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Russell Kent Skowronek

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**A NEW EUROPE IN THE NEW WORLD:
HIERARCHY, CONTINUITY AND CHANGE IN THE
SPANISH SIXTEENTH-CENTURY COLONIZATION OF
HISPANIOLA AND FLORIDA**

By

Russell Kent Skowronek

A DISSERTATION

**Submitted to
Michigan State University
in partial fulfillment of the requirements
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Department of Anthropology

1989

ABSTRACT

A NEW EUROPE IN THE NEW WORLD:
HIERARCHY, CONTINUITY AND CHANGE IN THE
SPANISH SIXTEENTH-CENTURY COLONIZATION OF
HISPANIOLA AND FLORIDA

By

Russell K. Skowronek

From 1492 through the first eight decades of the sixteenth century, Spain explored, conquered and settled much of the New World. Two of the colonies that were founded during this period of expansion were Hispaniola and Spanish Florida. These two colonial areas, similar in environment, natural resources and aboriginal population, shared a generalized or standardized Iberian culture. In spite of these overt similarities, however, by 1580, Hispaniola and Spanish Florida had come to play different roles in the Spanish empire. This study explores how differing economic roles affected the nature and form of the colonization effort in Hispaniola and Spanish Florida. It is proposed that Spanish settlements in the New World were not invariably stamped out; instead they were shaped by a combination of internal colonial constraints and external systemic concerns which resulted in hierarchical, economic relations within and between colonies in the empire. Using archaeological data drawn from Old and New World sites and documentary records, this study examines the nature of that hierarchy, the processes of its creation, and its

manifestation in terms of settlement pattern and composition. The study find that although the colonies passed through similar diachronic stages of incorporation into the empire, differences in economic focus affected emigration, the colonist's ability to transform their cultural and natural environment (beyond the veneer of a generalized Iberian culture), and thus created a hierarchical relationship with the homeland.

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1989

For my family

ACKNOWLEDGMENTS

This thesis is the culmination of years of research and much hard work. It has benefitted from the careful and thought provoking comments of my committee, colleagues, friends and family. I would like to take this opportunity to thank many who helped make this possible.

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supportive words and generous kindness will never be forgotten and will be a goal to emulate.

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Last, but certainly most important is Peg Graham. Thank you for always being there and helping me. Without

you at my side this project would have been meaningless.

Now I look forward to crossing the next hill together.

The ideas and opinions presented in this dissertation
are the responsibility of the author.

RKS
East Lansing
November 1989

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CHAPTER 1

INTRODUCTION

Problem

From 1492 through the first eight decades of the sixteenth century, Spain explored, conquered and settled most of the New World (Figure 1). Two of the colonies that were founded during this eighty-year period of expansion were Hispaniola and Spanish Florida. These two colonial areas, similar in environment, natural resources and aboriginal population, shared a generalized or standardized Iberian culture (Foster 1960). These general cultural traits are a distillation of the colonists' range of Old World experiences through which they sought to create a social and material facsimile of their Iberian homeland -- a "Neo-Europe (Crosby 1986)."

In spite of these similarities, however, by 1580, Hispaniola and Spanish Florida had come to play radically different roles in the Spanish empire. This study seeks to explore how differing economic roles affected the nature and form of the colonization effort in Hispaniola and Spanish Florida by measuring differences rather than similarities. It is proposed that Spanish settlements in the New World

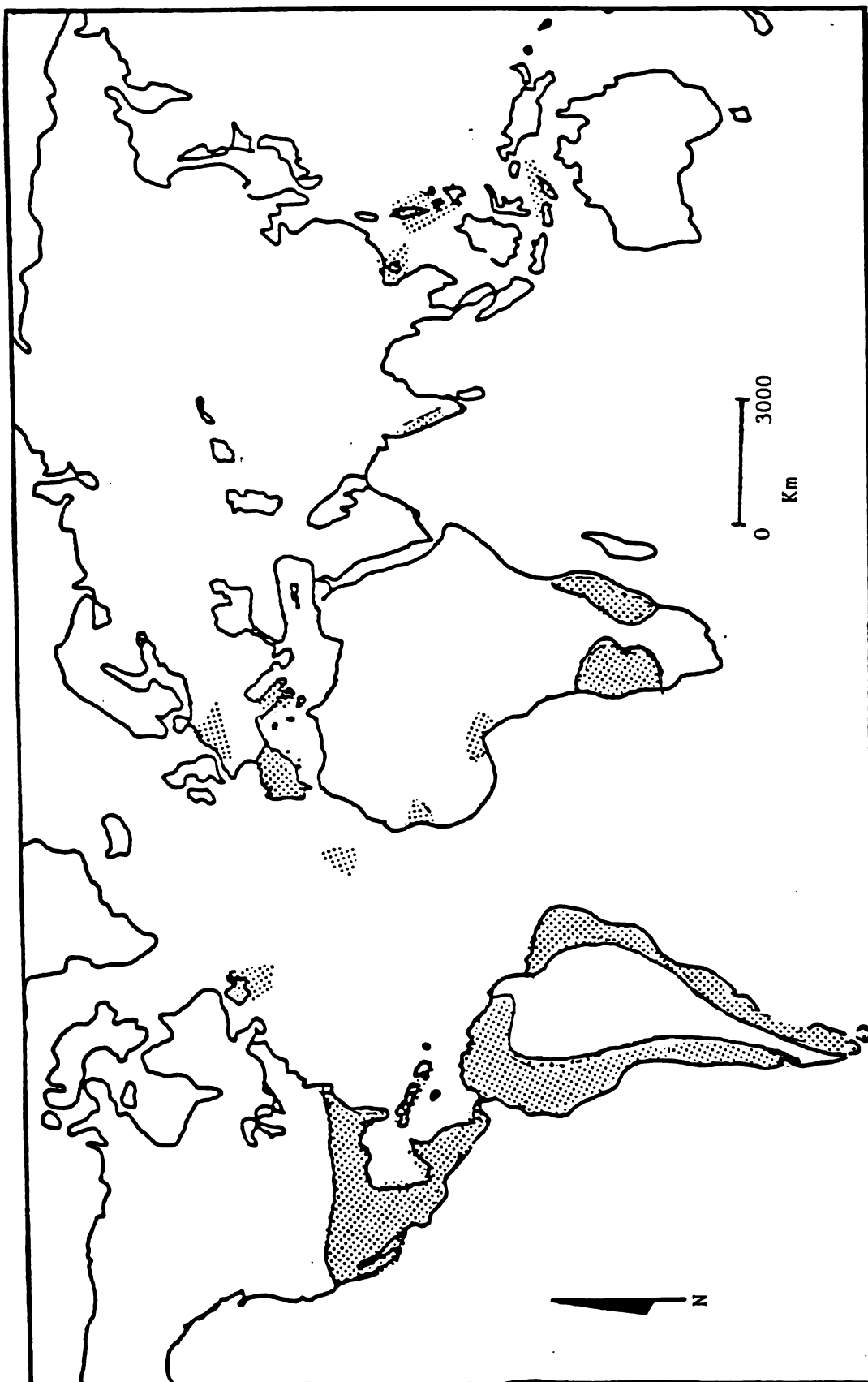


Figure 1. The Spanish Empire in 1580

were not identical across the empire; instead they were shaped by a combination of internal colonial constraints and external systemic concerns which resulted in a dynamic hierarchical economic relationship within and between colonies in the empire. This study examines the nature of that hierarchy, the processes of its creation, and its manifestation in terms of settlement pattern and composition. The study finds that although the colonies passed through similar diachronic stages of incorporation into the empire, differences in economic focus affected emigration, and the colonists' ability to transform their cultural and natural environment beyond a standardized veneer, and thus created a hierarchical relationship with the homeland.

Variables Influencing the Problem

The sixteenth century in Europe marked the beginning of the modern, European-centered, world economy. Based on the creation of a world-wide division of labor and the formation of bureaucratic state machineries in Europe, its focus was on the bulk movement of exotic commodities from peripheral production areas to the European core or motherland. In the sixteenth century, mercantilism colored the nascent world economic system in its demand to capture and monopolize these peripheral production areas for the aggrandizement and benefit of specific states (Wallerstein 1974:3-63; Wolf 1982:77-88). Colonies that supply commodities to the motherland or that protect these enterprises are termed

cosmopolitan because of the greater frequency of their outside commercial contact and their close political ties to the motherland (Steffen 1980:xii-xiv). These ties are close because their maintenance insures colonial produce will flow to and thus, be beneficial to the mother country alone.

Identifying the variables that influenced the cosmopolitan colonial settlement of Hispaniola and Spanish Florida requires an understanding not only of the natural and cultural histories of these areas but also of Spain. Spanish homeland adaptations to the Iberian environment, the ability to identify and exploit natural resources, and experiences with minorities in the Old World combine with larger systemic concerns to color the nature and form of New World colonization and settlement. Only by considering these aspects of Spanish culture against the larger milieu of the nascent European-centered world economy can Spanish New World experiences be evaluated.

Theoretical Orientation

The effect of the physical expansion of the European-centered world economy on Europe, its emigrants and the indigenous populations encountered outside of Western Europe have been the focus of anthropological, geographical, historical and sociological investigation for nearly a century (e.g., Lewis 1984; Steffen 1980; Turner 1893). Collectively known as Frontier Studies, this research initially focused exclusively on descriptions of European

adaptations to specific colonial situations (e.g., Bolton 1964; Leyburn 1935). More recently, Frontier Studies have attempted to be more explanatory and predictive in their treatment of European adaptations and aboriginal acculturation during the early modern era (e.g., Crosby 1986; Lewis 1984; Meinig 1986; Spicer 1962; Steffen 1980).

This study draws on many of the theoretical constructs that pertain to cosmopolitan frontier colonization. In this analysis of early modern colonial expansion, Steffen (1980: xiii-xix) related the extractive economic activities of ranching, mining and trading activities in North America to cosmopolitan colonization because they supplied desired commodities, such as hides, precious metals and furs, to the motherland. Lewis (1984:264-268) identified exploitative plantations, military frontiers and transportation frontiers to the North American experience. These activities are related in their direct and indirect functions of providing and protecting, at the lowest cost, desired products to the mercantile economy of the motherland.

In this study, these extractive (ranching, mining, trading, exploitative plantations) and protective (military and transportation) economic activities are also seen to characterize fifteenth- and sixteenth-century Spanish cosmopolitan colonization of the Americas. Henry Dobyns' (1980:9-20) work on the Spanish New World frontier recognized a variety of colonial settlement types which characterize these economic activities. These include multi-functional "colonial cities and mining-administrative

cities" and unifunctional "inns, charcoal making camps, ranches, presidios and encomiendas."

Understanding how and why these and other settlement types and economic activities vary within and between the colonial areas of Hispaniola and Florida is the subject of this study. To evaluate these differences and similarities requires evidence that is representative of the target study era. Archaeological and documentary information are appropriate to the examination of this problem. By using both these complementary and non-exclusive data sets a more accurate and unbiased view of the areas may be discerned. Because these cosmopolitan colonies were established for the economic benefit of Spain, there is documentary evidence about exported commodities, defense expenditures, and port activities that can suggest the amount of contact and value of a colonial area (Chaunu and Chaunu 1956; Hoffman 1980). The documentary material does, however, contain certain biases. The information it provides is, by and large, limited to the world of law, trade and commerce. Where it is concerned with the details of everyday life, that concern is generally limited to the lives of the elite.

Archaeological evidence counteracts this bias by equally considering the material remains of the entire population. Historical and Maritime archaeology are useful tools in this study because they consider equally the strengths and limitations of both material and documentary lines of evidence that relate to communication, subsistence, technology and exchange. By integrating these complementary

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lines of evidence much bias is removed from the evidence and a more accurate evaluation of the causes for differences in economic trajectory and settlement can be made (Muckelroy 1978:4-10).

What Follows

In the following seven chapters we explore how the differing economic roles affected the nature and form of the Spanish colonization effort in Hispaniola and Florida.

Chapter 2, "Approaches to the Past, Theoretical and Methodological Underpinnings," develops the eight propositions that are used to examine the thesis' problem. Here, the kinds of documentary and archaeological data used in the study are presented.

Next, Chapter 3, "The Old World Heritage: Old Spain in the 15th and 16th Centuries," examines Spanish culture and settlement on the Iberian peninsula. This information provides the baseline against which the observed New World phenomena are compared.

Chapters 4 and 5, "Hispaniola" and "Spanish Florida," examines the documentary record pertaining to the origin and development of the two colonies. In each colonial area, consideration is given to the environment and natural resources and, the nature and culture of the aboriginal inhabitants. The Spanish presence in both areas is chronicled from discovery through settlement.

Chapter 6, "Bridging the Gap: From the Documentary Ideal to the Material Reality," uses the information from

Chapters 3, 4, and 5 to examine the propositions presented in Chapter 2. Although, most of the propositions are explored through the documentary data, some of the propositions, require examination in the material record. For these propositions, hypotheses that are testable in the archaeological record are derived. The archaeological sites and artifacts used in this study are also discussed here.

In Chapter 7, "Extracting Meaning from Pattern: Comparing the Colonies," archaeologically-derived data is used to examine the propositions in both colonies' settlements and between the colonies and Spain.

Last, Chapter 8 " Summary and Conclusions," discusses the findings of the thesis and presents some ideas for future research.

Significance

The Columbian Quincentennial is less than three years away. Archaeological research on the nature of Spanish colonial settlement has thus far been limited to site specific studies and general histories with little consideration for the systemic implications of colonialism and subsequent economic trajectory and development. By comparing contemporary colonies within the same colonial system and controlling for the variables that influence economic focus, this study takes the first step toward a unifying predictive model for Spanish cosmopolitan colonization and its varied manifestations throughout the empire. Such a model goes beyond the general hype of the

Quincentennial by guiding future research on cultural process and change. But, to reach that plateau, we must understand the state of knowledge that affects our approaches to the problem.

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CHAPTER 2

APPROACHES TO THE PAST THEORETICAL & METHODOLOGICAL UNDERPINNINGS

Introduction

In 1960, George Foster coined the term "conquest culture" to apply to the shared cultural traits characteristic of those areas that had comprised the Spanish colonial empire in the New World. These shared traits, were in his view the "crystallization," distillation, or standardization of the colonists' range of Old World experiences (Deagan 1983:66-67; Foster 1960:233). Based on this view of modern Latin America, archaeologists developed and successfully tested the hypothesis that, from its beginning, the Spanish colonial experience throughout the New World was generally similar (Deagan 1983:221; Ewen 1987; McEwan 1988).

This study does not dispute the general trends recognized by these researchers but seeks to refine them. The thesis presented here recognizes that while Spanish settlements in the New World shared an overt generalized Iberian culture, their economic roles were quite different. These colonies were shaped by a variable combination of internal colonial constraints and external concerns, which

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resulted in a dynamic hierarchical relationship within and between colonies in the empire. This hierarchy reflects functional differences between settlements and the relationships between them as part of a larger system.

The goal of this study is to define the nature of that relationship and, ultimately, its limits by measuring the extent of these similarities within and between the distinct colonial areas of Hispaniola and Florida in the sixteenth-century Spanish empire. The differences that are revealed reflect the hierarchy of economic relationships within colonies and between colonies and the motherland.

Hierarchy and the World Economy

The complex societies of sixteenth-century Western Europe were set apart from their predecessors by their growing economic linkages beyond the political and cultural boundaries of the region. This nascent "European-centered world economy" was established first on the importation of luxury items and later on bulk produce (Wallerstein 1974:15-63). The basis of this "world economy" was the European "core" states' economic capture and/or political control of "peripheral" areas that produced these desired commodities. In this system, the inherently unequal economic relationships of producers and consumers that characterized these complex societies were forcefully extended, through colonialism and imperialism, to include a growing periphery of producers for the elite consumers of the core (Bartel 1980:15-19; Wallerstein 1974:67-129, 301-344; Wolf 1982:83-

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88,101-157). From the point of view of Europe, the colonies existed primarily to produce commodities for European consumers, to facilitate their transport, or to defend the sources of the commodities (Steffen 1980:xii-xviii).

This economy was inherently hierarchical, with elite consumers at one end, producers at the other and various sorts of middlemen between. Thus, it is hypothesized that not all colonies or colonial areas occupied the same level in the hierarchy; that is, although all colonies might be part of the "periphery," there was hierarchy within the periphery. Here, the colonial hierarchy is defined in terms of the value and amount of commodities exported from each colonial area. Thus, those areas that exported large volumes of valued commodities ranked highest in this hierarchy of the system's periphery. In the case of Spain's sixteenth-century colonial empire, this hierarchy should be discernible in comparisons between the colonies of Florida and Hispaniola because they played different economic roles in the system.

Cosmopolitan Frontiers and Neo-Europes

Settlements in colonial areas may be characterized by emphases on particular activities. Production activities such as ranching, lumbering, mining, plantations and fur trading (Hardesty 1985:213-214; Steffen 1980:xiii-xv), were the high-profile, lucrative aspects of the colonial enterprise. These settlements were protected and supported by the military, mission and transport activities (Lewis

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1984:264-268) that characterized various settlements. The unequal economic relationship that characterized the core societies were accentuated in their colonial extensions. The "peripheral" colonies that produced goods for the markets of "core" consumers or were central to transport enjoyed a higher frequency of commercial contact with the motherland than did those whose role was more "protective." Thus, because the nascent World economy was based on mercantilism, colonies that produced desired commodities for the motherland attracted a constant stream of merchant vessels. Colonies that produced no exportable goods did not attract merchants and, as such their outside contact was limited to infrequent sailings of supply ships.

A cosmopolitan colonial area's position in the economic hierarchy of a colonial system was, closely related to its function in the system. Here, this systemic function is defined in terms of the production of desired commodities. Thus, those colonies that produce a greater value of goods than was expended on defense, transportation and proselytizing was more valued by the motherland and enjoyed greater contact and colonization. Those colonies, on the other hand, whose returns failed to outweigh expenditures attracted fewer colonists and enjoyed less contact with the mother country. While the economic role of these colonies as "protective" complemented that of more "productive" areas, their value to the motherland and, thus, their position in the colonial hierarchy of the system, was low.

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This study examines the Spanish sixteenth-century colonies of Florida and Hispaniola to determine whether these colonies produced revenues or profits in excess of the costs of supporting their associated governmental, religious and military infra-structure. Colonies that do will be considered "productive" and, therefore, of greater value to the motherland.

Even with variable economic contact, the focus of both "productive" and "protective" colonies was on the motherland. This tethered the colonies closely to the political and social demands of the motherland and created what Steffen has called a "cosmopolitan frontier" (1980:xii-xiii). Thus, even in these physically remote, peripheral settings, the view of the inhabitants was "cosmopolitan" and focused outward on the "core" or mother country. A hallmark of this outward view was the creation of societal and ecological "Neo-Europes" (Crosby 1986:146-149). By importing animals, plants and material aspects of the Old World, the colonists attempted to transform or standardize their new environment into a facsimile of their cosmopolitan ideal (Crosby 1986:172; Hardesty 1985:214). While this transformation was most successful in temperate areas, which were climatically more similar to Europe, the transformation of the tropical environment was successful enough to attract permanent settlers (Crosby 1986:6,134,172-194). In Spanish America this transformation is apparent in Foster's (1960) concept of "Conquest Culture" in which he notes a regional

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homogeneity in settlement plan, architecture, foodways and other cultural traits.

In European cosmopolitan colonization, the economic position of any area plays an important role in the settlers' ability to alter the new setting into an acceptable replication of the motherland. This ability to create Neo-Europes can be accomplished by physically altering the environment of the area and/or by importing material goods in a finished form directly from the Old World. Thus, those areas that produce more desired goods for the core, enjoy greater contact with the motherland. They are able to attract a more demographically balanced European population and are thus able to better replicate "Europe" than are areas with less contact. Therefore, the ability of a cosmopolitan colonial area to superficially transform itself into a "Neo-Europe" can be seen as a reflection of the success of the colony in the commercial system of the founding state.

In Spanish Florida and Hispaniola the ability to create a "Neo-Europe" or "Neo-Spain" was related to the amount of commercial contact the colonies enjoyed with the mother country. Here, it was expected that the higher valued colony would be better able to replicate the Old World. Furthermore, given the focus of this study on the European experience, it should be possible to identify the Old World antecedents for these idealized "Neo-Europes."

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Factors Influencing Colonial Expansion

In the last two decades, studies of frontier expansion have striven to be more explanatory and predictive by exploring the processes involved in colonial formation (e.g., Hardesty 1985; Lewis 1984; Meinig 1986; Taaffe et al. 1963). A hallmark of these studies is the recognition of the European-centered world economy as the prime mover for colonization (Wallerstein 1974). Yet, as has already been proposed, the functions and hierarchical positions of colonies varied. The type of colony that developed and the colonial culture that evolved in these peripheral areas were the result of not only economic contact with the motherland (external systemic concerns) but also of internal colonial constraints which included the initial contact and subsequent European interactions with the environment and the aboriginal occupants of the area (e.g., Bilsky 1980; Meinig 1986:65-76; Taaffe et al. 1963:503-505).

Environment

The environment (including natural resources, climate and landforms) was important in determining the historic/economic development of colonial areas. It must be remembered that the reason for cosmopolitan colonization was the production of non-competitive commodities for the motherland and her segment of the European-centered world economy. Areas that bore proven sources of precious metals, had stands of exotic desired timber, were rich in fur-bearing wild animals, or possessed climates conducive to the

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plantation planting of desired exotic tropical plants, such as sugar cane, were powerful magnets for colonists (Gray 1976:124-133). Of course, the simple presence of some or all of these resources was not sufficient. We must also consider the technological capacity to exploit the resources economically (e.g. Bilsky 1980:3,12; Blakewell 1987; Cipolla 1976).

In this study, the environmental potential of Hispaniola and Spanish Florida is considered against the technological capacity to exploit these resources. These considerations and the Old World experiences of the colonists help account for differences in the economic roles of the colonial areas of Hispaniola and Spanish Florida and underscore Spain's ability to transform the new, and sometimes hostile, environment into a "standardized, Neo-Europe" (Crosby 1986; Hardesty 1985:214).

Aboriginal Population

Since the Roman empire, colonists have dealt with aboriginal populations in three main ways: eradication, assimilation, or exclusion (Augelli 1962; Bartel 1980:15-18; Bilsky 1980:3,12; Crosby 1972; Service 1955). This study rather than focusing on changes in aboriginal culture focuses on how the New World experience affected European culture. Although others (e.g., Deagan 1983) have discussed the creation of mestizo communities, the concern here is on what situations led to change and adaptation in European culture and how these acculturative processes varied across

the economic hierarchy of empire. In the case of Spanish Florida and Hispaniola, the degree of change wrought by the local indigenous population will be related to the colony's position in the colonial hierarchy.

Larger Systemic Concerns

In studying the growth of a system of overseas colonies, many researchers consider either only a specific colony (e.g., Deagan 1983) or the colonial experience in general (e.g., Lang 1975; McAlister 1984). If, however, cosmopolitan colonization is considered as an economic and political extension of a state-level society, it is necessary to understand the motherland and her colonies as a whole, including European rivalries and cultural norms. The case of Britain's colony of 1587 on North Carolina's Outer Banks illustrates the importance of understanding the relationship between a mother country and her periphery. The Outer Banks colony was "lost" when the arrival of the Great Armada of 1588 off the coast of England broke "cosmopolitan" commercial contact with the colony (Foss 1974). Thus, what the mother country needed and what happened at home or in "more" valued (i.e., productive) colonies often dictated the fate of a colonial area. With this issue in mind, a review of the cultural and economic conditions that characterized fifteenth and sixteenth-century Spain is as necessary to the understanding of colonial Hispaniola and Florida as a detailed account of the colonies themselves.

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Configurations of Cosmopolitan Colonization

During the past twenty years, researchers have studied the physical development stages of modern European colonization of the Americas and Africa and proposed models that are useful for comparisons. This study uses the work of Meinig (1986) and Taaffe et al. (1963). Meinig's (1986) model for the colonization of North America refers to a presettlement or "Prelude" phase and a settlement or "Fixation" phase (65-76). The Prelude phase (Figure 2) is characterized by exploration, gathering, bartering and plundering while the Fixation phase (Figure 3) involves the establishment of permanent political and commercial enclaves and the subsequent settlement of the colony's hinterlands for the purpose of producing non-competitive goods for the motherland. This study uses Meinig's model to examine the historical characteristics of the incorporation of Hispaniola and Florida as part of Spain's colonial periphery and to outline the similarities and differences between the two colonies from their discovery through the sixteenth century. How were the development phases affected by the aboriginal, environmental and systemic factors discussed above?

The work of Taaffe et al. (1963) derives from research on the nineteenth-century cosmopolitan colonies of Ghana and Nigeria and is concerned with the geographical configuration of settlement within a cosmopolitan colony.

This model (Figure 4) begins during Meinig's (1986) "Fixation" phase of the "Commercial Outpost." In stage "A"



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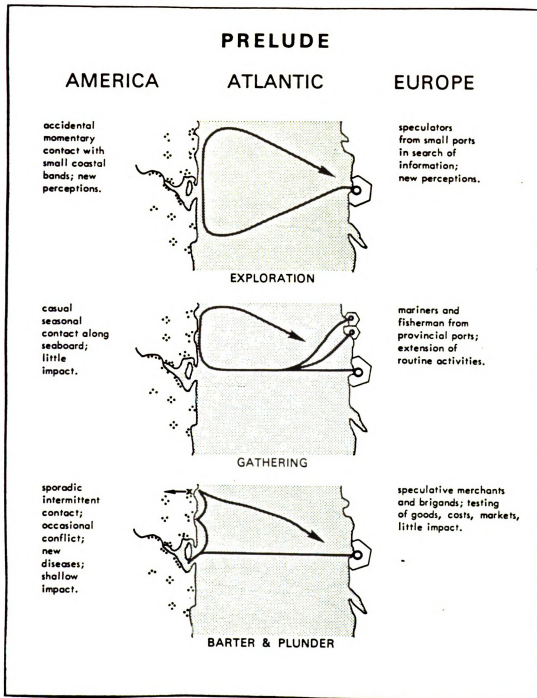


Figure 2.

Stages in Settlement Pattern -- "Prelude" (Meinig 1986:67)

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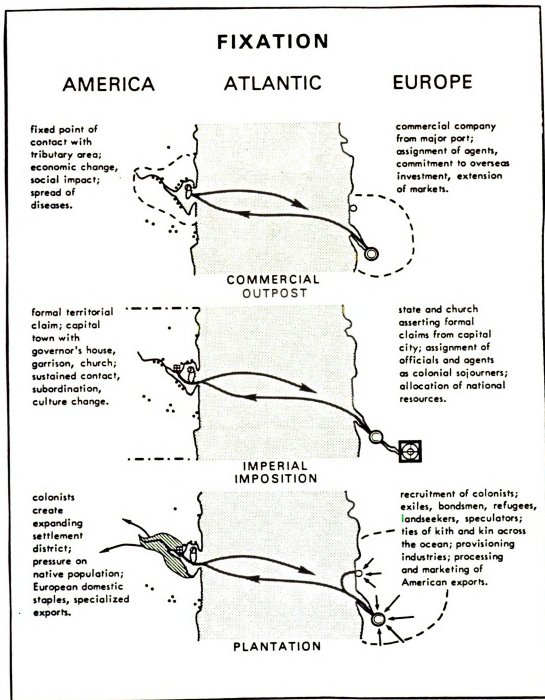


Figure 3.

Stages in Settlement Pattern -- "Fixation" (Meinig 1986:68)

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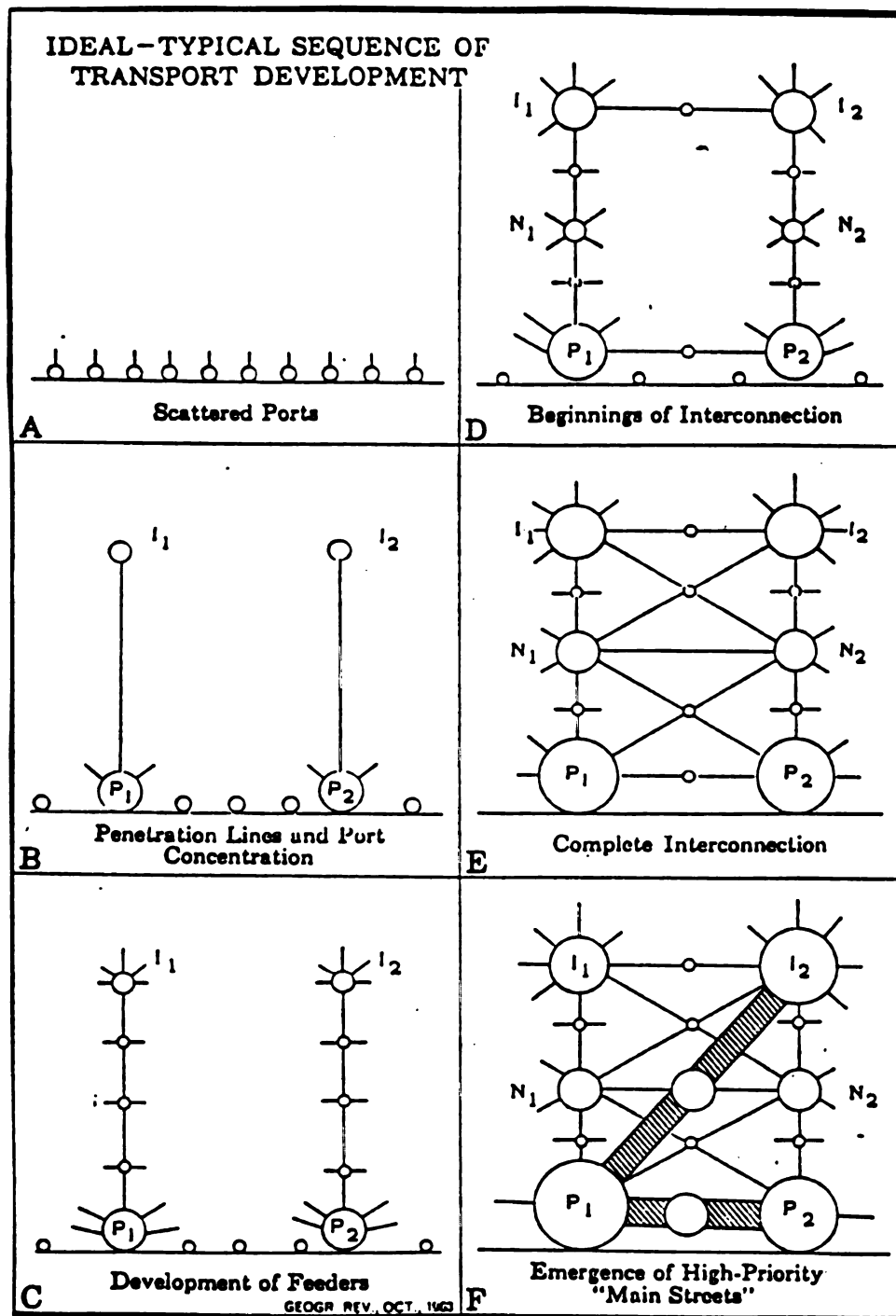


Figure 4.

Idealized Sequence of Transport Development

(Taaffe et al. 1963:504) (Reproduced by permission of
The American Geographical Society)

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of Taaffe et al.'s model there are many ports competing for the wealth of the interior. Those ports that enjoy easy access to interior resources established lines of communication around hostile environments (B). Along these lines, new settlements are founded that can more efficiently exploit the wealth of the hinterlands (C). Through time (D-E) communication lines connect and new settlements are founded. Certain interior settlements take on new functions and relations with the other settlements of the hinterland. These local service centers receive and distribute goods, information, and innovation from the main port or entrepot to other, less activity diverse settlements. Finally, (F) the most efficient line of communication gains ascendancy as the high priority main street, corridor, or trunk line over which the bulk of the most valuable exports flow (Whebell 1969:3). The entrepot, or break-in-bulk point, associated with these preeminent lines becomes the leading settlement of the colony by supplying European innovations and goods to the hinterlands and receiving the interior's produce for the motherland.

Taaffe et al.'s model is used here to compare Hispaniola and Florida because it considers the influence of geographical and systemic factors on transport and communication and how that ultimately affected the development sequence associated with settlement. In this study the Spanish colonies of Hispaniola and Florida are thought to exhibit a similar sequence of inland transport and settlement development. The degree of this development

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will be related to the colony's position in the hierarchy of empire and to the colony's economic role as "productive" or "protective." Settlement pattern is dictated by access to an economical means of communication and transportation to the motherland. Thus, coastal settlements or entrepôts require safe harbors and proximity to sea lanes while interior settlements stand near exploitable exotica on convenient trails or navigable rivers. If settlement pattern in cosmopolitan colonies was dictated by access to an economical means of communication with the motherland, it would be reasonable to expect that the "main street, corridor" or "trunkline" would develop from the entrepôt into the hinterlands.

Just as the settlement pattern of a colony was dictated by an economical means of internal transportation, so too was communication within the larger colonial system. No colony stood alone; each was linked by a combination of terrestrial and waterborne lines of trade and communication into a larger system (Muckelroy 1978:4-10). Water routes are particularly important in evaluating the development of any sixteenth-century colonial area. In the sixteenth century, roads were at best abysmal affairs, constructed and traveled with great difficulty around such hostile environments as mountains, deserts, and swamps. Even in the European core countries, the majority of commerce moved by water whenever possible (Braudel 1972:103, 282-283).

In the development of the larger colonial system, sea lanes developed like roads given the available technology.

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They avoided hostile environments, such as reefs and shoals, and followed the prevailing winds and currents, the routes of least resistance, to safe deep-water harbors or colonial entrepots at the heads of interior lines of communication (Taaffe et al. 1963:519-520). These sea lanes became de facto "main streets" of communication that afforded a safe and economically viable means of transportation and helped dictate which lands bordering these lanes would be exploited.

Given that cosmopolitan colonies were established to provide the motherland with goods and services, it is reasonable to expect that "main streets" of communication would develop that linked the colonies to the motherland. If the settlement pattern associated with cosmopolitan colonies is dictated by an economical means of transportation with the motherland, it would be reasonable to expect that the colony's entrepot that would be nearest the "main street" of communication with the motherland, would be the busiest port and, therefore, would have the most contact with the core.

Since communication within the colonial system and, ultimately, with the European core was crucial to the existence of peripheral colonies, the Spanish colonies of Hispaniola and Florida are expected to exhibit a similar settlement pattern that is focused on a main entrepot or port. This settlement will be sited to facilitate communication with both the interior and the external "main street." Other secondary settlements will be sited near

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desired commodities and be linked to the entrepot by a convenient line of communication.

A Hierarchy of Function

Cosmopolitan colonization is seen in this study as the economic and political incorporation of a peripheral area into the hierarchy of a state-level society. Taaffe et al.'s (1963) model for the cosmopolitan colonization of West Africa outlines a sequence for the development of a settlement hierarchy based on settlement function and access to the motherland. Here settlement function is defined in terms of economic, political and religious activities performed therein. In this model, the more remote a settlement, the fewer associated functions and the fewer physical trappings of the core colonizer are present. The entrepot is home to a wide variety of activities and enjoys greater contact with the motherland. Intermediate settlements, in turn, perform fewer activities and have fewer physical reminders of outside contact.

Regularities characterizing the decline in associated function and availability of imports to colonial settlements from the entrepot to the furthest hinterland settlement have been observed in the modern settlement of Ecuador (Casagrande et al. 1964). Settlement there was based not on subsistence farming but on the production of plantation crops such as sugar cane and the harvesting of timber for the market economy (Casagrande et al. 1964:291,299). Although much of the produce was being locally consumed, the

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ultimate goal of this colonization effort was to meet the demands of the market. In the Ecuadorian case, Casagrande et al. (1964:311-316) recognized a continuum, based on settlement function, that extended from the entrepot for the region to secondary "frontier towns," less complex nucleated and semi-nucleated villages, and ultimately, to single-activity, dispersed settlements. At this furthest end of the continuum, female colonists were extremely rare and the local Indian population became tenuously linked to the market economy (*ibid.*:299-300). Coincidental with this decrease in functional variety associated with the hinterlands of the colony, they note that

As one moves away from the metropolitan area and toward the frontier, and as the links with national institutions become more tenuous, fluidity increases and social and cultural attrition is more evident. This phenomenon we call the colonization gradient (*ibid.*:311).

These views of social and cultural attrition based on distance from the entrepot and the motherland are somewhat at odds with Foster's concept of shared general norms throughout Latin America (1960) and with Crosby's (1986) ideas about the creation of standardized "Neo-Europes." In this study, the differences between settlements that are in different colonial areas but occupy similar positions on their respective colonies "gradients" will be useful in determining each colony's position in the larger hierarchy of the colonial system. Given the presence of this hierarchy, it would be reasonable to expect that the ability to create a "Neo-Europe" would be dictated by a settlement's

position in the colony's "gradient" and in the system's economic hierarchy. The existence of the "colonization gradient" hierarchy intra-colonially and on a larger systemic scale (i.e., between productive and protective colonies) would lead us to expect that some of the less visible aspects of Old World material culture would be lost in settlements that were more economically distant from the motherland. In addition, the "colonization gradient" would lead us to expect that the European population should be increasingly skewed toward males as economic distance increases from the motherland and entrepot. In areas with a resident aboriginal population linked to the intrusive economy, we would expect to see greater evidence for this connection at the furthest reaches of the continuum.

In this study of Spanish sixteenth-century Hispaniola and Florida a "colonization gradient" is expected in both colonies, regardless of their economic development. The economic focus will, however, reflect the position of the colony in the larger colonial hierarchy in the ability of each settlement in the "gradient" to produce its own version of a "Neo-Europe."

Methodology

Introduction

To define and describe the characteristics associated with the creation of the Spanish sixteenth-century cosmopolitan colonial empire requires a methodological approach that can explore and explain the processes involved

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in the export and adaptation of Spanish culture to the New World environment. Anthropology provides the holistic and comparative framework for this project. It draws on and can evaluate diachronically and synchronically a wide range of available sources including the endeavors of historians, ethnologists, ethnohistorians, archaeologists and historical geographers.

The holistic approach that characterizes anthropology provides not only the realities of the colonial world through an examination of direct and indirect observations of human behavior (e.g., archaeological and documentary evidence) but also provides the framework for exploring the idealized goals, views, and beliefs that the colonists held about their own behavior in the colonial setting (e.g., contemporary accounts). It is this conjunction that allows a balanced view of these processes to be delimited (Schuyler 1977).

To explore the processes associated with the Spanish colonization of Hispaniola and Florida requires an examination of the options presented by the New World as well as the choices made. Where general history recounts the choices made, anthropology can, through many lines of evidence, reveal what options existed and explain why one was chosen over another.

In this study, the Old World Spanish experience is examined to provide a general cultural template or background for colonization (Chapter 3). This review of the cultural and physical environment of Iberia defines the

range of ideals subsumed in the creation of a "Neo-Europe."

The ideal aspects of house type, town plan and siting, communication, and economic focuses and the views of what constituted a Spaniard acted in concert and had to be translated to the New World environment. To understand what is changed we must understand what is lost.

The creation of cosmopolitan colonies in the New World involved an extension and adaptation of Spanish culture. To understand the choices made by the colonists in Hispaniola and Florida necessitates an examination of the options presented by the environment and the indigenous populations in these areas. The development of these colonies reflects not a simple cultural reaction to environmental factors alone but also the influence of larger systemic economic and political concerns. Presenting the sixteenth-century growth of settlement, communication, and economic focus in these areas in light of these options or influencing factors, will more fully explain the choices the colonists made and reveal how it affected the replication of Spanish culture through economic focus.

The Data

Documentary

This developmental view of the colonies and their place in the economic hierarchy of Spain is revealed through contemporary maps, ethnohistorical accounts, and quantifiable documentary evidence (e.g., Deagan 1985a; Sauer 1966). Documentary evidence relating to the value of

exports, port activity, and expenditures for defense is especially useful for determining the position of a settlement in the colonization gradient of a colony and the position of a colony in the economic hierarchy of empire. Spanish sixteenth-century bureaucracy preserved evidence of the value of exported produce and the amounts spent on defense and collected as taxes as well as port reports and customs data. Documents of this kind associated with Spanish Hispaniola and Florida have been translated and published (e.g., Chaunu and Chaunu 1956; Hamilton 1934; Hoffman 1980). They are useful in determining whether a colony is "productive" or "protective" and which settlement in a colony acts as the "primate city" or entrepot for a colony (Dobyns 1980).

Other forms of useful documentary evidence include contemporary letters and bureaucratic reports. Although such evidence is biased toward elite views of a settlement or colony, it has enormous descriptive value for its picture of the community and the concerns of the populace. Translations of reports and letters (e.g., Boxer 1975; Conner 1925; 1930; Lyon 1976; 1984; Ross 1925; Sauer 1966) provide information on the demographic composition of the colonies and the role of women. Additionally, these reports and letters contain data on the construction and condition of buildings and on diet including information on plant and animal husbandry.

While documentary evidence can provide a revealing look at New World options and colonial choices, it has several

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deficiencies: 1) there can be incomplete preservation; 2) a bias toward the world of commerce and law; and 3) and elite views of colonial life. To explore how the economic realities that characterized these colonies affected the creation of "Neo-Europes" and, thus, the daily lives of the colonists requires an examination of more direct evidence of human behavior-- archaeological data.

Archaeological

Archaeologically derived information provides measurable units of comparison that are useful in determining the colonization gradient and the economic hierarchy of the empire. Every archaeological site contains numerous classes and functional groups of artifacts that can be categorized for pattern recognition within and between communities (e.g., South 1977:95-96).

Archaeological research in the target areas of Hispaniola, at the colonial settlements of Santo Domingo and Puerto Real (Council 1975; Ewen 1987; Goggin 1968; McEwan 1983; Willis 1984), and in Spanish Florida, at Santa Elena and St. Augustine (Deagan 1985b; South 1979, 1980, 1982, 1983, 1984, 1985), has shown these areas to be very rich in artifacts. In addition, there is a rich body of documentary data from both areas. For these reasons these sites form the colonial data base for this study.

Validation of this New World comparison requires a non-colonial Old World control situation. In this study, the Baños de la Reina Mora site in Seville has been used for the

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Old World baseline. Because it is the only Spanish sixteenth-century site to have received any archaeological attention (McEwan 1988), this information will be supplemented with data from the 1554 flota (Arnold and Weddle 1978; Skowronek 1987). Shipwreck-derived data has been shown to be useful as floating extensions of Old World commerce and society in comparative studies of this kind (Muckelroy 1978; Skowronek 1984). This information, added to that from Seville, forms the baseline from which we can discern the hierarchical economic continuum and colonization gradient from core to periphery as reflected in the ability of the settlements and colonies to create a "Neo-Europe."

Propositions and Data

The eight propositions examined in this study ultimately reflect on its central thesis, namely, that the Spanish New World colonies were part of an hierarchical system that was the Spanish sixteenth century empire and that the creation, development, and perpetuation of this hierarchy can be discovered through historical archaeology.

(1) The first proposition is that, if an economic colonial hierarchy exists, then each colony will occupy a different level in that hierarchy. A colony's position will be reflected in the amount of contact it enjoys with the mother country. Documentary evidence on port activity in the

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colonial areas of Hispaniola and Florida will show which colony had the most external contact.

(2) Next consideration is given to the economic position of each colonial area as "productive" or "protective." If a colony's position in the economic hierarchy of the system is based on its economic focus then these differences should be discernible between every colony in the system. This proposition suggests that a continuum of value exists between colonies based on the monetary value of colonial export commodities divided by expenditure for defense of the colony by the motherland. Documentary evidence on defense expenditures and export values will be delineated to determine each colony's value on this continuum and its status as "productive" or "protective."

(3) Third, if a colony's ability to create a Neo-Europe is based on its position in the economic hierarchy of the system then those with a greater value will be more successful in this endeavor. A "perfect" Neo-Europe would include the primary visible aspects of conquest culture, as epitomized by town plan and building styles, in addition to the presence of a demographically balanced Spanish population. This population would attempt to create a Neo-Europe by importing Spanish goods or by altering the environment with Old World domesticated plants and animals. Any compromises from this ideal reflect the colonial area's access to these material markers of Old Spain. In this study, documentary evidence relating to the demographic composition and town plan of each settlement is examined.

(4) To examine the influence of the environmental potential of each colonial area on the economic development requires a knowledge of the presence or absence of desired resources relative to the technological capacity to exploit those resources. Here the resources of Hispaniola and Florida are examined and the Spanish ability to utilize them is reviewed to determine the similarities and differences between the colonial areas.

(5) The influence of the aboriginal population on the lifeways of European colonists was related to the position of the colony in the hierarchy of the Spanish empire. In this study, it is expected that, in the less valued colonies, the ability to replicate an ideal "Neo-Europe" was lessened. To make up this shortfall the Spanish settlers turned to the aboriginal populace for their succor in affairs of the heart and belly. In these areas, the demographic inequality between Iberian males and females was balanced with aboriginal women (Deagan 1980:28). This difference will be reflected in the greater presence of aboriginally-produced female associated artifacts (Deetz 1978:180). Furthermore, the lack of Iberian women meant that there was a shortfall in the requisite culinary skills to create culturally acceptable dishes from local food resources. This shortfall will be reflected in greater amounts of imported familiar foodstuffs in the hinterlands.

(6) Our sixth concern is the diachronic incorporation of a colonial area into the colonial system. If the incorporation of these areas can be classified into

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"Prelude" and "Fixation" stages, then these phases should be discernible in both Hispaniola and Florida. In the documentary record, we would then expect to find evidence of the stages of exploration, plunder, and a period of rapid imperial expansion followed by contraction and stabilization.

(7) Equally important is the geographical placement of settlement in the colonial area. If settlement is dictated by ease of communication from the hinterlands of a colonial area to the mainstreet of communication and to the motherland, then the primary entrepot is expected to be located adjacent to the mainstreet, and the siting of the rest of the settlements should focus on easy access to this port. The documentary record provides information on the location of settlements, roads, and the main routes of communication. Data on port activity reveals the primary entrepot of the colonial area.

(8) The final proposition we seek to elucidate regards internal colonial hierarchy. If there is a hierarchy of function in the settlements of each colonial area, then this hierarchy should be reflected as a colonization gradient that runs from single activity hinterland settlements to multi-activity entrepots. Many kinds of evidence are useful to examine this issue. Census reports should reveal a decline in the proportion of Iberian females at settlements located further out on the gradient. Archaeologically we expect to see fewer European materials at the far end of the gradient relative to the entrepot.

What Follows

To address this study's central issue on the formation and characteristics of the sixteenth-century Spanish New World colonial hierarchy requires some knowledge of the colonists' Iberian homeland from which their success at creating a "Neo-Europe" can be measured. Chapter 3, "Old Spain in the 15th and 16th Centuries", examines the colonists' Iberian experience culturally, environmentally and technologically. The nature of Spanish society, communication and settlement that emerges creates a baseline for later comparison to the New World colonies.

Chapter 4, "Hispaniola", describes the island's environment and aboriginal population at the time of contact. The Spanish conquest, settlement and incorporation of the area into the empire is considered in light of the economic opportunities presented by the natural resources and location to the main street of communication to the motherland.

Chapter 5 examines the environment, aboriginal population and Spanish settlement of Spanish Florida. Sighted less than a decade after Hispaniola and endowed with a similar environment and socially-organized aboriginal population to the earlier colony Spanish Florida played a radically different role in the Spanish empire. Why it differed and how this difference affected their ability to create "Neo-Europes" is considered here.

Chapter 6, "Bridging the Gap: From the Documentary Ideal to the Material Reality" uses the documentary evidence

presented in Chapters three, four and five to address the thesis' propositions. Where the documentary evidence is insufficient or imprecise to answer these propositions archaeologically testable hypotheses are presented. The latter part of the chapter discusses in greater detail the nature of the archaeological research conducted at each of the considered sites and the material evidence available for study.

Chapter 7, "Extracting Meaning from Pattern: Comparing the Colonies", brings the archaeological and documentary data together to specifically address three of the propositions (3, 5, 8) presented in this chapter. For the first time Spanish Old World and New World archaeological evidence is specifically compared to define the dynamic hierarchical relationship that connected these distinct areas of the empire.

