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Archaeology: puzzle of the past: an exhibit design

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ARCHAEOLOGY: PUZZLE OF THE PAST

AN EXHIBIT DESIGN

by

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Abstract

Archaeology: Puzzle of the Past is a design for a museum exhibit to better explain archaeology to the public. Its purpose is to change the audience's perspective from one of object orientation to visualization of archaeology as a process. The exhibit utilizes a chronological and concrete approach to move the visitors through the major steps in the archaeological process -- including survey, excavation , labwork, and interpretation -- as they occur within the parameters of a fictitious archaeological site. In addition, interactive exercises are designed to be included within each area to reinforce the message.

The purpose of this exhibit is to inform a general audience about modern archaeological theory and practice. The parameters were narrowed to the theories and practices involved in and surrounding an archaeological excavation. A linear "story" design was adopted to follow the roughly chronological pattern of a fictitious excavation. For the purposes of this paper, a site representative of Bronze Age Britain will be used, but the use of a fictitious site creates flexibility, allowing a particular museum to adapt the exhibit design to its available collection or to better suit the interests of its particular audience.

To better achieve the purpose of this exhibit (to inform/educate) a series of "interactive" exercises were designed and interspersed throughout the exhibit to provide multiple sensory learning opportunities, complement and reinforce the messages of the traditional exhibits, and allow for some "hands-on" fun.

The exhibit can be divided into five distinct sections. An "introductory" section is followed by four sections corresponding to the "survey," "excavation," "labwork," and

"interpretation" stages of an archaeological excavation.

INTRODUCTION

The "Introductory" section (1-5 in fig.1) serves to catch the audience's attention and briefly explain the topic of the exhibit. It consists of roughly three parts: catch material, topic introduction, and transition.

When they hear the word "archaeology," most people think of *Indiana Jones* and/or fabulous treasures. It can be assumed that the audience will have a number of preconceptions about the subject because their previous experiences with archaeology in museum exhibits will probably have been limited to objects displayed in cases or in dioramas of reconstructed context. They will probably be very "object oriented."

This creates a problem: How to interest an object oriented audience in an exhibit primarily concerned with a process. "Catch material" is needed, something to catch their eye and the obvious answer is to use objects. However, objects as such do not enter the archaeological process until somewhere in the middle (when they are dug out of the ground), and to start off with them disrupts the linear, chronological flow of the

exhibit, creating the need for a smooth and clear transition from the introduction back to the beginning of the linear and chronological exhibit.

The **catch material** decided upon for this exhibit consisted of a title and a case. The title (1) written in very large letters in the "Indiana Jones" style reads:

Archaeology: The Puzzle of the Past

It was chosen because it presents the subject as a process -- the solving of a puzzle, and indicates to the audience that this exhibit will be about many different "pieces" and how they "fit together." It also has nice alliteration.

In addition to the title, a case of objects is included in the catch material. The case (2) will contain the objects with which to draw the visitor into the subject. They must be interesting enough to catch attention but ordinary enough to tie into the excavation being presented. This would indicate using especially well preserved and/or beautiful (but typical) items. Proposed objects include:

1. "Tools" -- useful, everyday objects
   a) knives
   b) pottery

2. "Ornaments" -- decorative or symbolic objects
   a) jewelry (bracelets, torcs)
   b) penanular brooches, cloth fragments
3. "Environmental Evidence" -- evidence of climate and surroundings
   a) animal bones
   b) pollen/seed samples

These objects, with accompanying labels would be placed in a freestanding case approximately three feet tall with a top of sloping plexiglass. The placement of the case, directly across from the title and directly in front of panels three and four ties the catch material into the introduction of the main topic of the exhibit.

The **topic** of the exhibit is presented in the form of two full size panels covering one entire wall of the introduction room. Panel three is a photographic panel showing a scene representing the "undiscovered" site, in a typical field. Panel four is a drawing of a reconstruction of the "same" scene created using information obtained in an "excavation." Panels three and four are each accompanied by a narrow panel of explanatory information.

The two panels are tied together by the case immediately

in front of and "straddling" the two panels. The objects in the case will be accompanied by small different colored lights lit by pressing the button next to the object's name on the front panel of the case. These buttons will also activate corresponding colored lights set into each of the panels showing the relative position of the object on display in each of the represented situations in the panels. This serves the purpose of tieing the objects to the beginning and end of the process and creating curiosity in the visitor about how objects are used in that process to recreate scene four from scene three.

With panel four, the exhibit is really at the "end" of the process instead of the beginning. A **transition** is needed to take the audience from the completed product (the reconstruction panel) to the beginning of the process. The creation of a "time tunnel" (5) solves this problem.

The time tunnel really "begins" with panel four. It consists of five other full size panels on both sides of the "tunnel." Rounding the corner from the reconstruction on panel four, panels 5a - d show the degradation of the same scene until it arrives at 5e which is the same photographic scene as panel

three. Proposed stages or "scenes" for the degradation include:

5a) abandonment/vandalism
5b) burning/collapse
5c) burying/reclamation
5d) landform changes
5e) same as panel three

In addition to providing a tidy transition, the time-tunnel also informs the visitor as to the different forms of destruction, manmade and natural, involved in the degradation of a site.

SURVEY

The transition from the Introduction ends with a scene of an undiscovered site (5e). From here, the exhibit moves forward in a linear and chronological fashion beginning with the discovery, survey, and preparation of the site.

