

# Looking at the Variation of Pre-Columbian Communities at the regional scale in Southern Central America and Northern South America: San Ramón, Costa Rica and Manabí, Ecuador

By

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## Introduction

In 1971 Gordon Willey defined the territory between Mesoamerica and Peru as a distinct archaeological region and referred to it as “the Intermediate Area.” His method for separating this as a cohesive region consisted mostly on describing and comparing the similarities of different artifacts from across this vast territory. Ever since, there has been a long tradition amongst archaeologists working in southern Central America and northern South America of referring to this territory as a pre-Columbian cultural unit; either as a “periphery” of Mesoamerica and the Andes, or as its own region with a “diffuse unity” manifested in common cultural traits. It is for this reason that archaeological research in the Intermediate Area has been dominated by three major topics: the study and comparison of cultural material, the study of Mesoamerican and Andean cultural “influences,” and the existence of local cultural horizons *despite* Mesoamerican and Andean “influences.”

In this sense, very few works in the archaeology of southern Central America and northern South America have focused on the comparison of social variables between different societies (i.e. economy, politics, ideology, etc). Even fewer works have been carried out that explore these variables under the context of diachronic development, often referred to as the comparison of “trajectories of social change” (although notable exceptions include Sheets 1992 and Drennan 1995, 1996). Because researchers in the region still focus overwhelmingly on classificatory issues (e.g. the definition of the Chibchoide Area, of the Mesoamerican “periphery,” etc) comparative works have mostly focused on finding similarities among regions while differences are often relegated to the category of “background noise.” However, when the issue is to recognize which social variables were most important in the processes of social change (or social stability), differences are more enlightening than similarities. This is because differences tend to highlight the mechanisms behind social change while similarities tend to obscure them.

In our paper, two trajectories of social change—San Ramón, Costa Rica and Southern Manabí, Ecuador—are compared. By European contact, both societies differed in terms of their population size, degree of community nucleation, or the level of social stratification. By reconstructing the diachronic changes of these two regions it has been possible to discern some factors that seemed to play an important role in the development of these differences.

The reconstruction of the trajectories of social change of both of these societies was possible through similar systematic full coverage surveys carried out in both regions. In both cases, areas of approximately 100 square kilometers were surveyed that provided a glimpse into the regional changes. Both surveys included 100% coverage of

the landscape, recording of the location, area, and boundaries of the archeological artifact scatter, as well as systematic surface collections which made possible the reconstruction of the varying quantities and densities of material at different places and for different periods. These collections not only served as the basis for the demographic numbers cited below, but also provide supporting artifactual information regarding the importance of different activities amongst the populations. For a more thorough explanation of the methods employed in both surveys, as well as for the methods used in the reconstruction of the trajectories of social change of both regions see Drennan et al. (2003a, 2003b), Drennan (2005), Martin (2009), and Murillo (2009).

### **San Ramón, Cost Rica**

The San Ramón region is situated to the extreme northeast of the Costa Rican Central Valley. The Central Valley is a high valley whose median altitude is around 1000 meters and it is a natural communication route between the Pacific Ocean and the Caribbean. The environment of San Ramón can be described as tropical humid *premontane*, varying between wet and rain forest. Since the nineteenth century the region became famous because of its highly productive soils, especially suitable for crop production.

The pre-Columbian demographic changes of the region shows the presence of just a few families for the period between 1000-300 B.C., which was followed by a modest increase to around 200 people during 300 B.C. and 300 A.D. A much larger demographic increase took place for the total region in the subsequent period (between 300-900 A.D.) to about 2000 inhabitants. Finally, this was followed by a modest decline to about 1500 people in the period between 900-1550 A.D.

The settlement pattern during the 1000-300 B.C. period can be described as just a few families, small in size, living spread out throughout the territory. The minute amount of garbage left by these families may certainly reflect a small number of households, but it may also imply some degree of nomadic or semi-nomadic settlement pattern. Between 300 B.C.-300 A.D. there was a visible increase in the amount of households in San Ramón. At this time, there is some evidence on the landscape for the formation of a single small local community. This small community consisted of a small village where a few households grouped more closely together than those scattered about in the surrounding hinterland. The regional settlement pattern shows that there are no forms of settlement organization beyond normal daily face-to-face interaction. In other words, there is no evidence in the landscape that the regional settlement pattern was based on more "supra local" forms of organization that tend to be associated with societies where leadership went beyond the local village or community (and which are often associated with more institutionalized forms of leadership). Instead, the settlement pattern suggest that social organization was fundamentally based around the household, which was the most likely social matrix where the organization of leadership would have played itself out. While there is some evidence of long distance exchange during this period, it is minor and likely an unimportant component of either local economic relations or interregional interaction.

