French Colonial Archaeology

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Introduction

French colonial archaeology today is largely a North American phenomenon, dominated by Canadian archaeologists (many of whom are francophone) working mostly in Québec and the maritime provinces—an area that originally comprised the colonies of Nouvelle France (New France) and Île Royale. A smaller contingent of archaeologists in the United States studies the southernmost sites of New France and the widely dispersed outposts and towns of the colony of Louisiane (Louisiana) found throughout an area spanning much of the midcontinent. A few French, Canadian, and American archaeologists are beginning to investigate the colonial origins of the French Caribbean and Guyane (French Guiana) (Fig. 1).

So that readers can more readily follow the discussion of archaeology at French colonial sites, this review begins with a historical summary of French colonialism in the Americas from the sixteenth through eighteenth century. This chapter draws heavily from my guide to the archaeological literature of French colonial North America published some years ago (Waselkov, 1997), which also provides an extensive list of references to interested researchers. I am grateful to the Society for Historical Archaeology for permission to use the introductory material from that guide as a basis for this review chapter.

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Historical Perspective

French interest in overseas colonization developed early in the sixteenth century, at first focusing primarily on the Americas newly discovered to Europeans (for a comprehensive overview, see Boucher, 1989). The archaeological discussion that follows this section is limited to that region, and more specifically to North America, where most French colonial archaeological research has so far occurred.

Exploration under official French auspices began in 1524, when Giovanni da Verrazano skirted the coast of North America between Florida and Newfoundland in search of a Northwest Passage to the Pacific. Prior to that date, however—perhaps even predating the first voyage of Columbus—French, Portuguese, and Basque fishermen sailed from Europe every summer to harvest cod off Newfoundland and Labrador, and there met indigenous peoples and engaged in intermittent trade.

Jacques Cartier led the first royally sponsored probes inland, beginning with an exploratory voyage in 1534 that found Micmac Indians on the Gaspé Peninsula already willing to trade furs for European goods. On his second voyage, Cartier's ships entered the St. Lawrence River, searching for minerals as far as the Iroquoian town of Hochelaga (at Montréal). From 1541 to 1543, Cartier accompanied a colonizing expedition led by a Huguenot noble, La Rocque de Roberval, whose attempts to establish a settlement upstream from Iroquoian Stadacona (present-day Québec) were defeated by Native hostility, harsh winters, and the colonists' inability to find gems and precious metals.

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Fig. 1 Eighteenth-century French colonies in the Americas

By the 1540s, Basques from Spain and France began whaling in the Strait of Belle Isle between Newfoundland and Labrador, operating offshore on large galleons and supported by coastal tryworks for rendering the blubber. French and Basque sailors also engaged in fishing, whaling, and fur trading in the St. Lawrence estuary from the 1560s until at least 1600.

During this same era, French ships routinely visited the Brazilian coast of South America searching for logwood and that portion of the North American coast from Florida to Cape Hatteras (North Carolina) to obtain sassafras. The latter region was the scene of another Huguenot colonizing attempt, led this time by Jean Ribaut, who in 1562 built Charlesfort on Parris Island (South Carolina). Charlesfort was soon abandoned, but a large-scale Huguenot expedition jointly commanded by Ribaut and René de Laudonnière arrived 2 years later with 600 men, women, and children to construct Fort Caroline (near Jacksonville, Florida). In response

to this French challenge to their Caribbean hegemony, the Spanish ruthlessly destroyed the fort and its inhabitants to forestall French interloping.

French interest in North America revived in the 1580s, as offshore trading by captains from St. Malo developed into a profitable commerce in Canadian furs. When Samuel de Champlain surveyed the St. Lawrence valley in 1603 he found the Iroquoian villages of Cartier's day abandoned, but the land fertile and ripe for colonization. By 1608, Champlain gained royal consent for a St. Lawrence outpost at Québec, where he built a *habitation*, the first settlement of the colony of New France. From this strategic point, Champlain negotiated a series of trade alliances with the Ottawas, Montagnais, and Hurons, through which the French were drawn unwittingly into a long series of wars with the New York Iroquois.