The **discovery** of a site is explained with a case exhibit (6). The built-in case utilizes a combination of photographs and objects (accompanied by appropriate labels and text) to explain how the (fictitious) site was discovered by a farmer plowing his field. The proposed photos and objects are:

1) A color photograph of a tractor plowing in a field

(if possible in the same field as in 5e)

2) Objects (probably potsherds shown to be near the surface in panel three) representing the "discovery"

In addition to this, a corner of the case will display other possible methods of discovery such as aerial reconnaissance and construction (using photographs of those activities to illustrate) and historical references (probably represented by old maps or diaries).

The **survey** of a site will be covered in a panel (7) which explains how "site X" was surveyed by walking and describes the technique. Photographs of walking surveys in progress and drawings representing the types of objects found will form the central panel. The two "wing" panels will deal with other methods of surveying such as aerial and test plotting, mentioned as alternatives or complements and represented by photographs or drawings.

Alcove eight is the site of an **interactive exercise** involving the use of a transit in surveying sites. A short wing panel on the left of the alcove will explain the importance and use of the transit in surveying and the techniques for using it. The alcove itself will be another representation of panel three

with a meter stick set in front of the panel and a transit set in front of that. A short wing panel on the right will give directions for the exercise which will involve determining the relative height of two or more objects in the panel. The exercise is designed to have two levels, one nominative (which is higher?) and the other qualitative (how much higher is it?).

The **preparation** of the site for excavation will be explained in a loose "panel" (9) composed of a series of photographs with explanatory captions. Tasks such as clearing the grass (or crops) from the area and laying out the grid will be represented and explained.

EXCAVATION

The section of the exhibit explaining excavation will include exhibits on where to dig, how to dig, what to dig with, and how to record what is found. The central aspect of the excavation section is a life-size diorama of an excavation in progress (11). The above aspects will be represented in the section of the diorama closest to the exhibit containing the information. The entire section will also slope down gently from the entrance through the interactive exercises. The decoration

of the walls of this section will represent the "layers" of different types of earth.

How archaeologists decide **where** to excavate will be explained by a large panel (10). The procedure used on site X (features) will be explained in detail using diagrams, text, and photos as will other possibilities including systematic and random approaches as well as concentration of artifacts..

How excavation is actually carried out and **what** it is carried out with will be explained by the combination of a case (12) and a panel (13). Case twelve will contain examples of the standard tools used in a archaeological excavation including larger tools (shovels and picks), standard tools (trowels and dustpans), delicate tools (dental picks and paintbrushes), measuring tools (levels and plumb bobs), screening/sifting tools and "necessities" such as buckets along with labels which briefly explain what each item is and when it is useful (removing topsoil or creating platforms, etc.). The specific techniques of how to use a few of the more common tools (trowel, screening, etc.) will be explained in detail in an adjacent panel (13) using drawings, diagrams, pictures, text, and referring to examples of the

activity in the large diorama (11).

The process of **recording finds** during an excavation is explained through the use of an unusual case (14). Set against the background of the "layered" walls in the exhibit, case fourteen is a clear panel of plexiglass extending from floor to ceiling. Behind the plexiglass, suspended from the ceiling by invisible threads will be several (6-8?) objects "found" in the excavation. The objects will be suspended at their proper XYZ coordinates as recorded on a panel at right (15) which explains how objects are recorded onto graphs by referring to case fourteen as well as activities in the diorama.

Three **interactive activities** are included in the excavation section and are "layered" to provide stimulation for several age groups. A "sandbox" excavation (16) allows younger children (of all ages) to "dig up" objects while a "wall grid" (17) allows older children to record the X and Y coordinate of their finds. On the other side, a dry screening/sifting exercise (18) demonstrates how the different size meshes work. Two or three benches will probably be provided in this area for parents and to help with museum fatigue. Instructions will be posted on

panels for each exercise and, if possible, the presence of a docent during peak periods (to explain and keep order) would probably be a good idea.

LABWORK

The premise of the labwork section of the exhibit is a "mock lab" complete with counters, cabinets, sink (non-working), bulletin board (with *Calvin and Hobbes* and *The Far Side* cartoons), and other props to give it a "realistic" feel. The "stations" of labwork explained in the exhibit include cleaning, sorting, preservation/stabilization, and labeling of artifacts. Each area is explained through an interactive exercise as well as panels and cases of information (within the "laboratory" context).

The process of **cleaning** artifacts would form the first "station" (19). Located near the mock sink, a panel on the inside of an open cupboard door would explain methods of cleaning such as water cleaning, dry cleaning, and acid cleaning. On the shelves of the cupboard would be examples of objects requiring each type of cleaning. The interactive portion of station one would consist of drawers (one for each type of cleaning described

in the text of the panel) containing objects (permanently attached) and asking which method should be used to clean them. The answers would be written in the drawers under cards reading "to check your answer lift this card". Instructions for the exercise would be found on a clipboard (attached) on the counter.

Station two (20) would explain the process of **sorting** finds through one or more of a series of progressive exercises located on the counter.

