

Half of the world lives in cities today. A critical question for scholars and political planners alike, is how can a city maintain itself for a long period of time? Archaeology is the one discipline that can study the often millennia long history of a city. My research site is the ancient Maya city of Aventura, which has a long 2,500 year history. Founded around 1000 BC and occupied at least until AD 1500 (Spanish Conquest) this Pre-Columbian city offers a unique opportunity to study how a city changes through time. Was Aventura continuously occupied for 2,500 years and if so, how did this city responded to change? I will study Aventura's history by employing traditional archaeological methods of settlement survey and ceramic dating, which I will analyze in a Geographical Information System (GIS) database.

The ancient Maya were one of the world's most advanced civilizations. The height of ancient Maya society was the Classic period (AD 250 – 900). In this six century span, the Maya reached intellectual and artistic heights never before seen in the New World, and few could match in the Old World (Coe 2007: 67). It is at this time that the Maya built their largest and most powerful cities ruled by kings. AD 900 is known as the collapse of Maya society. The largest and most powerful cities went into decline and were abandoned and a political system dominated by kings ceased to exist. The city of Aventura is one Maya city that wasn't abandoned; it existed until at least the Spanish conquest some 600 years later. The city of Aventura is located in northern Belize, in an area considered to be a peripheral part of Classic Maya society. Classic period cities were smaller than those of the Maya heartland. Located in the Peten area of Guatemala, and they lacked hieroglyphic texts and stelae (standing stone monuments depicting the king). Due to Aventura's peripheral status in Maya society, it hasn't received any serious archaeological attention. This is not due to the site's lack of information, but rather is the result of previous archaeological research approaches. This provides a unique opportunity to complete groundbreaking new research in an area that can provide insight into the longevity of cities and answer questions about Mayan responses to change.

The only previous research at Aventura took place in the 1970's by archaeologists from the University of California, Los Angeles (Sidrys 1983). The 1970's research was a regional survey of northern Belize that focused on the exchange systems and settlement patterns present in the area. It did not pay much attention to any individual site. This research produced a rough map of Aventura's civic center and excavations at the site provided limited evidence for Aventura's long history. The first systematic archaeological research at Aventura will begin this summer. My research project at Aventura will provide much needed data, such as site maps and artifact density scales, on how site design and city arrangement changed through time. Most importantly, I will document if Aventura's occupation was continuous over 2,500 years, as the limited 1970's data suggests. This is important in understanding a city's ability to adapt to change over time.

My research will be conducted in three phases. In the first phase I will collaborate with the entire Aventura team to produce a new map of Aventura's civic center. In the second phase of my research I will work with Dr. Laura Kosakowsky, the leading Maya ceramicist of northern Belize, to date Aventura's buildings. In the third phase, I will work independently to develop a Geological Information Systems (GIS) database through which I can analyze the design and change through time at Aventura.

To start phase one, the Aventura team and I will survey and map Aventura, focusing specifically on the civic center. This research will be undertaken using a Theodolite and a Garmin Global Positioning System. The survey will precisely locate the architecture and topography of the city. The survey will allow me to understand the layout of the site, but only

presents a synchronic picture of Aventura. To begin to develop a diachronic picture of Aventura's history, I will work with Dr. Laura Kosakowsky of the University of Arizona to record chronological information for each of Aventura's buildings based on the ceramics that are visible on the surface (referred to as ceramic surface collection). Ceramic surface collections are the primary means through which Maya archaeologists rapidly generate a chronology for a site, since excavating a site takes years, if not decades (Hauser 2015). The latest and largest occupation of a site will be most represented in the material located at the surface of the site. In northern Belize, the thinness of tropical soils, modern disturbances from roots, rodents, and the farming of sugar cane, results in material from all periods of Aventura's occupation to be found on the present day land surface. It is for this reason that Maya archaeologists undertake ceramic surface collections to expeditiously date a site. I have already received descriptive material from Dr. Laura Kosakowsky on northern Belize ceramics that is helping me to prepare for this phase of my research (Kosakowsky 2012). Phases 1 and 2 of my research will be conducted in Belize over the course of 5 weeks between June 29 and August 2, 2015.

Phase 3 of my research will commence on my arrival back in the United States and will last for 3 weeks. Following my fieldwork, I will return to the Anthropology Department's Geographical Information Systems lab. There, I will develop a chronological database from the results of the phase 2 ceramic surface collection that I can incorporate through GIS into the map of Aventura's civic center. This will allow me to create a chronologically dynamic map of the city of Aventura through which I will be able to display and analyze how the city of Aventura grew and changed through time. With the GIS database, I will be able to create an accurate spatial timeline for Aventura. I expect to see that Aventura changed and grew through times that were detrimental to other Maya cities. This expectation can be corroborated through the ceramic data, as well as Aventura's peripheral location. The outcome of this research has transformative potential; I will be able to understand city design and changes at a Maya city that survived the collapse.

I have taken over 10 Anthropology and Archaeology classes at Northwestern University. These classes have focused on historical analysis, methodology, and research methods. I am currently enrolled in Anthropology 322, Research Methods, which teaches survey methodology, ethics, and how to conduct multi-staged research. In the spring, I will be enrolled in Anthropology 325, which teaches laboratory techniques surrounding artifact analysis. Most importantly, I am currently an Undergraduate Research Assistant (URAP) for Dr. Cynthia Robin. In this capacity I am assisting her in developing the Aventura project. The tasks that I am performing through my URAP position include conducting library research and producing a database about published chronological information and previous excavations at Aventura. This will provide useful information for my chronological analysis of Aventura. In the spring, I will be taking a specialized GIS class for Archaeology through the Northwestern Library. The national language of Belize is English, but our proximity to Mexico means that many individuals also speak Spanish. My Spanish communication abilities will allow me to interact with local individuals, especially when we present our research at the local historical society. I will use this research to write an Honors Thesis during my senior year (next year) at Northwestern University. I hope to present my research here at Northwestern and in publications as well. Long term, I am interested in attending graduate school for my doctorate in Archaeology. My specific interests for my PhD lie in studying community response to changes over time.