bethlehem, Pennsylvania, in which the town's organization and economic activities were collectivized so that profits from artisanal production financed the town and the missions (Engel 2009:35). After the "Oeconomy" was abandoned and allowances for personal profit-making were made, the artisans' profits continued to fund missions (Engel 2012:11–12).

Historical archaeology can access the role of material culture in maintaining the Moravians' transatlantic unity with studies of the artisanal products and by using documentary and archaeological data to track the locales reached by these goods. Archaeologists have revealed material and spatial patterns in the communities that indicate the trades and crafts practiced by Moravian artisans, which included potting, tanning, weaving, and many other skills that sustained interregional economic relationships. Thomas (1994) uses spatial patterns, language,

and pottery to explore how the “boundedness” of the Moravian community at Salem, North Carolina, was maintained even as the town was connected to local and regional commerce. Arendt (2011) studies three sites in Labrador to observe how Moravian missionaries impacted Inuit material culture and architecture in the 18th and 19th centuries. She accesses lists of goods shipped to Labrador and the requests for materials that were made by the missionaries (Arendt 2011:151–192). Studies of ceramics manufactured by Moravian potters in Pennsylvania (Reed 1987; Heindl 2010) and North Carolina (Bivins 1972; Whatley 1980; South 1999; Beckerdite and Brown 2009; Outlaw 2009; Owen and Greenough 2010) reconstruct vessel forms and decorative styles. Archaeology also uncovers spatial patterns at Moravian outposts. At the Ebenezer mission in Australia, Lydon (2009) reveals how Aboriginal residents could disregard the principles of surveillance that were allowed by the spatial layout of the Moravian church and mission house. Ferguson (2011) studies the landscape of Salem, North Carolina, to track how Moravian beliefs shaped the way the leadership in Herrnhut laid out the town vs. the actual design of Salem once it was built (Ferguson 2011:66–101), as well as how these principles were enacted in Moravian cemeteries in Salem in a context of increasing racial identification and segregation (Ferguson 2011:102–116). Murtagh (1998) compares patterns of Moravian architecture and town planning in Bethlehem and Herrnhut.

In the course of pursuing their proselytizing agenda, the missionaries traversed the Atlantic according to their assignments to the towns and missions as governed by elders in Herrnhut and Bethlehem. Following these same routes were the missionaries’ personal items and artisanal products. In this paper, we track material exchange among the communities and missions by piecing together the manufacture, shipment, and distribution of Moravian domestic ceramics from Bethlehem, Pennsylvania, to the U.S. (formerly Danish) Virgin Islands, where the first mission began in 1732. This combines our studies of morphologies and decorative styles of Moravian pottery made in Bethlehem (Heindl 2010) with archaeological findings in the U.S. Virgin Islands (Lenik 2004, 2006, 2009; Lenik and Armstrong 2010), where sherds exhibiting

decorative styles and vessel forms similar to Moravian pottery traditions have been identified. These data reconstruct shipments of pottery to missions in the Danish colonies and thence to locales outside the mission stations. The evidence tracks interregional interaction and trade in the Moravian Atlantic network and provides a starting point for more research into material aspects of daily life for Moravians and their converts among free and enslaved African populations in the Caribbean.

This paper will first discuss the origins of the Unity of Brethren and the trades that funded their missions. Vessel forms and decorative styles of domestic ceramics from the Bethlehem, Pennsylvania, pottery are defined, enabling these wares to be differentiated from pots made according to a similar Central European-derived, non-Moravian design tradition in southeastern Pennsylvania. Moravian records documenting that the trades and organizations, such as the Society for the Furtherance of the Gospel, a Moravian organization that funded mission work, shipped products to the Danish Virgin Islands mission are cited, and then the archaeological contexts in the Virgin Islands where Moravian ceramics have been identified are described. The shipment of goods, such as pottery from the towns to the missions and to the surrounding communities, illustrates material dimensions of the Moravian Atlantic community.

Community Cohesion, Artisanal Production, and Transatlantic Exchange in the Eighteenth-Century Moravian Church

The German-speaking Protestant group referred to as the Moravians is known by several names, including *Unitas Fratrum*, or Unity of Brethren (which became the Renewed Unity of Brethren after 1722), and *Brüdergemeine* (Community of the Brethren) or simply *Gemeine*. This group traces its origins to early-15th-century Bohemia and Moravia, in the present day Czech Republic, when the Roman Catholic Church began trying to subsume this region under its ecclesiastical jurisdiction. Christians in Bohemia and Moravia, almost a century before Martin Luther’s protests sparked the Reformation, resisted some of the beliefs and practices that accompanied the imposition of Roman Catholicism. Among the leaders of protests was Jan Hus, a priest who was convicted

of heresy by the church and burned at the stake in 1415. The martyrdom of Hus hardened resistance to Catholicism, and in 1457 some Christians founded a church body called the *Unitas Fratrum*, which created its own ministry in Bohemia, Moravia, and, later, Poland. A prolonged period of persecution of the *Unitas Fratrum* began in 1547 as church members were forced into hiding or exile and drawn into violent conflict, including the Thirty Years War, which further depleted their numbers. During the period known as the “Hidden Seed,” dating from their expulsion from Bohemia and Moravia in 1627 to the renewal of the church in Germany in 1722, the *Unitas Fratrum* survived as a few isolated groups without a formal clergy (Atwood 2004:21–22).

While the community’s origins are instrumental in understanding the resurgence of the *Unitas Fratrum* in the 1720s, the present study concerns the German-speaking people, still known as Moravians, who assembled in Saxony, Germany, in 1722, to found the town of Herrnhut (literally: “in the Lord’s care”) on property owned by Count Nicolas Ludwig von Zinzendorf (1700–1760). The count was influenced by Pietism, via his education at the University of Halle, Germany, and the teachings of theologians he met. The Pietist movement is difficult to define, but essentially it sought to renew Protestantism with a theology focused on the “heart” or personal piety. Pietists, as a reaction to perceived failures of Lutheranism, wanted to remove themselves from the world for the purposes of worship and study, in order to improve social life and individuals’ spiritual lives (Atwood 2004:28). The count joined the Moravians and, on 13 August 1727, the several hundred members created the Renewed Unity of Brethren, which would soon embark on a worldwide mission. Zinzendorf stood as the church’s *de facto* leader until his death in 1760 (Lewis 1962; Atwood 2004:58–59; Gillespie and Beachy 2007a:4). The Unity of Brethren fits within the category of Evangelical Protestantism and was not affiliated with any government as a state church. Beliefs were not formally recorded in a creed (Ferguson 2011:8), as the Moravians developed a theology of the “heart” focused on worship and service, with Jesus at the core of their theology (Atwood 2004:77).

The Moravians devised a model for their communities that merged rigid schedules of

worship and secular concerns, so that daily life was dominated by strict rules. To ensure unity, a system of social groups known as “choirs” was created. Separate choirs, or groups composed of children, single men, single women, married men, and married women, worked and lived together, while assembling for communal activities, such as services, hymn singing, and meals (Figure 1). This separation even continued in the afterlife, as cemeteries were usually divided into choirs. A “congregation town” ideal originated in Herrnhut in 1727, combining church and town into a single entity supported by artisans and governed by an elders conference that decided virtually all matters (Engel 2009:34–25). By the late 1730s the Moravians also organized “pilgrim congregations,” such as Bethlehem, Pennsylvania, that prioritized mission work rather than spiritual life (Engel 2009:29). Finally, there were “open congregations” that held meetings that could be attended by non-members, but only those who had been baptized and confirmed as full members of the church could enter a community’s private areas. Though this notion of separation was typically upheld at the larger communities like Bethlehem, Herrnhut, and Salem, as well as associated congregations that were founded in nearby areas, the ideal of separation pervaded the consciousness of all Moravian missionaries and smaller communities.

In Herrnhut the Moravians developed a global vision for missionary work that targeted people of European, Native American, and African ancestry (Vogt 2006:14–17). Though their ambitions were global, the 18th-century Moravians operated on a transatlantic scale, with a network of closed communities, open congregations, and missions spanning the Atlantic Ocean as a geographical space (Figure 2) (Vogt 2006:8–9). A number of scholars have explored this Atlantic perspective. Fogleman’s (2007) study of images and hymns, and Atwood’s (2004) analysis of Moravian theology illustrate how the Unity of Brethren ensured uniformity of belief in daily life across the various settlements in the “diaspora” ministry (Atwood 2004:4). An illustration of Moravian perceptions of unity was produced by an anonymous painter in the 1758 *Settlement Scene*, which places 63 mission outposts in a single image (Vogt 2006:26–28; Ferguson 2011:72–74). Sensbach’s (2005) study of