1) Rough Sorting Exercise -- separate objects into categories such as: pottery, bone, metal, flint
2) Pottery Sorting Exercise -- match supplied pot sherds of different types to pictures of a whole pot of that type
3) Bone Sorting Exercise -- match bones to outline shape
4) Screening Sorting Exercise -- tray of fine screening with a large magnifying glass, separate bone and flint from mud debris using tweezers

Exercise one is to provide the visitor with an understanding of the wide range of material that comes out of an excavation. Exercise two demonstrates "horizontal differentiations" (differences within a period of time) such as class differences revealed through such things as the wide varieties of pottery found during one time period. Exercise

three demonstrates "vertical differentiation" (changes over time) by showing the changes in animal size over time. Exercise four demonstrates the importance and value of even the smallest scrap (as long as you know where it came from).

Station three (21) demonstrates the most common current techniques of **preservation and stabilization**. A case (in the cupboard) contains examples of bone, metal, cloth, paper, leather, and wood "artifacts." A panel on the open cupboard door explains special requirements for each of these. Drawers are labeled with "climates" such as "wet and warm" or "cool and dry." These labels may be done with symbols like sun and water or snow and desert to help smaller children. Visitors guess which objects (copies of the objects in cupboards) are in which "climate" drawer.

Labeling will be the topic of station four (22). A cabinet panel will describe how a label is formed and where is the best place to label on different types of objects. A case on the counter will hold examples of labelled objects with the labels clearly visible. Drawers are again used as an interactive aid, this time containing objects which the visitor must decide

where to label. The answers will be in the form of labelled objects located in the other drawer marked "answers."

INTERPRETATION

From the mock lab visitors enter the "interpretation area." This exhibit explains how all of the gathered and analyzed objects are used to form reconstructions (such as panel four back in the introduction). It explains horizontal and vertical associations and is tentatively titled "Fitting the pieces together."

The explanation of **horizontal association** consists of a diorama with a "program" which is on a timer. The diorama is of the same scene as the reconstructed drawing in panel four. At a regular interval a light will appear on a single object, gradually expanding to point out and include other parts of the scene as a vocal recording explains the process. The order of association (roughly) will be as follows:

1) single object (most likely a piece of pottery because it is large enough to be easily seen)
2) associated objects (other tools and ornaments from case 2)
3) definition of "activity areas" using objects and features -- cooking, knapping, sleeping, etc.

4) environmental reconstruction

In addition to the vocal recording, panels on either side of the diorama will help visitors locate hard to spot objects and provide more detailed information for those interested.

Vertical association will be explained by a plastic panel/case (24) lit from behind displaying the "layered" sequences of occupation for site X. On a timer. At first only the "layer" represented in the diorama (23) is lit. Then all of the layers above light along with the text explaining that archaeologists had to dig through all of these layers to get to the diorama level. The next light illuminates a series of layers below the diorama level with text explaining that many more layers may still exist. A final light shows hundreds of tiny objects in each layer and text that explains that each and every layer has the potential to hold as much information as the diorama layer.

A short **interactive exercise** (25) provides people with puzzle pieces forming a picture of the diorama, reinforcing the message of interconnectedness.

Panel twenty-six is a **conclusion panel** tied to

panel/case twenty-four. An “inspirational" tie to last text of panel (24) stresses the large number of undiscovered or unreported sites and the large amount of information "out there" yet to be discovered, urges people to help find pieces to solve the puzzle of our past. (with image of crowd of people with puzzle shaped pieces missing - possibly pieces in the shape of archaeological artifacts).

Summary

Archaeology: Puzzle of the Past is a design for a museum exhibit to better explain archaeology to the general public. It's purpose is to alter the audience's perspective from one of object orientation to an ability to visualize archaeology as a process.

The exhibit utilizes a linear chronological and concrete approach in design to create a "story" which moves visitors through exhibits representing the major steps in the archaeological process -- including survey, excavation, labwork, and interpretation -- as they would occur within the parameters of a fictitious archaeological site.

In addition to the more traditional exhibit displays, designs for interactive exercises have been interspersed throughout the layouts for each of the four sections to provide multiple sensory learning opportunities, complement and reinforce the messages of the traditional exhibits, and allow for some "hands on fun."

This paper establishes a basic design for the exhibit. The focus of this design has been on communicating with the visitors through layout and design. Several other areas of design would have to be addressed before such an exhibit could become a reality. These areas include the technological aspects of the exhibit -- including lighting, labels, colour schemes, shelves, and many other details which have not been touched on here. A budget would also have to be established for the exhibit before it could become a reality.

However, neither of these areas is practical to explore within the scope of this paper. Technical details and budget vary so greatly from institution to institution that to create a model based on a prediction of what any individual museum has available in the way of space or artifacts or funding would not

be practical since it would not apply to any other institution and the purpose of this paper was to create a general exhibit design for use with many museums. The determination of some variables (such as a Bronze Age site from Britain and the physical layout) were necessary to facilitate the visualization of the basic design, but are in no way absolute or binding to the design.

Someday I hope to see this design as a real exhibit. I feel that its place in the world of museums, is that of an exhibit which will help to explain other exhibits. It could fulfill that function nicely in any number of children's museums, as a traveling exhibit, or even as an exhibit in a science center. Hopefully, someday ***Archaeology: Puzzle of the Past*** will help take the puzzle out of the misunderstanding which currently surround exhibits on archaeology.

