# The ASHP

# Journal

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Associated Students for Historic Preservation

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# Working with Historic Preservation Offices in the Pacific Islands

by Scott M. Fitzpatrick

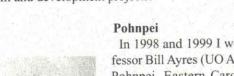
Unbeknownst to many historic preservationists, several Pacific Island states have their own historic preservation offices (SHPOs). After WWII, the U.S. Naval Administration took control of Micronesia and formed the Trust Territory of the Pacific Islands. After the 1966 National Historic Preservation Act was enacted, a

SHPO was placed in Guam to help manage and oversee cultural properties in the region. Today these islands have become more or less independent, but have Compacts of Free Association with the United States which provides funds for infrastructure development and running local governments. As a result each independent state in Micronesia now has their own SHPO, including the Federated States of Micronesia (Kosrae, Pohnpei, Chuuk (Truk) and Yap), the Marshall Islands, Guam, the Commonwealth of the Northern Marianas, and the Republic of Palau. These island states, as a result of their past colonial relationships with the U.S., are responsible for carrying out the same duties as other SHPOs in the continental U.S., Puerto Rico, the U.S. Virgin Islands, and American Samoa. Since 1997 I have worked with three Pacific island SHPOs, Pohnpei, American Samoa, and Palau, though in many different capacities.

As an archaeologist I am especially interested in using newly developed technologies for recording, mapping Nan Madol, Pohnpei (approximately 6-7m high). Photo by Author

and managing culturally and historically significant properties. Due to an increasingly rapid rate of modernization and tourist development in the Pacific, the ability to accurately define traditional village boundaries, concentrations of artifacts or features, and other culturally sensitive areas is crucial so as to minimize potentially adverse impacts to these areas. With help from the University of Oregon Micronesia and South Pacific Program (UO-MSPP) and funding from the Hawai'i East-West Center, I have had the unique opportunity to work with indigenous archaeolo-

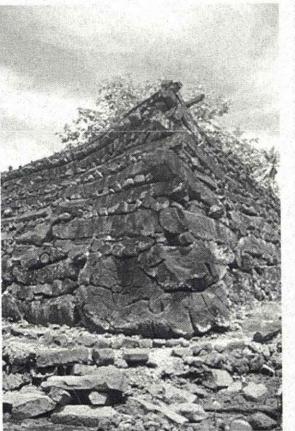
gists on these different islands in an attempt to find ways for preserving and protecting cultural properties in the face of expanding tourism and development projects.



In 1998 and 1999 I worked with Professor Bill Ayres (UO Anthropology) in Pohnpei, Eastern Caroline Islands in training projects in conjunction with the Pohnpei State Historic Preservation Office. We began mapping an extensive village site on Sokehs Island which contained several house platforms, stone pathways and a lolong (rock-wall enclosed tomb). According to Pohnpeian oral traditions this site was one of the first quarry areas for basalt, the material used for building the famous Nan Madol site complex. Nan Madol consists of over 100 artificially built islets constructed of coral rubble and basalt boulder foundations which support sections of columnar basalt set in a header/ stretcher formation. These structures were used for tombs such as Nan Douwas or for residences of the Saudeleur chiefly elite who ruled Pohnpei from about 500-1500 A.D. before they were overthrown by outsiders, possibly from Kosrae.

Although Nan Madol has been mapped over the years by archaeologists, we used a Differential Global Positioning System (DGPS) units to more accurately map

areas of the site. With these highly sophisticated devices, which can measure points on earth with sub-meter accuracy, we were able to more effectively map site and structural boundaries for preservation purposes. These pilot projects also allowed SHPO staff to observe the advantages and limitations of using this technology and compare it to other methods such as transit or compass and tape measurement for site recording.



(See Pacific Islands, page 10)

#### Editor's Notes...

by Anne McCleave

It's springtime! The time when the flowers start blooming and perhaps the time when a lot of us start realizing we need to "stop and smell the roses" more often. Though that quote has become more of a cliché, I think many of us do need to actually stop and smell the flowers. Mother Nature amazes us, something most of us agree upon. However, when we stop to appreciate Mother Nature, I think we also need to appreciate the human-built environment. Take the time to look beyond those gardens and see some of the amazing things our ancestors built; be it a pre-historic ruin, a vernacular or high-style building, a bridge, object, or garden wall, many of them are amazing.