Missionaries soon joined the colonists, who numbered only about 100 as late as 1626. Members of the Récollets, a branch of the Franciscans, founded a Huron mission in 1615 and were joined by Jesuits in 1625, but all returned to France when Québec fell to English privateers in 1629. With the Treaty of Saint-Germaine-en-Laye (1632), France regained Canada, Champlain returned to Québec, and the Jesuits renewed their missionization efforts, first among the Hurons in 1634, and by 1637 at the Algonquin mission village of Sillery near Québec. Two years later, Ursuline nuns arrived in New France to educate French and Indian girls. When the Hurons were defeated, dispersed, and largely assimilated in 1649 by Dutch-armed New York Iroquois, New France lost its most important Indian allies and trade partners.

Huguenots, who had instigated many of the initial French colonizing ventures, were officially excluded from New France after 1627, making the task of attracting colonists to a land with such a cold climate even more difficult. The first large party of immigrant families arrived in Québec in 1636 and Montréal was established in 1640, but high mortality in the colony and low levels of immigration kept the population hovering around 300 in the 1650s. During that same period, however, French colonization in the Caribbean grew at an explosive rate.

Earlier efforts to establish French settlements in northern South America among the Tupinambas between 1604 and 1616 failed in the face of intense Portuguese opposition. Then, in 1625, the Company of St. Christopher settled that Caribbean island for tobacco farming. French colonists established other Caribbean footholds in the 1630s and 1640s on Martinique and Guadeloupe, where sugar, indigo, and cotton plantations proved immensely profitable. By 1645, 8,500 French colonists were ensconced in the Caribbean, overseeing the labor of a larger number of African slaves. Around midcentury, French freebooters (*flibustiers*) began to congregate on the west half of Hispaniola, known as Saint-Domingue (Haiti), and eventually aspired to legitimate colonial status. Communities of fugitive slaves (*marrons*) eventually became so powerful on the French islands that finance minister Jean-Baptiste Colbert drew up the Black Code, issued in 1685, which attempted to ameliorate the treatment of slaves, thereby (Colbert reasoned) decreasing the risk of slave revolts while protecting the state's interest in enforced labor production.

Meanwhile, in North America, the population of Acadia (modern Nova Scotia and New Brunswick) had been growing rapidly, reaching 500 colonists by 1671. Acadian farmers cleared uplands and reclaimed tidal marshlands to create remarkably productive wheat fields and cattle pastures. Marshlands were enclosed with sod-and-log dykes and then drained during low tides through ingenious sluices (*aboiteaux*) that kept out saltwater during high tides. In New France, certain high-status individuals (*seigneurs*) obtained large land concessions from the king. *Habitants* gained title to land by clearing and permanently settling on individual lots, which were usually long and narrow, fronting on a river. Later, in French Louisiana and the Illinois Country, the long lot tradition continued without the seigneurial system.

After a string of colonizing debacles in South America during the 1630s and 1640s, the French managed in the 1670s to found the struggling colony of Guyane, which supplied wood, cattle, and provisions to the Caribbean island colonies. The 1670s were also a decade of exploration west and south from New France. Although contrary to an official policy of retrenchment to the St. Lawrence valley, royal governors encouraged illicit trading by *coureurs de bois* among the western tribes. Governor Frontenac sponsored Louis Joliet and Jacques Marquette's descent of the Mississippi River to the

Arkansas River in 1673, and built interior forts to personally control the fur trade. With the profitability of a western fur trade becoming increasingly clear, Colbert moved to legalize the trade by instituting a system of permits (*congés*) issued to individuals.

René-Robert Cavelier, Sieur de la Salle, pursued Frontenac's goal of expanding French control over the Mississippi valley, finally descending the Mississippi to the Gulf of Mexico in 1682. His attempt to claim the northern Gulf coast for France with a colonizing expedition to Matagorda Bay (Texas) in 1684 ended with his murder and dissolution of the settlement. Meanwhile, a series of campaigns from 1687 to 1696 destroyed most of the Seneca, Mohawk, Onondaga, and Oneida towns in the Finger Lakes region of New York, finally eliminating the Iroquois threat to New France by gaining their pledge of neutrality.

During King William's War (1689–1697), the citizens of Québec successfully repelled an English attack, and Pierre Le Moyne d'Iberville emerged as one of the most capable French military commanders after capturing English posts on Hudson Bay and defeating an English fleet. At war's end, the Treaty of Ryswick confirmed French control of Saint-Domingue and granted France the *asiento*, the right to trade slaves in Spanish colonial ports, which also proved a boon to smuggling. In this era of Bourbon alliance, Iberville arrived on the Gulf coast to establish the colony of Louisiana. Finding Pensacola Bay—the best natural harbor on the northern Gulf—in Spanish hands, Iberville built a temporary post in 1699 on Biloxi Bay, which he eventually abandoned with the establishment of the town of Mobile in 1702. Antoine Laumet, La Mothe Cadillac, had constructed a fort at Detroit a year earlier to secure the difficult transcontinental route from New France to the Mississippi. By the next decade, the founding of New Orleans (Louisiana) and Kaskaskia (Illinois) consolidated French control of the lower and central Mississippi valley.

