



Final Portfolio

Archaeology from Map to Museum

SBSC 324 Spring 2003
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A+
An excellent
portfolio. A
wonderful and
thorough
constant
- Only thing
missing
were
self assessment

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1.0.0 Reader Response**1.1.0 Peregrine Reader Response 1 (Week 3)**

Posted: Tue Feb 18, 2003 11:29 am Post subject: RR 1: Readings Review - Peregrine, Chapters 1 & 2

1. The development of an early societies and states was very much depended on survival, intimidation, aerial – geographical location, and trade relations. For example many small groups came together for the purpose of survival. Many ancient states and societies prospered because of their geographical location, which meant an abundance of agricultural or specific material goods, which allowed them to prosper.

2. I believe these two statements are related to each other and do convey the perspectives of seasoned archaeologist's, but there is more to it, and it can be interpret in two ways. The archaeological record accurately preserves the material remains in the sense that there is a record of those remains that will preserve their existence, but will not preserve the actual remains from wear and tear over the years. Human behavior can be accurately reconstructed from its material remains just by analyzing bone structure, teethes, food remains, hair, and other structures found where humans once lived.

3. Lithics: Stone tools and stone products such as arrowheads that were carved out of stone. Ceramics: Ceramic tools that were used to hold food, store goods, and for ritual ceremonies purposes. Floral remains: Natural remains, agricultural remains such as food and the surrounding environment. Faunal remains: Remains such as bones and hair, human and animal remains.

4. The archaeologist use the following theories to analyze and interpret records:

- Behaviorist theories – The archaeological record is really a snapshot of an ancient behavior in a way that it analyses how human behavior affect or is transmitted to the archaeological record. And how to apply that knowledge to reconstruct the behavior that is manifested in the archeological record.
- Cultural-historical theory – The reconstruction of a cultural history from the super positioning of archeology materials. Materials near the surface are more recent

than materials underlying them.

- Interpretive theories – Is paralleled to the behaviorist theory, with a small supplement that it analyzes and reconstruct ancient thought, feelings and motivations.
- Taphonomic theories – It's a theory that steps back and interpret how much information is there. Type of assessment.
- Reactionary theories – Promotes two interconnected positions, first is that we can never describe or understand a real past, second which is an explanation to the first is that its because of our filtered and limited knowledge, thought and our own personal interpretations that we can not really interpret the past correctly.

5. Context- Archaeological data are archeological material in CONTEXT, meaning all the archeological data being collected is really nothing unless it is being implemented in the right context, which allows crating a clear picture of the past.

1.2.0 Peregrine Reader Response 2 (Week 6)

Posted: Thu Mar 06, 2003 11:25 am Post subject: LD5 - Ch. 3-4

Question #1

Sampling is an important dimension because its accurately represents the relative proportions of cases in a given target of population or a site. If I was to choose a sampling method, I would probably choose a cluster sampling because as much as it wont provide a good representation of the total population but it will make the data collection process more easier and efficient, and we will cover a greater area. If a feature of interest will be found during our sampling method, I would shift to the “snowball” sampling data collection method.

Question #2

I would choose a highly populated site. A highly populated site would yield more artifacts and discovery. However, it would be very important that we make an accurate estimation of population. Studies in Taphonomy would help in making decisions about a

site, such as what areas are more likely to yield results. It is possible to study the features of the land and make estimates as to what type of activity occurred in various areas.

Question #5

Non-invasive archaeology is the type of surveying and studying that does not disturb a given site. A pedestrian survey is one example. There is no excavation, simply observation. Another example is aerial photography or digital imaging. These methods simply photograph the area, and there is no actual human contact with the site or the probably artifacts. These appropriate survey techniques ensure allow archaeologists to gain an idea or understanding of a site and the areas that will most likely yield archaeological data.

Question #6

Survey methods are important to the long-range goals of archaeological investigation because they can avoid misinterpreting information, for example, natural phenomena and disturbances. Also, it allows them to hopefully dig at the sites that will be most relevant to the overall project. Using various survey methods can also ensure that archaeologist do not repeat the work of fellow archaeologist.

Five terms:

- Units of analysis – The process of selecting appropriate units from which to take measurements.
- Random sampling – Randomly selecting a site or sectors previously divided within a site to sample its artifacts.
- Stratified sampling – Like Random sampling with a small difference, in Stratified sampling both a representation sample of the target population and a sample containing at least some of those cases of special interested are being used. WE classified and divide the population or site in categories and focusing on sampled taken from these categories.
- Bottom-up Surveys – The process in which a research is initiated from an established site and work outwards from it, attempting to find related sites.

- Shotgun and Predictive Surveys – Uses archaeologist's intuitive knowledge of prehistoric settlement and landscape to focus survey on places likely to have sites

1.3.0 Peregrine Reader Response 3 (Week 9)

Posted: Thu Mar 27, 2003 11:18 am Post subject: Peregrine reader response No. 3

Essay #1

The basic element in researching and excavating a site in a successful way, is to define its boundaries, meaning to draw the horizontal and vertical controls of the site. Horizontal and vertical controls refer to spatial control of archaeological materials recovered. This is important to the techniques used to locate and record artifacts, ecofacts and features in horizontal and vertical spaces. When these artifacts are found, it is important to record and take note of the context in which they were discovered. This is crucial to determining the overall relevance of what is found to the overall goals of the excavation. After the boundaries of the horizontal and vertical controls are defined, (i.e. test pits etc.) an excavation at stratigraphic levels will take place. That means that a vertical mapping of the different soil layer will take place, it's like browsing the different pages of history and each excavated layer reveal a new historic blue print of information about a specific time and place. Sometimes the terrain in which we are working is too deep, or with great stratigraphic level of complication, in that case a wall of balk (unexcavated soil) can be left between pits to help distinguish a horizontal control to ease the work and protect the finding found.

Essay #2

Artifacts, ecofacts, and features are the basic building blocks of archaeological data, but they are not themselves archaeological data. Archaeological data consist of the relationships between and among artifacts, ecofacts, and features; that is, archaeological data are archaeological materials in context. Archaeological record keeping focuses on two main tasks: recording context and providing redundancy. The first is the primary job of every archaeologist since the further the excavation take place the more it ruins the artifacts and make it harder on the archeologist to put the finding in context, so it is important to record context as accurately as possible and redundancy helps ensure this

process. The first type of context recording is the point plot system. This is the most accurate system, but also the most time consuming. It records archaeological findings by pinpointing them in terms of their horizontal and vertical location on a map. This creates the best context pattern, but requires a large amount of mapping. The second type is the lot system, which is the easiest way to record context. Artifacts are recorded as per the lot that they are found in with lots changing variably from day to day or from hour to hour to help review findings more easily. These lots are usually located within a horizontally and vertically defined unit. The lot-locus system is the secondary horizontally and vertically defined unit that is used at sites that are believed to be major archaeological findings. This helps maintain a focused context for that single area in which the findings can be more easily recorded and interpreted.