SOURCES OF INFORMATION

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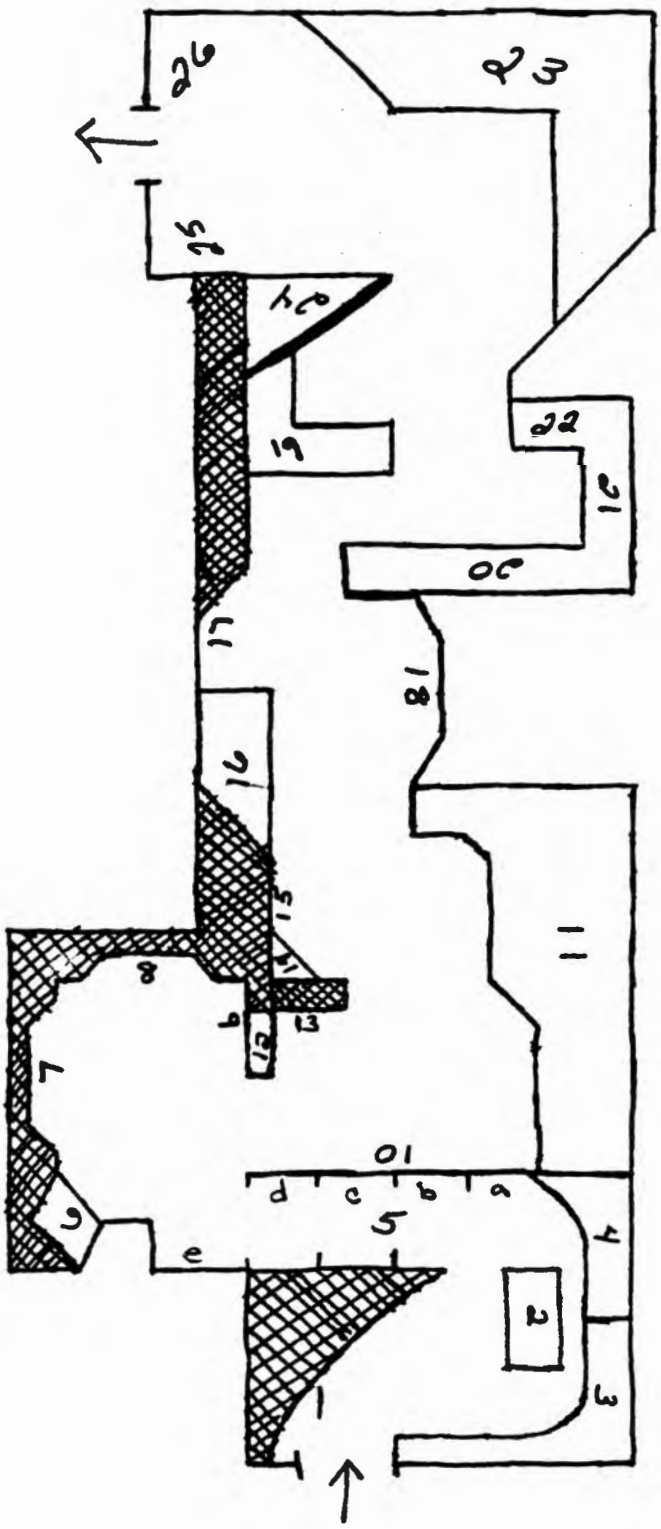