In the final chapter, "Summary, Conclusions and Implications", the findings of the study are reviewed and questions for future research are posed.

CHAPTER 3

THE OLD WORLD HERITAGE: OLD SPAIN IN THE 15th AND 16th CENTURIES

Introduction

To understand the Spanish creation of New World "Neo-Europes" and the formation of a colonial settlement hierarchy requires an examination of the colonists' cultural roots in Old Spain. The experiences and ideas about the physical, social and cultural world that the Spanish colonists brought with them were then shaped and modified by the New World environment and its aboriginal population to produce the colonial system. This larger system, of course, included the motherland in addition to the colonies. The cultural heritage borne by all the first generation colonial founders was most profoundly influenced by their Old World experiences. Although their lives and those of later immigrant peninsulares were modified by their New World activities, later creole (criollo), mestizo, zambo ([sic] a mixture of black and native American), black and europeanized aboriginal populations of the colonies would continue to be influenced by the motherland via the world economy. Thus, the creation of Neo-Europes were guided both

by Spain's economic, religious and political control and by the legacy of these founding colonists (Foster 1960).

Environment

Spain occupies five-sixths of the 600,000 square kilometers of the Iberian peninsula. Its northern coast (44 N) is at the same parallel of latitude as central Michigan while the Straits of Gibraltar on its southern extreme (36 N) is on line with central North Carolina (Foster 1960:21-23).

The lands that comprise both modern Spain and historic Spain of 1492 are divisible into three main zones: mountains; high plateaus called "mesetas"; and coastal plains (Figure 5). The areas of low lying coastal plains and associated river basin depressions are relatively small, yet their fertility makes them important, high population density centers for agriculture (Foster 1960:21; Way 1962:19). Rivers tend to be short, straight and shallow and, as such, not commonly used for transportation. The northeastern and northwestern coasts of Spain are heavily dissected landscapes with many good ports. On the south and east coasts are a mixture of low sand and marsh areas intermixed with rocky and indented shores near coastal highlands. Most ports in these areas (e.g., Seville/Cadiz on the Guadalquivir) are associated with developed rivers or good terrestrial means of access to the interior.

The mountain regions are noteworthy for their irregularly folded, rugged structure. In the north, the

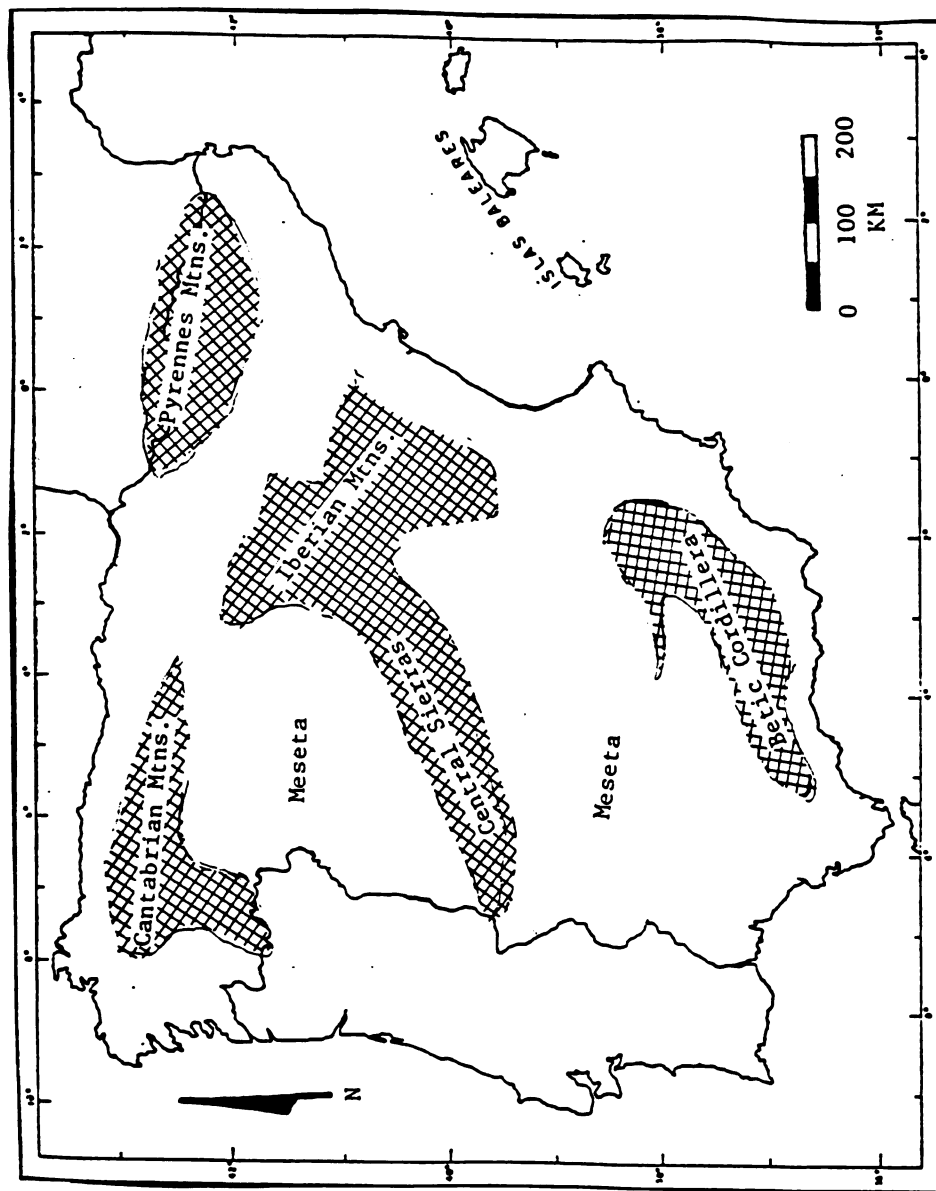


Figure 5. Physical Geography of Iberia (after Fisher and Bowen-Jones 1958:17)

glacier-covered 3,000+ meter Pyrennes and Cantabrian ranges are comparable to the Alps (Fisher and Bowen-Jones 1958:19). The Central Sierras and Iberian Mountains show less relief (1,000-2,000 meters) but nonetheless form important internal barriers within the peninsula (Way 1962:13). Lying in the southeastern reaches of Spain are the Iberian Peninsula's highest peaks (3,500 meters), the Betic Cordillera (Fisher and Bowen-Jones 1958:27; Way 1962:9). All of Spain's mountain regions are well endowed with both iron ore and coal (Way 1962:156-159), but it is the Betic Cordillera in Andalusia that bears deposits of gold, silver, lead, tin, copper and mercury (Fisher and Bowen-Jones 1958:24,61).

The Meseta, comprised of two enormous tablelands or upland basins separated by the 2700 meter crest of the Central Sierra, includes approximately half of the country (Way 1962:12). These plateaus slope from 830 meters in the east to 660 meters in the west (Fisher and Bowen-Jones 1958:22-23). The fertile flatlands and softly rolling hills that comprise the Meseta are the basis for the modern popular conceptions of the Spanish landscape found in Hollywood films such as "El Cid" and "Man of La Mancha," noted above (Way 1962:11-12).

Spain's climate, like her land forms, is marked by diversity. These differences divide the country into a wet north and west, with as much as 100-175 cm. of rain annually and a more arid zone to the east and south, with as little as 13 cm. of annual rainfall (Fisher and Bowen-Jones 1958:34). Despite the surrounding warm seas, the Iberian

peninsula has remarkably cold winters for its latitude. Temperature variations are such that snow is a common feature throughout the country. Madrid, positioned in the Meseta, has had snowfalls as late as June and averages more snowfall than England in any given year! A local saying characterizes the climate of the central Meseta as "winter for nine months, and hell for three" (Fisher and Bowen-Jones 1958:34). These climatic conditions are largely the result of Spain's greatly variable topography combined with the prevailing westerly wind currents blowing off the warm, moist Atlantic (Crosby 1986:110; Foster 1960:23; Way 1962:44). The conditions are reversed in the southern and eastern reaches of the peninsula. Influenced by proximity to the hot, dry sirocco winds of the Sahara, there is Mediterranean Spain, home to the Costa del Sol (Fisher and Bowen-Jones 1958:40-41; Way 1962:44,262).

Geographical and climatic diversity combine to produce a rich natural vegetation cover in Spain. Here we must distinguish, of course, between modern conditions and those that prevailed in the sixteenth century. Today less than 10% of Spain is forested and this is largely limited to the highland areas (Fisher and Bowen-Jones 1958:48). In the sixteenth century, the majority of Spain was wooded (Way 1962:75,78). In the southern part of the Iberian Peninsula were thick forests. These stands were so heavy that they were exploited for a millennium and a half by Romans, Moors and Spaniards. The timber was cut for export and for the construction of ships (Lewis 1980:79,80; Way 1962:78).

Likewise, the now barren Meseta was described as a wooded and forested region into the fifteenth century (Way 1962:12). The disappearance of woodland cover was the result of human activities, including uncontrolled cutting, burning for pasturage, and over-grazing by sheep and goats. This change, it is important to note, was underway in the sixteenth century when forest products and woolens were at a premium in the markets of Europe (Fernandez 1972a:68; Fernandez 1972b:84; Fisher and Bowen-Jones 1958:48; Vives 1972a:38,43; Vives 1972b:262).

Spain's varied climate and rainfall has been conducive to the cultivation of a wide variety of flora common to both temperate and sub-tropical regions. Along the warm, well-watered, fertile margins of the Mediterranean Sea and Straits of Gibraltar flourished such exotica as oranges, lemons, pomegranates, bananas, figs, rice, date palms and sugar cane (Fisher and Bowen-Jones 1958:50-51; Foster 1960:24). The dry, thin, well-drained soils that characterize the Meseta and upland margins were especially well suited to viticulture and olive production (Fisher and Bowen-Jones 1958:51-52 ; Ways 1962:124,127). This same area, also produced cereal crops such as wheat, oats, and barley. Rye was the common grain grown in the cooler, wetter northwest corner of the country. In the sixteenth century, a New World grain-- corn-- was successfully introduced in the surrounding coastal strip (Way 1962:120-123). Vegetable crops, including chick-peas, alfalfa, clover, vetch, lupin, lentils, beans, peas, onions,

asparagus, carrots, spinach and artichokes were grown throughout the peninsula (Fisher and Bowen-Jones 1958:51-53).

This examination of the Iberian Peninsula's topography, climate, mineral and floral resources and potential for domesticated crop production in the sixteenth century is important for evaluating its emigrants' reactions to the New World environment. These reactions were affected by Old World expectations. The Old World environmental experience represents one part of the Spanish cultural template, an idealized expression of which was reflected in the "Neo-Europes" of America.

Population, Communication and Settlement

In the last quarter of the fifteenth century there were over seven million people on the Iberian peninsula in the Kingdoms of Portugal, Castile, Aragon, Navarre and Granada (Figure 6 -- Lynch 1984:3; Vives 1972a:249). It is estimated that, by the end of the sixteenth century, these numbers increased to nearly nine million under the single crown of Imperial Spain (Braudel 1972:402-408; Braudel 1973:1-65; Lynch 1984:109-110).

The fifteenth and sixteenth century inhabitants of the five kingdoms that would become Imperial Spain were more similar than dissimilar (Gerhard 1981:56). They were all part of a hierarchy conscious, stratified society. This social stratification was exhibited in ostentatious elite

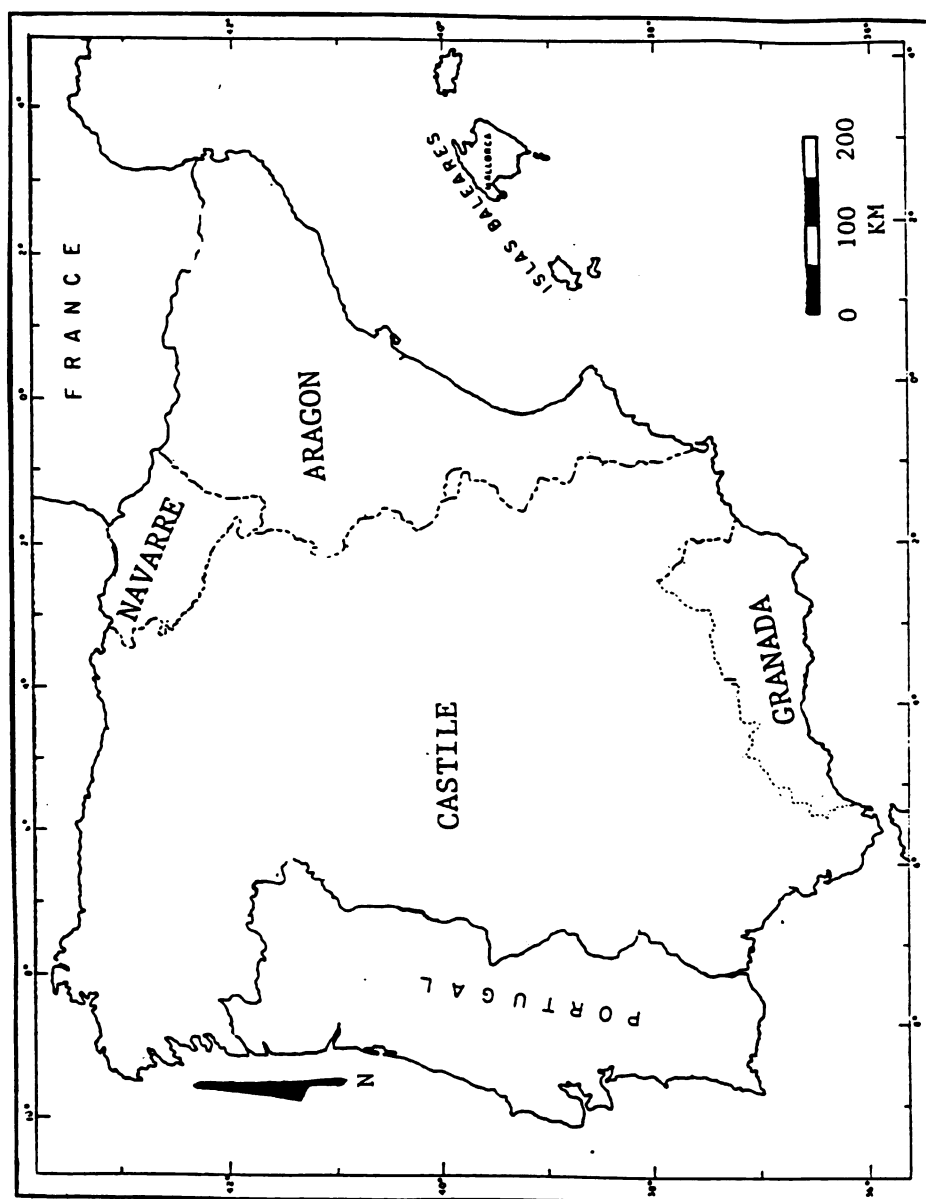


Figure 6. Iberian Kingdoms in the Fifteenth Century

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housing and sartorial luxury and was codified in the sumptuary rules of the era (Braudel 1972:709-718; Defourneaux 1966:85; Gerhard 1981:48). Those individuals with ascribed status were increasingly joined by those who achieved it in the marketplace, A sixteenth-century observer reported that half the people called themselves by the honorific title of nobleman (hidalgo) and "anyone who could afford the price could dress and live like a noble lady or gentleman (Tannenbaum 1965:129)."

This comment was, of course, an exaggeration for effect, in fact ninety-five percent of the sixteenth-century population owned less than five per cent of the land. The majority of the property (95-97%) was held by the elites one per-cent of the population with the remainder held by the expanding middle class (Lynch 1984:12-13; Vives 1972a:250-253). Understanding this inequity in distribution requires knowledge of how the Spaniards arranged themselves in and made a living from their environment.

Settlement Pattern and Function

The unions of the lands of the Iberian Peninsula in 1492, under the crowns of Aragon and Castile, were the product of centuries of conquest and intermarriage.

From the beginning of the eighth century to the end of the fifteenth century all or part of the Iberian peninsula was under the control of the Moors. Over nearly eight hundred years a slow crusade, known locally as the Reconquista, was undertaken to drive these followers of

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Islam from the peninsula. The culmination of the Reconquista came only in 1492 when Isabella of Aragon and her spouse Ferdinand of Castile (known as Los Reyes Catolicos- the Catholic Monarchs) succeeded in capturing the last vestige of Moorish rule in Iberia, the kingdom of Granada (Crow:150-151).

Obviously the Reconquista did not occur overnight. Rather it was the result of gradual southern expansion by the Christian kingdoms of the north (Crow 1985:81). These reconquests were by natural areas formed by the variable topography and climatic conditions that characterize the environment of Iberia. The very environmental reasons that made each of these natural political units also isolated its populations.

Communication

The rugged countryside and primordial forests of Spain made inter-regional communication by land nearly impossible (Braudel 1972:282-284; Braudel 1973:309; Lynch 1984:143-144). At the turn of the sixteenth century, it could take four weeks to travel overland from Barcelona in the northeastern corner of the country to Seville in the southwestern coast (Braudel 1972:366). A trip of this kind would probably have been over roads originally established by the Romans a millennium and a half previously (Figures 7 and 8 -- Braudel 1972:282; Way 1962:80). What non-Roman roads there were would better be termed paths or ruts. These were wide enough for porters and caravans of mules,

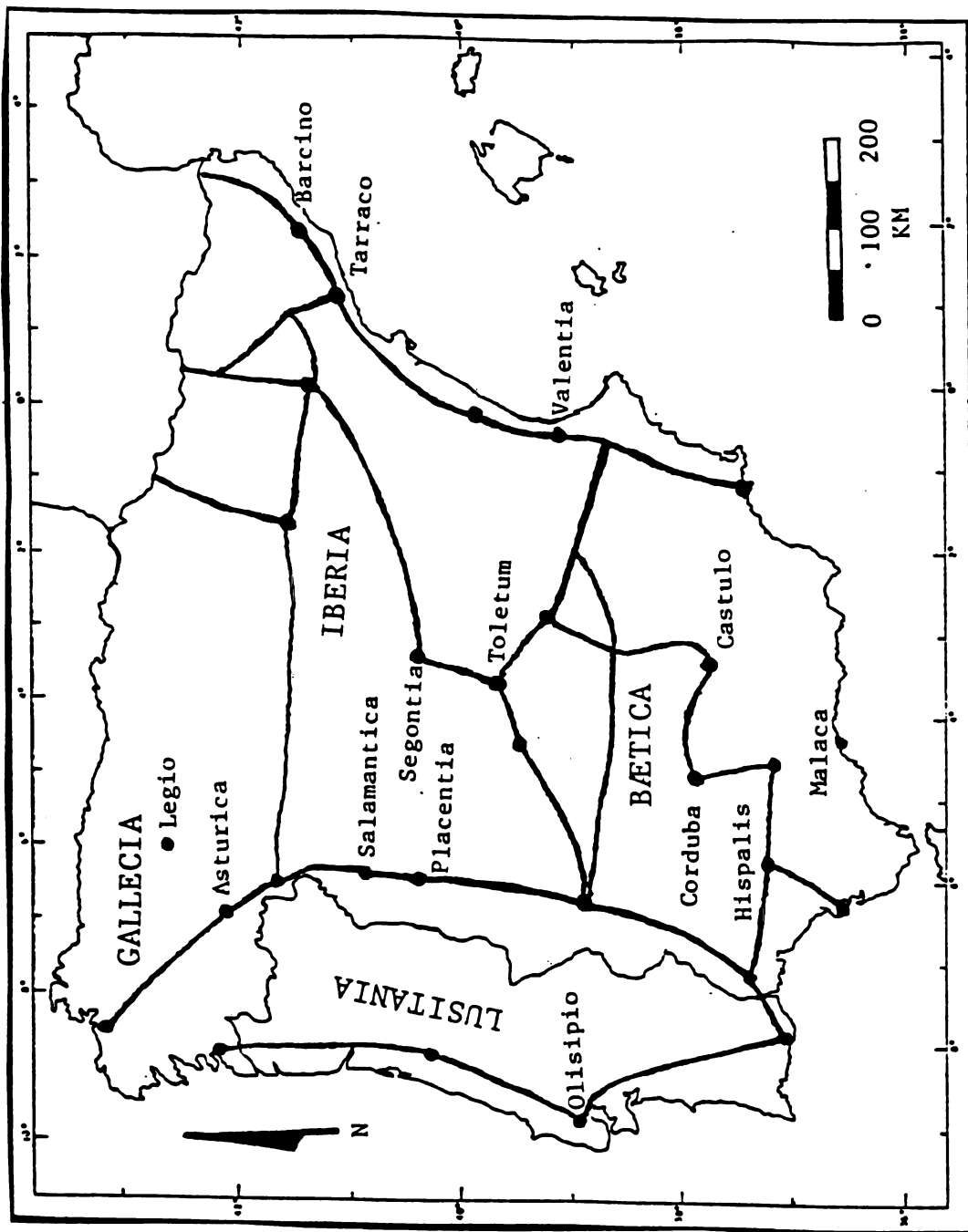


Figure 7. The Road Network of Roman Iberia (after Way 1962:80)

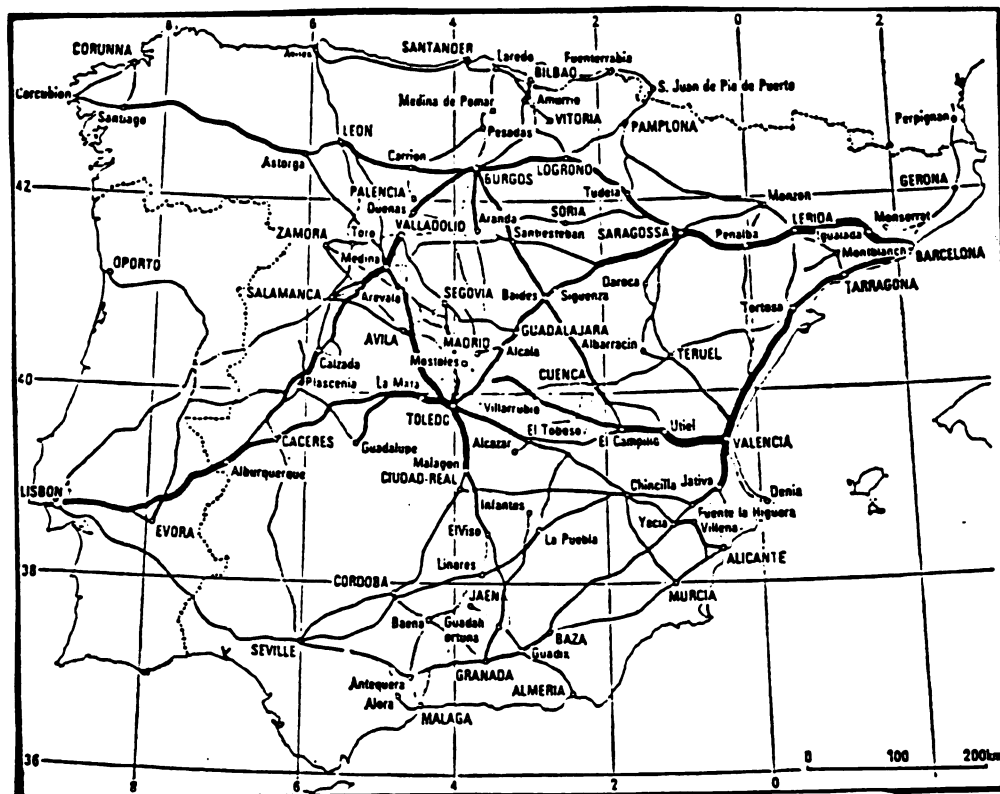


Figure 8.

The Road Network of Iberia in 1546

(Braudel 1972:279) (Reproduced by permission of Harper & Row, Publishers, Inc. from, The Mediterranean.)

horses and, occasionally ox carts to struggle over (Lynch 1984:143-144). Overland means of communication only began to improve under Philip II's drive to consolidate the Spanish Empire in the second half of the sixteenth century. Then, messages could travel between Burgos and Brussels in a week (Lynch 1984:145). As Stilgoe (1982:21-22) points out, a concern for good roads developed in conjunction with political unity and long-distance, overland commerce -- two things which had been lacking in Europe since the fall of Rome.

Given the difficulties of early modern overland travel, it should be obvious why the majority of commerce and communication in Europe followed sea and river routes (Braudel 1972:103,276-282; Lynch 1981:143). The lack of long stretches of navigable rivers in Spain focused waterborne transport on the numerous good ports that surround its dissected shoreline. Just as with roads, sea lanes became fixed and unchanging. Winds, shoals, reefs and channels formed hostile environments around which sea lanes were formulated and courses navigated. Perhaps the best example of the creation of a sea lane was that established between Spain and the West Indies. This route remained unchanged for over four centuries (Braudel 1973:312).

The constraints on transportation, of course, influenced the settlement pattern associated with the constituent kingdoms of the sixteenth century Iberian peninsula. Settlement pattern and location was based on three factors. First, the towns were positioned to serve

the surrounding hinterlands. Second, they were most often near and controlled some localized resource. Third they needed to be linked to the larger system. Transportation routes were the most influential variable in town location because most urban settlements grew at break-in-bulk points and, thus, include ports, fords, and passes (Johnson 1972:82-83). These factors were central in the location of Spanish towns in the fifteenth century, before the conquest of the New World (Foster 1960:34-36).

Urbanism was not a new phenomenon to Europe. Fifteen hundred years earlier, Imperial Roman trade linked Europe, Asia and Africa. The commerce carried out over the Roman roads and sea lanes focused population and created urban enclaves to which and through which passed trade. Collapse of the western half of the empire broke these external lines of communication. Without these routes, the need for population concentrations lessened, and they declined in importance on the European landscape (Johnson 1972:9-10).

Although cities lost much of their population and importance, they were not forgotten as centers of innovation, opportunity and learning (Cipolla 1976:139-145). In the fifteenth century, the urban "cityscape" once again became a magnet that attracted people from the hinterlands. Here man-made form and order, not natural vegetation, ruled space. During the Renaissance wilderness connoted disorder and fear beyond the control of God's human representatives (Stilgoe 1982:7,10,24). In the fifteenth and sixteenth centuries, Spain like the rest of the

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Mediterranean, could best be described as urban (Braudel 1972:278; Foster 1960:34-35; Ortiz 1971:130). Whether small population concentrations, as characterized the northern kingdoms, or large, as in the south, Spanish towns stood out as self-contained enclaves against the wilderness of the rural landscape. Cities functioned as commercial centers, as Segovia and Burgos did in the wool trade (Ortiz 1971:136-138); as administrative centers, such as the capital Madrid (Ortiz 1971:131,134-135); or as primate cities such as Seville where both functions were realized (Ortiz 1971:135).

Settlement Size

In the mid-sixteenth century, the primate city in each kingdom was the largest. For example, in Andalusia, the commercial port and administrative center was Seville (Figure 9). Located where favorable winds and currents came together to make the trip over the sealane to and from the New World relatively easy, this port had an advantage over other port cities of the Iberian peninsula during this age of wind powered vessels (Cipolla 1976:111; Crosby 1986:105-131; Elliott 1963:179). Its population of nearly 100,000 (some think as high as 180,000; see Defourneaux 1966:82; Elliott 1963:183-184) was the largest on the peninsula. It outstripped the surrounding secondary cities of Granada (50,000) and Cordoba and Malaga (40,000) and dwarfed the towns of Jerez and Jaen (15,000-30,000). Other such leading primate cities included Barcelona in Cataluña (35,000-50,000); Valencia in the kingdom of the same name (50,000-

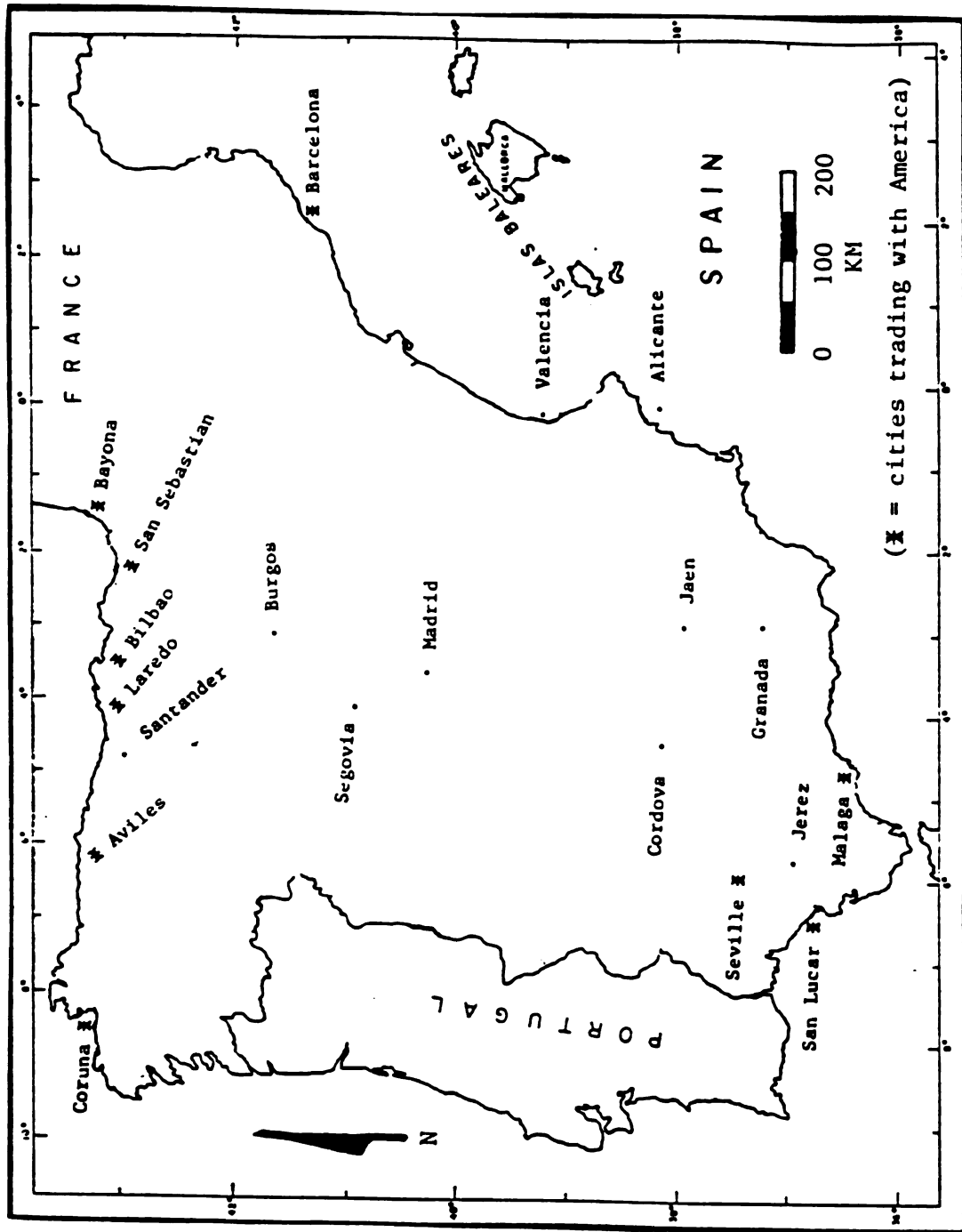


Figure 9. Sixteenth-Century Spanish Cities

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80,000); Burgos in Burgos (60,000; Braudel 1972:405; Ortiz 1971:134-135; Vives 1972b :251). At this same time, the administrative capital of Madrid had less than 15,000 people, while the commercial ports of Aviles in Asturias and Alicante in Valencia had 30,000 and 5,000 respectively (Braudel 1972:405; Ortiz 1971:135).

In Spain urban growth relates to the growth of trade (Fernandez 1972b:86), and this commercial expansion is directly linked to the developing stability of the state (Wallerstein 1974:50). Spain's greatest cities were ports that were both administrative and commercial centers with foci of control extending over both inland and overseas routes of trade. The secondary and smaller settlements functioned in a greatly reduced capacity as points for internal commerce or administration. Thus, it is clear that towns were central to trade, and the function of urbanism was the control of space via the routes of communication (Braudel 1972:293,312). In conjunction with consolidation of the state through the fifteenth and sixteenth centuries, population grew (Braudel 1972:326,402-407) and so too did the economy and the volume of Spain's overseas trade. By 1570 Spain was home to over 250,000 tons of shipping (Braudel 1972:446; Cipolla 1976:232). Representing this commerce were the 3100 ships that cleared for New World ports between 1568 and 1587 (Chaunu and Chaunu 1957 v. 6,n.7:47). Seville alone, as the largest city and port, could claim between 50,000 and 80,000 tons of shipping in the last half of the century (Chaunu and Chaunu 1957, vol.

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7:65) and could aptly be considered Spain's economic capital and the "Mirror of the Indies of Castile" (Defourneaux 1966:74,92).

Central Place and Economic Focus

Given these observations, the relationship of settlement pattern to function on the Spanish Iberian landscape begins to come into focus. The dual monarchy of Los Reyes Catolicas was equal in name only. Castile led Aragon in population, commercial output (including cloth, iron, and glass) and the development of state sponsored mercantilism (Braudel 1972:449; Fernandez 1972b:84; Vives 1972b:264, 270-271). Trade extended in two main directions. From the meseta surrounding Madrid and Burgos came wool, cloth and hides, and the highlands and rias of northwestern Spain were rich in iron and wood and related maritime industries. These were shipped via ports such as Coruña, Bilbao, Santander, Laredo, San Sebastian to Rochelle, Marseilles, Nantes, Rouen, Bruges, Antwerp, London and the Hanseatic ports (Braudel 1972:220,221,607,637,1095; Croft 1983; Curtin 1984:2; Davis 1973:64; Hurst 1977; Fernandez 1972b:86-89; Lynch 1981:144-145; Ortiz 1971:138; Vives 1972a:265-266). The other main axis was south through Cordova to the port of Seville. To that port went products for trade to Italy and to the Moors in Granada and later, North Africa (Fernandez 1972a:68; Ortiz 1971:138; Vives 1972b:47). Many of commercial relations were further reenforced through the dynastic ties of Charles I to the

house of Habsburg. By the middle of the sixteenth century Spain controlled, in addition to vast areas of the New World, the Low Countries, Burgundy, Franche-Comte, parts of Germany, and half of Italy including Naples, Sicily, Milan, Genoa and Venice (Figure 10; Elliott 1963:165; Tannenbaum 1965:133).

In the latter half of the century, the Empire would feel some contraction in Europe due to the split of the House of Habsburg at the abdication of Charles I and the war with the Netherlands. Still, the additions of the Philippines and the crown of Portugal and its far flung holdings made Philip II the most powerful man, and Spain, in the sixteenth century, the most powerful European nation on which the sun never set (Haring 1947:313; Ortiz 1971:83; Tannenbaum 1965:99,133- Figure 1).

Thus, it is essential to keep in mind that the power and influence of sixteenth century Spain and the kingdoms or holdings within its sphere of influence and tutelage were far greater than the area encompassed by modern Spain. Although commercial capitalism and mercantilism were in their infancy, raw materials, finished goods and people were moving within the empire and between the nascent nation states of Europe (Davis 1973:51,64; Gerhard 1981:64-65,89; Lister and Lister 1982:13,69-71; Lynch 1984:148-155). Antwerp was the economic capitol of Western Europe until 1585 (Lynch 1984:143). From it and the rest of the Low Countries, Spain derived over two fifths of its revenue (Davis 1973:65; Tannenbaum 1965:134). To this and other

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Habsburg Old World ports of call, including Seville, sailed Hanseatic vessels as well as ships from England, Italy and France (Haring 1947:295). This trade was to continue with Holland and England and other such "heretic" nations even during the religious and dynastic schisms of the last third of the century. War then, as now, was not total; indirect trade continued to take place between supposedly warring entities (Lynch 1984:145,154; Tanguy 1956).

Aragon was excluded from New World trade for the opening and closing thirty years of the century when commerce was reserved to the monopoly city of Seville and its port San Lucar (Elliott 1963:179; Haring 1947:303; Vives 1972b:273). The intervening forty years opened the Aragonian and Castilian ports of Coruña, Bayona, Aviles, Laredo, Bilbao, San Sebastian, Barcelona and Malaga to direct trade with the Indies; these ports were already part of the extensive intra-continental trade previously discussed (Tanguy 1956).

Against this historical and geographical background, the hierarchy in Spanish sixteenth century settlement pattern and function is apparent. The largest population concentrations were commercial and administrative centers -- primate cities whose focus was both internal and external. Concentration at these ports developed in response to the economics involved in break-in-bulk locations in trade dictated by the environment and, secondarily, to tradition. A good example of this was the replacement of Seville by Cadiz in 1685. It was then that the cost to lighter produce

from larger ocean-going vessels of the seventeenth century over the shoaling waters of the Guadalquivir River at San Lucar and then to Seville surpassed the value of the investment in immovable properties in the city (Braudel 1973:388). Other secondary, tertiary, and smaller settlements may have had administrative and commercial functions, but they were limited in scope and only serviced the local area. Ultimately, we see that these settlements were economically interdependent. Following Christaller's central place theory, each settlement focused on supplying local produce to the next greater level of complexity, and in return, the primate entrepot sent exotic goods and services (Johnson 1972:87,93,101). Thus, in exchange for such Spanish produce as iron, hides, wine, figs, raisins, wool, wheat, pottery, salt, glass, olive oil, and honey, the Spanish hidalgo received: ceramics, fine cloths, tapestries and paintings from Flanders and the Rhine valley; pottery, gold, silks, glass and luxuries from Italy; pottery and wine from France; and pewter from England (Fernandez 1972a: 58-68; Fernandez 1972b: 84-89; Lister and Lister 1982; Olds 1976, Willis 1976). From the New World came gold, silver, copper, hides, cattle by-products, fish, whale oil, cotton, tobacco, medicines, cacao, sugar, pottery, and new cultigens; from the Orient via the Philippines, came silks and porcelains (Crosby 1972:170; Haring 1947:293; McAlister 1984:364-366; Tuck 1985:42; Wolf 1982:140). As this material roll-call should begin to show, the nascent European-centered world economy with its focus on

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international trade was functioning well. In sixteenth century Spain, this nascent commercialism was reflected in the growth of cities and their pattern and function in the hierarchy of the economic system.

The Spanish Town

Urbanism was an ubiquitous aspect of Spain and the Mediterranean world in the fifteenth and sixteenth centuries. We noted how the population and function of Spanish settlements varied relative to their proximity to natural resources or break-in-bulk points, resulting in a hierarchy of functionally differentiated settlements. The function of each community can be considered to have been more or less administrative or commercial based on the variety, nature and amount of activities (occupations) performed. Since the sizes of Spanish communities vary enormously, we need to understand how internal differences can be utilized to accurately differentiate them and place them in the hierarchy.

The Renaissance Spaniards defined a city as the urban area plus the surrounding rural hinterlands, a concept that dates to the Roman occupation (Crouch et al. 1982:27). This concept helps explain the strong Spanish cultural identification with urbanism (Foster 1960:34-35). Each settlement was officially titled ciudad (city) or villa/pueblo (town). The former title was conferred upon the capitals of kingdoms and other large settlements with substantial tax bases that were granted a vote in the

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national Cortes (parliament). The more common entity, the pueblo or villa, was akin to our word "incorporated" community which ensured municipal autonomy within each kingdom (Ortiz 1971:131). Under this system, all villages were required to be chartered. For, without official governmental sanction all title to property was considered null and void and was subject to seizure by the state (Braudel 1972:707).

The urban nature of Renaissance Spain meant that all classes and occupations lived in proximity to one another. Land-owning hidalgos, peasants and a small growing class of merchants (ruanos) combined to make the towns dynamic centers of internal trade and long distance commerce.

To understand the internal function of the town, we must remember that this was an era of transition between the modern urban service and industrial cities of today and the model of the preindustrial city proposed by Sjoberg (1955). The preindustrial city was characterized by specialized function, small, stable population, rigid segregation of social groups, non-specialized land use, absence of industrialism, isolation and families as a predominant social institution.

In the fifteenth century, Spanish towns had a rural flavor, but markets, shops and trade fairs were a common part of all communities. The town lived off the agricultural produce of the rural countryside controlled by its municipal council or cabildo (Ortiz 1971:131-132; Vives 1972b:42). Inter- and intra-regional movement of both

finished and bulk goods created a small urban middle class (Vives 1972a:250). The productivity of the Castilian lands was such that it was the only kingdom in Europe that was self-sufficient and an exporter of foodstuffs (Fernandez 1972b:84). This success in the European marketplace led to a growing demand for consumer goods in Spain.

The primary producers of the field and sea included sheep and cattle herders, farmers, fishermen and miners. Additionally there were full-time craftsmen of materials of glass, ceramic, leather, metal, cloth and all varieties of specialty items. Craftsmen and merchants tended to be segregated by specialty on a single street. Originally, this clustering was related to guild membership, but later the practice was codified, as a kind of early zoning, to ensure the general health and welfare of the community (Crouch et al. 1982:15; Foster 1960:37; Lister and Lister 1984).

Thus, the fifteenth and sixteenth century Spanish town fits certain aspects of Sjoberg's parameters for the preindustrial city. These include the rigid segregation of social groups and the emphasis on the family as the predominant social institution. Even so, there were nascent aspects of modern industrial urbanism in such things as: non-specialized function; expanding population; specialized land-use; and a lessening of isolation via trade and incipient industrialism that resulted in the emergence of a small middle class.

The ubiquitous gridiron town plan feature of the Spanish colonial system has received much attention (e.g., Crouch et al. 1982; Foster 1960; Lockhart and Schwartz 1983; Deagan 1982). This plan gridded the town around a main central square or plaza mayor (Figure 11). The plaza was the hub of the municipality. Fronting on the plaza were the buildings representing the principal sources of power: the church; the state; and commerce. These included the church, municipal and other governmental buildings, and shops (Crouch et al. 1982:14-15; Lockhart and Schwartz 1983:66-67; Ortiz 1971:133). The residences of the elite surrounded the plaza also and were, in turn, surrounded by the homes and businesses of the commoners and folk of lesser status (DeFourneaux 1966:95-96). Thus, the grid plan layout of the towns reflects the hierarchical nature of the society (Stilgoe 1982:35,42).

The origin of the grid plan layout of fifteenth and sixteenth century Spanish and Spanish colonial cities can be traced to Renaissance ideas about town planning (Braudel 1973:384). These ideas, based on balanced Roman geometric plans for cities and military encampments, are the hallmark of Spanish and other Western European towns founded after the thirteenth century (Crouch et al. 1982:xv-xvii; Foster 1960:39-42). Cities founded before that time in Europe and adjacent contemporary areas of Africa were a maze of little streets and alleys crowded within a surrounding city wall (Braudel 1973:382-384; Ortiz 1971:133). It has been stated that there are few pure Renaissance cities in the Old World

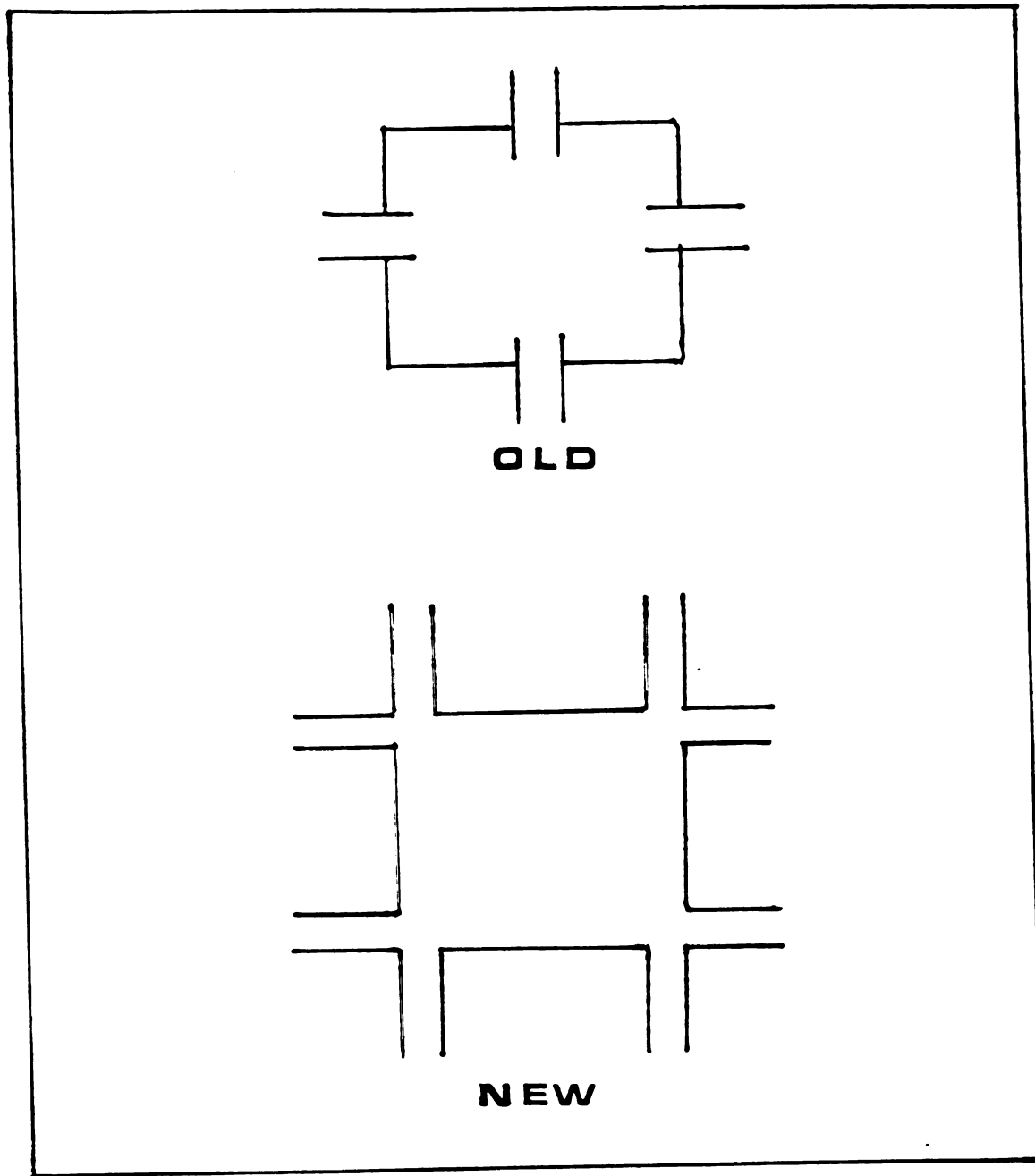


Figure 11.

Layout of Spanish Old and New World Cities

(after Crouch et al. 1982:60; Lockhart and Schwartz 1983:67)

because the majority of urban areas predate these developments (Crouch et al. 1982:xv). Such cities are, however, more common in southern Spain since these cities were founded in the wake of the Reconquista. Thus, we should not be surprised that sixteen of the twenty largest cities of modern Latin America, all dedicated by 1580, are classic Renaissance cities (Crouch et al. 1982:xv, 27).

An essential aspect of the ideas about towns and their appearance that Spanish colonists brought to the New World is ideas about house structure. This is important for understanding what aspects of Old World material culture were transferred to the New World "Neo-Europes."

Stereotypical notions about "typical" tile-roofed, white-washed houses and spinning windmills require some modification regarding applicability, both historically and geographically. Braudel (1973:193-204) generalized about housing in the early modern period by categorizing stone and brick as "rich building materials," and wood, earth and fabric as "poor." Defourneaux's work on life in Spain's "Golden Age" (1966:96,102,103) would lead to a similar conclusion. Indeed, this held true for Seville in Andalusia, for example, where stone was considered a luxury, but not all New World colonists were from Andalusia. Indeed, in the first half of the sixteenth century, the southern Spanish kingdoms of Andalusia and Extremadura contributed the most settlers (Foster 1960:29-32), but this changed in the second half of the century when these provinces were eclipsed by Galicia, Navarre, Asturias and

northern Cataluña as sources of immigration. Therefore, we must examine the geographical variety in sixteenth-century Spanish housing.