Essay #3

As mentioned in the previous sections the job of keeping and recording is with great importance to the overall context of our site, for example lab and field archaeologists keep excavation records and accession records. Evacuation records catalog the process of the evacuation process itself, and accession records list what it found. When using either of the records one must be very clear and detailed. Archaeologists are very sure to not miss anything because it could alter the final outcome of their findings and effect the over all context. They can be connected to the logs and records being taken in the field and the ones being taken in lab, and sometimes a combination of the two.

Among the field records or excavation records are the basic tools used to record context. Excavation records involve daily logs, level records, stratigraphic records, feature records, and unit records. Daily logs are logs kept by all members of the excavation crew. The log explains where the crew is, what they are doing, and whom they are working with. Level records keep detailed records of each level of ground being excavated. The record will show what level was being excavated, who excavated it, when it was worked on and what was found. Stratigraphic records are the interpretations of the level records. Feature records are detailed summaries of each feature found in the site. They answers questions such as "who, what and when". Unit records are very important to the excavation. Archaeologists put all of the information and make sure nothing has been left

out before they can close the unit.

Among the field/ lab records are accession records consist of lot books and accession catalogues. Lot books record the lots or point-plotted artifacts that were found each day. The lot book will note who was working on it, the lot number, the level it was found in and what was in it. When the artifacts are taken into the lab to be cleaned they receive a number and this number I recorded in the accession catalogues.

One good example of record taken from a site is the Kaminaljuyu site, which was a site excavated in Guatemala. Two major records keeping methods were used in this site random sample test pitting and trenching were used at this site. Still the archaeologists used the daily logs to record his information. They used this so future archaeologists could reconstruct the site. The second log was used to record any insight or observations. The feature record is also used in Kaminaljuyu. They also might have sketched maps for visual analysis. The second log was used to list the field numbers found in Kaminaljuyu. The photographic record was taken to indicate where the photographic data could be found. The stratigraphic records is a very detailed index page in which each piece of data is explained by answering questions such as, who, what, when and where. This example illustrate the high level of documented logs required in order to maintain the integrity of the whole site's context for future generations.

Key Words:

- Wheeler-Kenyon Method – an excavation strategy in which archeologist open large areas of a sit at a single time, but leave balk walls between excavation units to preserve stratigraphy.
- Pedestalling – An excavation technique in which items are left in place or in situ on columns of soil until the entire unit is excavation.
- Lot System – refers to a method of archaeology record keeping that adds to secondary, horizontally and vertically defined units are combined into one group or lot for the purpose of collection and analysis.
- Central Place Theory – developed by Walter Christaller in the 1930's as a way to model a perfect settlement system given interactions between settlements based on a known set of principles.

- Rank-Size Analysis – a method of regional analysis that attempts to determine whether any settlement vary from a predicted linear pattern of rank versus size.

2.0.0 Virtual Archaeology

2.1.0 Virtual Archaeology Lab

Posted: Tue Feb 04, 2003 10:31 am Post subject: VR is really cool!

There is nothing like playing with VR movies especially to examine an archaeological artifact. I really enjoined Thu's class, going over images and VR objects was quite fascinating.

2.2.0 Virtual Archaeology Assessment

Posted: Thu Feb 06, 2003 4:46 pm Post subject: Answers for VR use questions!!

1. I think VR weaknesses are that sometimes it is too “Virtual” and in a way distant from reality, it doesn’t use or consider all protocols and tools to substantiate facts or mosaic the final image, in most cases the image is not always accurate. Sometimes it is a matter of technological limitation, where the current technology at use hasn’t sufficiently developed to achieve the desired outcome.
2. It’s really depends on what is required of the VR model to be, if it is to be a map than I will probably need a variety of maps taken over a large period of time to assess the terrain changes and adaptation, I will also need a weather reports taken over a large period of time to assess climate changes, and the effects those changes will have on the terrain. I will also go to the history books and go over the history of the current place, see if there are any major events that might changed the condition of the area (like wars or natural disasters). I will search for any cultural, social bits of information available to determine the socio-ecological changes of the area. If it’s a small piece of artifact that I am required to create the VR model for, I will use current VR equipment to scan the artifact from every possible angle, even filling missing elements in the artifact using electronic graphic tools. Needless to say that in both sectors there will be a substantial use of electronic tools such as scanners, computers, cameras, and mathematical rendering softwares.

3. Absolutely, its quiet vital, it's like asking whether or not a book writer should have an imagination. It's with great importance to our understanding and visualization of archaeology.

2.3.0 Myths and Moundbuilders

Posted: Thu Feb 06, 2003 1:43 pm Post subject: [b]Video Review 1: Myths and Moundbuilders - Answers[/b]

1. The movie presented several myths regarding the origins of the Mound builders, among those myths are the existence of a super race of white mans, the removal of these superman race by the Indians who supposedly came after the race of the white superman's, and the myth of the Indians being a savage primitive race that couldn't create such a magnificent work.
2. To my opinion the origin of the myths mentioned lies within the savageness and primitiveness of the white settlers themselves, they refused to consider the possibility of a non-white race who was capable of creating these magnificent mounds, they were on a mission in those days under the belief that it is their destiny to manifest the land from east to west ("Manifest Destiny"), their beliefs blinded them from the true reality and true origins of some of the phenomenas they encountered. In addition to their twisted beliefs their limited understanding and limited technology also contributed to their misunderstanding and misinterpretation of facts. Some of the measures used to investigate the origin of the Mound builders were sculls measurement found in various graves excavation, and transcripts translations.
3. The use of previous Spanish transcripts used to record Spanish explorations in the north America and the exploration of similar Mounds in various places across America, where Indians once lived contributed to their understanding that the Mounds are Indian made, they also found similar artifacts from various places (continents) that led them to the believe that there is a connection between the various Mounds to the Indians and their predecessors the Maya and Aztec cultures.
4. The mound reconstruction hold tremendous value in it, it allows the archeologists to examine the effect time has on certain substances that are berried inside the mounds, it also allows the archeologists to analyze the technology that was used to build the

mounds, the time periods in which they were built, and the geographic changes that took place over the years, overall it gives the archaeologist a better in-depth understanding of the mounds shapes and forms and mound builders characteristics past present and future.

2.4.0 This Old Pyramid Video Review

Posted: Wed Apr 16, 2003 9:17 am Post subject: VR 4 - The great pyramid!

1. The clay road was probably the most accurate reconstruction of the Great Pyramid. On the other hand the limestone concrete theory was the least accurate due to various unanswered questions and flaws, it seems to me that the wood and lever system might work on a smaller scale pyramid, but wouldn't work on a pyramid the size of the great pyramid. The ramps idea also seemed like a probable idea for the reconstruction of the Great Pyramid, with consideration of the ramp slope, and appropriate materials that will be strong enough to support these bricks. I have to say I still have questions unanswered even after watching the movie, questions like how did they manage to reconstruct the last part of the pyramid?
2. The team attempted every single strategy presented to them, which caused frictions between the lead masons due to time constraints. Still the facts that they did tried every possible strategy showed their professionalism, and attempt to systematically cover every possible strategy, for the purpose of knowledge and nothing else.
3. I think that on a smaller scale the reconstruction did simulate a somewhat accurate model of the great pyramid, they made a lot of mistakes, but they learned from it, exactly like those who really built the great pyramid over a period of many years, during which knowledge passed from generation to generation until the final outcome of the great pyramid.