Fig. 1 Design Layout

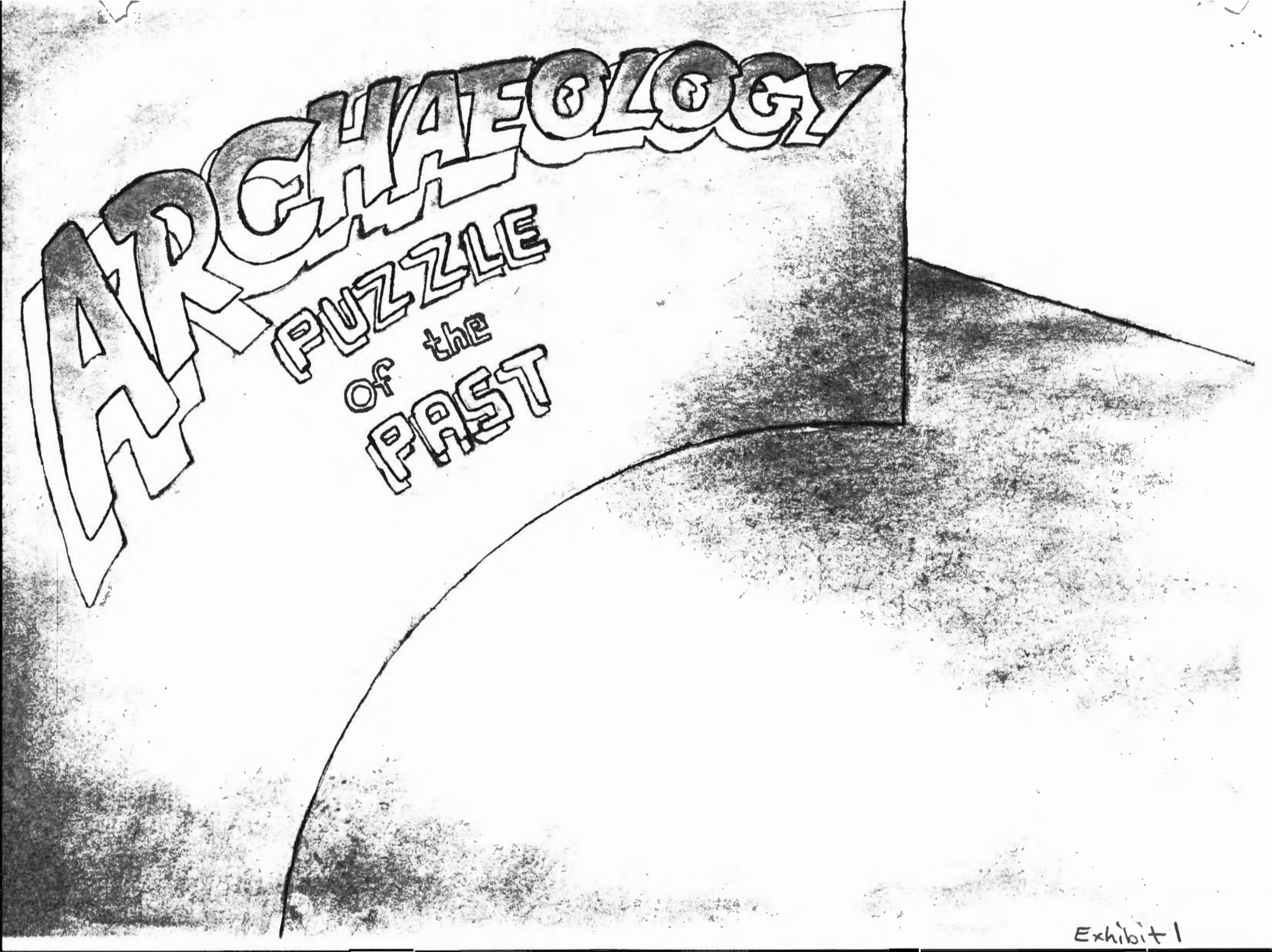