In the colder, wetter provinces of Spain (Galicia, Navarre, Asturias, northern Cataluña and Leon) homes tended to be set back from passing thoroughfares. These structures were of rough stone construction around a wooded frame and were rectangular or square in plan with pitched roofs of slate or thatch. The houses of the poor were dark and cramped due to low ceiling height and a general lack of windows (Baroja 1981, vol. 2:108-110, 128-135, 161). The well-to-do of the region lived in multi-storied buildings, with balconies and windows. These, too, were generally built of rough hewn stone although government and religious edifices and the houses of the ultra-wealthy were of dressed blocks (Baroja 1981, vol. 2:109).

Buildings in southern, torrid Spain (Andalusia, Extremadura, Murcia, southern Cataluña, southern New Castile) followed the Arab or Roman style in plan and placement on the street edge (Baroja 1981, vol.2:188; Defourneaux 1966:148). Homes for the very rich and government and religious structures were constructed of stone with tile roofs (Baroja 1981, vol.2:238, Defourneaux 1966:96,103). The commoners lived in white-washed adobe houses with tamped earth floors and roofs of wood and thatch (Baroja 1981, vol.2:251,324,330; Defourneaux 1966:96,102). Homes abutted directly on the street and were built around central patios, sometimes with pens or corrals at the back

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of the property for animals (Baroja 1981, vol.2:248, 297,331). Kitchens tended to be separated from living quarters, necessitating the use of braziers (anafes and braseros) in colder months (Baroja 1981, vol. 2:329; Defourneaux 1966:149). Central Spain (Old Castile, northern New Castile, Leon, Aragon, Cataluña), largely the mesta, was transitional between northern and southern architectural styles. Similar to the northern structures in floor plan, the buildings were variably constructed of stone, adobe or a wood and wattle baywork covered with clay (i.e., wattle and daub-- Baroja 1981, vol.2:185, 204,211,324,325). The houses of those of lesser means tended to be roofed with thatch while the houses of the elite were roofed with tile (Baroja 1981,vol.2:353,357,376,379).

We have noted that every town in Spain was chartered into existence for the protection of its inhabitants and for tax purposes. That meant that every town had certain basic activities associated with government and religion as well as some commercial activity. Ninety-five per cent of the population of Spain were peasants; the remainder were clerics, craftsmen, professionals, aristocrats and merchants (Lynch 1981:12-13).

At the turn of the sixteenth century, Spain was self-sufficient, the last Western European kingdom to be so endowed (Fernandez 1972b:84). In the north, iron ore deposits and wood resources were turned into ships and nautical fittings (Lynch 1981:125,144,164; Vives 1972a:264). Manned by Basques, Asturians, and Galicians, these vessels

were engaged in both fishing and trade throughout Europe and later in the Americas (Fernandez 1972a:58-61,68; 1972b:84-89; Tuck 1985; Vives 1972b:43,47).

From central Spain came wool. Considered by many to be the central cause for Spain's lack of internal economic development and overall weakness (e.g., Elliott 1963:185-196; Lynch 1981:16-18; Vives 1972b), it was considered a luxury item in Europe. Wool could be exchanged for gold, silk, finished cloth, and foodstuffs (Fernandez 1972a:68; 1972b:88-89; Vives 1972:43). Yet, for all of its value, wool had its long term costs in the massive deforestation of the meseta. The maintenance of tens of thousands of sheep required grassland whose growth was encouraged at the expense of forest and farm (Vives 1972a:262; 1972b:38).

Central and southern Spain was also home in the fifteenth and sixteenth centuries, to industries focused on the production of luxury items of textile, leather, silk, iron, ceramic and glass (Braudel 1973:213; Elliott 1963:185; Frothingham 1963; Lister and Lister 1982:45-69). The production centers for these goods included Seville, Segovia, Toledo, Cuenca, Cordoba. The proximity to raw materials, such as iron, lead and tin deposits and the living produce of the meseta, endowed these break-in-bulk points with these nascent industries. The importance of these materials as export items is documented not only in documents but also in the archaeological record. Ceramic and glass produced in these centers have been found throughout the New World (e.g. Goggin 1968; Lister and

Lister 1982:45-69; Skowronek 1987; South et al. 1988; Willis 1976), in Africa (Redman 1986: 176,191-199) and in Europe (Croft 1983; Hurst 1977).

Ethnicity, Nationalism and Class

Fifteenth and sixteenth century Spain was home to a multiplicity of ethnic groups cross-cut by the affiliations of religion and social class. Given the focus of this study on the ability of the Spanish colonies to create a familiar "Neo-Europe" in the New World, we must understand how these potential colonists saw themselves vis-a-vis others in the motherland. Thus our main focus is the Spanish Christian as compared to the: Spanish Jew, Spanish Moslem, foreign Christian and slave.

In the fifteenth century Latin Christianity, permeated and influenced thought, language, trade and government from Poland to Greenland and from the Baltic to the Mediterranean (Gerhard 1981:55-56).

Christian Spaniards of the Iberian peninsula were part of this larger European panorama marked by social stratification and a militant enthusiasm for Roman Catholicism (Braudel 1972:709-718; Crow 1985:78-113; Defourneaux 1966:106,224; Lynch 1981:12-30). Spain differed from most of western Europe (Austria and Poland excepted) in its lengthy war against Islam. While her neighbors participated to greater or lesser degrees in the various crusades to free the Holyland, the Spaniards were involved in a "reconquest" (Reconquista) of the Iberian peninsula,

almost constantly for 800 years. The reward for this politico-religious fervor came in 1492 with the reduction of Moorish Granada, the expulsion of the Jews and the discovery of the New World (Lynch 1981:29). At this point, the Spaniards thought their millennium had arrived under the banner of their patron saint, James of Compostela (Defourneaux 1966:114).

Before 1492 Spain had large Jewish and Moslem minorities (estimated at 200,000 and 1 million respectively) (Lynch 1981:15; Vives 1972a:248-250). The Jewish population comprised the majority of the nascent middle class. Because they lacked religious constraints regarding usury and the lending and collecting of money, they were useful to the crown as tax collectors and financiers for the Reconquista. Christian commoner and elite alike disliked them both for their power over the purse and for their religious beliefs (Vives 1972b:50-51). As the war against the Moorish kingdom of Granada wound down in the late fourteenth and fifteenth centuries, resentment against the Jewish minority grew with the extension of the Inquisition. Pogroms and mass conversions eventually culminated in the expulsion of three-quarters of the Jewish population in 1492 (Braudel 1972:820; Lynch 1981:20-21,29; Vives 1972b:32,33).

Moslem minorities were mostly peasant farmers with some representation in the middle and upper classes, especially in Granada (Braudel 1972:780-802). After the dispersal of the Jews, the Inquisition turned its attention to the followers of Islam. In their hands were rich irrigated

valleys in the Ebro basin and fields in Andalusia (Braudel 1972:75, 82-84). In 1502, ten years after the fall of Granada, they, like the Jews before them, were given the option to leave or convert to Catholicism (Lynch 1981:30). Thus, at the end of the fifteenth century the vast majority of the Iberian peninsula's inhabitants were professed Roman Catholics (Defourneaux 1966:106; Vives 1972a:248-249). Officially, after 1502, the only non-Catholic Christian resident people in Spain were slaves (Defourneaux 1966:84).

The converts to Catholicism, be they Jewish conversos or former adherents of Islam, the moriscos, were to remain the prime suspects for the Inquisition until the Reformation brought in a new and internal heretic -- the Protestant. The Inquisition was established to cleanse the church of internal heresy and apostasy. Thus, the profession of another faith, be it Judaism, Islam or Native American animism, was not the focus of the Inquisition's prosecution. It was, rather, the converts, the conversos, moriscos, and later the American Indians, who drew the full attention of the inquisitors (Elliott 1963:104-108; Lynch 1981:20-27; Ortiz 1971:166-172).

It has been estimated that there were some 150,000 foreigners living in Spain in the sixteenth century (Ortiz 1971:147). Expatriates from Italy, the Low Countries, Germany, France, Greece, the Hanseatic countries and England comprised ten per cent of Seville's population (Defourneaux 1966:82; Lister and Lister 1982:13; Ortiz 1971:147).

These people were usually merchants or craftsmen associated with trade and, as such, lived in Spain's major commercial cities. The craftsmen were encouraged to immigrate by the Spanish Crown, which offered tax exemptions to artisans relocating in Spain (Lister and Lister 1982:13). Merchants whose positions were often politically tenuous at best, especially during the many European conflicts of the age, often sought naturalization. This was obtained after ten years of residence if they were married to Spaniards and owned property (Ortiz 1971:147). Foreigners, whether they were liked or disliked, were important in bringing goods and services to Spain, and in addition provided ideas, financing, and immigrants for the later colonization of the New World (Elliott 1963:179).

Slavery was a part of Roman Spain and the West that had not disappeared by the end of the fifteenth century. It had gained new vigor after the era of the Black Death in the fourteenth century when the nascent middle class created a demand for cheap labor. In the fifteenth century, slavery was associated with both economic exploitation and a pandering to the demands for luxury by the nouveau riche. Spanish slavery, unlike its American counterpart, was commonly associated with the latter (Defourneaux 1966:83-84).

In Spain, slaves were both black and white and always non-Christian. The former were African, purchased from Portuguese slavers, while the latter were war captives from

the lands of Ottoman Turkey in North Africa or the eastern Mediterranean (Ortiz 1971:163).

These slaves lived with their owners and helped validate their social position. Harsher was the lot of the king's slaves who were put to work on public projects in the royal mines or aboard galleys. Only in very rare instances are there accounts of slaves working in the fields of Spain (Defourneaux 1966:83-84; Ortiz 1971:164-165).

The Material Counterparts of Hierarchy

For the early modern Spaniard, the staff of life was wheat bread, olive oil and wine (Braudel 1972:236; Crosby 1972:67). Agriculture was Spain's main industry. As we noted previously, Spain produced a wide variety of crops in the fifteenth and sixteenth centuries. These included wheat, barley, oats and rye in addition to a wide variety of garden and subtropical vegetables. Spaniards kept pigs, chickens, cattle, goats and sheep, and caught fish from off the coasts of Europe, Africa and North America (Crosby 1986; Fernandez 1972a:59; Reitz and Scarry 1985:34-35; Tuck 1985).

In the fifteenth and first half of the sixteenth century, following the ravages of the fourteenth century's Black Death, survivors of all classes ate well on a diet which included large portions of meat. This trend ended in the later sixteenth century when population outstripped production and, coupled with inflation, sent food prices spiraling upward (Braudel 1972:516,525; 1973:127-132; Hamilton 1934:319-357). After this, fresh meat in Spain was

considered a luxury item reserved for the upper class or the sick. The poor subsisted on bread and garden produce, including onions and olives, and such sources of protein as salt beef, fish and cheese (Braudel 1973:132,142,145-152; Defourneaux 1966:103,152; McEwan 1988:60-61).

Cooking was traditionally a female task in Spain, performed by women for their own household or by female slaves. While the elite might consume sumptuous and varied repasts of roast meat and other fresh foods, meals for the vast majority of the population were typically liquid-based stews. These were prepared in red lead-glazed earthenware cazuelas (flat-bottomed cooking dishes) and jarros (flat-based, globular bodied, constricted necked cooking dish) over a brazier or anafe (Defourneaux 1966:152; McEwan 1988:63, 209-212). Velazquez' early seventeenth century (1618) painting entitled "Old Woman Frying Eggs," depicts a women cooking in a cazuela over an anafe (see South et al. 1988:214).

Reports of rations issued to sailors and soldiers of Philip II's armed forces give us some idea of the composition of the normal diet for this segment of the population. By the closing third of the sixteenth century, caloric intake was between 2800 and 4100 per man per day. Of this, 66% to 70% of the diet was composed of cereals and the remainder was fairly evenly divided between meat and fish, milk products, oil and drink (Braudel 1973:88; Hamilton 1929:431-441). Although we can not be certain how reflective this information is of the norm of the

population, it does provide some guideline for examining the diets of contemporary Spaniards, whatever their locale, and can serve as an independent material means of evaluating status within the system.

Finally, the importance of these foods to Spanish culture is well seen in their New World colonies. There, success was measured by how well the colonists could europeanize the New World by replicating the Old, in this case via Spanish bread, wine and oil--all items produced from Old World cultigens (Crosby 1972:67). These and other Old World foodstuffs were heavily imported until the 1540s when olives, grapes and wheat, among other Old World crops, were being produced in sufficient quantities in Peru and Mexico to meet the demands of all the colonists (Crosby 1972:79). Indeed "...the Spanish colonist could almost always obtain wheat bread, unless he were very poor or an inhabitant of the hot lowlands -- and even the latter could have his wheat if he had the price to import it (Crosby 1972:71)." Even today, upper class Mexicans feel that corn is food for Indians and wheat is reserved for them (Crosby 1972:107). How successful the colonial Spaniards were in creating their "Neo-Europes" with familiar food prepared in familiar ways is considered in the following chapters.

The hierarchies that epitomized the Spanish social system, were reflected not only in homes and clothing but could also be seen in many of the utensils associated with daily life. Unfortunately, contemporary chroniclers rarely discuss the actual composition of these items in enough

detail which allow comparison (Braudel 1973:197-198; Defourneaux 1966). Thus, in these situations, researchers have turned to the archaeological record.

Until recently, the excavation of early modern sites in Spain was unknown. We are now fortunate to have the first report of the Baños site, the location of a convent of San Augustinian nuns in sixteenth-century Seville (McEwan 1988). Unfortunately, we currently lack terrestrial sites associated with other parts of the population. Shipwreck remains associated with the 1554 flota can provide some of this missing information both directly, in the hierarchies associated with shipboard life (Muckelroy 1978:240-242), and indirectly, from the presence and absence of certain types of artifactual remains found on the luxury-bearing ships of the flota (Skowronek 1987:103-104).

Much of the work conducted on these sites has focused on those remains associated with foodways and, specifically, on status-marking ceramics. The foremost ceramic in the study of Hispanic material culture is the tin-glazed earthenware commonly known as majolica. This material has been accurately identified in its many types as a luxury item and, thus, it can serve as an accurate status indicator (Deagan 1983:231-241; 1985b:23-28; Fairbanks 1973:165; Skowronek 1984). When majolicas of any functional classification are grouped with other status-marking table and utilitarian wares (e.g., porcelain, stoneware, Orange Micaceous) they can be compared to other non-status marking storage and utilitarian earthenwares and can, from their

variety, number and quality, give us some idea about the lifeways of the people who used them.

For instance, over 46% of the ceramics recovered from the Baños site were majolicas and other status/ethnic-marking wares, 53% were utilitarian and less than 1% were storage wares (Appendix A). In the 1554 flota assemblage, these groupings were 5%, 1% and 93% respectively (see Appendix B). These differences reflect not only the differing functions of each site and the availability of fresh food but also the demography and social status of their respective populations. Thus, while the hierarchical nature of the crews of the 1554 flota represented a microcosm of sixteenth century Spanish culture, from captain to cabin boy, the lack of women and the specialized function of the vessel as a bulk carrier of produce places it at a materially lower status. Baños, as part of the multi-functional community of Seville, had access to a greater variety of elite markers. Its population, although also demographically skewed, was hierarchically arranged. The overall high status of the sisters in the community, combined with their access to status-markings foods and material goods, is reflected in their ceramic assemblage. From an evaluation of these material aspects of the lifeways of these distinct communities, we can begin to see not only the role of the individual site in the hierarchy of the settlement, but develop an independent scale for evaluating the site's position in the hierarchy of the system.

Summary

This chapter outlined the formation of the settlement pattern associated with early modern Spain in the fifteenth and sixteenth centuries. The hierarchical nature associated with settlement was examined against the Peninsula's environment and its economic and political history. Hierarchies were part of the cultural template for the creation of "Neo-Europes" that the Spaniards would carry to the New World. These were influences that would color their choice of town sites, the function of settlements, and their relationships with the aboriginal populations and with each other.

From this homeland, some 100,000 to 200,000 people seeking a better life emigrated to the New World in the sixteenth century. The Spanish colonists who came to the New World came from a society already experienced in urban life and steeped in social and economic hierarchy. Spain was also a nation that, after 800 years of politico-religious warfare, was finally politically unified and religiously homogeneous. It was, thus, ill-disposed to tolerance of political or religious difference. These emigrants carried a Spanish cultural template that contained idealized images of what the New World could and should be (Braudel 1972:404,417,740; Lynch 1984:110). How these desires and expectations were or were not realized is the subject of the following chapters.

CHAPTER 4

HISPANIOLA

Introduction

The discovery and establishment of the Spanish colony of Hispaniola is a story of wind and its shaping of the hostile ocean environment into natural "main street" sea lanes of communication between Spain and the New World (Taaffe et al. 1963:504,519). And, the same winds that sent ships of conquest and commerce down to the Canary Islands (a fifteenth century conquest) propelled Columbus to the shores of Hispaniola in December of 1492. The route he pioneered to the New World was formalized over the next three hundred and fifty years until the close of the age of sail (Morison 1942:277-278).

Spain's geographical position places it on the interface of the northern hemisphere's two main wind systems, the Prevailing Westerlies and the Northeast Trades (Augelli 1965:41-43; Crosby 1986:104-131). These wind currents were crucial in propelling Spanish ships to and from the New World. Its relationship to these winds placed the Spanish city and port of Seville at the prime break-in-bulk location to control the country's overseas trade with

the New World. The control of this trade led to the city's meteoric growth in the sixteenth century.

Environment

Hispaniola lies in the tropics (17° N to 20° N and 68° W to 74° W) between the Caribbean Sea and Atlantic Ocean (Figure 12). The island occupies 11,580 square kilometers and is approximately the size of Scotland or Vermont and New Hampshire combined (Augelli 1965:250; Bell 1981:1).

Hispaniola is a land of rugged mountains, deep valleys and broad plains. Over half of the island consists of steep-sided highlands that rise as high as 3,000 meters so that the relief patterns of Hispaniola are the most complex in the West Indies (Augelli 1965:250-251; Bell 1981:1; West and Augelli 1976:157). The three mountain ranges (Figure 13) run generally in a northwesterly to southeasterly direction. These ranges separate broad, fertile lowland valleys.

In the north, between the Cordillera Central and the Cordillera Septentrional (Sierra de Montecristi), lie the historically rich farmlands of Cibao and La Vega Real (Royal Plain). These valleys are watered by the Yaque de Norte and Yuna Rivers respectively and have been centers for population concentrations and agricultural production both prehistorically and historically. Southwest of the Cordillera Central is a complex of alternating ranges and lowlands. Some of the lowlands lie below sea level and are covered by salt lakes. Two main rivers, the Artibonite in

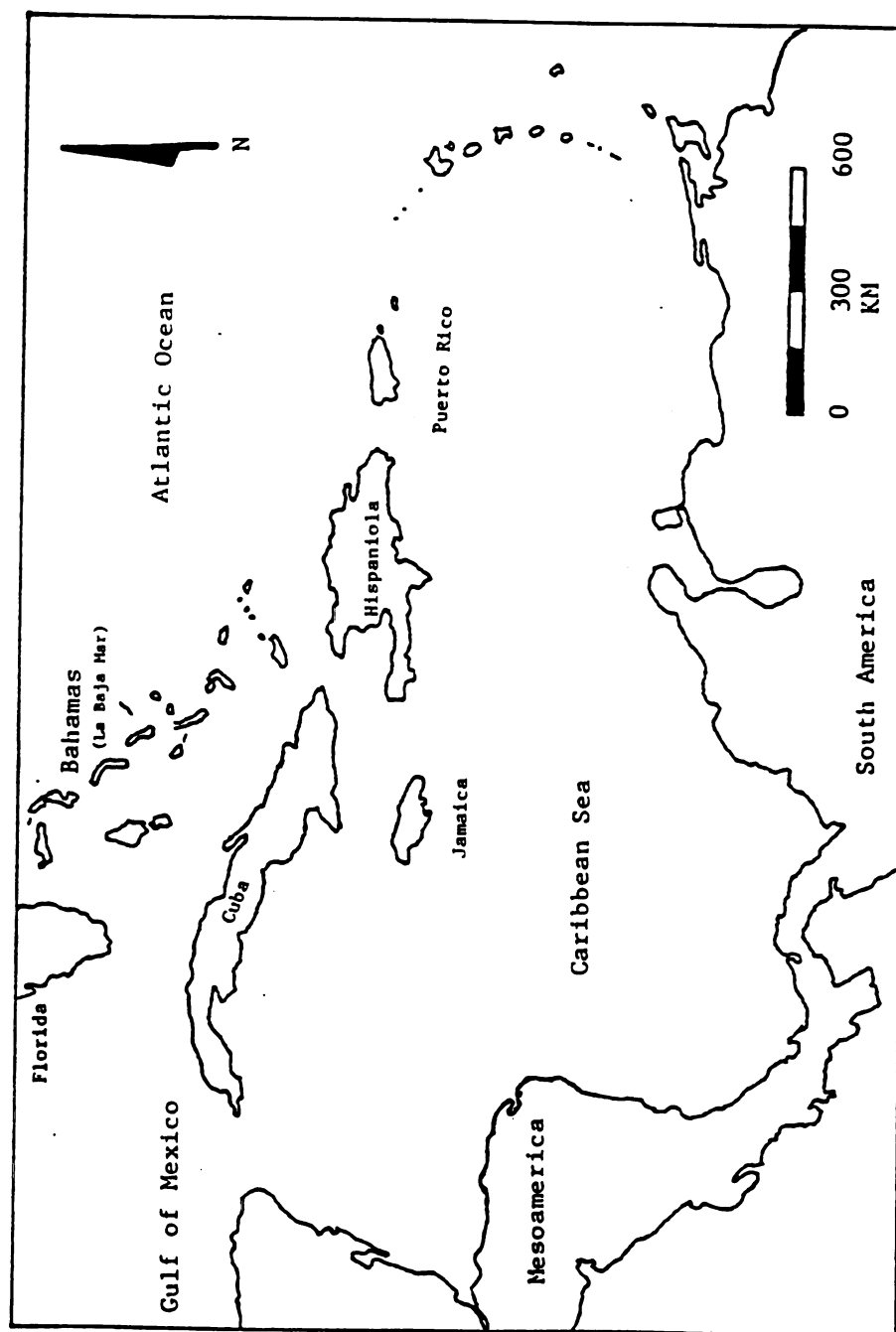


Figure 12. The Caribbean Basin (after Sauer 1966:3)

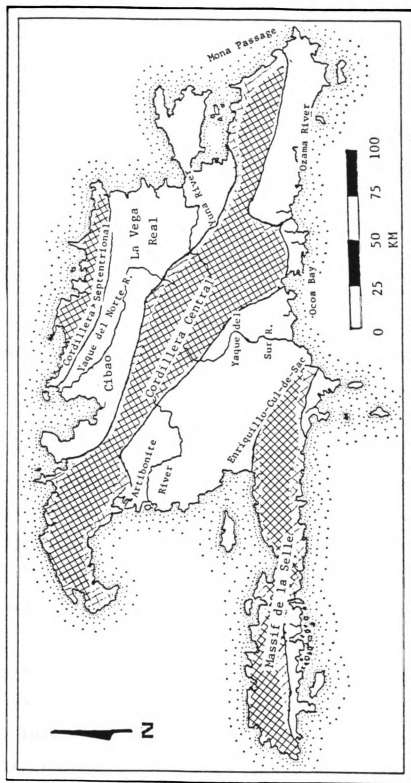


Figure 13. Hispaniola-- Landforms (after West and Augelli 1976:157)

the west and the Yaque del Sur west of Ocoa Bay in the San Juan Valley, are the centers for agricultural production in these regions. Lastly, in the southeastern corner of Hispaniola on the shores of the Caribbean and the Mona Passage, separating the island from Puerto Rico, is the largest stretch of coastal plain. Watered by the Ozama River, this region is presently home to plantations and pasture land (Augelli 1965:250-251; Bell 1981:2-3; West and Augelli 1976:157-159).

Although Hispaniola lies in the tropics, all of the island is not equally lush. Rainfall over most of the island is over 100 centimeters per year, with much less falling in the Enriquillo-Cul-de-sac Depression southwest of the Cordillera Central. Thus, the natural vegetation varies from tropical rain forest to virtual desert. In general, there is more rain in the northeast or windward quarter. This decreases to the southwest, especially on the leeward side of the mountain ranges, to the extent that irrigation is necessary for farming adjacent to the Yaque del Sur and the Artibonite Rivers (West and Augelli 1976:40-41, 159).

The marked variation in moisture patterns and verticality gave the vegetation of Hispaniola a mosaic-like quality. In the northeastern quarter and on the Guacayarima peninsula, where rainfall is greatest, were tropical rain, deciduous and semi-deciduous forests. These forests were heavily lumbered by the Spanish in the sixteenth century for dyewoods, including the prized brasilium or brazilwood, pines and pine resins and gums for naval stores and

medicinal plants such as cañafistula (Cassia fistula) and wild cinnamon (Sauer 1966:92,93,98,99; West and Augelli 1976:45-48).

The highland regions of the island are characterized by distinctive wet and dry seasons. Because of altitude differences, these areas are home to temperate forms of vegetation. In these highland forests are deciduous and evergreen broadleaf and coniferous trees such as North American pines (Pinus sp.) and oaks (Quercus sp.). This wet and dry climate also characterizes the Caribbean Coastal Plain east of Santo Domingo. Here, open tropical savanna is found. In these areas of tall grass cover with scattered deciduous and evergreen broadleaf trees, shrubs, palms and pines were established the first sugar cane plantations in the New World (Sauer 1966:209-212; West and Augelli 1976:45,48-50).

Finally, in the Enriquillo-Cul-de-sac Depression, low rainfall and humidity have combined to create semi-arid steppe conditions characterized by short grass cover with scattered shrubs and cacti (West and Augelli 1976:45,53,54). The similarity of this area to Spain's meseta in vegetation and climate was not lost on the sixteenth century Spanish who utilized this area for horse and cattle pasturage (Sauer 1966:153,156-157).

In the modern era, the island of Hispaniola is known for the production of nickel, iron, bauxite, salt and copper (Augelli 1965:252-253; West and Augelli 1976:97). In the fifteenth and sixteenth centuries, the mineral that lured

the Spanish to occupy Hispaniola was gold. On December 12, 1492, Columbus formally claimed Hispaniola for Spain. At that time he saw for the first time, and captured, one of the natives, described as a "very young and beautiful woman" clad only in a gold nose-plug (Morison 1942:283). It is difficult to ascertain a half a millennium later which aspect of the woman's dishabille concerned the Spanish sailors' sensibilities more that day, but let it be noted that the following day was to witness the first European prospecting trip on the island (Morison 1942:284). From these humble beginnings began the first gold rush in the New World. Placer deposits of gold would be found along the Haina and Ozama Rivers in the eastern half of the island, and the source lodes were discovered later in the interior (Floyd 1973:32,44,66; Sauer 1966:61,77-79,153-155). When Columbus reported to the crown in 1494, "There is more gold here than iron in the Biscay," the reverberations were felt throughout the Iberian Peninsula and Europe (Floyd 1973:24).

Copper was another mineral exploited by the Spanish from deposits near the town of Puerto Real (near modern Cap Haitien) on the island's north shore (Floyd 1973:63). Copper not only had intrinsic value but also was an essential component for the bronze that was crucial in the casting of artillery for the defense of the empire (Hoffman 1980:59-62).

The third major mineral to be exploited by the Spanish was salt. Mined from the Enriquillo-Cul-de-sac Depression and shipped through their port of Azua, salt was not only a

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table seasoning but also an important preservative for hides and meats (Floyd 1973:11). As we saw in Chapter 3, salted beef and fish were important in the diets of peasants as well as soldiers and sailors.

In summary, the climate of tropical Hispaniola is varied, depending on elevation and relative windward or leeward position vis-a-vis the Northeast Trade winds. This climatic variety and accompanying topographic differentiation created lush forests, open savannas and dry scrubland. These differing environmental zones, coupled with natural mineral and plant resources, created a tempting setting for Spanish economic expansion in valued exotica.

Native Population

Columbus had headed west to reach Asia in order to circumvent the Ottoman Turks in the Mediterranean and the Portuguese footholds along the African and Asian littoral. Following the well-known wind systems of the age, he set a course that would have taken him to the Spice Islands (East Indies) had not the rich islands and mainlands of the New World intervened (Crosby 1986; Morison 1942; Parry 1963).

In this New World Columbus, and those who followed, found peoples at what could be characterized as an advanced neolithic level of technology but with varied forms of social organization -- from bands to states (Service 1955). Subsistence in this hemisphere ranged from hunting, gathering and fishing to intensive horticulture supplemented with hunting and gathering, and limited pastoralism.

New and Old World contacts resulted in drastic and sometimes deadly changes in the populations of both hemispheres. Crosby (1972) called these modifications the Columbian Exchange. Plants, animals and especially diseases from the Old World and the Canary Islands took hold among the heretofore isolated New World populace and inalterably changed them from their previous pristine state (Haring 1918:124-125). While New World crops would lead to an eventual population explosion in the Old World, inhabitants of the New World were decimated by disease (Dobyns 1983) just as the inhabitants of the Canary Islands had been during and after the Spanish conquest (Crosby 1986). Because of these changes, the complexion of the New World changed in all but the most densely populated Pre-Columbian states and remote regions so that we now find populations whose roots are mixed (e.g., mestizo and zambo) or are predominantly European or African in origin (Augelli 1962; Service 1955:412; West and Augelli 1976:12-15).

The members of the complex stratified society that once inhabited Hispaniola and the islands of the Greater Antilles are known to modern researchers as the Island Arawaks. This name is based on linguistic similarities between these island dwellers and inhabitants of the South American mainland; it was never used as the name for any specific group (Rouse in Olsen 1974:xiii-xvi). To the Spanish, these people were known as Tainos, a term derived from the natives' own term for the nobles of their society -- the nitainos or nitaynos (Floyd 1973:12; Moya Pons 1976:14, 27;

Sauer 1966:45). Other inhabitants of the Caribbean basin, who had some contact with the Arawaks, were the peoples of the Lesser Antilles and Bahamas -- the Caribs and Lucayos respectively (Figure 14).

Population estimates for the Arawaks of Hispaniola, at the time of contact, range from as high as 8 million to a low of 100,000 (Bell 1981:9; Deagan 1985a:283; Floyd 1973:12-13; Sauer 1966). While most researchers feel the lower estimate is more accurate; in 1514 a census enumerated only some 22,726 (Sauer 1966:200-204). Five years later another census recorded less than 5,000 (Moya Pons 1976:68). By 1540, less than a lifetime after the first landfall of Columbus, the Tainos were extinct as a distinctive population on the island (Bell 1981:9-10; Las Casas 1974:45-53).

The ranked social organization of the Tainos or Arawaks of Hispaniola was that of a chiefdom (Deagan 1985a:283; Sauer 1966:6) with a matrilineal, exogamous, clan structure. The position of caciques or chiefs was inherited within a given lineage of the nitaino class and was open to women as well as men (Bell 1981:7; Moya Pons 1976:22). "Queen" Higuanama of Higuey (a.k.a. Anacaona of Xaragua), for example, became chief after the death of her brother Behechio (Las Casas 1974:49-50). Marriage was monogamous, except among the caciques, where polygamy was practiced to ensure alliances within districts and provinces (Moya Pons 1976:21-22).

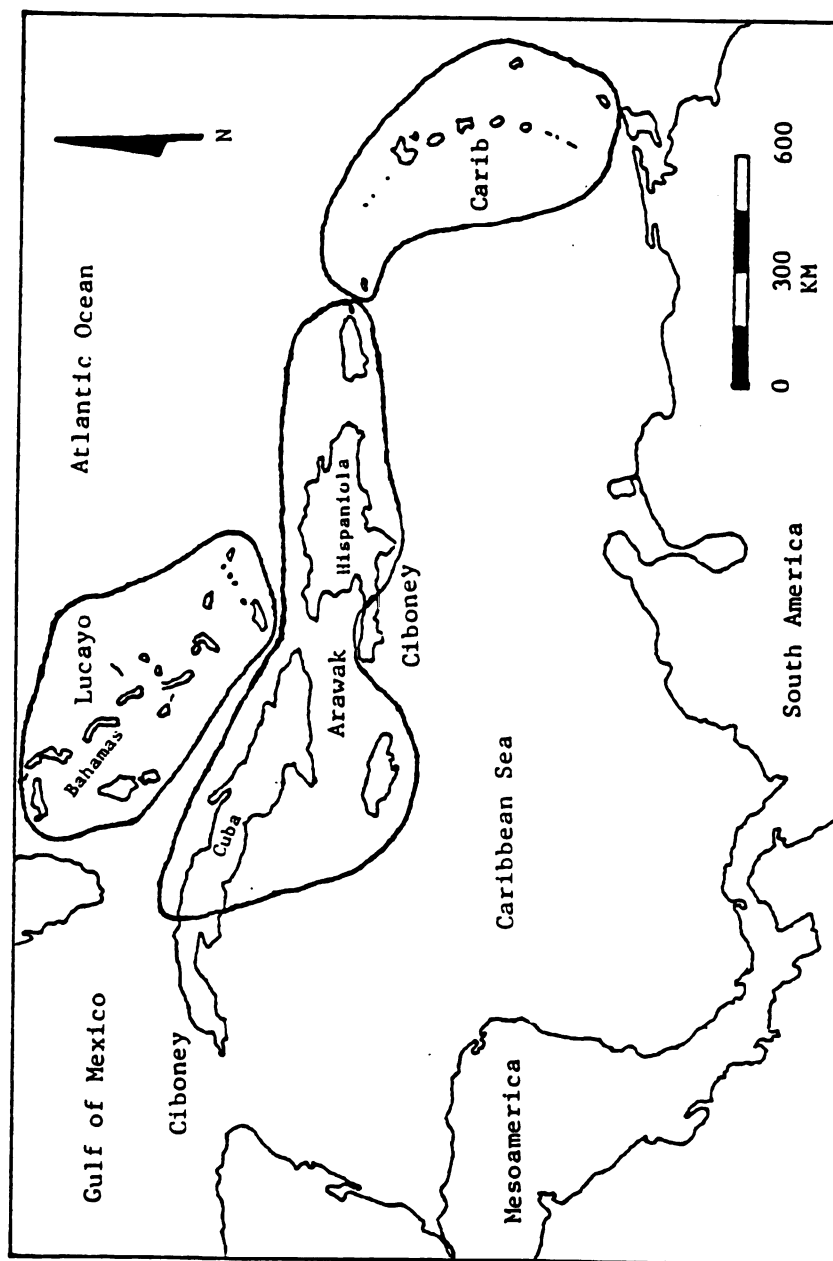


Figure 14. Aboriginal Populations in the Caribbean Basin (after Deagan 1985a:234)

Hispaniola, known as Quizquella ("a thing than which there is nothing greater") to its inhabitants, was organized into five general confederacies called cacicazgos, under a paramount chiefs (Moya Pons 1976:26; Sauer 1966:45-50). These chiefs lent their lineage names to their respective confederacies just as the family or clan names of the local and district chiefs identified the areas under their control. Confusion over the hierarchy and the myriad of names associated with each area led many of the Spanish and later researchers to sometimes mistakenly attribute greater status to a local cacique than to one who represented a district or cacicazgo (e.g., Las Casas 1974:45-50; Moya Pons 1976:26). Figure 15 shows the five cacicazgos of Hispaniola -- Caizcimu, Huhabo, Cayabo, Bainoa and Guacayarima -- as they were recorded by the Spanish at the beginning of the sixteenth century. These were subdivided into ten, two, twelve, twenty-four, and eleven districts respectively (Sauer 1966:47).

Taino subsistence was based on a mixture of hunting, gathering, fishing and horticulture (Deagan 1985a:283; Moya Pons 1976:15-16). Terrestrial meat protein was limited on this mammal-poor island to iguanas, birds, the rodent Hutia, and the occasional consumption of domestic dogs (Sauer 1966:58-59). The sea provided fish, shellfish, crustaceans, turtles and their eggs, manatees and other sea mammals and sea birds. These were taken from blinds, with weirs, or from canoes with the aid of nets, harpoons, and hook and line (Bell 1981:9; Sauer 1966:58).

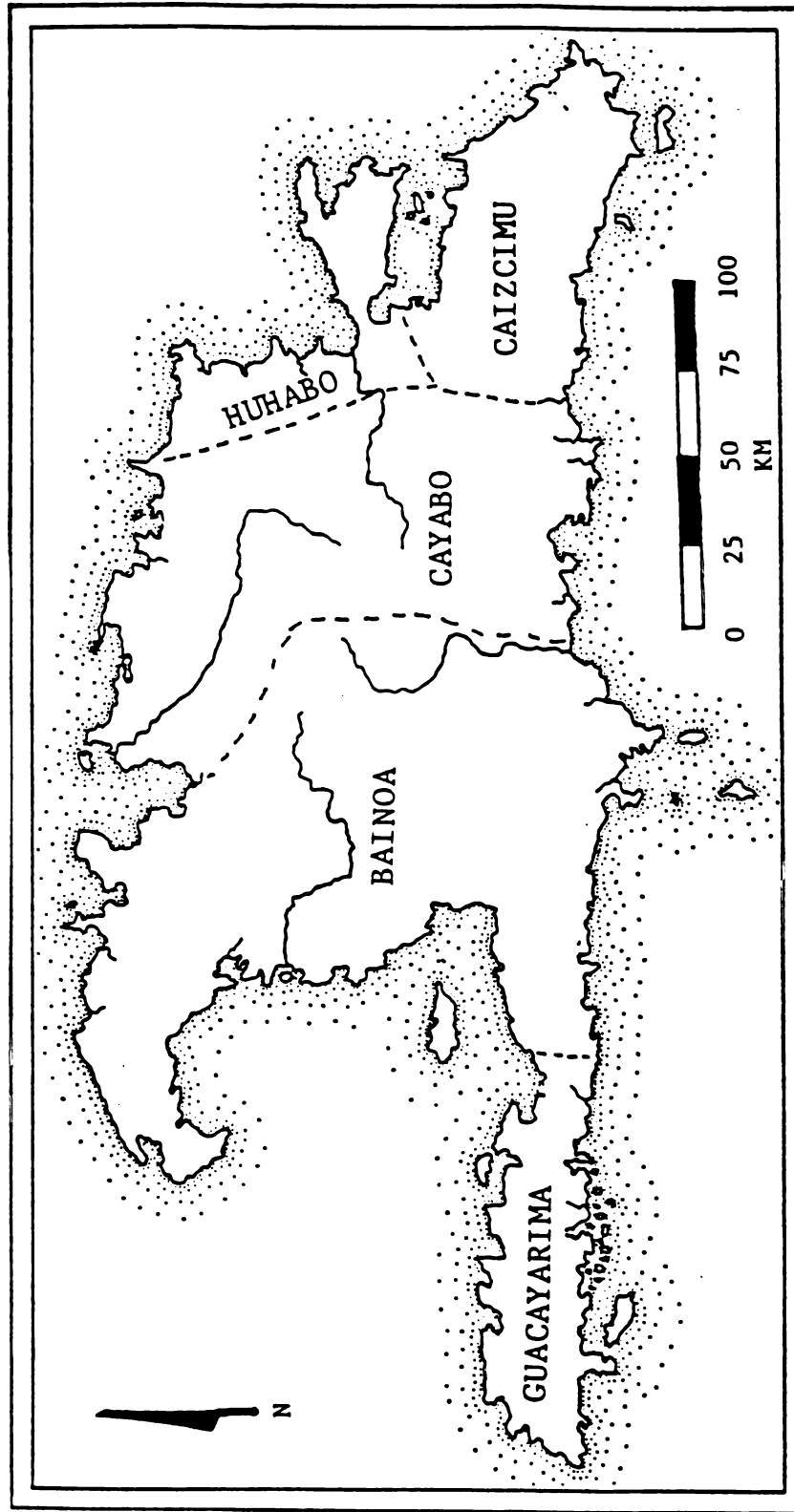


Figure 15. Aboriginal Provinces of Hispaniola (after Sauer 1966:46)

Root horticulture provided the majority of food for the Arawak. The primary crop was manioc, followed by sweet potatoes and yucca. Less important food crops included arrowroot, peanuts, corn, beans and squash. Other cultivated plants included tobacco, cotton and the bottle gourd or calabash (Bell 1981:9; Moya Pons 1976:15-18; Sauer 1966:53-56; West and Augelli 1976:60). These plants were cultivated in cleared, raised fields called conucos, using a slash and burn technology. Common tools were digging sticks, axes and hoes of stone and shell and a wooden forerunner of the machete (Bell 1981:9; Sauer 1966:51-53). Irrigation was practiced in the dry southwestern region of Hispaniola. Maintained by the naborias or commoners of the cazicazgos, the conucos were able to support a dense population near Xaragua as well as in the Vega Real or Magua, in the basin of Maguana, on the north coastal plain of Marien, and on the rich limestone lands of Hispaniola's southeast near Higüey, as the various cazicazgos were known to the Spanish (Figure 16 -Floyd 1973:14; Sauer 1966:52-53).

Among the Arawak there was a sexual division of labor. Men were involved with fishing, warfare and fieldwork. Women, whether naboria or nitaino, collected food and fuel, worked in the fields, made pottery and cooked (Deagan 1985a:285; Ewen 1987:76, 206-208). The material by-products associated with these activities is important in this study because their recovery on European archaeological sites can help us determine the behavior performed therein.

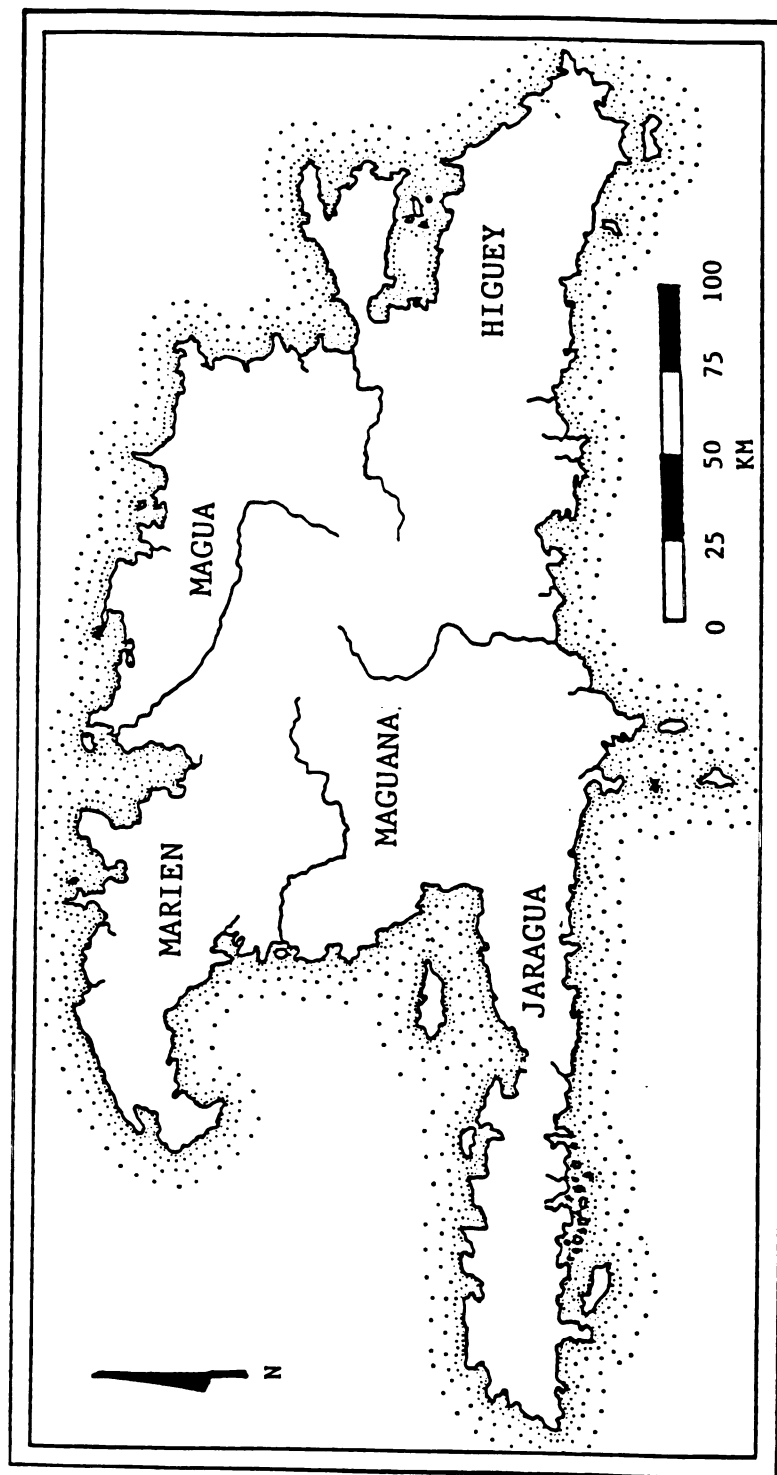


Figure 16. Arawak Cazicazgos as Perceived by the Spanish (after Floyd 1973:11)

Descriptions of contact-era Arawak villages are limited but give us some idea of their plan and constituent parts as a reflection of Arawak social organization.

Houses for the naborias were circular in plan and cone- or bell-shaped in profile. Wooden posts served as the main structural members for the houses. These were covered with an unplastered or daubed wattle of cane, thatch or palm. Given Hispaniola's mild climate, the houses were used only for sleeping and, as such, were sparsely furnished with hammocks and some personal belongings.

These houses were large enough to shelter an extended family and were loosely grouped by clan, making true streets nonexistent. These clan neighborhoods were grouped around a central plaza which doubled as a ball court and on which faced the house of the cacique. The houses of caciques were constructed of the same materials as those of the commoners but were rectangular. These structures were the largest buildings in a village and were sometimes raised on mounds (Deagan 1987a:674-675; Moya Pons 1976:19-20; Sauer 1966:62-64). Recent archaeological excavations at the alleged site of Columbus's first landfall at the village of Guacanagari, district of Marien, cazicazgo of Bainoa, reveal a settlement that is over 300 meters in circumference with a central plaza and platform mound (Deagan 1987a:674-75).

The lack of extensive archaeological research, combined with the impermanent nature of the materials used in the construction of these villages, makes an exact description of settlement pattern nearly impossible. Even though the

exact locations of the majority of contact-era Arawak villages are unknown, we can make some generalizations about the settlement pattern from documentary sources.

Some researchers have reasoned that Arawak villages were located away from the coast as protection from the raids of their fierce Carib neighbors to the south (Morison 1942:293-294). Although there is truth in the observation of the Caribs' prowess as seafarers and raiders, these occasional forays cannot be cited as the reason for Arawak settlement inland from the coast (Deagan 1985a:283; Severin 1970:11). The explanation may instead be in the nature of Arawak horticulture.

Unlike the Caribs, who were hunters and gatherers, the Arawaks based their economy on root horticulture with supplemental fruits of the field and sea. Root crops, which reproduce vegetatively, require certain environmental settings to ensure the survival of the plants from which cuttings can be made for the following year's crop. Lands immediately adjacent to the coast are known the world over for the general poor quality of the soils. In the Caribbean basin the danger to planted crops along coast is further compounded by the annual hurricane season and drought in marginal areas (Sauer 1966:68; Severin 1970:10-11). The more sedentary Arawak villages, surrounded by their precious and labor intensive conucos, were sited away from the coast because their economic focus was on food production rather than food procurement (Floyd 1973:15,21,28,61; Morison 1942:427).

Columbus met the cacique Guacanagari on his first landfall on the north coast of Hispaniola. This low-ranking chief was carried on a litter from his initial meeting with Columbus on the coast "to his residence which lay some miles inland" (Morison 1942:290). Guacanagari's contemporary, the great cacique of the cazicazgo of Bainoa, Behechio, lived at Xaragua (Jaragua) inland from the coast (Las Casas 1974:49; Sauer 1966:51,153). From these examples alone, it should be clear that the Arawak settlement pattern had an inward-looking, terrestrial focus rather than looking to the coast and the horizon beyond as did their chief antagonists the Caribs and the Spanish. Thus, it should come as no surprise that the largest Arawak population concentrations occurred near the best farm lands located in the well watered north, the southeast lowlands, and the irrigated southwestern periphery.