With the outbreak of Queen Anne's War in 1701, Spanish colonial ports cautiously relaxed mercantilist restrictions and permitted trade with allied French ships, thereby creating a commercial boom in the French Caribbean. The English capture of Port-Royal (in modern-day Nova Scotia) in 1710, however, placed most Acadians under British rule. By the Treaty of Utrecht (1713), France ceded Port-Royal, Hudson Bay, and Newfoundland, prompting the transfer of their cod fisheries to Île Royale (Cape Breton Island), where Louisbourg became the principal port for the inshore fishery and a major trade entrepôt linking New France with Europe, New England, and the Caribbean.

Provoked by years of slave raids and trade abuses, many of the southeastern Indian tribes killed or expelled British traders from that region in the Yamassee War of 1715, providing an opportunity for the French in Louisiana to establish Fort Toulouse among the Alabamas and Fort Rosalie at the Natchez villages. In the upper Great Lakes, the construction of Fort Michilimackinac in 1715 secured French trade interests throughout that vast interior region. The French became embroiled in two Indian wars at this time, one against the Fox (1712–1737) in the upper Great Lakes, and a second with the Chickasaws (1736–1740) who had sheltered Natchez refugees after that chiefdom destroyed the French settlements among them in 1729.

The first half of the eighteenth century was a period of population growth, demographic maturation, and commercial development in French North America. By 1760 the French population of New France exceeded 70,000, Montréal and Québec had become urban centers, and industrial ironworking at the Forges du Saint-Maurice contributed to colonial self-sufficiency. However, all this paled in comparison to the growth of British North America, with 50 times the population. The French court valued its North American colonies primarily for their strategic locations blocking expansion by the British. They certainly were held in less esteem than the extraordinarily profitable Caribbean islands.

King George's War (1744–1748) in America centered mainly on Île-Royale. An expedition launched from New England lay siege and captured the Fortress of Louisbourg in 1745, only to see it returned to French control by the Treaty of Aix-la-Chapelle (1748). With a renewal of hostilities, the British began forcibly deporting the French population of Acadia, exiling approximately 13,000 people. Several thousand eventually were allowed to return in the 1770s, and thousands more found refuge in Spanish Louisiana.

The Seven Years War (1754–1763) began in the Ohio Country when Virginia challenged the French

construction of Fort Duquesne at the head of the Ohio River. After a number of French victories under the leadership of the Marquis de Montcalm at Fort William Henry and Fort Carillon, the British military overwhelmed Louisbourg (1758), Québec and Guadeloupe (1759), Montréal (1760), and Martinique (1762). Although Louisiana remained unconquered, it was ceded along with New France and Île Royale so that France could retain the Caribbean islands and Guyane. Many colonists in eastern Louisiana fled British West Florida, as it came to be known, in favor of Spanish-controlled New Orleans and territory west of the Mississippi River. In Canada, some French elite did sail for France, but most of the population stayed and adapted to British rule.

French Colonial Archaeology in the Americas

Origins of French Colonial Archaeology in Canada and the United States

The earliest archaeological investigations of French sites in North America mainly concentrated on remains left by famous French colonists (Fig. 2). The 1604–1605 settlement established by Samuel de Champlain on Ste-Croix Island was the scene of the first documented excavation at a French colonial site, conducted in 1797 by a joint U.S.–British commission establishing the Maine–New Brunswick boundary. The search (still fruitless) for Champlain's grave in Québec City has been underway periodically for over a century, and sites associated with Jesuit missionaries, particularly of those martyred among the Hurons in the seventeenth century, have generated intense interest since the 1840s. Despite this tendency to focus on the historically famous, these projects have sometimes yielded other important information. Kenneth Kidd (1949) transcended his church sponsor's parochial goals during World War II–era excavations at Sainte-Marie-among-the-Hurons and set high standards for excavation, analysis, and reporting that positively influenced the development of historical archaeology as an academic discipline.