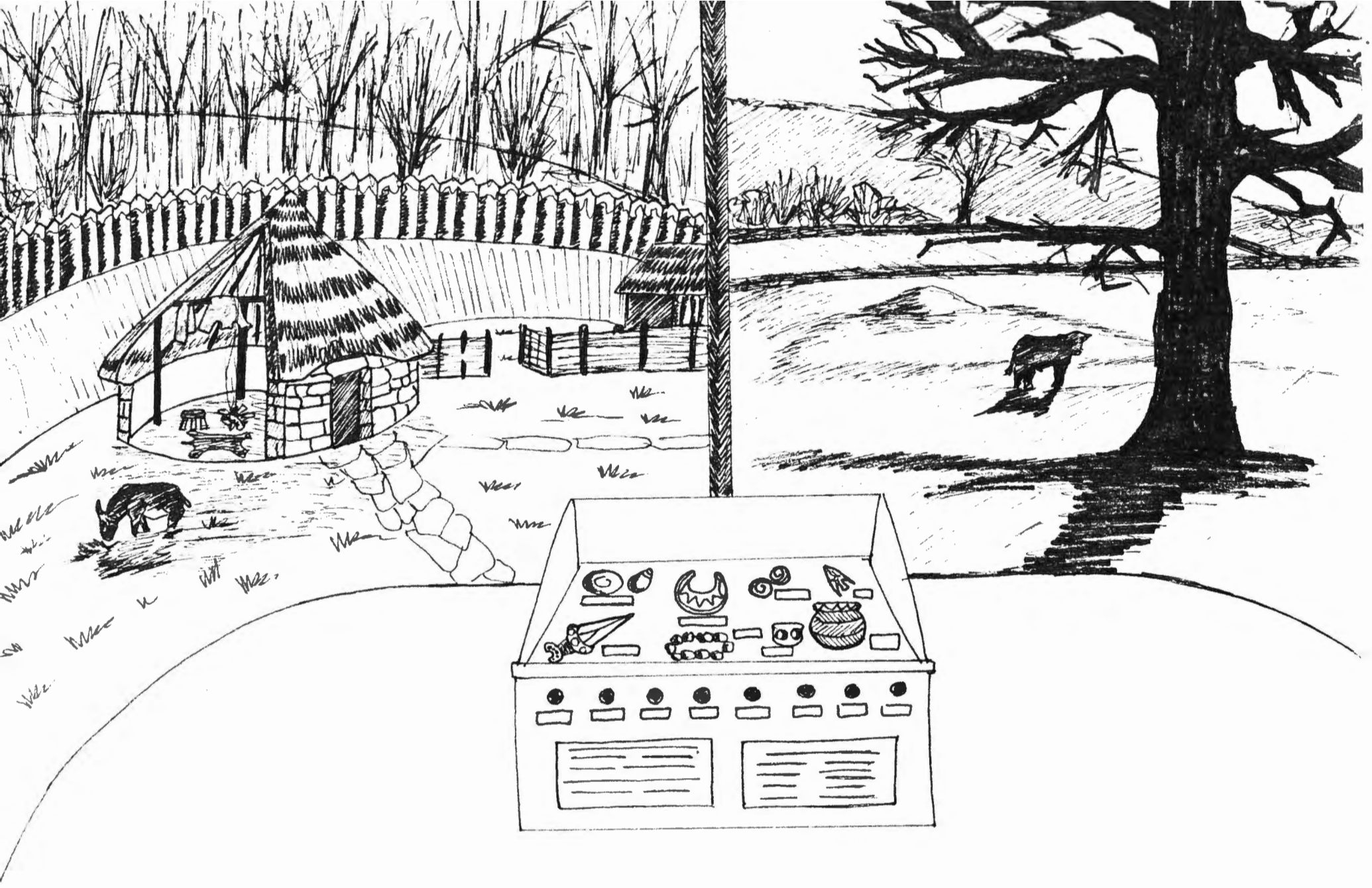
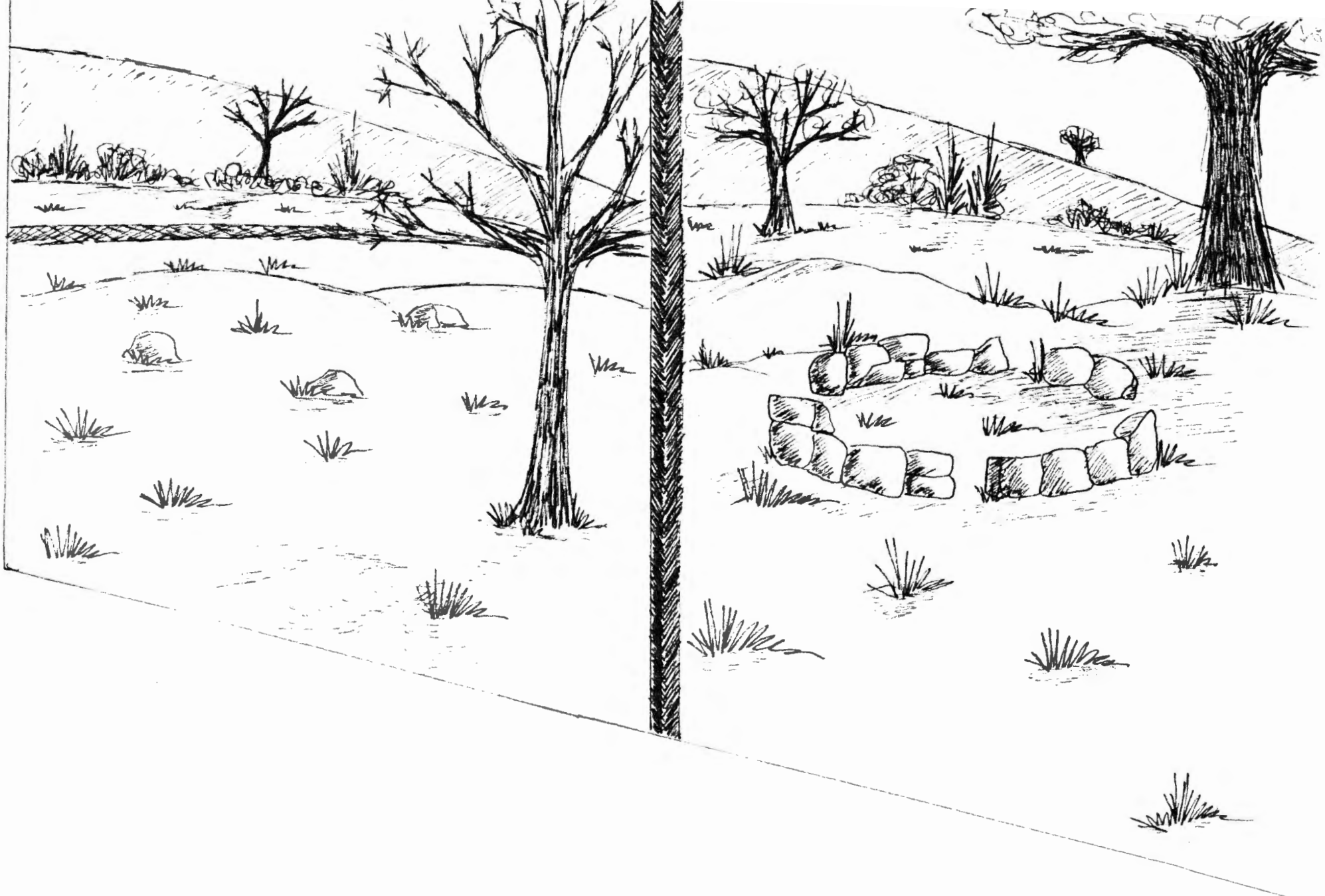