On December 18, 1492, Columbus wrote to Los Reyes Catolicos about his meeting with the cacique Guacanagari and his people. A passage from this letter would color the subsequent European colonization of the New World.

Your Highness may believe...that this island and all the others are as much yours as Castile, that here is wanting nothing save a settlement, and to command them to do what you will. For I with these people aboard, who are not many, could overrun all these islands without opposition; for already I have seen but three of these mariners go ashore where there was a multitude of these Indians, and all fled without their seeking to do them ill. They bear no arms, and are all unprotected and so very cowardly that a thousand would not face three; so they are fit to be ordered about and made to work, to sow and do aught else that may be needed, and you may build towns and teach them to go clothed and to adopt our customs (Columbus in Morison 1942:290).

The later massacre of the survivors of the Santa Maria at the town of Navidad would prove the Tainos not to be the passive folk Columbus claimed. Caonabo of Maguana, paramount chief of the province of Cayabo, would not suffer the arrogance of the castaway Spaniards. His power would not be broken except by force of arms at the battle of Santa Cerro in 1495 (Bell 1981:11; Floyd 1973:21). The other provinces would similarly be reduced by force of arms, sometimes combined with treachery. By 1504, with the capture of Higüey, the Spanish had wrested control of the island from its aboriginal masters, the caciques, but with far less ease than Columbus had predicted (Floyd 1973:61-62; Las Casas 1974:45-52; Sauer 1966:149).

Under the Spanish, the surviving Arawak commoners would pass through three stages of domination. As the island was being reduced from separate indigenous provinces, those who were already under Spanish control were forced to provide regular, involuntary tribute. Since tribute was a part of precontact chiefdom society, this was not especially onerous as first conceived.

The tribute system would give way when, in addition to demanding gold, dyewood and food, the Spanish demanded the people. In 1496, the Spanish treated the natives as benign subjects of the crown to be manipulated at will and without any consideration for their rights. Under this policy, known as repartimiento, the aboriginal population was allotted to the Spanish colonists or crown to do with as they saw fit, be it enslavement or the wholesale movement of

men to work the mines (Bell 1981:13; Floyd 1973:28, 29,33, 35,64; Sauer 1966:96,99,150).

In 1504 repartimiento gave way to the encomienda system (a grant of land and service from the crown). Under this system, the Arawaks were still assigned to certain Spanish individuals, usually for labor in the mines or fields, but as subjects of the crown, they were given rights as well which included proper care, work limitations and proper wages (Sauer 1966:150). In theory under this system, any encomendero (a grantee) who failed to treat the king's subjects properly could lose their encomienda. In fact however, such requirements were rarely enforced (Bell 1981:13).

The rapid wholesale collapse of the Arawak culture can be attributed to a variety of factors, including disease and the inherent internal weaknesses associated with its organization, a weakness in which disaffected peripheral constituent chiefdoms refused to unite to actively support the whole or simply refused to act against the invader. In Hispaniola, the Spanish found peripheral chiefs who would support their cause, thus aiding the collapse of the society from within.

In summary, the Arawak were a sedentary, horticultural people living inland on the richest lands of Hispaniola. Nobles and commoners, known respectively as nitainos and naborias, lived under the control of the caciques or chiefs. Each village was part of an hierarchy within a district

which in turn was part of a larger province or confederacy called a cazicazgo.

Because of their reliance on root horticulture the Arawak sited their villages near the more fertile inland areas of the island. Social organization was reflected in the size and importance of these towns within each district and cazicazgo. The hierarchical nature of this organization meant that the disruption of any part of the whole had ramifications both above and below through the ties of reciprocity and redistribution.

The rapid collapse of this society, in just over a decade from the date of contact and its extinction after half a century were as astounding to contemporary observers such as Las Casas as to modern researchers. In fact, however, the nature of the social organization held the seeds of its own destruction. On the periphery, the limits of redistribution-based reciprocity can stretch too far for kin-based fealty to play a major role in the support of the larger political divisions. In Hispaniola, these limits had been reached to the point that peripheral segments were willing to support the Spanish against the caciques. This, combined with warfare, the Spanish introduction of lethal diseases, the disruption of the subsistence system, and overwork brought the Arawaks' demise.

The Spanish Colony

The late fifteenth and early sixteenth century Spanish occupation of Hispaniola went through four distinctive

phases of physical, economic and political expansion that are roughly comparable to those discussed by Meinig (1986) and Taaffe et al. (1963). (See Chapter 2). Although no tightly-dated lines of demarcation can exactly separate these phases, the sixteenth century make-up of the oldest Spanish colony was in place by 1520, less than thirty years after Columbus's first landfall.

The European settlement of Hispaniola in the fifteenth and sixteenth centuries best fits our definition of a colonial extractive cosmopolitan frontier where the exploitation of local resources is the primary function. Its rapid evolution and transformation from initial exploration to cosmopolitan plantation colony is best seen against the larger expansion of the empire into the New World and the colony's response when faced with a huge investment in physical plant and falling returns from its initial trajectory of investment and growth.

Phase I

Prelude -- 1492-1493

Before he returned to Spain, Columbus explored Hispaniola's north shore in December of 1492 and January of 1493. These investigations revealed some of the island's natural resources, including anchorages for removing items perceived as Asian spices and medicines and the unmistakable presence of copper and gold (Morison 1942:282,293,288,311).

This first voyage was to be one of discovery and nothing more until the loss of the Santa Maria on Christmas day 1492 made the return of the entire crew an impossibility. The vessel was lost on a reef on a shallow bay west of the good harbor near the present location of Cap Haitien, Haiti. From the remains of the Santa Maria, Columbus constructed the settlement-fortress named Navidad (Figure 17). Its willing inhabitants were the crew of the lost vessel, who envisioned it as their means to a quick fortune before the gold rush that was certain to follow Columbus' return to Spain. These men were to continue the bartering started by the fleet, find the source of the region's gold and continue the good relations that Columbus had enjoyed with the local Arawak cacique Guacanagari (Deagan 1987a:672-675).

Columbus left Navidad on January 3, 1493, and headed west. In landing at the Cibao-Vega region surrounding the Rio Yaque del Norte, Columbus found the principal source of gold he sought in Hispaniola as well as the island's richest lands and one of its centers of aboriginal population (Morison 1942:309). Another week brought the Admiral into Samana Bay on Hispaniola's east coast and from there back to Spain.

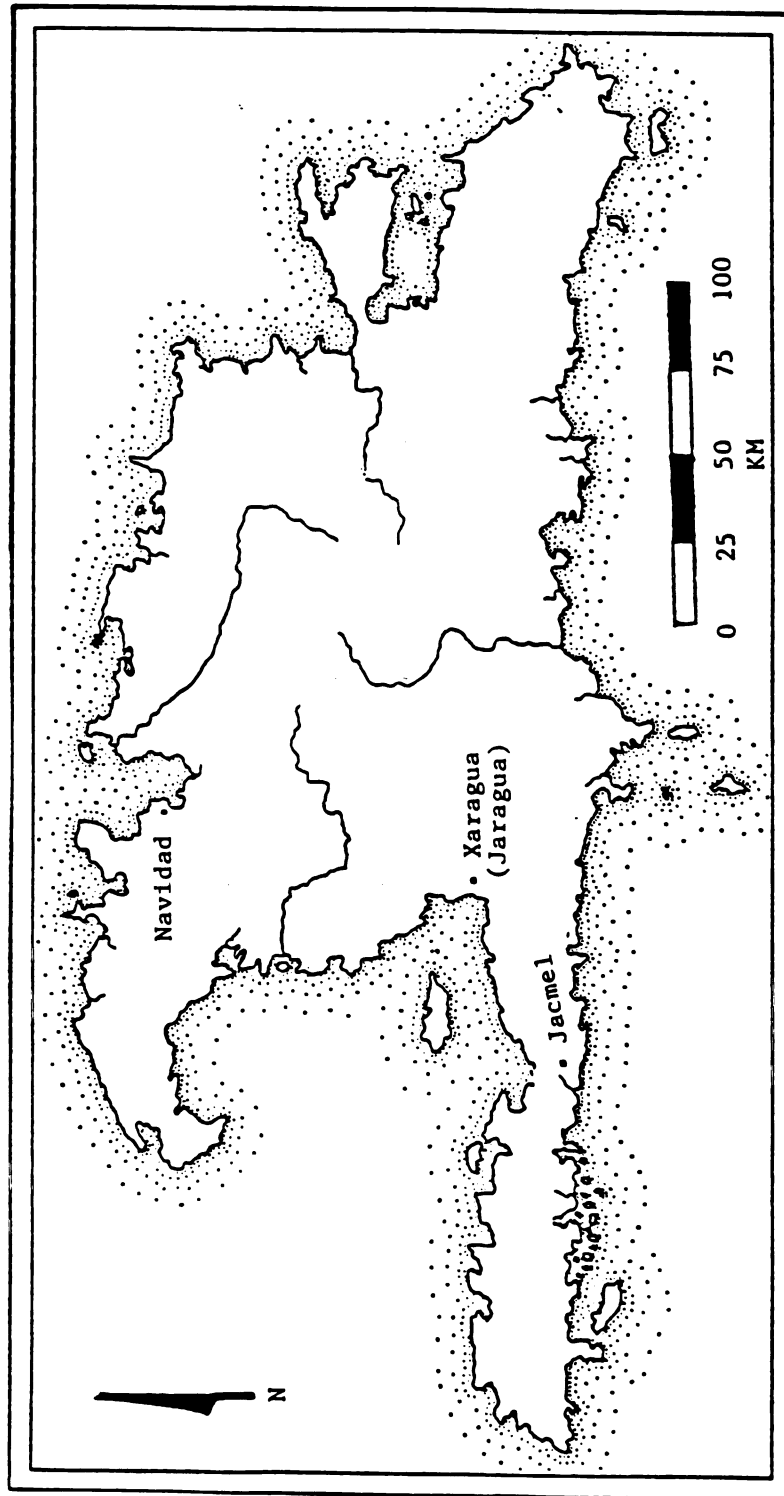


Figure 17. Phase I -- Prelude, 1492

Phase II

Barter and Plunder -- the Commercial Outpost 1493-1502

In November of 1493, Columbus returned to Hispaniola and began the second phase of the island's settlement history. During this phase, explorations of the island continued and revealed the richest mining regions for gold, copper and salt as well as stands of dyewoods and aboriginal population concentrations as sources for workers in these enterprises. When Columbus's second fleet of seventeen ships and 1500 men anchored off Navidad, they found the fort abandoned. The local cacique Guacanagari reported that the Spanish sailors had angered the local paramount chief Caonabo who, in turn, had destroyed the settlement and its inhabitants. With no reason to remain at Navidad, Columbus sailed westward to the Cibao-Vega region where he had earlier found gold sources and fertile lands for exploitation. There, in January of 1494 on a shallow bay, he founded Isabela (Floyd 1973:22; Figure 18).

Named for Spain's queen, Isabela served as the capital and main entrepot for the colony until the turn of the century. The settlement was laid out on the Bajabonico River adjacent to an Arawak village. A town of some two hundred wood and thatch houses was constructed around a central plaza where stood Columbus's stone home, warehouses and, no doubt, the first church in the New World (Floyd 1973:17,22).

Sustenance for the town was accomplished with imported foods, experimental plantings of Old World crops, such as

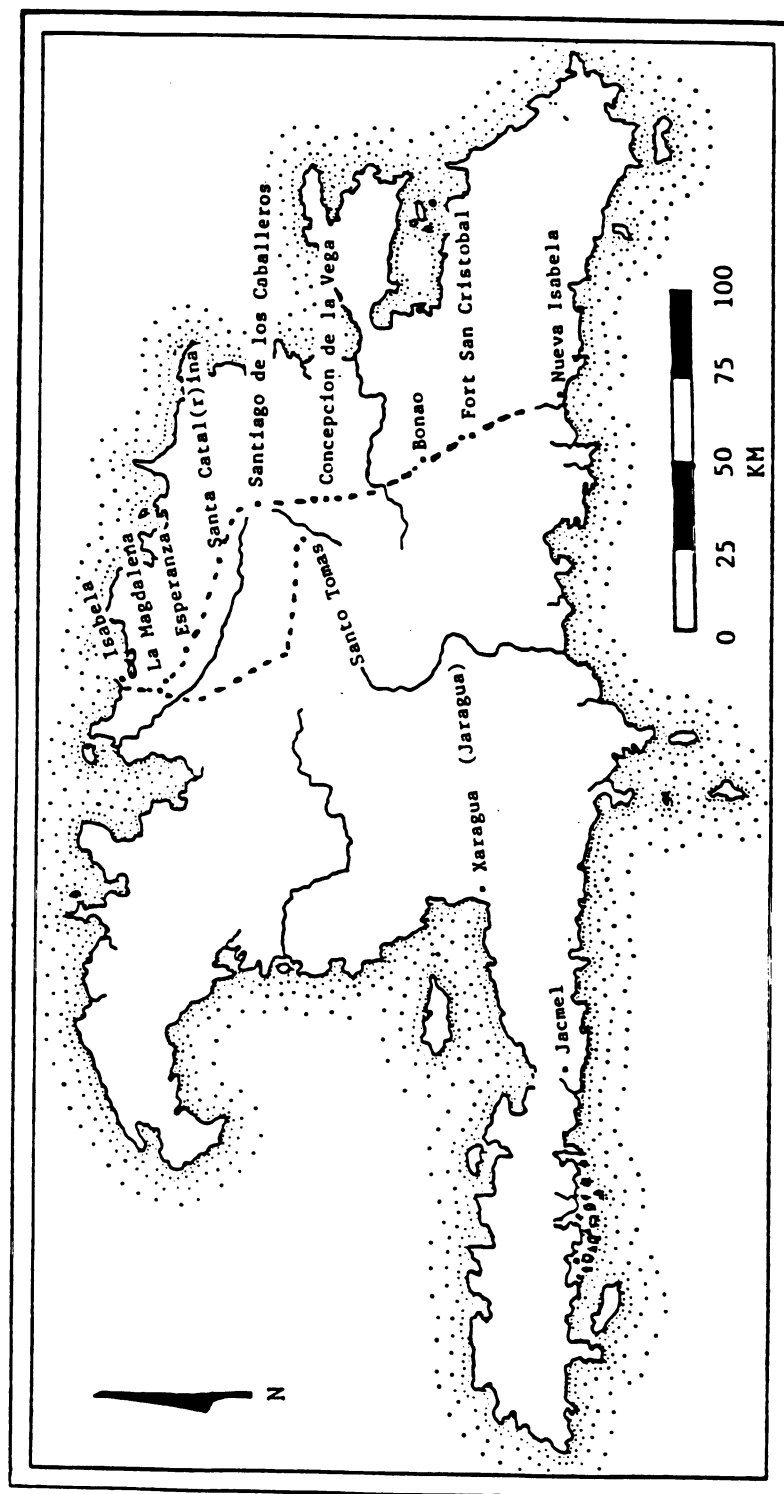


Figure 18. Phase II- Barter & Plunder/Commercial Outpost, 1493-1502 (after Sauer 1966:94)

wheat, chickpeas, melons, onions, radishes, salad greens, grape vines, sugar cane and orchards, in addition to the foods supplied by the local aboriginal population (Crosby 1972:67; Floyd 1973:23). Columbus also brought animals to feed and power the community. These included dogs, horses, pigs, cattle, chickens, sheep and goats. With the lack of predators in Hispaniola, all of the animals reproduced at previously unknown rates. Only the sheep were said not to prosper in the tropics. The lack of a New World sheepherding/wool industry has been attributed to a climate said to be unfavorable to sheep. Yet, the reproduction rates were as high as those for other animals (Crosby 1972:74-96; Sauer 1966:156). The answer is more likely economic than biological. We noted in Chapter 3 the extent of the meseta, a major wool-producing area, in Spain in the fifteenth and sixteenth centuries. The presence of cotton in the New World tropics, plus the power of mercantilism in which the protection of homeland industries was central, made the keeping of sheep in the New World an unprofitable venture. This was to remain true until the growth of population and empire on the American mainland outstripped Old World production and made sheepherding in North and South America profitable.

Because this early Spanish population was entirely male, they looked to the local population for spouses and concubines (Deagan 1985a:289,304-305 Floyd 1973:23,59). These unions resulted not only in the production of a mestizo population but also in kinship ties between the

populations. In a kin-ordered mode of production, such as had existed in prehistoric Hispaniola, liaisons between Spaniards and Arawaks served to legitimize the reformulated hierarchical social order under Spanish control.

While the expansion and role of Old World plants and animals is central to our understanding of conquest culture and the Europeanization of the New World through the colonization gradient, these aspects were largely unconscious but expected sidecars to the cause celebre for expansion -- gold. Based on the Portuguese factoria system, the initial Spanish penetration into Hispaniola was a corporate venture, sponsored by the crown and its supporters, wherein the settlers were wage earners in the employ of the investors (Floyd 1973:17-18).

From the town of Isabela, a series of fortified factorias led into the interior of the island. Constructed at one day's march intervals, nine blockhouses were built across the eastern interior of Hispaniola. These factorias were built adjacent to existing Arawak villages so as to be able to barter with them for both gold and food (Floyd 1973:24,28-30,34). Later in the decade, as bartering gave way to the tributary and repartimiento systems, these settlements came to be centers for mining and internal slaving (Floyd 1973:28,56).

One of the last settlements founded was Nueva Isabela on the Ozama River on Hispaniola's southern coast. While a major gold strike brought the Spaniards to the area, it was the good harbor, fertile lands, large Indian population, an

estuary rich in fish, shellfish and fowl, and the wind and sea that favored ships moving across the Caribbean that encouraged them to stay (Floyd 1973:34,44; Sauer 1966:92). By 1500 the entrepot and capital of Isabela was abandoned after hurricanes wracked its open harbor; its functions were moved to Nueva Isabela, which was then renamed Santo Domingo (Bell 1981:12; Floyd 1973:44).

After less than a decade, the gold supply of the eastern half of the island had begun to dwindle. The island that a boastful Columbus said had "more gold than iron in Biscay" was being written off by the Spanish as good only for provisions in light of the ongoing discoveries in the New World (Floyd 1973:48). In reality, a second rush was about to unfold which would place the entire island under Spanish domination. This expansion would be built on the discovery of copper, salt and dyewoods in Haiti ("a rough wild region" in Arawak) and of major exploitable population concentrations in Xaragua, Jacmel and other locales (Floyd 1973:61-63; Sauer 1966:45,92,99).

Phase III

Imperial Imposition to Plantation, 1502-1520

The third phase of Spanish expansion in Hispaniola marks the collapse of any aboriginal autonomy on the island and the transitional period between the primary focus on gold extraction and the later focus on sugar production. Many of the factorias established during the second phase were abandoned at this time for the new mining centers and

settlements in both eastern Hispaniola and Haiti (compare Figures 18 and 19).

The fifteen settlements that mark this phase were, in essence, an official statement of imperial control. Ovando, the crown's representative, was instructed to inspect existing settlements and to establish others on the island according to the quality of the land, place and people "because it is our pleasure that the Christians living in said island or who may live there in the future shall not live dispersed and that none shall live outside of the places to be founded..." (Sauer 1966:151). These were officially incorporated villas with coats of arms and city governments (see Chapter 3; Sauer 1966:151). Evidence from contemporary drawings (e.g., Figure 20; Santo Domingo; Hoffman 1980:156); extant cities (e.g., Santo Domingo, Puerto Plata, Santiago de los Caballeros, and Azua); and archaeological evidence (e.g., Puerto Real and Concepcion de la Vega; Deagan 1987b:6-7; Hamilton 1981:30; Willis 1984:348) suggests that the majority of these settlements were laid out following the Spanish grid plan. Most houses were in the architectural pattern of southern Spain, where the structures were built immediately adjacent to the street. According to an 1514 census, these villas were inhabited by 664 Spanish men with 102 Spanish and 51 native wives. These few representatives of Spain controlled, through the encomienda system, 22,326 Arawaks (Sauer 1966:199-201).

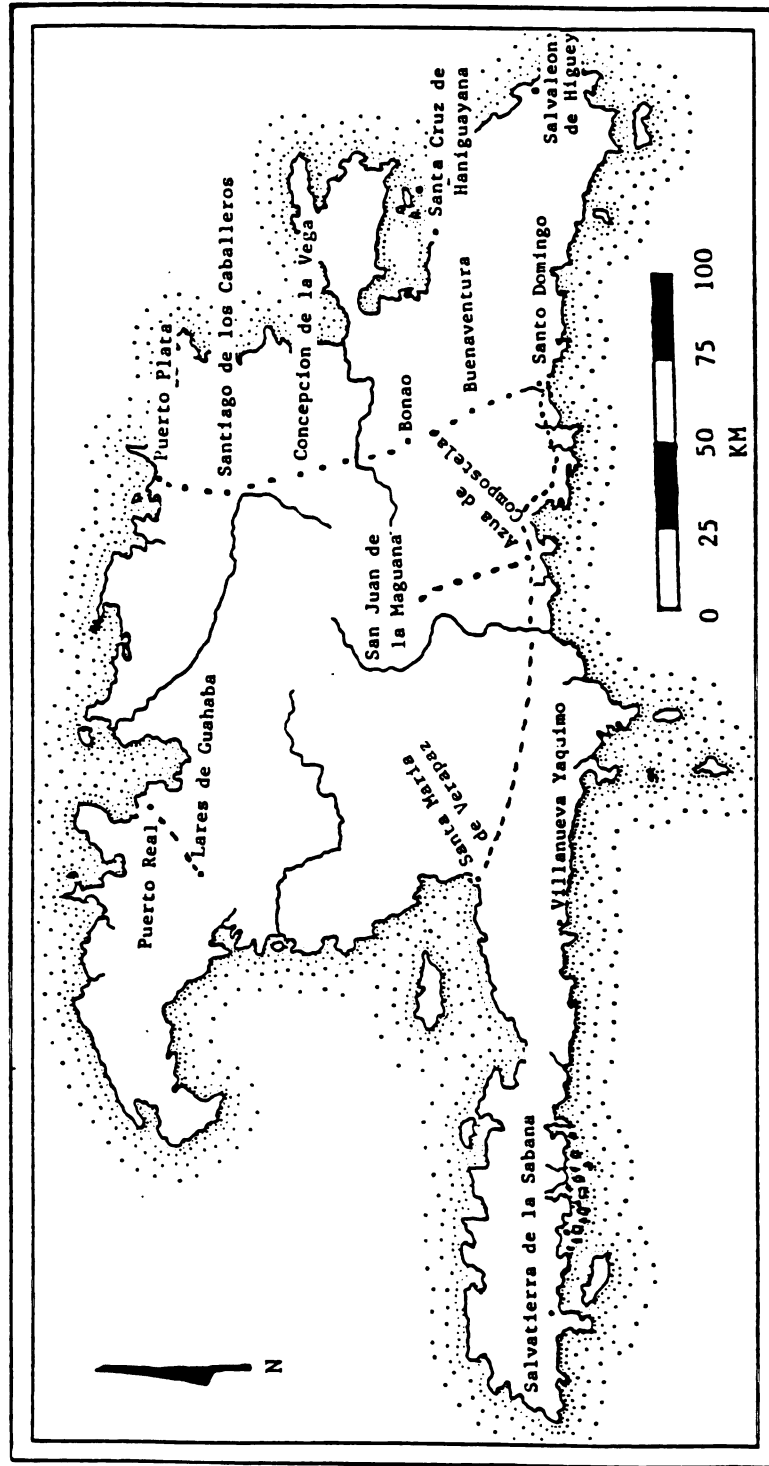


Figure 19. Phase III--Imperial Imposition to Plantation, 1503-1520 (after Sauer 1966:153)

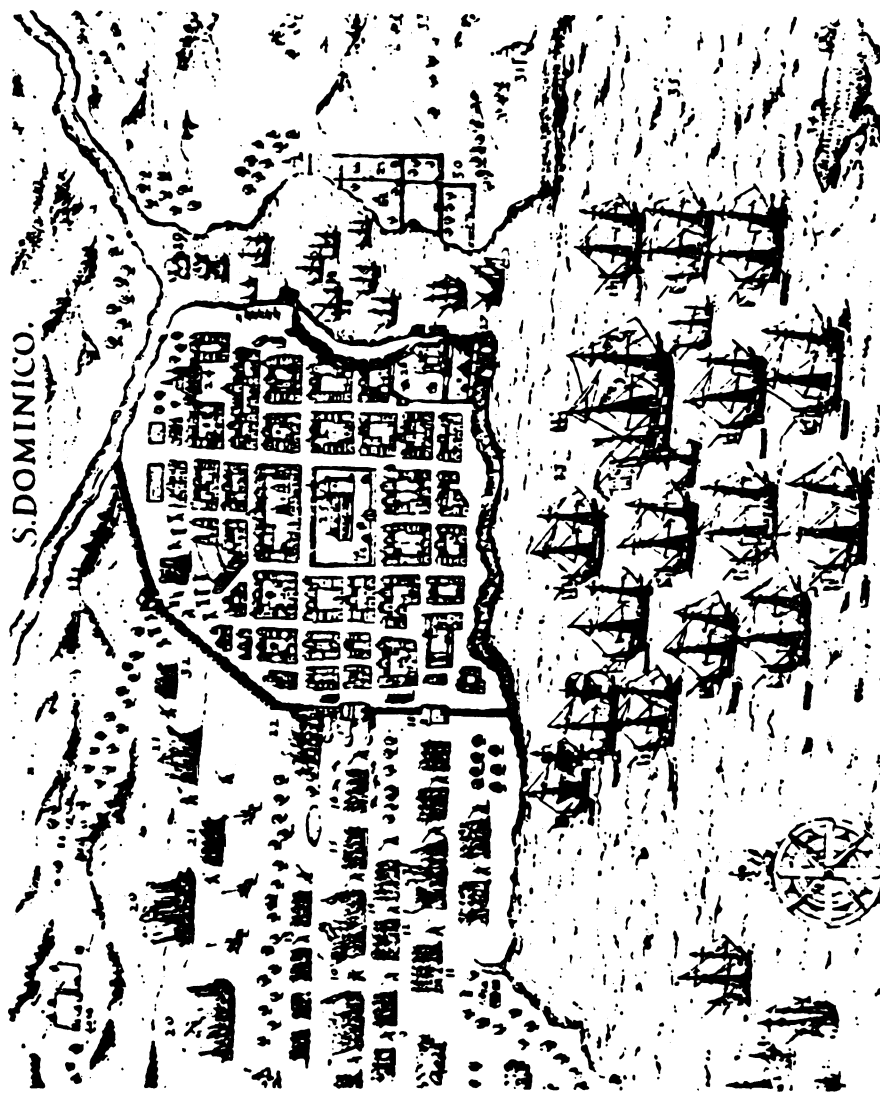


Figure 20. Santo Domingo's Grid Plan in 1586 (by permission of the British Library)

In addition to these formal similarities, each villa stood adjacent to or in the vicinity of aboriginal population concentrations which could be exploited for food and labor under the newly instituted encomienda system. Perhaps the most crucial observation to be made about these new towns is their location on the coast near adequate harbors. At this time overland trails were limited to those founded during Phase II between Santo Domingo and Puerto Plata and new ones from Santo Domingo to Azua and San Juan and from Puerto Real inland to Lares de Guahaba. This lack of roads is understandable, given Hispaniola's rugged terrain. In a country that was still operating on 1500-year-old roads, Spain saw that profits were to be made in coastal trading and communications, investments in external cosmopolitan control with a focus on the needs of the motherland.

The following briefly summarizes these new towns, their primary functions, and their populations in 1514 during this phase (compiled from Floyd 1973:63,66 and Sauer 1966:153-154, 199 unless otherwise noted):

1) Santa Maria de Verapaz - Established on the coast near the Arawak town of Xaragua, this villa was a rich food and dyewood producer. There were 48 Spanish men with six Spanish and six native wives.

2) Salvatierra de la Sabana - This port town was founded on a swampy plain that was hospitable to livestock, agriculture and the exploitation of various seafoods. The productivity of this town made it a popular port for supply vessels and for the mines. Twenty Spanish men with two native wives comprised the population of this town.

- 3) Villa Nueva de Yaquimo - Built near the Arawak town of Jacmel, Yaquimo was the principle port for the export of brazil and other dyewoods (Sauer 1966:92). Yaquimo was home to 32 Spanish men, two Spanish women and one native wife.
- 4) Azua de Compostella - Port for San Juan de Maguana, this rich agricultural area was also important in the mining of salt, the universal preservative, from the adjacent Enriquillo-Cul-de-Sac Depression. By the end of this Phase, Azua would be part of the developing sugar cane district (Sauer 1966:209-211). Twenty four Spanish men and four women lived in this villa.
- 5) San Juan de la Maguana - Built near the paramount cacique Caonabo's village, this fertile region fed the mines with its produce. Overseeing this production were 41 Spanish men, one Spanish woman and two native wives.
- 6) Lares de Guahaba - Named for Ovando as the Comendador de Lares and for the adjacent Arawak village of Guahaba, this inland town was the scene of a copper strike as well as a major aboriginal population concentration. At this pueblo were two Spanish women, one native wife and 22 Spanish men.
- 7) Puerto Real - Port for Lares with some copper mining, this town near the ruins of Navidad was central in both the internal and external slave trade. Puerto Real was home to 38 Spanish men with three Spanish and two native wives.
- 8) Santa Cruz de Haniquayana - Another agrarian town founded to supply food and labor to the mines.
- 9) Salveon de Higuey - This agrarian port town, like its neighbor Santa Cruz, supplied food and labor to the mines until its aboriginal population ceased to exist and its Spanish population had moved to Puerto Rico. This settlement had 16 Spanish and five native wives for the 41 male residents.
- 10) Puerto Plata - The main port for Hispaniola's north coast, Puerto Plata replaced Isabela and served to funnel supplies of food and labor to the mines. In this small settlement were twenty Spanish men and three Spanish and four native wives.
- 11) Santiago de los Caballeros - One of the original factorias of Phase II, this inland mining town was also rich in agricultural and livestock production due to its location in the rich Cibao-Vega region.

12) Concepcion de la Vega - Another old factoria settlement in the fertile Vega district, this gold mining town was also a mint. The gold was a magnet for population. Here 68 Spanish men lived with their seven Spanish and seven native wives.

13) Bonao - The last of the factorias, Bonao was rich in livestock and other comestibles. This valuable land attracted 42 Spanish men with four Spanish and four native wives.

14) Buenaventura - A new villa on the main inland trail, Buenaventura was built on the Haina River and was home to a mint as well as mines. Like the mining town of Concepcion de la Vega, Buenaventura boasted a "large" population of 62 Spanish men with nine Spanish and seven native wives.

15) Santo Domingo - Reestablished by Ovando on the west bank of the Ozama River after being destroyed by a hurricane, Santo Domingo was the primate city serving as the capital and leading port town on Hispaniola. Its preeminence was reflected in its population size. As early as 1514 it was home to the largest concentration of Spaniards on the island. Here there were 28 Spanish and five native wives for the 164 Spanish male residents. The town's importance is attributable to several factors including: a large harbor for local and overseas trade; terminal point for the main overland trail to the gold fields; fertile soils; and a rich estuary environment. Through time Santo Domingo would be home to a ship-building industry, the center for sugar production, the highest courts for the island, a mint and royal treasury, a cathedral, the seat of the royal Audiencia or supreme court, a convent, a brothel and an university (Boxer 1975:51; Moya Pons 1976:67).

These fifteen towns can be divided into inland and port towns. For the former, other than San Juan which was established to control an Arawak town, the five inland towns were copper and gold mining towns. Harbor towns can be divided into those on the terminus of inland trails and solitary ports. Given the nature of all of these towns as suppliers of food and labor for the mines, only Puerto Real, Puerto Plata and Santo Domingo are distinguishable due to their position as terminals for inland trails to the mines.

These can further be divided into the more important gold and less important copper fields, leaving Puerto Plata and Santo Domingo. The question of why Isabela's physical plant was abandoned and its functions transferred to Puerto Plata and Santo Domingo is important here. The main reason lay not in internal qualities but in their positions vis-a-vis the rest of the New World and the prevailing trade winds. Santo Domingo lay closer to the "main street" of the trade that was developing between Seville and the Spanish New World mainland colonies (Figure 21). As such, Puerto Plata and the rest of Hispaniola's north shore settlements were relegated to a secondary status as out of the way ports and, therefore, too expensive to maintain for regular overseas communication.

The housing styles in these new Phase III towns tell us something about the social hierarchy. At this time, stone construction was rare except in Santo Domingo. Wherever masonry structures were built they were signs of power -- the power of the crown, the church, and the wealthy (Floyd 1973:73,85,221; Sauer 1966:200). Archaeologists have found that the majority of housing during this expansion phase was of wood and thatch. While laid out on the planned, gridded lots, these structures were circular in plan and, therefore, more akin to the dwellings of the local Arawaks than the rectangular structures of Old Spain discussed in Chapter 3 (Willis 1984:247). While it may be argued that the settlers were merely responding to Spanish town planning ordinances that stated that, following gridding, "one should make their

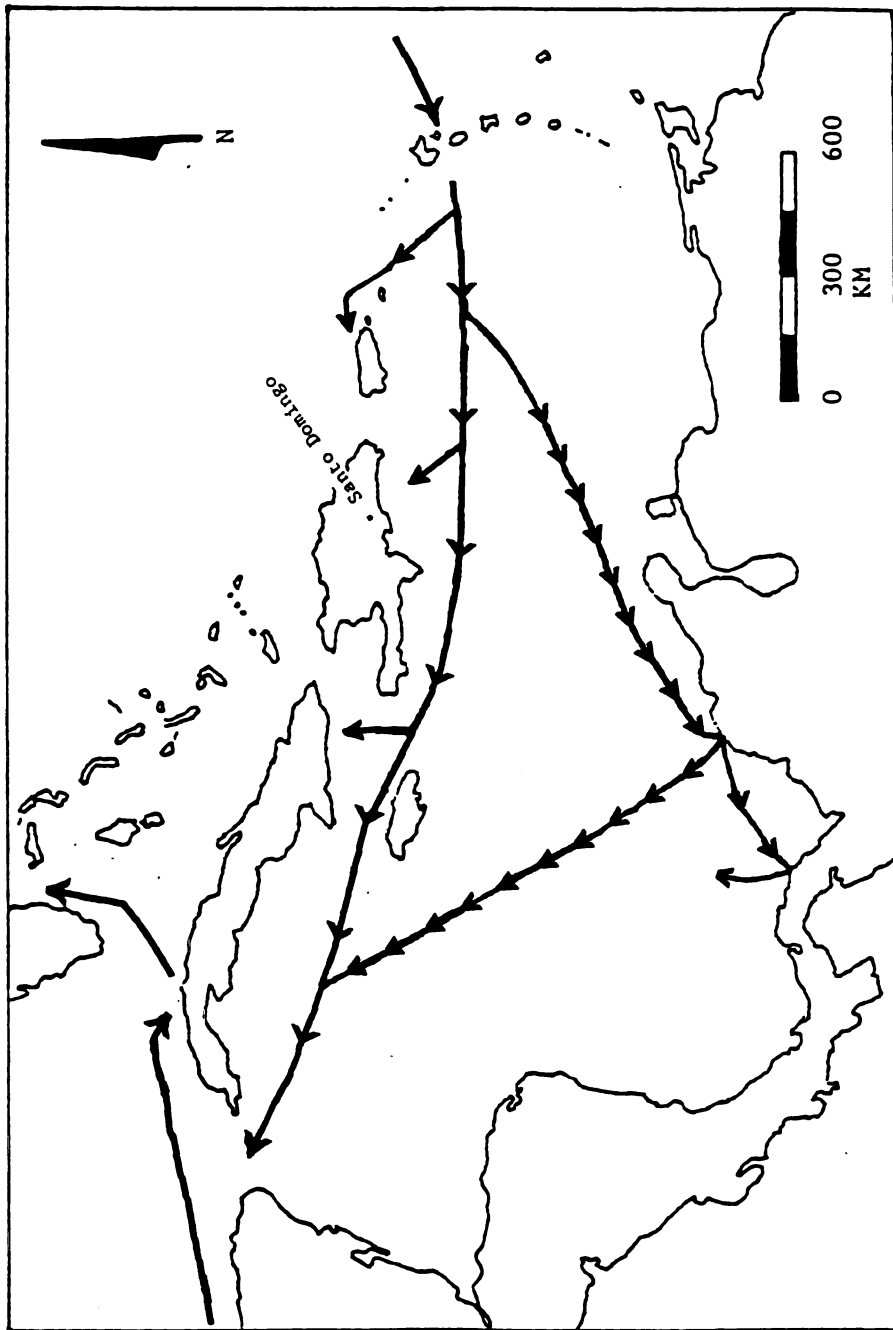


Figure 21. Route of the Spanish Convoy System--A "Main Street" (after Skowronek 1984)

huts of easily available local materials, so that they may have shelter...", the form of these structures perhaps tell a more poignant story of Spanish planning and direction being carried out by native workers (Crouch et al. 1982:16). This early circular housing was to give way to the rectilinear housing of Old Spain by the end of this phase (Ortega 1982; Willis 1984).

Phase IV

Plantation, Contraction and Stabilization, 1520-1570

At the beginning of Phase IV in 1520, the Spanish New World empire had grown far beyond the confines of Hispaniola to include the islands of Puerto Rico, Cuba, Jamaica and parts of modern Venezuela, Panama and Mexico. By the end of this Phase, Spain's presence would be felt from Labrador to Tierra del Fuego -- an expansion that had repercussions on Hispaniola (Figure 22; Lockhart and Schwartz 1983:84).

Territorial expansion encouraged emigration not only by Old World Spaniards but by many residents of Hispaniola. As the gold resources in Hispaniola began to dry up and new strikes were made in the new territories, many citizens of Hispaniola's villas joined in the rush (Floyd 1973:223-232; Moya Pons 1976:72,75,77).

The Spanish were not alone in this exodus from the island. Already we have seen the precipitous drop in the Arawak population of Hispaniola and discussed their demise vis-a-vis the impact of disease and servitude, but another

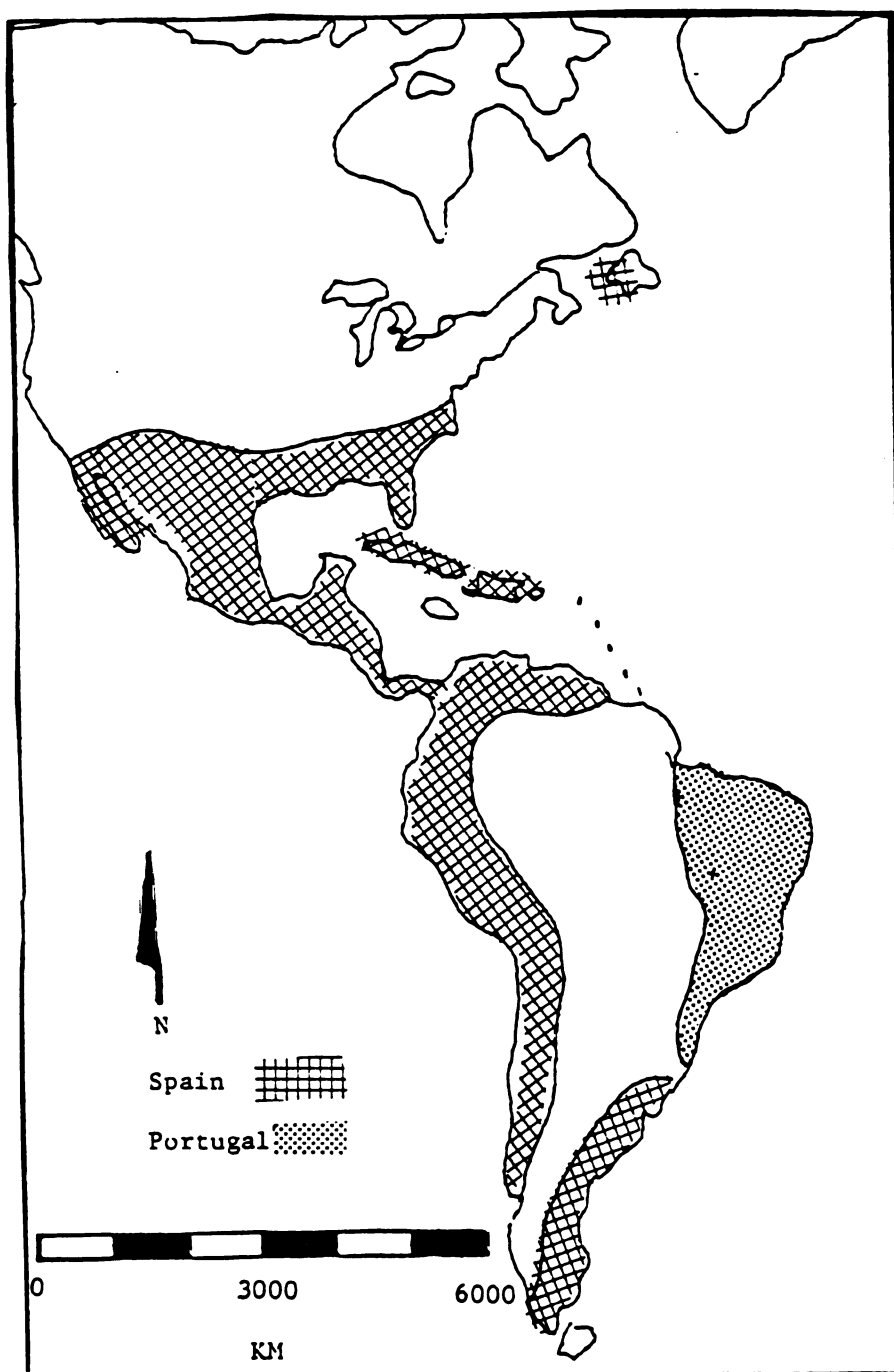


Figure 22.

Spanish and Portuguese America in 1580

factor was simple migration to Cuba and other surrounding islands (Floyd 1973:125). The end result of this population drop was the abandonment of many of the villas that had been established in the island's third Phase when their sole purpose -- food and labor for the mines -- was no longer needed (Figure 23).

If Hispaniola's first three phases can be characterized as a rush for precious metals, the fourth and by far longest phase is best seen as a period of stabilization. As a part of a far flung mercantile empire, Hispaniola in Phase IV became a provider of exotic plant products to the cosmopolitan market. These products, such as sugar, cotton, dyewoods, indigo, cañafistula, ginger and other medicinal plants and spices, were joined by the less exotic but no less important trade in naval stores, tortoise shell, beef and beef by-products such as hides and tallow. Exports of these commodities between 1565 and 1587 yielded an average of value of 247,016.2 gold ducats per year. Of this amount a seven per cent averia or tax (17,291.12 ducats) was levied by the crown to help pay for the defense of the island and colonial shipping (Chaunu and Chaunu v.6,1956:992,998,1000,1002,1008,1017,1026, 1028,1031; V.7, 1956:142-143; Haring 1918: 59-95, 327-328; Hoffman 1980:255; Moya Pons 1976:67,78; Sauer 1966:208-209). As a point of reference, in Spain the average real wage per year was 108 maravedis at a time when 375 maravedis equalled a ducat (Hamilton 1934:278; Hoffman 1980:254-255). In a relative

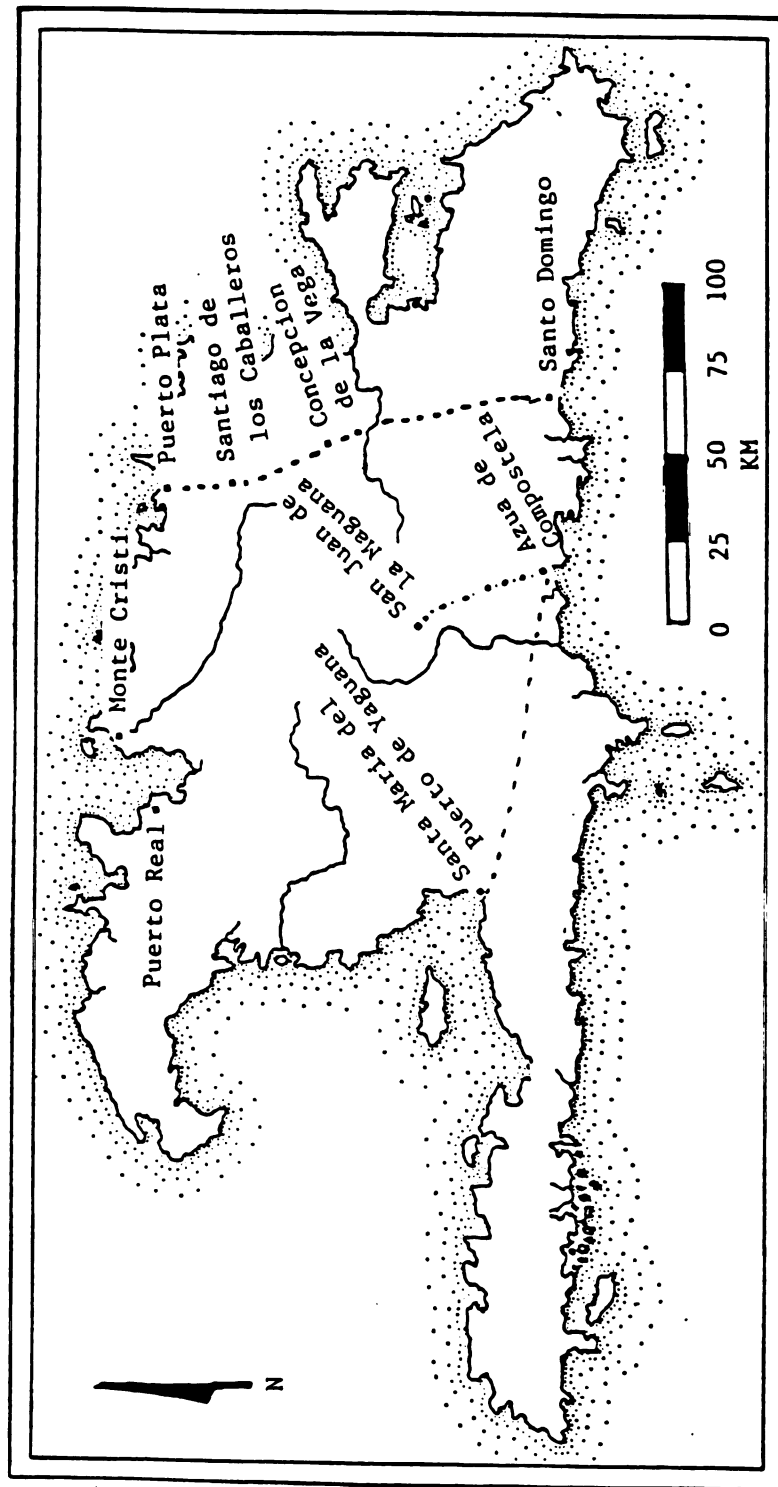


Figure 23. Phase IV--Plantation, Contraction & Stabilization, 1520-70 (after Wilgus 1943:215)

sense, in 1540 a dozen eggs cost 16 maravedis in Castile and Leon (Hamilton 1934:173,326).

The value of the island's produce is further underscored when shipping activity is considered. Between 1565 and 1587, 3100 ships cleared Spain for the New World and of this number 458 or 14.8% called at ports in Hispaniola (Chaunu and Chaunu 1956). Ninety-one per cent (416) of these stopped at the capital, Santo Domingo. Next in number were Puerto Plata, at the other end of the "gold trail" with sixteen vessels and Yaguana with fifteen. Only eleven other ships (2%) were documented for the other ports (e.g., Puerto Real, 3) of the island (Chaunu and Chaunu 1957,v. 6, n.6:497-520). Although it is certain that other undocumented vessels called at the island during this time, the primacy of Santo Domingo as entrepot and capital was evidently unchallenged.