3.0.0 Lab Deliverable

3.1.0 American Cities of the 31st Century

Posted: Thu Feb 13, 2003 10:56 am Post subject: LD2: American Cities of the 31st Century

1. We choose Las Vegas because of the complexity and the uniqueness of the city, also the location of the city, its climate, and the abundance of substance and information the city holds. Also we thought about what will people think in 1000 years if they will find this palace, and what will it tell them about us....
2. We are expecting to find sand, a lot of sand which will cover the whole palace, but will also preserve the city, after excavating the city they will probably find strong and resistance substances that survived with the years, such as concrete, aluminum, magnets, glasses, glasses from bulb lights (something Vegas had plenty off), a lot of coins, tiles, strange huge monuments each in every side of what used to be a main road, monuments that were once the entrances to hotels, which will than be probably conceived as palaces and religious places, strange bits of electronics hardware distributed in huge ball rooms, what once used to be gambling machines, the remains of huge array of tables, being arranged very neatly. Excavation east or west to Vegas it self will reveal a nuclear waste facility which presumably will stay intact (wishful thinking...).
3. See excel sheet.
4. If we were to examine Las Vegas in 1000 years, our guess is that we will have a 100 times more sophisticated technology to accurately assess and analyze our finding, with that in mind and following the archaeology excavation guidelines and methods of interpretation accuracy will be near perfect. Of course locating our excavation site in a strategic place is a key issue in the success of our research.
5. Excavations, Technology (computers, video, VR), History books, sociological analysis, maps – mapping of the aerial site, food source research, and agricultural finding will be used to maximize our recovery.
6. Drawings and numbers are universal languages that can be interpreted by all, the types of material used to hold the writings, and created them.
7. Locations of monuments, size, material used, quantity, repeating patterns, and illustrations found in artifacts will be used to assess the functionality, social contexts,

provenience, cultural relationships, ideology, status, and age of those artifacts and buildings recovered.

3.2.0 Wireless Transect Survey Methods

Posted: Tue Feb 25, 2003 10:41 am Post subject: LD3

Answers to #9

- a. Lots of plastic wrappers, food remnants, cigarette butts, rocks, & man-made influenced landscaping (i.e. concrete, fire hydrants, metal piping).
- b. The residents in the area have ready access to food, points to evidence they also did not care for their immediate surrounds and habitat, littering and throwing their trash where they pleased, they had a poor diet (as reflected from the wrappers and food we found), maybe they were a race of vegetarians who ate lots of lettuce..... we're not sure.
- c. One of the surrounding buildings could have been a feast hall or a type of living hall due to the large amount of food remains and food-related trash we found in the archaeological site.
- d. Since there were no signs of day-to-day task remains found in the quad, we would think that this area was used as a central gathering point where large amounts of people could gather for a major/centralized purpose.
- e. Looking thorough an archaeologists' eyes, one could assume that this alien civilization had time for recreation or entertainment, therefore they needed a large area where they could accommodate vast amounts of people, hence they lead a life with some sort of only minimal work required.
- f. The experience was overall pretty well, minus a few drawbacks, for example, recording large amounts of data quickly, signal interference, remembering large amounts of objects and observations from the 50 pace walk, and going through landscaping and large obstacles.

g. It's an efficient way in which to cover a large area that provides a sense of a general understanding of how that culture survived and how that area was used by that alien culture.

3.3.0 Map Sampling, Surveys and Settlement Patterns

Posted: Tue Mar 04, 2003 11:48 am Post subject: LD4: Map Sampling, Surveys and Settlement Patterns

- Strategy 1: We took little pieces of paper and ripped each of them into a similar size labeling each piece with a number or letter from the transparency. Then we placed the pieces into a hat and drew out a letter and number for a single unit. We did this five times.
- Strategy 2: Using the same pieces of paper, we chose 5 pieces that would represent transect rows and columns.
- Strategy 3: For this part, we each named off units that we thought would yield the most productive dig sites. We choose on the basis of mountaintops, and what appeared to be the most elevated areas.
- Strategy 4: We chose our 5 samples for this part based on the what we thought was the center most point of open clearings, and then one just slightly lower of a hilltop. We choose these because clearings were probably main sites for agriculture and residential areas, and the hillside because the buildings on the top could have fallen into the hill, or a smaller building are built just below it.
- #2. All members participated fully in the selection of samples. We all worked cohesively as a team and ensured that each person took part in determining the random and non-random samples. People took turns picking sites, and non-random sites were chosen with group discussion.
- #3. The transect sample was probably our best sampling since it would have given us a large variety in our findings, from the elite mountain sections, to the residential areas of the flat lands. Our transects crossed the mountains and ravines, making a

good cross transect that will give a very good picture of the monuments and architecture we will be looking for.

- #4. I think our sampling can be improved by testing for several key areas. We could look at the topographic map to determine what areas (mountain tops, valleys, gorges, etc.) might best sustain living, and what areas might make for good gathering, hunting and agriculture. Also, by looking at the shape of the surrounding lands, it might be possible to come up with a good guess for where their civic ceremonial locations might be.
- #5. Our map samples yielded key ceremonial areas at I-13, row 12, (transect) J-12, M-12, and I-8. Many of our other samples yielded residential and smaller ceremonial sites as well. The majority of our samples yielded residential sites from the Epiclassic period; overall our sampling would have proved successful.

3.4.0 Record Keeping and Technical Descriptions (Ceramics)

Posted: Tue Apr 01, 2003 12:00 pm Post subject: Here we go...

1. Mocha Wave, Platter or kitchenware cream shard (rim shard) with Tin glazed (center glazed) Yellow, green – Dark and cream colors, “Finger” painted, manganese painted, decorated with cream and draw – pictures paints and Store-bodied earth wares.
2. Ventura Plychrome used for chafing ware rim shared with intervening band, tin glazed light green and blue surface, that was hand painted, with undulating edge and rim decorating patterns.
3. Puebla Plychrome used as plates, cups, mugs, and basins, rim bases and rim shad with Tin glazed blue and black hand painted, raised, and grades made inscriptions, scroll like patters and lobe design.

Functional Analysis:

Keyboard is an input/ typing tool, which transfer information from the user by means of electronic data to the computer.

