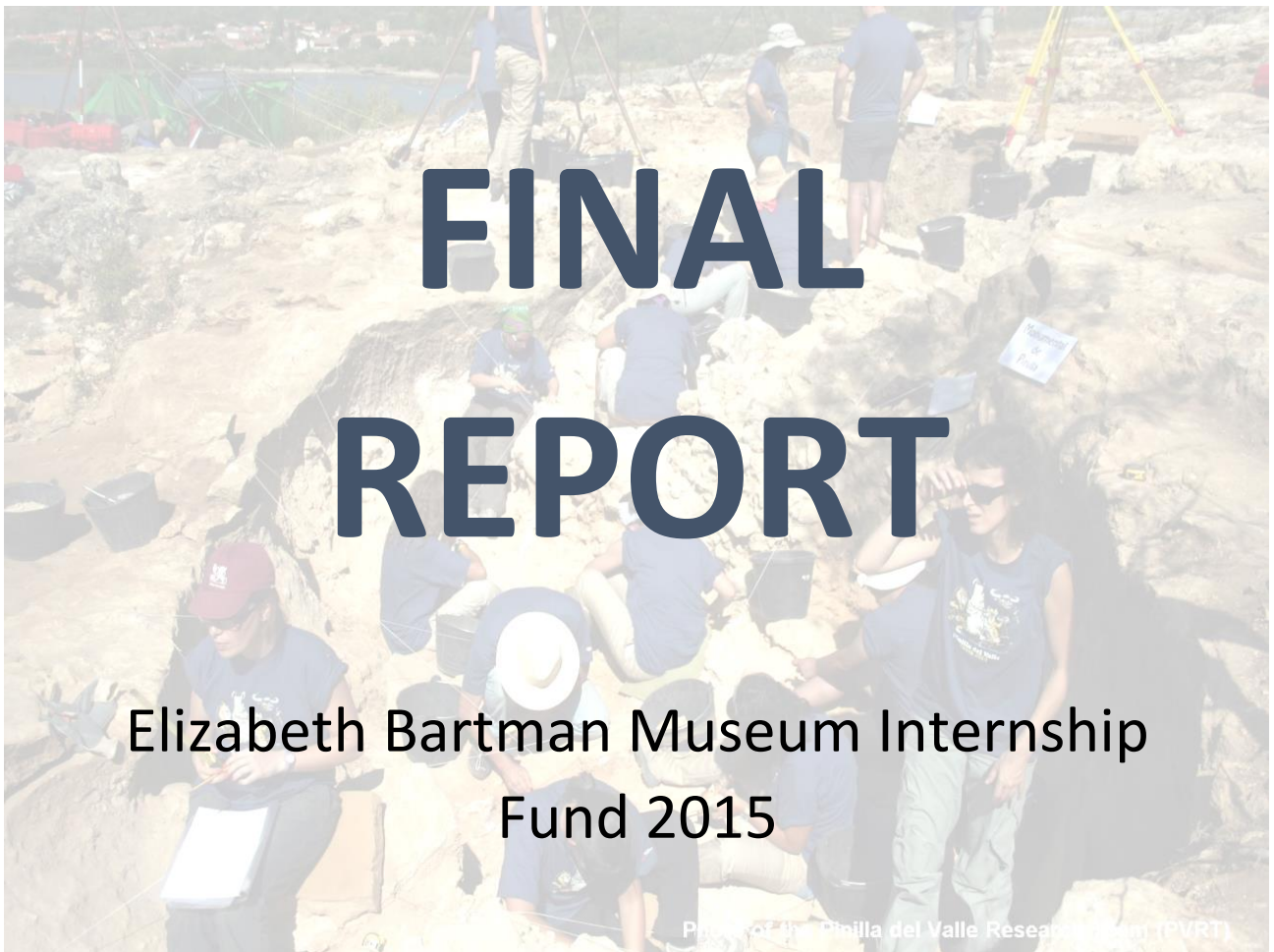




Archaeological Institute of America



Ana Cordeiro de Sousa Gomes Abrunhosa

Porto (Portugal), 29th February, 2016

Archaeological Institute of America Elizabeth Bartman Museum Internship Fund Award 2015 - Report

Final Report on the use of funds and activities developed with the Elizabeth Bartman Museum Internship Fund in Alcalá de Henares (Madrid – Spain) from August 14th until December 16th of 2015, by grantee Ana Abrunhosa.

