#### In Maya Ruins, Scholars See Evidence of Urban Sprawl

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# In Maya Ruins, Scholars See Evidence of Urban Sprawl

### Outlying Districts Show Remnants of the Strip Malls of Antiquity

#### By JOHN NOBLE WILFORD

Long before there were places like Scarsdale and Scottsdale, Paoli and Palo Alto, the ancient Maya of Central America appear to have had cities with their own version of suburbia Archaeologists have uncovered what they say is a prime example of Maya suburbs in the ruins of Caracol in Belize

Excavations by Dr Diane Z Chase and Dr Arlen F Chase, archaeologists at the University of Central Florida in Orlando, have revealed that beyond the grand palaces at the core of Caracol, one of the largest Maya cities, lay crowded settlements of workshops and modest dwellings of poor construction They likened this to the poor neighborhoods and industrial zones that surround the centers of modern cities. The surprise came when the archaeolo-

gists investigated the land immediately beyond this and found evidence of Caracol's wider urban sprawl.

Suburbs of more substantial houses were set among terraced fields and reservoirs Here and there stood markets and government buildings around open plazas, which the archaeologists contended were not unlike today's strip malls

"Both the 'malling' and 'suburbanization' of modern society appears to be reflected within the Caracol data," the Chases reported recently at a conference of anthropologists in Spain "The similarities in growth patterns between ancient Maya and contemporary urban forms are striking and suggest that similar societal stimuli may have been operating in the past "

The Chases, a husband-and-wife team, have spent 16 years studying the Caracol site They had earlier challenged the conventional wisdom that the Maya had an invariably simple social structure divided sharply between the rulers and nobles on top and the multitude of poor working peasants.

In the tombs and other runs of Caracol, Continued on Page 5 Blocked due to copyright. See full page image or microfilm.

> Archaeologists have partially excavated this palace and temple compound in Caracol. They believe it

Diane 7 Chas

Mava Suburbanites was inhabited by members of the ruling elite. 0 Milos MEXICC Archaeologists believe that the Maya city Caracol CHAONISTERO OUTER RING grew outward in a pattern similar to contempo-About 4 miles from rary cities since it appears to have had a network Caracol, reached of roads connecting it to "rings" of suburbs around A D 630 by Caracol's growth Inner ring Each dot is a small INNER RING Roads for CAHAL of suburbs cluster of structures MAYA SUBURBS foot trave PICHIK INNER RING Communities like Puchituk, shown Outer ring Each square is an area CEIRA About 1 5 miles below, were newly built on vacant of suburbs checked for structures from Caracol, built land as Caracol spread outward around A D 600 OUTER RING MAYA SUBURBS Independent suburban communi-Residential Elite houses Caracol ties like Retiro, shown below, were Elite houses with and temples family units private temples engulfed by Caracol as it grew Population peak about 140,000, A D 560 - A D 680 CONCHITA RAMONA Caretaker housing maintenance of plaza RETIRO Miles ROUND The complex at bottom of hill was the original center of Administrative buildings built after Causeway Large plaza surrounded by Residential Causeway leading HOLE BANK Retiro before Caracol's sprawl reached it The larger Caracol took control, probably leading back structures for administrative back to Caracol family units structures were probably temples including a marketplace to Caracol and economic purposes

Sources Dr Diane Z Chase, Dr Arlen F Chase University of Central Florida

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The archaeologists Arlen and Diane Chase at the excavation of a residential building outside the city center of the former Caracol settlement in Belize. The Chases spent 16 years studying the Caracol site.

The largest complex in the former city center of Caracol was Caana, which contained a combination of palaces and ritual rooms that were accessible by a central summit stairway.

## In Maya Ruins, Scholars Find Evidence of the Strip Malls of Antiquity

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they found evidence of a growing middle class in Maya cities

The findings dispute another commonly held idea, which is that the Maya organized their cities so that the richest lived at the core and the poorest on the outside. This traditional model stemmed from the 16th century ethnohistory written by Diego de Landa, a Spanish bishop

Like other Maya specialists, Dr Joyce Marcus of the University of Michigan said the research on the dispersed settlement patterns of Caracol was "highly interesting and important" and represented an overdue extension of Maya urban studies beyond the elite city centers.