3.5.0 Archaeology and the Scientific Method

Posted: Tue Apr 08, 2003 10:06 am Post subject:

1. The site we are choosing to study is one of the Mayan ruins located on the Yucatan lowlands of Mexico. The site is believed to be about 4000 yrs old, as the civilization was believed to have its Classic Maya peak around 750 AD, with it demise occurring around 950 AD due to severe droughts. The civilization was thought to have started, with agriculture, about 2000 BC. The Mayans were an ancient people whose high civilization flourished in what is today Mexico, Honduras and Guatemala. They created monuments as impressive as those in ancient Egypt, were proficient in mathematics and astronomy and invented a unique written language.
2. We are going to be looking for evidence of what might have happened between 750 and 950 AD to start the downfall of this very successful civilization. If we discover that it was in fact a drought that caused the ruin of the civilization, how exactly were the peoples affected? The Mayans were a great people, and studying the events that may have led up to their downfall will provide great insight to what may have destroyed one of the area's most significant prehistoric civilizations. We can hope to discover patterns that may have previously been undiscovered, as this theory of a drought has never been put to the test before because climate records have never been as precise as a study of this size would mandate.
3. For finding data and previous studies on this subject, we would consult archaeological and scientific publications such as the journal Science. We would also consult with the research team from the Swiss Federal Institute of Technology, as they are one of the first institutions to develop the theory we are examining. The study of long-term climate records from other similar areas, such as Venezuela, would provide us with information that assist in determining the climate records of the Yucatan peninsula. Stratigraphy would be a key element of our research strategy, as we would be examining different variations in the earth to find evidence of the yearly rainfall. Step trenching may help us to compare different levels of the strata simultaneously in order to make comparison of the light and dark bands that correspond to annual wet and dry seasons.
4. After researching all available publications related to our study (doing our

homework) we will come up with a theory. Our theory is that the three major droughts that took place around 810, 860 and 910 AD were the three phases of demise of the Mayan civilization we will identify our site. We will then select our site. Our site should be a pristine area that will still reflect the weather patterns of previous centuries. Aerial photography will greatly help us in selecting a suitable site. We will need at least 10 people on our excavation team, including experts in the areas of climate, soil and Mayan civilization. We will need equipment to dig many pits to different depths simultaneously so that our step trenching will yield results. We will need to use remote sensing and probing to survey the entire site effectively.

5. Changing weather could prove to be our largest problem. Once our pits are dug, if water were to touch the walls, it could potentially wash away important evidence. Political instability is not a problem, for the most part, but keeping cash on hand to bribe unruly natives could prove to our advantage in the long run. We should select several sites, in case our initial site is in fact damaged by weather, or does not yield conclusive results.
6. We are not really looking for “artifacts” per se, but instead looking for elements of the environment. We will examine the soil for elements of titanium that will give us hints to the levels of rainfall for a certain time. We will also look for seeds or other evidence of organized agriculture that may have been successful or may have failed. By finding if our site was used for agriculture or not, we will be able to put our findings in a better context. If the site was purely pristine, we will know that the only effects on data were natural history. Findings that will require immediate attention will be soil samples from the different levels of strata. Air and other elements may adversely affect our samples.
7. Our two hypotheses will be that one: droughts did in fact contribute to the downfall of the Mayan civilization and two: Mayans had only one primary food source, and because of that their lives, and ultimately their civilization were endangered. The significance of our findings will be that this is the first excavation to probe the possibilities of a drought destroying the great Mayan civilization and limited food contributing to illness and premature death. Our information will be disseminated through the scientific community with an official publication of our findings. The

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document will be proofed first and collaborated on with fellow archaeologists familiar with the topics. Perhaps we will hire a press agent, to ensure that our information is published in upstanding scientific journals. Our lead archaeologist, of course, will be none other than the infamous Eidan Elbaz, but we will all acquire the same recognition.

3.6.0 Modern Material Cultures Lab Forum

3.6.1 Modern Material Cultures Lab Forum - Week 1

Posted: Thu Apr 03, 2003 11:42 am Post subject: Re: LD 7: Modern Material Cultures Lab Forum (Week 1)

The overall composition of the contents was mostly paper products, packaged foods, and snack foods. There was a great deal of notes and reminders, as well as several tissues and paper towels. The food items that weren't packaged had mold and appeared to be mostly food that would be eaten on the run. (orange and banana peels, pizza scraps etc.) The packaged food was mostly of the snack nature as well, such as individual oatmeal and macaroni packages. There was one full sized meal that had not been fully consumed, but it was in a package that suggested it was a "to-go" item from a restaurant.

Some preliminary observations were that the group was concerned with cleanliness, as we found evidence of laundry being recently done, and a Swiffer pad that was used. There was also a used antiseptic pad and a few band-aid wrappers, suggesting the occupants took care of their bodies as well. It appeared that meals are not eaten within their household, as there were few food products. The occupants are avid recyclers, since there was not a single recyclable item found in the sample. The occupants found breakfast to be important, but also took breakfast in the room a number of times. The occupants needed reminders, such as sticky notes and to-do lists to stay organized. Further analysis will reveal other such patterns.

It is difficult to gauge the diet and healthy eating habits of the occupants, since there is little evidence of eating in the room. However, the majority of food products found were relatively healthy items.

3.6.2 Modern Material Cultures Lab - Week 2

Posted: Thu Apr 10, 2003 10:34 am Post subject: LD 7

Predominate trashes this week included a large amount of paper and plastic products, a majority of which could have been recycled. The foods we found this week were still consistently prepackaged foods, along with sweets, which show they are leading a on-the-go lifestyle. Far less posted notes, meaning maybe this last week has been less active for them. Also, they seemed to have cut back on the candy and increased the gum chewing. Someone is also getting sick, apparent by the tissues and empty tissue box. The relative diet of the household is about a C. They have a large amount of prepacked foods, and sweets, but there is evidence of healthy eating, apparent in the yogurt and fruit remains.

3.6.3 Modern Material Cultures Lab -Week 3

Posted: Tue Apr 22, 2003 6:53 pm Post subject: Garbology - Week 3

This weeks sample went fairly quickly as our group sorted the trash indoors to prevent some of the problems we've been having with the wind. The food samples for this week included a much larger variety of prepackaged foods, and it appeared that was a much larger percentage of food items in this weeks sample than previous weeks, as the overall trash sample was bigger than either of the previous weeks indicating to us that either both residents were at home more frequently, or that more people had occupied the room for an amount of time.

Some indications we noted was that there was a large amount of paper items that could have been recycled and it seemed odd that they recycled plastic and not paper. Also, there were signs that someone was getting sick, evident from the amount of tissues we found. Indications we made as to the household's diet were that they were eating on go more often, evident by the growing amounts of food related trash item's we've been finding and that most near to all their foods have been prepackaged, "junk" food. Also, there is still not enough food items to show that they're eating entirely at home, also furthering the hypothesis that they're on the go, eating elsewhere where it's more convenient.

