



NATIONAL ENDOWMENT FOR THE

Humanities

DIVISION OF RESEARCH PROGRAMS

Narrative Section of a Successful Application

The attached document contains the grant narrative and selected portions of a previously funded grant application. It is not intended to serve as a model, but to give you a sense of how a successful application may be crafted. Every successful application is different, and each applicant is urged to prepare a proposal that reflects its unique project and aspirations. Prospective applicants should consult the Research Programs application guidelines at <http://www.neh.gov/grants/research/collaborative-research-grants> for instructions. Applicants are also strongly encouraged to consult with the NEH Division of Research Programs staff well before a grant deadline.

Note: The attachment only contains the grant narrative and selected portions, not the entire funded application. In addition, certain portions may have been redacted to protect the privacy interests of an individual and/or to protect confidential commercial and financial information and/or to protect copyrighted materials.

Project Title: The Roots of Creole New Orleans: Archaeological Investigations at St. Louis Cathedral and Ursuline Convent

Institution: University of Chicago

Project Director: Shannon Dawdy

Grant Program: Collaborative Research

1. Statement of significance and impact

Funding is requested to support a collaborative, interdisciplinary archaeological research program over three years to investigate the colonial foundations of New Orleans at two of its most significant historic complexes located in the French Quarter, St. Louis Cathedral and Ursuline Convent. Until recently, researchers have not had an opportunity to expose extensive deposits related to the French colonial period in New Orleans (1717-1768). However, limited excavations behind St. Louis Cathedral in summer 2008 revealed significant deposits and compelling results. This proposal intends to extend those excavations and incorporate the findings into a broader comparative framework that includes new fieldwork at the Ursuline Convent, re-analysis of previous projects, and specialized laboratory analyses.

While St. Louis was the colony's center of religious practice, Ursuline Convent was the center of educational life and medicine. They were two of the most influential institutions in French Louisiana, but there are other factors that together make them a powerful resource for understanding the early roots of New Orleans' famed creole culture. The target of the archaeological investigations will not be the standing structures of the church and convent, but rather their attached garden spaces (St. Anthony's Garden and Ursuline Garden). These gardens and open spaces in the heart of the city were critical sites of encounter -- between colonialists and the environment, and between diverse social groups. Open spaces were flexible meeting grounds adapted for occasions of trade, feasting, and temporary residence. Gardens were places in which knowledge about food and medicinal crops was collected, implemented, and transformed with input from Native American informants, African farmers, and European administrators. The question that frames this project is: *What were the material dynamics -- both ecological and economic -- of the creolization process in New Orleans?* This study seeks to develop a contextual approach to creolization (the formation of a new cultural identity) that emphasizes the material practices under colonialism that gave shape to, and were shaped by, cultural interactions.

The project will make a significant contribution to the *We the People* initiative by studying how this important American city took shape not as an imperial blueprint stamped upon a swampy wilderness, but as a collaboratively built crossroads carved out of a shared cultural space.

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3. List of participants

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Narrative

Substance and context

Many people do not realize that the French Quarter has very little of its French heritage left in architectural form. The Ursuline Convent is the only standing structure from the French period that survives in New Orleans today due to two devastating fires that struck the city in the Spanish colonial period in 1788 and 1794. Therefore, the kind of information that material culture can provide on the processes of colonization and creolization in the French period lies almost entirely below ground in the form of archaeological deposits.

The proposed project represents the first effort to execute a multi-site archaeological research plan focused on New Orleans' French colonial founding (1717-1768). Despite its prominence in regional history, the archaeological study of early New Orleans has lagged behind studies of predecessor settlements at Old Mobile (Waselkov et al. 2002, Waselkov 2005), Dauphine Island (Shorter 2002) and more recently, Biloxi (Marie Danforth, personal communication, September 2008). While these studies will provide important comparative and contextual data for the present study, researchers in the area have long been waiting for reciprocal data from Louisiana's long-lived administrative and economic center at New Orleans. The warm-up to the present initiative has been building through several projects undertaken by the Project Director in New Orleans since 1995. The most important of these projects were those at Madame John's Legacy (a National Historic Landmark with deposits dating back to the 1720s [Dawdy 1998]), the Maginnis Cotton Mill (a 1760s indigo plantation [Dawdy and Ibáñez 1997]), and the Rising Sun Hotel (Dawdy et al. 2008). The latter site, among other interesting components, possessed two that are critical to the present project: the first pre-colonial Native American habitation ever identified in the French Quarter (radio carbon dated to circa 1640s-1690s), and a well-preserved French colonial kitchen garden (circa 1720-1750). In addition, in 1995, Dawdy conducted limited shovel testing at Ursuline Convent, one of the two sites of the current proposal, to verify the integrity of the deposits there (Dawdy and Yakubik 1995).

However, the catalyst for the current project is of more recent origin. From June to July 2008, Dawdy headed archaeological field investigations at St. Anthony's Garden, in collaboration with The St. Louis Cathedral, New Orleans Archdiocese. St. Anthony's Garden is the name given to the green space that lies directly behind this iconic cathedral (please see maps and photos provided in Appendix). This archaeological investigation is one component of the planning phase for the restoration of the historic landscape of the garden, which was badly damaged by Hurricane Katrina. The Getty Foundation is supporting an interdisciplinary and international effort to study and redesign the garden, with a projected completion date of January 2010. The intended focus of the Summer 2008 archaeological investigation (and the limits of the Getty funding) concentrated on answering questions regarding former landscape features and the recovery of botanical remains that will inform the restoration. However, during the course of excavation several unexpected and remarkable discoveries related to other (non-garden) aspects of the site's history, and to the colonial founding of New Orleans, were made. The inspiration, and urgency, of the present project is to develop these discoveries to their full scholarly potential before the deposits are disturbed by the renovation and replanting of the garden.

No site quite like St. Anthony's Garden has been excavated in the state of Louisiana. In terms of preservation conditions, archaeological features, and historic import, it is akin to Louisiana's Jamestown or Plymouth Plantation -- two other colonial centers that might be better understood through comparison with this other American foundation story. In just three small areas opened in the 2008 season, the site has exceeded expectations in its ability to reveal how the early city was constructed -- from the form of its earliest temporary architecture and the meals that Governor Bienville's pioneers were eating, to the unexpected influence of Native Americans in the form of hybrid pottery, decorated pipe bowls, and a hut with an axe-hewn rectangular European form and palmetto thatch walls of possible Native American technique.