Similarly, John Dawson's (1860) essentially antiquarian, mid-nineteenth-century search for traces of explorer Jacques Cartier's voyage up the St. Lawrence River in 1535–1536 culminated in a much-debated identification of Cartier's anchorage at Iroquoian Hochelaga in modern Montréal. Dawson's work led eventually to Pendergast and Trigger's (1972) reevaluation of his argument that cast serious doubt on Dawson's conclusions. Their work stands as a model of rigorous ethnohistorical analysis involving the testing of archaeological evidence. Because of the nature of many of these sites, an awareness of the close interrelationships between French colonists and native peoples has also pervaded French colonial archaeology in the Americas for well over a century (e.g., Walthall and Emerson, 1991).

Much late nineteenth- and early twentieth-century Canadian historical archaeology can be viewed as contributions to nation-building; that is, as celebrations of remarkable colonists admired equally by Canadians of English and French descent for their bravery and sacrifice (Trigger, 1985:5–6). Because archaeology could provide tangible relics of a glorious past, policy makers occasionally acknowledged a public interest in the quest for sites from Canada's "Heroic Age" and the French regime. By the mid-twentieth century, archaeology was poised to benefit from a convergence of Canadian national pride, a growing awareness of the economic profits to be derived from tourism at historic parks, and political efforts to reduce unemployment in some provinces by sponsoring huge federally funded excavation and restoration projects. The most ambitious outcome was the Fortress of Louisbourg project, a monumental effort to excavate, reconstruct, and furnish one-fourth of the colonial town and its defenses, and present the site as Canada's preeminent historic interpretive park (Fry, 1969). Between 1959 and 1979, hundreds of out-of-work Cape Breton coal miners were employed as excavators and builders (and later as interpretive guides) in a project that has assembled an excavated artifact collection of several million specimens (Harris, 1993). Other long-term excavation programs were also carried out during this era at the Forges du Saint-Maurice and Québec City's Place Royale (Picard, 1979), and on Basque whaling sites at Red Bay, Labrador (Tuck and Grenier, 1989).

Fig. 2 Some important eighteenth-century French colonial archaeological sites in North America

These projects were a training ground for many of the archaeologists currently engaged in French regime research today. However, the field of French colonial archaeology is by no means entirely defined by the Louisbourg model. While many French colonial sites in the United States have likewise been excavated primarily to meet park interpretive goals (such as Forts de Chartres [Keene, 1991], Michilimackinac [Stone, 1974] [Fig. 3], and Toulouse [Waselkov, 1989]), other sites have been mitigated prior to road

Fig. 3 Artifacts from Fort Michilimackinac, early to mid-eighteenth century (clockwise from *upper left*): rooster bottle stopper of bone, lead seal with the mark of the Compagnie des Indes, green lead-glazed earthenware bowl, rosary of ivory beads on brass chain (courtesy Mackinac State Historic Parks)

construction (such as the Cahokia Wedge site [Gums, 1988]), some have been excavated by university field schools (the Intendant's Palace in Québec City [Moussette, 1994] [Fig. 4]), and still others were the subject of grant-funded research (Fort Pentagoet [Faulkner and Faulkner, 1987], Fort St-Pierre [Brown, 1979], and Old Mobile [Waselkov, 1999, 2002] [Fig. 5]). The remarkable cofferdam excavation and on-going conservation of La Salle's ship, *La Belle*, wrecked in Matagorda Bay, Texas, in 1686

Fig. 4 Glass bottle with threaded pewter collar (*left*), ca. 1700, from Rocher de la Chapelle, on Ile aux Oies, Québec, and green lead-glazed earthenware jug (*right*), ca. 1760, from the first Intendant's Palace, Québec City (courtesy Lise Jodoin, Laboratoire de restauration/conservation, Département d'histoire, Université Laval)

Fig. 5 Red pipestone pipe bowls, a bead, and worked slabs from the Old Mobile site, 1702–1711 (courtesy Center for Archaeological Studies, University of South Alabama)

(Bruseth and Turner, 2005) (Fig. 6), required six million dollars in public and private funds, reflecting a current trend away from sole reliance on government appropriations and grants. In addition, some major explorations of rural farms and seigneuries are beginning to correct an imbalance in previous French colonial archaeology that has focused almost exclusively on urban and military sites (Côté, 2005; Guimont, 1996; Nadon, 2004).