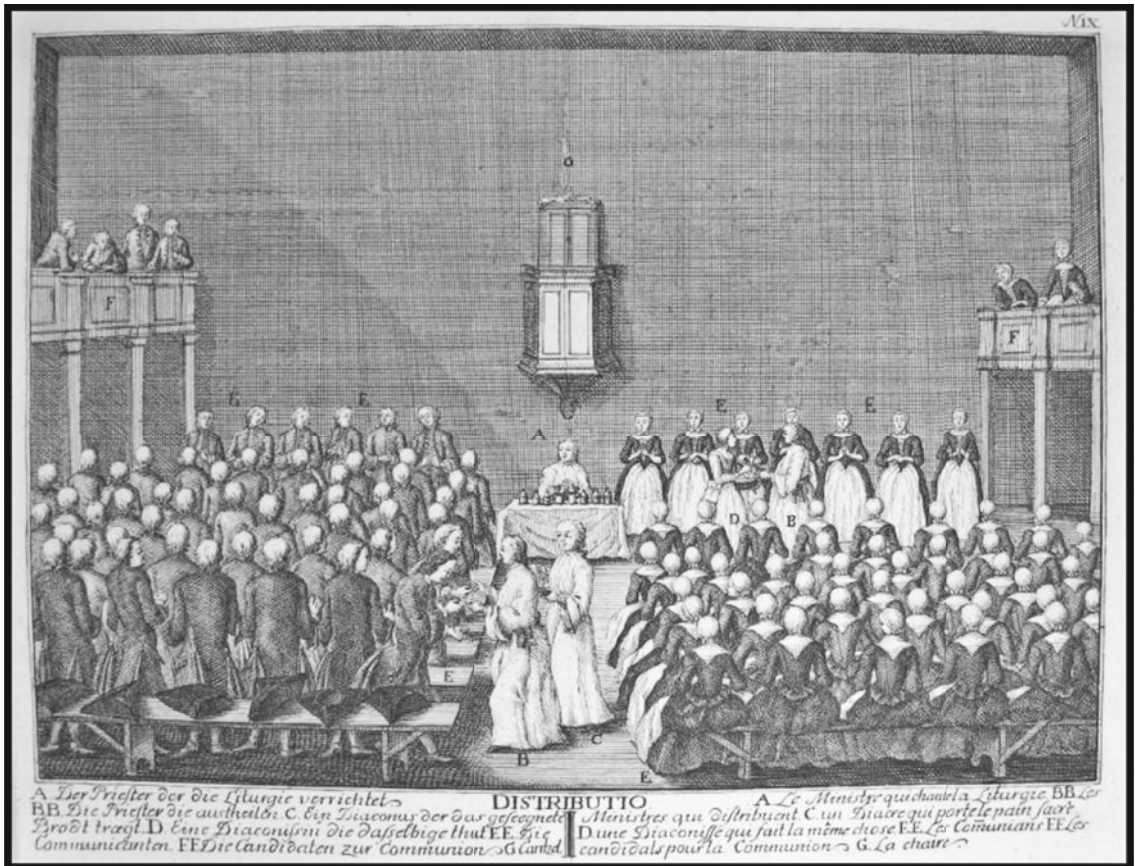


FIGURE 1. Printed lithograph showing the distribution of communion during a Moravian service, women are on the right and men are on the left. Published in Cranz (1757). (Courtesy, Moravian Archives, Bethlehem, Pennsylvania.)

Rebecca Protten from St. Thomas and Warner-Lewis's (2007) book about Archibald Monteath of Jamaica trace the African, Caribbean, and European heritage of free and enslaved individuals who joined the church in the Caribbean. Engel (2003, 2009, 2010, 2012) explores Moravian religion and transatlantic economic relationships. In *Religion and Profit*, Engel (2009) finds that the settlement of Bethlehem in Pennsylvania was "neither isolated nor static," since "it existed within a larger Moravian framework" (Engel 2009:4). Bethlehem was "a key node in a wide network that ringed the Atlantic Ocean and reached far into the North American interior" (Engel 2009:5). Engel tracks several oceangoing vessels owned by the Moravian Church that carried missionaries to their posts with cargo space hired out to fund the voyages (Engel 2007, 2009, 2010, 2012).

An opportunity for mission work emerged in 1731 in Copenhagen at the coronation of King

Christian VI of Denmark, where Zinzendorf met Anthony or Anton Ulrich, a former slave from Denmark's Caribbean colony of St. Thomas, who described the lack of Christianity among slaves on that island. Inspired by this meeting and Ulrich's visit to Herrnhut, Zinzendorf won approval from the Danish Crown to begin a mission on St. Thomas (Figure 3). Progress was slow following the arrival of the first two missionaries in 1732, but conversions steadily increased as the mission expanded to the nearby Danish colonies of St. Croix and St. John. By the end of the 18th century thousands of free and enslaved Africans had been baptized, and Caribbean missions were established at Jamaica, Antigua, Trinidad, Suriname, and elsewhere.

Once missions began in the Virgin Islands in 1732 and Greenland in 1733, elders in Herrnhut planned a North American community as a base for mission work. After a failed attempt in Georgia in 1735, a location to host a new

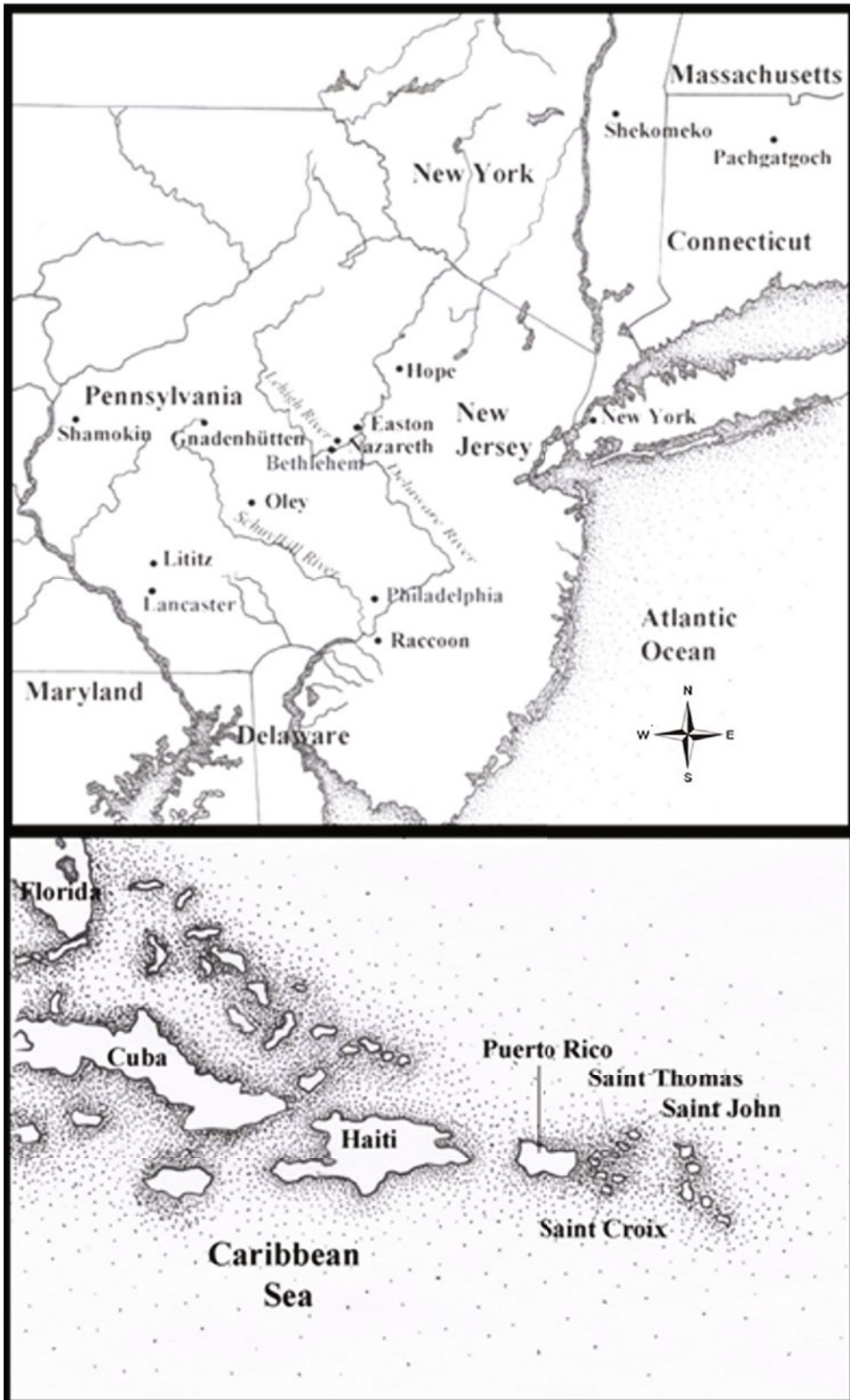


FIGURE 2. *Top:* Map of the mid-Atlantic showing Moravian settlements. *Bottom:* Map of the Danish Virgin Islands in the Caribbean. (Images by B. Heindl, 2010.)



FIGURE 3. Image of New Herrnhut, St. Thomas, published in Cranz (1757). (Courtesy Moravian Archives, Bethlehem, Pennsylvania.)

town was secured in Pennsylvania, where other German Pietist groups had found refuge, on the Lehigh River northeast of Philadelphia. The town of Bethlehem, founded in 1741 as a pilgrim congregation, became a center for spiritual life, artisanal production, and mission work. Missions among Native Americans in the British colonies were organized, and products of the artisanal community were sent to the missions. Like Herrnhut, Bethlehem was a closed community where only full church members could reside, living according to the rigorous schedule of worship and work. Additional closed communities were founded in other parts of Pennsylvania, in Maryland, and the Wachovia Tract in North Carolina, purchased in 1752, and open congregations were established in non-Moravian communities (Fogleman 1996). As the Moravians expanded their geographic presence, their methods of maintaining community cohesion offered a clear identity for church members and

converts, regardless of where a town or mission was built. Separate communities maintained frequent contact and interaction by regularly transferring missionaries from one to another and sending reports to Herrnhut, from whence these published accounts were circulated to the other missions. Each mission observed the same daily schedule of prayer and work.