Both sites served as gardens in the French period (a Capuchin food and experimental crop garden, and the Ursuline nuns' medicinal herb garden). Both sites were also important meeting grounds for the diverse cultures that came together to create Creole New Orleans. The Capuchins used enslaved Africans

to assist in their subsistence activities and worldly affairs. The Ursulines brought African and Native American girls and women into their convent as converts, workers, and students. The green space behind St. Louis Cathedral now known (and hereafter referred to) as St. Anthony's Garden was split between the Capuchin garden and an undeveloped lot that appears to have served as a campsite for visiting Native Americans, and possibly as an open air market sponsored by the church, as evidenced in the archaeological features and artifacts uncovered during initial excavations in Summer 2008. Although the role of frontier missions has been an important subfield in historical archaeology (e.g., Deetz 1978, Farnsworth 1989, McEwan 1991, Lightfoot 2005, Silliman 2001; for a review see Graham 1998), the role of church institutions in urban settings has received relatively little attention, particularly in places like New Orleans where the enslaved comprised a significant percentage of the colonial population.

Unlike the focus of most urban archaeological projects, these sites were neither private households nor fixed architectural spaces. Due to their flexible uses and their accessibility to a wide variety of colonial participants, they are locales well suited to study cultural interactions. But far from being entirely fluid spaces, the cultural interactions they fostered were mediated by colonialism in the form of supervising Catholic institutions. They have a high potential to inform us about questions related to: environmental and dietary adaptations; architectural and landscape patterns that capture colonial relations in spatial terms; trading connections and materials not privileged in the archival record (smuggled goods or African or Native American produced goods); and the ways in which technological and environmental knowledge may have been circulating among the early colony's African, Native American, and European residents (such as medical knowledge of local plants or African treatments for tropical fevers, architectural techniques, or how to tan a deer hide). In addition, these sites present an unusual perspective in the study of colonialism that considers the role that major religious institutions played in producing new secular economies and sites of social interaction in the setting of an urban port.

While St. Anthony's Garden rests in the shadow of the oldest operating cathedral in the United States, the Ursuline Garden rests in the shadow of the oldest standing structure in the Mississippi Valley, the main convent building, which dates to 1752 (see photos in Appendix). Both institutions, however,

were present and operating at their current sites by the 1720s, using earlier buildings. The social and political significance of the St. Louis Cathedral complex, which formed the visual and spatial centerpiece of the planned town, has often been presumed by historians and others, but most studies on the colonial period have been limited to biographical or ecclesiastical histories, with little investigation of how the church and its operations affected quotidian life (Alberts 1998, Miceli 1979, O'Neill 1966, Vogel 1928). In contrast, historians have argued for the prominent place of the Ursuline Convent in the social and cultural life of French New Orleans (Clark 2007a, Heaney 1993). Still, some specific gaps remain. Although the records are rich with references to the Ursuline's well-maintained herb garden that existed within the walls of their cloister, the actual content and design of the garden and the other ways in which the community may have used the convent's open space to participate in the local economy are topics neglected in the written sources. Archaeologically, the site of the herb garden remains well preserved, with promising potential to answer these questions.

The scope of the research over three years (1 July 2009 - 30 June 2012) will be:

- (1) four weeks of additional, intensive excavation at St. Anthony's Garden;
- (2) four weeks of intensive excavation at Ursuline Convent;
- (3) the laboratory identification, sorting, dating, analysis, cataloging and preparation of all archaeologically recovered remains;
- (4) specialized analyses warranted by the research questions (including small control samples taken from nearby sites) such as phytolith analysis to identify the plants cultivated on the sites, archaeometric analysis of handbuilt pottery types to identify related traditions and possible regional sources, and chemical residue analysis of selected vessels to determine the content of past meals or possibly, of medicinal preparations; and
- (5) public outreach, report writing, and dissemination of results through a website, public talks, and academic conferences and publications.

The source materials used for this project will consist of the artifacts, documented archaeological features, and ecological data directly produced by these new excavations, as well as

comparative data gathered through analysis of samples from previously excavated assemblages. In addition, necessary archival research will be conducted to flesh out any remaining gaps in the property histories, or address specific questions that will aid in the interpretation of the results.

Recovered artifacts and recorded architectural features

The most immediate and significant source material will be the ceramics, glass, metal, personal and miscellaneous objects, architectural features and artifacts, and archaeobotanical and zooarchaeological remains that will be recovered from excavations at the two sites. Judging from the still-pending observational results of the 2008 St. Anthony's excavations, these will include but not be limited to: French faience, Mexican majolica, Native American ceramics, redwares, Saintonge, stonewares, white salt-glazed stoneware, French olive green wine bottle glass, gin or case bottle glass, black glass, smoking pipes (both kaolin and hand-made), coins, jewelry, beads, postholes and poteaux-en-terre features, bousillage, chert scrapers and debitage, possible glass scrapers, fruit stones and burned corn, and a dense and highly variable faunal record that includes turtle, equid, alligator, many freshwater and saltwater fish species, caprine, bovine, raccoon, and rabbit.

Archives

Much of the historical footwork has already been completed through the Vieux Carré Survey (a compilation of maps, archival documents and a chain of title data file maintained for each property in the French Quarter) and through secondary works such as Emily Clark's history of the Ursulines (2007a) and Shannon Lee Dawdy's work on the socio-economic history of French New Orleans (2008) and on food practices in colonial Louisiana (Dawdy in prep, Scott and Dawdy in press). In addition, the Getty Foundation funded a thorough property history and research on gardening practices in New Orleans for the first phase of the St. Anthony Garden, completed by local archivist Sally Reeves (in prep) and by the French historian Gilles Langlois (in prep), a specialist in eighteenth-century French landscapes.

Still, some specific questions remain regarding Native American visits and activities in the French Quarter that might be tied to these sites through a more directed search of colonial correspondence and civic records. In addition, a detail property history of the Ursuline Convent is needed, as well as a

search of all relevant sources pertaining to the herb garden and other activities that may have been taking place in the open spaces of the convent. Dawdy will work with local collaborator and historian Emily Clark to address these, using archival resources such as the New Orleans Notarial Archives (for property history and possible early civic cases that pertain), Orleans Parish Conveyance Records (for property history), The Historic New Orleans Collection (for historic maps and microfilms of the C13 series of French colonial correspondence, as well as the Louisiana Superior Council and Cabildo records that served as the civic and legal record of the colonial period, as well as relevant colonial reports and descriptive narratives), and especially, the archives of the Archdiocese of New Orleans, which holds the administrative records of St. Louis Cathedral and the Ursuline Convent as well as the letters and papers of several of its nuns dating back to its founding in 1727.

