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Introduction

In the fall of 2007 I began my schooling at Texas State University in San Marcos, Texas to pursue a degree in anthropology. I had been interested in history since elementary school and in particular, I really liked learning about indigenous cultures. My love of outdoors and getting dirty only encouraged me in my decision of choosing archaeology as a career path. For the first two years of my education I took the college-basics and anthropological classes that focused on archaeology. Towards the end of my second year I began to look at field schools and I chose the ‘Field Methods in Rock Art’ course offered through Texas State and Shumla. I had no previous experience with rock art and it wasn’t dirt archaeology but it was only three weeks long and I had a busy summer. Little did I know that attending that field school would set up a whole chain of events leading to my current job. The field school is led by Dr. Carolyn Boyd, the current expert on the rock art of the Lower Pecos region. My interest was sparked the very first day of field school and Dr. Boyd’s passion for the art was contagious. When I returned to San Antonio after field school I was determined to find a way to get back out to west Texas, so I went back as a volunteer with the research team for a two-week field session in July and that’s when I knew I was hooked.

Shumla is a non-profit organization based out of Comstock, Texas and led by Dr. Carolyn Boyd. The organization has two sections that work on different projects but are tied together by our mission:
SHUMLA School is a nonprofit archeological research and education center working internationally to connect people of all ages with the land and their cultural heritage.

Our programs offer an opportunity to shed cultural preconceptions and look beyond the taken-for-granted world. Participants gain awareness that all people share the same basic needs, emotions, and ways of communicating. Individuals become empowered to take responsibility for their social and natural environment and begin to bridge the cultural, social, and economic gaps that mark our society today. We are truly more alike than we are different, and by celebrating our similarities, we can learn to better appreciate and respect our differences

Shumla is also an acronym for Studying Human Use of Materials, Land, and Art. The education department of Shumla creates and runs programs for elementary school children that use archaeological concepts to teach kids in a fun interactive way. The education department works out of the main office in Comstock, along with our accountant and grant writer. The research team, which I am a part of, is a separate department that focuses mostly on recording, preservation projects, and learning as much about the rock art as we can. The research team works out of the ‘research house’ which is the building located next to the education office. The team consists of the executive director of Shumla, Carolyn Boyd, her research assistant, Angel Johnson, our IT guy, Ben Dwyer, and the research intern, me! Though in different buildings, the two departments are extremely intertwined so we do not lose sight of our main goal. We consider ourselves one Shumla family. We also have the Shumla campus which is on a ranch about 15 miles west of Comstock. This property has a dormitory building, a kitchen/pavilion, a bathroom, and an air-conditioned library and conference room. This campus is where the Rock Art Field Methods course and all of the educational programs take place at.
The archaeological region termed “Lower Pecos” is centered near the confluence of the Pecos and Rio Grande Rivers. The northern half lies in Texas and the southern half in Coahuila, Mexico (Boyd, 2003:9). The environment here is a mix between the semi-arid Chihuahuan Desert of west Texas and the humid climate of central Texas. Since the region is at a climatic crossroads it experiences a great deal of variability throughout the years. A staple of the Lower Pecos are the dry rock shelters, where archaeologists can find impeccable preservation of otherwise perishable materials. This is also where we find the rock art preserved the best. Most of the rock art in the Lower Pecos consists of pictographs, which is actually paint, rather than petroglyphs, which are engravings in the rock surface. Since the art is not etched into the wall preservation plays a large part in our recording process.

The Lower Pecos has been inhabited by hunter-gatherer groups since Paleo-Indian times dating back to 11,000 years B.P. (Boyd, 2003:14). That is no surprise since as before mentioned, this region is a meeting place of climates and rivers which means there are a bigger variety of resources to be found and an abundance of water. It is these hunter-gatherer groups that created these master pieces of art that are more complex than the most confusing Mayan hieroglyph. Another amazing aspect to this art is the dates, it goes back well before any of the empires arise in Mesoamerica.

