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### Classic Maya Settlement Patterns

Much insight can be gained into the nature of a culture and society by careful analysis of its settlement patterns. Settlement patterns can be defined as: "...the way in which man (sic) disposed himself over the landscape in which he lived. [The term] refers to dwellings, to their arrangement, and to the nature and disposition of other buildings pertaining to community life. These settlements reflect the natural environment, the level of technology on which the builders operated, *and various institutions of social interaction and control* which the culture maintained. Because settlement patterns are, to a large extent, directly shaped by widely held cultural needs, they offer a strategic starting point for the functional interpretation of archaeological cultures" (Willey 1953: 1). ( Italics my own).

To this I would add that not only cultural needs but fundamental cultural beliefs can be ascertained, especially at the scale of larger settlements associated with civilization. It has been proposed that all pre-Colombian, Mesoamerican peoples shared a common 'civilization', with shared beliefs, practices, and overall outlook on life (Carmack 1996). It is my intention to demonstrate that the Classic Maya, specifically, possessed a unique civilization, incongruent with the patterns of contemporaneous civilizations in Mexico, and representing a brilliant model for settlement patterns of the 21<sup>st</sup> century.

First I will clarify the term "civilization": Civilization is derived from the Latin root *civitas*, or city; civilization is the culture of cities --- city-life. It is generally employed to describe a culture which has developed to the point of centralized government, craft specialization, a religious hierarchy, the invention of writing, the pursuit of science, etc. The convergence of a large population into a single settlement pattern has the *potential* for maximizing diversity and facilitating a true flowering of human potential. Unfortunately, an historical survey reveals that the centralization of power associated with civilization inevitably leads to a corruption of the potential and eventual demise. Initial gains in cultural refinement are soon overtaken by the unsustainability of the pattern --- a city, by definition, is so large that it exceeds the

carrying-capacity of the ecosystem it inhabits. An idle, ambitious, and voracious centralized power structure is then required (or has the excuse) to project its power into neighboring regions to extract resources to be drawn back to sustain the center. This extraction from the hinterland inevitably assumes the character of force, with subsequent subjugation of outlying populations. A standing army of disgruntled, without-opportunity city-dwellers is purposefully organized to project this power, and a militaristic mindset is the result. Inevitable competition with other cities/ civilizations/ power centers for ever scarcer resources leads to a permanent state of war.

This scenario has been repeated time and time again: 1) a civilization will develop and begin to flourish; 2) it will exceed the ecological capacity of the land to sustain it, resulting in impoverishment of the local landscape; 3) it will then project its power to obtain required resources; 4) the projection of power will inevitably lead to competition with other resource-depleted, centralized power centers; and 5) a perpetual militaristic, control-oriented society will develop whose very nature sows the seeds of its eventual collapse. This is the nature of civilization as defined by city-culture; urban civilization runs parallel with imperialism, conquest, and control. But is it possible to have the benefits of civilization: the diversity, the arts, the science, the pursuit of true human potential, etc., without setting on a course that leads to war and destruction? I would say, “YES!”, it is possible; in fact, it has already been achieved. The key is to ecologically integrate settlements into the landscape so that carrying capacity is not exceeded.

The Aztecs of the Central Mexican Valley are an excellent example of the prevailing mode. Though war-like in nature from inception, once they established a centralized capital they sought to project their power throughout Mesoamerica. Their capital, Tenochtitlan, was a highly nucleated, densely populated, urban city that eventually exceeded 200, 000 souls. With their available technology, they could not meet the needs of the populace within their defined ecological region. They projected their power mercilessly on outlying regions to draw resources back to the center. An insecure, gruesome cult of sacrifice developed that was the focus of their cosmological beliefs, and the justification for the continuation of their imperialism. The Aztecs are a prime example of civilization gone awry, with control and conquest the primary motivations, and pursuit of the flowering of true human potential relegated to a subsidiary role.