A Moravian community's economic growth and stability relied on a number of industries, rather than income from a seasonal agricultural schedule (Engel 2009:33–34). Mid-18th century Bethlehem thrived as an artisanal community with over 40 different trades, and this approach was adopted in the North Carolina communities where numerous trades were also practiced, including by 1756 pottery making (South 1967, 1999; Bivins 1972; Beckerdite and Brown 2009). As described above, the trades financed the missions during and after the time the “General Oeconomy” was in effect at Bethlehem.

In 1751 a New Jersey traveler to Bethlehem wrote that even though the frontier settlement seemed small, “there is scarcely a trade carried on in the largest city in this country but it is also there and done in the best manner” (Engel 2003:269).

Despite the apparent geographical isolation of the towns in eastern North America, each community’s artisans formed an integral part of the tightly woven economic and religious network by producing vital sources of wealth and goods for the missions. Cohesion was maintained via personal relationships because, under the direction of the church elders, missionaries frequently transferred among different outposts and could follow each others’ movements in published reports of each mission’s progress. Likewise, mission outposts could not sustain themselves without the influx of missionaries and income from the trades. Away from the towns, missions tried to finance their own work, as will be shown below in the case of St. Thomas, but developing trades was challenging. In order to provide income in some Caribbean colonies, Moravians acquired and operated plantations based on enslaved African labor, such as Posaunenberg (New Herrnhut) in St. Thomas (Figure 3).

Each community member was required to participate in mission work and was expected to provide for his or her own subsistence, as well as to contribute some income to the community. Though this mission service caused some impermanency in operating the trades, it did not seem to lower productivity or community cohesiveness. Bishop Cammerhof in Bethlehem, an assistant to the theologian and bishop August Gottlieb Spangenberg, wrote to Zinzendorf concerning the financial and provisioning problems that arose by shifting Bethlehem’s personnel out to mission work. He stated that

it is always a wonder of the Savior to me, when I think of it, that it [the Bethlehem “Oeconomy”] still goes forward the way it does. The many changes of craft masters in this or that area that we have to make, due to missionary plans or also sometimes because of spiritual reasons, often leave large gaps in many shops. (Engel 2003:77)

References to “Master Potter” and apprentices in documents from the Bethlehem pottery suggest that workers were organized as masters,

journeymen, and apprentices in the manner typical for trade shops in 18th-century Pennsylvania (Rorabaugh 1986). As individuals moved in and out for mission work, possible disruptions were minimized during the “Oeconomy,” since apprentices were bound out to the trustees rather than directly to the masters. Therefore, if a master were transferred elsewhere, an apprentice was not bound to that individual, but instead to the community, so apprentices could be reassigned to another master or moved to another trade (Engel 2003:291). Movements of the potters illustrate the different assignments an artisan might expect. Michael Odenwald, one of Bethlehem’s master potters, was trained in Germany. He traveled to Bethlehem via New York. On occasion he traveled between North Carolina and Pennsylvania, and even visited Suriname as a missionary in 1762, returning the following year (Heindl 2010). Master potter Gottfried Aust was born in Silesia before he moved to Herrnhut. Aust sailed from London to Bethlehem and eventually settled in North Carolina to begin a long career as a potter (South 1967; Bivins 1972:16–30).

Pottery Production and Exchange at Moravian Bethlehem

Records show that products from Bethlehem were exported to the Caribbean missions from the trades themselves and through entities like the Society for the Furtherance of the Gospel. To identify Moravian wares in archaeological contexts in the Virgin Islands, and thus to reveal material dimensions of the transatlantic Moravian Church, specific decorative styles, source materials, and vessel forms of Bethlehem pottery need to be identified. Heindl’s (2010) comparison of Bethlehem wares to collections from sites in the Philadelphia region reveals attributes that distinguish Moravian sherds from other southeastern Pennsylvania ceramics manufactured according to a similar Central European design tradition (Barber 1903; James 1978; Bower 1985; Steen 1999; Magid and Means 2003; Gible 2005).

Moravian Pottery in Bethlehem, Pennsylvania

The original pottery at Bethlehem, a log structure used from 1743 to 1749, was replaced

by a stone building constructed in 1749. The pottery moved to a third location in 1767 or 1768. In the 1970s part of the second pottery was excavated before construction of a parking lot (Historic Bethlehem, Inc. 1970; Gill 1976; National Heritage Corporation 1977). Much of the artifact collection from the 1960s and 1970s was never cataloged, however, and documentation of the fieldwork was either never completed or lost. Some material was discarded, the collections and the site were scavenged, and much of the decorated ware was removed. Many boxes of ceramic sherds collected during this project were curated by the Historic Bethlehem Partnership, but the materials were not studied until the 2000s (Heindl 2010).

Heindl's analysis of the Historic Bethlehem Partnership collection from the 1749–1767/8 pottery identifies decoration and morphology for wares made by Moravian Bethlehem potters. This work documents red-bodied earthenwares with an orange or light red paste beneath a clear, slightly yellow lead glaze. Many of the clear lead-glazed wares are decorated beneath the glaze with slip trailed lines in white (yellow in appearance), green, and black. While most of the material exhibits clear glaze, there are also dark brown, black, and green lead glazes (Heindl 2010). Some similarities to ceramics produced in southeastern Pennsylvania would be expected because Moravian potters shared in a Central European design tradition practiced throughout the Middle Atlantic and the Northeast (Barber 1903; Bower 1975, 1985; Steen 1999; Gibble 2005), but, through comparisons to assemblages of slip-trailed redwares from Philadelphia, unique attributes of pottery manufactured in Bethlehem were identified. Philadelphia wares examined for this study are not necessarily representative of all ceramics produced in southeastern Pennsylvania, but this sample, along with the comparison to decorated red earthenware from five archaeological sites outside Philadelphia contemporary with the Moravian pottery production (Heindl 2010), allows for specific traits of Bethlehem Moravian pots to be identified.

The most common vessel form in the Historic Bethlehem Partnership collection is a shallow dish with a thick, rolled rim, and a wide marley measuring up to 2 in. in the interior profile before dipping inward to the rounded part of the base (Figure 4). Nearly all the observed

rim profiles have been rolled and simply pressed to form an angle, or pressed with a tool to make a lobed edge. The rim profile in Figure 4 is often associated with large, shallow dishes or milk pans. The profile in Figure 5 is typical of small dishes. The defined foot profile has been tooled to create a rounded edge, and the rim profile is thickly rolled. The exterior edge and interior have a dark brown glaze. Other forms in the Bethlehem assemblage are also found listed in community inventories, including crocks or pots, small mugs, large mugs, large basins with straps, bowls, plates, chamber pots, a shaving basin, pipe heads, bottles, pitchers, and stove tiles (Moravian Archive at Bethlehem [MAB] 1765).

Through comparison of the Bethlehem material with wares excavated in and outside Philadelphia a distinct differentiation between Philadelphia- and Bethlehem-made material was recognized. A defining characteristic of the Bethlehem Moravian pottery that distinguishes it from Philadelphia-made pottery is a very black slip used for slip trailing. While both Philadelphia and Moravian potters used a black glaze that often coated the entire surface of vessels, the slip trail colors are noticeably different. The black slip trailing found on Bethlehem-made pottery is fluid and solid in color (Figure 6), likely well mixed and blended, whereas the Philadelphia dark brown slip trailing often has flecking or visible particle distribution in the trailing, particularly in the case of collections excavated at Market Street, Philadelphia (Figure 7). The color difference may be explained by the use of manganese in Philadelphia potters' slip decorations, also noted by Steen (1999:65). Whether the Bethlehem potters also used manganese is unknown.

Decorative material and style also differentiate Bethlehem sherds from those in Philadelphia collections such as Market Street. Compared to the white slip-trailed designs on Philadelphia-made wares, lines on the Bethlehem sherds are more controlled, often with more-even spacing. Also, on the Bethlehem material the oxide is blended into the green-colored slip in a consistent manner, vs. slip-trailed Philadelphia wares where the green oxide is speckled in appearance, as shown in Figure 8.