<table>
<thead>
<tr>
<th>Rock Art Style</th>
<th>Dates</th>
<th>Explanation</th>
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<tbody>
<tr>
<td>Historic Style</td>
<td>AD 1500- AD 1800</td>
<td>Pictographs that show depictions of churches/Europeans/horses</td>
</tr>
<tr>
<td>Rock Art Style</td>
<td>Estimated Dates</td>
<td>Description</td>
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<tr>
<td>------------------------</td>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Red Monochrome</td>
<td>AD 800 (1,200 years ago)</td>
<td>Monochrome figures (red) that depicts later Native American traditions/cultures</td>
</tr>
<tr>
<td>Red Linear</td>
<td>Inconclusive (at least 1,400 years ago, most likely over 2,000)</td>
<td>Typically small, red figures (although recently found in black and yellow pigment as well)</td>
</tr>
<tr>
<td>Pecos River Style</td>
<td>2250 BC- 800 BC (over 4,000 years old and continued almost 1,500 years)</td>
<td>Polychrome human-like figures, animals, and enigmatic designs</td>
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</tbody>
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Table 1: Rock Art Style Dates (Kirkland and Newcomb, 1967) and Descriptions

There are many different clichés or ideas that are associated with this rock art. One of the most popular is that all of the figures depicted are shamans and that the Indians just got high on peyote and painted random images that came to their minds while in the altered state. Another common belief was stated by Dr. Harry Shafer at the end of the documentary, “Spirits of the Canyon” when he closed the last scene with the claim of, “...and we will never know what it means”. While the statement added a bit of drama and mystery to the rock art, Dr. Carolyn Boyd and the Shumla research team would argue just the opposite. Dr. Boyd has created a research design that looks for patterns of motifs, figures, and attributes that will help us tie together similarities and common ideas. Dr. Boyd has done extensive research on one site in particular called White Shaman (41VV124) and this site has opened up a whole new way of looking at the rock art of the Lower Pecos. After identifying reoccurring motifs and doing significant background research of cultures in Mesoamerica and the American Southwest, she tied the painting at the site to a Huichol Indian pilgrimage story. Today the Huichol Indians reside in southwest central Mexico and the rock art here might be the beginnings of a set of
beliefs or even a religion. This is not necessarily tied just to the Huichol since the peoples here were uto-Aztecan and could have spread anywhere into Mesoamerica. Another point that we try to drive home here at Shumla is that these are not just random paintings; these are 4,000 year old books. They are meant to be read just like a codex, it is one flowing and connected piece of literature. With the new insight on the rock art panels it will really force archaeologists to rethink their ideas and theories on the complexity and belief systems of hunter-gatherer groups.

Experiences

My internship duties began May 15th, 2010 acting as a teaching assistant for this year’s Field Methods in Rock Art course. We set out to record a site called Black Cave (41VV76) that is located in Seminole Canyon State Park. Acting as a T.A. for the field school gave me good experience in leadership. There was a lot of responsibility resting on my back and I had to stay organized and focused to be sure we had everything we needed at all times. Leading a group of your peers can be a very frustrating and rewarding experience all at the same time. Group dynamics play a large factor and of course we have some students who are genuinely interested and want to learn, and then we have those who just are there because they need to credit to graduate. It can be extremely difficult to watch someone waste a great experience and not care about something you are very passionate about. But I learned the best thing to do is to keep trying and reaching out. The field school was a success in the end. We finished up Black Cave except for a few minor details. It was the first site to ever be finished during a field school.
After one day off I began my duties as a Shumla representative at Dr. Black’s Lower Pecos Canyonlands field school, which he held on the Shumla campus. I participated in the same activities as the students but also acted as a duties master and kitchen facilitator. I made sure the students kept the campus clean and that they were doing the little things that need to be done during a field school. I also made the menu each week and did the shopping, cooking for 20 people each meal no easy task. Dr. Black counted on me and another Shumla intern to teach different primitive technologies to the students since we have plenty of experience in the area. So in the evenings we showed them how to use an atlatl, make cordage, and do friction fire. Dr. Boyd wanted me to attend the field school since all the knowledge I would gain would be relevant to our work and also to learn the Shumla ranch backwards and forwards. Being an intern we often have to take people out to certain sites and be able to tell them about the landscape.