For those of you who can take the time and read this edition, you'll learn that one author, Shannon Hecht, took the time to go off the beaten path and found a log cabin, a "treasure" as she describes it, built in the late 1800s. She envisages what the builder must have viewed when he first came across this once undeveloped landscape, while also admiring the house he created and his perseverance in doing so. Another author, Scott Fitzpatick, informs us about historic preservation taking place in the Pacific Islands. A place some of us here on the mainland may not think our government reaches, and a place where Mother Nature dominates these island environments. Though not the main purpose of his article, Scott tells us that the indigenous people of the prehistoric and historic times quarried stone money, some coins measuring four meters in diameter! Try fitting those into your coin purse.

This summer our program is extending its Summer Field School to Italy. However it's not going to be in Rome, but in a small town in the Ossola Valley, called Oira. Michael Cockram provides us with a brief summary of the course, where the students will view historic stone structures and learn about the people who built them. Hopefully the participants will leave the school appreciating not only the craftspeople, but also the hard work they put into their art in such a way that the structures are able to continue their use into the future. On a more scientific, yet stylistic subject, Paul Porter gives us an abbreviated summary on the evolution of lighting and, for another way of looking at it, of man's intelligence to produce the technology we take for granted.

In addition, as preservation spreads more into the planning sector, we start viewing multiple resources together and we research the methods in which they evolved as one entity. Many of our neighborhoods are designed on the grid system. Greg Thomson, in his article, reminds us of the origins of such a system, coming from the ancient Greek society. He shares with us several different theories of Greek urban planning and allows us to think more about the origins of our own neighborhoods. The neighborhoods where Mother Nature is waiting for us to stop, if only for a moment, and appreciate Her; and where the human-built environment is silently standing in Her shadow, waiting to be just as much appreciated.

It's springtime. Do yourself a favor and take the time to "smell the roses," whether they be Mother Nature's, or our own.

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Submissions to *The ASHP Journal* are encouraged and can be sent to Editor, c/o Historic Preservation Program, 5233 University of Oregon, Eugene, OR 97403-5233. E-mails to the Editor can also be sent courtesy to Anne McCleave at the following address: amcc@darkwing.uoregon.edu.

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## President's Column... Historic Lighting

by Paul Porter, ASHP President

As I sat down to write my article for the Winter Term Edition of the ASHP Journal, I thought, what should I write about? Corri suggested to me, write about what you are doing! So I am. I am working on my terminal project, Historic Lighting 1900-1950: Fifty Years of Technological Advancement and Stylistic Innovations in Lighting Systems. I have been thinking and planning this project for so long, that it was amazing to me how fast I was able to pour out four chapters onto paper in the space of two and a half weeks.

So far the project is divided into four categories: Technological Advancements of the Lamp, Development and Technology of Residential Wiring Systems, Maintenance and Retrofit, and Stylistic History (High Style). In the first section I have addressed the advancements of the incandescent bulb over the fifty year time span in question. I will not rewrite the entire project here, but I will touch on some of the highlights. First of all, Thomas Edison did not invent the incandescent lamp. He did however invent the first commercially viable incandescent lamp. Experiments with the incandescent lamp went back as far as 1810 to a Sir Charles Davy of England. Edison's product came about in 1879, and for the next two decades spent a good deal of that time in court battling over patents with other inventors on the changes in the lamp. His carbon filament lamps put out 2.6 lumens per watt. A 60 watt bulb of this type produced the level of light that today we would comparatively call a night light. After 1906, the tungsten filament lamp was produced and the light output was dramatically increased. The drawback to this was the fact that the glass on the lamps were not coated to diffuse the glare of the light being produced. Lighting designers compensated for this by producing fixtures with longer shades to shield the harsh light to the eyes. Early skeptics of the electric light warned of damage to the eyes by using such bright lights. Frosting of the lamp was not perfected until 1925, and then shades could be reduced in size as glare was no longer a concern. By the middle of the 1920s, it was clear that the electric lamp was here to stay, and designers began to create unique and exciting fixtures to showcase their design techniques.

