Chaco Canyon Notes

The Anasazi Culture of the Southwestern High Deserts in America is one of those cultures whose history reads like Science Fiction. Beginning about 800 AD and lasting until 1300, the Anasazi built a great pueblo aligned to astronomical points common to other cultures, such as Stonehenge, but including many other geophysical references to celestial happenings missed by other ancient builders.

What was going on with these people?

I. The Land



Chaco Canyon is one of the most inhospitable places on earth for a culture to thrive in. Topsoil is very thin. Water is scarce. Natural resources such as wood must be hauled in from as far away as 50 miles. Of course, the Anasazi had no horses or pack animals, so human muscle was employed.

Apparently, in the past, the environment was better for growing things, but not that much better. Archaeologists have found remains of shriveled plants indicating the environment was somewhat more supportive of vegetation than it is now. Even so, growing food was a labor-intensive activity. Good times were very good.

2. Trade

The Chaco Canyon culture had extensive trade routes and connections with many pre-Columbian cultures, extending as far south as the Mayas of Yucatan. They traded turquoise for parrots and Macaws, using the brightly colored feathers in their ornaments and ceremonies. They also imported other, more abstract cultural practices, such as the ancient ball game. Another cultural idea they most likely imported was social control by cannibalism and extreme violence.

As there were no written records detailing where the Anasazi acquired these practices, the closest culture employing these tactics were the Toltecs, a fabled warrior culture that had a powerful, interim empire, between the Maya, historically, and the culture of Teotihuacan, which I believe was the origin-point of this brutal social control scheme: Do what we tell you, or we'll eat you.

3. The Photographs

These pictures are all the same format. All are 8192×4096 pixels. When correctly viewed using a stereoscopic VR headset, they are fused into a 360/720 spherical panorama. You are inside the globe.



To accomplish the photographs, I use an Apple II smartphone with a Sandmarc 180 degree fisheye lens. I mount the camera on a VRkit Rotator which is linked to the camera in the phone by Bluetooth.

The VRkit software by Dermandar pieces together the images to make the photographs you see here.

As you can see by the panos, it was sunny, but the things you couldn't see: it was chilly and the winds were gusty, these things were significant. There were very few people around.

Part of the fun of doing these types of panoramas is that you can appear in your image more than once, by moving carefully around. You can also, by timing when you move, create expressionistic distortions of your selfie, thereby adding a dimension to the picture. I have found it useful to assume from the start that I will be in my pictures, but I also try to vary in what way I appear. In these Chaco Canyon panos, sometimes I'm a witness, sometimes Lorna and I appear together as a

double selfie, and other times, she appears alone. Sometimes, only the camera appears.



One other element that played a significant role in these pictures is the element of accident or surprise. As I was setting up one of these shots, I found I was having trouble getting the rotator to sit flat. I worked with it awhile, and then decided to go for it. As the Rotator was about half way through its cycle, a powerful gust of wind caught my iPhone and knocked it over. Of course, it was scary, but nothing serious happened to the iPhone, lens or the Rotator.

On the present pano, Chaco Canyon 3: This picture hints at what I interpret to be construction techniques. Here and there, these rock walls behind me contain square holes. I take these holes to be where joists were lodged. The structure most likely was huge. Some Anasazi Great Houses were five stories high.

4. It is never quite a straight line from the beginning to the end. That is to say, do you imagine the people who worked so hard to build Pueblo Bonito knew how it would come clattering down five or six hundred years later? When you're working hard inside a culture, as we all are, it is almost impossible to see what the outcome of your efforts will be.

This picture is one of the first I really liked in this series because of the very clearly demarcated stairs. In the Mayan culture, stair steps were used to record the history of the kingship. Stairs were the physical embodiment of the passage of time. In contemporary Pueblo pottery, stair steps can stand for a number of things such as mountains or snakes. A singular meaning is that of descent. As, one descends into the Kiva.

A Kiva is a circular subterranean room, often with benches along the sides for those in the community. There is a hearth for warmth, as it can be bitterly cold in the high desert. There are other fixtures in the floor for ceremonial use, as needed.

Here, at Pueblo Bonito, are some of the largest Kivas ever built. Pueblo Bonito has over 600 rooms, 32 Kivas and 3 Great Kivas. The overall shape of Pueblo Bonito resembles a capital letter-D.

I believe a successful argument has been by scientists and researchers that Chaco Canyon, like Stonehenge, the Pyramids of Gizeh and other giant astronomical structures are human culture's early efforts at controlling time. Such arguments only increase the huge admiration I have for those ancients struggling to provide a framework for their activities. If only they had stopped with that...and not tried to control people...