Previous excavations and collections

Prior to the present project, controlled excavations on French colonial deposits have been reported on only six sites in New Orleans and the findings at each were limited to a handful of stratigraphic contexts. These are: (1) the Durel Cottage, which overlays the city's first military barracks (Yakubik and Dawdy 1998); (2) the Cabildo excavations, which uncovered architectural portions of the 1730 prison (Yakubik et al. 1997); (3) St. Peter Street Cemetery, where in 1984 construction workers uncovered the city's first official cemetery (dating to the 1720s) and afforded archaeologists the opportunity to remove 29 skeletons and burial objects for study (Owsley et al. 1995); (4) Madame John's Legacy, excavated by Richard Shenkel (1971) and again in 1997 by the current Project Director (Dawdy 1998); (5) Tremé plantation site, excavated in 1999, having remains associated with a plantation manor house and Company of the Indies era brick-making operation located on the edge of town (Matthews 1999); and (6) the Hotel Rising Sun site at 535 Conti Street, excavated in 2004-05, which included a well-preserved garden level associated with Madame Mandeville, dating to the 1720s-1750s and a protohistoric Indian encampment (Dawdy et al. 2008).

The information these sites yielded varies in type and quality. The Durel Cottage and Cabildo sites providing the best comparative architectural data. Tremé and Madame John's Legacy providing the

best dietary and ceramics data, and the Rising Sun Hotel site providing the best botanical data. The present research design will integrate the pertinent findings from these sites into a comparative frame. In the case of Madame John's Legacy, Treme, and the Rising Sun Hotel, ceramic samples from the sites will be re-analyzed using both multi-variate observational criteria (paste, temper, Moh's scale, color, glaze, manufacture technique, vessel forms and thickness, and treatment) and neutron activation analysis (NAA) to identify chemical signatures and groupings. Another important comparative assemblage for the NAA sampling comes from outside New Orleans, at a plantation site upriver where archaeological investigations uncovered a French colonial redware kiln (Lee et al. 1997).

New botanical analyses (phytolith sampling) will be run with soil samples preserved from the Rising Sun Hotel site and the macrobotanical analysis will be completed for this unfunded project. Further, specific findings from all analyses will be compared to published data produced from excavations at Old Mobile (Waselkov et al. 2002, Waselkov 2005), Dauphine Island (Shorter 2002), and other relevant French colonial sites in the Gulf Coast region, Illinois Country, Canada, and the Caribbean. Examples of early French colonial architecture, archaeobotanical data, and NAA profiles of local and colonial pottery will be especially important.

Specialized Analyses

Analysis of phytoliths (microscopic mineral structures left by plant cells) has begun to be used in colonial and later historic contexts for garden reconstruction (Sullivan and Kealhofer 2004, Palus and Shackel 2006; for an overview, see Baugher and De Cunzo 2002). Because some phytoliths can be specifically identified as originating from root cells, and because carbonization is not necessary for preservation, they provide the best botanical identifications for plants cultivated on a particular site. To the author's knowledge, the present project represents the first time phytolith analysis will be used on an historic garden site in the Gulf South and the first time ever that this type of analysis will be undertaken in Louisiana, on either a historic or prehistoric site. The project thus will begin to build a baseline of phytolith data for the region. In addition to soil profiles, washes taken from selected cooking vessels or

medicine containers will also provide samples for phytolith residues. Standard macrobotanical analysis of seeds and other plant remains will also be run, primarily to reconstruct diet and medicinal practices.

An important aspect of the ceramic assemblage from St. Anthony's Garden is its large amount of coarse earthenware. These handmade redwares bear marked similarities to ceramics produced by Native American groups in the region, particularly the Creek and Choctaw, but were excavated from a distinctly French colonial context. Generally speaking, coarse handmade earthenwares recovered from contact period sites are considered to be of non-European manufacture, and are often referred to as colonoware, particularly if they exhibit aspects of European forms.

While the vast majority of the literature on colonoware concerns the identity of its manufacturers (Ferguson 1992, Heite 2002, Mouer et al. 1999), a number of scholars have been working towards more nuanced understandings of native pottery occurring on colonial sites. Deagan (1973, 1996), for example, has used historic and archaeological evidence to argue that native pottery on colonial sites is a result of intermarriage between Spanish men and native women. Loren (2000) compares the native items in French and Spanish households and suggests that the variable adoption of native practices and objects (including ceramics) was a self-conscious effort to negotiate identity and part of the process of creolization. Mills' (2002) examination of Pueblo ceramics after the Spanish conquest indicates that ceramics may be used by native people as a form of resistance. Saunders (in prep) uses her work on Guale ceramics to argue that the fluorescence of native ceramics under Spanish rule was a result of market demand. These and other studies demonstrate that careful analysis of the archaeological record, and specifically of native ceramics in the colonial context, can provide insight into issues of interpersonal relations, identity formation and ethnogenesis, power and resistance, and colonial economies (Cordell 2002, Crane 1993, Davidson 2004, Deetz 1993, Hauser 2001, Hauser and DeCorse 2003, Heath 1996, Rodriguez-Alegria et al. 2003, Rolland and Ashley 2000, Singleton and Bograd 2000).

Based on preliminary analysis, many of the vessels recovered during the 2008 excavations at St. Anthony's Garden fall outside of known typologies. One of these can be considered a "hybrid" style: lead-glazed, like many European imports, but handmade. It may represent a local experiment in pottery

production. Several other sherds are reminiscent of wares from Puerto Rico and/or coastal Mexico, but confirmation of a relationship requires additional study. Overall, the assemblage is distinguished by the large quantity and unique types of its coarse earthenware, raising numerous questions about the manufacture, meaning, and use of these ceramics. Similar observations were made about ceramics recovered from the Tremé site and Madame John's Legacy (Matthews 1999, Dawdy 1998), although more thorough analyses were not possible at the time.