The second chapter deals with the development of residential wiring systems. Electricity was new and foreign to the world of science and technology, and scientists did not know how to control it, or know its behavioral characteristics. For example, it was commonly thought that wire had to be run in a straight line with no twists or turns, otherwise the electricity would jump off the wire and burn anything in its path. This leads to the biggest problem with electric lighting. How do you insulate the conductors so they are safe and remain so for many years? Scientists tried everything from beeswax, to paraffin, to linseed oil, to varnish, and to asphalt to coat and protect the wires. They eventually developed insulations of fiber compositions of cloth dipped in linseed oil and covered with asphalt for stabilization. Varnish was also a good sealer. Rubber compounds were also developed, but it was quickly discovered that rubber had to be used in installations where no moisture was present, otherwise the damp would quickly compromise its integrity. The National Electric Code was established in 1897 to regulate the electric industry and to keep wiring safe, as fires were frequent with early systems. Modern thermoplastic wiring insulations were not developed until after World War II, and only have a life span of approximately forty years. To date, there is nothing being produced that has a longer life span.

Maintenance and Retrofit is the section that any historic homeowner should read thoroughly, as there are many dangers associated with old wiring systems. Old insulations dry out and crack, leaving conductors exposed. Thus, when you are investigating your wiring system, if you do not take the proper precautions, you could very easily electrocute yourself, or burn your house down. A wiring system called the Carter System was often employed, as it cut down on the amount of wire the electrician had to run to make the circuit work. It became illegal in 1920, but many electricians used it long after that. A modern system consists of a black wire, which is hot, and a white or gray wire, which is neutral and is not hot. In The Carter System, either wire could be hot or neutral as the wires were alternated in current, creating a lazy neutral. Power could be backfed through the system, thus creating a dangerous situation for anyone trying to work on it. Switches did not necessarily cut the power off with this system, as they could be backfed as well. The use of the term neutral wire in an historic lighting system is a misnomer, for the reasons I stated above. The proper term is return conductor.

Besides the hazards of old failing insulation and scary wiring techniques, other hazards are those historic wiring systems that often have been serviced or altered in some way over the years, and the electrician's competency is a gamble. The important thing to remember is to turn off the power at the main source, either the fuse box or the main power switch to the house. In addition, circuit breakers are not superior to fuses. They are more convenient, but several models and manufacturers made breakers that would not pop when overloaded, and many circuits have been compromised. The insulation on the wires can be compromised even if the over exposure to heat only happens once.

The stylistic periods that were overlapping and simultaneous in some cases during this fifty year period are, the American Victorian period, the Arts and Crafts movement, American Beaux Arts, Art Nouveau, Edwardian, Art Deco and the Modern Movement. I have found that the examples of these lighting styles all deal in high-end lighting with prominent designers leading the way. The vernacular lighting needs of the masses are not well addressed in the style books, but such guides as the *Illuminating Engineering Society* can shed some insight as to what average Americans were putting in their homes. The Art Nouveau style was by far the most creative and outrageous style produced. Bronze was a favorite material to work with to contort the popular female figure, the flower, and a combination of the two called femme-fleur.

There are numerous other aspects of lighting I could go into here, however suffice it to say, historic lighting is a vast topic, and one that requires a lot of research to figure out what happened when and where, and who affected the change.

#### Log House in Columbia County, Oregon

by Shannon Hecht

The snowy peaks of Mt. St. Helens catch the attention of most people traveling the broad stretches of US Highway 30 between Portland and Astoria, Oregon. Leaving Portland heading west one is captivated by architecture of the St. John's Bridge and the bridge to Longview, Washington. There are a number of interesting buildings along the way, too, including that old abandoned masonry warehouse on the river side of the road, several big and imposing homes that must have had incredible vistas of the Columbia River and Sauvie Island, and who has made the drive and not wondered about the "Mannequin Factory?" All of this, and much more, can be seen just staying on the highway, never venturing into the communities that span the roadway. But, a treasure, known until recently only to the locals, is some twenty miles from this bustling thoroughfare.