3.6.4 Cultural Resources Assessment - Material Cultures

Posted: Thu May 15, 2003 10:34 am Post subject:

1. The primary themes were blood, sacrifice, ancestry, animorphs, and a strong sense of spirituality. The use of animals and their connection to nature was also prevalent. There was also evidence of a numbering system that was associated with period dating and quantitative measurements.
2. We believe that there were several sub-themes represented, such as the sacrifice to animorphs or a higher spirit, and the constant presence of natural spirits and ancestral spirits in Aztec life. There were also multiple associations with single entities, for example the rabbit symbolizing alcohol, the moon and feminism.
3. The evidence of dots and lines representing number systems. People pulling on a chord representing ancestry. There were brown, bloody sticks representing piercings and blood letting to the Spirits and sacrifice.
4. The only things identifiable were the numbering system and the blood, plus the tools used for various purposes.
5. Yes, there were many animals that were still representative of what they actually were. Ceremonies were obvious in the depictions and a lot of them were obvious in purpose. The surrounding numbering obviously shows some sort of calendar system. However, without further background information or researches it would be increasingly difficult to find out the relationship between these symbols or distinguish the meaning of any of the other codices or manuscripts.
6. We can identify the rabbit as a symbol of ancestry, feminism, and drinking. There is an all-black animal with a red face and teeth that was associated with war and work because anywhere it showed up it either had weapons or it was sitting with regularly dressed people, not ceremonial dressed people. There was a little lizard, possibly an iguana, that held up dots for keeping count for days or time which might show that they were associated with wisdom and memory.

3.7.0 Flint knapping

3.7.1 Flint knapping and Stone Tools Video Notes

Posted: Tue Apr 29, 2003 9:12 am Post subject: Notes !

The stone must be:

- Elastic
- Flake easily
- Pure

In order to create sharp stones one must break equally and in less than 90 Degree angle.

The energy transferred from the hammer to the stone in a cone-shaped break, the energy is being returned and omitted back to the opposite surface equally.

The breaks will usually occur along ridges, or sharp uplifts in the rock. Different edged tools are needed for different jobs, like hunting, cutting, preparing food and clothing.

Breaks will usually occur along the ridges, or sharp uplifts in the rock

Angle of impact determines broken shape, along with contour, following ridges

Different edged tools are needed for different jobs.

A single shard of obsidian can be used to produce all the tools needed for a hunt, modifying the tool as the jobs come up.

International process, wherever you were in the world you did the same process

3.7.2 Flint knapping and Stone Tools Notes

Posted: Tue May 20, 2003 1:20 pm

Flintknapping Methods:

Hard-hammer Percussion: The direct contact hit of a rock against the core stone. This method is used to flake off the shards or pieces that will be used to produce the tools.

Hard-hammer reflects all of the contact from the hit back into the core stone, which allows the core stone to chip away.

- Soft-hammer Percussion: This is direct contact hit of a flexible solid against the flint. During the project our flexible object will be antlers. Because of the antler's composition, when it strikes against the flint the antler absorbs some of the hit, and causes a light pressure hit which is effective for delicate or precision work.

Indirect Percussion: By using your soft-hammer object and holding it against the

core stone, then striking the soft-hammer with your hard-hammer you send a shock-wave all the way through the rock, but since the contact is indirectly, a majority of the cone is condensed and allows for a straight break.

- Pressure Flaking: A method of preparing the edge, you used the point of the antler and push into the edge of the tool, then pull away. This creates small shards that when positioned along an edge, can create tools like saws, scrappers, and bifacial blades.

The two primary considerations in regards to the physics of flint knapping are one, the shock wave effect, and two, the structure of the stone. First, it's important to take into effect that when an object strikes the stone, it will produce an internal cone-shaped shock wave, and that will determine your break. Because of this, it's important to strike at angles that are less than 90 degrees, and to always strike at an angle to focus your hit. Secondly, the natural formation of the stone does not always mean that the rock forms like glass. This means that there are imperfections within the rock that are obvious as crevices or ridges in the rock. It is important to take this into mind because a poorly angled hit can cause the shock wave to travel along that crevice and shatter your rock. Archaeologists distinguish tool types by referring to the context in which they were found and then using experimental archaeology. The context in which they were found is important because that is the first element in which tools are identified. The surrounding area, what the world was like then, how similar tools like it have been identified, and how it would have fit-in the civilization from which it came. They can also distinguish tool types from their edges. Different edges are used for different jobs, like a bifacial serrated edge would be used as a saw, or a unifacial edge with a blade like edge would be used as a knife.

Experimental archaeology also plays a role in the flint knapping process, in that by attempting to reproduce the same tools via the same methods it becomes possible for archaeologists to more readily assess the purpose and value of that tool. For example, in the video by Dr. Bruce Bradley we saw that it was possible to make a variety of tools from a single shard. This meant that early civilizations probably used the tool for the one

By Eidan Elbaz

hunt, and then disregarded it after returning to the village. From that hypothesis, archaeologists can then begin to look for that piece and the flakes that would be produced from those shard's changes for the various tools.

4.0.0 Speakers

4.1.0 Speaker's Forum: Mazatzin and the Aztec Calendar

Posted: Thu Mar 13, 2003 11:10 pm Post subject: Aztec Calendar!

1. The following sources were used: generation-to-generation knowledge (four symbol mother earth, sun, air and fire), some few archaeological artifacts like the flag that is now stored in the Vatican (why I don't know!), nature like the sky, they used the sun and moon to interpret their calendar and the various sessions.
2. Primary source was our ancestors – grandfathers, and that we share the same collective unconscious, same thought and knowledge, we are all the same, his studies helped him in his understanding of the calendar.
3. In his the “seed Planter” example, which was thought to be bloody and vicious but end up being the opposite. I could get the sense that all those bloody and vicious acts that indeed took place, happened from the opposite reason, meaning they weren’t blood drinking culture and they way they considered their acts were as reviving and the rebirth of something, the completion of a cycle.
4. I must admit that after class I approached him personally and asked for my zodiac sign interpretation, and he was quiet accurate! About my future mission... I don't know maybe 😊 (although I think I already playing my future role 😊)

5.0.0 Wireless Journal

- **Name:** Silver Falcons

E-mail: eidan_elbaz@csumb.com

Date: 2003-02-20 10:57:25

Message:

Team members: derek ford dante galeazzi natalie stephels brittni donnachie eidan elbaz We r using an ipaq. A. a plastic bag - step 1 A. wood pieces - step 1 A. cig b. - step 1 A. dry le - step 40 A. carrots - step 50 A. frezbee - step 50

- **Name:** Silver Falcons

E-mail: derek_ford@csumb.edu

Date: 2003-02-20 11:07:49

Message:

toshiba station 2: b:wrapper & cigarette butt. c: salt wrappers, bar code d: 2 white wrappers, 1 goldwrapper,tire tracks, e: paper plate, 1white wrapper. station 3: b: plastic & cig butt c: tape & plastic fork d: lettuce, wrapper, hydrant, concrete. e: pickle, pepper.

- **Name:** Silver Falcons

E-mail: eidan_elbaz@csumb.edu

Date: 2003-02-20 11:15:07

Message:

Station 2. step (50-100) A. step 58 dry wood A. step 60 lettuce A. step 80 - bottle cup A. step 90 - white rock (granite)

- **Name:** Silver Falcons

E-mail: eidan_elbaz@csumb.com

Date: 2003-02-20 11:23:52

Message:

Station 3. steps 100-150. B. step 110 - white paper A. step 120 - big white granite rock. A. step 140 - dog poop. B. step 145 - orange peal. c. step 130 - metal pipe with bolts c. 132 white gum

By Eidan Elbaz

- **Name:** Silver Falcons

E-mail: derek_ford@csumb.edu

Date: 2003-02-20 11:24:58

Message:

toshiba station 4 : b: orange peel and post it. c: gum,wrapper, pipes. d: wrapper, concrete, e: ranch wrapper, bottle cap.