Grantee: Ana Cordeiro de Sousa Gomes Abrunhosa

Citizenship: Portuguese

Country of Internship: Spain

Name of internship: Estancia en el Museo Arqueologico Regional de la Comunidad de Madrid

Name of Museum: Museo Arqueológico Regional de la Comunidad de Madrid

Supervisor: Enrique Baquedano

Period of Internship: 14 August – 16 December, 2015.

Table of Contents

Introduction	4
Project Goals	5
Budget and Expenses	6
Activities	8
• Fieldwork at Pinilla del Valle	9
• Laboratory work at the MAR	10
Conclusion	13

Introduction

Final report on the use of funds and activities developed with the Elizabeth Bartman Museum Internship Fund in Alcalá de Henares (Madrid- Spain) between 15th of August until the 16th of December, 2015 by grantee Ana Abrunhosa.

The purpose of this report is to present the activities developed from 14th of August until the 16th of December of 2015 at *the Museo Arqueológico Regional de la Comunidad de Madrid*¹ in Alcalá de Henares, Spain and the use of the Elizabeth Bartman Internship Fund Award to support the experience abroad as a grantee of the Archaeological Institute of America.

The first section - Project Goals - describes the project objectives as presented for the grant application for both fieldwork at the Pinilla del Valle Archaeological site from the 15th of August until the 22th of September and the laboratory work at the Área de Investigación (Research Area) of the MAR in until the 16th of December 2015.

The second section - Budget and Expenses - reports how the Elizabeth Bartman Internship Fund Award helped support the expenses during the internship in Spain. An overall budget and expense list justifies how the grant was used.

The third section – Activities - presents all the activities developed during the internship both during fieldwork and latter at the museum. It is followed by the fourth section with final conclusions and outcomes of having been an AIA grantee.

At the end of the report an Appendix gathers additional information of the Budget and Expenses such as flight tickets from Portugal to Spain and back, a declaration of room rental and other expenses while abroad as food and travel expenses inside Madrid Community.

¹ In English - Regional Archaeological Museum of the Community of Madrid (translation by the author)

Project Goals

The main goal of the internship was to study the lithic collection from Pinilla del Valle and to be able to construct the foundation of the future Ph.D. thesis to be supervised by Nuno Bicho in Portugal and Enrique Baquedano in Spain about the Mousterian lithic raw material procurement in Pinilla del Valle. Because national (Portuguese) research financial help for grants suffered cuts of 50% in the last 6 years due to the economic crisis in Portugal, the AIA grantee was placed in a position that in previous normal conditions would result in funding for a Ph.D. The AIA grant had the objective of allowing to continue the study of Pinilla del Valle and to enrichen the grantee's CV in order to reapply for a national grant.

With the AIA Award the grantee was able to participate in the 2015 summer field archeological campaign in Pinilla del Valle, to aid with the pre and post campaign and to proceed with the inventory of the findings and classification of the lithic raw materials from the Middle Palaeolithic Pinilla del Valle's archaeological sites deposited at the *Museo Arqueológico Regional de la Comunidad de Madrid (MAR)*.

The internship was undertaken at the MAR in Alcalá de Henares (Madrid – Spain) under the supervision of its director, Enrique Baquedano Pérez. It had a duration of eighteen (18) weeks divided into: i) a first term of six (6) weeks of fieldwork at the archaeological excavations in Pinilla del Valle Middle Palaeolithic sites and ii) a second term of twelve (12) weeks of inventory, cataloguing and analysis of the lithic collection at the investigation department – Área de Investigación - of the museum.

During the first six weeks, the objectives were to give logistic support throughout the pre-campaign, archaeological excavations and post-campaign of the 2015 Pinilla del Valle summer fieldwork campaign.

The main goals of the laboratory work was to learn how to work with the program *FilemakerPro*, the Pinilla del Valle's database, to familiarize with the lithic collection and perceive its characteristics. This was of the most importance to trace objectives and define future methodologies to be applied on the raw material study.