Hispaniola's success as a colony rested on the productivity of its natives, and their numbers were dropping (Sauer 1966:201-203). To fill the labor vacuum for labor intensive mining and plantation industries, slaves were imported from Spain and Africa or, like the Lucayans from the Bahamas, were captured in the New World (Moya Pons 1976:80; Sauer 1966:159, 206-207). This new economy, based on the exploitation of tropical plants, was the birth of the New World plantation system. By 1546 the 5,000 Spanish inhabitants of Hispaniola were outnumbered by 12,000 black slaves (Moya Pons 1976:80). This shift to the plantation economy permanently altered the face of Hispaniola. The

island was deforested to create plantation fields and to provide fuel for the fires of the sugar mills. This, combined with the introduction of Old World animals, plants and peoples transformed Hispaniola into a tropical neo-Europe (Sauer 1966:210). Those villas that remained took on a greater degree of permanence with the construction of rectangular, stone structures for public and private, religious and secular use (Council 1975; Deagan 1987b:6-7; Ewen 1987; Floyd 1973: 221; Goggin 1968; Willis 1984).

Santo Domingo, as the capital, took on a very cosmopolitan air with the growth of the plantation economy. In addition to the Spaniards, mestizos, creoles, blacks, mulattos and zambos, there were Germans, Genoese and Portuguese, representing other parts of the empire, living in the city and the surrounding hinterlands. So successful were these venturers that, while their slaves were fed the New World domesticate cassava, they themselves lived in splendor and dined on imported Old World food and drink (Moya Pons 1976:77-78; Sauer 1966:157). This preference for European food reached out from Santo Domingo to Hispaniola's north coast to the cowtown and slaving center of Puerto Real (Ewen 1987; McEwan 1983; Willis 1984).

Iberian women, although few in number, played a prominent role in the Spanish empire. Enough Spanish women emigrated to maintain some of the less visible aspects (e.g., foodways) of Iberian culture in their creation of a Neo-Europe (Boxer 1975:35,39,99). The first Spaniards in Hispaniola did not find Amerindian women attractive yet, as

discussed above, marriages were encouraged as a means of legitimizing political control in the colony (Boxer 1975:52; Deagan 1985a:304-5). After the volatile boom-era ended in the 1520s, however, no respectable Spaniard wanted to marry an Indian nor a Mestiza. To validate his position in colonial society a successful Spaniard aspired to have an Iberian wife "as the legitimate female head of their household (Boxer 1975:38,85)." During this period of stabilization, the growing presence of Spanish women and the formation of Iberian families coincided with the shift from a focus on extractive mining industry to a focus on the production of Old World plantation domesticates. This led to a change in the nature of Spanish commerce from foodstuffs to finished goods, including ceramics (Lynch 1984:169; McAlister 1984:117,371).

Thus, between 1492 and 1570, Hispaniola experienced four distinctive phases from contact to the cosmopolitan plantation colony that epitomized its existence for the majority of the sixteenth century. The colony expanded and contracted to a mature stability in a period of thirty years in response to the expansion of the larger Spanish empire.

Summary

Hispaniola was an island rich in natural and human resources before 1492. Spanish capture of the island resulted in drastic changes to these assets. Spanish settlement pattern was initially dictated by both of these resources. Where even marginal ports coincided with access

to minerals and/or aboriginal population concentrations, villas were founded. As the expanding Spanish empire moved past Hispaniola to the mainland, the island's settlement focus shifted from the north coast to the south and centered on Santo Domingo. The crucial factor was Santo Domingo's location adjacent to the main street of communication into the New World from Spain.

Spanish colonists transformed Hispaniola into a tropical Neo-Europe. This colony was populated with Old World people, animals and crops. It functioned as a producing cosmopolitan plantation colony based on the extraction of exotic produce for a mercantilist mother country and her trading partners. In the creation of this Neo-Europe, most of the overt symbols of Spain were imported. These included Roman Catholicism, mercantilism and centralized power under a direct representative of the crown. These aspects of Iberian culture were physically manifested in the official incorporation of villas and in the construction of religious, governmental, and high status residences on the towns' central plazas. These central edifices were constructed of masonry, while surrounding structures were built of wood. Renaissance ideals for city planning were also imported. The gridiron plan, used in the Reconquista fortress towns of southern Spain, were here used to focus colonial attention on the continued primacy of the municipality and on the three central pillars of Spanish society -- the church, the crown and business (Foster 1960:34-49).

Architectural styles, like city plan, were commonly of southern Iberian extraction. This preference for styles from the torrid region of Spain may reflect a concession to the climate of Hispaniola, may result from the Andalusian origins of the majority of colonists during this era, or may be a by-product of the ubiquitous gridiron city plan for the Christian colonization of southern Iberia (Foster 1960:31).

The direct effect of the environment on the Spanish colonists was extremely limited. Hispaniola's lack of familiar plants and animals was dealt with by the importation of familiar Old World domesticates. These familiar plant and animal foods, both locally-produced and imported, formed the core of the Spanish diet. New World cultigens continued to be grown, in much reduced quantities, only to meet the needs of the aboriginal, and later the black slave populations.

Similarly, the long-term impact of the aboriginal population was extremely limited. Although, it is true that the earliest conquistadors married Arawak "princesses," lived in local-style round houses on their gridded streets and continued to grow some New World cultigens, the aboriginal population was, on the whole, incorporated into the lower aspects of the Spanish social hierarchy as near slaves.

After the boom era, a white, preferably Iberian-born, wife served as an overt status marker for the successful Spaniard. Mestizas and mulattas (the offspring of the initial conquest) served as second choices above the

remaining Arawaks and the recently arrived blacks (Boxer 1975:38,52,85). It was through the presence of Spanish women that the final and most important aspect of the preindustrial city the family --was reconstituted (Boxer 1975; Sjoberg 1955).

By the 1520s, the Spanish colonists had radically altered the natural and cultural environment of Hispaniola into a Neo-Europe. The important institutions of the church, the state and the market were represented in newly founded settlements whose focus and function were to supply desired produce to Spain. In Hispaniola the alien Precolumbian natural and cultural environment was transformed and ordered into a familiar, generalized Spanish cultural template. These generalizations included: the formal planning and organization of municipalities; the introduction of Old World domesticates; and the incorporation of the aboriginal population into the social hierarchy. Housing and sustenance were based on Old World antecedents. To this was added the growing presence and role of female colonists as essential to the representation of Iberian cultural ideals of family in Hispaniola. Each settlement bore these general traits to a greater or lesser degree, depending on its respective demographic composition and connections to the external world, which were based on its role in the colonial system.

CHAPTER 5

SPANISH FLORIDA

Introduction

As we noted in Chapter One, Spanish Florida was significantly larger than the present State of Florida (Sauer 1971:35). Running from about 37 N to 25 N latitude, Spanish Florida included parts of the coastal regions of the present states of Florida, Georgia, South Carolina, North Carolina and Virginia in addition to a nebulous area of the interior of the southeastern United States through which sixteenth-century Spanish explorers, traders and conquistadors blindly stumbled in quest of elusive specie and booty (Figure 24).

"Florida" first appeared on maps in 1502 and was named some eleven years later by Ponce de Leon when he landed north of modern St. Augustine during Easter week and found the land to be "verdant and adorned with flowers" (pascua florida) (Sauer 1966:189-190; 1971:25-28; Schlesinger and Stabler 1986:130). His name and claim endured, such that the Spanish considered most of the North American mainland east of Mexico and north of the Antilles as Florida and their private domain.

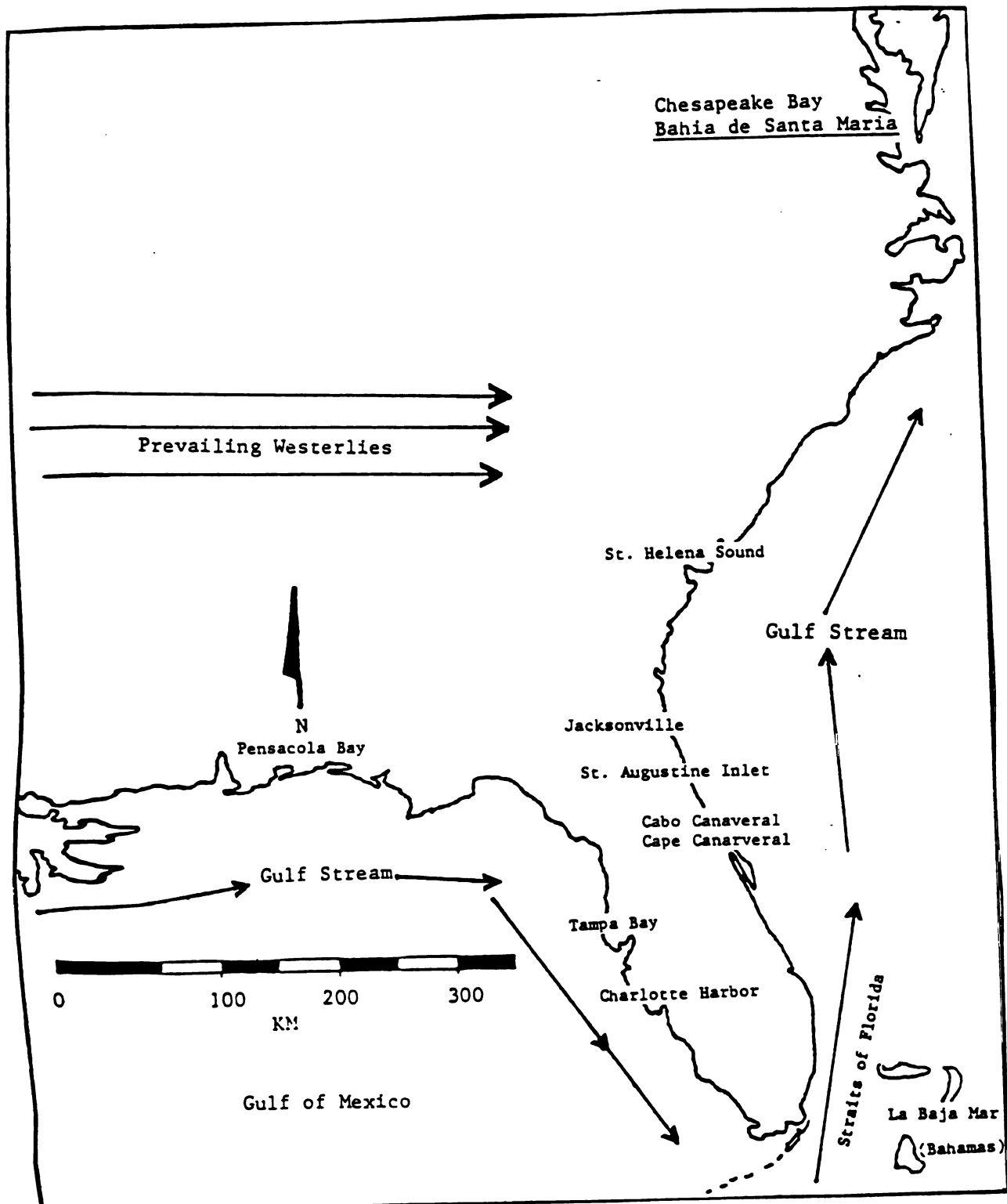


Figure 24.

The Area of Spanish Florida

If Hispaniola's story was one of wind, Spanish Florida's is one of wind and water currents. The coincidence of the Prevailing Westerlies with the warm northward-flowing Gulf Stream waters made the Straits of Florida and the Spanish Florida Atlantic seaboard the natural "main street" return route to the Old World.

Environment

The information in this section combines descriptions from contemporary sixteenth-century observers with those from later geographers. Such "hindsight" information as is provided from later sources is useful in determining not only the technological limitations of the age (in this case mineral prospecting) but also the direct role of politics and economics in determining the settlement trajectory of a colonial area.

The area encompassed by Spanish Florida is in the region known physiographically as the Coastal Plain Province. Extending inland 160 to 300 kilometers to the fall line (the present limits for the presence of brackish water), this province runs the entire length of the Atlantic seaboard and Gulf coast, from Massachusetts to Texas. Unlike the Iberian peninsula and Hispaniola, the Coastal Plain Province has little relief. With minor exceptions, altitudes are below 150 meters and the majority are below 30 meters (Fenneman 1938:1; Hunt 1967:137-139).

The Coastal Plain Province is a continuation of the continental shelf and, therefore, has varied in size over

the past 70 million years with fluctuations in sea level (Hunt 1967:163). Because of these changes and the very gradual slope of the plain onto the submerged continental shelf, rivers tend to be shallow and run perpendicular to the coast from the fall line. The submergence and emergence of the coastal zone since the Pleistocene has resulted in the recent deposits of unweathered and, consequently, weakly developed soils of peat, muck and sand. This coastal zone was the location of all of the sixteenth-century European settlements.

The coastal sands grade inland to the older, red clay soils that characterize most of the coastal plain in the modern South. Although this area was famous for its seventeenth-century plantations of tobacco and indigo and later nineteenth-century fields of cotton, the soils are thin and not very productive for intensive long-term agriculture without massive applications of fertilizers (Fenneman 1938:29-30; Hunt 1967:155).

The area of Florida south of modern Tallahassee differs from the rest of the Coastal Plain Province in the nature of its soils. Peninsular Florida is generally lower and has even less relief than the northern reaches of Spanish Florida. Underlain by thick deposits of shale and limestone, this unweathered and little developed area of thin soils is characterized by muck, peat and sand. Because of this setting and soils, drainage and fertilization is necessary for intensive long-term agriculture (Fenneman 1938:46-67; Hunt 1967:146-147; Miller and Parkins 1928:276).

Finally, the low relief of the coastal plain means that most of Spanish Florida south of modern Jacksonville, Florida, lacks good, protected deep-water harbors. Most of the Atlantic and Gulf coast is sand and mud-reefed in the form of barrier islands. The shifting nature of these islands, combined with the shallow slow-moving, sediment-laden waters of the province's rivers, creates swampy salt marshes or shoaling lagoons at the interface between the emerged and submerged portions of the continental shelf (Fenneman 1938:1-6). It was this lack of suitable, protected, deep-water ports in peninsular Florida that would eventually lead the Spanish away from the beaches of the peninsula to the broad and safe sounds to the north -- those associated with the modern cities of Jacksonville and St. Augustine, Florida, and Beaufort, South Carolina (Sauer 1971:192, 213-214).

Spanish Florida was not well-endowed with the mineral resources that sixteenth-century Spaniards desired. Today's highly valued deposits of natural gas, oil and phosphates join iron ore, sandstones, mica, ceramic clays and some copper and gold (Hunt 1967:157-160; Miller and Parkins 1928:319-321).

Of all of these mineral resources, the Spanish were most interested in the copper and gold. The sources of copper, other than that owned by the Indians themselves, would remain elusive to the Spanish. Although the drawings, engravings and reports by the Frenchmen De Bry, LeMoyne and Laudonniere report the presence of bullion

(Alexander 1976:58; Lorant 1946:117; Sauer 1971:206), gold appears to have been almost totally unknown to the aboriginal inhabitants of Spanish Florida. Today researchers feel that Spanish shipwrecks was the source of this metal to the Calusa of peninsular Florida (Lewis 1978:22; Swanton 1946:35,59,494).

Although Quattlebaum (1956:115) states that De Soto found gold, copper and silver, in addition to caches of freshwater pearls, at the aboriginal town of Cofitachiqui in modern South Carolina, and Lewis (1978:21) suggests that "inferior" quality gold found among the Calusa in southwestern Florida came from the Appalachian Mountains, neither the conquistador nor his men found bullion there nor in the rumored "gold regions of Chisca in the mountains to the north" (Lowery 1959:230-232; Sauer 1971:206).

It is interesting to note, however, that significant gold deposits did exist within the boundaries of Spanish Florida. Deposits found in the 1820s at Dahlonega, Georgia, in North Carolina, and at the Haile gold mine in South Carolina led to the removal of the Cherokee from the region (Cotterill 1954:238; Neely 1979:156-157; Swanton 1946:113). It would appear that, while the level of Spanish mining technology was advanced in the sixteenth century, their lack of geological knowledge meant that the gold deposits went undiscovered. Certainly, if the aboriginal inhabitants of the region had known of metal sources, the Spanish would have capitalized on them. Thus, the Spanish "prospecting" trips were for booty and information regarding the location

of tried deposits. True prospecting, in the modern sense of the term, would not begin until the birth of modern geology in the eighteenth and nineteenth centuries (Blakewell 1987:203-220).

The climate of Spanish Florida varies from warm temperate in present Virginia and North Carolina to humid, sub-tropical in South Carolina, Georgia and north Florida and tropical in southern peninsular Florida. This means that the growing season ranges from 180 days in the north to well over 300 days in the south. Similarly, rainfall varies from over 100 cm per year in Virginia to over 150 cm in southern Florida. Long, bitterly cold winters are the exception in an area where annual snowfalls vary from 25 cm or less in the north to less than an 2.5 cm in north Florida (Hunt 1967:150-151; Kovacik and Winberry 1987:31-40; Miller and Parkins 1928:18-30; Shelford 1963:56; Swanton 1946:1-10).

We have stated that it was the coincidence of the Prevailing Westerly winds with the northward flowing Gulf Stream that was crucial in influencing the settlement of Spanish Florida. There were, indeed, other wind and sea currents, such as the Northeast Trades and the Caribbean Current, but the physiographic configuration of continental North America and the shallows surrounding the Bahama Islands created a unique natural funnel for the Gulf Stream known today as the Straits of Florida. Recognized as early as 1502 by Spanish pilots, the 80 F temperatures of the Gulf Stream waters speed northward at seventy miles per day,

hugging the continental shelf and on through the bottleneck formed by the Straits (Sauer 1971:29, 190). These warm waters are important in ameliorating the climate in Spanish Florida from the colder continental winds brought by the Prevailing Westerlies (Kovacik and Winberry 1987:35-39). The warming effects of the Gulf Stream are lessened from modern Georgia northward. This is due to the width of the continental shelf, which keeps the current some fifty miles off shore, and the lack of a restricting "strait" which leads to mixing and the southward flood of the cold Labrador current. In essence, it was just at the present Florida-Georgia border that the Gulf Stream met the Prevailing Westerlies and the shortest, quickest course to the Old World from the New could be plotted for the sailing ships of the sixteenth century.

The entire coastal region of Spanish Florida is encompassed within the Austroriparian Biotic Province. In the drier red clay soils of the uplands are grasses and forests of pines and hardwoods, such as oaks, hickories, and chestnuts. Along the Atlantic littoral and in low-lying parts of peninsular Florida is the magnolia and maritime forest. Included in this area, on higher, drier hammocks, are magnolias, cypress, live oak, palm, palmetto and yaupon trees. Lower areas of salt and brackish-water marsh are covered with grasses, rushes, sedges and a variety of evergreen shrubs and vines (Dice 1943:18-21; Kovacik and Winberry 1987:45-47; Shelford 1963:56-88).

Unlike Hispaniola, Spanish Florida was well-endowed with a wide variety of edible marine and terrestrial fauna. Salt, fresh and brackish waters in and surrounding Spanish Florida were teeming with fish, shellfish and crustaceans. Additionally, the warm waters of peninsular Florida were home to the seacow or manatee. These areas are especially rich in seafoods because the warm, shallow estuaries are prime hatcheries for many species (Hunt 1967:163-165).

Reptiles, such as the alligator, extended as far north as the Outer Banks of North Carolina and were joined by a wide variety of snakes, including rattlers, cottonmouths and copperheads. Crocodiles and coral snakes join these species in southern peninsular Florida. Wild turkey, passenger pigeon, migratory ducks and geese, grouse and the Carolina parakeet, in addition to numerous raptors and forest, shore and marsh birds, filled the sky.

The same oak and hickory nuts that attracted the turkey lured deer, squirrels, raccoons, opossums, rabbits and, occasionally, elk to the area. These were joined by smaller rodents and carnivores including the panther, fox, wolf, black bear and bobcat (Dice 1943:18-21; Sauer 1971:284-286; Shelford 1963:56-88). It should be noted that although the American bison or buffalo was known in the Southeast during the seventeenth century, in the sixteenth century it was limited in range to the area west of the Mississippi and, thus, played no role in the period being examined. (Sauer 1971:140,142).

From these descriptions, we can draw some immediate comparisons with Hispaniola. Like Hispaniola, most of Spanish Florida enjoyed a warm, humid, semi-tropical to tropical climate that was conducive to the planting of exotic plantation crops such as cotton, tobacco, indigo, rice and sugar cane (Lewis 1984:37-41). Spanish Florida was richer than Hispaniola in the variety of wildlife but was relatively impoverished in the perception of sixteenth-century Spaniards in such resources, as gold and copper, that could bring immediate profits. The heavy forests that blanketed Spanish Florida were important in the later development of a naval stores industry but bore no exotic dyewoods nor recognizable medicinal plants from which the Spanish could turn a quick profit (Harman 1969). The Spanish also recognized that, relative to the Vega of Hispaniola, this "green desert" of Spanish Florida had thin soils that would be quickly exhausted by the intensive agricultural practices associated with plantations. Nevertheless, what Spanish Florida lacked in protected deep-water harbors, bullion, dyewoods, and fertile lands it made up for in its geographical location on the interface between the Gulf Stream and prevailing Westerly winds --the "main street" back to the Old World from the New.

The Aboriginal Inhabitants

The prehistoric and historic aboriginal inhabitants of what would become the southeastern United States have been the focus of scholarly research for more than a

century. During this time, our knowledge of the region's prehistory and post-seventeenth century history have been continually improved but the crucial protohistoric fifteenth and historic sixteenth centuries have been somewhat neglected. This information bias was created by English-speaking historians whose studies focused on the aggrandizement of the British period and whose research locales included state archives and the Public Records Office in London (e.g., Cotterill 1954). Until recently, the archaeological community, because of its long-standing aversion to the investigation of historic and protohistoric cultures, did little to fill the gap. This situation changed dramatically during the past thirty years as archaeologists, ethnohistorians and historians began to reconstruct the important sixteenth-century era of Spanish contact and culture change among the aboriginal inhabitants (e.g., Deagan 1985a; Milanich and Proctor 1978; Smith 1956)

Over three score years of Spanish contact passed before the first successful English and French North American colonies were established. These sixty years of Spanish contact changed precontact aboriginal culture in ways that were unobserved by later colonial rivals.

This section focuses on the sixteenth century aboriginal inhabitants of Spanish Florida at the time of contact. The large spatial extent of Spanish Florida and the nature of this thesis, however, make a detailed account of all of the aboriginal peoples neither possible nor warranted. The discussion of the Spanish Florida

aboriginals presented here is, therefore generalized and focused on population, social organization, economy, and settlement plan, function and pattern as influencing factors in the development of the Spanish colony.

The aboriginal inhabitants of Spanish Florida were, like their Arawak neighbors to the south, members of complex stratified societies commonly known as chiefdoms. In the sixteenth century, there were at least thirty historically identifiable aboriginal societies from Cape Henry at the mouth of Chesapeake Bay to the tip of peninsular Florida (Figure 25) (Milanich and Proctor 1978; South 1972; Swanton 1946:34-35).

These peoples spoke a multitude of tongues from the Muskogean, Siouan, Iroquoian and Algonquian language stocks (Swanton 1946:10-11). Because of this great linguistic diversity, there was no single local aboriginal term used by the Spanish to identify these peoples. Rather, they were referred to collectively by the Spanish term Indios or specifically by the name of the local paramount chief (e.g., Paraousti Satouriona --the Saturioua, Saturiba or Satoriwa) (Deagan 1978:90; Lorant 1946:57; Thevet in Schlesinger and Stabler 1986:128,144-147). In other situations the local aboriginal term for the area (e.g., Chicora for modern South Carolina) (Quattlebaum 1956:12; Swanton 1946:66), or a descriptive Spanish term for the area inhabited by the specific aboriginal group (e.g., Agua Dulce or Sweet Water People) were used (Deagan 1978:108-111).

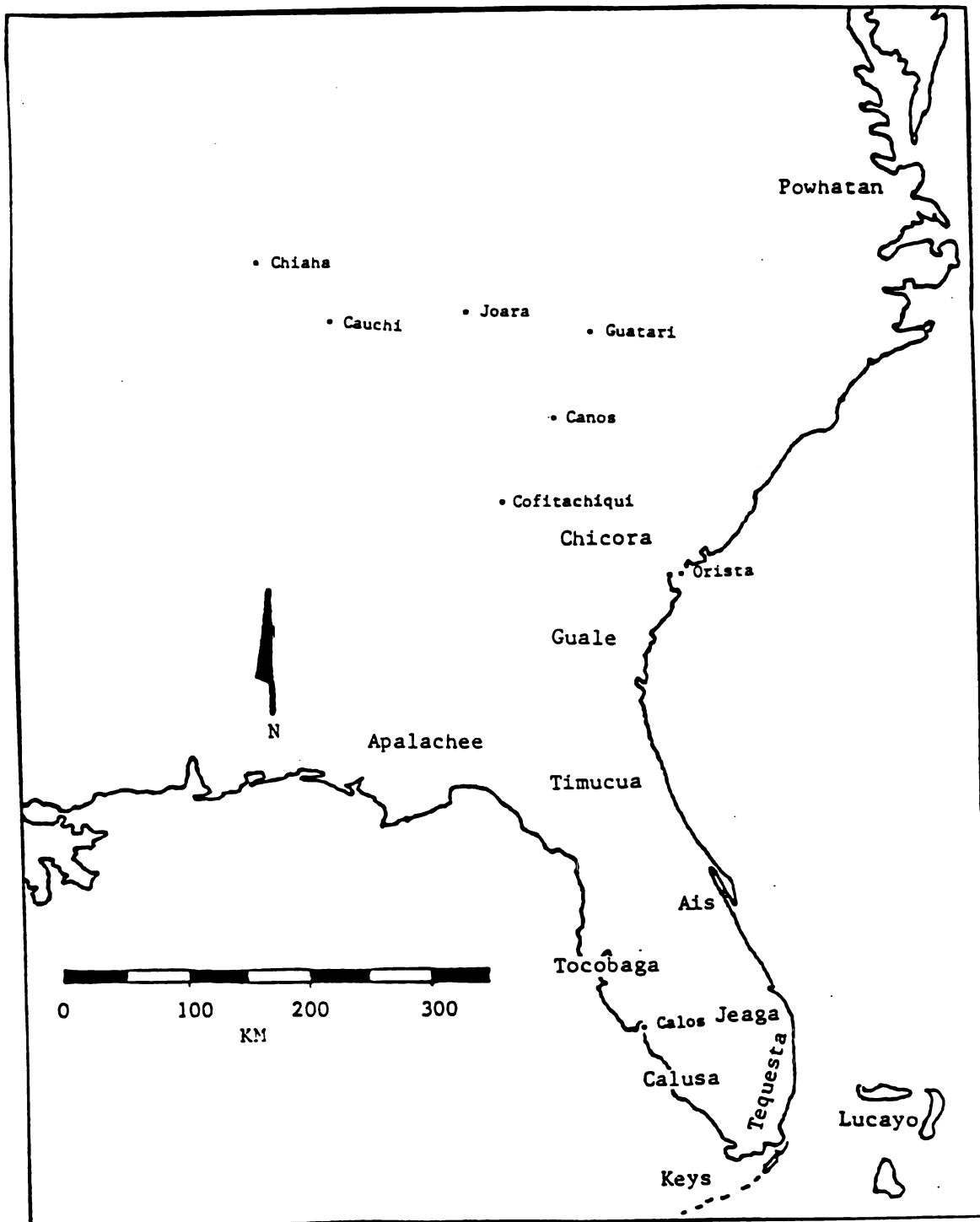


Figure 25.

Some Aboriginal Cultures and Towns in Spanish Florida

Population estimates proposed for sixteenth-century Spanish Florida are as variable as those for fifteenth-century Hispaniola. In 1946 Swanton estimated a population of some 171,000 in the entire southeast with some 30,000 or less occupying the area we call Spanish Florida (11-14). Milanich and Fairbanks (1980:227,230,232,235,238,244) have calculated a population of 103,000 at contact for the area of modern Florida alone, while Dobyns (1983:205,292) has recently proposed a population of between 722,000 and 807,000 in 1515 for the same area.

The massive discrepancies in calculated population densities may be the result of faulty and incomplete demographic information or, as Dobyns (1983) proposed, may stem from large-scale European disease-related depopulations of densely inhabited sedentary aboriginal populations in the years before permanent European occupation. If Dobyns is correct, by 1560 there were some 150,000 aboriginal inhabitants living in Florida (1983:181,292). This number matches well with that of Milanich and Fairbanks (1980) for these post-contact peoples and may be as accurate as any for this era, given the impact of disease and the lack of any Spanish sixteenth century censuses. In light of English accounts of the population vacuum in these areas in the seventeenth and eighteenth centuries, the devastating role of epidemic disease cannot be underestimated (see Bartram 1980; the Atkin Report in Jacobs 1967; Lawsom 1967; Smith 1987; and James Adair in Williams 1930).

The lack of effective control of the region meant that enumeration by the earliest Europeans was based more on impression than accuracy. At any rate, it is certainly correct to say that, at contact and later at the date of effective settlement in the 1560s, the aboriginal population of Spanish Florida was never as dense as that of Hispaniola.

We have noted that the aboriginal inhabitants of Spanish Florida were members of complex stratified societies. Their social organization was similar to that of the Arawaks described in Chapter Four (Lewis 1978:35). Here again we see a hierarchy comprised of paramount chiefs, chiefs, headmen, commoners and slaves (Bullen 1978:56; Deagan 1978:107; Larson 1978:125-127; South 1972:5-6; Swanton 1946:641-665). A system of ranked matrilineal clans determined each individual's position in this hierarchy, from chief or cacique down.

The ranking that characterized these societies was apparent in the form of sumptuary restrictions on tattoos, pendants, pearls, elaborate feathered headdresses and cloaks. Other symbols of the elite included the ceremonial use of litters or sedan chairs, retainers bearing fans, mound burial and human sacrifice (LeMoyne in Lortie 1946:63,71,99,103,109,113,115; Milanich and Fairbanks 1980:248; Quattlebaum 1956:116; Sauer 1971:205; Swanton 1946:598).

Marriage was monogamous except for the caciques, who practiced polygamy. The caciques always married the sisters of other chiefs; these marriages cemented economic and

political relationships of reciprocity, redistribution and alliances (Bullen 1978:56; Larson 1978:126; LeMoyne in Lorant 1946:109; Lewis 1978:32; Quattlebaum 1956:112). This practice is seen in the 1566 marriage of Pedro Menendez to the sister of Calos, the paramount chief of the Calusa, to seal the pair's peace treaty (Lyon 1976:149).

As in Hispaniola, the hierarchical social organization in Spanish Florida reflected in the formation of polities. For example, there were five political divisions among the Eastern Timucua that coincided with the local spoken dialects. These polities were associations of towns headed by a cacique and joined for economic and political reasons (i.e., tribute and warfare) under a paramount chief (Deagan 1978:91-92; Dobyns 1983:151-173). Similar political organizations occurred throughout Spanish Florida from the Calusa in the south, to the Apalachee in the modern Florida panhandle, and northward to the Guale in Georgia, Cofitachequi in South Carolina and on to the famous Powhatan Confederacy in the Tidewater region of modern Virginia and North Carolina (Deagan 1985a:288-289; Hudson et.al 1985:723; Larson 1978:125; Lewis 1978; Milanich and Fairbanks 1980:211-248; Quattlebaum 1956:110; Sauer 1971:166-167; Swanton 1946:175).

The subsistence base of the aboriginal population of Spanish Florida was much more varied than that of the Taino of Hispaniola. Although it was also based on horticulture, hunting, gathering, and fishing. The greater variety of fauna, plus the rich riverine and estuary resources, made

Spanish Florida very rich in hunted, fished and collected foods (Dobyns 1983:48-125). This abundance, combined with the cultivation of corn, beans, squash and other plants from the fertile lands of central peninsular Florida northward, Produced a subsistence base capable of supporting a substantial population (Dobyns 1983:135-146,219-237; Sauer 1971:203-205).

Cultivated and gathered foods appear to have made up the majority of the food consumed by the aboriginal inhabitants of Spanish Florida. The cultivation system was rainfall horticulture conducted with both stone and shell hoes and wooden digging sticks. Unlike the Taino of Hispaniola, the aboriginal inhabitants of Spanish Florida did not practice what might be construed as intensive agriculture. There were no raised ridge fields nor irrigation. The only dug canals were in southern peninsular Florida, and these were apparently for communication and transportation alone (Lewis 1978:39).

Aboriginal society in Spanish Florida was marked by a complementary but strict sexual division of labor. Hunting, fishing, field preparation and warfare were considered male activities because they demanded strength and endurance. These sporadic labors were largely seasonal however, and often required lengthy absences from home (Axtell 1981:103-104; Lora 1946:61,77,85-87,97,251).

In contrast with the sporadic nature of male activities, female labors were more continuous. These included clothing, utensil and pottery making, cooking,

child care, cultivation and the collection of fuel and food (Axtell 1981:104). Of these activities it is obvious that those associated with food preparation were omnipresent. Food was prepared by roasting, baking or boiling in earthenware pots and was served on woven mats or ceramic dishes. Comestibles that were slated for future consumption were preserved by salting, drying or smoking and were stored in baskets in public granaries or private homes (Lorant 1946:77,79,81,83,199,255; Swanton 1946:351-381, 549-555).

We have a much better understanding of contact-era aboriginal habitation sites in Spanish Florida than of those in Hispaniola. This record is more complete in the southeastern United States because of the artwork of contemporary observers such as Le Moyne and White (Lorant 1946), explorers such as De Soto (Swanton 1946) and a growing body of archaeological work on late prehistoric, protohistoric and contact-era sites.

Aboriginal structures in Spanish Florida were similar from north to south. All were wooden framed, with the external covering comprised of bark, thatch, grass, cane and sometimes daub or clay. Near Chesapeake Bay and in the environs of the Tidewater region in modern Virginia and North Carolina, the structures took the form of longhouses which were inhabited by extended families. Sometimes these homes, as well as structures for the chief and a temple/charnel house, were surrounded by a palisade. Whether walled or open, towns invariably contained a cleared plaza (Lorant 1946:243,263,265).

Further south, in modern South Carolina and Georgia and the Apalachee region of North Florida, living structures were smaller, of a size suitable for a nuclear family. These usually had a rectangular floor plans although circular houses have also been cited. Council houses were large, round, semi-subterranean structures or, in some situations, longhouses (Larson 1978:131; Quattlebaum 1956:115-117; South 1972:3,11). These towns contained cleared plazas surrounded by temples, platform mounds for the house of the chief, granaries and the homes of the commoners. Burial mounds were raised outside the towns.

The Timucua, of northeast peninsular Florida, lived in circular houses of palm and thatch. These were sometimes plastered or daubed. Villages were frequently palisaded and built around a plaza. Communal structures had either a round or longhouse-style floor plan. Again, mound burial for the elite was practiced (Deagan 1978:108; LeMoyne in Lorant 1946:79,95,97,101; Milanich and Fairbanks 1980:216-217; Ribault in Sauer 1971:203).

In the wet lands of southern peninsular Florida, the Calusa and other groups built rectangular and round structures which were frequently raised on pilings. The construction of platform and burial mounds is also reported, as is the presence of plazas (Lewis 1978; Milanich and Fairbanks 1980:230-232,239,246).

In summary, certain elements in house and village plan were common to all of the aboriginal inhabitants of Spanish Florida. These include the use of palisades, longhouses,

mound burial and plazas. The material/formal aspects, when combined with the presence of parts of the Southeastern Ceremonial Complex, a religious tradition with roots in the Mississippian period, help demonstrate the interconnectedness of this cultural area (Howard 1968; Sauer 1971:205-206).

Two settlement patterns characterize the aboriginal inhabitants of Spanish Florida. Along the marshy and heavily dissected Gulf coast and southern peninsula, the Tocobaga, Tequesta, Keys, Jeaga, Ais and Calusa tended to build permanent villages on coastal lagoons. Their subsistence focus on fishing, collecting and hunting and only secondarily on horticulture, meant that access to marine resources was important. These people also undertook deepwater trips in oceangoing canoes and in catamarans as far as the Bahamas and the Dry Tortugas (Milanich and Fairbanks 1980:211,230-250).

The aboriginal inhabitants of the northern Spanish Florida littoral, the Timucua, Guale and Orista, had a settlement pattern different from that of their southern neighbors. Like the Arawak, these horticulturalists tended to live inland, adjacent to fresh water and fertile lands. These were only semi-permanent villages as, seasonally, the inhabitants would decamp for the coast to fish and gather marine resources or inland to hunt (Deagan 1978:93,113; Larson 1978:123,137; Quattlebaum 1956:96). This semi-sedentary lifestyle bothered the Spanish priests, who came to proselytize and win followers. In 1569 Father Rogel

wrote that when the acorns ripened the local inhabitants of Chicora "left me quite alone, all going to the forests, each one to his own quarter" (Quattlebaum 1956:99).

For the Spanish, whose conquest experiences had been limited to either fully sedentary populations such as were found in southern Spain (the Moors), Hispaniola, Mexico and Peru or the small, physically limited population of the Canaries, northern Spanish Florida posed a new challenge for control. This challenge was not met during the sixteenth century and had only limited success in the following century. The vast interior, coupled with the semi-sedentary nature of the aboriginal population and the changing ideas of the Spanish government about the physical control of the indigenous populations in the colonies, meant that a different relationship developed between the Spanish and the aboriginals of Spanish Florida than had occurred in the earlier colonies (Jaenen 1976:15-17).

The relationship that developed between the Florida aboriginals and the Spanish ultimately took a radically different trajectory from that of the Hispaniola experience. In Hispaniola, the Arawak were controlled as slaves under the repartimiento and encomienda systems. These systems, which were extended to Mexico and Peru, were never implemented in Florida. This was certainly not because the Indians' labor was undesired, although the need was limited. In the case of Florida, it was a combination of conscience, a perceived lack of valued natural resources, and location on the "main street" back to Spain that produced a different

orientation. As early as 1520, Las Casas had convinced Charles I that "the procedure of the conquistadors in the Indian lands had been illegal" and that the "actions of these governors were neither Christian nor humane but are actions of the devil" (Las Casas 1974:25). Because of this, later explorers and settlers were given royal charters that allowed no slaving except for those taken in war (Quattlebaum 1956:16). Virtually every licentiate violated these unenforcable charters. Lucas Vazquez de Ayllon, who explored and planned to settle the modern South Carolina coast in 1521, took 140 of the Chicora to the slave markets of Hispaniola (Quattlebaum 1956:12). The later (1539-42) more famous Hernando De Soto expedition was similarly chartered by the crown not to molest the Indians, yet his deceptions and enslavements are legend (Gannon 1983:8; Swanton 1939:79).

The lack of mineral wealth did not produce a rush to Florida by gold-fevered Spaniards. Also, the area's more temperate climate, lack of dyewoods and medicinal plants, and thin soils meant that the area was not, in sixteenth century terms, well-suited for plantations, especially since there was still ample lands in the Caribbean. Without these commercial endeavors, the need of aboriginal labor was limited.

This again leaves Florida's geographical position on the "main street" of communication as an influencing factor in the interaction of Spaniards and Indians. In the sixteenth century, Spaniards came permanently to Florida to

remove the threatening presence of the French colony at Fort Caroline near modern Jacksonville. Unlike the later French and English use of Indian allies in warfare, the Spanish, acting alone, in 1565 despatched the French colony (Lyon 1976:120-121). For the balance of the century Jesuit and Franciscan missionaries worked among the Indians to Christianize them and make them loyal to the crown. The perceived low value of Spanish Florida as good for little other than the defence of the trade routes, a buffer colony, meant that limited settlement and expansion would characterize its history. This situation led only, in the seventeenth century, to the control of the Indians via the mission system for limited tribute and corvee in the form of food, portorage and labor on the castillo in St. Augustine (Gannon 1983:57).

The lot of the Florida aboriginals under the Spanish, while not easy, was never as severe as that suffered by their cousins in the islands and mainlands to the south. Their enslavement by the English for labor in the plantations of Carolina and Barbados in the seventeenth and eighteenth centuries ended the period of benign neglect they experienced under the Spanish (Smith 1987; Wright 1981:126-150). Thus we can see that the sixteenth century Spaniards did not develop the aboriginal resource for a variety of reasons, including conscience, the increased use of black slaves and, most importantly the economic *raison d'etre* of the colony-- defense of the "Main Street" of commerce (Sauer 1971:217).

In summary, the aboriginal inhabitants of northern Spanish Florida were semi-sedentary, horticultural chiefdom-level societies while those inhabiting southern peninsular Florida were more sedentary and less horticultural. Every society in the area formed part of one of a number of hierarchical confederacies headed by a paramount chief, whose position was based on kinship ties and the associated economic aspects of reciprocity and redistribution.

With the exception of the Calusa and their south Florida neighbors, the aboriginals of Spanish Florida tended to live inland on more fertile horticultural lands and make occasional collecting and fishing forays to the coast. The inland focus of the northern aboriginal inhabitants of the Atlantic littoral of Spanish Florida (e.g., Timucua, Guale, Orista) was complementary to the seaward focus of the Spanish in the sixteenth and later centuries. This is especially important when considering the impact of disease and acculturation on the indigenous population before the eighteenth century encroachments of the English and French.

We saw how, in Hispaniola, the Spanish infiltration of the island and the capture of its inhabitants led to the extinction of the Arawak as a distinct viable population in less than fifty years. In the region that comprised Spanish Florida, the removal of the aboriginal population took nearly three hundred years. The reason for this more lengthy period of decline was not because these people were more resilient to the diseases of the European but because

of the limited presence and interaction of Old and New World populations.

The European Colony

The sixteenth-century European occupation of Florida, like that of Hispaniola, went through four distinctive phases of physical, economic and political expansion. In this section, we will see that the phases of occupation of Spanish Florida are comparable in form to those witnessed on Hispaniola but that the time lapse between the phases varied greatly.

This section will not recount in detail the history of Spanish Florida. It will, instead, review the Spanish reaction to the local environment and aboriginal population to lend insight into the development of the colony's economic role in the empire. A focus of this concern for the colony's economic role is the growth of Neo-Europes associated with the area's sixteenth-century settlement. Emphasis will be placed on the later stages of the colony's economy, defense, towns, people and subsistence in order that comparisons between contemporary Spanish Florida and Hispaniola can be made.

The primary motive for the exploration of Spanish Florida was the same as that for Hispaniola, that is, the discovery and capture of lands rich in precious metals and exotic flora (Sauer 1971:158. Unlike Hispaniola, however, Spanish Florida was poor in these resources. Nonetheless, its location on the "main street" of communication and trade

between the motherland and the producers of specie and other desired exotica made its control imperative to the maintenance of empire. Thus, the European settlement of sixteenth-century Spanish Florida can best be defined as a colonial protective cosmopolitan frontier area, whose primary function was the defense and protection of trade and communication between the motherland and her colonial extractive cosmopolitan frontiers (Sauer 1971:190-192).

The lack of immediate profits to be had in Spanish Florida forestalled effective Spanish control of the area for over half a century and made the Spanish occupation one of benign neglect for the duration of the first Spanish period. Spanish Florida's long-term value was limited to that of a buffer colony and port of refuge, rescue and salvage (Sauer 1971:191). This limited value and primary function was reflected in the form, pattern and military role of the European settlement of the area (Sauer 1971:216-218).

Phase I

Prelude, 1502-1562

We have seen that the area known as Spanish Florida was known to navigators and cartographers as early as 1502. For the next sixty years, thousands of Spaniards would find themselves in this area of North America as victims of shipwrecks, members of abortive settlement attempts or conquistadors bent on explorations for plunder. None of the

groups successfully founded a permanent European habitation (Sauer 1971) (Figure 26).

The latter groups were led by Spaniards who had already made their fortunes in the gold fields and plantations of the islands (e.g., Ponce de Leon) or in the plunder of the mainland states of Mesoamerica and South America (e.g., Panfilo de Narvaez, Hernando de Soto).

The first, Ponce de Leon from Hispaniola and later Puerto Rico, visited both the area near modern St. Augustine and the southwest corner of peninsular Florida near Charlotte Harbor in 1513, and the latter again in 1521. On both occasions, the Spaniards were attacked by the resident Timucua and Calusa and were driven away (Sauer 1971:26-28,35).

At the time that Ponce was succumbing to a Calusa arrow, another Spanish landing was taking place on the Atlantic coast in Chicora. Originating from northern Hispaniola, this party had sailed via the depopulated Bahamas in search of slaves for their sugar plantations. They returned not only with slaves but with reports of fertile lands. The stories fueled the imagination of one of the partners of this venture, Lucas Vazquez de Ayllon, who later successfully petitioned the court for the right to settle the new lands (Sauer 1971:69-71).

In 1526 Ayllon attempted to found the first settlement in Spanish Florida. The town of San Miguel de Gualdape was

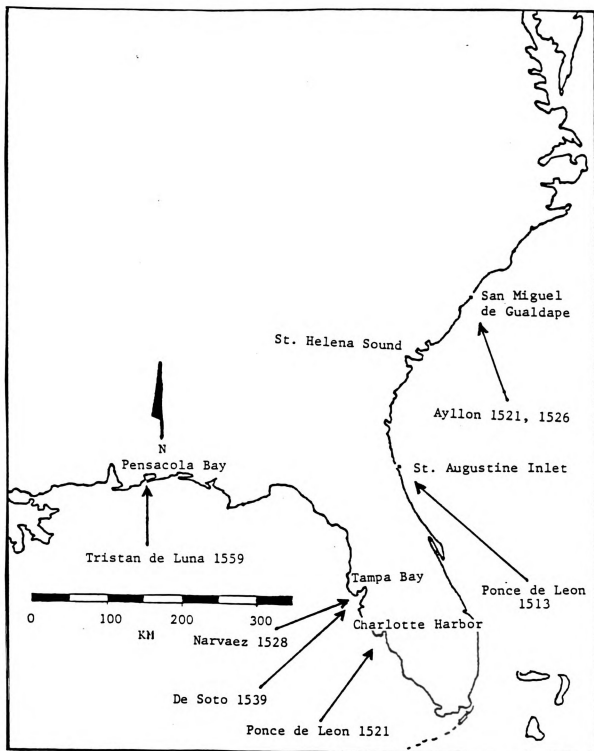


Figure 26.

Phase I -- Prelude 1502-1562

founded, with some 500 men, women and black slaves, in what would become South Carolina. In less than six months, Ayllon and 400 of his followers died of fever, Indian arrows, or at the hands of the troops or renegade slaves (Lowery 1959:156-165; Quattlebaum 1956:18-27; Sauer 1971:69-76).

The year 1528 brought Panfilo de Narvaez to the Gulf coast of peninsular Florida. Leading 400 men bent on profit and adventure, Narvaez landed near modern Tampa Bay and began battling northward through the lands of the Calusa, Tocobaga, Timucua and Apalachee in search of gold. In the end, this veteran of the conquest of Mexico and his men would abandon their quest (Lowery 1959:172-212; Sauer 1971:36-46; Weddle 1985:185-207).

A decade later, the famed veteran of Pizarro's Peruvian campaign, Hernando De Soto, was granted possession of the lands north of the Gulf of Mexico. In May of 1539, De Soto landed near Narvaez' embarkation point on the southwest Florida coast. Over the next four years De Soto, heading nearly 700 men, ranged over the southeastern corner of the continent in search of gold. Like Narvaez, De Soto found hostile native inhabitants, no gold and eventually his grave. The frustrated survivors of his expedition made their way home in 1543 (Lowery 1959:213-252; Sauer 1971:157-185; Weddle 1985:208-233).

By the 1550s the Florida Straits were the preferred return route to Spain. The principal reasons for this accommodation were piracy in the Bahamas Channel north of the Greater Antilles and south of peninsular Florida

combined with increased knowledge of the Gulf Stream, the development of the convoy system and the use of larger less-efficient sailing ships (Haring 1918:205,207,213,228; Sauer 1971:190,191,213).