Full agricultural village life seems to have consolidated itself in the succeeding period (300-900 A.D.) as evidenced by the emergence of eight (village sized) local communities spread out throughout the landscape and a substantial increase in raw population numbers. In addition, for the first time in the sequence, the settlement pattern shows evidence that people arranged themselves due to factors not just related to household or village life. Some settlements are located in closer proximity to one another than to others, forming two distinct settlement groupings or “districts” in the landscape. These “supra local” forms of settlement organization may suggest the presence of at least some degree of political forces which could influence the settlement arrangement of separate local communities. They may also reflect the fact that at least some part of the population of each district decided to devote some of their time and energy to communal work arranged around levels of social organization above that of the household or local village. It should be noted, however, that aside from these modest indicators of supra local organization there is little accompanying evidence for pronounced forms of regional political integration. Each district is relatively uncentralized—that is to say it is composed of several villages that are somewhat similar in population size and density to each other. The lack of a strong central place within each district suggests that the clustering of settlements that creates the two separate districts may not be result of the presence of strong forms of political leadership (i.e. institutionalized leadership) that was able to control multiple local communities. Instead, the settlement pattern suggest that villages were largely autonomous entities and that the formation of multiple districts of supra local interaction may have resulted from other factors not related to direct political control (for example shared ethnic, ritual, or kin practices could produce closer congregation of settlements). Finally, during this period there is little to no artifactual evidence from within the survey region for substantial participation in networks of interregional exchange.

For the period between 900-1550 A.D. population nucleation and centralization continued only for one of the previous two districts. This resulted in a total population increase for that district—and especially for a single large central village that reached an approximate size of about 600 people. On the other hand, there is evidence of population loss for the rest of the villages in the survey area. This decrease is especially dramatic for the second largest village of the preceding period, which at this point in the sequence becomes reduced to small hamlet. For the final period, the bulk of the regional population seems to have settled in close proximity to the new emergent regional center. The central place is sufficiently dominant in the landscape that other occupations become peripheral settlements to it and a single large district—encompassing the entire survey area—forms around it. Thus, former autonomous villages appear to now have integrated into a single sociopolitical entity whose regional center clearly dominated the demographic landscape. This type of centralized settlement formation is much more concomitant with the presence of more centralized forms of leadership and even possibly with some degree of institutionalized leadership (where the settlement choice of individual households and villages was more strongly affected by factors well outside the household or village life). Interestingly, the rise of sociopolitical complexity in San Ramón seems to have occurred in conjunction with a

decrease in the total number of people in the region, although only to a modest degree (from about 2000 in the previous period to about 1500 in the final part of the sequence). Villages and hamlets became more compact (more people lived in them but their extension does not increase). At the same time the number of isolated scattered farmsteads decreased to the point that they are virtually non-existent during the last part of the sequence. Finally, the evidence for participation in exchange networks does increase somewhat for this period, yet it remains restricted and sporadic enough that it seems unlikely that it was of much economic importance to the regional population as a whole.

Although a more thorough study of the factors promoting social change in San Ramón has not yet been carried out yet, the timing of this surge in sociopolitical development in relation to that of other regions in Costa Rica suggests that the developments that took place in San Ramon were not related to external contact (Murillo 2009). Rather, the pattern of small village formations spread out throughout the landscape is likely to have resulted from the consolidation of agriculture. In this sense, the control of local “staple finance” stands as likely candidate for the economic bases around which the more pronounced social formations of the final period arose (D’Altroy and Early 1985; Earle 1997).

### **Southern Manabi**

A somewhat different picture emerges from the region of southern Manabi, Ecuador. The regional survey carried out in that area revealed a long trajectory of development that shows only minimal population growth and a complete lack for evidence of political centralization throughout most of the sequence, from about 3300 B.C. to 700 A.D. This is followed by a punctuated burst in sociopolitical development, demographic growth, and settlement nucleation around a large regional center once interregional exchange with neighboring Peruvian states begins at about 700 A.D.

In the first period of the sequence, between 3300 to 300 B.C., the entire study area shows a few scattered and isolated farmsteads surrounding a small hamlet by the ocean near the present day town of *Machalilla*. Regional demographic numbers are very low and the entire survey area does not appear to surpass a couple of hundred inhabitants. The Machalilla hamlet itself shows enough archaeological material to account for between 30 and 60 people, but the direct positioning of the hamlet in relation to the ocean would suggest that it was a maritime subsistence strategy that prompted people to settle more closely together at that locale. At this time, there is also no evidence in the landscape of any supra local form of settlement organization.

Not much changes in the succeeding period (300 B.C.–700 A.D.). In general, regional population numbers increase somewhat but still retain a modest size (with roughly 400 inhabitants for the entire survey area). At this point in the sequence, Machalilla continues to be the only notable community in the landscape which increases to the size of a small village (with about 150 people). The rest of the population continues to scatter itself throughout the territory in small isolated farmsteads. There is also no evidence at this time of supra local forms of settlement organization that occur

beyond the local community or village. Even though Machalilla has a dominant position of the settlement landscape, this appears to still be related to its proximity to maritime resources that its inhabitants could take advantage of.