Archaeological research on historical sites has begun in other parts of French America. Martinique and Guadeloupe have seen recent excavations (Kelly, 2004), as has French Guyane (Bernier, 2003; Chouinard, 2001; Le Roux et al., 2007) (Fig. 7), where construction of a dam by Électricité France at Petit Saut has led to salvage investigations of sites dating from the mid-seventeenth century to the present (Puaux and Philippe, 1997). Projects such as this, which explored changes in colonization approaches and the effects of European settlement on native Indians, are evidence of an awakening interest in archaeology of the modern era among French archaeologists working in overseas Départements of France.

French Colonial Material Culture

For a number of historical reasons, theory has played a very small role in French colonial archaeology. Until recently, most archaeology on French colonial sites has been driven primarily by the needs of managers and interpreters at historical parks. Further, many Canadian archaeologists have received their training in academic departments of history. Social theory typically finds little support in either location. As a consequence, few publications on French colonial archaeology contain explicit theoretical statements; most are descriptive accounts of features and artifacts anchored in historical context by narratives describing the lives of site occupants. Such reports have tremendous potential as data reservoirs for synthetic and

Fig. 6 Cache of brass artifacts from the wreck of *La Belle*, 1686, including kettle, two candlesticks, ladle, candleholder or chamberstick, and colander (courtesy Texas Historical Commission)

Fig. 7 Refined white earthenware pitcher (*left*) with black transfer print, marked on base "CREIL," a French pottery manufacturer in the Paris region between 1808 and 1840, and a Rouen faience plate (*right*), ca. 1750, both from the Loyola site, French Guyana (courtesy Lise Jodoin, Laboratoire de restauration/conservation, Département d'histoire, Université Laval)

comparative studies, but that capacity remains largely unexploited.

However, the situation decades ago was much worse. Beginning in the 1930s and continuing into the 1960s, reports written primarily for use by restoration architects only described structural features, with little or no consideration of associated artifacts. Increasing frustration among historical archaeologists with that state of affairs, coupled with their growing awareness of the anthropological and historical significance of historic sites, resulted in a fuller descriptive coverage of artifacts in cultural contexts. Parks Canada for a time encouraged research and publication by material culture specialists that has proven beneficial to the entire field of historical archaeology. Their high-quality publications have enduring value as classificatory guides and for comparative purposes. Although decades of federal budget cutting have effectively dismantled that pioneering program of material culture studies, other agencies in Canada and the United States continue to sponsor material culture studies aimed at specialists as well as the interested public (Brassard and Leclerc, 2001; Evans, 2003; Lapointe, 1998).

Of all artifact categories found at French colonial sites, ceramics have undoubtedly received the most attention. Some particularly important studies have established sources of manufacture or presented widely applicable classificatory schemes. Reports on some sites, such as Fort Michilimackinac and Champlain's Habitation, treat French pottery of all sorts—coarse earthenwares, faïence and other refined earthenwares, and stonewares—in comprehensive analyses that also serve as good introductions to the topic (Miller and Stone, 1970; Niellon and Moussette, 1985).

Coarse earthenware potteries with a green lead glaze originated in a number of regions of western and northern France. These distinctive ceramics have been identified on stylistic grounds at many North American sites, with especially important studies of collections from sites such as Louisbourg, Place Royale in Québec City, *Le Machault* shipwreck, and the Trudeau site in Louisiana (Barton, 1977, 1981; Moussette, 1982; Steponaitis, 1979).

The study of faïence—French-made, tin-glazed, fine earthenware—has principally been the domain of decorative arts specialists in France, although some French researchers are now developing an interest in the processes of its manufacture and export to overseas colonies (Rosen, 1995). In North America, John Walthall (1991a) proposed a classification system for faïence found at Illinois sites that has recently been revised for broader applicability across North America (Waselkov and Walthall, 2002). For the very diverse site assemblages, Canadian archaeologists

have preferred a less-specific classification based on regional decorative styles (Bernier, 2003; Blanchette, 1981; Genêt, 1996).

French-made stonewares are rarely reported from sites south of Canada, perhaps partially because of a lack of familiarity with this ceramic category among archaeologists in the United States. Some excellent descriptive and compositional studies are available, though, that should permit accurate identifications of varieties produced in Normandy, Béarn, Beauvaisis, and the Loire valley (Chrestien and Dufournier, 1995; Flambard Héricher, 2002). Chinese porcelain has been found, albeit normally in small quantities, at many eighteenth-century French colonial sites (Genêt and Lapointe, 1994).