With the presence of these unusual wares, including hybrid types and possibly imported vessels, it is difficult to distinguish locally manufactured pots from imported pieces. Even with complete typologies, one can be mistaken for the other (Rodriguez-Alegria et al. 2003). One technique often used to distinguish imports from local goods is neutron activation analysis (NAA). NAA can determine a vessel's chemical composition, including the major, minor and trace elements present in a sample (Bishop, Rands and Holley 1982, Neff 2000, Rice 1987). Once obtained, a chemical profile can be compared to that of other vessels or to raw clay samples. In this case, both methods will be employed to distinguish locally produced pottery: a comparison between types found on the site, and a comparison with available chemical profiles (e.g., Olin et al. 2002, Steponaitis et al. 1996). The resulting identifications can then be used as a foundation for research into the interpersonal, political, and economic relationships in operation during the early colonial period.

In terms of a **contribution to scholarship and student audiences**, the present study promises to elaborate the prominent exemplar of creolization in Louisiana and make clearer how material practices contributed to this process by creating fields of interaction and a new *habitus*, or a set of taken-for-granted cultural dispositions and habits (Bourdieu 1977). Put simply, the main question that frames this project is: *What were the material dynamics -- both ecological and economic -- of the creolization process in New Orleans?* To answer this question, it will be necessary to identify fields of material practice through which members of Native American, African, and European donor populations may have interacted or collaborated, in both intimate and institutional settings, such as: food/drink preparation and consumption, gardening, medicine, architecture and spatial organization, trade and technology, and personal

presentation (dress, jewelry, etc.). These identifications will necessarily be argumentative rather than indexical, based upon the archival evidence and hybrid forms of material culture, such as a rectangular palmetto hut, pottery constructed using Native American techniques but with European forms or decoration, or gardens where Native American and African plants (tobacco, persimmon, okra, rice, etc.) were cultivated alongside European crops, or according to European parterre garden design. One of the intended discoveries of this analysis will be to prioritize those fields in which cultural knowledge sharing and mixed practices seem most prevalent. This, in turn, will have interpretive implications about where and how diverse segments of the population interacted socially, as well as those spheres that may have been most closely monitored, controlled, or even encouraged by religious and political authorities.

The term “creolization” has been deployed with increasing frequency in humanistic and social science studies of the Atlantic World to describe a process of cultural formation under colonial conditions (e.g., Brathwaite 1998, Balutansky and Sourieau 1998, Buisseret and Reinhardt 2000, Price 2001, Spitzer 2003; for a review see Palmié 2006). “Creolization” can offer a suppler alternative to “assimilation” or “acculturation” models of cultural change and the term has been enjoying a rising popularity in archaeological interpretations of colonialism, ethnogenesis, and racial identities (e.g., Deagan 1983, Ewen 1991, Ferguson 1992, Dawdy and contributors 2000, Armstrong 2003, Maygarden 2006, Stewart and contributors 2007, Morgan and MacDonald 2007). While authors differ in emphasis, the broadest definition of creolization is the formation of a new culture from colonial or pre-colonial antecedents. The essence of the difference with older models is that creolization describes a multi-directional, rather than unilateral, process of cultural influence and exchange. Thus, creolization does not privilege the colonizing force as the arbiter of culture. Creolization recognizes that Europeans were transformed by their interactions with Native Americans and Africans as much as the other way around. Further, work like that of Ira Berlin (1996) recognizes that the process of creolization took place among a highly mobile colonial population such that the “founding” of places like New Orleans was undertaken by a very cosmopolitan crew of sailors, slaves, and Indian traders who were, in fact, already “Atlantic Creoles.”

Still, most archaeological studies of creolization have remained provincially bounded within the discipline while most historical and humanistic studies of creolization and creolité have focused on the “melding” of cultures (in language, clothing, musical forms, etc.) as if they are composed of elements from a purely discursive, expressive realm, without reference to the material context of these exchanges. One important exception is the ethnographic work of Katherine Browne (2004). She highlights the “Creole Economics” of contemporary Martinique to show how local identity arose not only out of the colonial past, but specifically out of ways of subsisting, trading, and entertaining. The present study, using archaeological data especially well suited to the study of informal economic and ecological practices, seeks to re-situate creolization in its material context in a similar vein for the colonial period and in a way that stretches beyond archaeological applications.

Until recently, most archaeological models of creolization held material culture to be a proxy for the hybrid nature of colonial households and communities. However, newer work points out the problems in assuming that “mixed” material cultural complexes are necessary markers of creolization. Voss (2008) stresses the contingent and highly variable nature of colonial interactions such that we must take into account local economic and political realities like trade, labor, warfare, and forced migration that can also produce mixed assemblages. “Hybrid” archaeological materials that seem to refer to a combination of Native American, African, and/or European antecedents may reflect pluralities and inequalities in the colonial community rather than the creation of a new holistic culture one could call “creole.” Consensus is building among scholars that a contextual rather than a one-size-fits-all approach to colonialism and creolization is necessary to account for the wide variability witnessed in the historical and archaeological records (Dawdy 2000, 2008; Voss 2008). One implication of the contextual approach for this study is that the material culture of the pioneer phase of New Orleans will uniquely reflect its conditions as a trading center established by Canadian *coureurs de bois*, Caribbean buccaneers, French prisoners, and enslaved Senegalese sailors within a vast Indian territory, which rapidly became a major smuggling port. Another implication of recent critiques is that a static approach to material culture in which certain new forms (e.g., colonoware, gumbo, or the dog-trot house) are taken to be static “markers”

of creolization tells us very little about social and cultural processes. What is needed is to abandon the still-latent unilineal equation (social blending begets creolized material culture) in favor of a practice-based model that imagines a dynamic feedback loop in which material practices shape social interactions, which in turn shape material practices.

In addition to providing a material dimension to our understanding of the early colonial context of New Orleans' famed creole culture, this study will develop ways to study a contingent factor surprisingly neglected in historical archaeology. One vernacular meaning of creolization that scholars have overlooked is the sense of "seasoning," or becoming conditioned to a new local environment in the colonies. Usually referring to the health of people, and even plants and animals, this older meaning can be recouped in order to bring together environmental history and environmental archaeology with colonial studies (cf. Oxford Shorter Dictionary entry: "European fruits planted there [in West Indies], but which have undergone considerable alterations from the climate" [1760]).