A very special experience that we were included in was when a Huichol shaman, named Matzuwa, came to visit us and we visited the White Shaman site. This was very important to Dr. Boyd since she has made so much progress on the interpretation of the rock art panel there. Matzuwa has been working on his visa for the past 8 years so he could come see the White Shaman panel and other rock art in the area. The pilgrimage that is depicted in the panel is that of the first trip to Dawn Mountain where they hunt the peyote. It is a creation story and tells how the world began. This pilgrimage is so important to the Huichol that they still do it every year and they believe that if they do not do it then the whole world will cease to continue. This is not to say that the Huichol Indians painted this panel 4,000 years ago but it extremely possible and probable that a distant group of ancestors did. These painters were the people
who moved down into the Mesoamerican region and split into different cultural groups. The Huichol take their responsibility to keep the world in existence very seriously. Matzuwa is in one of the highest positions of the Huichol tribe; he is the keeper of the knowledge for their group. His reaction to the site could have been either tragic, in that he did not recognize anything or feel a connection, or it could have been a confirming situation in which he told us we were on the right path. His visit brought about the latter situation. When he stepped foot into the shelter and looked at the panel he began to weep joyously and exclaim that they (the deities) were all there. His face looked as if he had just reunited with lost family. It was truly a humbling and touching experience for everyone present. He has promised to return every year and he gave us his blessing in our research. He was extremely sincere and it reminds me that this rock art is so much more important than people think. The research team is reminded why we are doing this project and to put our best efforts into it. It can bring people together that would otherwise never have met; it allows us to learn from each other. Matzuwa reminded us that “todos somos una raza”, translated: we are all one race.

**Duties**

After Dr. Black’s five week field school I was finally able to return to Comstock and unpack all the bags sitting in the living room of my new house and go back to work in the research house. Right now the research team is in the middle of a two year grant to record fourteen different rock art sites, the Lower Pecos Rock Art Recording and Preservation Project. The first year started in March of 2009 and ended in March 2010. They spent most of the year
figuring out the best way to go about the recording processes and lab procedure, getting the right equipment, and the other millions of things that need attending to. In my short time here, I’ve realized that when working at a non-profit there is always something to be done. So even though we got a 2 year grant to drop everything and do research, it is unrealistic and downright impossible. Since our time is dwindling down the research team is putting more priority with our fieldwork and getting the recording done. My first task was to make a time chart for the sites we are recording. I made a spreadsheet of sites and their status of completion to put together a tentative schedule for how long each site will take us to finish. I put all the tasks for a site in a list and put the amount of person hours it would take to get done. I also had to keep track of how many days were in the lab and how many were in the field. Putting this all out on paper is a bit daunting and it begins to feel impossible. However, I put the schedule together as if only 1 person would be doing the project. Shumla has a large volunteer base and people are always itching to get out here and help. The projected number is about 228 person days to get the project completely finished which seems like a lot but with 4 members of the research team and plenty of volunteers I think we will be able to get the job done. Making the tentative schedule for recording was very helpful for us to set dates each month to do research that way we can tell our volunteers and have them out in sessions. This schedule was also helpful for me to understand the beginning of a research design. Once you get your research design going and you are trying to figure out how many people you need to help, you would use a schedule like this. It could be used in a grant or proposal to get funding for employees and also for an idea as to how long the project could take you. For right now we have a block of time each month that is absolutely dedicated to recording a particular site. As the intern, I will go through almost
every step of the procedure for all fourteen sites. The next section will go through the entire procedure that we have written up so far.

LPRARPP Recording Procedures

The recording procedure is a major part of our research design and it has gone through many revisions. Currently we feel extremely confident with our methods but it is a process that is under constant change. Our procedure starts out with two different checklists. We have the personal checklist that everyone, volunteers especially, goes through to make sure they have all the proper materials for a hike and time in the field. This includes: lots of water, sun screen, lunch, snacks, a hat, sunglasses, a backpack, a camera, a recorder field kit, and anything else one might need. The second check list is for the research team and it lists all the equipment that we need to take on a field day. This includes: first aid kit, extra water, radios, GPS units, a datum line, the photography kit, the Canon camera, the D-stretch camera, the red camera, extra batteries for all three cameras, all recording forms, a chair, a table, a ladder, a compass, binoculars, and the detailed sketch kit. Now that we’ve double and triple checked all our equipment we can get on to the good stuff.