This difference may relate to how the oxide was ground or how the slip was made. There are no large splotches or splashes of green oxide on the Bethlehem wares, as seen on wares likely

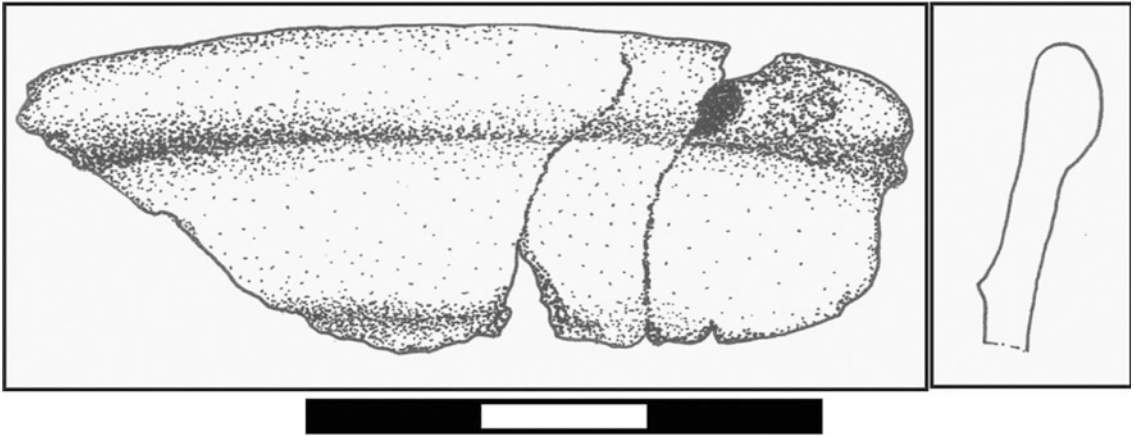


FIGURE 4. The sherd 2942 profile shows a common vessel form in the Historic Bethlehem Partnership collection. (Image by B. Heindl, 2010.)

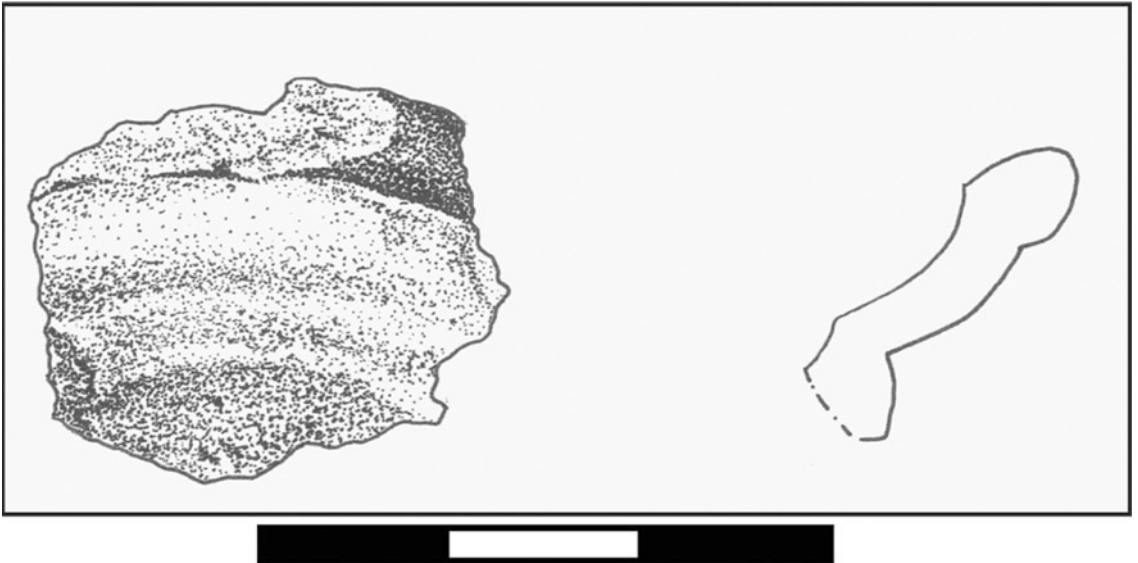


FIGURE 5. The sherd 2825 profile is typical of small dishes in the Historic Bethlehem Partnership collection. (Image by B. Heindl, 2010.)

produced in Philadelphia. No manganese flecking or brown spots are evident on the Bethlehem materials, but this trait is found on Philadelphia wares (Figure 9). Finally, several sites in Philadelphia yield ornate slip-decorated earthenwares, but these do not appear with enough frequency to attribute them solely to Philadelphia manufacture. Highly decorated wares that are slip trailed with multiple colors, including green and black (Figure 10), may exemplify goods imported to Philadelphia from overseas or outside the city, rather than locally produced pottery (Heindl 2010).

Since the Moravians practiced a design tradition that is similar to other pottery made in southeastern Pennsylvania, and there is a dearth of intact surviving vessels, identifying pottery fragments from Moravian Bethlehem in assemblages outside this region of Pennsylvania is complicated. Moravian pottery from North Carolina has much better documentation—see e.g., Bivins (1972), South (1967, 1999), Beckerdite and Brown (2009), Outlaw (2009), Owen and Greenough (2010)—and available compositional data (Owen and Greenough 2010).

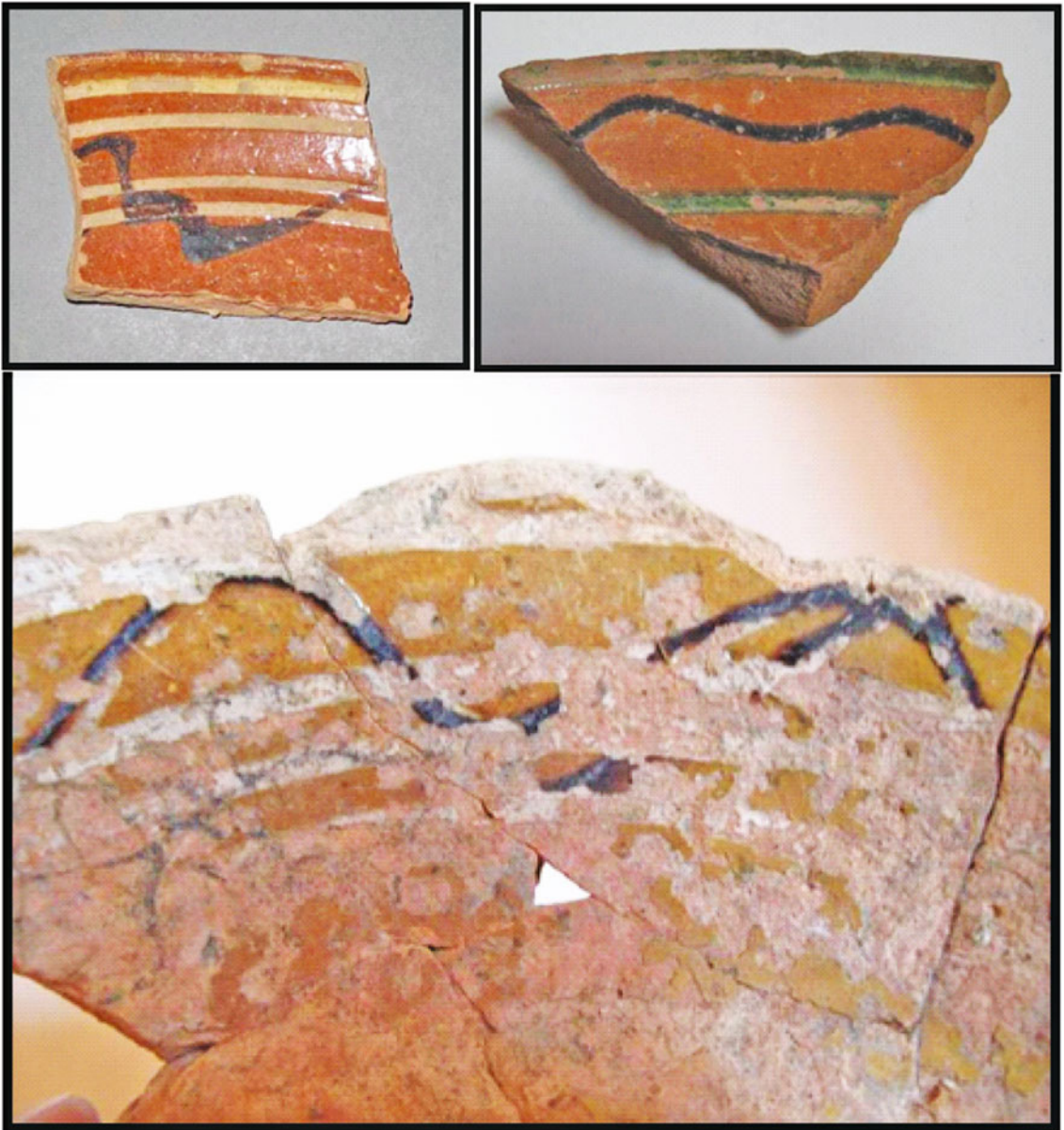


FIGURE 6. Black slip-trailed designs. (Collection of the Historic Bethlehem Partnership). (Photo by B. Heindl, 2010.)

We have been unable to locate information about ceramics produced in Herrnhut and other European communities. Illustrating the complexity of identifying Moravian sherds is the Mount Shepherd pottery in North Carolina, where a potter named Jacob Meyer, who was trained by the Moravians but was expelled from Wachovia, continued to make plates and stove tiles in the tradition he had learned. Meyer added his own decorations, such as soldiers, which the Moravians, as pacifists, would not use, but otherwise many

forms and decorations are similar (Whatley 1980; Outlaw 2009).

Nevertheless, as long as diagnostic sherds are present, the morphological and decorative attributes outlined here are a starting point for visual identification of fragments of Moravian wares. Our analysis of the Virgin Islands assemblages below shows that Moravian sherds, possibly made in Bethlehem, Pennsylvania, can be identified using decorations and rim profiles.