While prior modes of archaeological inquiry looked to environmental factors as prime movers in social adaptation, the present study pursues a more open and dynamic view of human-environment interaction in which human skill and knowledge is seen as an important intermediary that both constrains and enables cultural adaptation. This model leads to a less deterministic set of possibilities for the human-nature nexus. For example, it is not enough to say that colonial Louisianans altered their architecture to facilitate passive cooling in the warm climate because this was more adaptive. Rather, the range of African, Native American, and European mental blueprints and learned technologies that were available to inform architectural possibilities are themselves considered "environmental" factors. Similar approaches to medicine, food preparation, agriculture, ceramics, clothing, hunting and fishing, and transportation can be applied. The theoretical contribution of this study will be to create and apply a model of creolization in which the intercultural exchange of ecological knowledge and practical know-how (what James Scott [1998] calls *mētis*; see also Dawdy 2008) is an environmental variable that can be tracked as a contributing force in the formation of a new colonial culture. The constraints, opportunities, and benefits associated with this exchange will give specific contours to creole *habitus*.

We can propose some basic predictions for the material culture of this early phase of the city's founding based upon the foregoing theoretical framework and a baseline of historical research on French period New Orleans (e.g., Dawdy 2008, Usner 1998, Lewis 2003, Clark 1970, Clark 2007a):

1) evidence for the sharing of ecological knowledge will be most evident in those factors historical actors identified as key to urban survival in New Orleans (i.e., gardening and medicine) as seen in the adaptation of Native American and African crops and techniques;

2) the sharing of ecological knowledge and food practices will be more prevalent in open spaces as compared to private households due to their role as intercultural meeting grounds and feasting sites;

3) gardens controlled by religious institutions, which also served as educational and medical institutions, will be distinguished by highly planned and symmetrical European garden designs but the greatest diversity of native and African-influenced plants;

4) artifacts of non-French European and colonial manufacture will be found in significant frequencies, in violation of the Mississippi Company trade monopoly; and

5) Native American influences in early Louisiana material culture are more likely to reflect interactions with Indian groups that may have been geographically distant, but politically and economically near, to the early French settlers at New Orleans, such as groups situated further up the Mississippi (e.g., Natchez, Tunica or further up, the Illiniwek groups of Illinois country), as well as the powerful Choctaw allies to the east. If this latter prediction is borne out in elements such as ceramics, pipes, tools, and architecture, then the initial founding of New Orleans in 1718 can be attributed to a colonization of the area by a joint French-Indian occupation force that overwhelmed small local Native American groups (such as the Ouacha, Chuouacha, and Acolapissa) who remained largely outside the global circuit of the town's political economy. A major implication would be that the town could best be characterized as founded by a group of "Mississippi Creoles" (after Berlin 1996).

Regardless of whether these predictions are confirmed in the final interpretations, there has been so little previous archaeological work done on French colonial sites in New Orleans (an exposure totaling less than 5 cubic meters of excavated soil), that the artifactual, botanical, and architectural data made

available to other researchers through this project will make a significant contribution to the region, and to comparative studies of colonialism.

In terms of a **contribution to general audiences in the humanities**, this discovery of the colonial foundations of a major American city promises to enrich public understandings of the roots, not only of Creole New Orleans, but of the American Republic. With the Louisiana Purchase, the United States doubled in size, but rather than representing the annexation of a wilderness, as is often depicted in popular accounts, the country gained an already colonized land and a complex society formed by over 100 years of interactions among Indians, Africans, and Europeans. Thus, the project brings to light, and adds specific dimensions to, the culturally diverse roots of America, and a colonial past quite different from the familiar stories of New England Puritans and Virginia Cavaliers. Public interest in the St. Anthony Garden project is already running high, as evidenced by the daily visitors at the site, the more than 300 visitors during an open house, and numerous newspaper, television, and radio reports. A website has recently been launched which provides updates on the project and links to media coverage (<http://home.uchicago.edu/~sdawdy>). The visibility of St. Louis Cathedral and the Ursuline Convent (two of the most visited sites in the city) will ensure that a ready public of tourists, locals, and general followers of Louisiana culture and history will be reached.

History and duration of the project

St. Anthony's Garden

An excavation directed by the Project Director in the summer of 2008 in the garden behind the Cathedral exposed remarkably well preserved deposits associated with two early structures, one of which predates the street grid and almost certainly represents an early hut established by one of the pioneers in the land-clearing phase (1717-1726). It is the earliest and only such structure ever encountered in an excavation in New Orleans. The site is also characterized by rich deposits of artifacts stratigraphically well separated by identifiable features, such as a roadbed known to have been laid in 1726 and the fire level of 1788. What is particularly important about the artifactual remains is that the 2008 excavations

suggest that Native Americans played a much more prominent role in the early founding years than has been previously appreciated, or than is presented in the archival record. The deposits from the early French strata appear to be comprised almost 50/50 of European and Native American material culture (with the latter represented by hand-built ceramics, hide scrapers, decorated clay pipes, and lithics).

Nine University of Chicago students and over 15 local volunteers assisted with the excavation between June 15 and July 10, 2008. The project consisted of archaeological investigations of the green space located on the northwest side of St. Louis Cathedral known as St. Anthony's Garden (see site map and photos in the Appendix). Project members recorded features, recovered artifacts, and collected soil samples to aid in the reconstruction of planting practices in the space from the French colonial period through to the mid-20th century. The space overlaps or encompasses at least four historic gardens: an early 1700s food garden cultivated by the French Capuchins, the kitchen garden of Pere Antoine dating ca. 1780-1820, a landscaped public park dating to the antebellum period that featured an ice cream pavilion and flower mart, and the cathedral's formal garden which took over this same space in the 1860s. While deposits and features likely associated with each of these garden episodes on the site were identified during the 2008 excavations, several unexpected discoveries relating to other aspects of the site's use bear further investigation.

Highlights of these findings include:

- *The earliest architectural structure ever identified in New Orleans*, a ca. 1717-1726 simple rectangular hut with square posts and probable palmetto thatch walls. A second well-preserved poteaux-en-terre structure dating to ca. 1726-1750 was also uncovered.
- *A high incidence of Native American material culture*, including a predominating red-filmed pottery provisionally nicknamed "New Orleans Red." Along with the ceramics were hide scrapers and non-local debitage (the closest chert sources are located in north Louisiana), a decorated Indian pipe, and ubiquitous wild animal food remains.
- *The original street surface, ditch, and banquette (elevated sidewalk) of Orleans Street (ca. 1726-1830s)* which cut through the space before it was converted to a public park. The ditch associated

with the colonial street and sidewalk was full of household debris and lost items of early New Orleanians who lived nearby.