However, dramatic changes are visible in the settlement landscape of Southern Manabi during the final part of its sequence of development (from about 700 to 1532 A.D.). Regional population numbers soar to around 6000 inhabitants for the entire survey area. Many more local communities appear on the landscape, and Machalilla grows to a burgeoning regional center with a population of about 3000 inhabitants. Up to a couple thousand people settle in the prime inland farming areas next to the Buenavista Valley and two large supra local communities appear on the landscape. The first forms around the coastal regional center of Machailla and the second around the large inland settlement of the Buenavista Valley. Large numbers of more sophisticated stone architecture appears throughout the territory during this period, including several large communal and elite structures (McEwan 2003). At the time of European arrival, ethno-historic sources detail that all the settlements of the entire survey area (as well as many more outside it) were united under a single political figure that exerted control throughout the territory. Both the ethnographic accounts and the archaeological evidence available for this period strongly suggest the presence of institutionalized forms of leadership that exerted control and affected the structure of settlements at supra local levels beyond simply those of the household and local village (or community).

All these changes occur in conjunction with the beginning of large scale trade with central Peruvian states. Beginning at around 600 AD, central Andean states began consuming ritual paraphernalia made from the *Spondylus* shell in much larger quantities than they had ever done before (Martin 2007; Shimada 1996). However, because of the restricted natural habitat of the shell (which only thrives in the warm waters to the north of the present day Peru-Ecuador border), these *Spondylus* artifacts had to be acquired through trade with the Ecuadorian communities of Southern Manabi.

In the study area, artifactual evidence shows large quantities of material related to the acquisition and manufacture of *Spondylus* objects (including worked shell and the associated tools for making them). More so, these materials appear to belong fundamentally to the period between 700 and 1532 A.D. when the notable changes in sociopolitical organization described above take place (Martin 2009). The distribution of *Spondylus* material throughout the settlements suggest that large segments of the population (and specially in the large coastal regional center of Machalilla) were in some way involved in the acquisition and manufacture of *Spondylus* objects.

Both the large amounts of *Spondylus* archaeological material, as well as the timing of sociopolitical development within the study area, suggest that not only was this an important industry (in direct economic terms) for the inhabitants of Southern Manabi, but also that the appearance of the foreign *Spondylus* markets was a likely—and powerful—catalyst of the demographic expansion of the Machailla center and the subsequent sociopolitical development seen for this region at this point in time. In this sense, the trajectory of development of southern Manabi appears to have been clearly influenced by external factors. The integration into a large Andean economic system

seems to have promoted the centripetal forces that created more distinct and larger communities by attracting sheer large numbers of people into specific locales where they could take advantage of this industry and its derived income. At the same time, these larger numbers of people settling in closer proximity to one another would have required the formation of the managerial forms of leadership capable of reducing social friction and necessary for the daily articulation of social life for such large numbers of people.

## **Conclusions**

The comparisons of the trajectories of social change of both of these regions highlights a range of variation, both in terms of the structure of the communities themselves, as well as in the factors that created their differences in social structure and organization. While both regions showed some evidence for the development of sociopolitical complexity though time (in the form of more centralization and evidence of supra local forms of social organization) the types of communities that developed in both regions were notably distinct in terms of raw population numbers, settlement structure, and degree of sociopolitical complexity achieved. In this sense, while evidence for the development of political complexity is present in both regions, the varying stimulating factors that pressure people to form new types of organization and interaction in both regions undoubtedly pressured distinct settlement arrangement.

For southern Manabi, the type of central community generated by the appearance of the *Spondylus* markets was demographically larger and more dependent on the restricted locale of this specific industry. This type of social arrangement would have required the quick development of strong institutionalized forms of leadership capable of organizing labor and other aspects of daily social articulation required to reduce social friction. By contrast, in San Ramon, the forces that produced more centralized settlement arrangements appeared to have been related more to internal factors; perhaps related to population growth and an increasing need to organize around more common—local—resources that were not geographically restricted, such maize and other agricultural foodstuffs. Under this context, leadership may have risen under the context of developing populations that were not as pressured into nucleated living arrangements as those of Southern Manabi.

This preliminary comparison serves as a rough sketch that can help us discern potential factors influencing the development of structurally distinct communities. The differences in the types of societies described here—as well as in the trajectories through which they developed—may provided some preliminary explanation for why some societies in the “Intermediate Area” developed stable forms of institutionalized leadership and others did not. Specifically, supra local forms of social organization with demographically large centers appear as precisely the type of social structure under which institutionalized leadership would be expected to arise. Mainly because they would require more coercive forms of leadership in order to manage the smooth social articulation of larger numbers of people living in close proximity to one another (Service 1962). In this sense, the many different types of economic subsistence strategies followed by different societies throughout the Intermediate Area would provide a

plethora of different economic bases over which populations had to organize themselves. *Some* of which, would inevitably fit closer to the centralized demographically compact settlement arrangement that would require the appearance of strong institutionalized leaders.

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