FIGURE 7. Comparison of black and dark brown slips. *Above*: Black slip on Bethlehem pottery (Collection of the Historic Bethlehem Partnership). *Below*: Manganese dark brown slip trailing on dish from Market Street (36PH5), Philadelphia. (Collection of the Pennsylvania Historical and Museum Commission, State Museum of Pennsylvania). (Photo by B. Heindl, 2010.)

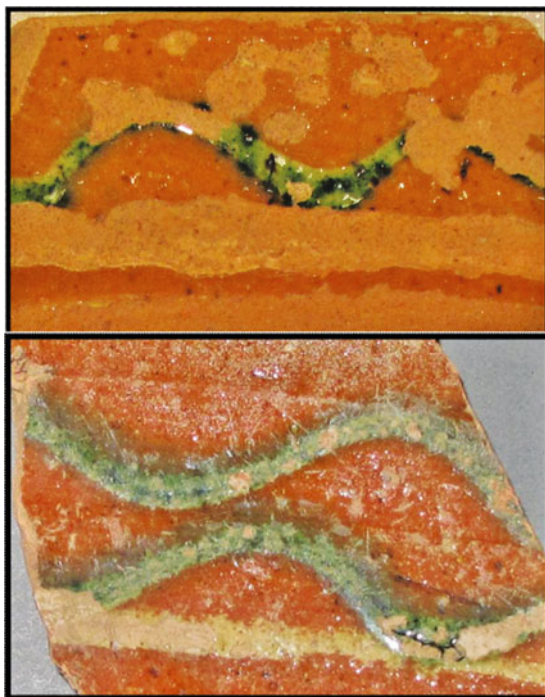


FIGURE 8. Comparison of green oxide. *Top*: A sherd from the Industrial Quarter of Bethlehem (Collection of the Historic Bethlehem Partnership). *Bottom*: A sherd from Market Street, Philadelphia (36PH5) (Collection of the Pennsylvania Historical and Museum Commission, State Museum of Pennsylvania, Archaeology). (Photo by B. Heindl, 2010.)

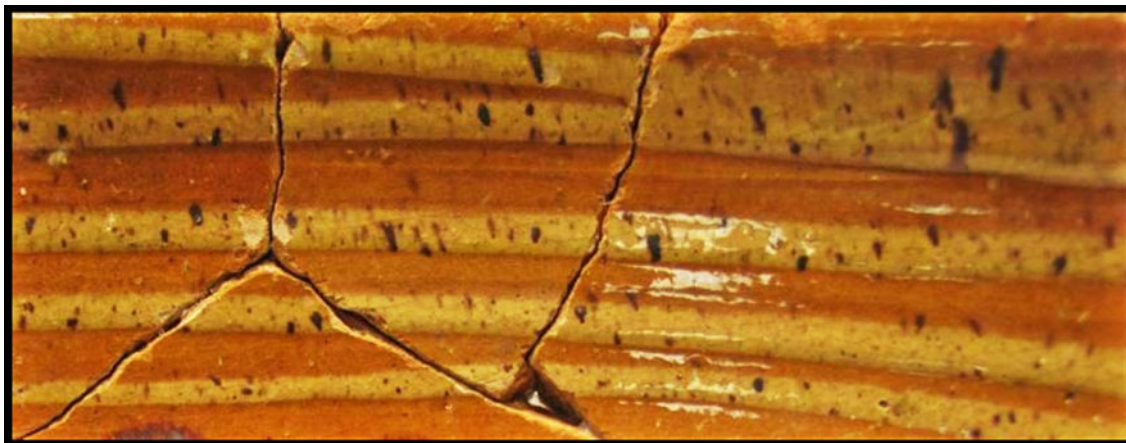


FIGURE 9. Example of brown flecking on a piece excavated from Market Street (36PH5), Philadelphia (Collection of the Pennsylvania Historical and Museum Commission, State Museum of Pennsylvania). (Photo by B. Heindl, 2010.)

Records of Exchange among Moravian Towns and Missions

Moravians recorded their activities wherever they traveled in their mission network. Even in Bethlehem's early years, when resources were

scarce, special allowances for an archive were made. Each congregation kept a communal diary detailing its daily works for God, along with meetings, decisions, and economic activities. Individuals kept detailed letters, reports, and catalogs of members and congregations (Peucker

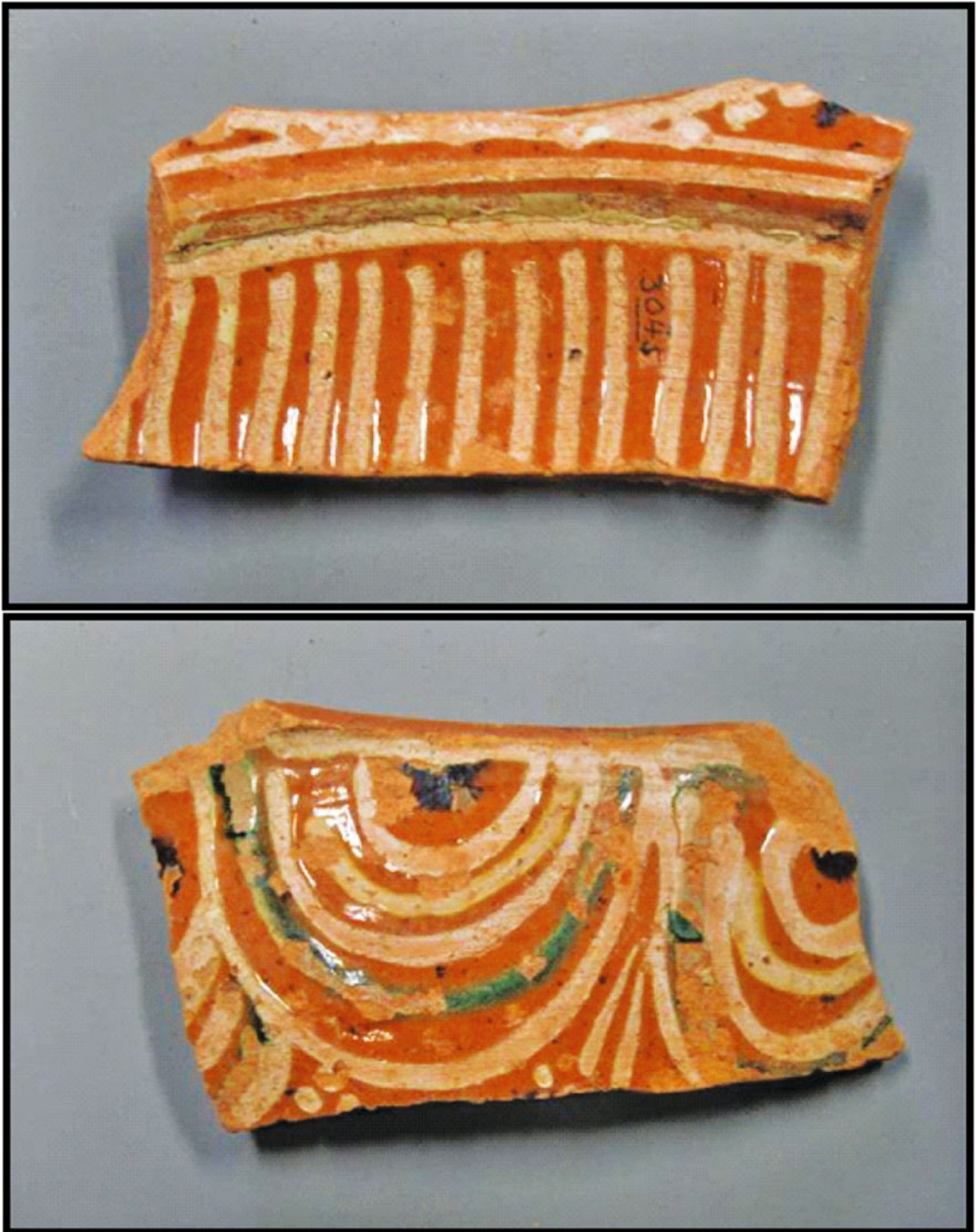


FIGURE 10. Marley of a shaving basin from Bethlehem, decorated with black, green, and white slip trailing. Exterior edge is decorated with a half-circle design (Collection of the Historic Bethlehem Partnership). (Photo by B. Heindl, 2010.)

2009). By 1747 a system called the *Gemeinnachrichten* was developed, in which handwritten reports were delivered to a central board in Herrnhut that edited and published the reports for all communities to track the progress of the Brethren (Vogt 2006:24).

Detailed records of the trades were also kept, so that by the mid-18th century there were yearly inventories of each craft building in Bethlehem. These sources provide clear evidence of exchange between the pottery and the other trades there and the St. Thomas mission. Among the records are ledgers consisting of entries corresponding to the trades that credit buildings, such as “The Stranger’s Store” or “The Tavern,” rather than individuals. Ledger entries illustrate both local transactions and international exchange. A Bethlehem ledger entry

shown in Figure 11 lists a credit to the potter for the “St. Thoms Brethren” on 15 October 1759 (MAB 1755–1762:226). Other entries reflect additional links to the Caribbean. On 8 April 1755, Bethlehem’s blacksmith was credited to the “St. Thomas Brethren,” and the pewterer was credited for “Jamaica” on 13 February 1758 (MAB 1755–1762:6,8). A brazier is credited to the “St. Thomas Brethren” for “12 mill brasses” weighing 283 lb. (MAB 1762–1771:176).