Budget and Expenses

The AIA final award was the amount of \$2,375 USD. The duration of the internship was of 24 weeks but because the final amount of the award was less than the original application budget and this was the only financial help the grantee had to go abroad, the final duration of the internship was reduced to eighteen (18) weeks – six of field work and twelve of laboratory work.

In Portugal (the account where the money was transferred to) and in Spain (where the grantee interned for 5 months) the currency is EURO thus for practical reasons all expenses are presented here in Euros. The USD transfer after conversion was of 2,077.30 €. After the Portuguese bank charged a 15€ fee for the international money transfer and conversion.

Flights Oporto-Madrid (14th September 2015) Madrid – Oporto (16th December 2015) were purchased on *Ryanair Ltd.*, a low cost company and the prices presented on the table below already include luggage and all taxes.

The access from Madrid to Rascafría (Pinilla del Valle) is made by bus and each ticket costs 3.60€. During the voluntary work at the archaeological campaign, house and 4 daily meals are provided by the organization – breakfast, morning snack, lunch and dinner.

The grantee rented a room to tenent Ingrid Gali. The address was Calle Escuelas Pias 7 2B in Alcalá de Henares from September until December. It was close to the work place so there would not be additional transportation expenses. The rent was of 300€ per month and included all in house expenses – water, electricity, gas, tv/wi-fi. For the four months – September, October, November, and December – the total amount spent in rent was of 1,200€.

The average spent on subsistence per month was of 150€. The total spent on the four months in Alcalá de Henares was 600€. While at the Fieldwork campaign in Rascafría (Pinilla del Valle) all volunteers have housing and food for free so only small expenses were made during this period for hygiene products or snacks.

Alcalá de Henares has a bus and train connection to many localities in the Madrid Community. During the stay in Spain the grantee did several trips to Madrid (city center) where the National Museum of Archaeology and the National Science Museum are located and where there are periodical events of interest such as scientific meetings, conferences, book launches with interviews with authors, but only two *Cercanias-Renfe Madrid* train tickets for 10 trips each were bought with the AIA Award. Each ten trip ticket has a cost of 36€. The total spent was 72€.

A mobile phone prepaid SIM card from YOGO, a Spanish phone company, had a mandatory charging of 10€ per month. This was bought to be contactable by co-workers while in Spain.

<i>Type of Expenditure</i>	<i>Amount spent in EURO €</i>
<i>AIA Award received in USD</i>	\$2,375.00
<i>AIA Award after conversion to EURO</i>	2,077.30 €
<i>International transaction bank fee</i>	15.00€
<i>Ryanair Flight Oporto – Madrid + baggage</i>	75.98€
<i>Ryanair Flight Madrid - Oporto + baggage</i>	58.12€
<i>Bus Madrid - Rascafria / Rascafria - Madrid</i>	7.20€ (3.60€ x 2 tickets)
<i>Rent (water, electricity, gas, tv/wi-fi)</i>	1,200.00€ (300.00€ x 4 months)
<i>Subsistence (Food)</i>	600.00€ (150.00€ x 4 months)
<i>Telecommunications (YOGO Prepaid SIM)</i>	50.00€ (10.00€ x 5 months)
<i>Train Cercanias Alcalá - Madrid</i>	72.00€ (2x 36€ per 10-trip tickets)
<i>Total spent:</i>	2,078.30€

Table 1: AIA Award budget and list of expenses (in EURO)

All receipts were kept in case there is the need to prove all expenses while abroad. A copy of the airplane tickets and a declaration between Ingrid Gali (tenant of the rented room) and the grantee are attached in the final pages (Appendices) of the report. Other expenses the grantee had that are not listed in the table above (such as subway inside Madrid) were performed with the grantee's own resources / savings.

Activities

The first term of the grant was developed in the Pinilla del Valle Archaeological sites. The activities of the second term were developed in the Research Area of the Archaeological Museum in Alcalá de Henares.

During the Internship, the grantee attended two congresses – with an oral presentation at the Annual EAA Meeting in Glasgow, Scotland and a poster presentation at the Protolang in Rome, Italy. Expenses related with these congresses were supported by the grantee’s own resources and so they do not appear listed on the table 1. They do appear listed on table 2 because the work presented on those congresses is related with the research being developed about Pinilla del Valle.