White clay pipes have generally been attributed to English or Dutch manufacture, although a small and poorly known French pipe industry did exist and may have contributed to North American assemblages (Walker, 1971).

Copper and brass kettles were an important trade commodity beginning as early as the 1580s, and their acquisition had a major impact on Native American societies and material culture. Particularly in New France, Indian pottery manufacture declined rapidly as kettles increased in availability. In Louisiana, however, kettles found wide acceptance but did not eclipse the vibrant native ceramic tradition (Brain, 1979). Brass finger rings, usually called Jesuit rings, are the subject of one of the few explicitly theoretical articles published by a French colonial archaeologist. Charles Cleland (1972) posited that "style drift" accounted for the simplification in ring decoration he thought had occurred between 1700 and 1760. More recent analyses of temporal and geographical distributions of ring styles suggest that economic and social factors more adequately account for shifts in decorative styles (Mercier, 2007; Walthall, 1993).

Glass analyses by material culture specialists from Parks Canada, along with several important works on collections from Place Royale and Fort Michilimackinac, have identified major categories of French container glass (Jones, 1981). Some studies focus specifically on bottles (Harris, 1979), and others on tableware, including stemware, tumblers, bowls, and wine glass coolers (McNally, 1982).

Glass beads were primarily imported for trade to Native Americans. Consequently, most have been recovered from Indian village sites and from fortified trading entrepôts (Brain, 1979; Stone, 1974). The widely used Kidd and Kidd (1970) glass bead typology was developed in part from bead collections excavated at French colonial and French contact sites in Canada. Chronological and geographical distribution studies of glass beads have led to considerable refinement of bead chronologies; they are undoubtedly one of the most sensitive temporal indicators currently available for sixteenth-, seventeenth-, and eighteenth-century sites (Smith, 2002).

Beginning in 1736, cast iron artifacts produced at the Forges du Saint-Maurice included stove parts, firebacks, kettles, and cannonballs (Moussette, 1983). Building hardware and furniture hardware are the largest categories of iron artifacts recovered from most French colonial sites (Stone, 1974), with nails (Edwards and Wells, 1993; Frurip et al., 1983) and door hardware (Moogk, 1977) receiving particular attention.

Although a few intact colonial-period firearms survive in private collections and public museums, most of our knowledge of French trade guns derives from archaeological specimens (Bouchard, 1976; Hamilton, 1980). After many years of debate, archaeologists have managed to determine the origins of different styles of gunflints, including several varieties made of French raw materials (Durst, 2009; Emery, 1985; Hamilton and Emery, 1988).

Most of the above-mentioned material culture studies rely on stylistic variation to establish origin of manufacture, but chemical characterization of raw materials is employed increasingly to pinpoint sources of select artifact types. Isotope analyses of lead artifacts have recently demonstrated the potential to distinguish between European and North American geological sources, which should prove useful in evaluating the importance of French colonial galena mining in the central Mississippi valley (Farquhar et al., 1995). Copper and brass kettles imported by Basques and Norman French in the sixteenth and seventeenth centuries to the northeast Atlantic coast, where they are found mainly in Indian graves, have been intensely studied to determine sources of manufacture (Fitzgerald, 1995; Fitzgerald et al., 1993; Whitehead, 1993). Several neutron activation analyses have begun to characterize French

and Dutch trade bead assemblages on the basis of predominant chemical compositions—a result that has clear implications for the study of colonial trade spheres (Kenyon et al., 1995). This technique offers great potential to sort out the numerous production sources of French earthenware ceramics (Olin et al., 2002). Artifacts from the Forges du Saint-Maurice in Québec and from a forge operated for the Jesuits in Guyane have been the subjects of sophisticated metallurgical studies (Chouinard, 2001; Unglik, 1990). Most recently, Ehrhardt (2005) has applied metallurgical and spectrographic analysis techniques to copper and brass obtained in trade from the French by native Illinois Indians in the late seventeenth century.

Trade and Social Interaction

Because sources of exotic goods often can be established with some confidence by archaeologists, the nature, extent, and role of trade systems have been considered more frequently than some less-accessible topics. For archaeologists of French colonial North America, trade with the Old World, intercolonial trade, and trade with Native Americans are all important issues that relate to larger questions of French mercantilism as it was applied during the late seventeenth and eighteenth centuries. How effectively did the *métropole* impose mercantilist limitations on colonial economies? Did official sanctions succeed in stifling colonial manufacturing and intercolonial trade or did colonists find ways to circumvent royal restrictions?