Along with specific references to links between the Bethlehem trades and the Virgin Islands are ledgers for the “Society for the Furtherance of the Gospel.” Tracking precisely where the society sent goods is difficult, but, nevertheless, these records demonstrate that goods, including pottery, were sent to the missions (Figure 12). Between 1760 and 1761 the cooper was credited

1759		Con	
June 30	257	By the Strang. Store	29
July 13	260	Geo. E. Schloffer for Cash	0
Aug 31	279	Strang. Store	0 11
Sept 29	291	J. & Locksmith	0
Octob 15	296	St. Thom. Brethren	15
20	297	Cash	1 10
30	305	Farm in Leticia	5 2
Dec 31	331	Sundry Acco ^{ts}	9 4 5
1760 Feb 29	331	Strang. Store	0 15 5
	352 353	Sundry Acco ^{ts}	3 10 0
March 31	364	Strang. Store	7 17 0
April 30	375 376	J. & Expenses	17 14 9
May 31	397	Apothecary	0 6 0

FIGURE 11. Credit for the St. Thomas Brethren listed under the heading “Potter” in the Ledger of the Diaconat at Bethlehem (MAB 1755–1762:226).

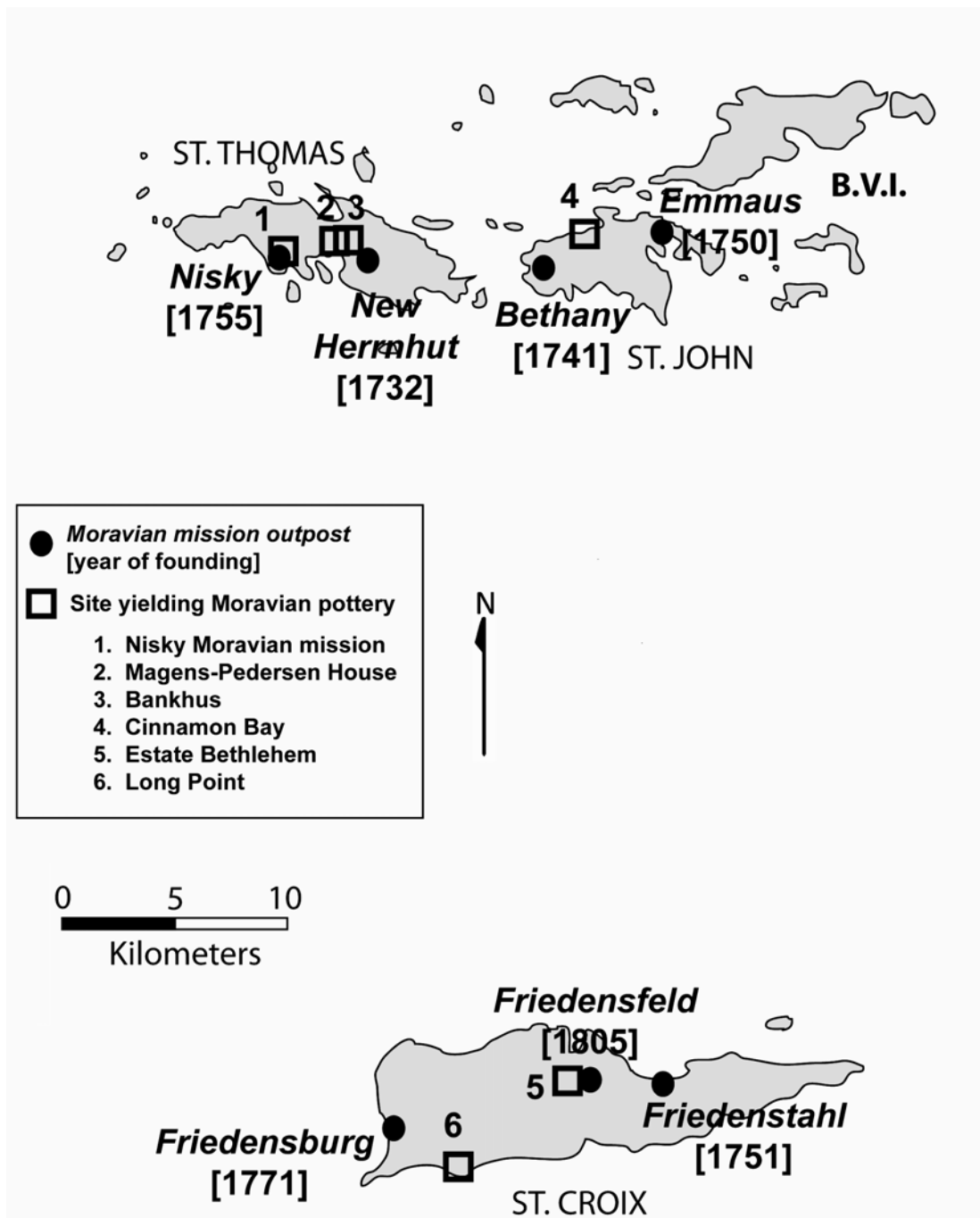


FIGURE 12. Moravian mission outposts and archaeological sites in the U.S. (formerly Danish) Virgin Islands. (Image by S. Lenik, 2010.)

numerous times to “Society for the Furtherance of the Gospel,” and between 1761 and 1762 the potter has several entries to the society for varying amounts (MAB 1755–1762:3,226; Engel 2009:103–104). One of Bethlehem’s master

potters, Daniel Miller, belonged to the society, and a journal of the society kept between 1745 and 1759 includes an entry from Wednesday, 22 October 1746 stating: “paid to Bethlehem for the undermentioned things for the Indians”

that included earthenware priced at 11 p. (MAB 1745–1759). Arendt (2011:151–192) has accessed similar archival resources in her study of the Labrador missions.

Indications of the goods that accompanied traveling missionaries are recorded in Oldendorp's *A Caribbean Mission* (1987), an account of the first decades of the Danish Caribbean mission first published in 1770 (Barac and Highfield 1987:xxiii–xxv). In describing movements of missionaries among the Virgin Islands, North America, and Europe, Oldendorp refers to individuals carrying personal items and materials intended for the missions' use. For example, in November 1739 a missionary named Christian Israel and a scholar, Albin Feder, were caught in a shipwreck while traveling from Europe to St. Thomas. Feder perished. The wreck resulted in the loss of Israel and Feder's "things, including letters, medicine, and other material, that they had brought along for the brethren on St. Thomas" (Oldendorp 1987:383). As the Moravian mission expanded to Danish St. Croix and St. John, it is reasonable to assume that material goods accompanied the missionaries and artisans.

These sources record that shipments of products from Bethlehem to the Caribbean missions occurred in tandem with proselytizing and community formation and maintenance. The missionaries and goods that arrived in the islands were not restricted to the mission stations, and Oldendorp illustrates the movements of the Moravians as missionaries visiting plantations, and converts traveling from their homes to attend services in locations such as the meetinghouse on the Posaunenberg plantation (Oldendorp 1987:390). As demonstrated by the archaeological data described below, interactions among European missionaries, local church members, and other inhabitants of the Danish colonies may have had material aspects that can be traced using this Moravian pottery.

The Moravian Mission to the Danish West Indies

The Moravian mission to the Caribbean originated with Zinzendorf's 1731 meeting with a former slave from St. Thomas named Anton Ulrich, who described the lack of Christianity among enslaved Africans in Denmark's colonies.

After Ulrich visited Herrnhut, two Moravians, Johann Leonhard Dober and Tobias Leupold, resolved to begin a mission in St. Thomas. Dober, trained as a potter, was chosen by lot, a system through which randomly drawn scraps of paper indicated God's intentions, but Leupold was not. Instead, David Nitschmann, a carpenter, was selected (Oldendorp 1987:271–273). Danish planters opposed the presence of missionaries, who they thought would sow discord among slaves, and before Dober and Nitschmann departed Europe they met resistance to their travel that focused on the lack of a means of subsistence. Since Denmark's Caribbean colonies were devoted to plantation agriculture and maritime commerce, there were few possibilities for missionaries to be employed or to practice crafts. Eventually they were permitted passage as craftsmen because Nitschmann was a carpenter. Oldendorp's *A Caribbean Mission* reveals that funding was a constant problem, despite donations from supporters in Europe and the colonies, and their skills and the benevolence of colonists on St. Thomas supported the pair during the first months (Oldendorp 1987:277–286). On St. Thomas, Dober, Nitschmann, and other missionaries who followed them had to proselytize at night, on Saturday afternoons, and Sundays because of the rigorous labor schedule faced by the enslaved. In addition to these obstacles, financial support was a major concern, and Oldendorp records that Dober tried making pottery on St. Thomas in 1733, but failed because of poor quality clay and an inadequate kiln (Oldendorp 1987:285,288). Ultimately Dober was employed as the governor's steward and later overseer and manager of a cotton plantation (Oldendorp 1987:288,297–298). Clay sources in the Virgin Islands are of sufficient quality to support handmade-earthenware manufacture, as indicated by archaeological evidence of pre-Columbian ceramics, as well as low-fired earthenware pots, both produced on St. John (Hauser and Armstrong 1999) and St. Croix (Gartley 1979; Lenik 2004), but it is not clear why Dober's efforts to fire pots in kilns were unsuccessful. Regardless of the reason this trade did not succeed, there is at present no evidence that Moravians manufactured pottery in the Caribbean.