- *Numerous small items and identifiable features associated with religious, recreational, feasting, marketing, and educational activities* which took place on the site (including a silver crucifix possibly associated with colonial figure Pere Antoine), suggesting the flexible uses of this public space where different segments of the colonial population interacted.

After returning from the field in July, the team completed flotation processing and sorting, and has nearly completed artifact washing of the estimated 30,000 diagnostic artifacts recovered. The first volume of a two-volume report, focusing on the field investigations and botanical results, is being prepared for submission to the Getty Foundation by December 31, 2008 (Dawdy et al. in prep). A second volume containing detailed cultural artifact identification, analysis, and interpretation will be completed by June 30, 2009.

Ursuline Convent

Because it survived the Great Fire of 1788, the main building of the Ursuline Convent is believed to be the oldest European structure in the Mississippi Valley (Wilson 1987). However, it was actually the second building constructed for the French Ursulines, who arrived in the young colony in 1727. The substantial structure which stands today was built between 1745 and 1752. The sisters were invited to the colony by the Company of the Indies and the colonial government in order to operate a much-needed hospital in the city (Clark 2007a). It is well known that the Ursulines cultivated an herb garden within the cloister walls to produce medicines to treat the colony's sick and injured. One of their sisters, Francis Xavier, was a renowned pharmacist. Archival records indicate that both slaves and free people of color were regularly employed at the hospital, and some were noted as skilled practitioners. In addition to their medical mission, the nuns defied colonial authorities in maintaining their order's focus on education and missionary work. They established a successful school in colonial New Orleans, which ultimately resulted in the literacy rate for women becoming measurably higher than that of colonial men in the early town. In these efforts, the Ursulines reached out to Native American and African girls and women,

adopting orphans, providing catechism, and teaching them the rudiments of literacy along with young European girls.

A previous archaeological study of this site was instigated by a 1978 request from the Archdiocese to demolish the remaining walls of a building used for St. Mary's School, located in one corner of the Ursuline complex. Examination of a trench, the brick walls, and foundation confirmed that a significant portion of the remaining structure belonged to the original Almonaster Chapel and dated to 1786 (Shenkel and Beavers 1978). In 1995, Shannon Dawdy (then as a Project Manager with Earth Search, Inc.) conducted limited shovel testing in the rear courtyard area of the convent, which included this same area as well as the previously uninvestigated herb garden (Dawdy and Yakubik 1995). Testing was designed to mitigate any damage from planned tree-planting and landscaping activities, so units were excavated only to estimated impact depths, or 20-50 cm below surface. This limited exposure to 19th-20th century deposits at the site. However, good preservation was indicated and intact colonial deposits associated with the French colonial convent garden were identified at the base of the deeper tests. There was little evidence of modern disturbance other than isolated utility lines. In general, natural and cultural deposition factors in New Orleans favor preservation through sedimentation and landfill build-up, resulting in accumulations of 40-100 cm per 100 years.

Staff

Shannon Dawdy will serve as Project Director, charged with research and grant administration, field and laboratory supervision, coordination of collaborators and institutions, and report writing. This will require 23% of her full time effort over the three years of the project (15% over the academic year plus 1 month full time effort during the summer). Dawdy has served as a P.I. on 13 historical archaeology projects in Louisiana since 1994. Prominent major projects include the National Historic Landmark Madame John's Legacy and the Rising Sun Hotel. She received her original training in archaeology through the College of William and Mary and early phases of the Jamestown Rediscovery project. Subsequent training came from extensive fieldwork experience as the founding director of the

Greater New Orleans Archaeology Program and later as a student in the University of Michigan's Doctoral Program in Anthropology and History. While her master's thesis focused on Native American adaptations in the Virginia-North Carolina area, her dissertation focused on the social and economic life of French colonial New Orleans, resulting in her recently released book *Building the Devil's Empire* (University of Chicago Press, 2008). In addition, she has edited or co-edited three volumes (one on creolization in archaeology, one on the archaeology of Cuba, and one annotated historical account of French Louisiana), as well as nine peer-reviewed journal articles (excluding invited commentaries), and four book chapters. She has published or presented in both French and Spanish. In 2008, she was recognized by her peers by being awarded the John Cotter Award in Historical Archaeology for achievement by a junior scholar. Other recent honors include a fellowship offer from the Institute for Advanced Studies at Princeton and a Mellon Postdoctoral Research Fellowship from the Newberry Library.

Dr. Emily Clark will serve as the main consulting historian collaborating on the project. Dr. Clark is Associate Professor of History at Tulane University and her book, *Masterless Mistresses: The New Orleans Ursulines and the Development of a New World Society, 1727-1834* (2007a), is the most complete and authoritative work on the Ursulines in New Orleans. She has also produced an important translation of letters written by one of the early nuns (Clark 2007b). Her role will be to flesh out the property history of the Ursuline Convent, locate documents related to the herb garden, and provide contextual historical narratives. Her contribution will be 15 days of full-time effort in the second year of the project.

Dr. Kristen Gremillion is Associate Professor with the Department of Anthropology at the Ohio State University. Her role in the project will be as a consultant-collaborator to analyze macrobotanical remains from both sites, and to assist in the interpretation of new phytolith samples taken from Ursuline Convent and samples previously collected from the Rising Sun Hotel site. She is a recognized expert on wild resource utilization and plant domestication in the American Southeast and has also conducted archaeobotany on samples taken from the early French colonial site of Old Mobile. She is serving as the

archaeobotanist for the 2008-09 season at St. Anthony's Garden. Her level of effort over the three years is expected to be 30 days of full-time effort.

Dr. Susan Defrance is an expert in zooarchaeological analysis, with extensive experience on French colonial and southeast U.S. sites. Her facilities at University of Florida contain one of the best comparative collections of Gulf Coast and Caribbean fauna. Her role will be to analyze the animal bone recovered from the sites for dietary analysis, in the capacity of a collaborator-consultant. Her effort is estimated at 66 days of full-time effort over the three years.

Dr. Susan Mulholland is recognized as one of the pioneers in phytolith analysis. Through her consulting firm, the Duluth Archaeology Center, she will process and identify the samples to be taken from the Ursuline Convent, as well as samples stored from the Rising Sun Hotel project. Her effort is estimated at 30 days over the three years.