- **Name:** Silver Falcons

E-mail: derek_ford@csumb.edu

Date: 2003-02-20 11:29:14

Message:

toshiba station 5 b: salt shaker @30 c: concrete@2 cotton @15 red wrapper @37 pepper shaker @36 d: tape @24 plastic glove piece @40 e: wrapper @2 hot sauce@25 pen @30 orange peel @49

- **Name:** Silver Falcons

E-mail: eidan_elbaz@csumb.com

Date: 2003-02-20 11:29:27

Message:

station 4. A. step 160 - irrigation control valve cover. A. step 165 - dark mud. B. step 165 - Salt shaker. C. step 152 - concrete. C. step 166 - cotton. C. step 186 - pepper shaker. c. step 187 - red wrapper.

- **Name:** Silver Falcons

E-mail: derek_ford@csumb.edu

Date: 2003-02-20 11:36:03

Message:

toshiba station 5 b: rope @30 hershey wrapper @ 32 & 48 c: concrete 39, plastic grate 44 50, cookie wrapper 50, yellow paper 50 stn d d: 8 blk straphome, 45 concrete

- **Name:** Silver Falcons

E-mail: eidan_elbaz@csumb.edu

Date: 2003-02-20 11:37:58

Message:

station4 A. Step 180-190 Rocks. B. step 142 &144 candy wraper. A. step 170 - black

By Eidan Elbaz

hose A. step 130 - gum wraper A. srep 150 - shiny white rock. A. step 150 - straw C. step 139 - concrete C. step 144 - plastic grate C. step 150 - plastic grade C. step 150 - a purple starburst warper.

- **Name:** Silver Falcons

E-mail: dante_galeazzi@csumb.edu

Date: 2003-02-20 11:42:49

Message:

station 5-6 b. peanuts shell 2, fortune 30 d. plastic shard 3, concrete 5, plastic cap 10, metal pc 40 e. coughdrop wrapper 20, silver wrapper 35 42, pink wrapper 36 c. concrete 4, 9 red wrapper, 14 gum wrapper, 29 trash , 40 gum wrapper , 44 wrapper 2 drugs

- **Name:** Silver Falcons

E-mail: eidan_elbaz@csumb.com

Date: 2003-02-20 11:43:03

Message:

A. step 215 plastic. A. step 230 - broken glass A. step 250 - starburst warper B. step 202 - pinute B. step 230 - fortune note (from insude a fortune).

- **Name:** Silver Falcons

E-mail: dante_galeazzi@csumb.edu

Date: 2003-02-20 11:45:56

Message:

station 6-7 b. jolly rancher wrapper 40, c. 10 trash, 40 concrete d. 40 46 concrete, plastic grate 35

- **Name:** Eidan Elbaz

E-mail: eidan_elbaz@csumb.edu

Date: 2003-02-20 11:50:33

Message:

station6 A. step 270 - red plastic A. step 280 - white rocks e. step 256 - white wraper e. step 286 - white wraper e. step 296 - plastic wrapper

- **Name:** Eidan Elbaz

E-mail: eidan_elbaz@csumb.edu

Date: 2003-05-01 11:43:51

Message:

We were introduced to the Rock carving mythologies, how to shape the rock using various tools, how to use soft and hard hammer precaution rock carving. We then set a grid on the surface to trace the field in which the rocks fall and spreads. I must say it was really interesting trying to carve the rocks, and trying to hit it in the right place, in the right corner, while emphasizing the methods previously learned, I looked for a less than 90 degree angle corners, I tried hitting the rock in a 45 degree angle etc.

After getting what I thought was an appropriate rock to carve, and shape, I tried carving it to an arrow shape, unsuccessful if I may add. It was intriguing, sometimes I hit it right, and sometimes I didn't, but I learned from my experience. I must say it's a function of time, the more I will try the better I will get.

- **Name:** Eidan Elbaz

E-mail: eidan_elbaz@csumb.edu

Date: 2003-05-13 11:13:45

Message:

Today's lab, which is the last one we are going to have was very quiet, and somewhat less successful than the previous labs, I guess we just ran out of good rocks to begin our carving process, I tried implementing most methods (soft/ hard percussion carving), still nothing really worked for me, in one point I went back to rocks, which I previously carved in previous classes, I guess its really a function of time and knowledge, I just hope I won't have to rely on stone carving for future survival, but than again who knows :o). Maybe than I will be proficient enough to carve professional stones. That's it the last lab, thanks for a fascinating experience! Eidan.

6.0.0 Final Lab Report

6.1.0 Introduction

The vast majority of archaeological materials are garbage: discarded stone tools, the remnants of meals, a broken ceramic vessel, the rotting remains of a seasonally occupied structure, and so on are all artifacts in the same sense that a discarded Coke can is an artifact. In the following lab reports a comprehensive analysis of garbage collected over a period of three weeks will be supplied along with a complete analysis and interpretations of the project's findings. There will be a brief introduction, materials and methods used, results collected, logical discussion on results, and conclusion. Enjoy.

Garbology is, basically, just what it sounds like -- the study of garbage. More specifically, it is the careful observation and study of the waste products produced by a population of people, in order to learn about that population's activities in areas such as waste disposal and food consumption. In Garbology, everyday pieces of trash suddenly become valuable and interesting artifacts from which many inferences about their source can be drawn.

Over a three-week period, three samples of trash were collected from a pair of roommates living in the CSUMB dorms. My team and I analyzed each sample the day it was collected, looking for evidence of eating patterns, living habits and anything else that might stand out about the behavior of these students. By analyzing the student's garbage I was able to get a brief look at their real behavior, without it being idealized by the explanations or estimates of the students themselves. This is what is known as a non-reactive measurement -- a measurement or observation taken without the subject's knowledge or interference. Although the students knew I was looking through their garbage, they didn't know *what* types of things I was looking for, and so they had no reason to alter their garbage-producing habits. Hypothesis – My findings will show that the eating and product consuming habits of my subjects are being dictated by the fact that they are students, meaning there will be an increased presence of fast food substance, and other easy to use cost effective products.

6.2.0 Materials and Methods

The key materials used in the lab procedures were:

- Protecting gear - gloves, isolating nylons, and picking tools to pick and separate the garbage.
- Date collections – various PDAs, laptops, and databases to store our findings.

Lab was taking place out in the open due to lack of air circulation system used to circulate bad odors, so unless you have an air circulation system don't do this experiment in a close location. Once in the open we put down a protecting nylons on which we disposed the garbage, we then started to separate and classified each of the items found to their own related groups, after we finish identifying and attaching items to their groups, we started the data recording process, during which we recorded our findings in great details. We recorded information such as time, size, brand, quantity, price, and condition.

6.3.0 Results and Analysis

My project results section was divided into three sections, one for each of the three weeks the project took place in.