<i>Date</i>	<i>Task</i>
<i>14th August</i>	Arrival in Spain
<i>15th August</i>	Arrival in Pinilla del Valle for excavation pre-campaign. Beginning of Fieldwork.
<i>18th August</i>	Beginning of the 1 st term of the excavation and volunteer’s arrival.
<i>30th August</i>	End of 1 st term of the excavation
<i>1st September</i>	Beginning of the 2 nd term of the excavation and volunteer’s arrival.
<i>2nd September</i>	Flight to Edinburgh to attend the EAA (with oral presentation)
<i>6th September</i>	Flight back to Madrid.
<i>15th September</i>	End of the archaeological campaign. Beginning of the Post-campaign.
<i>23rd September</i>	Flight to Rome – Protolang Congress (with poster presentation)
<i>25th September</i>	Flight back to Madrid
<i>28th September</i>	Internship at the Museum - MAR
<i>16th December</i>	End of the Internship. Arrival in Portugal.

Table 2: Tasks developed during the internship from September 14^t until December 16th, 2015.

- Fieldwork at Pinilla del Valle

The pre-campaign had the duration of a week and it had the objective of preparing all set ups needed for the campaign – uncover the archaeological sites², mount the sediment water sieving system and prepare the area with all the materials needed for the job such as hoses, pumps, sieves, plastics, gloves and water boots. The laboratories were set up at Albergue de los Batanes in Rascafría³ with all necessary material – microscopes, computers, washing and restoration tools. There were 4 laboratories: i) a laboratory with networked computers with the site's database where on site records were reviewed and cataloging was made; ii) one for sieving the sediments washed previously on site to look for micro fauna, coprolites and small lithic splinters; iii) a room for washing lithics and bones and; vi) a laboratory for restoration and future conditioning of all findings before being sent to the MAR. Work tools were removed from a warehouse and quality checked to purchase the necessary new tools for the excavation such as buckets, trowels, wheelbarrows, wood boards, safety straps, helmets, among others.

The field campaign lasts four weeks divided in two periods of two weeks each. At the end of the first period there is a group change of volunteers. The Team is composed by University Professors, Researchers, Ph.D. to graduation and under graduation students. There are around 70 people per week working at the sites – Navalmaíllo Rock shelter, Buena Pinta Cave, Descubierta Cave and Ocelado Cave. The workday is divided in excavation from 9h to 14h and laboratory from 16h30 until 19h. During the field campaign, the grantee aided with the coordination of the Navalmaíllo Rock shelter excavation where she worked closely with archeologists, geologists, biologists and restoration personnel. At the laboratory, the grantee was responsible for revising the field records - revision of drawings, coordinates, the presence of artifacts collected that day and the sorting of materials according to their state of preservation and their conservation requirements. Depending on their needs, artifacts where sorted

² The open area excavated has to be covered by the end of each field campaign due to preservation requirements of the sites and also to prevent the fall of both people and animals that might wander in the valley during the rest of the year.

³ The Youth Hostel in a small village in the valley near the sites of Pinilla that lodges the Pinilla del Valle Team during archaeological campaigns.

for cleaning or directly into the restoration and conservation laboratory where the team would proceed with the needed handling. All volunteers were encouraged to participate in various tasks after finishing the one assigned to them. At restoration and conservation laboratory the grantee learnt how to perform the removal of calcareous concretions from lithics with acid and the mechanical removal of calcareous concretions from osseous materials.

During the campaign the grantee took the chance to do geological survey on the valley of Pinilla with the geologists of the Research Team and was part of a lithic use wear experimental archaeology project cutting bones with different raw materials.

The post campaign is a week after the end of the fieldwork and only a small team stays to close and cover the sites with wood tables and geotextile that protect the site from, for example, erosion and animal activity. Before covering the site, the faunal remains that are still unearthed due to their depth, are covered by the restoration team (composed by both professionals and volunteered students) with an insulating foam that protects them until the next opportunity to excavate them.

The laboratories are dismantled during the last days of the post campaign and all artifacts, field records and computers were taken back to the Museum in Alcalá de Henares to be analyzed, studied and catalogued.

- **Laboratory work at the MAR**

From the end of September until the end of the Internship the main tasks at the Research Area of the Archaeological Museum were to do the inventory and cataloguing of the lithic collection retrieved during the 2015 campaign in Pinilla del Valle and to study the lithic materials collected between 2002 and 2015.