How unbelievably different the scenery must have been about 1875 when Jakob Zwingli likely built the log house near Shiloh Basin, west of Deer Island, Oregon. The trip west along the river to St. Helens, left at Deer Island and into the heart of Columbia County was difficult enough, but to have cleared the land and built the house would have required a determination and stamina beyond anything needed to build what can be seen along the highway today.

The house sits off a gravel road on a parcel of land about seven and one-half acres. It is what remains of Jakob Zwingli's 1898 quarter section homestead grant. Nothing is known about this Zwingli, but the name is important in Protestant religious history. Pages from "Germania," a German language newspaper, published in Milwaukee, Wisconsin, line upstairs walls. The oldest date to 1875.

As one approaches the property from the south, the road curves to the right, then left. Suddenly, on the left, sits this log house looking for the most part exactly as it did well over one hundred years ago. The roof is now sheathed in green asphalt shingles and (See Log Cabin, page 9)



Zwingli Log Cabin, Columbia County, Oregon

### Preservation Field School Goes to Italy

by Michael Cockram

This summer will mark the introduction of an international field school in Oira, Italy. The course is being offered jointly by the University of Oregon Historic Preservation Program and the Department of Architecture and will give students an opportuninty to experience preservation of traditional stone buildings in a northern Italian village.

An hour by train northwest of Milan and located at the northern end of the Ossola Valley in the Piedmont region of Italy, Oira is a small village of approximately 300 people. The narrow valley winds its way toward Switzerland and the Simplone Pass and is surrounded by the steep granite slopes of the Italian Alps. Until the last few years this region was fairly isolated and not well documented. But recently, a surge of interest has emerged in the area's wealth of stone structures, frescoes and natural beauty. The valley has a long history of granite quarrying and milling and it has many intact stone villages, a number of which stand as they did in the 15th and 16th centuries.

The stone building culture of Italy's Ossola Valley has its beginnings in megalithic structures dating back 3500 years and continues through pre-Roman, Roman, Medieval and Renaissance periods. Its relatively isolated position in the central Alps of the Piedmont region has insulated it from the destructive forces of urban renewal and war leaving examples from each layer of its rich history intact. The goal of the course will be to not only involve students in the preservation process and historic architectural significance of these structures, but also to involve the students directly with the culture that generated these important works of art and architecture. To begin to grasp the many facets of this building culture the students will experience a broad range of experiences, from tours and lectures by regional academics to demonstrations by local Italian craftsmen, as well as many other direct experiences in the built environment.

As a field school, much of the students' time will be spent outside the classroom touring significant structures, observing the work of traditional building craftspeople, getting hands-on experience with some of the traditional building methods and the documentation of a specific set of buildings or building elements.

Paolo Volorio, a scholar on the traditional architecture of the region, will conduct historic tours. The students will visit sites such as the Vatican's marble quarry and stone carving workshop. They will also get an unusual look at the process of fresco restoration and painting techniques, an element integrally important in the traditional buildings in the Ossola Valley. They will also participate in the documentation of some important medieval structures, potentially making a substantial contribution to the knowledge base of these little studied buildings.

There will be free time on the weekend when the students will be encouraged to visit important sites of the area according to their interests. These include: the Renaissance island palace of Isola Bella in Stresa, the high Alps park of Devero and the distinct architecture of the Italian Alps, and the many sites of Milan including much of Leonardo da Vinci's work and the Duomo.

The program will be centered in a group of about twenty houses known as Canova. Much of this part of Oira has been renovated and has become a center for painting schools, musicians, dancers and architects from all over the world. Students would be housed in these ancient stone dwellings, which have been modernized with full kitchens and plumbing.

These structures are "living buildings" in the sense that many have been continuously used and adapted since the 15th century, and interlaced into the fabric of these buildings are the manifestations of history, art and beliefs of the people who inhabited them. Exposure to the local craftspeople as well as the villagers who dwell in the buildings is an important aspect of the course.