Week One Results

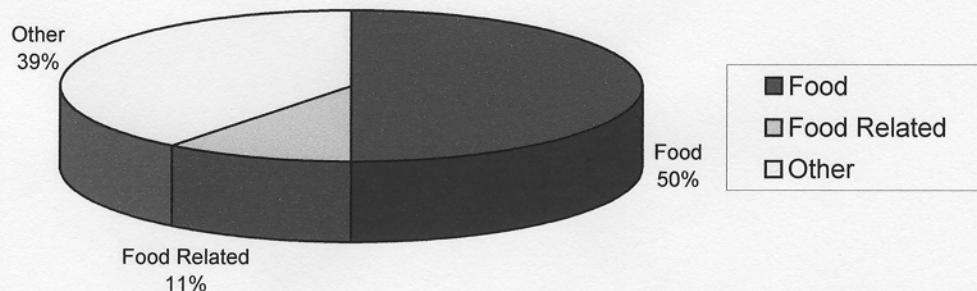
The overall composition of the contents was mostly paper products, packaged foods, and snack foods. There was a great deal of notes and reminders, as well as several tissues and paper towels. The food items that weren't packaged had mold and appeared to be mostly food that would be eaten on the run. (orange and banana peels, pizza scraps etc.) The packaged food was mostly of the snack nature as well, such as individual oatmeal and macaroni packages. There was one full sized meal that had not been fully consumed, but it was in a package that suggested it was a "to-go" item from a restaurant.

Week One Analysis – Discussion

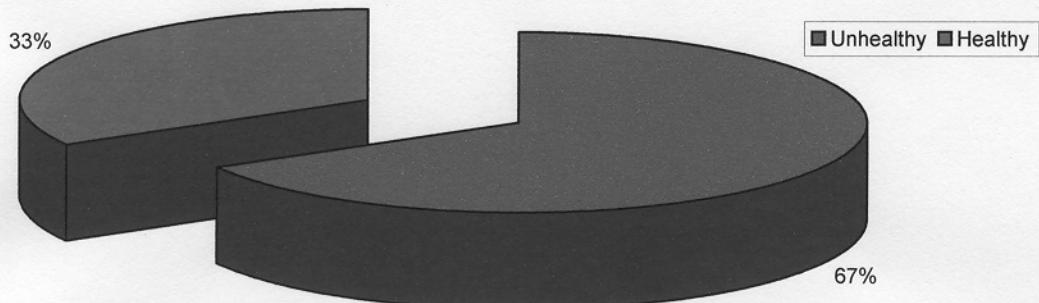
Some preliminary observations were that the students were concerned with cleanliness, as we found evidence of laundry being recently done, and a swifter pad that was used. There was also a used antiseptic pad and a few band-aid wrappers, suggesting the occupants took care of their bodies as well. It appeared that meals are not eaten within their household, as there were few food products. The occupants are avid recyclers, since there was not a single recyclable item found in the trash sample. The occupants found breakfast

to be important, but also took breakfast in the room a number of times. The occupants needed reminders, such as sticky notes and to-do lists to stay organized. Further analysis will reveal other such patterns. It was difficult after analysis of one sample to gauge the diet and healthy eating habits of the occupants, since there was little evidence of eating in the room so far. However, the majority of food products found were relatively healthy items.

Total Findings



Food Breakdown



Week Two Results

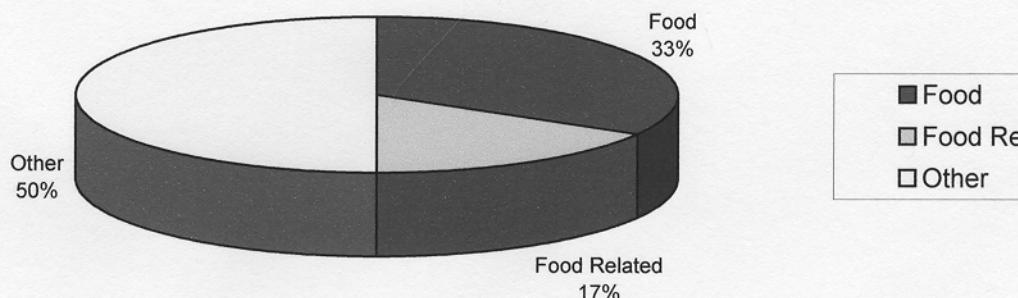
Predominate trashes this week included a large amount of paper and plastic products, and a majority of the papers could have been recycled. The foods we found this week were still consistently prepackaged foods, along with sweets, which show they are leading an on-the-go lifestyle. Far less post-it notes, meaning maybe that last week had been less active for them.

Week Two Analysis – Discussion

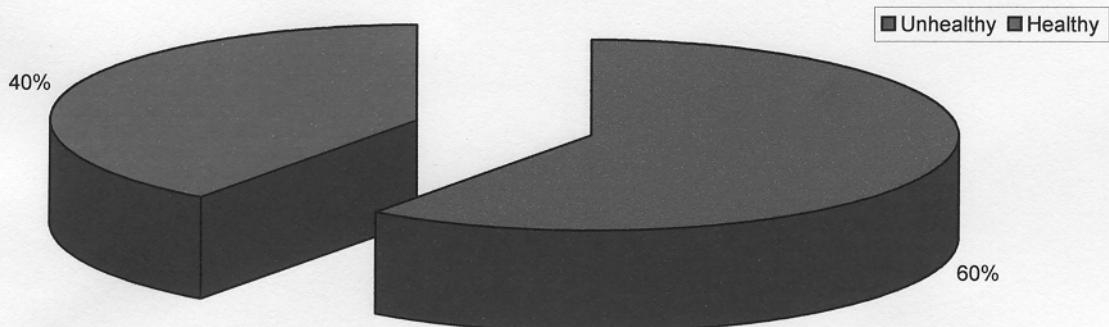
Also, they seemed to have cut back on the candy and increased the gum chewing. Someone is also getting sick, apparent by the tissues and empty tissue box. On a grade

scale the relative diet of the household is graded a C. They have a large amount of prepackaged foods, and sweets, but there is evidence of healthy eating, apparent in the yogurt and fruit remains.