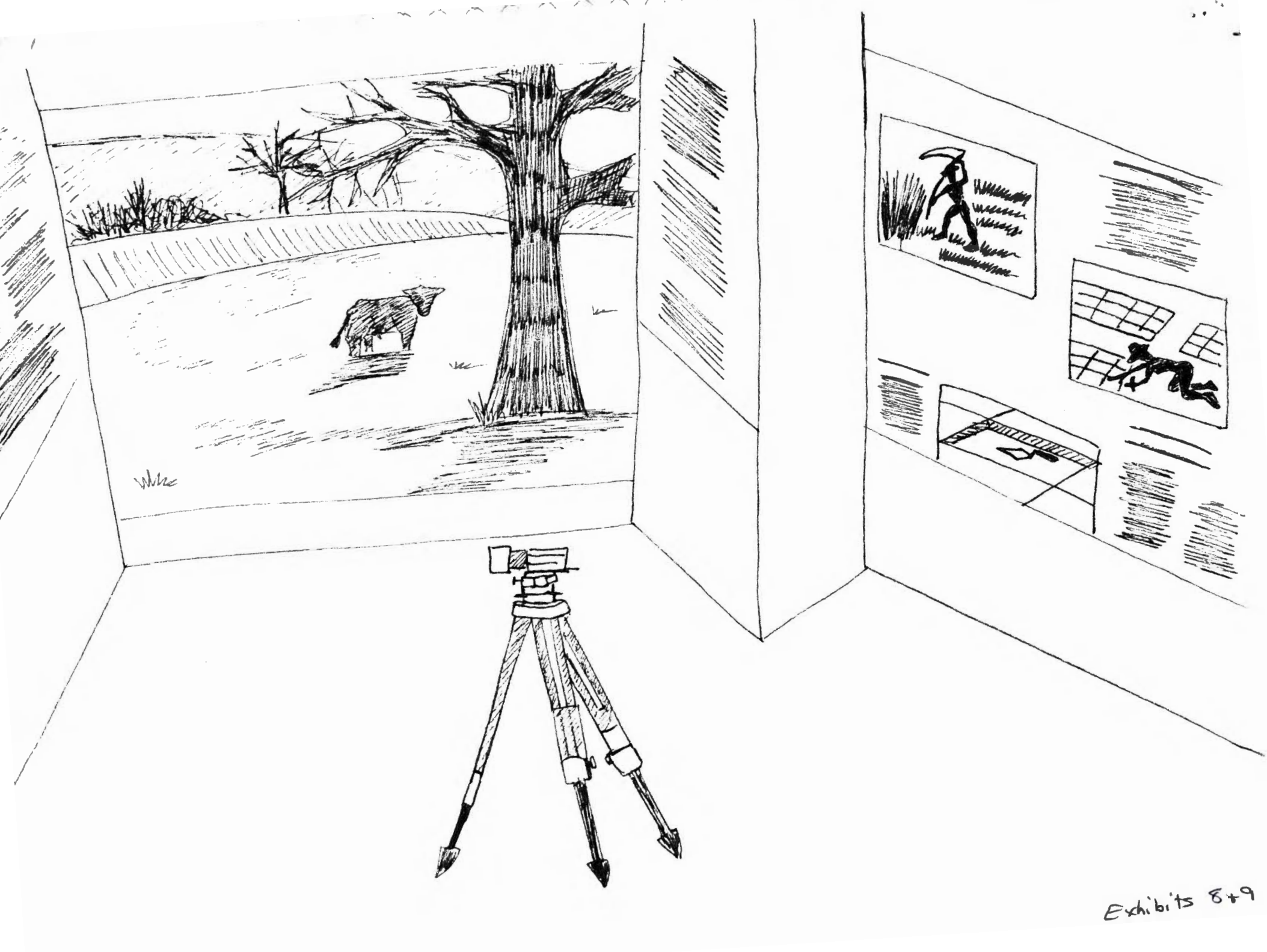
Exhibit 1



Exhibits 2, 3, 4

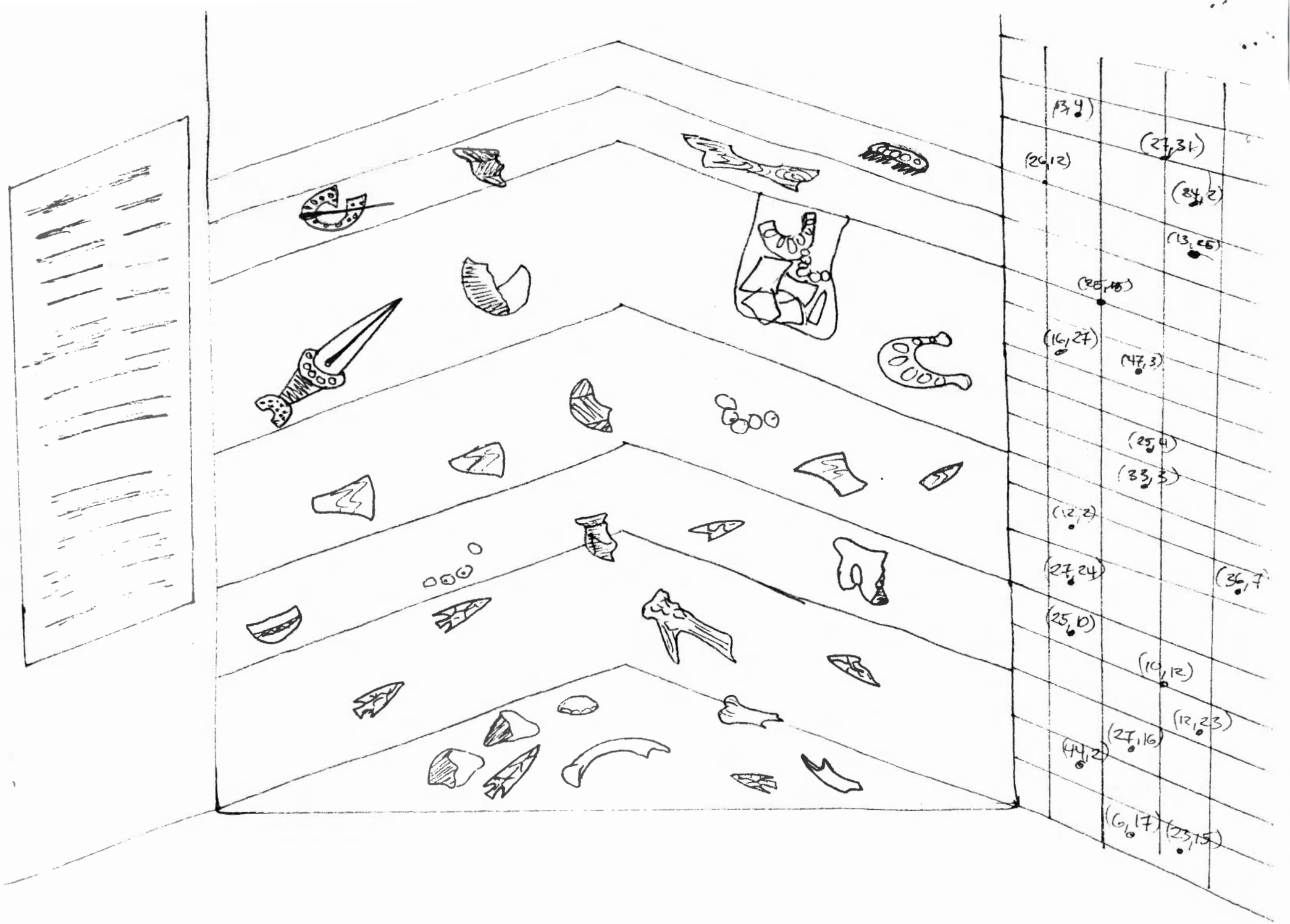