Another important aspect of the course is the setting, Oira and the enclave of Canova, where the facilities will be centered. The course coordinator in Italy, Ken Marquardt, has been instrumental in rebuilding many of the buildings in this group of houses and in making the village a gathering place for artists and scholars from all over the world. At any given time, one might find a Swiss painting school spread out over the village, Irish musicians filling a courtyard with ancient melodies, a mime troupe performing as a part of a workshop, or an Egyptian dance lesson in the studio space. This kind of convergence of disciplines and cultures is an ideal place for a preservation field school.

The course will be led by Michael Cockram, Adjunct Assistant Professor of Architecture and Don Peting, Director of the Historic Preservation Program.



Stone building, Oira, Italy

hoto by Author

(Greece, page 7)

street system, and so forming effective and impressive schemes."

Wycherley also notes the beginning of the formalization of the agora in the development of urban planning in ancient Greece, however he makes no attempt to identify a systematic method for the arrangement of the buildings within the confines of the agora. This passing over of the arrangement of the buildings of the representative agora may not seem to be significant. After all, they were typically built of unfired mud bricks and wood, and compared to the temples, were insignificant in terms of their "architectural" quality. However, Wycherley glosses over the spatial composition of shrines and temples as they exist within the city.

Many of Wycherley's references are from the 1950s, with a few in the 1930s and 1940s. Having not seen the first edition, it would be interesting to see if there were references that were dropped from the end notes, or if there simply were not works cited for much of the text. The works cited from the 1930s do include a number of German studies and authors, but lacks those works that go into some depth about the spatial relationship of the various parts of the city as they can be defined by mathematical formulae. These works were available in the early 1930s, some of them having been written in the late 19th century.

Notably absent is Doxiadis' book, Architectural Space in Ancient Greece, which was published in 1937. This work carefully and deliberately studies the possibility of the use of very rigorous, detailed, and complex mathematical and geometric formulae that might have been used for the construction and planning of buildings in ancient Greece. What makes the absence of Doxiadis' book as a reference in Wycherley's text even more curious, is that both authors reference many of the same texts. Though somehow they come to dramatically different conceptions of, and conclusions about, what urban planning and spatial composition are or mean.

Doxiadis, using the archaeological evidence available to him at the time, defines his study by establishing which parts of ancient Greek cities he will evaluate. His premise is that the sacred precincts, the temenos where temples and altars were located, were laid out in a very conscious manner. He writes "[i]ust as we can consider a temple as representative of Greek architecture, so we may consider the layout of an entire sacred precinct as typical of all Greek spatial complexes."14 He does qualify this statement by stating that there is less formality in the composition of the secular precinct, perhaps because they were simply less sacred, as well as the fact that there are fewer, less well preserved sites to study. In addition to exhibiting the methods by which Greek cities were planned, Doxiadis is also interested in clarifying whether planning in Greek cities is limited to those cities with orthogonal streets, and rectilinear blocks. Unlike Wycherley, Doxiadis does not believe that the simple addition of regularized, intersecting streets, laid down at right angles to one another, automatically makes a city better.

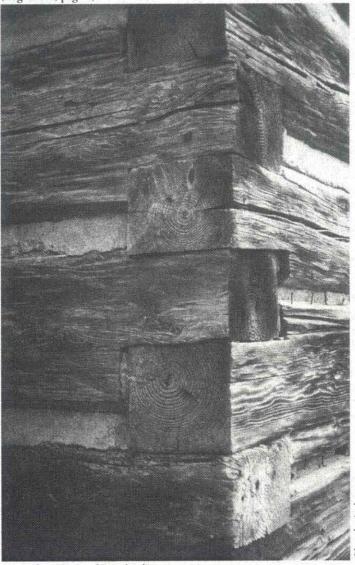
Because of the dearth of primary sources on architecture or planning in ancient Greece, the study of the intentions, methods and technology is largely speculative. Greek and Roman writers spent little time on the issues of design and space planning in their accounts, making only vague references to the works of architects and engineers. What writers like Aristotle, Vitruvius, and Plato have done is to give us insight into political and social issues of the time, which is critical information when trying to decipher the ruins of long extinct civilizations and accepted academic research strategy.