Total Findings



Food Breakdown



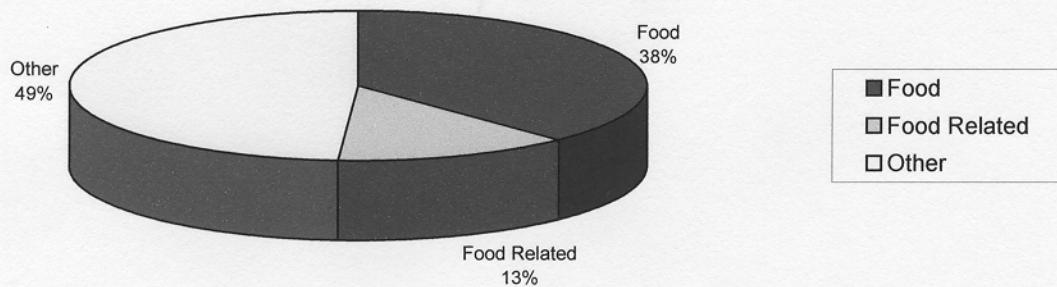
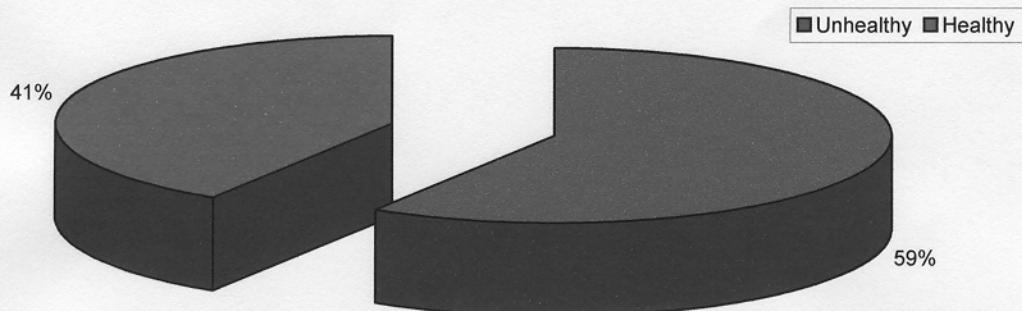
Week Three Results

This weeks sample went fairly quickly as our group sorted the trash indoors to prevent some of the problems we've been having with the wind. The food samples for this week included a much larger variety of prepackaged foods, and it appeared that was a much larger percentage of food items in this weeks sample than previous weeks, as the overall trash sample was bigger than either of the previous weeks indicating to us that either both residents were at home more frequently, or that more people had occupied the room for an amount of time.

Week Three Analysis – Discussion

Some indications we noted was that there was a large amount of paper items that could have been recycled and it seemed odd that they recycled plastic and not paper. Also, there were signs that someone was still sick, evident from the amount of tissues we found.

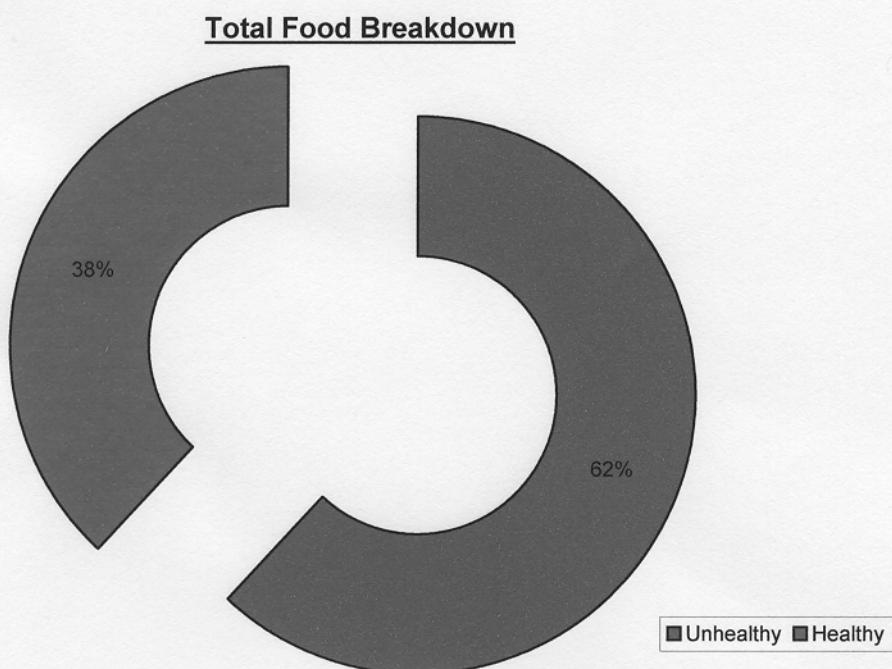
Indications we made as to the household's diet were that they were eating on the go more often, evident by the growing amounts of food related trash items we've been finding and that nearly all their foods have been prepackaged, "junk" food. Also, there are still not enough food items to show that they're eating entirely at home, also furthering the hypothesis that they're on the go, eating elsewhere where it's more convenient.

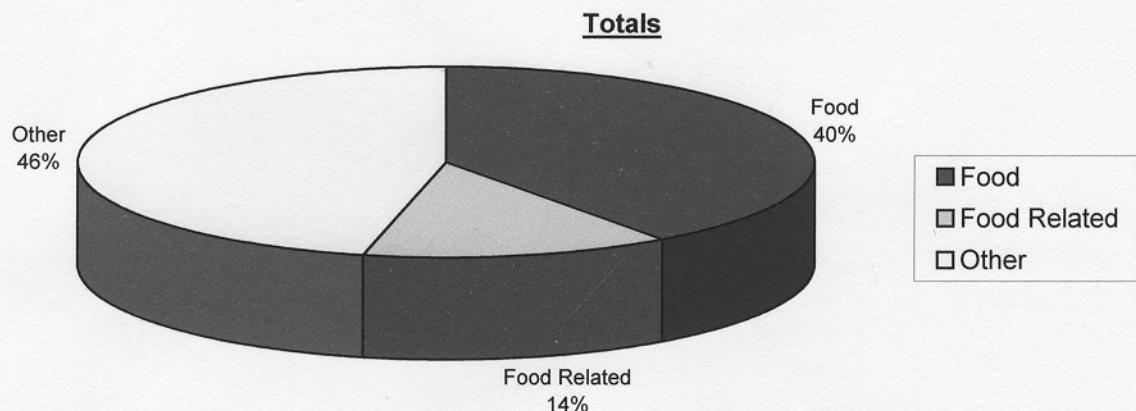
Total Findings**Food Breakdown**

6.4.0 Conclusions

Looking at complete data, the garbage sampled was 46% non food-related. Based on this number, as presented in my hypothesis, I have concluded that the subjects took most of their meals on the go and that they use their room for working and studying more than anything else. The food and food related items found, were mostly sweets, junk food and unhealthy. 62% of all food observed was considered unhealthy. Other items that were very consistent in the garbage analyzed were tissues and post-it notes, which are very typical to a student.

If I were to do this project again, I would probably pick a big size family, people who aren't necessarily students, which are subjects that are very easy to predict. However, even in a small, limited study like this one, with a specific predicted subject, certain inferences concerning these behaviors can be made, and differences between real and ideal behaviors can be seen. The concept of Garbology is one that could offer many kinds of information about a population. It's amazing what you can find out about someone, just by going through his or her trash.



**Week one**

Food	19	Unhealthy	12
Food Related	4	Healthy	6
Other	15		

Week two

Food	14	Unhealthy	9
Food Related	7	Healthy	6
Other	21		

Week three

Food	17	Unhealthy	10
Food Related	6	Healthy	7
Other	22		
		Unhealthy	31
		Healthy	19



Garbology - The Study of Garbage

“What’s in your garbage?”

**Garbolody Lab report
SBSC 324 Spring 2003
By Eidan Elbaz**

CSU Monterey Bay

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