Exhibits 6+7

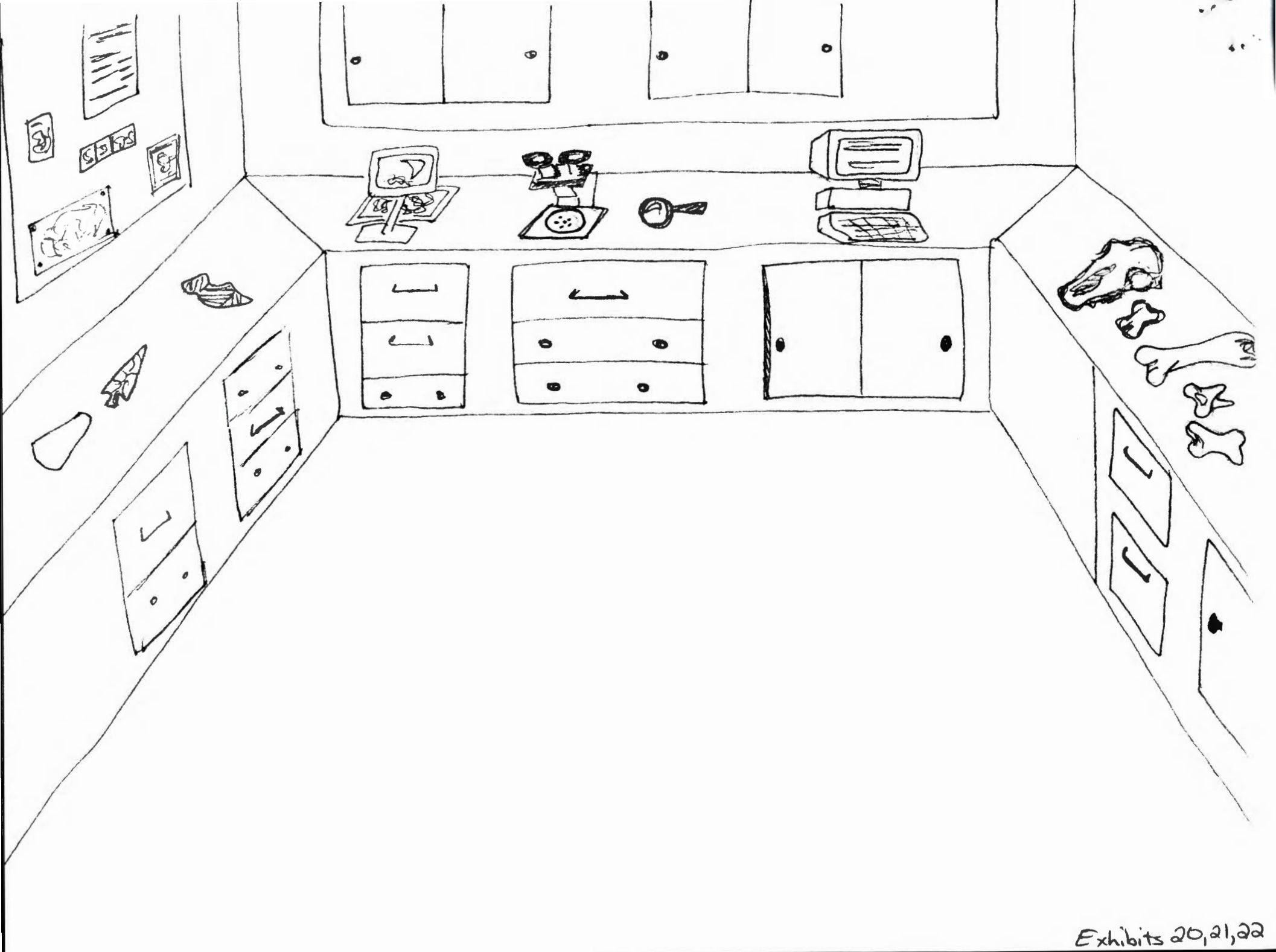


Exhibits 8+9

Exhibit 11



Exhibits 14+15



Exhibits 20, 21, 22