5. I'm not in this picture. Neither is Lorna, but the camera is. My iPhone I I is on the Rotator. The large circle near the top of the phone is the Sandmarc fisheye lens. The reason I point out the camera's presence is that you can always find it at the center of these 360/720 spherical panoramas.

These days, you can almost always find a camera at the center of whatever picture you're looking at. There is an operator taking the picture, but the camera is producing the actual image. After that, there is usually a machine, a computer processing the picture.

The Anasazi did not have the benefit of machine presence in camera form, and look at what it got them. The wreckage is strewn for miles around. We have no real evidence, no real proof of who ate whom, who killed whom, so all we can do is speculate. I am tired of the human apologists who think this situation with no objective evidence is just fine. I am tired of those who say objectivity doesn't exist. Oh yeah? I tell you now and I'll say it again: Without machines recording our

actions in some form, what happened to the Anasazi will happen to us, just as sure as night follows the day.

Think about it: without machines taking pictures, you are free to obfuscate and cover up the evidence as those you love are eaten away, as the beautiful suburb you live in hides you from discovery, as the fabled city that masks your pride becomes worse than the lowest ring of Dante's hell.

I tell you now and I'll say it again: Without machines recording our actions in some form, what happened to the Anasazi will happen to us, just as sure as night follows...



6. Here I am, mindlessly strolling along through the ruins of the Great Houses. We haven't left our coronavirus time period too far behind. I hope, when you are reading this brief text, that the coronavirus is just a dim blip on your radar screen, that it is trashed and threatening no more.

When the ruins of Chaco Canyon first came to light, some thought that a plague had wiped them out. There were mass burials, but they were small, and showed no signs of hurried interment one would expect from European plague experiences. Some of the skeletons found did show signs of butchery, with knife grooves to strip off the flesh, and cracked bones to get at the marrow.

Of course, that was the end of the Chaco Canyon people, not the beginning. Lorna and I are still at the start of our adventure.

Why is it, when human enterprise ends in a great calamity, a searing catastrophe, that we, positioned safely at a distance through the luck of time...why is it that we, the living, focus on those wretched people's ending?

It is because knowing how it ended for the Chaco Canyon people somehow gives us a measure of control that they were not afforded. I stand on a hillock of ruins. I look around. The sky is blue. It is clear. What do I have to worry about?

It is interesting to note that the Southwestern American High Desert is a place you can contract bubonic plague. There are infected rodents about. Vacationers and travelers like myself are the usual victims. There are several cases a year. One year, the Boy Scouts Jamboree was hit by infected rodents.

There is no evidence, though, of bubonic plague infecting the Chaco Canyon people.



Lorna is in the distance.

She's contemplating the Great Kiva of Pueblo Bonito, the political and spiritual center of the community. In the upper left of the Kiva wall, on a diagonal from the sign, there appear to be steps down to the floor level. Benches are built-in, following along the perimeter of the wall.

There are more easily understandable reasons for the demise of Chaco Canyon. Economics is chief among these. The elite, those living in the multi-storied Great Houses ate better than those living on the perimeter. They had more variety in their diet, and they probably ate more consistently than the less well-to-do. The elite suffered fewer health issues. One of the main diseases was arthritis apparently brought on by the very hard labor required to build the pueblo. The Chaco Canyon people had some medical remedies to ease arthritic pain. They made a tea containing salicin, a pain killer.

If you were female, the risks in living were much greater. Child birth was very risky, and child mortality was high.

It is difficult to know what brings a culture like this down. There were droughts but none so serious or long lasting to threaten food supplies. The people of Chaco Canyon left no written records, so they are silent on these matters.

The Necessity of Language

I'm a picture guy. I would much rather see pictures than read description. I don't read many novels. It takes too long. When groups of diverse people come together to build a new culture, pictures are extremely useful. This is why America is such a visual culture. What about the First Nations?

Here's the thing. Imagine, as I have in these panoramas, that you have stumbled upon a truly apocalyptic situation, one that will lead to disaster. How do you communicate this to others you want help from, or others you want to protect?



The 360/720 spherical panoramas I've posted here are designed to communicate the maximum amount of information available visually. Is this enough information for someone to act credibly on?

The situation of Chaco Canyon and its people, its buildings and its devotion to time are complicated because no one understands exactly why they carried their study of the stars to such an extreme. The Chacoans left their architecture, a giant, physical clock, but no explanations.

Who visited the violence descending to cannibalism on them? Did they do it to themselves, or did some outlier group do it to them? There are no records.

Chaco Canyon is a desolate, ruined but incredibly beautiful place.

It is very still.