Twelve Moravians expanded the mission to Denmark's newly acquired colony of St.

Croix in 1734, when the Danish councillor and chamberlain, Von Pless, arranged for the missionaries to work as overseers and managers on six Crucian plantations he owned. This group included masons and carpenters, as the Moravians anticipated the need for such skills, but the attempt was abandoned in December 1736 after most of the missionaries fell ill and perished (Oldendorp 1987:291–306). When the St. Thomas mission resumed in early 1736, leaders in Herrnhut decided that Friedrich Martin would be accompanied by Johann Andreas Bönike, a tailor whose trade could fund the pair (Oldendorp 1987:307). In the Danish colonies controversy arose in the 1730s amid accusations of sacraments that had been conducted illegally by a missionary who had left the church, leading to the imprisonment of two male Moravians and one of their wives, Rebecca, the subject of Sensbach's (2005) *Rebecca's Revival*. They were freed when Zinzendorf arrived in 1739 and resolved the conflict (Lewis 1962:82–83; Oldendorp 1987:357–366; Sensbach 2005).

The growing numbers of converts reflect the mission's success. By 1768, 1,665 had been baptized into the church in St. Croix, with another 348 candidates awaiting baptism (Oldendorp 1987:625–626); 20 years later there were 3,669 baptized converts (Mason 2001:142). By the 19th century converts were being taught trades in order to support the mission. The planters' initial reluctance was placated as they saw the benefits of free and enslaved African Moravians, understanding that Christianity might instill obedience. In 1788, the planter Johan Christian Schmidt's expressed these sentiments in praise for the Moravians:

[T]heir congregation here is a support for public tranquility and a strong restraint on the Negroes. If a Negro from the Congregation of the Brethren runs away, his name is removed from the rolls, and he is dismissed if he does not return for a specific penalty. If he does it a second time, he is completely shut out, though that hardly ever occurs, because that, as stated above, is the greatest punishment, the one they fear most. (Schmidt 1998:22)

Archaeological Evidence of Moravian Pottery in the Virgin Islands

Documentary evidence demonstrates that pottery and other goods from Bethlehem were shipped to the Danish colonies. Fragments

of Moravian wares have been identified in archaeological contexts from the mid-18th to the early 19th century in the U.S. Virgin Islands, former Danish colonies, based on visual identification of sherds using Heindl's (2010) findings. The sites include the Estate Lower Bethlehem and Cinnamon Bay plantations and the Magens and Bankhus urban compounds, as well as the Nisky mission and a watch house on St. Croix. To the best of our knowledge, the possibility that Moravian pottery was present in the Danish colonies was first considered during Lenik's (2004, 2006) master's thesis research at Estate Bethlehem, St. Croix. At that time no historical documentation of trade was known (Lenik 2009:21), and identifications were based on comparisons to sherds in the Historic Bethlehem Partnership collection and the Florida Museum of Natural History, and Bivins's (1972) study of Moravian pottery from North Carolina.

Using Heindl's (2010) observations of decorative styles and morphologies of Bethlehem wares, Moravian-made sherds from six Virgin Islands sites were identified based on characteristics including: bright yellow/white, green, and black slips; a lack of speckling from manganese impurities; more consistently blended oxides in green slips; and rolled rims on shallow dishes with wide (up to 2 in.) marleys. This analysis must consider that "Philadelphia earthenwares" (Steen 1999) or similar types from southeastern Pennsylvania (Bower 1985; Gible 2005) were also imported to the Danish colonies, though we believe that there is good evidence to assign a Moravian origin to the sherds described in this section. With the exception of the two urban sites in St. Thomas that include undecorated sherds, only decorated sherds were included in this study, since attributes that indicate Moravian manufacture are based on decorative styles or qualitative characteristics; thus, it proved difficult to determine whether plain body sherds might be Moravian.

The plantation at Estate Lower Bethlehem in King's Quarter, St. Croix, operated from the late 1730s until 1966, when the Bethlehem Central Factory closed (Lenik 2009:17). There is no evidence that the plantation's name has a Moravian origin, though in 1805 a mission was founded nearby at Friedensfeld (Lenik 2004:52–53). Part of Estate Bethlehem lies in the Virgin Islands National Guard armory, where Section

106 compliance excavations were completed in 2002 and 2003 in anticipation of construction of a headquarters building. A thin layer of soil around a large tamarind tree was scraped off to delineate features including: 35 post holes, 40 pit features, and at least 33 human burials. Subsurface testing sampled eight post holes and seven pit features. Archaeological data and maps show that these deposits relate to the late-18th-century laborer village (Lenik 2004). The pit features appear to have been intentionally dug, but their precise function is unclear. At some point they were filled with soil and refuse, though it cannot be determined whether this is primary and secondary refuse, nor can they be linked to specific households (Lenik 2009:17–19). In the pit-feature assemblages are 107 sherds, of which 16 pieces from four features suggest Moravian manufacture (Figure 13), representing 14.9% of the total sherd count and 15.4% of the minimum number of vessels.

Mean ceramic dates range from 1749 to 1770. The *terminus post quem* is 1733, when Denmark took possession of the island, and the assemblage also includes fragments of white salt-glazed stoneware, creamware, and pearlware, as well as delftwares without diagnostic elements. Vessel forms include a bowl with a concentric yellow/white slip trailing, a plate with yellow slip and hand-painted green and dark brown decorations, and a lid fragment (Lenik 2009:21–23). The black slip in the plate fragment in the top row of Figure 13 resembles black slip on the Moravian Bethlehem wares in Figure 7.

Remains of a warehouse/planter's house and two storage buildings from a coastal beachhead plantation were uncovered at Cinnamon Bay, St. John, between 1999 and 2003. Excavations identified occupation from the period predating formal Danish settlement in 1718 until the early 19th century; the storage buildings were abandoned in 1819. The excavations recorded



FIGURE 13. Moravian sherds from Estate Lower Bethlehem, St. Croix, U.S. Virgin Islands. (Photo by S. Lenik, 2004.)

phases of occupation that are clearly delineated by construction of mortar floors built after a 1733 slave rebellion, when one building burned down, and after hurricanes in 1775 and 1799. As the structures were rebuilt, floors added above rubble from these traumas sealed contexts beneath (Lenik and Armstrong 2010). After Moravian wares were identified at Estate Bethlehem, the ceramic assemblage from Cinnamon Bay was reexamined. Moravian missionaries first visited St. John in 1741 (Oldendorp 1987:431–432), and mission stations were founded at Bethany, chartered in 1754, and Emmaus, where the manse was built in 1750 and the church in 1782. This analysis found 106 possible Moravian sherds in rubble deposits in all three buildings from six contexts that can be dated because the dates of the rebellion and hurricanes are known (Figure 14c). Most of the sherds ($n=84$, 12.2% of the total sherd count in those deposits) are from 1799–1819 deposits, with 21 pieces (4.9% of total) in 1776–1799 contexts, and a single outlier sherd (3.8% of total) from 1735–1775. Mean ceramic dates

range from 1783 to 1800, with a single outlier at 1756 (Lenik and Armstrong 2010).

Two adjacent urban merchant house compounds on Kongens Gade in the port of Charlotte Amalie, St. Thomas, have yielded possible Moravian wares. During excavations from 2007 to 2012 at the Magens and Bankhus compounds over 70 Moravian sherds were identified based on slip-trailed decorations and rim profiles (Figure 14), as well as undecorated body sherds with paste and glaze characteristics suggesting Moravian manufacture. Since Charlotte Amalie was a neutral port that attracted commerce from many nations during the Danish colonial period, it is possible that slip-decorated ceramics from North America were imported. The Moravian presence on St. Thomas began in 1732, with missions founded at New Herrnhut in 1737 and Nisky in 1755. The Memorial Moravian Church a few blocks south of the two properties, built in 1882, postdates the archaeological contexts described here. Moravian wares from these sites show that this pottery reached urban settings where people of different classes and ancestries lived in close proximity.