Other staff will consist of three field and laboratory assistants drawn from experienced and highly skilled graduate students at the University of Chicago (Adela Amaral, Megan Edwards, and Sarah Kautz) whose efforts will each be for 1 month of full time effort per year over the three years. In addition, a project manager/field supervisor (Ryan Gray), as well as an experienced laboratory supervisor (Jason Ramsey) will each be needed for six months of full-time effort annually over the three years.

Methods

The field methods and results of the 2008 season at St. Anthony's Garden will inform the methods and research design for the present project. In 2008, 30-cm shovel tests were performed along four 10-meter transects across the 31 x 43 meter lot. The results indicated well preserved and complex deposits across the site, with some areas disturbed by modern utility lines. These were then avoided in the placement of excavation units. The initial design was for four 1x2 meter excavation units placed judgmentally in each of the four quadrants of the site, adjacent to artifact-rich shovel tests with undisturbed strata. One of these units was eventually extended into a 2x2 meter unit. Three units were excavated to sterile soil (encountered between 120 and 160 cm below surface), although subsided timbers

associated with an early French colonial structure were left in tact in the 2x2 in order to facilitate exposure upon a hoped-for return to the site to clarify the dimensions and character of this structure. A fourth unit terminated on a substantial brick foundation belonging to 1915 temporary chapel built on the site. The stratigraphy at the site is quite complex and deep, as is not uncommon in urban New Orleans. Using the Harris Matrix system of stratigraphic recording, 61 different contexts were identified and divided into 10-cm arbitrary levels, yielding 149 different proveniences. The stratigraphic complexity and dense clay soils at St. Anthony's Garden meant that broad horizontal exposure was restricted in favor of tight vertical control and careful screening.

From the fieldwork to the analysis, write-up, and curation stages, the high **standards of U.S. archaeological practice** (based on National Park Service Guidelines) were followed in 2008, and will be followed in the current project. The site will be mapped using a laser total station, with elevations tied to a nearby USGS benchmark. Detailed day notes and context forms following the Harris Matrix system of stratigraphic recording will be maintained and each level and new context will be drawn and photographed in both plan and profile views. Excavation will proceed by 10-cm levels within natural strata and all soils above the French colonial deposits will be dry screened through 1/4" mesh (1/16" in case of flotation and wet-screened samples). Although it not logistically possible to wet-screen all soils on-site (due to drainage and subsidence problems, as well as the public nuisance factor at an urban tourist destination), all soils from the French-period deposits will be removed off-site for wet screening and/or flotation processing through 1/16" mesh to ensure maximum recovery of small faunal and botanical remains as well as small items such as beads, pins, and shot. Water processing will take place on the University of New Orleans campus, where flotation processing was done in 2008 through the logistical assistance of Andrea White, New Orleans Regional Archaeologist for the Louisiana Division of Archaeology.

All diagnostic artifacts will be collected, bagged, washed, and labeled. Samples of non-diagnostic rubble (brick, mortar, slate, etc.) will be collected from each unique context and the total percentage content within the matrix estimated. As in 2008, 10-liter flotation samples will be taken from

all unique strata and features within each unit. In addition, 50 gram soil samples from clean unit profiles will be judgmentally selected for appropriate phytolith samples. Acid-free and reversible materials will be used in preparing the artifacts for curation. A copy of all the field notes and final report will be curated with the artifacts in the same facility (the Archives of the Archdiocese of New Orleans). A Louisiana Division of Archaeology site number will be obtained and the site will be recorded in their file database.

Initial artifact processing (washing, sorting, bag labeling) will take place in at the field house in New Orleans (a private sublet arranged by the Project Director) to the extent feasible, and then completed at the Anthropology Department of the University of Chicago, as well as in specialty labs subcontracted for the floral and faunal analysis (The Ohio State University and the University of Florida, respectively). Bucket flotation will be performed on the University of New Orleans campus after defloculating overnight in a sodium bicarbonate solution. Neutron Activation Analysis (NAA) will be performed on a minimum of 50 ceramic sherds through the Archaeometry Lab at the University of Missouri. Control samples of identified prehistoric and historic Native American and/or colonoware types from the Southeast will be analyzed as part of the total sample (we have permission to use samples from the St. Augustine site, Rising Sun Hotel, Madame John's Legacy, and prehistoric sites in the collections at Louisiana State University), and more samples will be added should additional funding sources beyond the NEH be made available.

Curation for the artifacts will be arranged with the Archdiocese of New Orleans, which maintains its own archives and museum collections. In addition, the Archdiocese has promised any and all logistical support, as they provided in 2008, to support the fieldwork (see letter of support in Appendix). Monsignor Crosby Kern and Garden Project Manager Dr. Alfred Lemmon have been important liaisons with the Archdiocese, city government, and other local institutions and they have enthusiastically volunteered to continue in this role.

Specific field strategies at each site will be approached somewhat differently given the greater size of the St. Anthony Garden site and the greater extent of the previous excavations there. At St. Anthony's, four field objectives will be pursued: 1) to extend the excavations (at minimum, a 1x2 meter

unit) in the vicinity of the pioneer-phase hut to confirm its architectural dimensions and construction, as well as to collect additional artifactual evidence that might shed light on who might have been occupying the hut and their household economy; 2) to extend excavations (also minimally a 1x2) in vicinity of the second French-period structure to better understand its construction, dimensions, and orientation; 3) to excavate a 50-cm wide trench across the width of the garden to confirm the layout of structures associated with the former bed of Orleans Street, and to identify any additional unrecorded French period structures that lie beneath it; and 4) to add two more 1x2 meter units in the area where Native American artifacts concentrated in the NW and NE corners of the garden to confirm whether these artifacts seem to be associated with the grounds being used as a temporary campsite or market area.

It should also be emphasized that St. Anthony's Garden is a multi-component site with well-preserved and highly significant deposits dating from the Spanish colonial period to the present. While these deposits do not inform the central research agenda of this project, the recovery methods are designed to collect, process, and preserve these archaeological data as well, so that graduate students or other researchers may access these findings for inquiries structured around a different set of temporal and thematic parameters. A multi-component recovery strategy will also be deployed at Ursuline Garden.