Clearly, from specifically examining the works of these different authors, there are different ways of interpreting those primary sources, as well as the remains of ancient Greek cities. Some of the differences can be attributed to the final result the author is looking for, be it specific formulae for locating buildings in an urban setting, or the sources and processes by which ancient cities became rationalized and formalized over time. Other differences in methods, however, can be the result of the time in which a scholar did his or her work, or the training that author received in research methodology. Despite all of the differences in the three authors works, there was one common theme: the manifestation of the Greek city as indivisible from the Greek way of life. Virtually all the parts of ancient Greek culture - religion, politics, social structure and economics combined to form the buildings and spaces that remain, the mysteries of which scholars have been pouring over for centuries. As Ward-Perkins so aptly states it: "The history of the classical town is in a very real sense the history of classical civilization itself."15

#### Notes

- <sup>1</sup> J.B. Ward-Perkins, <u>Cities Of Ancient Greece And Italy:</u> <u>Planning In Classical Antiquity</u>. (New York: George Braziller, 1974), p. 8.
- <sup>2</sup> R.E. Wycherley, <u>How The Greeks Built Cities</u>, 2nd ed. (London: MacMillan & Co. Ltd., 1962), p. 4.
  - 3 Wycherley, How The Greeks Built Cities, p. 16.
- <sup>4</sup>There is some debate about which is the first ancient Greek city to be orthogonally planned, for the purposes of this paper it will be assumed that Miletus was the first city to be orthogonally planned
  - <sup>5</sup> Wycherley, How The Greeks Built Cities, p. 15.
  - 6 Wycherley, How The Greeks Built Cities, p. ix.
- <sup>7</sup> Constantinos A. Doxiadis, <u>Architectural Space in Ancient Greece</u>. 2nd Ed. trans. Jaqueline Tyrwhitt. (Cambridge: The MIT Press, 1972), p. 15.
- <sup>8</sup> Constantinos A. Doxiadis, <u>Architectural Space in Ancient Greece</u>, p. 17.
- <sup>9</sup> J.B. Ward-Perkins, <u>Cities Of Ancient Greece And Italy:</u> <u>Planning In Classical Antiquity</u>. (New York: George Braziller, 1974), p. 8.
- <sup>10</sup> J.B. Ward-Perkins, <u>Cities Of Ancient Greece And Italy:</u> <u>Planning In Classical Antiquity</u>. p. 8.
- <sup>11</sup> J.B. Ward-Perkins, <u>Cities Of Ancient Greece And Italy:</u> <u>Planning In Classical Antiquity</u>, p. 8.

(Log Cabin, page 4)



Log notches on corner of Zwingli cabin

some of the windows are not the original four-over-four, but otherwise it is a glimpse back into the last century.

Built of hewn logs, the twenty-four by thirty-six foot, two-story house retains most of its original exterior and interior details. The corners are joined in an unusual way. Unlike other joining techniques, the logs are not all notched in the same manner. Some are notched at the top or the bottom; others are notched at both the top and bottom. The original exterior chinking has been replaced with a cement mortar mixture. The house sits on a foundation of huge log drums, some measuring twenty-four inches in diameter. The joists are peeled round logs, notched at the ends to sit on the sill logs.

The first floor interior walls are covered in vertical rough-cut boards that vary in width from eleven to thirteen inches and extend the full nine feet to the ceiling. The windows on the west side of the house appear to be original, single hung four-over-four. Other windows are not original but date to the early 20th century. The exterior doors are also early 20th century, but some of the interior doors might be original. The old wood burning stove in the kitchen does not draw well anymore, likely due to failure of the old brick chimney. The only heat in the house is from a wood stove in the largest downstairs room that is a much more recent addition. Heat rises through a hole in the ceiling to reach the upstairs.

The second floor of the house is reached by way of a narrow stairway from the kitchen. The walls of the sleeping rooms have been covered. The smaller of the two bedrooms was completely lined in beaded board many, many years ago. The walls, floor, ceiling and doors are all covered in the same beaded board. Walls in the larger bedroom are covered in vertical planks similar to those found downstairs. It is under these planks that newspapers can be seen. Besides "Germania," there are a number of English language newspapers and ads dating from the 1880s.