The normal dangers inherent in shipboard travel in this era, in addition to the presence of dangerous reefs, corsairs and the port-less expanses of sandy beaches in the southern reaches of the Atlantic littoral on the Florida peninsula, encouraged the Spanish to undertake one final attempt at settling the region. Florida was to be a port of refuge, rescue and salvage. The plan was to maintain two settlements, one at modern Pensacola on the Gulf coast and the other near modern Beaufort, South Carolina, on St. Helena sound. In 1559, Tristan de Luna y Arellano led 1500 settlers to Pensacola Bay. Less than a week after they landed, a hurricane destroyed their settlement and supplies. For two years, the survivors lived on the charity of the local aboriginal population and sent an unsuccessful prospecting expedition overland to the future site of Santa Elena. The colony was finally abandoned in 1561. Philip II then declared that no further attempt should be made to colonize the east coast, because the area lay too far north of the Tropic of Cancer to produce gold, and therefore foreign interlopers would not be encouraged to take possession of the area and threaten the Spanish route of trade. Philip II was wrong (Lowery 1959:367-368, 376; Sauer 1971:193-195; Weddle 1985:265-284).

Phase II

Plunder and Imperial Competition, 1562-1565

In 1562 Spain's greatest enemy, France, planted a colony in Spanish Florida (Figure 27). The colony's purpose was to harass Spain's shipping and to serve as a home for its Protestant minority, the Huguenots (Lorant 1946:5; Lyon 1976:38-39; Sauer 1971:196-199). Charlesfort was established by the French on St. Helena Sound, which they renamed Port Royal. Founded by the Huguenot naval Captain Jean Ribault, the little fortress was garrisoned by thirty men. Their mission was to hold the French claim against the Spanish and to win the support of the local aboriginal inhabitants (Lorant 1946; South 1981). Although the small group succeeded in the latter endeavor, they abandoned the fort in 1563 and the Spanish razed it in 1564 (Quattlebaum 1956:42-53; Sauer 1971:196-199).

The French returned to Florida in 1564. This time 300 men chose a site near the modern deepwater port city of Jacksonville, Florida. Named Fort Caroline, in honor of the French monarch Charles IX, the town's advantages as a port and its proximity to the Gulf Stream made it more attractive for settlement than either St. Augustine inlet or Port Royal. From this base, the French proceeded to alienate the local Timucua by plundering them of gold and silver specie that the Indians had gleaned from shipwrecks. It was not this, however, but corsair raids on Hispaniola and Jamaica, originating from Fort Caroline, that brought about the colony's demise. These raids so antagonized the Spanish

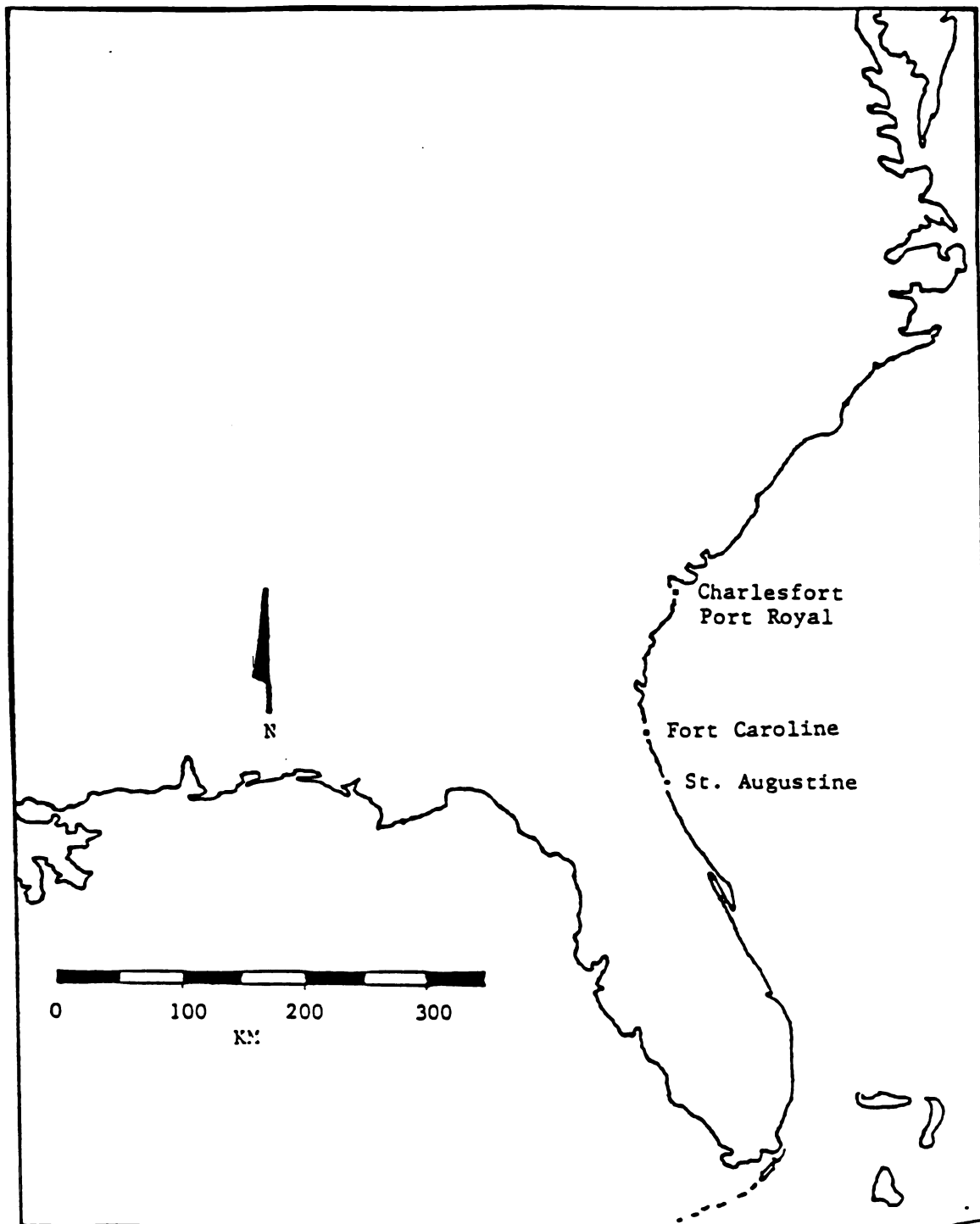


Figure 27.

Phase II -- Plunder and Imperial Competition, 1562-1565

that the Spanish king, Philip II, ordered his most successful naval commander to eradicate the French menace (Lyon 1976:35-40; Quattlebaum 1956:53-55; Sauer 1971:199-200).

Pedro Menendez, from the Asturian town of Aviles, was made an adelantado or direct representative of the crown. This position carried with it a title, estates, and great judicial and governmental powers along with the responsibility for getting rid of the French interlopers and the settlement of the land (Lyon 1976:2-3,43,44,50).

After a circuitous route from Spain and the Antilles, Menendez and his fleet arrived in Florida in August of 1565. By the middle of September, following combat and a disastrous hurricane that scattered Ribault's fleet at Fort Caroline, the French threat was permanently removed from Florida. While preparing for the capture of Fort Caroline, Menendez chose St. Augustine inlet as his base of military operations and established it as the first official municipality in Florida (Lyon 1976:115-120; Quattlebaum 1956:55-59; Sauer 1971:200-203).

Phase III

Imperial Imposition and Expansion, 1565-1576

Pedro Menendez' asiento or contract with the crown for removing the French from Florida provided guidelines for the continued exploration and settlement of the area. The plan called for the founding of at least three towns with 500 white settlers and 500 black slaves. These colonists were

to construct fortresses, homes, sugar plantations and mills. Additionally, horses, cattle, sheep, goats, pigs and chickens were to be imported for food and to promote the hide industry. To complete this spearhead of Castilian civilization, clerics were to be sent for the succor of the settlers and to convert the native population (Lyon 1976:49-50). As we will see below only a fraction of these grandiose plans were ever realized in Spanish Florida.

After the capture of Fort Caroline, Menendez began to fulfill his contract. In addition to the one at St. Augustine, garrisons were established in peninsular Florida: at San Mateo (1565-1568, the renamed Fort Caroline); Forts San Esteban and San Gabriel (1566-1570) on the St. John's River near San Mateo and St. Augustine (DePratter and Smith 1980:68-69); at Santa Lucia (1565-1566); San Anton de Padua at Calos, among the Calusa (1566-71); at Tocobaga on Tampa Bay (1566-1568); among the Ais at Cape Canaveral (1565-1569) and at Tequesta on Biscayne Bay (1566-1569) (Gannon 1983:29; Lyon 1976:140,150,201-205; Quattlebaum 1956:70; Sauer 1971:214-221). North of San Mateo, the Spanish established the mission of Ajacan (variously Axacan or Jacan, 1570-1571) among the Powatan on the Bahia de Santa Maria (Chesapeake Bay) (Bolton and Ross 1925; Connor 1923; Lyon 1976; Quattlebaum 1956:72-73,100; Sauer 1971:223-225), Fort San Pedro and associated missions on modern Cumberland Island, Georgia (1566-1597) (Thomas 1987:93-94), and the colony's capital Santa Elena (1566-87).

Founded near the ruins of Charlesfort on Port Royal sound, Santa Elena was the stepping off point for the only inland penetration of Spanish settlement in the sixteenth century. From there, Menendez' captain, Juan Pardo, led two expeditions (1566-1568) into the hinterlands of Spanish Florida. They were charged with securing aboriginal support in the form of food for the coastal garrisons, missions and settlements. They were also to find an overland route to the silver mines of northern Mexico while continuing the search for elusive treasure. Although Pardo failed in all three endeavors, he did establish six garrisoned blockhouses: San Pedro at Chiaha; San Pablo at Cauchi; San Juan at Joara; Santiago at Guatari; Santo Tomas at Canos; and Nueva Señora de Buena Esperanza at Orista in the modern states of South Carolina, North Carolina and Tennessee (DePratter and Smith 1980:70) (Figure 28).

Despite these efforts, Menendez' success in carrying out his contract was limited. Among this score of blockhouses and settlements there were less than 1,500 Spaniards (Quattlebaum 1956:69). With the exception of the two municipalities of St. Augustine and Santa Elena, which had a combined resident male and female civilian and military population of about 500, the Spanish presence consisted of isolated garrisons of soldiers or small groups of missionaries (Lyon 1976:164-165; 1984:4,6; Sauer 1971:221). Problems of supply at these isolated posts exacerbated intercultural conflict. Although these outposts were supposed to be supplied by sea, their

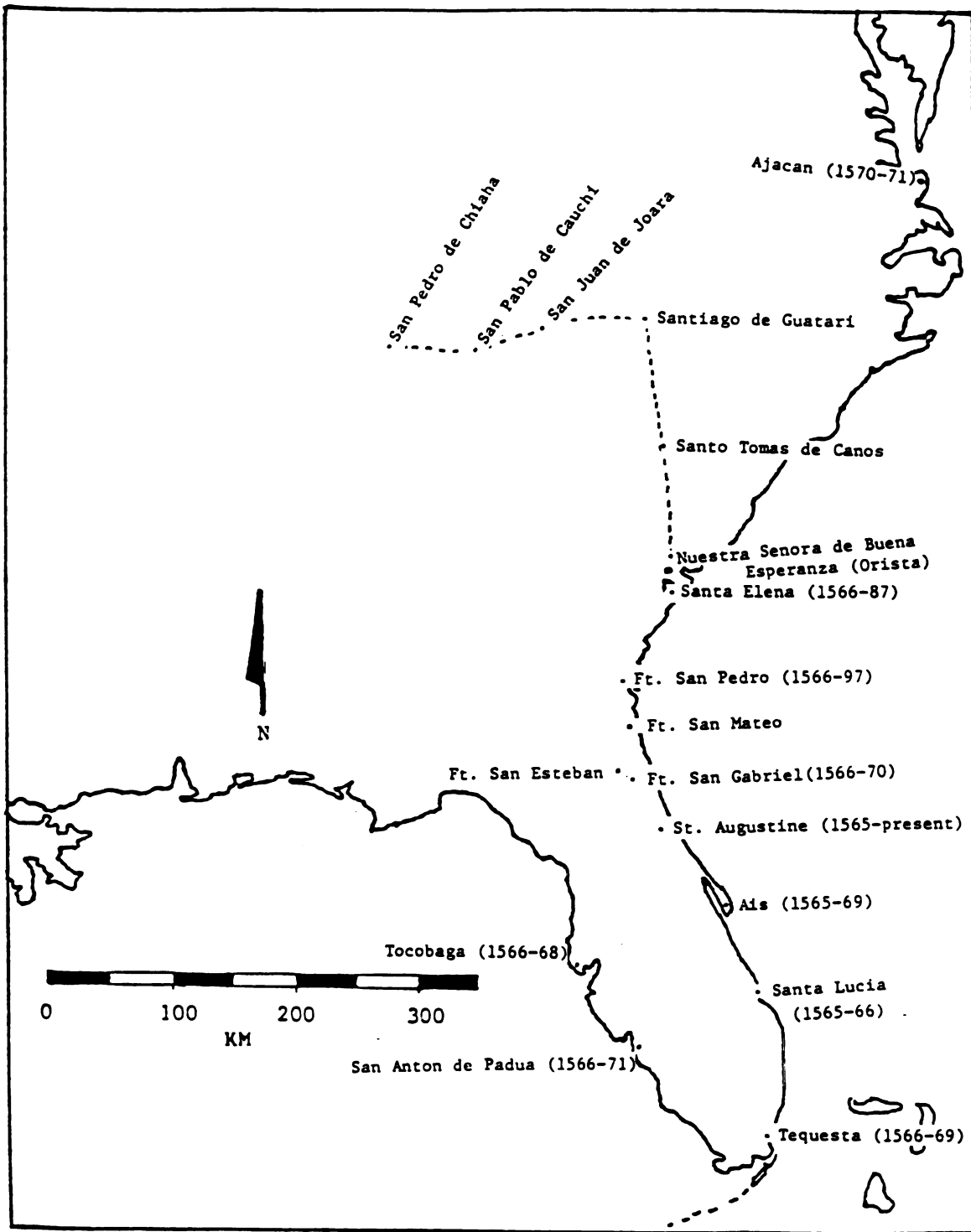


Figure 28.

Phase III-- Imperial Imposition & Expansion, 1565-1576

garrisons were frequently driven by shortfalls to demand sustenance from their aboriginal hosts (Lyon 1976:118-119). The result was aboriginal hostility, massacres and the withdrawal from all of the posts except Santa Elena and St. Augustine by 1575 (Sauer 1971:220-221).

Archaeological and documentary evidence from this era suggests that the Spanish inhabitants of Florida had managed to transplant material aspects of their world to the frontier (e.g., Lyon 1984:6; South et al. 1988). Livestock such as cattle, sheep, goats, hogs and chickens were imported to Santa Elena and St. Augustine. To complement the domesticated and wild meat, fish, and shellfish, there were gardens with both Old and New World plants (Connor 1925:83,89,93,97,101,245; Lyon 1976:204; 1984:3; Manucy 1985:39-40).

The towns and all of the outposts, with the exception of Pardo's blockhouses, were built near the sea for supply and communication and adjacent to aboriginal villages. At this time no structures were constructed of stone. Habitations and fortresses were built of wooden boards, thatch and plaster following Old World styles (Connor 1930:123-201, 283; Lyon 1977:21; 1984:13; Manucy 1983; 1985; Ross 1925). Although contemporary plans of the towns are not extant for this phase, sixteenth century descriptions make a clear distinction between "the city and fort" of each community (Connor 1925:203,209,213). This indicates that the towns were separated from the fortresses of San Marcos in St. Augustine and San Salvador/San Felipe in Santa Elena

by an open area according to the sixteenth-century tenets for Spanish city planning (Crouch et al. 1983). Adjacent to the gridded towns, but bordering the open area, were public buildings such as the church and government house. Obviously, the cleared area not only represented a defensive "killing ground" around the fortification but also the classic plaza of Old Spain with its core triumvirate of military, governmental/judicial and ecclesiastical buildings (Deagan 1985:10; Hoffman 1978:21-38; Lyon 1984; Manucy 1985:34-53).

Phase IV

Contraction and Stabilization, 1577-1587

Much of the vigor that characterized the expansion of Spanish Florida died in 1574 with Pedro Menendez. The low point of the colony came in 1576 when the capital, Santa Elena, was abandoned to the then hostile Orista from the nearby village of Escamazu (Lyon 1984:10-11). Santa Elena's reoccupation in 1577 marks the beginning of the end of Spanish Florida as an defensive colonial area with pretensions to a stable resident civilian population (Connor 1930:283; Lyon 1984:12-15).

In the 1570s and 1580s, Florida had a very diverse population in its two constituent municipalities (Figure 29) (Connor 1930:191-201; Lyon 1977:24-25; Ross 1925). Like Hispaniola's settlers, these colonists had come directly from the Old World (Connor 1930:115). They represented all the provinces of Spain; in addition, there were some French

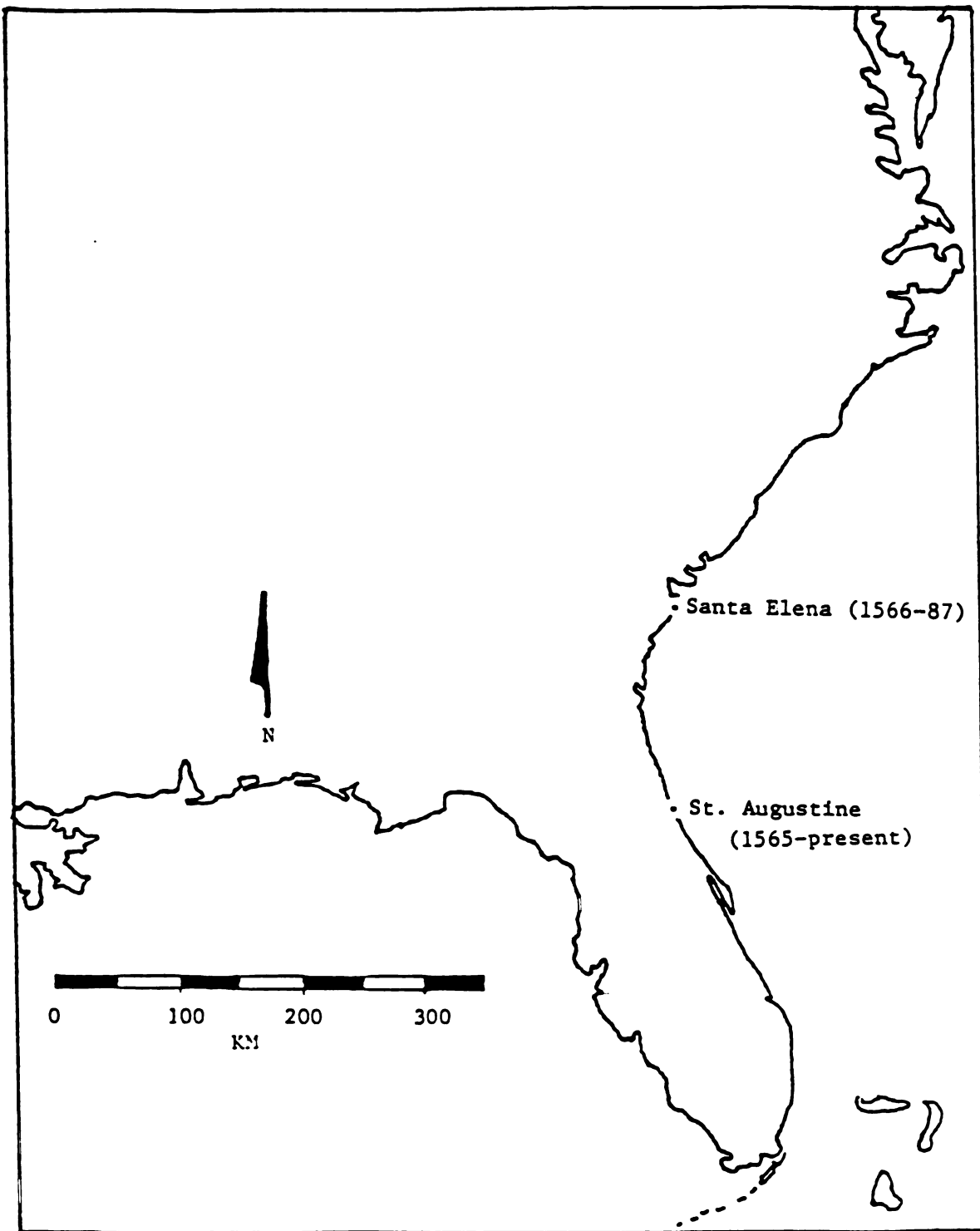


Figure 29.

Phase IV-- Contraction and Stabilization, 1577-1587

and German immigrants (Lyon 1977:24; Lyon 1984:6; Manucy 1985:52). In 1580, St. Augustine, the colony's second city, had some 55 house lots and an estimated population of 400, half of whom were soldiers and half civilian families (Manucy 1985:46,48,52). Santa Elena reportedly had sixty houses in 1580, in addition to its garrison and fort (Connor 1930:283; Lyon 1984:13; Quattlebaum 1956:77). Given the town's earlier preeminence as capital and designation as the primary settlement area, the presence of recently enlarged Fort San Marcos, a garrison of 300 with a like number of civilians is probable (Hoffman 1978:30; Lyon 1977:22; Hoffman 1984:4).

At this time, household composition was variable. In St. Augustine, well over 50% of the dwellings housed unmarried soldiers. Approximately half of the women in the settlement were local aboriginal wives or concubines while the remainder were of Hispanic origin (Deagan 1980:28). Santa Elena, as the premier settlement in the colony, probably had a greater number of Hispanic females and so, a more balanced distribution in its Hispanic population (Lyon 1984; Manucy 1985:46-48).

This phase is marked by the presence, in Santa Elena and St. Augustine, of a microcosm of the life and society of peninsular Spain. There was a stratified community marked by three classes of European society: nobles and royal officials representing the upper class; a middle class of skilled tradesmen and professionals who worked with their hands; and a lower class of unskilled peasants and slaves.

Many occupations were represented, including farmers, smiths, soldiers, fishermen, barber-surgeons, cobblers, sawyers, a shield maker, pitchmaker, matchcord maker, charcoal producer, tailors, moneylenders, tavern keepers, carpenters, masons, dry goods merchants, notaries, and fur and sarsaparilla root traders (Lyon 1977:23; Lyon 1984:6-7; Manucy 1985:43-44,48).

In 1580 both communities had forts, churches, and private residences. A sixteenth century map of St. Augustine (Figure 30) and descriptions of both towns indicate that their fortifications were sited to best protect the settlements from seaborne European invaders. Armed with iron and bronze artillery and constructed of earth, wood and plaster, the fortifications at both cities were built following European styles of defensive architecture (Connor 1930:117-202; Ross 1925). In both instances, barracks for the soldiers were built within the walls of the fortresses (Connor 1930: 50,129,135,157,159). In St. Augustine the civilian town lay away from the main path of seaborne attack, on the other side of the plaza from the fort (Connor 1930:129; Manucy 1985:34-37). Here, following a gridiron plan, were the homes and businesses of the civilian inhabitants. Nearby, on the edge of the plaza closest to the fort stood government buildings and the church (Manucy 1985:34-37). Although, no plans have been located for Santa Elena, we can assume that it followed a configuration similar to that of St. Augustine. It should be remembered that both cities were founded by Menendez as

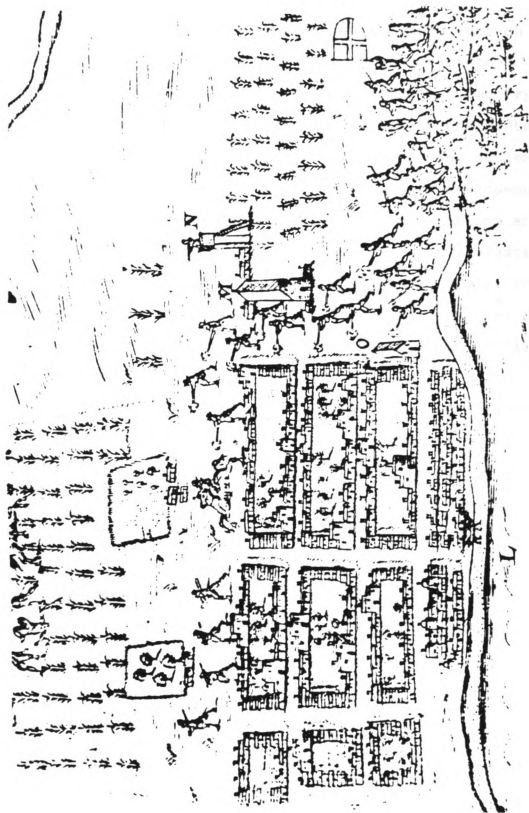


Figure 30. The Town Plan of St. Augustine, 1586 (by permission St. Augustine Hist. Soc.)

official municipalities (Lyon 1976:116,157). Contemporary accounts reveal the presence of the Old World dichotomy of incorporated urban town and rural country lands (Crouch et al. 1982:27; Ortiz 1971:131). A 1580 royal grant to Gutierre de Miranda refers to "town lots and ... country lands" (Lyon 1984:13). At this time, Santa Elena contained a church and sixty houses in its urban center and at least one hog and cattle ranch at some distance from the community (Connor 1930:189,283; Lyon 1984:13-14). Habitations and government buildings were built of thatch, board, plaster and wattle and daub with both flat and pitched roofs. The settlers' fields and livestock lay beyond the town, as did any aboriginal villages (Hoffman 1978:21-49; Lyon 1977:21; 1984; Manucy 1985:34-53).

While the towns strove to be self-sufficient, imports of familiar Spanish foods such as wine, olive oil, raisins, hazelnuts, wheat, cassava, quince-paste, rice, garbanzo beans, and lentils are reported. These supplemented the wheat, barley, melons, garlic, onions, kidney beans, squash, corn and garbanzos grown in the colony, and the meat protein from domesticated, hunted, fished and gathered resources (Lyon 1977:23; 1981:286; 1984:6,10; Reitz and Scarry 1985:55,65). These foods were cooked by women in much the same fashion as they were in the Old World. Stews were prepared in earthenware pots and metal kettles over wood and charcoal fires (Lyon 1977:23; 1984:6). In addition to foodstuffs, the colony imported finished goods such as

ceramics, tools, equipment, wax, rope and furniture (Deagan 1980:28; 1985; Lyon 1984:7-8; South et al. 1988).

In this period, the focus of Spanish Florida's settlement was the continued defense of the Gulf Stream "main street" of communication (Haring 1918; Hoffman 1980). As noted earlier, this defense was predicated on the occupation of deepwater ports of refuge that could shelter corsairs (Bolton and Ross 1925:12-13; Connor 1930:321; Lyon 1984:11,14; Sauer 1971:225-226). The Spanish crown had hoped that Menendez' colony would accomplish this goal at little cost and through commercial expansion. Yet, for all of the industry and vigor expressed by the inhabitants of Spanish Florida in the last third of the sixteenth century, they were still a population that depended on an annual subsidy from the crown and, frequently, the help of the local aboriginal population (Bushnell 1981; Deagan 1985; Lyon 1984:10). Florida's precarious peripheral position as a non-productive colonial area is manifested in the low volume of documented port activity. Only seventeen vessels are known to have sailed into or cleared from the colony's ports between 1568 and 1587. None of the ships leaving the colony reported the export of a valued cargo (Chaunu and Chaunu 1957 6(6):553). This port activity represents less than 0.5% of the total known Imperial Spanish commerce for the era (Chaunu and Chaunu 1957 6(7):47). Of course, without exports there was no tax base for defense expenditures -- the colony's primary function.

Florida was expensive to maintain. Between 1564 and 1577 Spain spent 130,722 ducats per year for colonial defense of which 21% (about 27,445 ducats) was spent on Florida (Hoffman 1980:124-125). Inflation and enhanced imperial defense concerns between 1578 and 1587 nearly doubled Spain's yearly expenditures to 245,558 ducats. Florida's part of this budget remained high at 26,147 ducats (about 11%) per year (Hoffman 1980:176-177). Without taxable exports the entire cost of the colony fell on the crown.

The weakness of the colony extended far beyond matters of subsistence and expenditures to its primary function -- the protection of the "main street" Spanish route from the New World. We have previously seen how the combination of both situations caused contraction in the number of outposts in the 1560s and 70s. The 1580s showed just how fragile Spain's Florida colony was. During this decade, England planted the Roanoke colony in modern North Carolina and Sir Francis Drake captured and burned St. Augustine in 1586 (Foss 1974; Lyon 1984:14). The following year, Santa Elena was evacuated by the Spanish as a cost-saving measure (Lyon 1984:15). Santa Elena's citizens and its governmental functions moved permanently to the rebuilt St. Augustine, the last municipality in Spanish Florida (Deagan 1985:6; Lyon 1984). At the end of this phase, only St. Augustine survived, with a handful of coastal Guale and Timucuan missions, to see the beginning of the seventeenth century (Bolton and Ross 1925:15-23).

Summary

Spanish Florida was variable in extent at any given time during the sixteenth century (Sauer 1971:35). This temperate to tropical area was adequate for most plantation crops but was bereft of extensive deposits of noble metals (Lewis 1978:22). What made Spanish Florida important was its proximity to the northward-flowing Gulf Stream and the Prevailing Westerlies (Kovacik and Winberry 1987:35-39; Sauer 1971:29,190).

The aboriginal population of Spanish Florida consisted of chiefdom-level of societies that supported themselves through a combination of hunting, fishing, gathering and, in most cases, horticulture (Dobyns 1983; Swanton 1946). Although these people did interact with the Spanish through marriage, trade and warfare, this contact was limited (Deagan 1985). The Spanish, for various reasons, were unable to gain and sustain the kind of control they had in Hispaniola.

Spanish interests in Florida waxed and waned through each of the first six decades of the sixteenth century. Just as the memory of earlier disasters had dimmed, a new attempt to discover the area's fabled resources of precious metals was undertaken by Pardo in 1566 (DePratter and Smith 1980). Serious consideration of the area by the crown was forthcoming only when the presence of foreign interlopers threatened to cut the lines of communication between the extractive colonies of Hispaniola, Mexico and South America

and the motherland (Lorant 1946:5; Lyon 1976:38-39; Sauer 1971:196-199).

With the removal of the French Florida settlement, the Spanish investment in Florida was not unlike that seen in Hispaniola some sixty years earlier. Then, as in Florida, there was an initial rush to "show the flag" and to quickly examine and exploit the resources of the region (Lyon 1976). The resources desired by Spain were lacking in Florida and this resulted in the number of outposts being reduced to the main port settlements. In Hispaniola, the remaining outposts were associated with gold mining and plantations (i.e., productive), whereas, in Florida, the establishments at Santa Elena and St. Augustine were associated with defense (i.e., protective) (Lyon 1976:vi).

These enclaves of Castile carried many of the hallmarks of Spanish civilization, including incorporated municipalities, town plan, housing, social stratification and physical separation of the races (Lyon 1977:23; 1984:43-44; Manucy 1985:43-44, 48). What weakened and limited the development of the Florida colony was the predominance of soldiers in the population (Manucy 1985:46). These single men were dependent on the support of the crown and, the general populace (Lyon 1984:4-7). The relatively small size of the civilian population, combined with the unreliable government subsidy to the garrisons, placed too great a burden on this military colony's sustenance base (Lyon 1984:5). When imported and locally produced stores ran low, the soldiers and civilians alike turned to the local

aboriginals for help (Lyon 1984:9). The burden of providing for some 1000 people was more than the aboriginal population could or wanted to bear. The result was often strained and, frequently, hostile relations (Lyon 1984:10-11).

While the defensive intentions associated with the maintenance of Florida were noteworthy, in reality it was Spain's paper tiger. Certainly Francis Drake's attack was a crushing blow, but the presence of an hostile European colony in North Carolina and the earlier victory of the local aboriginal population over the colony's largest settlement is symptomatic of a larger, more general, malaise associated with benign neglect. Spanish Florida was a drain on the Spanish coffers (Bushnell 1981). It produced little that could be profitably exported and was incapable of supporting itself without a subsidy (Lyon 1984:7). Yet Florida's position on the "main street" of communication made its maintenance imperative (Lyon 1976:vi). In 1587 however, Spain was concerned with the mounting of the Great Armada of 1588 (Howarth 1981). At that time, consolidation of the Florida colony to a single enclave was deemed most cost efficient (Lyon 1984:14-15). The potential of Florida had been tested and found wanting save for defense. Spanish presence in the area for the next two centuries would be limited to an ever-shortening chain of missions and small military outposts up the Atlantic littoral and across northern peninsular Florida to the Gulf (Bushnell 1981).

CHAPTER 6

BRIDGING THE GAP: FROM THE DOCUMENTARY IDEAL TO THE MATERIAL REALITY

Introduction

The primary motivation for Spanish expansion in the fifteenth and sixteenth centuries was economic. From the Iberian peninsula to the Canary Islands, Hispaniola, Florida and the rest of the New World Spain established its dominion by planting parts of its culture in each settlement and colony (Foster 1960). Both the environment and aboriginal inhabitants in each area influenced the nature and form of Spanish settlement and culture. How these alien environments and new cultures shaped each colony and its place in the hierarchy of empire was reflected in the ability of each to create a "Neo-Europe" (Crosby 1986; Gerhard 1980).

The Documentary Record

Much of the evidence presented in Chapters Four and Five showed the validity of Foster's (1960) "conquest culture" concept in the sixteenth-century settlement of Hispaniola and Spanish Florida. In both areas are found the generalized overt physical symbols of Spanish control. These

shared characteristics include familiar aspects of the market economy, religion and government control. The most obvious physical manifestation of these highly visible cultural traits is the layout of colonial settlements. Each officially chartered municipality was laid out in a gridiron pattern (Crouch et al. 1982). Around the central plaza stood the homes and businesses of the wealthy, a Catholic church, and a city hall, governor's palace or fortress, representing the central power triumvirate of the state, the church and the marketplace.

Spanish colonial settlement plan is an outgrowth of the fortified, gridded towns of the Reconquista (Foster 1960). The city plans of Santo Domingo and other settlements in Hispaniola are classic examples of Old World town sites with the focus on the central plaza. Their Spanish Florida counterparts have been cited as examples that deviate from the older settlement patterns (Deagan 1982:190). In reality, these municipalities met city planning ordinances of the era for settlements where there were concerns about pirates and defense (Crouch et al. 1982:9). In these settings:

The main plaza is to be the starting point for the town; if the town is situated on the sea coast, it should be placed at the landing place of the port, but inland it should be at the center of the town...

(Crouch et al. 1982:13).

In port towns, the church was to be constructed in sight of the sea and in such a position that it could be used for defense. Similarly, town layout was to consider the future

growth of a settlement around the central plaza and the benefits of sanitation and communication when a river or stream was present (Crouch et al. 1982:13-15).

The sixteenth century plan of St. Augustine (Figure 30) indicates that indeed the Florida settlements were as systematically planned as Santo Domingo (Figure 20) or any other New World city. We should see Spanish Florida's settlements primarily as garrisoned, military strongholds or presidios rather than civilian settlements (Moorhead 1975:27; Quattlebaum 1956:72). The presidio concept was born in the Reconquista when the presidio was designed to function as an enclave of Christianity in a heathen land (Foster 1960; Moorhead 1975). These static defenses served a nuclei for civilian settlement and to occupy territory against the establishment of foreign bases or the encroachment of the indigenous population (Moorhead 1975:3-10). These civilian/military posts were designated villas or pueblos at founding and frequently were gridded in such a way that the plaza lay between the town and the fort (Moorhead 1975:232,239).

Beyond these physical manifestations of a generalized or standardized Iberian culture, there was an attempt to create "Neo-Europes" at each of these urban enclaves through the importation of familiar plants, animals, and products as well as the social aspects of Iberian culture (Boxer 1975; Crosby 1986). The success of each colonial area and settlement at creating such "Neo-Europes" reflects the

hierarchical position of each settlement in a colonial area and each colony in the larger system.

In the preceding chapters, we have seen, through the documentary record, how local environment and aboriginal population combined with the larger systemic concerns of the Spanish Empire to affect the nature of colonial settlement in Hispaniola and Florida. Comparing the evidence from both areas begins to reveal and define the dynamic hierarchical economic relationship within and between colonies in the empire and how these differences affected the creation of "Neo-Europes."

The documentary record alone is too imprecise to illuminate particular differences within and between areas. It can, however, suggest behavioral observations that can be tested in the archaeological record. Archaeologically derived information provides measurable units of comparison that are useful in determining the relative success of a colony in creating a "Neo-Europe." Together these lines of evidence combine to reflect the reality of the Spanish colonial system and the way of life of its colonists.

Predictions From The Past

In Chapter Two the focus of this thesis was outlined in eight propositions that guided the information, drawn from documentary sources, presented in Chapters Three, Four and Five. This documentary evidence alone, however, can suggest a far too static and simple generalized Iberian culture (Foster 1960) view of Spain's sixteenth century colonies and

does not show how functional differences in the settlements' hierarchy in the empire's hierarchy affected a colony's ability to create a "Neo-Europe". Deductions made from these documentary sources about the nature of the colonial economic hierarchy lead to predictions about the relative ability of colonies and settlements within colonies to create "Neo-Europes." Among the hypotheses derived from these predictions some are testable in the archaeological record.

The Propositions

(1) The documentary evidence demonstrates a hierarchy of colonies within the system. These differences are revealed not only in the value of exports but also by the amount of contact each colony enjoyed with Spain. Between 1568 and 1587 Hispaniola exported produce valued at 247,016.2 ducats each year and was the primary port of call for 14.8% (458 vessels) of Spanish commerce during the era (Chaunu and Chaunu 1957 6(6):497-520, 998, 1000, 1008, 1017, 1026, 1028, 1031). In this same period, Spanish Florida had no exports and attracted only seventeen documented ships (0.5%) of the 3100 that sailed from Spain (Chaunu and Chaunu 1957 6(6):553; 6(7):47). These documentary markers indicate that Hispaniola ranked higher in the colonial hierarchy than Florida.

(2) It was proposed that the focus of a colony was productive or protective with the former ranked higher than

the latter. It was proposed that a continuum of value existed between colonies based on the monetary value of colonial export commodities divided by expenditures for defense of the colony by Spain. Documentary evidence from Hispaniola and Florida demonstrates cost/benefits to Spain of each area.

Hispaniola exported 247,016 ducats worth of produce each year between 1565 and 1587 (Chaunu and Chaunu 1957 6(6):998,1000,1008,1017,1026,1028,1031; Hoffman 1980:255). In that same period the crown's defense expenditures for the colony were 1501 ducats per year (Hoffman 1980:176-177). Spanish Florida during the same period produced negligible returns on produce but cost the crown over 26,000 ducats in annual support (Chaunu and Chaunu 1957 6(6):553; Hoffman 1980:124-125,176-177). The 1500 ducat expenditure for the defense of Hispaniola was 1/164th the value of yearly exports from the colony. As such the colony was productive. In comparison, the yearly cost for the Florida establishment and its focus on defense of the "main street" of communication made it a less-valued protective colony.

(3) It was proposed that a colony's ability to create a "Neo-Europe" was influenced by the colony's position in the economic hierarchy of the empire. Documentary evidence relating to the value of exports, defense expenditures and the amount of inter-colonial ocean traffic indicates that Hispaniola's position in the hierarchy was higher than that of Spanish Florida. Yet, both areas shared the highly

visible physical aspects of a generalized or standardized Iberian culture -- the state, the church, and the market -- in the chartering, layout, zoning and basic functions of the municipality. Based on the documentary record alone, it is difficult to see how each colony's ability to create a "Neo-Europe" was influenced by the area's position in the economic hierarchy of the system.

In this proposition it is assumed that the ability to create a "Neo-Europe", is based on access to material goods. Given that Hispaniola enjoyed greater commercial contact with Spain than did colonial Florida, it would have been more successful at creating a "Neo-Europe." We would expect that, if Hispaniola were positioned higher in the economic hierarchy, then it should be more materially similar to Spain in artifacts and ecofacts (i.e., plant and animal remains) than was Florida.

The more successful a "Neo-Europe" was, the more demographically-balanced the European colonial population (Boxer 1975:36-39). These immigrant families brought with them a cultural template for the preparation and presentation of Iberian cuisine and for the furnishing of domestic structures. Although every archaeological site contains numerous classes and functional groups of artifacts that can be categorized for pattern recognition within and between communities (e.g., South 1977:95-96), the artifact class that is most indicative of the economic focus of each settlement, its commercial position within the colony and the larger systemic hierarchy is ceramics.

Ceramics are durable and therefore ubiquitous on historical archaeological sites. Their form, surface decoration and method of manufacture make them highly identifiable markers of function, status, and cultural point of origin. In some of the earliest work on the cultural significance of ceramics in the Spanish empire, Charles Fairbanks(1973) noted the role of table, utilitarian (i.e., ceramics used for cooking and cleaning) and storage (i.e., ceramic containers used for storing foods) wares in Spanish New World culture as markers of status and ethnicity. This hypothesis has been tested by Kathleen Deagan (1985b:23-28) and others (e.g., Skowronek 1984). Their research suggested that the frequency of majolica and other Spanish wares correlates favorably with the social status and ethnicity of its users. In this study, the frequency of European-made or imported ceramic ethnicity-marking table and utilitarian wares is considered in conjunction with the frequency of locally-produced utilitarian wares as a sensitive indicator of each settlement's demographic composition and its ability to create a "Neo-Europe."

If the hypothesis were confirmed, the more "successful" "Neo-Europes" would have greater frequencies of ethnicity-marking European ceramic wares. Confirmation of the null hypothesis would suggest that there is no relationship between the frequency of European ceramics and the successful creation of a "Neo-Europe" or that despite Hispaniola being a productive colony with more contact with

Spain, Florida and Hispaniola were equally successful in creating "Neo-Europes."

Another hypothesis relating to the establishment of a "Neo-Europe" relates to diet. Since an acceptable supply of familiar foods was important in establishing a colony and attracting a demographically-balanced immigrant population, the frequency of imported Old World foodways artifacts (e.g., ceramic storage wares) at more successful "Neo-Europes" should be lower than at less successful ones during the considered time period. By the 1540s, food was no longer the primary commodity exported to the colonies (Lynch 1984:169) because local production was providing the bulk of familiar foods (Crosby 1972;1986; Super 1988). In those areas where local production could not meet the demands of the population, their creation of a "Neo-Europe" could only be effected by importing familiar foods (Crosby 1986; Super 1988:41).

If the hypothesis were confirmed, the more successful "Neo-Europe" would exhibit a lower frequency of imported ceramic food storage wares than the less successful ones. Confirmation of the null hypothesis would suggest that shortages of familiar food continued even in productive colonial areas. Thus, in examining proposition 3, three categories of ceramics are used: Spanish Empire; Locally-Produced and; Spanish Storage wares (see Appendices A-H).

The first two ceramic categories reflect the ethnic and demographic make-up of each colonial area. The Spanish Empire ware category is comprised of all Spanish-made or

Spanish-imported, non-storage ceramics. These include table and utilitarian ceramics, such as Italian Montelupo and red lead-glazed earthenwares, used in the presentation and preparation of foods. The Locally-Produced ceramic category represents those aboriginal or colono-Indian utilitarian wares used by the Spanish colonists and their Indian wives and servants when Spanish Empire wares were unavailable or the demand for them was lacking.

The relative proportions of the two ware categories reflect the demographic and ethnic make-up of the population in the colonial area. The more balanced the sex ratio of the Iberian population, the greater the proportion of Spanish Empire wares in the assemblage. When imbalance occurs in the European population, the aboriginal population plays a greater role in the foodways of the colonists; this is reflected by higher proportions of locally-produced wares.

The last category, Spanish Storage wares, reflects the colonists' success at altering the local environment into a "Neo-Europe." Spanish Storage wares, such as Olive Jar, are used as containers for transporting food. Thus, the relative presence or absence of this ware category suggests the dependence of a colonial area on the motherland for familiar food. When the colonists are able to produce locally acceptable foods, they no longer have to import familiar foods from Spain. If this transformation is incomplete, however, they will remain dependent on imports

of stored familiar foods. Thus, the ceramic assemblage in these areas contains a high proportion of storage wares.

Using the relative proportions of these three categories of ceramic wares, we can demonstrate the relationship between the position of a colony in the hierarchy of empire and the ability of that colony to create a "Neo-Europe." The higher the position of a colony in the hierarchy of empire, the greater the proportion of Spanish Empire wares and the lower the proportion of Locally-Produced and Spanish Storage wares vis-a-vis colonies that are ranked lower.

(4) Exploitable environmental potential influenced the economic development of both of the colonies because of the limitations of sixteenth century technology (Blakewell 1987; Cipolla 1976). Both Hispaniola and Spanish Florida had gold resources, exotic plants and appropriate climates and soils for plantations (Sauer 1966; 1971). Yet, of the two areas only Hispaniola developed a productive economic focus. Documentary evidence has demonstrated that the Spanish ability to exploit bullion resources was crucial in the formation of an area's economic focus. Unless proven mineral sources were located (usually with the help of the indigenous population) a "rush" of immigrants did not materialize (Blakewell 1987). The location of bullion sources attracted immigrants and investments. Once a valuable physical plant was in place, other resources were exploited and plantations were established (Sauer 1966).

Hispaniola and the rest of the Antilles produced precious metals only during the first half of the sixteenth century (Hamilton 1934:43). Between 1565 and 1587, however, Hispaniola's exports included sugar, leather, cañafistula, ginger, gaiac, brazil wood and tincture wood. These renewable resources brought an average of 247,016.2 ducats per year (Chaunu and Chaunu 1957 6(6):998,1000,1008, 1017,1026,1028,1031; Hoffman 1980:255).

Spanish Florida never produced gold. For sixty years, Spaniards searched in vain for bullion in the southeast (Sauer 1971). Even after Philip II concurred in the belief that the area lay too far north to produce gold (Weddle 1985:265-284) Menendez sent Pardo in search of treasure (Smith and DePratter 1980). The lack of exploitable mineral resources limited immigration and interest in developing other resources. Certainly we do know of small ranches and sassafras root and fur traders, but the returns on these renewable resources were negligible (Chaunu and Chaunu 1957 6(6):553). Thus, the effective settlement of Florida was predicated not on the exploitation of mineral resources and the later production of renewable exotic goods but rather on the protection of commerce originating from productive colonies (Sauer 1971:275). Environmental potential that is exploitable by contemporary technology does influence the course of cosmopolitan settlement and the economic focus of a colonial area.

(5) Another concern of this study is the influence of the aboriginal population on the lifeways of the European colonists. Non-Spaniards, be they Moslems and Jews in southern Iberia, Guanche in the Canaries, Arawaks in Hispaniola or the Indios of Spanish Florida, experienced similar situations with their Spanish conquerors (Crosby 1972; 1983). All resisted Spanish conquest and were met with the inquisition (Las Casas 1974; Gannon 1983). Mandatory conversion followed by expulsion, enslavement or placement in the repartimiento or encomienda systems was the lot of each of these peoples.

In some cases the Spanish invaders either drove out local inhabitants or simply excluded them from economic and social enterprise. In other cases, the local peoples were drawn into the system as workers and as wives and concubines (Deagan 1985a; Sauer 1966; 1971).

Even groups that were excluded from mainstream aspects of Spanish culture as direct influences could play an important role in the development of a Spanish-American culture through the creation of a mestizo population (Deagan 1985). The marriages and liaisons of the Spanish invaders with indigenous women created kinship ties that influenced local colonial policy and settlement among unassimilated groups (Deagan 1985a; Lyon 1976:149).

The aboriginal influence on Spanish New World culture is invisible in the documentary materials associated with commerce, but can be seen in the archaeological record. Work at eighteenth-century Spanish sites in Florida and

California has demonstrated that when acculturation changes aboriginal economic focus to one that is compatible with European needs, indigenous populations tend to lose those parts of their material culture associated with pre-contact economic behavior and have replaced them with European products (Deetz 1978). While artifacts associated with food production changed rapidly, those connected with food preparation tended to be conserved (Deagan 1983; Deetz 1978). Factors influencing the continued use of traditional food preparation objects include: 1) whether it is aboriginal or Iberian women actually doing food preparation; and 2) the availability of material aspects of Spanish culture at these outposts. In other words, the influence of aboriginal people on Spanish society is to be found not in the documentary record, with its bias toward formal economic transactions, but in the less visible aspects of subsistence in these communities. Problems in supply created shortfalls in food-preparation materials and affected immigration of female colonists. Shortages in cookwares and lack of knowledge on the part of aboriginal women about the preparation of Iberian cuisine created a demand for imported familiar food and locally-produced substitutes for European cookwares.