The first step in the field is the initial site visit. We have not had a chance to do a true initial site visit yet since we already have some information from most of the sites we’re recording. The idea of an initial site visit is to go into a new site and get a good feel for what is present culturally. This would include filling out a TexSite form, filling out a rock art site form,
taking measurements, setting up a datum line, going through the rock art panel and doing a preliminary count of how many figures are at the site, and also shoot a panorama of the shelter. A datum line is the equivalent of a datum point in dirt archaeology. A datum point is a known location and the artifacts and features found are measured from that known point. Our datum line acts as a simple line that we have marked meters on and it runs along the back wall of the shelter. So when we are discussing a figure in the middle of the shelter we can see what meter mark it is at, thus the location. We want to do a panorama as a beginning step so that we can use the photo as a rough feature map; it allows us to know where figures are located on the wall. The initial site visit is also useful to recognize the amount of time it will take to complete the recording process.

The next time we go back to the site we start our figure identification process. When it is just the research team at the site we combine this procedure with figure photography and four people are the optimal number for this process. We have one person using the big Canon camera, one acting as “Vana White” holding the mug board and scales near the figure, one keeping track of the different photos with the photo reference forms, and the last person writing notes pages for the figures that we are photographing. When we identify the figures we give them each their own permanent ‘name’; the name has three parts. The first part of the name is always the site number; the second part will tell what kind of figure it is and give its number. For example, if I am writing notes for the third Zoomorph (animal-like figure) that we’ve found at Black Cave that figures number would be 0076_Z003_. When that figure gets illustrated in the lab the last part of the name will become the initials of the illustrator. Other types of figures that we record are Anthropomorphs, human-like figures, and also what we call
Enigmatics, which is everything that does not fall into the Anthropomorph or Zoomorph category. Each figure we photograph gets at least four pictures. The first shot is always an overall (OA) that shoes the figure and a large portion of the panel around it. This shot helps orient the viewer where the figure is. The second photo is a mid-range (MR) shot which is zoomed in from the overall. Both of these pictures have the mug board in the shot that has the figure number, unit number, and the type of photo written on it. The third photo is the close-up (CU) and this is a shot that is meant to frame the figure and its paraphernalia (if present) as best as possible. We use the little 10 centimeter scale in this photo and use it later on in the lab process to trace from. The last photo that each figure must have is a close-up no scale (CUNS). This is the exact same shot as the close-up but without the scale. If the figure has any paraphernalia, such as an atlatl (ancient spear thrower), darts, or a power bundle, then those items must get their own photo. Also, if the figure is very large we might take close up sections of just the figure’s head, feet, hands, etc. At field schools we split up the figure identification and photography teams since so many people are in the shelter and we are trying to get everyone to gain experience with the entire procedure.

The next step in the procedure is renaming the photos, making forms, doing photo enhancements and illustrating the figures; this happens back in the lab and is mainly my responsibility. If I am not available to do the first step, photo rename, then another Shumla research staff must do it because it is a critical part of the process. If the photos are renamed incorrectly it will completely mess up our data. Once in the lab we upload all of the photos we took from the figure photography and put them into an “Originals” file under the corresponding site file. These photographs are not to be touched, manipulated, rotated, and especially not
deleted. They are our back up system if sometime happens to the ones we work with. So after making a copy of all the photos we can begin to rename them. Using the photo reference guides that we filled out in the field we rename each photograph and the name as four parts (ex. 0076_Z003_OA_7589). The first number is the site number. The second is the figure number. The third part is the photo code for the type of shot. The last number is the photograph number that links it back to the camera. As you rename them and finish a set of photographs for one figure we put them in a new folder titled “Photographs” in a folder that has the figure’s name on it (0076_Z003_). It is a very tedious and time consuming process but it is crucial to keeping our photos organized. If a group of photos are renamed to a figure that they do not have in them, then the rest of the information on that figure will be confused and eventually redone once sorted out. Thankfully, I have not had this experience. Once all the photos are renamed and put into their corresponding folders we can begin making the forms. The first form that we make is the illustration form. This is used for the illustrator to trace the figure onto. The illustration form has the figure’s name on it, the unit number, the illustrator’s name, and the date that the illustrator drew it. The second form is the recording form. On the front of the recording form is the figure’s name, all of the photo numbers go along with that particular figure, a list of duties that we initial after completed, the style of rock art the figure falls under, the unit number, the recorder’s name and the date they fill out the attribute data, and also the overall shot and close up shot. On the back of the recording form is a checklist of attribute data that we collect when we go back out in the field. These two forms are made in Microsoft publisher and after finishing one form it must be saved to the figure’s folder in another folder titled “0076_Z003 Forms”, or whatever the figure number may be.
After all of the forms are made we use a program called ImageJ that has a D-stretch option that enhances the photographs. We take the close up photo (with the scale) and auto-contrast it, and then we run the picture through eight different channels that pull out different colors in the picture. It is similar to Photoshop but much easier to use. We also do a command named “Split channels” and it will produce three different black and white images from the original photo. We save each of these photos in the different channels in a “Photo Enhancements” folder in the “Photograph” folder of the figure. Once we do this, we print out an auto-contrasted copy of the close-up and also the best one of the eight D-stretch channels the photo was run through. We then use these two print offs and a light table to do the illustrations. The light table has made our illustrations much more accurate but it is not an easy task by any stretch of the imagination. When drawing you have to be careful of spots on the pictures that may look like pigment but are not. Also when there are five figures all superimposed, it can get very confusing in the photograph. Not to mention the spots that begin to show up in your eyes from staring at a light and the hand cramps that sneak up on you after doing six figures in a
row! All kidding aside, this method is much better than our previous way, as mentioned earlier we used to draw free-hand in the field.