The most striking feature of the second floor, besides the newspapers, is the appearance of the uncovered walls. The interior surfaces of the hewn logs on the west side of the upstairs living area have never been covered. The deep brown colored logs, with ax and adze marks, are a tribute to the workmanship needed to build the house. These surfaces are a visual record of every motion used to transform the once majestic trees into building components for the simple home. There are thin strips of shaped wood placed, like chinking, between the logs. It is amazing to see the difference between the weathered, gray log exterior and the rich brown log interior surfaces.

A barn and storage shed are also located on the property. These are not the same time period as the house, but are important to the whole picture of the site. The barn frame is of large peeled logs. The foundation of the shed is similar to that of the house, large log drums with peeled log joists.

Old aerial photos of the site do not show any other buildings, but there is a large, flat area that seems to be the location of a previous barn. The water source for the house and barn is a spring that runs cool and clear year round. Located slightly uphill and behind the house, the spring was probably a primary factor in choosing the site for the house.

Scattered around the site, near where the old barn might have been, are some enormous tree stumps. These stumps measure from fourty-five to sixty inches in diameter. The idea that these stumps might be the remains of some of the trees used to build the log house is intriguing. They add a sense of awe to the mystery and wonder of the Zwingli log house and the mystery and wonder of historic Columbia County, Oregon. •

Photo by Autho

#### (Pacific Islands, page 1) American Samoa

In the winter of 1999 I spent three months with the American Samoa Historic Preservation Office (ASHPO) as a technical assistant through the Micronesia and South Pacific Program. The goal of this project was to train staff on how to use and modify hardware and software configurations for GPS mapping of archaeological and historical sites. We conducted a number of field exercises to determine how useful GPS mapping would be in American Samoa under varying conditions including intensive vegetation cover, urban areas with tall obstructions, and islands away from our main base station terminal. A major part of the project was to collect GPS data of WWII-era pillboxes that are scattered around the coastline of Tutuila, the main island. We also gathered GPS positions at the Breakers site, a WWII artillery fortification overlook-

ing Pago Pago harbor. This data was then used as part of the site's nomination to the National Register and helped us to determine GPS signal strength in dense forest canopy.

The results of our work indicated that using GPS here is possible, despite its rugged topography and dense vegetation cover. However, we encountered several major problems that will require further resolution. One of the main problems we had was that our GPS location data, when uploaded into GIS programs, was incorrect. After trying numerous configurations with software, hardware, datum positions, and digital maps, we realized that the United States Geological Survey maps had used a false UTM coordinate system, incompatible with the standard UTM coordinate system. This presented a number of other problems and has significant im-



Collecting GPS data at a WWII-era artillery site - Breakers, American Samoa

plications for creating a comprehensive historic and cultural resource management plan using GPS data. The results of my work with the ASHPO will be included in my M.S. terminal project for the Historic Preservation Program. This project will also be an attempt to resolve similar technical problems that exist for surveying, recording, and managing cultural and historical resources in other small Pacific Island States.

#### Republic of Palau

Palau is located in the Western Caroline Islands of Micronesia, roughly 800 kilometers from both the Philippines to the west and Irian Jaya to the south. The Palau Islands are comprised of many different geological types including volcanic, coral reef and atoll,

> and high limestone. Locally, these high limestone islands are referred to as the 'Rock Islands'.

> During late prehistoric/early historic times, peoples from the island of Yap (about 400 kilometers northeast) traveled to Palau to quarry limestone disks, or 'stone money' in the Rock Islands. These disks range in size from a few centimeters across to over four meters in diameter (some weighing over six metric tons). Their worth was dependent on size, shape, quality of stone, and risk associated with its quarrying and transport. These disks were brought back to Yap via raft or ship. During the Japanese administration over 13,000 disks were counted on Yap, a testament to the importance that stone money played to the political economy on the island.

> Why the Yapese quarried limestone disks in Palau and the duration of this activity is still unknown. It has been suggested that stone money was used by some villages in Yap to counterbalance the power that Gachpar Village (Gagil Mu-(See Pacific Islands, page 11)



(Pacific Islands, page 10)

nicipality) had in the sawei exchange. This exchange system refers to the formal gift-exchange between the people of Gagil and the Outer Islanders based on an owner-tenant and caste relationship. The quarrying of stone money may then have been integral to a political economy among several villages designed to gain traditional status and wealth using these limestone disks.