Thus, we would expect that in areas where the aboriginal population influenced the creation of Spanish "Neo-Europes," aboriginally produced ceramics should be present. If this hypothesis is true, in remote areas with little external contact and a small female Iberian

population, there should be a greater frequency of aboriginally-produced ceramic wares than in more successful "Neo-Europes." The null hypothesis suggests that the economic hierarchy is not reflected by the degree of inclusion of an aboriginal population in the social milieu.

To examine this proposition we are able to turn to the archaeological record, specifically the Locally-Produced ceramic utilitarian wares (see Appendices C-H for counts). As discussed in Proposition 3, the less productive a colony, the less demographically balanced the Iberian population and the less commercial contact with Spain. In these settings, such as Spanish Florida, the Spanish population turned to the local aboriginal population for wives and concubines. This greater reliance on the aboriginal population should be reflected in the larger proportion of Locally-Produced ceramics associated with the assemblages from these areas. Thus, it is position on the continuum of value from productive to protective that determines the amount and kind of interaction between the Spanish and the indigenous inhabitants of the colonial areas.

(6) Hispaniola and Spanish Florida experienced similar phases of diachronic incorporation into the Spanish empire. First a "Prelude" stage, from initial observations to prolonged contact, and later a "Fixation" stage of rapid settlement expansion and eventual contraction and stabilization. The duration of each of these phases was dictated in part by the perceived value of the area in terms

of exportable exotica. Thus Hispaniola, went through these two stages in some thirty years because of the discovery and exploitation of gold and other exotica such as dyewoods (Sauer 1966).

Spanish Florida, while a "rich" area in the modern period, was perceived by sixteenth-century Spaniards as impoverished in desired exotica relative to their discoveries in the Antilles and on the Mesoamerican and South American mainland (Sauer 1966; 1971). Thus Florida, perceived as lacking desired produce, languished for decades in the "Prelude" stage until the presence of a hostile foreign power necessitated its incorporation into the Spanish empire through settlement (Sauer 1971: 196-203). These differences between the two areas, therefore, lay in the variables of natural resources and larger external systemic factors, rather than in the ability of the individual conquerors.

(7) Settlement pattern in each area will be dictated by the economics of transportation. In Hispaniola the focus of settlement shifted from the island's north shore to the south as the empire shifted westward. Santo Domingo on the island's south shore, was adjacent to the "main street" of communication from Spain to the New World (West and Augelli 1976:64). Siting of settlements was keyed, in both Florida and Hispaniola, to the presence of safe harbors (Lyon 1976:156-157). Seaborne commerce meant cheap multipurpose transportation, which did not require the development and

maintenance of a road network that could become obsolete through economic changes in empire (Taaffe et al. 1963).

(8) Settlement function is largely dictated by the settlement's position in the communication hierarchy of the colonial area (Casagrande et al. 1964). The settlement located nearest to the "main street" of communication to or from the mother country, with internal lines of communication radiating from it, is the leading or capital municipality for the area (Taaffe et al. 1963). In Hispaniola, Santo Domingo lay adjacent to the "main street" and was the terminus of the road to the gold fields (Sauer 1966). The documentary record of port activity demonstrates Santo Domingo's preeminence in Hispaniola. As we saw in Chapter 4, 91% of the vessels that sailed to Hispaniola between 1568 and 1587 called at Santo Domingo (Chaunu and Chaunu 1957 6(6):497-520).

Similarly, Santa Elena, in Spanish Florida, was sited at the interface of the Prevailing Westerlies and Gulf Stream on the "main street" home to Spain (DePratter and Smith 1980). It served as the anchor for Juan Pardo's trail to the west. Although the precise documentary evidence is lacking for port activity between Santa Elena and St. Augustine, the larger civilian population and the location of Menendez's home at the former settlement made it both the defacto and dejure preeminent municipality in the colony.

This documentary evidence of a colonization gradient from a primary entrepot to less functionally diverse settlements suggest that the more remote a settlement, the less contact with Spain. We would expect this lessening in outside contact to be reflected in the European and aboriginally-produced ceramic material assemblage found at each settlement.

The role of Iberian and aboriginal women in the creation of "Neo-Europes" have already been discussed (Boxer 1975; Crosby 1986; Super 1988). The greater the outside contact of a settlement the more demographically balanced the Iberian population and the greater the ability to create a "Neo-Europe". However, as communication at these hinterland, less functionally-diverse, settlements becomes more tenuous we would expect that the ability to replicate a "Neo-Europe" would be lessened.

If that hypothesis is validated those populations at the entrepot would have greater access to locally-produced European foods and European produced ceramic utilitarian and presentation wares because of their location vis-a-vis the "main street" of communication and the presence of a large Iberian population representing different social classes and professions. Further, these populations would have less need for aboriginally-produced preparation wares and imported Spanish foods (represented by ceramic storage wares). The more remote a settlement in the colonization gradient, the smaller the Iberian population and the less access to the material culture of Spain. At more remote

settlements, there would be a greater reliance on aboriginally-produced ceramic wares and imported familiar foodstuffs. Thus, we would expect if the colonization gradient is present that as one moves away from the primary entrepot the frequency of European-produced or imported table and utilitarian wares will decrease while aboriginally-produced utilitarian wares and storage wares increase. If the null hypothesis is validated it indicates that either the documentary evidence is incomplete or biased or that our perception of the colonization gradient is not operational in these contexts.

This study suggests that the "colonization gradient" or communication hierarchy is reflected in the material culture of each settlement. In Proposition 8 the presence or absence of various ceramic categories are considered as a measure of this position. Here four ceramic categories are used: Spanish Ethnicity-Marking; Spanish Utilitarian; Locally-Produced and; Spanish Storage Wares (see Appendices A-H for specific types and counts). The first two categories -- Spanish Ethnicity-Marking and Spanish Utilitarian wares-- represent a division of the earlier Spanish Empire wares category. This division was chosen to more clearly reveal the amount of communication or external contact experienced by a settlement as reflected in the proportion of Spanish Ethnicity-Marking wares such as majolica and porcelain. Spanish Utilitarian wares, such as red lead-glazed earthenwares, are associated with Iberian women, since these wares are associated with cooking

vessels. The presence or absence of these wares reflects not only external contact but a demand for these materials by a portion of the populace. The presence or absence of the categories of Locally-Produced wares and Spanish Storage wares are respectively associated with the role of aboriginal society in a settlement and the dependence of each settlement on imported foods.

Bridging The Gap

On the basis of documentary evidence we have classified two Spanish colonies as productive or protective, depending on their economic focus. These differing economic foci led to differing positions on the system's economic hierarchy. This evidence implies that differences in economic position affected each colony's ability to create a "Neo-Europe." The documentary record further suggests that the success of this creation should be reflected in the material culture associated with the colonial settlements. Because of the inherent biases associated with the documentary record, however, we turn to the archaeological record in order to more accurately assess these differences in ability to create "Neo-Europes."

A demonstration that the archaeological record reflects the ability to create "Neo-Europes" would allow accurate positioning of each settlement in the "colonization gradient" of a colonial area; each area in the economic hierarchy of empire; and each settlement in the economic hierarchy. Thus, such comparisons would more

clearly demonstrate the relationship between economic focus (i.e., productive, protective) and the ability to create a "Neo-Europe."

These differences should be reflected in the archaeological remains associated with these differentially functioning colonial areas and settlements. It is expected that the relative frequencies of European and aboriginally-produced artifacts in the primary entrepot and other less functionally diverse settlements in the productive colony of Hispaniola will be more similar to those found in Seville than will similarly functioning settlements in Spanish Florida.

To examine these questions, there is a substantial body of archaeological data available from Spain, Hispaniola and Spanish Florida.

The Archaeological Record

Introduction

Anthropological archaeological investigations of early modern Spanish colonial New World sites began nearly forty years ago under the aegis of John Goggin of Florida. His baseline work (1968) in Hispaniola, Florida, Mexico and the Caribbean basin has been recently built upon in detailed, site-specific studies in Haitian Hispaniola (e.g., Ewen 1987; Willis 1984) and in Spanish Florida (e.g., Deagan 1983; South 1979). These studies focus not only on the more traditional aspects of archaeological research, that is, the spatial relationship of ceramic and non-ceramic artifactual

evidence, but also on associated faunal and floral ecofacts.

Unfortunately the focus of Post Medieval archaeology, the Old World equivalent of historical archaeology has been on earlier historical periods, and material evidence of the early modern era is limited. To make up for these shortcomings, archaeologists have relied on information recovered from contemporary New and Old World shipwrecks (Skowronek 1984).

The following pages outline the archaeological evidence used for this study from Spain, Hispaniola and Spanish Florida. This study considers ceramics exclusively for its main avenue of inquiry. The reason for this exclusion of other artifact categories is two-fold. First, our knowledge of non-ceramic sixteenth-century Spanish artifacts is still somewhat rudimentary. Although notable exceptions exist (e.g., South et al. 1988) that have begun to document the meaning and use of these items in the Spanish empire, their ethnic- or status-marking position is not as clear as that associated with ceramics (e.g., Skowronek 1984). Second, the types of non-ceramic artifacts found at each settlement are not always comparable between sites. This is because of variable preservation and importantly the function of each site, wherein certain categories of non-ceramic artifacts may not have comprised the systemic assemblage of the settlement.

In the following sections each archaeological site is described. Detailed information on these ceramic data sets, including type and count, are presented in Appendices A-H.

This study considers sherd counts rather than a calculated minimum number of vessels.

Spain

A central premise of this thesis is that to discern a hierarchy in settlement pattern and function in the Spanish New World colonies requires defining material norms against which position can be measured. Given the tenets of cosmopolitan colonization wherein it is desirable to maintain close ties between the core and the periphery of empire, the norm for this study need be drawn from Old Spain and preferably from its leading sixteenth-century city. In the sixteenth century Spain's international economic hub was Seville (see Chapter Three).

Less than five years ago no post-medieval archaeological investigations had been undertaken in Seville. In 1983 a mid-sixteenth century site was tested in the city by the Sevillian Provincial Archaeological Museum. This site, Baños de la Reina Mora, part of an Augustinian convent, was analyzed by Bonnie McEwan (1986; 1987; 1988) of the University of Florida. Although the excavations were not extensive, sealed sixteenth century contexts (dating from 1550) were identified (McEwan 1988:81).

The ceramics from Baños are used here although they have been reclassified from McEwan's functional classification (1988) into ceramic ware types to make them comparable to materials from other sites (Appendix A). Since Baños de la Reina Mora was home to a convent of

Augustinian nuns we can be certain that food was prepared and served there. Thus, utilitarian and table ceramic wares are expected in the assemblage. Given the sites location in Seville -- Spain's leading city and the hub for the Indies trade-- no American aboriginal pottery is expected and the frequency of Spanish Storage wares should be low. This is because a large variety of foods were grown in the environs of Seville for the consumption of the city and for shipping. thus, the convent would have had access to fresh food and the need for stored foods would have been lessened (Defourneaux 1966:77-105).

Shipwrecks

A single, partially excavated terrestrial site is inadequate for drawing comparisons between the Old and New World Spanish presence. Since there are no other archaeologically excavated sixteenth-century terrestrial sites from Old Spain that have been quantified and reported, I have turned to shipwrecks for additional data.

Because ships were floating extensions of their countries' commerce and society, shipwreck-derived data is useful in comparative studies of this kind (Muckelroy 1978; Skowronek 1984). When shipwreck data is used in this way, ships are seen as the equivalent of a single function activity locus at the far end of the colonization gradient (Skowronek 1984). Shipwreck data, added to that from Seville, forms the baseline from which we can judge the

ability of the settlements and colonies to create "Neo-Europes."

There are two main sources of archaeological information about excavated sixteenth-century Spanish shipwrecks. These include the remains of: La Trinidad Valencera, Santa Maria de la Rosa, Girona, San Juan de Sicilia and Santa Ana Maria -- all of the Great Armada of 1588 lost off Britain and Ireland; and the remains of the Espiritu Santo and San Esteban of the 1554 flota, lost off the Texas coast. The Armada remains are well described in the literature (Martin 1979a; 1979b; 1980), but they remain unquantified and cannot be used here. Further, their use as troop transports skew the nature of their assemblages with greater than normal amounts of Spanish food storage containers and personal mess dishes. On the other hand, the ceramic remains of the 1554 flota, initially excavated by treasure salvors and later by the State of Texas, have been compiled.

Merchant ships, such as the 1554 flota, are appropriate for this study because of the nature of its resident populace-- the crew. This population mirrored the social organization of the Spanish homeland. On the ships the captain and his officers formed the elite, while specialists like the carpenter, surgeon and sailmaker formed the middle rank. Sailors formed the lowest rank in the hierarchy (Muckelroy 1978:219-230). On board ship, as on land, people had expectations regarding food and its preparation and service. Although only stored food was available,

preparation and presentation followed homeland practices (Palacio 1986:138; Skowronek 1987:105). Thus, while no American aboriginal utilitarian ceramics are expected in these collections, other Spanish utilitarian and table wares should be present along with high frequencies of Spanish storage ceramics (Skowronek 1987:104).

Because ceramic collections from both of these homeward-bound merchant ships are well described and quantified they are used in this study (Arnold and Weddle 1978:265; Olds 1976; Skowronek 1987) (Appendix B).

Hispaniola

Santo Domingo

In 1954, the late John Goggin of the University of Florida conducted some of the earliest excavations of Spanish colonial sites on the island for his now classic studies on Hispanic ceramics (1960; 1968). His work at the mid-sixteenth century Convento de San Francisco in Santo Domingo is used in this study.

The convent was occupied early in the sixteenth century. Resident priests lived in the convent and ministered to the needs of Santo Domingo and its environs. Within the convent the priests lived, worked and slept. Aboriginal neophytes were in residence there as well. They served as servants and cooks. At the convent we would expect to see not only Spanish utilitarian, table and storage wares but Locally-produced utilitarian ceramics as well. Since there was a full-time resident population at

the convent, whose own internal hierarchy mirrored that of the community, the artifacts recovered at the site should be representative of the community as a whole.

Goggin's stratigraphic excavations of a 5 x 35 foot trench at the four hundred and fifty-year-old site resulted in a seriation of ceramics (Goggin 1968:101-114). In his and subsequent (Council 1975) studies of the site, attention was focused on the description of ceramic and non-ceramic artifactual remains -- specifically those from the deepest part of the stratigraphic cut Section (0'-5') (Goggin 1968:103). In that section, all ceramic materials encountered below 59" are clearly in a sixteenth-century context and will be used in this study (Goggin 1968:113).

In addition, I have examined Goggin's collections and original notes housed at the University of Florida Archaeology Lab at the Florida State Museum. This investigation revealed that Sections 5'-10'(below 75"), 10'-15'(below 67"), 20'-25'(below 48"), 25'-30'(below 32") and 30'-35'(below 32") were intact sixteenth-century zones. This ceramic information is quantified with that of published Section 0'-5' in this study (Appendix C).

Puerto Real

Since the late 1970s the University of Florida has been involved in the excavation of the sixteenth century villa of Puerto Real on the north coast of Hispaniola in Haiti. The focus of several articles, theses and dissertations (e.g., Deagan 1985a; Ewen 1987; Hamilton 1981; McEwan 1983; Willis

1984), Puerto Real is by far the most extensively studied sixteenth-century Spanish colonial site in the Caribbean basin. These problem-oriented investigations have answered processual questions regarding diet, settlement plan and acculturation in addition to identifying, describing and quantifying the remains found at the site. Because these projects have examined not only the city plan but several structures in the town, including the church, a high-status residence and a low-status residence it is assumed a representative sample of the community was available for this study. The Spanish abandoned the site in the late 1570s; therefore I have used here only the Spanish-related ceramic materials from Willis' (1984) Stratum III, Ewen's (1987) early and late contexts and McEwan's (1983) Levels 3 and 4 are used in this study (Appendices D,E,F).

Spanish Florida

Santa Elena

Twentieth-century excavations at the site of the first capital of Spanish Florida, Santa Elena, began as early as 1923, with Major (U.S.M.C.) George H. Osterhout's excavations on Parris Island, South Carolina. He declared the site to be the remains of France's Charlesfort (Osterhout 1936). Reanalysis of the Osterhout materials in the 1950s suggested that in fact the site was that of Santa Elena, Spanish capital of Florida (Manucy 1957).

Since 1979, Stanley South, of the South Carolina Institute of Archaeology and Anthropology has conducted a

series of projects in the area adjacent to the Osterhout excavations. In these projects, Fort San Felipe II and some adjacent and associated structures have been excavated and reported (South 1979, 1980, 1981, 1983, 1984, 1985). From these projects a representative sample of the settlement's artifacts and ecofacts have been collected, described and quantified (Reitz and Scarry 1985; South et al. 1988). Given the short occupation of the site (1566-87) all of the Spanish period ceramic artifacts are from middens and features (Appendix G). At Santa Elena Spanish utilitarian, table and storage wares, as well as, Locally-Produced aboriginal utilitarian wares are present.

St. Augustine

Spanish Florida's second town and the oldest continuously occupied European municipality in the United States is St. Augustine. St. Augustine and its environs have been the focus of archaeological investigations by the U.S. National Park Service, Florida State University and the University of Florida for nearly thirty years (Deagan 1983). Since 1976 a multi-disciplinary investigation of the sixteenth-century component of the town has been conducted that has provided a representative sample of the town, its activities and its inhabitants. A summary of the results of this investigation has been published (see Deagan 1985; Reitz and Scarry 1985).

St. Augustine's resident population of Spanish soldiers and civilians and aboriginal women were involved in the

production, preparation and presentation of familiar food. The ethnic make-up of the population and the settlement's location are reflected in the composition of the ceramic assemblage. In sixteenth-century Spanish St. Augustine Spanish utilitarian, table and storage wares in addition to Locally-Produced aboriginal utilitarian wares are present. Therefore, with the exception of ceramic wares imported after 1590, the entire ceramic component is used in this study (Appendix H).

The ceramic artifacts recovered from these sites (see Appendices A-H) are used in the next chapter to examine propositions 3, 5, and 8. It is the relative presence or absence of these materials that helps us measure the success of each settlement's "Neo-Europe" and so, their place in the empire.

Summary

In this chapter the eight propositions that guided the research were examined against the data presented in the previous three chapters. Of them five were addressed using the documentary record. It is clear from these data that the documentary record cannot examine all aspects of hierarchy and culture change. To examine the other three propositions hypotheses were derived that are testable in the archaeological record. For these tests archaeological evidence from sites in the Old and New World were described and the artifacts appropriate for the tests were detailed that will help us delimit these differences.

CHAPTER 7

EXTRACTING MEANING FROM PATTERN: COMPARING THE COLONIES

Introduction

Mercantile economic gain was the motivation for Spain's capture and maintenance of a New World empire (Hamilton 1934; Hoffman 1980). This led to the founding of primary extractive/productive colonies whose function was to provide desired produce such as bullion, dyewoods, medicinal plants and plantation crops. Because the economic returns from these colonies far outstripped the costs incurred for their defense, the productive colonies were highly valued (Chaunu and Chaunu 1957; Hoffman 1980). Secondary, less-valued colonial areas, which cost the state more to maintain and protect than they produced in valued exports, are termed here protective. Although both colonial area types shared general aspects of Spanish settlement and culture (Foster 1960), their radically different economic roles affected their ability to create "Neo-Europes" (Crosby 1986).

The documentary record suggests that there is a relationship between a colony's position in the empire's economic hierarchy and communication with the motherland (Chaunu and Chaunu 1957). This relationship is important in the ability of a colony to create a "Neo-Europe" since

greater communication provides greater access to material aspects of the Old World. In terms of actually discerning, however, the success of a colony or settlement at creating a "Neo-Europe," the documentary record, with its bias towards commerce is inadequate. The archaeological record, from which we can determine something about the material and activities of everyday life can help answer this question.

Archaeological Evidence

Every archaeological site contains many classes and functional groups of artifacts that can be categorized for making comparisons within and between communities. When systematic archaeological excavations are undertaken, a representative sample of the range of material culture may be retrieved, categorized and examined (e.g., South 1977:95-96). For example, the collections available for study from Puerto Real in Hispaniola and Santa Elena and St. Augustine in Spanish Florida, were drawn from a representative variety of archaeological situations including features, middens and structures (Deagan 1985b; Ewen 1987; McEwan 1983; South 1979, 1980, 1982, 1983, 1984, 1985; Willis 1984). These diachronically deposited collections represent a sample of the total material culture associated with the systemic context of the Spanish sixteenth century occupation. Samples from the Convento de San Francisco in Santo Domingo, the Baños de la Reina Mora site in Seville and the remains of the 1554 flota are limited by the nature and scale of their excavation or their deposition.

Excavations at the Convento were stratigraphic and for the express purpose of creating a ceramic seriation (Council 1975; Goggin 1968). However, since these excavations focused on a diachronically deposited midden there is increased confidence in the representativeness of the collection from this site (Council 1975; Goggin 1968:32, 101-114).

At the Baños de la Reina Mora site, excavations focused on a single, discrete and synchronically deposited feature (McEwan 1988). The nature of this deposit suggests its representativeness may be questionable. However, given the uniqueness of excavations on sixteenth-century sites in Spain, the value of this collection is immeasurable

The 1554 flota materials were recovered by treasure salvors (Olds 1976) and by the State of Texas (Arnold and Weddle 1978; Skowronek 1987). Because of the archaeological rigor imposed by the State's excavations there is increased confidence in the representativeness of the entire collection from the flota. The materials from this site represent a self-contained, synchronic sample or a form of "de facto refuse" (Schiffer 1977:23-24). Although synchronically deposited, like the materials from Baños, the self-contained and thus, complete nature of the 1554 flota suggests that the sample collected from it is representative of the operating shipboard community (Skowronek 1984:3).

What joins the six sites and makes their collections comparable, is the nature of their activities. Each site served as a habitation where people cooked, ate, worked and

lived. Although the nature of their economic activities differed, they shared an Iberian cultural background. The aspect of the archaeological record that reflects this background most clearly is that associated with foodways. This includes ecofacts and artifacts, especially ceramics -- an artifact class that is of primary importance in determining the relative ability of a settlement to create a "Neo-Europe."

Ceramics

Pottery vessels are inherently fragile, but the sherds that comprised these artifacts are durable and therefore ubiquitous on historical archaeological sites. Of importance in this study is the cultural significance of ceramics in the Spanish empire as indicators of ethnicity and social status. In some of the earliest work on this subject, Charles Fairbanks (1973) noted that Spanish-made or Spanish empire-produced ceramic table, utilitarian and storage wares served as markers of ethnicity and social status in Spanish New World culture. The hypothesis was tested by Kathleen Deagan (1983:237-244; 1985b:23-28) and others (e.g., Skowronek 1984) with collections from St. Augustine and materials from the 1733 flota. This research suggested that, in the Spanish Empire, imported tablewares (of various manufacture) and all forms of tin-glazed earthenwares (known as majolica) correlated favorably with the ethnicity and social status of its users. In these studies peninsulare and creole households had greater

frequencies of these wares than did mestizo and Indian households.

Other imported lead-glazed and unglazed ceramic wares are divisible into two categories storage and utilitarian (cooking and washing) (Lister and Lister 1976; South et al. 1988). Storage wares included the ubiquitous olive jars (Goggin 1960) as well as other containers used for the shipping and storage of anything that could be poured, including such foodstuffs as wine, garbanzo beans and oil (Fairbanks 1973:143-144; Goggin 1960; Skowronek 1984; 1987). As colonial areas matured and gained demographically balanced populations, local agricultural produce met the needs of the colonists, thus lessening the need for imported food and, presumably for these shipping and storage containers (Lynch 1984:169).

In Chapter 3, we learned that Iberian women used lead-glazed ceramic wares for washing and cooking. Given the expense of importing materials to the colonies it is suggested that the presence of European-made lead-glazed ceramic cooking and washing vessels are indicative of the presence of Iberian women in the population of the colonies. Familiar ceramic forms would have been preferred for the correct preparation of Spanish cuisine and thus the creation of the less visible aspects of the Old World in the "Neo-Europes" (Deagan 1980:28-29; 1983:122,233-234,266-268).

In addition to these imported ceramic wares, we sometimes find in Spanish contexts locally-produced utilitarian cooking wares in aboriginal styles. The

frequency of these wares correlates with fewer Iberian women in the population and more Indian wives and concubines (Deagan 1980:28-29; 1983:1_-104,266-268).

The relative frequencies of these four categories: 1) Spanish Ethnicity-marking wares; 2) Spanish utilitarian wares; 3) Locally-Produced utilitarian wares; and, 4) Spanish storage wares (see Appendices A through H) are indicative of the ethnic composition of the settlements and, as such, their success at creating a "Neo-Europe" (Crosby 1986).

Testing The Hypotheses

Introduction

The documentary record shows that, between 1567 and 1587, the productive colony of Hispaniola enjoyed more commercial contact with Spain than did the protective colony of Spanish Florida (Chaunu and Chaunu 1957; Hoffman 1980). This evidence suggests that Hispaniola ranked higher in the economic hierarchy of the empire and, thus, had greater access to material goods used in the creation of a "Neo-Europe."

Proposition 3 -- The Creation of "Neo-Europes"

It was proposed (3) that a colony's ability to create a "Neo-Europe" was influenced by the colony's position in the economic hierarchy of the empire. Thus, we would expect the sites in Hispaniola to have a higher proportion of Spanish Empire ceramics (i.e., to be more similar to Spanish sites)

than those in Spanish Florida. A comparison of the ratio of ceramics from the five terrestrial sites (Table 1; Figure 31) confirms the hypothesis. The frequency of Spanish Empire ceramics in Hispaniola is greater than that in Spanish Florida. This information suggests that the inhabitants of the commodity-rich productive colony of Hispaniola were better able to create a "Neo-Europe" by importing Spanish Empire ceramics than was the population in the commodity-poor protective colony of Spanish Florida.

Proposition 3's second hypothesis seeks to examine the success of a "Neo-Europe" by measuring each area's ability to replicate the diet of Spain. Although some controlled studies of the faunal and floral remains from the Spanish Florida and Hispaniola have been made (e.g., Ewen 1987; McEwan 1983; Reitz and Scarry 1985), no systematically recovered representative remains are available from sites of the 1554 flota, Baños de la Reina Mora or the Convento de San Francisco in Santo Domingo (Arnold and Weddle 1978; Council 1975:34-42; McEwan 1988:81-82). This lack of comparable direct information on diet in the colonies and Spain can, in part, be rectified by using inferential data derived from ceramic storage wares.

Ceramic storage containers were used to transport foodstuffs from Spain to those colonies that were unable to produce familiar food locally. It was hypothesized that the smaller, demographically unbalanced population in the

Table 1

CERAMIC FREQUENCY BY AREA

	Spain	Hispaniola	Spanish Florida
Ceramic Wares	%	%	%
Spanish Empire	99.3	63	18
Locally-Produced (aboriginal)	0	23	52
Spanish Storage	0.7	14	30
Total	100	100	100

(See Appendices A and C through H for a listing of the ceramic types and their proveniences)

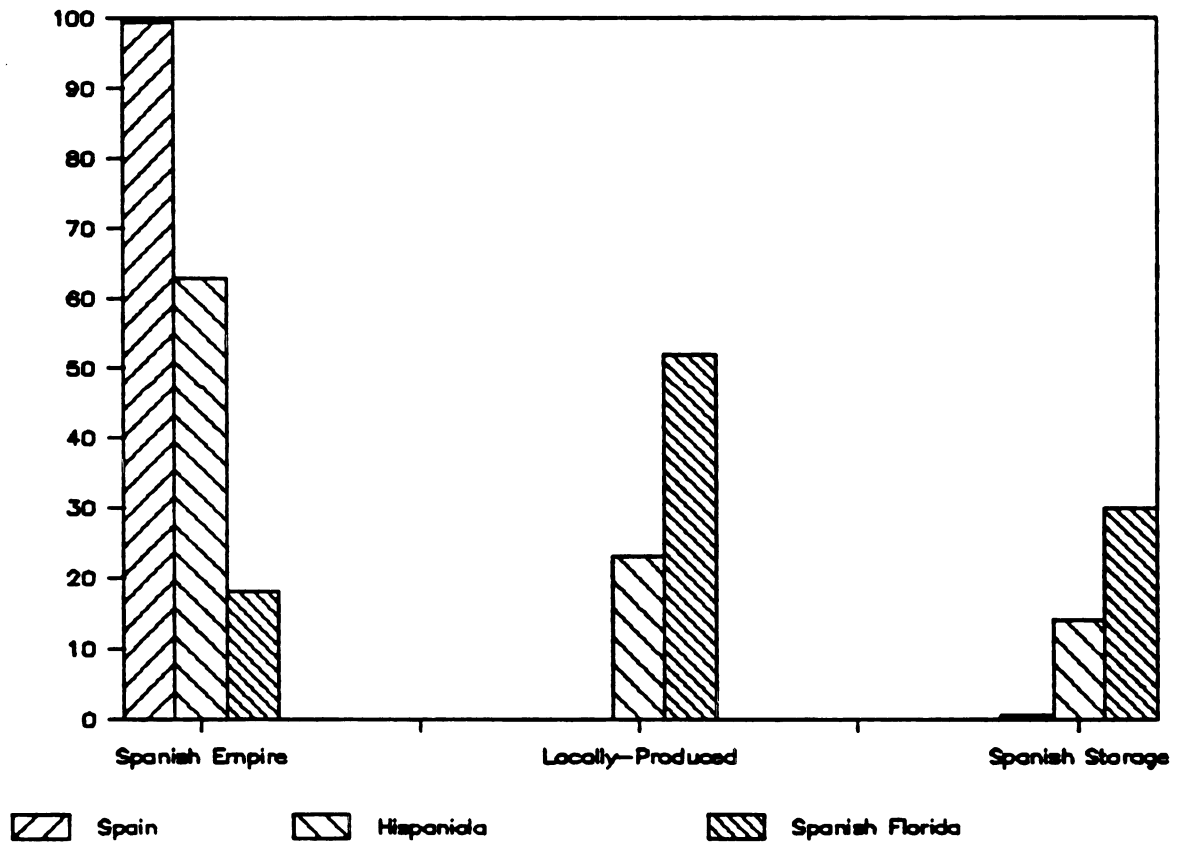


Figure 31.

Ceramic Frequency by Area

protective colony of Spanish Florida would be more dependent on imported foods than the productive colony of Hispaniola. This hypothesis was confirmed (Table 1; Figure 31) by the presence of higher frequencies of ceramic storage wares in Spanish Florida relative to their frequency in Hispaniola and Spain.

Discussion

Throughout Spain's New World empire, a generalized culture was shared, no matter the position of a colony in the economic hierarchy of the system. As discussed previously, within this extension of the normative cultural template were the primacy of the state, the church and the market (Foster 1960). These aspects were physically expressed throughout the empire in the layout of every official municipality (Crouch et al. 1982). There the social hierarchy was epitomized in the central position of government, religious and elite structures in each community (Lockhart and Schwartz 1983).

Beyond these obvious similarities, the colonies did differ. For the higher a colony's position in the economic hierarchy of imperial Spain the greater its ability was to create a "Neo-Europe." Hierarchical position was related to the value and volume of commodities exported relative to the cost of colonial defense of the area. Thus, when an area was productive, as was Hispaniola, it will be attractive to more colonists seeking to improve their social circumstances. The gains realized from their economic

endeavors will be reflected in their greater ability to create a "Neo-Europe" through both purchases of ethnicity-marking goods, such as ceramics, as well as through the transformation of their colonial environment into a closer facsimile of Europe that is capable of supplying familiar sustenance (Crosby 1986; Super 1988:41).

Less productive or protective areas were attractive to neither colonists nor commerce. The ability of the inhabitants of these areas to create "Neo-Europes" was lessened beyond the general aspects detailed above. These areas, like Spanish Florida, were to a greater degree less able to purchase and produce a "Neo-Europe." This inability to attract colonists to create the "Neo-Europe," meant that there was a greater dependence on imported foods. The few ships that came contained more storage jars of familiar food and fewer material markers of ethnic and social status (such as European ceramics) for the greatly reduced economic spectrum represented by its colonists.

Proposition 5 -- The Role of The Aboriginal Population

It was proposed (5) that when an aboriginal population was present in a colonial area, eradication, expulsion or inclusion might follow (Bartel 1980). If the first two responses were elicited from the European colonists then, of course, the aboriginal role in colonial culture would be negligible. In situations where inclusion was the norm, transculturation was expected and such contact would alter the nature of the created "Neo-Europes."

In these areas of cultural contact, physical aspects of precontact male aboriginal economic behavior were supplanted. These behavioral practices were subsumed under the mercantile economic focus of the dominant European society through such systems as repartimiento and encomienda. Thus, while this important part of the aboriginal population can be materially absent in the archaeological record, the economically-focused documentary record reveals their important role in colonial culture (Deetz 1978:180-181; Sauer 1966). While physical aspects of aboriginal male behavior were lost or excluded because of their subservient role in the European economic system, aboriginal females often had direct roles in colonial society.

Intimate contact between European males and aboriginal females, through concubinage and marriage, was a characteristic of inclusive Spanish colonial areas. Such liaisons created not only kinship ties for the economic benefit of Spain, but literally gave "birth" to a mestizo society (Deagan 1985a:289,304-305). Women's roles are virtually invisible in the strongly state and economically-focused documentary record (e.g., Connor 1925; 1930). Yet, we have seen the important role of women in the transmission of the less documentarily visible aspects of culture including subsistence activities (DeFourneaux 1966:152). Thus, in colonial Spanish America, where Iberian women were rare -- except in areas with extensive external commercial contact (Boxer 1975:38,51) -- aboriginal behavioral

practices in the less-visible preparation aspects of subsistence activities were probably substantial (Deagan 1983:103-104,122,233-234,266-268).

Since the immigration of Iberian women was influenced by the ability of a colonial area to create a "Neo-Europe" and the success of the creation was linked to the amount of outside commercial contact, we would expect that aboriginal females played a larger role in food preparation activities in Spanish Florida than in Hispaniola. An indication of this increased role would be in the greater frequency of aboriginally produced ceramic utilitarian wares in these more remote areas of the empire. Over 52% of the ceramic assemblage from Spanish Florida is comprised of these aboriginally produced utilitarian wares. The frequency of these wares in Hispaniola is lower at 23% of the total (Table 1; Figure 31).

Discussion

The role of the female aboriginal population in the shaping of colonial Spanish America into a mestizo society was apparently very great. In Chapter 3 the large role of women in the foodways of Iberian culture was outlined (Defourneaux 1966:152; McEwan 1988:63,209-212). We need only examine the frequency of utilitarian ceramic wares in the Spanish empire in the latter half of the sixteenth century to see how this crucial but little known part of Spanish culture was altered. The frequency of non-status marking Locally-made utilitarian wares in Hispaniola and

Florida (@ 23%-52%; Table 1) demonstrates the different roles of Indian women in each colony. These changes are attributable to both the availability of these European wares and also to the demand for them by the growing mestizo population.

Hispaniola by mid-century had larger Iberian and mestizo populations than did Spanish Florida because of its lengthy occupation and its amount of commerce (Connor 1930; Lyon 1984; Manucy 1985; Sauer 1966). We can infer that, in areas where there was a large Iberian female population the demand for and presence of familiar European utilitarian produce was great, but where mestizo populations predominated, locally-produced wares had become a part of the "Neo-Europe." What was important was the marking of ethnicity. In Hispaniola Spanish Ethnicity-marking ceramic wares comprised one-third of the assemblage. The preparation of food was done in seclusion by aboriginal and Iberian women using their own cultural styles. How that documentarily invisible activity was completed did not matter to the Iberian males. Thus, we see aboriginal cultural traits penetrated the created "Neo-Europes" through the kitchen door.

Spanish Florida, though at the same developmental phase, had been occupied for less than a generation. The adult population was still largely male and female Iberians and aboriginal women. Although the documentary record indicates a low frequency of outside contact, the presence of high frequencies of imported foods (storage wares 30%)

suggests that the necessities were flowing to the colony. Thus, in this era Spanish Florida had a greater concern with what was eaten and how it was prepared than how it was presented. For them, this material aspect (ethnicity-marking wares) of social differentiation was lessened in importance because racial differences readily differentiated these two parts of the population. Through time, the growth of a mestizo population led to a lessening in these racial differences and a greater emphasis on the marking of status in the colony (Deagan 1983:239-244; Skowronek 1984). Thus, what we see in the colony of Spanish Florida is the very beginning of the mestizaje process (Deagan 1983:99).

Proposition 8 -- The Colonization Gradient

It was proposed that settlement function was dictated by a town's position in the communication hierarchy of the colonial area (Casagrande et al. 1964). In this study that settlement located nearest to the "main street" of communication was the leading or capital municipality for the area (Taaffe et al. 1963).

Hispaniola

For Hispaniola the documentary record suggested that Santo Domingo was far more cosmopolitan than Puerto Real on the island's northern coast. Santo Domingo was a port of call for 91% of the commercial traffic bound for the island (Chaunu and Chaunu 1957). It was home to the highest governmental and religious offices, diverse industries, and

a population of Spanish elites and foreign entrepreneurs (Sauer 1966).

Puerto Real's population was smaller, less economically diverse and far removed from the "main street" of external communication (Ewen 1987; McEwan 1983; Sauer 1966; Willis 1984). What ships did call at the port represented less than three per cent of the island's total commerce for the era (1567-1587) (Chaunu and Chaunu 1957). These differences between the two communities in the amount of outside contact should be reflected in the ceramic assemblages associated with each community and, thus, each community's ability to create a "Neo-Europe."

Figure 32 and Table 2 show the percentage of each of the four ceramic groups considered diagnostic in this study in the ceramics recovered from Santo Domingo and Puerto Real (see Appendices C through F for identified types and counts). Santo Domingo's status as primary entrepot for a valued productive colony is demonstrated by the presence of high frequencies of Spanish Ethnicity-marking wares and European utilitarian wares and low frequencies of Locally-Produced utilitarian wares relative to Puerto Real. As was noted earlier the Iberian/European population of Santo Domingo was more demographically balanced than was that of Puerto Real. By mid-century, the aboriginal population in this part of Hispaniola had ceased to exist as a distinct population (Sauer 1966:201-203). In their place on the plantations was a growing number of black slaves and Europeans (Moya Pons 1976:80). The city became a European

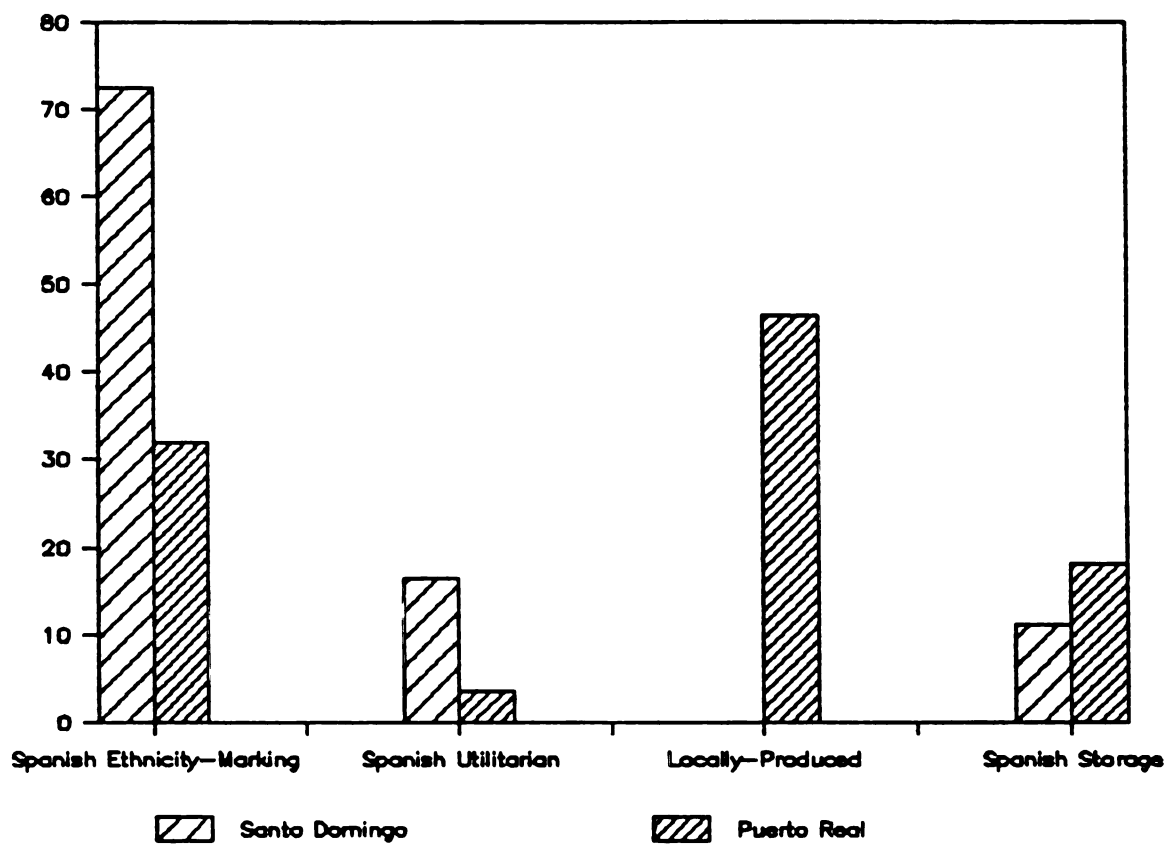


Figure 32.

Ceramic Frequency by Group -- Santo Domingo & Puerto Real

TABLE 2

Hispaniola Frequency of Ceramic Groups by Settlement

Ceramic Groups	Santo Domingo		Puerto Real	
	#	%	#	%
Sp. Ethnicity-Marking	1119	72.4	15599	32
Spanish Utilitarian	255	16.5	1748	3.6
Locally-Produced (aboriginal)	0	0	22694	46.4
Spanish Storage	171	11.1	8780	18
Total	1545	100	48821	100

(See Appendices C through F for a listing of the ceramic types and their proveniences)

enclave where the conspicuous consumption of imported European materials and the presence of Iberian women acted in concert to validate status (Boxer 1975). Iberian women demanded familiar utilitarian ceramic wares while their husbands sought to validate their ethnicity and status with ostentatious material displays of their wealth. Frequent commercial contact with Spain allowed them to fulfill these demands. This idea is being further validated by archaeological testing programs in Santo Domingo's environs. At the sixteenth-century home of Diego Caballero, for example, we find that Locally-Produced ceramics are very rare (about three per cent) in the assemblage (Ortega et al. 1982:86-93).

Santo Domingo's success, relative to Puerto Real, at creating a "Neo-Europe" is further reflected in the frequency of ceramic storage wares recovered at the Convento de San Francisco. As discussed above, these containers were used to ship familiar foods to the colonists (Goggin 1960). At Santo Domingo storage wares comprised less than 12% of the ceramics compared with 18% at Puerto Real. Although both settlements were founded at the turn of the sixteenth century, Santo Domingo, as the colony's primary entrepot nearest to the "main street" of communication, attracted a larger, more demographically balanced European population than did Puerto Real (Moya Pons 1976:77-78; Sauer 1966:157). This population not only demanded familiar foods but established farms for their production (Super 1988:41). During the island's fourth phase, Santo Domingo's environs

produced not only exportable plantation crops but also Old World comestibles for local consumption (Sauer 1966:203,206,209). This growing self-sufficiency in familiar foodstuffs lessened the need for importing them from Spain and, thus, decreased the frequency of ceramic storage wares at Santo Domingo.

Meanwhile at Puerto Real, on the island's remote northern coast, the economy continued to focus on the cattle industry and the Indian slave trade (Sauer 1966:159-160; Willis 1984:29-30). Thus, because Old World floral domesticates were not grown for local consumption, food continued to be an important imported commodity.

Discussion

These observations suggest that in Hispaniola the colonization gradient is reflected in the ceramic material culture of each settlement. Multi-functional settlements such as Santo Domingo served as the equivalent of Casagrande et al.'s (1964) entrepot or frontier town (the high end of the gradient) for the colonial area. Its extensive internal and external commercial ties attracted a more demographically balanced European population than the more remote settlements. The larger and more diverse population allowed the creation of a more successful "Neo-Europe" through the active transformation of the local environment with imported plant and animal species as well as through the importation of finished, Spanish Ethnicity-marking Old World goods.

In the hinterland settlements, such as Puerto Real, the transformation was much less complete. There a smaller, less demographically balanced European population relied more on the aboriginal population. The ceramic assemblage has a lower frequency of status-marking and Spanish utilitarian wares because of the composition of its population and its reduced external commercial contact. Puerto Real's greater functional specialization placed it lower on the colonization gradient than Santo Domingo and thus limited its ability to create a "Neo-Europe" through the transformation of the local environment. To make up for shortfalls in familiar foods, the Iberian settlers were forced to import food from Spain and thus were able to expend fewer resources on the less basic aspects of civilization. As more of the contemporary settlements are excavated more of the material reflection of the colonization gradient will be illuminated and, thus, will be able to serve as a gauge for determining the affect of external commercial contact on the creation of "Neo-Europes."

Spanish Florida

The documentary evidence pertaining to the external commercial contact enjoyed by any settlement in Spanish Florida is much less clear (Chaunu and Chaunu 1957). There, the differences between the capital, Santa Elena and the colony's second city, St. Augustine, are not as great as those between Santo Domingo and Puerto Real in Hispaniola.

Certainly, Santa Elena was the home of majority of the colony's elite population, the anchor for Pardo's inland trail, and the center for governmental and religious affairs, but the lack of a productive economy relegated the settlement to the status of a frontier administrative town (Depratter and Smith 1980; Dobyns 1980; Lyon 1976; 1984). St. Augustine, although designated the colony's secondary settlement apparently differed little from Santa Elena in the variety of activities performed and in the size of the population and garrison (Connor 1930; Lyon 1984; Manucy 1985).

Yet, even given the similarities between the two settlements, there are recognizable differences in the ceramic material assemblages that are reflective the of the colonization gradient in this protective colony. Figure 33 and Table 3 show the percentages of the four ceramic ware groups in the materials recovered from Santa Elena and St. Augustine (see Appendices G and H for specific counts and types considered). In Spanish Florida as in Hispaniola, the frequency of Spanish Ethnicity-marking and Spanish utilitarian wares is greater at the capital city, home of a more demographically balanced Iberian population, than in the secondary settlement. Similarly, we see that Locally-Produced wares and storage wares are more common in hinterland assemblages than in that of the primary entrepot.

Although these differences are not as great as those in Hispaniola, they should be seen as representing the protective colonial expression of the colonization gradient.