"For the first 100 years of Maya archaeology, we concentrated on the downtowns," Dr. Marcus said "We are just beginning to explore the peripheries, and it's a new frontier, literally "

Dr Arthur Demarest, a Maya archaeologist at Vanderbilt University in Nashville, said that he tended to agree with the Chases' thesis

"Caracol's dispersed parts do appear to be more economically integrated than those in most Maya centers," he said

Archaeological evidence shows that people lived at the Caracol site

from about 600 B C through A D 1050, a period that included the Maya civilization's ascendancy. The city reached the peak of its power in the southern lowlands between A.D. 560 and 680, when its population may have grown to as much as 140,000 Only Tikal in Guatemala and Calakmul in southern Mexico rivaled Caracol's size in this period

From ground surveys and satellite photography, archaeologists mapped a system of roads over causeways radiating from the city's center like the spokes of a wheel. These were the ties, the Chases argued, that bound the outlying settlements into an integrated urban whole

These roads were raised above the generally low-lying terrain to guarantee travel in the rainy season. They were for travel by foot, there being no horses or other beasts of burden in pre-Columbian America Some of the roads ended at plazas about a mile and a half from the center, out in the nearest zone of suburbia Branch causeways led from the plazas to high-status residential settlements.

A few of the main roads extended beyond to another distinct band of suburbs, between three and five miles out. Here the Chases found several clusters of nonresidential buildings — the strip malls of antiquity In at least two cases, they said,

the roads seemed to end at plazas centered around pre-existing settlements, perhaps early examples of urban sprawl engulfing once independent communities

Dr Diane Chase saw in this pattern an ancient corollary to the modern phenomenon described by Joel Garreau, an urban theorist, in his 1991 book, "Edge City"

Edge cities are suburban communities where people not only live in the shadow of a larger city but also have developed additional means of creating wealth outside the direct influence of the central city These places build their own retail, corporate and administrative infrastructure, becoming smaller epicenters within a larger megalopolis

Such a suburban pattern came into focus about three decades ago with the first new clusters of high-tech commerce and residential complexes along Route 128 in the Boston environs.

"Data on the layout of Caracol and on the growth of the city suggest an unplanned development similar to that of contemporary urban edge cities, but with a scale more appropriate to foot travel rather than to wheeled carriage or automobile travel," the Chases concluded in their report

Other Maya specialists, asked to comment on the suburbs thesis, said

the most critical issue concerned just how closely integrated the fringe settlements were into the economic life of the city center. If their economic ties were strong, this may indeed have been an example of suburbia in a more or less modern sense. Otherwise, these were simply neighboring but probably independent communities

"The Chases see Caracol integrated by the system of causeways, and that probably justified their thinking of it in terms of suburbs," Dr Demarest said

In the past, archaeologists have mapped causeways leading out from the heart of several Maya cities They have usually been interpreted as roads for regal processions leading from the central palaces and temples to outlying ritual centers

"I tend to agree with the Chases," Dr. Demarest said, "that the causeway system at Caracol is extensive, more than if it was just for ritual purposes, and so was probably a multifunctional road system with what might be called economic traffic."

The social status of people living in different parts of the city was inferred from the size of residential buildings, the quality of stonework, the distribution of prized objects like jade and mirrors and the bones of those buried there

The suburban pattern exemplified by the Route 128 corridor around Boston was described by Joel Garreau in his book "Edge City." An analysis of their bones provided clues to the diets of the people Dr Christine White and Dr Fred Longstaffe of Western Ontario University, in London, Canada, found that people ate best in the palaces at the city center and ate worst in the settlements just beyond the core, the Maya equivalent of the slums of modern cities Then the diets improved in the suburbs, where increased physical space between families may also have led to healthier living

Diane Z. Chas

How typical Caracol's suburbia was of other Maya cities remains beyond current knowledge

Dr Marcus, who has excavated at Calakmul and specializes in Messoamerican urban settlement patterns, said that archaeologists lacked sufficient mapping and other data from other sites to judge whether the apparent suburbs at Caracol are typical or rare in the Maya civilization.

Typical or not, Dr Arlen Chase said, the suburbs at Caracol appear to have been more durable than the city center.

Excavations this year uncovered evidence that Caracol was in the midst of a new building boom when it collapsed suddenly in 895, probably the result of an invasion The society's elite abandoned the city center, but life continued in the suburbs

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