Although many researchers have commented on stone money and reasons surrounding its use, the money quarries themselves have received little attention by archaeologists. As part of my Ph.D. dissertation research in the Anthropology department, I have conducted preliminary investigations with the Palau Division of Cultural Affairs at several quarries. Our work thus far has revealed thirteen stone money disks in various stages of production as well as extensive pottery, shell and other faunal remains in the vicinity of nine recorded stone money quarries. Although oral historical and ethnographic references provide some clues about these processes, these are often synchronic and thus limited in their scope of explanation.

As part of my research to investigate this exchange system, I have worked with the Division of Cultural Affairs staff and various other government agencies and NGOs in Palau. During the first stages of this long-term research project, two University of Oregon anthropology undergraduate students accompanied me last summer to work with Palauan archaeologists at Omis Cave, a major stone money quarry. Eight more students plan to accompany me this summer as part of a larger collaborative field training program with the HPO. This project will be partially funded by a National Science Foundation dissertation research improvement grant that I recently received. Our work will improve upon the information collected thus far in an attempt to place quarrying activities into a more stringent temporal framework. This research is the first intensive survey of stone money quarries in Palau, and will help us to better understand the development of exchange between Palauan-Yapese societies through time, and comprehend how other cultural domains were influenced by exchange practices. •

#### Historic Preservation Week

by Bernadette Niederer

From May 13 - 21 the National Trust for Historic Preservation, Associated Students for Historic Preservation, and diverse organizations throughout Eugene will celebrate Preservation Week. This year's theme, "Taking America's Past into the Future," according to Richard Moe, President of the National Trust, "celebrates that link between past and future, challenging us to plan for the issues that will confront us in the years to come. It is essential that we be vigilant, flexible and well informed in order to deal with the rapid changes that are sure to have an impact on our irreplaceable historic treasures."

Accordingly, events in Eugene will feature both familiar as well as new elements. The celebration kicks of with a walking tour of historic Dorris Ranch on Saturday, May 13 starting at 10:00 a.m. Events on Mother's Day, May 14, will focus on the East Skinner Butte Historic District. An exhibit entitled "A Future for the Past," opening at the 1888 Shelton-McMurphey-Johnson house, and tours of Skinner Butte and individual houses within the neighborhood will begin at 10:00 a.m. On the same day, visitors to the University's Adele McMillan Gallery in the EMU will have the opportunity to guess "What Style Is It?" at an exhibit concerning historic architectural styles scheduled to run from May 14 - 28. Events will continue on the following weekend with a hands-on gardening session at the Pioneer Cemetery on Saturday and closing events at Wayne Morris Ranch on Sunday, May 21.

For more information on scheduling and participation please contact Bernadette Niederer at bniedere@darkwing.uoregon.edu or at (541) 485-4632. ❖

(Greece, page 8)

<sup>12</sup> J.B. Ward-Perkins, <u>Cities Of Ancient Greece And Italy:</u> <u>Planning In Classical Antiquity</u>. p. 19.

<sup>13</sup> R.E. Wycherley, How The Greeks Built Cities, p. 71.

<sup>14</sup> Constantinos A. Doxiadis, <u>Architectural Space in Ancient Greece</u>, p. 3.

<sup>15</sup> J.B. Ward-Perkins, <u>Cities Of Ancient Greece And Italy:</u> <u>Planning In Classical Antiquity</u>. p. 8.

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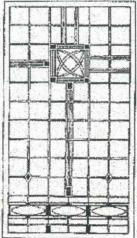
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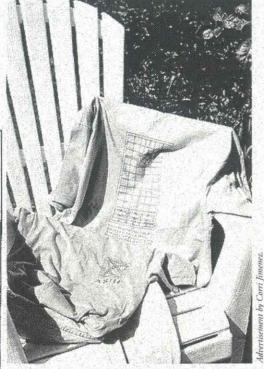
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