It is very important, in light of my goals, to note that Tenochtitlan was rigidly arranged in a square-grid pattern. Likewise, Teotihuacan, another Mexican Highland power center, and inspiration for the Aztecs, was also arranged in a rigid, square-grid pattern. Both were major manufacturing and trade centers that sought to project their power to ensure open trade routes and access to distant resources. Both were highly-nucleated and densely-populated; this pattern ensures a continual supply of impoverished, anxious young men ready to fill the ranks of the standing army necessary to project the power. "Nucleation in a civilized society can...be considered as a social invention with the primary function of socio-economic integration and control" (Sanders and Price 1968: 201).

This same settlement pattern --- square grids arbitrarily laid-out on top of the landscape, with highly-nucleated, densely-packed urban cores --- is the primary model found all over the United States (the seat of global imperialism) as well: San Francisco, New York, Chicago, Washington D.C. Their function is the same as the ancient Highland Mexico centers: political, manufacturing, and trade foci that require the projection of centralized power to ensure open trade routes and access to distant resources, necessitating the subjugation of distant peoples by military means, with the ultimate goal being the lavish enjoyment of an opulent lifestyle for a privileged few. It is the patriarchal, control-oriented, domination over Nature paradigm that produces these high-density, square-grid patterns of human settlement. The Square does not naturally occur in Nature, it is completely an abstract human construction. Likewise, the culture (civilization) that develops from these squares is unnatural, completely an abstract human construction, divorced from Nature, full of fear and anxiety, and on the road to Death.

In stark contrast is the Classic Maya pattern: "...the data from Maya settlement studies suggest an evolutionary trajectory strikingly different from other areas of Mesoamerica, particularly from the highlands of Mexico...It is characterized by weakly developed economic institutions other than those directly related to agricultural production...Maya society was highly stratified...but central place functions were limited primarily to the political sphere" (Sanders as quoted in Ashmore 1981: 369). It is also evident that central place functions included the spheres of dedicated science and religion. It is my belief that the Classic Maya elite were so obsessed with pursuing their science and astronomy; observing, refining, and maintaining their calendars; and recording all these interpretations in elaborate art, architecture, and ceremony, that they were completely disinterested in projecting power through imperialism --- they had

better things to do. They created a socio-economic system designed for long-term maintenance and sustainability.

Quoting Arguelles, “Morley still viewed the Maya as being in the Stone Age. No metallurgy, no wheels. And yet, in Morley’s estimation, and much to his amazement, without the material contrivances they still managed to create a science and an architecture of a proportional harmonic beauty equal to the greatest of the Old World civilizations. For Morley, writing in 1947, the Maya remained an “intractable exception...Few if any other cultures with comparably primitive features...have focussed to such a degree upon intellectual attainment.”” They purposefully designed a socio-economic system that would ‘run on its own’, freeing up enough time as possible to pursue intellectual endeavors. Conquest and control, as in the Mexican Highlands, were just not a concern.

To organize their society to take care of itself and perpetuate itself, they modeled their settlement patterns after natural systems: they were ecologically dispersed and organically integrated into the landscape. “[The dispersed settlement pattern] was a social invention, a technique of governance that allowed for a semblance of equality in a system that was non-egalitarian” (Willey as quoted in Ashmore 1981: 411). “...the old Maya dispersed settlement pattern was instituted, consisting of a politico-ceremonial center surrounded by numerous small agricultural villages” (Carmack 1996: 229). This last statement is not entirely correct, for of the thousand or so centers that have been discovered in “Mayaland”, there is great variation in size and population density --- some were large enough to incorporate surrounding villages, others only hamlets, and still others just clusters of residences. But the essential point remains: (even large) Maya centers were not a densely packed urban core. The residential units tended to be segregated somewhat from the politico-ceremonial center and were arranged in an organic, hierarchical pattern:

Level 1: Minimum Residential Units (MRU’s) – the dwellings of nuclear families, used primarily for sleeping.

Level 2: Group Units – assemblages of from two to six MRU’s, organized around a central patio, and sometimes consisting of ancillary buildings – kitchens, oratories, shrines, administrative buildings, or storage sheds. This level comprised the extended biological family.

Level 3: The Cluster – composed of several Group Units. Clusters are less definitively patterned

but can still be discerned. Their function was organization at the kin level, and may have included artisan or craft guilds.