The role of military posts as trade entrepôts has received much attention from archaeologists, particularly because many interior forts were militarily weak and existed only at the sufferance of neighboring tribes, who found the presence of regulated French traders in their midst politically and economically beneficial (Waselkov, 1993). Intensive trade with Native Americans has been documented at Forts Michilimackinac (Stone, 1974), Ouiatenon (Noble, 1983; Tordoff, 1983), St-Pierre (Brown, 1979), Toulouse (Waselkov, 1989), and many other sites, including recently discovered Fort St. Joseph in Niles, Michigan (Nassaney et al., 2002).

Although I will not go into depth regarding the responses of Indian societies to French interaction, the French response to interaction with Indians deserves mention (Brown, 1992). Throughout much of the sparsely populated interior territories of New France and Louisiana, French colonists depended on native-grown foodstuffs for their subsistence. In addition, at remote outposts subject to infrequent resupply from France, items of material culture were often purchased from Indians by the colonists for their own use. For instance, Colonoware ceramics—pottery made by non-Europeans in imitation of European vessel forms—have rarely been found on Canadian sites, where contact with France was most easily maintained. However, French sites in the lower Mississippi valley contain traditional kinds of Indian pottery and Colonowares in a wide variety of forms, including plates with foot rings, pitchers, and bowls (Cordell, 2002). Evidently, in French Louisiana, poorly supplied colonists provided a market for Indian potters, farmers, and hunters.

The material culture of colonists and Native Americans also overlapped in the realm of smoking pipes. Micmac-style and calumet-style pipe bowls of ceramic and stone have been recovered from numerous French and Indian sites in Canada and the Louisiana colony. Some researchers have argued that the spread of the calumet ceremony coincided with, and may have been accelerated by, the appearance of French colonists in southern North America (Brown, 2006). Pipes, beads, and pendants of catlinite and similar-looking red pipestones were evidently made by both peoples, since whittled and drilled pieces of red stone are known from Fort Michilimackinac, Old Mobile, and many Native American sites (Gundersen et al., 2002; Morand, 1994). For the French colonists, calumets might have served simply as tobacco pipes—like the white clay European-made pipes found in large quantities at French colonial sites—but their presence in so many French contexts also suggests at least partial acceptance of the associated Indian symbolism and meaning.

Archaeologists have long recognized the potential value of estate inventories as aids to interpret the incompletely preserved assemblages of personal possessions recovered from even the most painstakingly rigorous excavation. A sophisticated analysis that considers both sets of data can yield a better assessment of relative material wealth than would either

alone. The analytic possibilities offered by this approach have only begun to be explored by French colonial archaeologists using estate inventories from eighteenth-century Illinois and Canada (Cloutier, 1993; Walthall, 1991b). In the most ambitious attempt so far, L'Anglais (1994) has assembled documentary data on ceramic vessel usage in early eighteenth-century Québec for comparison with archaeological data from households in Québec's Place Royale and Louisbourg.

French mercantilism, in its most idealized expression, reserved to the parent country the exclusive right of trade to its colonies, which served as markets for manufactured goods and extractive sources of raw materials (Brown, 1985; Tordoff, 1983). Competition for these ostensibly closed markets, in the form of smuggling and illicit intercolonial trade, meant loss of royal revenue from taxes levied on manufactured goods exported to the colonies. Nevertheless, any goods taxed were (and are) liable to be smuggled, and official control of trade was never so perfectly administered that some smuggling did not occur. When archaeologists have considered the broad context of trade in seventeenth- and eighteenth-century North America, they have found abundant evidence of intercolonial economic intercourse. French-made artifacts have been recovered from English sites in New England and along the Hudson Bay, and French goods are not uncommon at Spanish colonial sites.

On the other hand, Spanish and Spanish colonial ceramics have been identified from Louisbourg and the Arkansas Post. French sites along the Gulf coast and in the Caribbean that date to the War of Spanish Succession (1701–1713) contain abundant evidence of private trading in Spanish ports—a trade that declined precipitously after the Treaty of Utrecht and was largely replaced by illicit trade with British Carolina during the 1720s and 1730s.