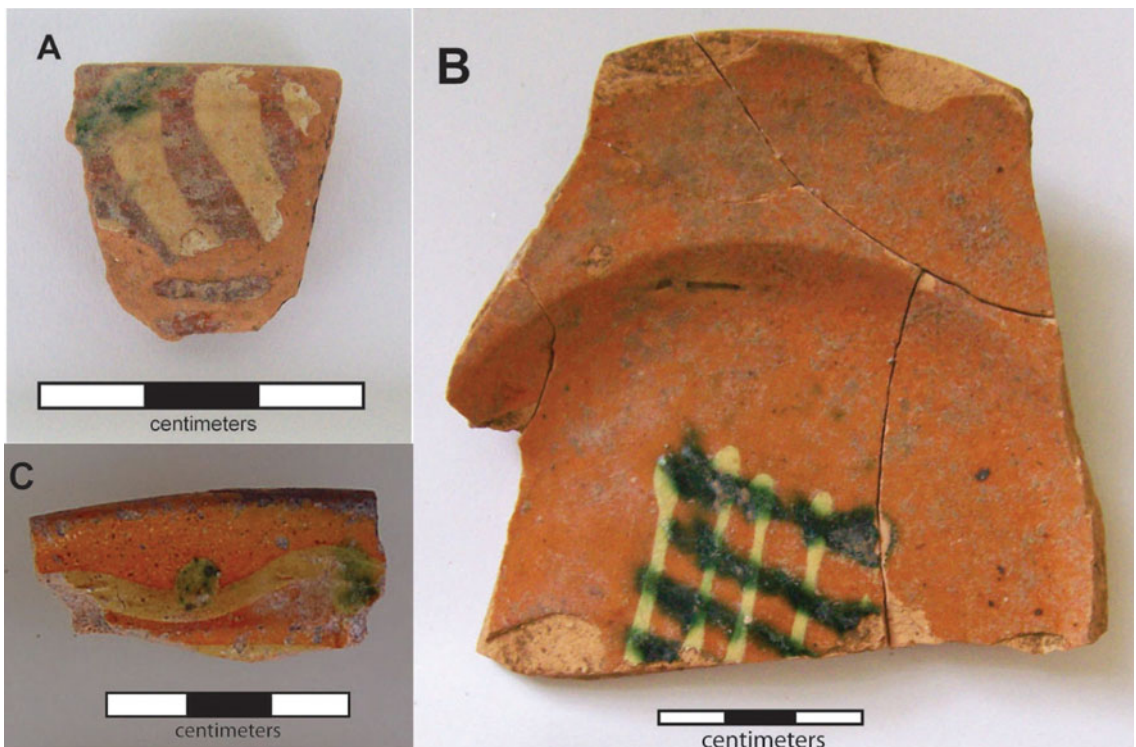


FIGURE 14. Moravian sherds from the U.S. Virgin Islands: (a) rim from Magens House, St. Thomas; (b) plate from Bankhus, St. Thomas; and (c) rim from Cinnamon Bay, St. John. (Photo by S. Lenik, 2010.)

The Magens house compound is associated with wealthy merchant families who lived in Charlotte Amalie to manage their shipping interests as they enjoyed the convenience of the urban setting. Also inhabiting the site were clerks who rented houses, and enslaved and free people laboring as servants and cooks. Located on a hillside, the walled Magens compound is split into many flat terraces connected by stairs and doorways (Williamson and Armstrong 2011). Among the ceramics collected from five platforms at the Magens compound are 11 possible Moravian sherds out of 139 total pieces (7.9% of total count). Mean ceramic dates for these yard deposits range from 1795 to 1811, but the small sample size of identifiable ceramics prevents a reliable date range from being established (Christian Williamson 2012, pers. comm.). Two pieces in the Magens assemblage strongly suggest Moravian origin, including a yellow and green slip-decorated rim sherd (Figure 14a) and a rim sherd (099-008) with a profile like that of the Bethlehem vessel in Figure 4.

The Bankhus property, like the adjacent Magens compound, was owned by a series of merchant families. The name “Bankhus” was coined by a lawyer whose firm once owned the building, and he chose the name because the director of the Danish West Indian National Bank once lived on the property and held bank functions there (Christian Williamson 2012, pers. comm.). Compared to Magens, the Bankhus has fewer platforms, but it is also divided into a series of terraces and platforms that exaggerate the separation of the different zones (Williamson et al. 2011). Excavations of five contexts on three distinct terraces at the Bankhus collected 64 possible Moravian sherds, representing 4.0% of the sherds by count, with mean ceramic dates of these yard deposits ranging from 1798 to 1812. Like the Magens site, the date ranges are wide, with a *terminus post quem* of 1732, when the first missionaries arrived. Collected sherds include a plate with a wide marley decorated with yellow and green slip (Figure 14b). The green glaze bears a strong resemblance to the sherd in Figure 8, and the wide marley resembles Heindl’s observation of a Bethlehem pottery form.

During a visit to the Nisky mission on St. Thomas in June 2010, the senior author (Lenik) found a surface scatter of ceramics near the

Fellowship Hall and office. These included the base of a shallow bowl with yellow slip-trailed decoration on the interior that resembles Moravian sherds, but collection of samples was not possible. A sixth site yielding possible Moravian wares is a watch house operated by the Danish government from 1760 to 1800 at Long Point, Estate Carlton, on St. Croix’s south coast. This was manned by two Danish officers and a small number of royal slaves. Testing of a midden measuring 4 × 8 m and 30 cm in depth revealed 15 sherds bearing yellow and green slip suggestive of Moravian origin, including a plate that appears to have a folded rim (David Hayes 2009, pers. comm.), though the authors have not examined this assemblage.

Discussion and Conclusions

Decorations and morphologies consistent with known examples of the 1749–1767/8 Moravian pottery in Bethlehem have been identified in mid-18th- to early-19th-century contexts in the Virgin Islands. While the presence of these wares at Moravian mission stations fits with the documentary evidence, the non-mission contexts in which these pots have been identified reflect that goods were traded beyond the sphere of Moravian material exchange. While it must also be considered that some sherds, particularly the nondiagnostic pieces, were produced in Pennsylvania or other regions by potters who shared a similar design tradition, such as the “Philadelphia ware” described by Steen (1999), we believe that a convincing argument has been made that Moravian pottery is present at Estate Lower Bethlehem on St. Croix; Cinnamon Bay, St. John; and the Bankhus and Magens compounds on St. Thomas. Pieces from the Nisky mission and Long Point are less reliable, but illustrate the breadth of site types on which these wares may be found.

Our findings define the wider distribution of material exchange of goods among Moravian communities, mission outposts, and the range of contexts in the Danish colonies in which these wares appear. Most of the records kept by Moravians were intended to document movements of missionaries and to relate successes and failures of their work; thus, objects used in daily life that accompanied the missionaries are rarely discussed. Yet evidence

from the Moravian archives and Oldendorp's *A Caribbean Mission* show that ceramics and other goods produced in Bethlehem were shipped to the Danish Caribbean mission. Missionaries are known to have practiced trades, such as the carpenter and tailor on St. Thomas in the 1730s, but we do not possess records that goods were sent to the colonies for the purpose of trade with non-Moravians. With archaeological data we may track locations outside the Moravian mission stations where these wares were found. The presence of Moravian pottery in the Danish Virgin Islands defines material aspects of the transatlantic Moravian mission and reveals venues reached by their artisanal products. The particular forms of exchange by which these pots reached plantations on St. Croix and St. John and urban sites on St. Thomas are unknown. Goods may have been traded or sold to non-Moravians in times of need or to secure profits to fund mission work. It is also possible that the vessels were acquired by members of these households who were Moravian, but this cannot be confirmed. Likewise, meanings attached to the possession and use of these wares are unclear, as it cannot be determined whether people who used the pots associated them with the Moravians, and whether these wares were markers of identity (Lenik 2009:21–23). Nevertheless, material dimensions of the way missionaries and people baptized into the church in the Virgin Islands maintained the Moravian community can be observed and have been explored by archaeological evidence from Moravian missions in other regions (Thomas 1994; Lydon 2009; Arendt 2011; Ferguson 2011).

There are prospects for compositional analysis of Moravian pottery, as Owen and Greenough have demonstrated in their study of samples from Moravian production sites in North Carolina using x-ray fluorescence (XRF) analysis (Owen and Greenough 2010). Such techniques might uncover features of ceramics manufactured by Moravians, such as glaze composition, that could distinguish these wares from pots made by non-Moravians in the northeastern United States, as long as different clay and/or glaze sources were accessed. XRF or neutron activation analysis of clays or glazes from possible Moravian wares from Virgin Islands archaeological sites, and other areas where missionaries were active, could then be compared to samples from known Moravian potteries.

For this paper, the ceramic assemblage collected in the 1970s and currently owned by the Historic Bethlehem Partnership was studied (Heindl 2010). The excavations took place in the vicinity of the second Bethlehem pottery works, a site that is tightly dated between 1743 and 1767/68, when the pottery was moved to another location. However, the site was not excavated in its entirety, and the kiln itself was not found. Further excavations at this pottery site, particularly of the kiln, would improve the contextualization and provide more examples of the decorated wares and vessel forms produced there.

This paper shows how historical archaeology can recover material reflections of the cohesive transatlantic Moravian community, which historians have begun to explore using the extensive documentary records of this 18th-century missionary organization. By identifying Moravian pottery at six sites in the Virgin Islands, we see that goods produced by Moravian artisans were also part of the networks of missionaries and information that circulated throughout this community. More research at Moravian archives will continue to define these economic connections, and the analysis of assemblages from other regions targeted by missionaries may identify pottery and other artisanal products that were exchanged. In this manner archaeologists can continue to identify material and spatial evidence of the Moravian missions that are not clearly recorded in the written record, and to consider how material culture may have influenced the missionaries and the people who converted to the Moravian Church, whose descendants continue as a small but vibrant Protestant group to this day.

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