This social organization resembles an organic, systems-oriented approach. Individuals have the security of being embedded in an ever-expanding social context that culminates with identification with the center. Primary needs (food growing, craft production, etc.) are met locally, within family and kin groups. Pilgrimage Barter Faires were held at the center and regional level, in concord with the annual calendar, to obtain items not produced in the kin group (Friedel as quoted in Ashmore 1981: 378). This entire socio-economic, settlement pattern reflects a designed, decentralization of power and is in stark contrast to the centralized power arrangements of contemporaneous Highland Mexico (and modern United States). It is my thesis that the Maya pattern represents a useful model for sustainable settlements of the 21<sup>st</sup> century.

The Classic Maya knew that for a human society to blossom and flourish, it must be modeled upon natural systems. They purposefully arranged their settlements, both structurally and socially, in accord with this understanding. "...in their treatment of urban spaces, the Maya did reach one of the peaks we know of in urban design: the skill in taking advantage of topography, the incredible subtlety displayed in the modeling of sequences, the deliberate handling of the element of surprise, and a clear intention to avoid monumental axes" (Hardoy 1968: 29). Hardoy, writing a book about urban planning, uses the term 'urban' loosely. The Maya had cities, large population centers enjoying the fruits of civilization, but they were not true urban centers --- this distinction is important.

Classic Maya civilization is unrivaled in beauty and elegance --- their architecture, art forms, costuming, ceremonial life. Yet, it is their intellectual achievements that stand out as much as, if not more than the heights of their aesthetics. "The Maya computed the length of the Earth's revolution around the Sun to within a thousandth of a decimal point of the calculations of modern science...they kept calendars of the lunation and eclipse cycles...they maintained calendars recording synodical revolutions and synchronizations of [the inner planets]" (Arguelles 1987: 19). Writing of their architecture, Carmack (1996: 295) states, "Indeed as far as we have been able to interpret the meaning of the great...centers of this period, it seems clear that their overall spatial design and major structures expressed nothing less than divine cosmograms".

The Classic Maya had a curious obsession with the nature and passage of time. They had cycles of 260, 365.28, and 548 days. They interwove, intersected and extrapolated these cycles and came up with grand, cosmic cycles that Arguelles argues coincides with galactic cycles. One 5120 year cycle in particular attracted their attention: the passage of time since a mythical origin-point of 3114 B.C. to a mythical end-point of 2012 A.D. All the magnificent stellae they erected are commemorations celebrating important passages along the length of this cycle.

In summary, the Classic Maya developed a unique, awe-inspiring civilization that flourished for almost 700 years. One of the key factors in their success was their wisdom to model their settlements after natural patterns. This fact alone provides substantial evidence to assert that Maya civilization lacked the imperialistic, war-like propensities of contemporaneous civilizations in Mexico. Their relative isolation and impenetrable terrain also contributed to the development of a unique civilization. When one also considers the stellar heights of intellectual understanding achieved, it becomes clear that the Classic Maya socio-economic/settlement model had few rivals among archaeological cultures, and remains a brilliant model for the patterning of sustainable human settlements for the 21<sup>st</sup> century

Bibliography:

- 1) Abrams, Eliot M. (1994) *How the Maya Built Their World: Energetics and Ancient Architecture* (Austin: University of Texas Press)
- 2) Arguelles, Jose (1987) *The Mayan Factor* (Santa Fe: Bear and Company)
- 3) Ashmore, Wendy, editor (1981) *Lowland Maya Settlement Patterns* (Albuquerque: University of New Mexico Press)
- 4) Carmack, Robert M., et. al. (1996) *The Legacy of Mesoamerica* (New York: Prentice Hall)
- 5) Hardoy, Jorge (1968) *Urban Planning in Pre-columbian America* (New York: George Braziller)
- 6) Morley, Sylvanus G. (1946) *The Ancient Maya* (Stanford: Stanford University Press)
- 7) Sanders, William T., and Barbara J. Price (1968) *Mesoamerica: The Evolution of a Civilization* (New York: Random House)
- 8) Willey, Gordon R. (1953) *Prehistoric Settlement Patterns in the Viru Valley, Peru*, Bureau of American Ethnology, Smithsonian Institution Bulletin no. 155 (Washington D.C.: U.S. Government Press)