Ethnicity in French North America

The French immigrant experience in North America was not the transplantation of a homogeneous people sharing a monolithic culture. Culturally distinct regions of France each contributed in complex ways to create different colonial societies in Acadia, New France, the Illinois Country, Louisiana, the Lesser Antilles, and Guyane. Another source of diversity during the sixteenth century was the Basque border region of France and Spain. The Basque presence in French North America was limited to the shores of the St. Lawrence River and the Canadian maritime coast, where they engaged primarily in whaling and fishing (Lalande, 1989; Tuck and Grenier, 1989). However, the impact of Basque trade with American Indians extended far inland, as evidenced by the recovery of copper kettles and iron implements at numerous Native American sites.

French colonists in Acadia developed a distinctive culture and ethnic identity, and Acadian architecture, settlement patterns, and elaborate land reclamation efforts in coastal marshes have merited substantial study (Bleakney, 2004; Crépeau and Dunn, 1986; Lavoie, 1987). The forced deportation and dispersal of Acadians has not yet received much attention from archaeologists.

The Huguenots were victims of a different kind of colonial diaspora. Exiled from France for their Protestantism, some sought refuge in the English colonies of North America. Several of their houses have been excavated in New York, Maryland, and South Carolina (e.g., Doepkens, 1991), but identifying material indicators of Huguenot ethnicity has so far proven elusive.

More successful has been the archaeological identification of ethnic French households in southeastern North America occupied after the Seven Years War and the end of the French regime. Unlike newly installed British officials in Canada, who effectively prohibited imports of French goods after 1759, Spanish administrators in post-1763 Louisiana and their British counterparts in west Florida evidently sanctioned continued trade with France, especially in ceramics (Yakubik, 1990). Of course, French-made material culture continued in use, albeit in steadily declining quantities, among French Canadians in the decades after the British took control of the region. Investigating how material culture helped francophone Canadians maintain their separate ethnicity in the face of British colonial oppression poses a substantial challenge for archaeologists.

Research on foodways offers another perspective on French colonial ethnicity. Blanchette's (1981) pathbreaking analysis of brown-backed faïence

(*faïence brune*), a tableware designed to withstand direct heat, still stands nearly alone in his consideration of ethnographic, historical, and archaeological data from all parts of French colonial North America. Zooarchaeological analyses of animal bones from French colonial sites indicate an earlier dependence on domesticates in New France than occurred farther south, although wild meat sources continued to provide significant variety in the diet at nearly all locations (Balkwill and Cumbaa, 1987; Cleland, 1970; Martin, 1991).

Theory in French Colonial Archaeology

Explicit theory has played only a small role in the development of French colonial archaeology. Lewis Binford was perhaps the first to suggest (in a brief article originally published in 1962) that comparisons of French colonial remains with those of the succeeding British era could offer insights about the nature of colonialism as implemented by different nations (Binford, 1978). Binford's discussion of Fort Michilimackinac under French and British rule, although little more than a research prospectus, is an example of a scientific approach to historical archaeology that has attracted few followers in the intervening years. An exception is James Fitting's (1976) attempt to describe the different effects that French and British contact had on the native peoples of the Straits of Mackinac, in which he portrays Indians mechanistically responding to the essentially benign French and exploitative British. Later writers have criticized Fitting's historical naiveté (e.g., Brose, 1983), and his failure to consider native peoples' active role in their own adaptive responses to European contact.

Judith Tordoff (1983) applied a systems theory model to French fur trade outposts of the Great Lakes region, and sought evidence of settlement and economic hierarchy in a comparison of materials from Fort Michilimackinac (a "Regional Distribution Center") and Fort Ouiatenon (a "Local Distribution Center"). Interest in the functions of trading outposts has continued, as in Lynn Morand's (1994) recent study of local craft industries practiced at Fort Michilimackinac, and Alaric Faulkner's (1986) analysis of frontier maintenance and fabrication at Fort Pentagoet.

Some of the most original and provocative theoretical work in French colonial archaeology concerns the interpretation of urban sites in Canada. By tacitly rejecting Binford's ahistorical approach in favor of Ian Hodder's contextual materialism, Marcel Moussette (1994, 1996) has analyzed the Intendant's Palace site in Québec City in terms of its structural evolution and changes in symbolic meaning to arrive at a more profound understanding of the site's role in the lives of its inhabitants than is usually achieved in archaeological studies. Historical constraints on successive occupations and the cumulative memory of a site's meaning and importance are powerful forces, particularly in an urban setting. Their systematic study can lead to better understanding of the development and growth of cities, as a mode of environmental adaptation, from their colonial origins (Desjardins and Duguay, 1992; L'Anglais, 1994; La Roche, 1994).

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