At Ursuline Garden, the findings of the 1995 shovel testing will be used to determine the placement of a minimum of four 1x2 meter excavation units based upon the presence of colonial era deposits and buried garden horizons. In addition, a contingency plan for unrecorded early structures (such as those found at St. Anthony's) will allow the priorities of the excavation to be adjusted in the field, so that additional 1x1 meter or 1x2 meter extensions will be added as needed.

In terms of the **data-theory fit**, these field methods are designed to produce a full spectrum of botanical, faunal, and man-made artifactual materials to assist in understanding the ecological and economic dimensions of creolization in early New Orleans. Specifically, concentrating on the early French period deposits is designed to gather enough of the handbuilt pottery (a minimum of 50 analyzable sherds) to conduct compositional analysis via NAA which can then be compared against a rapidly expanding baseline of data on prehistoric, colonial, and imported European ceramics present in the Gulf

states (e.g., Fox and Ulrich 2008, Avery 2007). The cultural affiliations of regional sources and ceramic clusters identified by neutron activation, when combined with historical or other lines of evidence, may point to specific historic Native American groups who were interacting materially with the European and African colonists in New Orleans (e.g., Choctaw, Creek, Natchez, or local petites nations). In addition, a small sample of unusual redwares that do not fit known typologies will be tested to find out whether they are of local or foreign (European or perhaps Mexican) manufacture. It also is hoped that by concentrating on where these early deposits are known to be rich, a larger sample of Native American material such as the decorated pipe bowl, hide scraper, and lithics found in 2008 will be recovered so that additional lines of evidence can be developed to contextualize the ceramic data. An attempt will also be made to identify the likely source of the chert debitage (there are no natural lithic sources in the New Orleans area due to the entirely alluvial nature of the landform).

Analyzing these materials within the full assemblage of French period artifacts and with a clearer idea of their depositional context will clarify what relationships they may represent. Possibilities include: production in the case of Indian deer hide traders camping out in New Orleans; consumption in the case of Native-made pottery being used in colonial French households that were depositing trash on the lot; or trade and marketing activities which would exhibit a narrower range of goods and perhaps broken merchandise. Analysis of the ceramics, glass, and other durable artifacts will also aim to identify those of French origin (and thus approved by the Company of the Indies monopoly) and those which were likely acquired through smuggling due to their British, Spanish, or other origins. Field excavations concentrated on clarifying the dimensions and construction techniques of the two early French structures will help elucidate what cultural technologies seem to be represented in the architecture.

The recovery of macrobotanical and phytolith remains will help form what may be the best comparative collection of three French colonial gardens from the same time and place, allowing an identification of the genus and, in many cases, the species that were planted in this urban setting for food and medicinal uses. Similarly, the analysis of food remains in the form of macrobotanical and faunal artifacts, as well as chemical residues on vessels (to be paid for with other funding sources), will help us

understand when and how New Orleans cooking became “Creole,” as now represented in the gumbo trilogy of Indian sassafras leaves (filé), African okra (ngombo), and European sausage.

Final product and dissemination

For scholarly audiences, dissemination of the results will occur at various levels and in several venues. First, the project web site will provide this audience with a summary of work in progress and presentation of preliminary results. The web site will also provide a portal for scholars to download the technical reports summarizing the field and laboratory results as PDFs. Copies of the technical reports will also be deposited with local libraries and the Louisiana Division of Archaeology. Beyond this, however, it is anticipated that a minimum of four peer review articles will be produced by this long-range project and perhaps more, warranting a special issue volume of *Historical Archaeology* or the *International Journal of Historical Archaeology*. Finally, the Project Director plans on integrating aspects of the project’s results into a book currently underway on the archaeology of New Orleans (a book contract is currently under negotiation).

For general and student audiences, the website will likewise provide a portal for information and links. One planned aspect of the website is a public Wiki that allows visitors to add comments, queries and, especially, to post their memories and oral traditions that relate to the sites and their findings. As in 2008, a press release will be prepared toward the end of each excavation season summarizing the preliminary results and inviting members of the press and public to an open house at the dig site. A public lecture is already planned for early 2009 to summarize the results of the first season at St. Anthony’s Garden and it is planned that this be at minimum an annual event while the project is underway (in the future to be coordinated with Louisiana Archaeology Month in October). Finally, the Archdiocese is keen to develop a permanent exhibit of the artifacts based upon the excavations, most likely in the under-utilized museum space at the Ursuline Convent itself. Although the museum exhibition preparation and design is not included in this grant proposal, the Archdiocese has identified

other institutional partners who will assist in this endeavor and certainly the preparation, identification, and interpretation of the artifacts will provide the raw materials for the final exhibit.

Work plan

July 1 - December 31, 2009: Plan and execute second season of excavations at St. Anthony's Garden, complete flotation, initial artifact processing (washing, sorting, labeling). Personnel: Dawdy, Gray, Ramsey, Amaral, Edwards, Kautz.

January 1 - June 30, 2010: Complete artifact analysis and field report for St. Anthony's Garden. Faunal and macrobotanical analysis completed for St. Anthony's. First conference papers presented. Personnel: Dawdy, Gray, Ramsey, Amaral, Edwards, Kautz, Gremillion, Defrance.

July 1 - December 31, 2010: Research and planning for Ursuline Convent excavations. Historical research conducted for both sites. Archaeometric and residue analyses of St. Anthony's material initiated. Personnel: Dawdy, Clark, Gray, Ramsey, Amaral, Edwards, Kautz.

January 1 - June 30, 2011: Execute archaeological excavations at Ursuline Convent, complete flotation, initial artifact processing (washing, sorting, labeling); follow-up historical research in response to archaeological fieldwork. Archaeometry and residue analysis continues. Second set of conference papers presented. Personnel: Dawdy, Gray, Ramsey, Amaral, Edwards, Kautz.

July 1 - December 31, 2011: Complete artifact analysis and field report for Ursuline Convent. Faunal and macrobotanical analysis completed. Archaeometry, residue analysis, and phytolith analysis completed. Coordination and preparation of museum exhibit. Personnel: Dawdy, Gray, Ramsey, Amaral, Edwards, Kautz, Gremillion, Defrance, Mulholland.

January 1 - June 30, 2012: Final, interpretative report completed with historical context, results of advanced analyses (archaeometric, residue analysis, phytolith analysis) presented, a comparison of the sites, and a summary of significant findings provided. Journal articles submitted. Personnel: Dawdy, Gray, Ramsey, Kautz, Amaral, Edwards.