There is a big amount of archaeological artefacts collected each year (from lithics to faunal remains, human and animal activity indicators such as coprolites and charcoals from possible hearths) and because of that the inventory from each campaign is started during the laboratory hours every day of work of the field campaign. Due to its quantity, variety, number of different people who handle them between the various laboratories

until they are finally packed and sent to the MAR, it is necessary to review and make sure nothing was lost between transitions and that the artefacts are correctly inventoried and stored.

The tasks assigned by the museum were:

LIST OF TASKS TO BE DEVELOPED DURING THE INTERNSHIP AT THE MAR

- REVIEW THE LITHIC INVENTORY FROM ALL PINILLA DEL VALLE SITES
- ORGANIZE THE DATA COLLECTED DURING PUNCTUAL SURVEYS
- CREATE A RAW MATERIAL DATA BASE FROM PINILLA DEL VALLE
- ORGANIZE A MAP FUTURE SURVEY AREAS
- WRITE AN ARTICLE ON RAW MATERIAL PROCUREMENT IN THE IBERIA

The Pinilla del Valle database is based on a model from the Atapuerca Research Team in *FileMaker Pro* program, with the fields adapted to the sites needs and the materials characteristics. The lithics were: i) organized and placed in boxes by layers to be deposited in the museum archive for future consultation by whoever needs to study them; ii) small lithic splinters were separated; iii) lithics that needed to be subject to cleaning by acid in order to later be analysed typologically were placed in different boxes by site with a separated inventory to be sent to the laboratory of conservation and restauration of the museum. Almost 2.000 lithics were retrieved in the 2015 excavations.

After revising the inventory the grantee dedicated the rest of her stay studying the lithic raw materials, studying the geology of the valley a preparing future surveys on areas of interest to collect geological samples to afterwards compare with samples from the archaeological artefacts from Pinilla del Valle.

Started the basis of a raw material database from the lithics present at Pinilla del Valle recording photographically. The selection of pieces from each year for photography in studio and binocular loupe was held. The criterion for the choice of the pieces to be analyzed was: i) the representation of the raw material; ii) the rock preservation condition (degraded sandstones and pieces with more than 50% of calcareous concretions were not recorded at this stage). The studio photographs were

taken at the Photography studio of the MAR with the help of the Museum photographer – Mario Torquemada. At the Research Area with help of use wear specialist Belén Marquez, the grantee took detail photographs of the same pieces with an Olympus SZX12 stereoscopic binocular microscope with a camera coupled with computer connection. The software used to view and capture images is the *Cell^A*. To edit it was used *Helicon Focus 6* software.

During the time of the internship, the museum inaugurated two temporal exhibits, held a conference on the Archaeology of Madrid Region and the director of the Museum presented the launch of a book at the National Museum of Natural Sciences in Madrid entitled “Qué sabemos de los Primeros Homininos. Paleontología humana” - “What do we know about the First Hominins. Human Paleontology” from António Rosas.

Conclusion

The grant helped pursue research work on Pinilla del Valle's lithic collection that otherwise would be impossible without this financial help.

With the Internship the grantee got the opportunity to work with an interdisciplinary team doing both fieldwork and laboratory work, improve Spanish both speaking and writing, got more experiencing in working with a Mousterian lithic collection, did geologic surveys, learnt how to work with various software – File Maker Pro, Cell^A, Helicon Focus 6 – and to be part of a research team in a Museum environment.

The inventory and study of the artifacts from Pinilla del Valle sites will contribute to the valorization of the archaeological collections in the Museum archive and to continue the research Projects in the Middle Palaeolithic of central Iberia.

The data collected during this period is going to be the basis of the future research work for a PhD on lithic raw material procurement in Pinilla del Valle.

Thanks to the AIA grant, the grantee got a set of skills that improved the CV in order to apply one more time to a national PhD grant from the Portuguese Science and Technology Foundation. The grantee is fortunate to announce that she was offered the PhD grant to pursue her studies about the Mousterian lithic raw materials from Pinilla del Valle at the University of Algarve and the Museum in Alcalá de Henares, starting of January 2016.