The last bit of field work comes next, we must go back out to the site to collect the attribute data for each figure and also check the illustrations to make sure they are done correctly. We could fill most of the attribute data out in the lab just by looking at the picture (what colors are present, does it have wings, how many digits, etc.) but we believe it is important to take more than just one look at a figure. Once you have drawn the figure you have become “intimate” and you really know it well. So in the field we can look more closely and make sure what we saw in the photographs really is there. We also collect data that can only be retrieved in the field such as distance from datum point (where it’s located in the shelter), distance from the datum line (how high up on the wall), and compass direction (the direction the figure is facing). This attribute data is some of the most important information that we collect. Our database is being built right now but once it is finished we will enter all of the information from the attribute data and will be able to look for patterns more easily. As stated before, it’s those patterns in the rock art that will help us break the code so to speak.

The last major part of the process is scanning all the forms so that we can have them digitally. They too will be going into the master database. We scan the completed illustration page, recording form, notes pages, photo reference forms, and anything else we might have in the site binder of hard copies. We do not scan the print offs of the photo enhancements since we already have those digitally. This is the second most tedious job; photo rename comes in first, mostly because we have to take every page out of its protective sleeve and separate them
into groups and then put them back. Other small jobs that must be done for a site to be completed is to submit the TexSite form, make sure all the folders look clean and organized, and make a cover sheet, spine tab, and dividers for the binder of hard copies.

Once we get our procedure completely finished we hope to publish it and put it in a rock art recording guidelines book for our Field Methods in Rock Art classes to use. Until then, we will continue to revisit and revise it as new methods and ideas come to light. I have learned here that one of the greatest qualities you can have is to be flexible and to work together with your team members because that is when real progress is made.

Conclusion

For the next year I will stay in Comstock as a research intern with Shumla and I could not be more excited. This summer has been the busiest of my life but also one of the best. To have a job that I am so passionate about and care about so much cannot be described by words alone. We have successfully finished three sites in the past few weeks, Black Cave, Black Cave Annex, and Pancho’s Shelter. At the moment we are in the middle of the illustration process for White Shaman, it is an extremely important site so we are making sure we put our best efforts into it. After we finish White Shaman, we have 10 more sites to complete and it is a tall order. But I believe with our new method, good attitudes, and a few weekends of working we will get it done. The information we have already learned is so tremendous and it will only continue to grow with the work Shumla is doing. We hope to have more experiences like the one with Matzuwa and help people understand the importance of this ancient treasure. I hope to stay on
board here for as long as Shumla will keep me but graduate school is in the plans as well. I wanted to take this opportunity to make connections, gain focus, and get some good experience in the field of archaeology, and I believe Shumla is going to allow me to do all those things and much more.
Bibliography

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