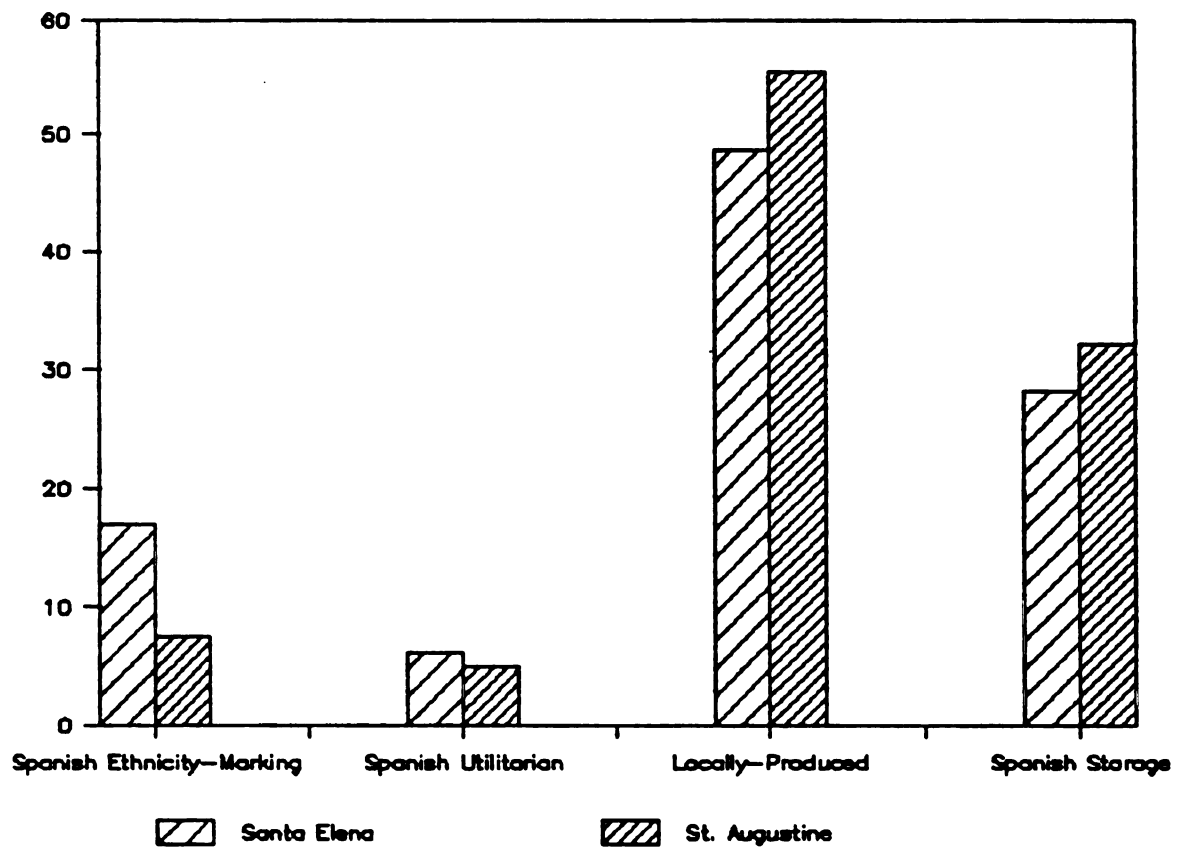


Figure 33.

Ceramic Frequency by Group -- Santa Elena & St. Augustine

TABLE 3

Spanish Florida Frequency of Ceramic Groups by Settlement

Ceramic Groups	Santa Elena		St. Augustine	
	#	%	#	%
Sp. Ethnicity-Marking	10061	17	743	7.5
Spanish Utilitarian	3638	6.1	494	5.0
Locally-Produced (aboriginal)	28910	48.7	5447	55.3
Spanish Storage	16763	28.2	3168	32.2
Total	59372	100	9852	100

(See Appendices G and H for a listing of the ceramic types and their proveniences.)

Discussion

In Spanish Florida the most demographically balanced Iberian population lived in the capital, Santa Elena. To this frontier town they brought and imported Spanish Ethnicity-marking and Spanish utilitarian ceramic wares which were familiar to them. Their "Neo-Europe," with farms and ranches, was much more complete than that of St. Augustine and required less importation of food (although neither area was self-sufficient) (Connor 1930; Hoffman 1978; Lyon 1977; 1984; Manucy 1985; Reitz and Scarry 1985).

In both settlements, the role of the female aboriginal population was evidently quite great as evidenced by the high frequencies of locally-produced ceramic wares. Given the high number of troops in each settlement and the small Iberian civilian population, aboriginal women became wives, concubines and servants for the largely male population (Connor 1930; Hoffman 1978:30; Lyon 1977; 1984).

Thus, in Spanish Florida a colonization gradient did exist from the capital, Santa Elena to St. Augustine. Although both settlements were functionally similar Santa Elena, as capital and administrative hub, attracted a more demographically balanced Iberian population whose success at creating a "Neo-Europe" was reflected in the establishment of farms and ranches and in the greater frequency of imported Spanish Ethnicity-marking ceramic wares and in the lesser reliance on imported food. St. Augustine's secondary position in the colony is reflected in the lower frequency of imported ceramics and in the greater reliance on the

aboriginal population and on imported Old World foods. Although no other municipalities were founded in the colony during the sixteenth century, we would expect these trends to continue to the dispersed military, trading and religious outposts that were founded by Menendez and his followers in the hinterlands of Spanish Florida.

Systemic Hierarchy and the Colonization Gradient

Introduction

The physical configurations associated with a colony's colonization gradient are contextualized by comparison with the motherland and other colonies in the system. Such comparisons between settlements and areas in general can be used for predicting the expected frequency of ceramic artifacts recovered from sites in this system and so, be able to measure the variable success rate at each settlement for creating "Neo-Europes" . Such an examination allows accurate positioning of each settlement and area in the empire and thus, more clearly demonstrates how the economic focus (i.e., productive, protective) affects the ability to create a "Neo-Europe".

The Systemic Gradient

If there is a relationship between economic focus, colonial "value," and the ability to create a "Neo-Europe," then we would expect that a hierarchy between functionally similar settlements in different colonial areas. Thus, the primary entrepot in a productive colonial area would be

expected to create a more successful "Neo-Europe" and therefore be more similar to sixteenth century Seville than the primary entrepot in a protective area. These differences should be reflected in the ceramic remains associated with these settlements.

We have seen that a successful "Neo-Europe" is materially reflected in the frequency of three categories of pottery. "Spanish Empire" ceramics (Spanish Ethnicity-marking and utilitarian) reflect commercial contact and the replication of the social hierarchy of Spain (South et al. 1988). The frequency of locally-produced wares reflects the integration of indigenous peoples into Spanish colonial society. The less successful the "Neo-Europe," the fewer Iberian women in residence and the greater the number of aboriginal wives and concubines. Finally, a crucial aspect of the creation of "Neo-Europes" is the transformation of the local environment to produce familiar foods. Once self-sufficiency in subsistence is achieved, replication of the social hierarchy may follow. The frequency of storage wares in the ceramic assemblage reflects the success of the colonists in creating a sustenance providing "Neo-Europe". Higher frequencies of those wares represents a greater dependence on the motherland and, thus, a less successful "Neo-Europe."

In this study the ceramic data from Old World and New World contexts demonstrates the presence of this hierarchy. Table 4 and Figure 34 shows the frequency of Spanish Empire, locally-made and storage ceramic wares recovered from Baños,

TABLE 4

Ceramic Frequency and Systemic Hierarchy

	Baños	Sto Dngo	Prto Real	Sta Elna	St Agstn	1554 <u>flta</u>
Ceramics						
Spanish Empire	99%	88%	35.5%	23%	12.5%	6%
Locally- Produced (abrgnl)	0%	0%	46.5%	48%	55.5%	0%
Spanish Storage	>1%	12%	18%	29%	32%	94%
Total	100%	100%	100%	100%	100%	100%

(See Appendices A through H for a listing of the ceramic types and their proveniences)

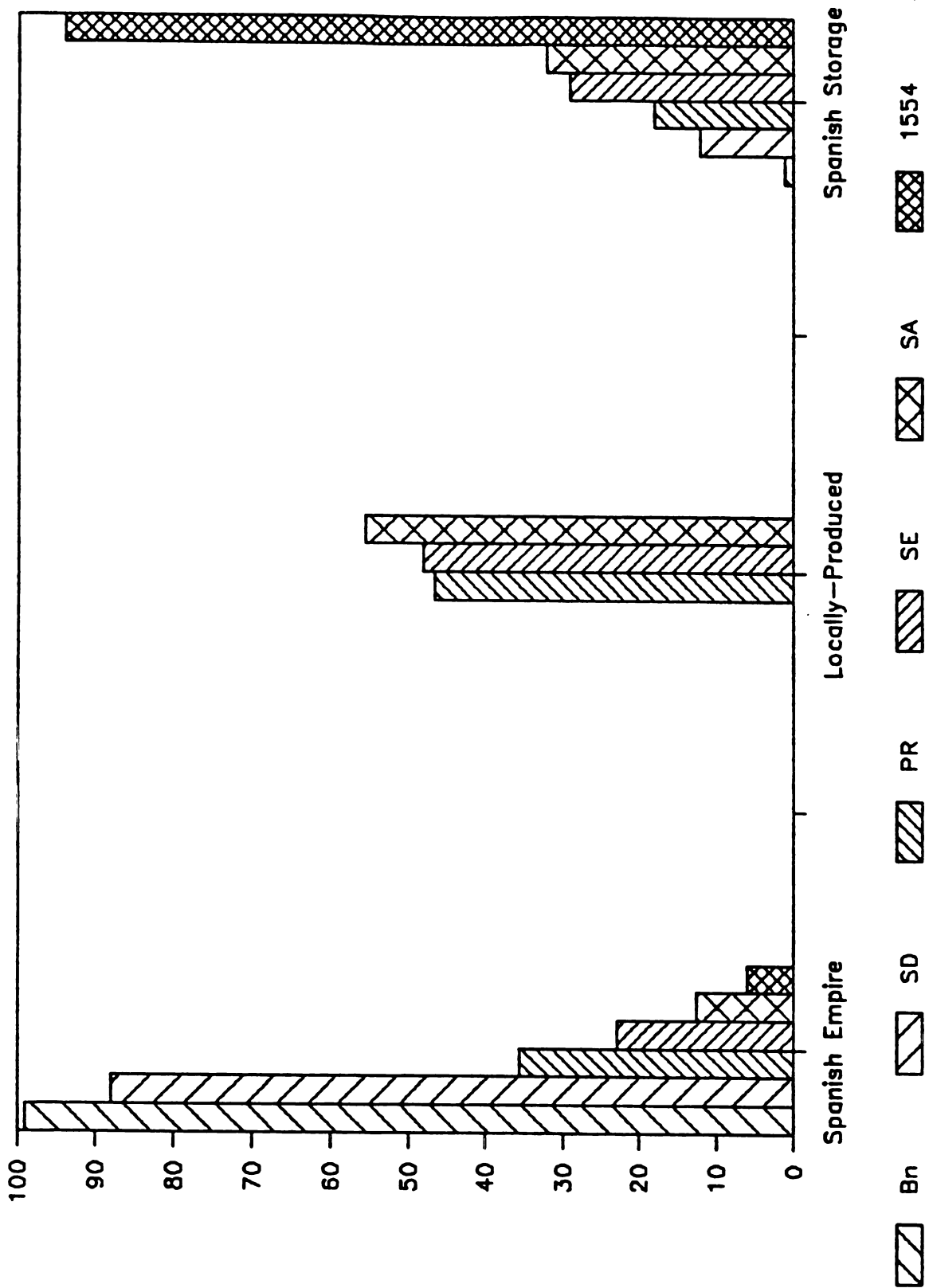


Figure 34. Ceramic Frequency and Systemic Hierarchy

the 1554 flota, Santo Domingo, Puerto Real, Santa Elena and St. Augustine.

Our measure for positioning on the hierarchy is drawn from Spain's economic capital and the "Mirror of the Indies of Castile," Seville (Defourneaux 1966:74,92). At the Baños de la Reina Mora site in Seville, over 99% of the ceramic assemblage are table and utilitarian wares, the remainder being storage wares (Appendix A; McEwan 1988). The infrequency of storage wares demonstrates the availability of fresh produce from the city's hinterlands.

Hispaniola's capital, Santo Domingo is, of the sites considered, materially most similar to Baños. Eighty-eight per cent of the ceramic assemblage from the Convento de San Francisco are Spanish Empire wares, while some 12% is storage wares (Appendix C). As the primary entrepot for a productive colony, the settlement created a "Neo-Europe" by transforming the local environment with familiar Old World plants and animals and through importing the artifacts of the motherland (Chaunu and Chaunu 1957; Sauer 1966). Faunal remains from the Convento suggest how complete the transformation was. The majority of the biomass is domestic species of cows, pigs, sheep, goats and chickens while the minority is fish (Council 1975:38-39).

According to the documentary record the role of the aboriginal population in the city was apparently very limited. The archaeological record from the Convento de San Francisco appears to validate those records. Although it may be tempting to suggest bias in the collection of

aboriginally-made ceramics in excavations at this site, Goggin (1968:105) clearly states that none were encountered. These findings are corroborated by recent reports of low frequencies of aboriginal wares from other sites in the city (Ortega et al. 1982). These data, coupled with documentary evidence of the European demographic make-up of the community, suggests that it is reasonable to assume that the influence of the aboriginal population was slight (Boxer 1975; Moya Pons 1976; Sauer 1966). Thus, the Convento's ceramic frequencies reflect the settlement's success at creating a "Neo-Europe."

Puerto Real, a hinterland settlement on Hispaniola's north shore, was far less cosmopolitan than Santo Domingo and thus, less like Seville (Appendices D through F). Only 35% of the ceramic assemblage recovered from Puerto Real are Spanish Empire wares. This low frequency corresponds with documentary evidence regarding the few vessels that called at this remote port (Chaunu and Chaunu 1957). Although there were profitable industries at Puerto Real, primarily cattle raising and slaving, there were few Iberian women in the Spanish populace (Sauer 1966; Willis 1984). Thus, aboriginal women were included into the colonial society of the community (Deagan 1985). The influence of this ethnic group can be reckoned by the high frequency (46.5%) of Locally-Produced ceramics recovered throughout the site (Ewen 1987; McEwan 1983; Willis 1984).

Finally, the success of Puerto Real's alteration of the environment into a "Neo-Europe" is reflected in the

frequency of storage wares (18%) in the ceramic assemblage. At Puerto Real, these wares are one-and-one-half times as frequent as they are in Santo Domingo, indicating a greater reliance on imported Old World plant foods. Although farms were rare in this community, herding was not (Willis 1984). Studies of the faunal remains from the site show that over 90% of the available biomass was beef, pork and mutton, with the remainder composed of turtle, fish and birds (Ewen 1987:194; McEwan 1983:84-85; Willis 1984:233).

Santa Elena occupied the third position in the hierarchy. This settlement served as the capital for the protective colony of Spanish Florida. Twenty-three per cent of the ceramics recovered (Appendix G) from this site are Spanish Empire wares, while Locally-Produced and storage wares comprise 48% and 29% respectively. Santa Elena was a capital and, presumably, the primary entrepot for a distinct colony, yet its material face is more like to a remote hinterland settlement in Hispaniola than a mirror of Seville and Spain. The low "value" of the colony in the Spanish system of empire had little to recommend it for colonization and commerce. The majority of those Spaniards that comprised its European populace were there at the pleasure of the crown as bureaucrats, soldiers and priests (Connor 1930; Lyon 1984; Manucy 1985; Ross 1925). Although some civilian families were present, their creation of a "Neo-Europe" was far less developed than those of their cousins in Hispaniola.

The few ships that did call brought basic supplies such as food and a few Old World commodities like ceramics (Bushnell 1981; Chaunu and Chaunu 1957; Deagan 1980:28; Lyon 1984:6). Study of faunal and floral remains from Santa Elena reveals that most Old World domesticates were available to the populace (Reitz and Scarry 1985:56,65,66). Yet, less than 30% of the faunal remains were beef, pork, mutton or chicken; the remainder were fish and game animals (Reitz and Scarry 1985:66-68). This heavy reliance on hunted and fished foods and the high frequency (29%) of imported storage wares suggests that the locally established farms and ranches were unable to meet the demands of the Iberian population (Connor 1930:189,283; Lyon 1984:5,10,13-14). In 1573 one soldier complained that "rations of biscuit, maize, flour, jerked beef, wine...oil" were sporadically issued. "When there was nothing they ate herbs, fish and other scum and vermin" (Connor 1925:98-99). As we have seen (Chapter 3), the standard diet in Philip II's army was comprised of cereal products, meat, fish, milk products, oil and drink. If these familiar items were unavailable to the troops, the grumbling would not be limited to their bellies (Braudel 1973:88). Thus, mutiny was a constant fear in the colony (Lyon 1984:2). The high frequency (48%) of locally-produced utilitarian wares suggests that the aboriginal populace played an important role in Santa Elena. Indeed in addition to providing wives and concubines for the soldiers, Indians labored on the

fortress of San Marcos and supplied food and other tribute to the community (Lyon 1984:5,9,14).

The colony's second municipality, St. Augustine continues the trends observed in the other settlements. The city's primary military focus is reflected in its ceramic assemblage (Deagan 1985b) (Appendix H). There, Spanish Empire ceramics comprise only 12.5% of the recovered pottery. With Santa Elena as capital and primary center for civilian settlement, St. Augustine's Iberian populace was largely comprised of soldiers, petty bureaucrats and some civilians (Lyon 1977; 1984; Manucy 1985). Thus, the demand for Spanish Empire ceramics was low.

In St. Augustine, the integration of the aboriginal population was even greater than in Santa Elena. As Deagan has observed (1980:29; 1985a:304), St. Augustine's mestizo population was born in the sixteenth century when Indian women acted as wives, concubines and servants for the Spanish garrison. At this settlement, over fifty per cent (55.5%) of the ceramics are Locally-Produced wares. As in Santa Elena, the aboriginal populace supplied both labor and commodities to the Spanish (Deagan 1985a:293-294; Lyon 1976:50, 118-119).

If St. Augustine's population did not lend itself to the creation of a material "Neo-Europe," its transition of the environment was similarly underdeveloped. Again many Old World cultigens have been identified from archaeological excavations in the community (Reitz and Scarry 1985:56), but the high frequency of storage wares (32%) indicates that

shortfalls in familiar produce plagued the community and thus needed to be imported. It is interesting to note, however, that nearly half the faunal assemblage identified from the municipality has been identified as domesticated Old World species. As compared to the lower frequencies identified in Santa Elena, this may represent St. Augustine's attempt to create a simplified culinary "Neo-Europe." Given the largely male make-up of this military outpost, the nuances of the generalized Iberian culture differed from that found nearer the main line of communication and commerce. Spanish men and their Indian wives could not produce "Spanish" meals from local foods. To compensate for this shortfall and to validate their cultural position and create their version of a "Neo-Europe" beyond gridded streets, the Catholic church, and the Spanish language, they relied more on familiar Old World foods.

The last segment of the system's hierarchy considered here is the 1554 flota. Research on shipwreck remains from the seventeenth and eighteenth centuries suggested that they be viewed as the furthest extension of colonial empire and thus, represent a "floating frontier" (Johnson and Skowronek 1986). There is no reason to suspect that the archaeologically retrieved materials from these sixteenth-century vessels be viewed any differently from terrestrial sites (Arnold and Weddle 1978; Olds 1976; Skowronek 1987). The social hierarchies that characterized sixteenth-century Spain were mirrored on board the vessels that transported their people and cargo to and from the colonies. There were

both elite and commoner people among the crew with clear indications of the status of each individual aboard (Muckelroy 1978; Skowronek 1984). Thus, while the frequency of Spanish Empire wares is low in the assemblage (6%) (see Appendix B), this does reflect the needs of the crew and the problems of supply in a "frontier" setting. To create their "Neo-Europe" in this hostile environment, the crew were supplied with familiar stored and fresh foods (storage wares 94%). These included the identified remains of olives and hazelnuts and pig bones (Arnold and Weddle 1978:265,373).

The lack of locally-produced wares reflects the closed nature of shipboard life, wherein women and children were only aboard as passengers, and the dependence of the crew in this setting was on familiar Spanish Empire ceramics and non-ceramic cooking wares (Arnold and Weddle 1978; Olds 1976; Skowronek 1987).

Discussion

By integrating archaeological and documentary evidence from many locales in the Spanish sixteenth-century empire, we are able to more clearly understand what aspects of Spanish culture were considered important and, thus, exported as a "conquest culture" (Foster 1960). Further, these two types of data can lead to a clearer understanding of how "Neo-Europes" were formulated and influenced by the environment, the aboriginal population, and larger systemic concerns.

We have seen that "Neo-Europes" are comprised of more than the aspects of the church, the state and the economy and their manifestations in city plan, architecture, language and societal norms as documented in written records. We have seen that access to familiar food was basic for colonization whether exported in storage wares or produced locally. The relative success of a "Neo-Europe" was based on the ability to produce these familiar foodstuffs locally, as was seen in Santo Domingo (Sauer 1966). When these comestibles were regularly produced, the need for imported foods fell and the immigration rate of Iberian women rose (Super 1988:41). With a more balanced population, colonial society began to increasingly mark its internal hierarchy with material items, including Spanish Empire ceramics. Concurrent with the rise of creole society, there was a lessening of dependence on locally-produced ceramic wares. Thus, people sought to mark their Spanish roots with Spanish cuisine, prepared by Iberian wives using European ceramics and techniques and presenting their repast on status-marking Spanish Empire wares (Boxer 1975; Deagan 1983; Skowronek 1984; South et al. 1988).

Environmental potential affected the "value" of each colonial area. As value decreased so too did the volume of commercial contact with the motherland. And with the fall of shipping traffic and their cargoes, the ability to create "Neo-Europes" in these less-productive and protective colonies was affected. Yet, these differing economic roles did not affect how the aboriginal population was integrated

into colonial society. In both areas, women served as wives, concubines and servants while tribute in the form of labor and materials was expected from the aboriginal males (Deagan 1985a). The Spanish sought to bring the aboriginal population into their Old World society as part of their "Neo-Europes". As such, when possible, the Spanish sought to eradicate aboriginal cultural practices (Deagan 1985a; Sauer 1966; 1971). Yet, in areas with limited external contact, aboriginal culture left its mark in the Spanish community. We see this physically, in the form of a mestizo population, and materially in the less visible aspects of food preparation.

Thus, within the Spanish colonial system, there was a hierarchy of colonization whose manifestation was the creation of a "Neo-Europe." In the sixteenth-century colonies of Hispaniola and Florida, settlements of similar function, which shared general parts of a "conquest culture," differed considerably in the degree of their success at creating "Neo-Europes." Although both areas shared similar environments and resident aboriginal societies, their "value" as productive or protective affected their positions in the hierarchy of the empire and, in turn, their respective abilities to create a "Neo-Europe." Thus, even secondary and tertiary settlements in a productive colony may have created more successful "Neo-Europes" than a primary entrepot and capital of another colonial area.

CHAPTER 8

SUMMARY AND CONCLUSIONS

Introduction

The traits shared by Spanish New World colonies have been termed "conquest culture" (Foster 1960). This generalized Iberian culture is a distillation or standardization of the colonists' range of Old World experiences. Through this generalized Iberian culture, the colonists sought to create a social and material facsimile of their Iberian homeland -- a "Neo-Europe." In these "Neo-Europes," generalized aspects of the more visible parts of Spanish Old World culture occur (Crosby 1986). Thus, throughout the Spanish colonies, we see a common language and hierarchy in governmental, religious and social institutions. Repeatedly, in each settlement in each colony these institutions are physically manifested in community function, town plan, architecture and siting of buildings in the community.

Yet, if we look beyond this veneer, it is clear that Spanish settlements in the New World were not invariably stamped out; instead they were shaped by a variable combination of internal colonial constraints and external systemic concerns that resulted in a hierarchical

relationship within and between colonies in the empire. Through the archaeological and documentary records, we have begun to define the nature of that relationship by measuring the relative success of the created "Neo-Europes" in Hispaniola and Florida. The differences that were revealed reflect the hierarchy of economic relationships within colonies and between colonies and the motherland.

Modelling Sixteenth Century Spanish Colonization

The differences we have observed in the relative success of settlements and colonial areas in creating "Neo-Europe" can be used to determine the positions of other less known locales in the system. In such settings, the eight propositions that guided this thesis may be tested and further refined on other European sites in these colonial areas or in other parts of the sixteenth-century Spanish Empire. A review of these propositions serves as a summary of the findings of this research.

(1) Hierarchy characterized Spain's colonial system. This hierarchy was reflected not only in the amount and value of exports from each colonial area but also in the amount of contact each colony enjoyed with Spain. During the two decades following 1568, Hispaniola was the destination of nearly 15% of the ships that cleared Seville for the New World. These vessels removed nearly a quarter of a million ducats of produce annually from the island (Chaunu and Chaunu 1957). In the same era, Florida produced no exports

and attracted less than 1% of the shipping (ibid. 1957). Thus, those areas that produced exotica enjoyed greater contact with Spain and so ranked higher in the hierarchy of empire than areas that produced few or no exports. Where documentary evidence exists for other Spanish colonial areas of this era, it should be possible to rank them against Hispaniola and Florida and, thus, determine their position in the hierarchy.

(2) Economic focus in the Spanish sixteenth-century colonial empire was described as a continuum of value based on the monetary value of colonial export commodities divided by expenditures for defense of the colony by Spain. At the higher end of this continuum were productive colonies; those at the lower end were termed protective. The value of Hispaniola's exports was 164 times the amount spent on defense while the Florida colony annually cost the crown 26,000 more ducats than it produced (Chaunu and Chaunu 1957; Hoffman 1980). Using this scale, the economic focus of, Hispaniola was more productive while that of Spanish Florida was more protective. This proposition and the first proposition suggest that the more productive a colony was, the higher its rank in the hierarchy of empire. In other colonial areas for which documentary evidence on the value of exports and defense expenditures exists, it should be possible to place such areas on this continuum and, thus, determine their roles in the empire.

(3) It was proposed that a colony's ability to create a "Neo-Europe" was influenced by the colony's position in the economic hierarchy of the empire. As we have seen, the documentary record suggests that certain aspects of a generalized Iberian culture, such as architecture and city plan, are present regardless of a settlement's or colony's economic focus or hierarchical position. However, since a "Neo-Europe" is created both by physically altering the ecology of the colonial area as well as by importing goods directly from Spain and the Old World, we would expect that those areas that enjoyed greater contact with the motherland were more successful in their replications than those that suffered from commercial neglect.

To see this differential in success rates, we turned to the archaeological record. Ceramic remains (specifically those associated with food storage, preparation and presentation) were used as sensitive indicators of the nature of the colonial population and its ability to create a "Neo-Europe." These ceramic remains were categorized as Spanish Empire, Locally-Produced and Spanish Storage wares. The relative proportions of the first two ware categories reflect the make-up of the population in the colonial area. Thus, the more demographically balanced the Iberian population, the greater the proportion of Spanish Empire wares in the assemblage. When imbalance occurred in the European population, the aboriginal population played a greater role in the foodways of the colonists; this is reflected by higher proportions of locally-produced wares.

The last category, storage wares, reflects the colonists' success at altering the local environment into a "Neo-Europe." When the colonists were able to produce familiar, acceptable foods locally, they no longer had to import familiar foods from Spain. If this transformation was incomplete, however, they had to remain dependent on imports of stored familiar foods. Thus, the ceramic assemblage in these areas contains a high proportion of storage wares.

Using the relative proportions of these three categories of ceramic wares, we have demonstrated a relationship between the position of a colony in the hierarchy of empire and the ability of that colony to create a "Neo-Europe." The higher the position of a colony in the hierarchy of empire, the greater the proportion of Spanish Empire wares and the lower the proportion of locally-produced and storage wares vis-a-vis colonies that are ranked lower. By using this scale, the success of colonial areas at creating "Neo-Europes" may be measured.

(4) It was proposed that exploitable environmental potential influenced the economic focus of each colonial area. Indeed, it was shown that, while both areas had potential gold resources, exotic plants and appropriate climates and soils for plantations (Sauer 1966; 1971), only Hispaniola developed a productive economic focus. The documentary record suggests that the Spanish ability to exploit bullion resources (and other commodities such as pearls and precious stones) was of primary importance in the

development of a productive focus (Sauer 1966). If such resources could be located, those and other secondary commodities would be exploited while other products were developed for export (Blakewell 1987). Areas where Spanish explorers failed to locate precious resources attracted few settlers and tended to be less valued and ranked lower in the hierarchy of empire. In such settings, the "Neo-Europes" were less successful than in those with bullion or that had previously produced similar precious commodities.

(5) The influence of the aboriginal population on the lifeways of European colonists varied according to the economic focus of the colony and its position in the hierarchy of empire. A productive, valued colony such as Hispaniola tended to exclude the indigenous population from the European population and settlements, whereas in Spanish Florida, the aboriginal population played a larger role in the creation of Spanish-American culture. Documentary information on the indigenous population in the sixteenth-century Spanish Empire is largely limited to descriptions of their ferocity in battle, their mistreatment at the hands of the Spanish or their short life expectancies (e.g., Las Casas 1974); it gives little information about their interactions with the colonists (Deagan 1985a).

To make up for these shortcomings, we were able to turn to the archaeological record, specifically the locally-produced ceramic utilitarian wares. As discussed in Proposition 3, the less productive a colony, the less

demographically balanced the Iberian population and the less commercial contact with Spain. In these settings, such as Spanish Florida, the Spanish population turned to the local aboriginal populations for wives and concubines. This greater reliance on the aboriginal population is reflected in the larger proportion of locally-produced ceramics associated with the assemblages from these areas. Thus, it is position on the continuum of value from productive to protective that determines the amount and kind of interaction between the Spanish and the indigenous inhabitants of the colonial areas.

(6) The diachronic phases of incorporation of colonial areas into the Spanish Empire vary only in duration. All areas pass through four phases: Prelude; Barter and Plunder; Imperial Imposition; and Contraction and Stabilization. The duration and scale of each phase is dictated by the perceived value of each colony in relation to the presence of exportable exotica (including gold, dyewoods and slaves) or the presence of hostile European powers (Sauer 1966:61,77-79,153-155; 1971:196-203). Passage through these phases, therefore, lies in the variable of the Spanish perception of natural resources and larger external systemic factors, rather than in the ability of individual conquerors.

(7) The study showed that settlement pattern was dictated by the economics of transportation from the colonial area to

Spain. A colony's primary entrepot was sited on a safe harbor adjacent to the "main street" of communication from Spain to the New World (Sauer 1971:192,213-214; West and Augelli 1976:64). Other secondary and tertiary settlements were located inland or at other less convenient ports adjacent to desired commodities and, thus, were usually supplied via the entrepot (Taaffe et al. 1963). It is thus expected that, in other colonial areas, the primary entrepot would be located adjacent to the most convenient route to the Old World and that the settlements and road system would focus on that primary port.

(8) In these cosmopolitan colonies, we saw that settlement function was dictated by the settlement's position in the communication hierarchy of the colonial area (Casagrande et al. 1964). The settlement that was located nearest to the "main street" of communication and was joined to other settlements in the colony by trails or sea lanes served as a primary multi-functional entrepot for the colony. From this location, information and finished goods were sent to the hinterlands and to it flowed the products or information desired by Spain. It follows that the more remote the siting of a settlement vis-a-vis the primary entrepot, the less functionally diverse it would be (Dobyns 1980). Thus, settlement function is predicated on position in the communication hierarchy or colonization gradient of a colony (Casagrande et al. 1964).

Because of this relationship between function and communication, the relative position of each settlement in a colony is discernible by its ability to create a "Neo-Europe." Given the difficulty in comparing the similar aspects of "conquest culture" as it is recorded in the documentary record, the degree of this success is best measured using material culture. Ceramics are a powerful tool for this measurement because they are highly diagnostic as to function, age, and point of origin and because the presence or absence of certain categories can suggest different interpretations for the observed phenomenon. Thus, in Hispaniola the documentary record suggested the preeminence of Santo Domingo in the colony's "colonization gradient" and the secondary role of Puerto Real on the island's north shore. Comparison of the proportions of various categories of ceramic wares demonstrated the relative success of Santo Domingo's "Neo-Europe" compared with that created by Puerto Real. Comparison of Santa Elena and St. Augustine in Spanish Florida revealed a similar relationship between these two settlements.

The value of these material correlates of the "colonization gradient" and the varying success at creating "Neo-Europes" lies in the ability to examine intra- and inter-colonial relationships. On the intra-colonial level, these material comparisons can be used to interpret discrepancies in the documentary record and to understand how each settlement was adapted to its own local environment. When the same comparisons are made on an

inter-colonial level, the relationship of each settlement and its version of a "Neo-Europe" to the rest of the empire is discernible. Thus, we can see that, while Santa Elena served as the capital and primary entrepot for Spanish Florida, its version of a "Neo-Europe" was more akin to that of Puerto Real, a remote settlement, than to that of Santo Domingo, Hispaniola's primary entrepot. As more settlements in these colonies and other areas receive archaeological attention, their position in the Spanish Empire can be determined on this same basis. This will allow more precise inter- and intra-colonial comparisons that will show how internal colonial constraints and external systemic concerns combine to affect the role and hierarchical position of each settlement in Spain's system of empire.

Reevaluating The Theoretical Base

This study of two colonies in Spain's sixteenth-century New World empire lends insight into the early modern colonization process beyond the creation of a model suitable for archaeological and documentary testing. Some of these insights are considered below.

At the base of this research lies world systems theory and its focus on the creation of the modern European-centered world economy. In this view the world is characterized as bipartite with a European core of consumers being supplied by a periphery of colonial producers (Stavrianos 1981; Wallerstein 1974; Wolf 1982). As this study has pointed out a division into "core" and "periphery"

is too simple, for indeed there is hierarchy within the periphery that results in some areas being more peripheral than others.

Another pillar of this research is the "cosmopolitan" concepts of Frontier Studies (Lewis 1984; Steffen 1980). Part of this term's definition is that continuing contact with the motherland allows only modal change and no fundamental change in the colonial area. As detailed earlier, not all cosmopolitan colonies enjoy a high level of contact with the motherland. This issue of the degree of contact and change must be considered when categorizing a colony as "cosmopolitan" or "insular" in focus (Lewis 1984; Steffen 1980). Activities performed within a colony do not automatically place it in one category or another. As we have seen part of the colonization process is the alteration of the environment into a Neo-Europe, both materially and in the production of familiar foods (Crosby 1986). Thus, even if a colony only produces goods for internal consumption and not for export they still may have a cosmopolitan focus similar to that associated with Spanish Florida. Knowing where a colony "fits" requires a knowledge of the system of which it was a part -- and that knowledge can only come through comparison.

Additionally, the physical manifestations of a cosmopolitan frontier or colony should be considered within the framework of the colonization gradient (Casagrande et al. 1964). In this study "cosmopolitan" was defined as having extractive/productive or associated protective

activities which were conducted for the ultimate benefit of a remote motherland. Thus, while ranching, mining, plantations and lumbering may be associated with the furthest reaches of the colonization gradient-- the hinterlands or single activity sites, we can see that administrative centers (entrepots and frontier towns) and their associated activities are no less a part of the cosmopolitan colonial milieu. Ultimately it is the raison d'etre for the settlement of an area that must be considered and not simply the activities performed therein.

Finally, this study has suggested that the stages of area incorporation, and the development of lines of communication proposed by Meinig (1986) and Taaffe et al. (1963) may be a global phenomenon. Is it because these models are too general or is it because the quest for efficient profit making is a culturally overarching hallmark of the world economy? Only through continued comparative work on the modern era and other time periods can we begin to see the broader applicability of these models.

De Omnibus Dubitandum -- Guidelines For Future Research

As this last section's title suggests, everything ought to be doubted until it is tested. An important part of this study was based on variably collected material remains. In the upcoming Columbian Quincentennial observances, this model should be tested on other sites within the former Spanish colonies of Hispaniola and Florida and in other contemporary but differently endowed Spanish colonies.

Its ramifications for larger cross-cultural and diachronic considerations of cosmopolitan colonization efforts is also manifest. Questions might include: "Was Spain alone in the creation of hierarchically ordered "Neo-Europes" in a single system or can these trends be seen among the other European colonizers?"; and "Did Florida's hierarchical position change as new lands such as California, Arizona and New Mexico were colonized in the seventeenth and eighteenth centuries?"

Much work remains but a testable foundation has been laid. We have seen that Spain's New World colonies, despite their sharing of an overt generalized Iberian culture, were quite different in economic focus. These colonies were shaped by various combinations of internal constraints and external concerns, resulting in a hierarchical relationship within and between colonies in the empire. Our future goal is to further define the nature of that relationship and ultimately its limits.

APPENDICES

APPENDIX A

Banos de la Reina Mora Ceramics*

Ceramic Types	Number

Spanish Ethnicity-Marking Wares:	
Andalusia Plain	114
Andalusia Polychrome "A"	28
Andalusia Polychrome "B"	6
Bisque	14
Caparra Blue	1
Columbia Plain	939
Dibujo de Encaje	1
Eroded Tin-Glazed	1
Green Tin-Glazed	124
Green & White tin-Glazed	115
Indeterminate Tin-Glazed	143
Iron Brown Yayal	2
Isabela Polychrome	12
Lustreware	2
Melado	38
Paterna Tin-Glazed	1
Puerto Real Green on Green	11
Santa Elena Mottled Blue on White	54
Sevilla Blue on Blue	721
Santo Domingo Blue on White	105
Unclassified Blue on White	238
Unclassified Polychrome Majolica	41
Yayal Blue on White	283
Bizcocho	1321
Feldspar Inlaid Redware	2
Feldspar Tempered Redware	8
Fine unglazed coarse earthenware	53
Orange Micaceous	2
Blue on White Delft	1
Ligurian Blue on Blue	15
Ming Porcelain	3
Pisan Slipware	13
 Total	 4412
Percentage	46.1%

Appendix A (cont'd)

Ceramic Types	Number

Spanish Utilitarian Wares:	
Anafe	46
Arcaduz	1003
Green Bacin	21
Green Lebrillo	103
Lead Glazed Coarse Earthenware	2556
Mortar	9
Unglazed Coarse Earthenware	1355
Total	5093
Percentage	53.2%
Spanish Storage Wares:	
Tin-Glazed Olive Jar (tinaja)	2
Lead Glazed Olive Jar	22
Unglazed Olive Jar	43
Total	67
Percentage	0.7%
Total Ceramics	14732
Percentage	100%

Source: McEwan 1988:85-90,224-227

* McEwan's functional classification has been adjusted to reflect the economic categories considered in this study

APPENDIX B

Flota of 1554 Ceramics

Ceramic Types	Espiritu Santo (41WY3)	San Esteban (41KN10)	Total

Spanish Ethnicity-Marking Wares:			
Columbia Plain	1	11	12
Yayal Blue on White	0	3	3
Santo Domingo Blue on White	0	2	2
Santa Elena Green and White	0	1	1
Unidentified Majolica	1	8	9
Honey Colored Ware	0	12	12
Montelupo Polychrome	0	2	2
Montelupo Blue on White	0	2	2
Cologne Stoneware	0	7	7
Mexican Red Painted	0	1	1
Total			51
Percentage			5.3%
Spanish Utilitarian Wares:			
Red Lead Glazed	8	5	13
Total			13
Percentage			1.4%
Spanish Storage Wares:			
Olive Jar	754	143	897
Total			897
Percentage			93.3%
Total Ceramics			961
Percentage			100%

Source: Skowronek 1987:104, Table 1

APPENDIX C

Convento de San Francisco Ceramics by Location and Type

Ceramic Types	Horizontal Location from Datum						Number
	0-5ft.*	5-10 ft	10-15ft	20-25ft	25-30ft	30-35ft	
	Vertical Location (Level)						
	below 59"	blw 75"	67-75"	blw 48"	blw 32"	blw 32"	

Sp. Ethnicity-Marking Wares:							
Columbia Plain	248	3	4	176	55	96	582
Yayal Blue on White	12	0	0	31	5	16	64
Santo Domingo Blue on White	1	0	2	0	2	0	5
Caparra Blue	0	0	1	0	0	0	1
Isabela Polychrome	2	0	0	2	1	2	7
UID Blue on White Majolica	7	0	0	6	4	0	17
Honey Colored Ware	16	0	0	14	0	14	44
Montelupo Polychrome	0	0	0	0	0	2	2
Redware	11	3	0	84	5	236	339
Orange Micaceous	1	0	0	1	0	3	5
Red Slipped (Mexican Red?)	0	0	0	2	0	8	10
Feldspar Inlaid	0	0	0	0	2	7	9
Cuerda Seca	0	0	0	0	0	9	9
Porcelain	0	0	0	0	1	0	1
Unidentified Tablewares	18	0	0	6	0	0	24
Total (%)							1119 (72.4%)
Spanish Utilitarian Wares:							
Green Lead Glazed	0	0	0	0	1	0	1
Red Lead Glazed	136	9	11	62	14	22	254
Total (%)							255 (16.5%)
Spanish Storage Wares:							
Olive Jar	109	8	8	0	22	24	171
Total (%)							171 (11.1%)
Total Ceramics (%)							1545 (100%)

* Figures in this column are adapted from Goggin 1968:109. All other data from Goggin's field notes, Convento de San Francisco, D.R., Ciudad Trujillo, Jan., Feb., July 1954," on file at the Florida State Museum, Gainesville, FL. For more information see Council 1975:55-118.

APPENDIX D

Puerto Real, Building A Ceramics

Ceramic Types	Number
Spanish Ethnicity-Marking Wares:	
Columbia Plain	353
Columbia Green	8
Yayal Blue on White	5
Santo Domingo Blue on White	9
Caparra Blue	1
Honey Colored	172
Faenza White	6
Montelupo Polychrome	8
Ligurian Blue on Blue	30
Redware (thin and unglazed)	135
Orange Micaceous	15
Unidentified/bisque	56
Cologne Stoneware	3
Porcelain	7
Feldspar Inlaid	12
Total (%)	820 (62.3%)
Spanish Utilitarian Wares:	
Green Lead Glazed	56
(Green Basin and Green)	
Red Lead Glazed (El Morro and Yellow	87
Total (%)	143 (10.9%)
Locally Produced Utilitarian:	
Aboriginal/Colono-Indian	87
Total (%)	87 (6.6%)
Spanish Storage Wares:	
Olive Jar	266
Total (%)	266 (20.2%)
Total Ceramics (%)	1361 (100%)

Source: Willis 1984: 218-219, 223-224, 295, 298, 316, 318, 320. This study used Strata III and IV (1503-78); cuenca tile and lattice are omitted. Strata I and II (1578-1605) are not used in this study.

APPENDIX E

Puerto Real, Area 35 Ceramics

Ceramic Types	Number
Spanish Ethnicity-Marking Wares:	
Columbia Plain	431
Yayal Blue on White	6
Caparra Blue	4
Isabela Polychrome	2
Unidentified Majolica	57
Honey Colored	22
Ligurian Blue on Blue	12
Redware	83
Orange Micaceous	35
Feldspar Inlaid	13
Unidentified wares	120
Total (%)	785 (21.8%)
Spanish Utilitarian Wares:	
Green Lead Glazed	22
Red Lead Glazed	21
Total (%)	43 (1.5%)
Locally-Produced Utilitarian Wares:	
Aboriginal Types	1694
Total (%)	1694 (60.6%)
Spanish Storage Wares:	
Olive Jar	272
Total (%)	272 (9.8%)
Total Ceramics	2794 (100%)
Source: McEwan 1983:66-67,116-139, Levels 3 and 4, Features. Cuenca Tile is not considered.	

APPENDIX F

Puerto Real, Locus 19 Ceramics

Ceramic Types	Number

Spanish Ethnicity-Marking Wares:	
Columbia Plain	7673
Columbia Plain Green	186
Yayal Blue on White	70
Santo Domingo Blue on White	16
Caparra Blue	15
Isabela Polychrome	12
Santa Elena Green and White	45
White	337
UID/bisque/polychrome/blue on white	711
La Vega	3
Honey Colored	584
Sevilla Blue on White	1
Sevilla Blue on Blue	3
Fuerto Real Green and Green	24
Lustreware	1
Montelupo Polychrome	9
Ligurian Blue on Blue	11
Redware	320
Orange Micaceous	806
Cologne Stoneware	25
Porcelain	45
Faience	34
Unidentified/unglazed-glazed	2739
Delft	62
Feldspar Inlaid	262
Total (%)	13994 (31.3%)
Spanish Utilitarian Wares:	
Green Lead Glazed (inc. Green Basin)	346
Red Lead Glazed (inc. El Morro)	1214
Total (%)	1560 (3.5%)
Locally Produced Utilitarian Wares:	
Aboriginal Types	20913
Total (%)	20913 (46.8%)
Spanish Storage Wares:	
Olive Jar	8242
Total (%)	8242 (18.4%)
Total Ceramics (%)	44709 (100%)

Source: Ewen 1987:175-180. Data include both Early and Late materials but omit cuenca tile.

APPENDIX 6

Santa Elena Ceramics by Project*

Ceramic Types	1	2	3	4	5	Total #
Imported Status Wares:						
Columbia Plain	68	880	622	1052	1390	4012
Columbia Plain Gunmetal	6	14	118	311	1375	1824
Yayal Blue on White	3	70	27	85	156	341
Santo Domingo Blue on White	0	50	19	66	19	154
Caparra Blue	0	2	7	2	4	15
Isabela Polychrome	0	12	10	7	9	38
Santa Elena Mottled Blue on White	0	65	0	135	213	413
Santa Elena Green and White	0	0	0	173	203	376
Fine White	0	0	0	21	7	28
Triana Seville Polychrome	0	0	2	0	4	6
La Vega	0	0	0	0	3	3
Seville Blue on White	0	0	0	0	1	1
Unidentified Majolica	7	153	178	1080	3	1421
Honey-Colored	0	0	6	0	0	6
Montelupo Polychrome	0	21	0	0	0	21
Ligurian Blue on Blue	1	15	20	26	24	86
Redware	14	0	0	11	294	319
Orange Micaceous	14	99	9	20	25	167
Mexican Red Painted	5	15	11	89	57	177
Fine Orange	0	82	18	45	68	213
Yucatan Colonial	0	6	2	0	11	19
Feldspar Inlaid	0	2	3	2	0	7
Porcelain	1	67	18	20	3	109
Unidentified Tablewares	0	26	38	227	14	305
Total (%)						10061 (17.0%)
Spanish Utilitarian Wares:						
Green Lead Glazed	18	75	93	220	211	617
Red Lead Glazed	42	107	71	1513	1288	3021
Total (%)						3638 (6.1%)
Locally-Made Utilitarian Wares:						
Aboriginal types	109	5183	9039	9427	5152	28910
Total (%)						28910 (48.7%)
Spanish Storage Wares:						
Olive Jar	776	3816	1976	4329	5866	16763
Total (%)						16763 (28.2%)
Total Ceramics (%)						59372 (100%)

Appendix 6 (cont'd)

*Sources: Project 1--South 1980: hut, p.22.

Project 2--South 1982: B level, p.70; Features, p.71.

Project 3--South 1983: B zone, pp.34-35; Features, pp.35-36; moat fill, p.67;

NW Bastion, A zone, p.68; NW Bastion, B zone, p.69.

Project 4--South 1984: 3'squares, p.105; 10' squares, p.116; Features 1/8" mesh, p.120;

Features 1/4" mesh, p.125

Project 5--South 1985: 10' squares, p.71; Features, p.125; North well (F335), p.127-128;

Replacement well (F333), p.129; well (F172), p.130-131; South well (F146), pp.133-134.

APPENDIX H

St. Augustine Ceramics*

Ceramic Types	Number

Spanish Ethnicity-Marking Wares:	
Columbia Plain	177
Caparra Plain	7
Isabela Polychrome	4
Santo Domingo Blue on White	34
Yayal Blue on White	12
UID Polychrome	14
UID Blue on White	64
UID Plain	109
Cologne Stoneware	1
Ligurian/Sevilla Blue on Blue	114
Feldspar Inlaid	4
Mexiacan Red Painted	84
Orange Micaceous	45
Yucatan Colonial	4
Redware	56
Porcelain	14
Total (%)	743 (7.5%)
Spanish Utilitarian Wares:	
Green Lead Glazed (Basin)	6
Lead Glazed Coarse Earthenware	106
Lime Clay	25
UID Earthenware	357
Total	494 (5.0%)
Locally-Made Utilitarian Wares:	
Aboriginal types	5447
Total	5447 (55.3%)
Spanish Storage Wares:	
Olive Jar/Storage Jar	2423
Glazed Olive Jar	734
Glazed Storage Jar	11
Total	3168 (32.2%)
Total Ceramics	9852 (100%)

Source: Deagan 1985b:11-12, Table 1

*Note: Mexican-made wares imported after 1590 are not used. Types excluded: Fig Springs (San Juan) Poly, Ichtucknee B/W, San Luis B/W and Mexico City White

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