Site Formation in Archaeology

Teacher Directions

There are generally four ways archaeological sites are formed. These include:

- construction on site
- abandonment of the site
- site use
- decay or destruction of the site

Any or all of these processes could be identified for any one site. This is one reason why most archaeological sites have more than one soil level forming their stratigraphy.

The following exercise illustrates the process of site formation using a Hopi Indian “pit house” site (a structure constructed partially underground). This example demonstrates how the sequence of events at a site can be reconstructed using archaeological remains.

Define the following terms before completing the Hopi pit house exercise:

- hearth
- living floor
- storage pit

Student Directions: Have students-

- scan the illustrations that show the chronological sequence of the Hopi “pit house” site.
- place the illustrations in chronological order, it may be helpful for students to cut out each illustration.
- explain what took place in each of the seven stages.

Discussion Questions:

- What material remains survive to help the archaeologist reconstruct events at the pit house? (Possible answers: stones, clay floors, excavated pit)

- How could you account for the fact that very few artifacts survive as part of the archaeological record at the pit house site? (Possible Answers: possessions may have been removed by the occupants when they relocated, few possessions may have existed to begin with, artifact preservation rates vary with the composition of items)
Site Formation Activity

The Hopi Pit House

Directions: Place the following illustrations in the order in which they occurred.
The correct chronology for the site is: B, F, D, A, E, C, C

Beginning with the oldest (earliest-dating) stage of the sequence:

B) This is the oldest (earliest-dating) stage in the sequence of events. The drawing depicts a "pit house" that would be entered by a ladder through the roof. A hearth, located in the center of the room, is dug into the "living floor surface. A draft hole for hearth ventilation is constructed in the wall (seen on the right side of the illustration).

F) This drawing shows the structure after a second, subsequent, period of use. A new floor surface has been laid down closing off the first hearth and a new hearth has been constructed (to the right of the first one). A storage pit, or cache, filled with some kind of a substance has been dug into the left side of the living floor.

D) Yet another occupation of the pit house is indicated by the construction of a new floor surface. This construction activity seals off the earlier floor and its storage pit.

A) An interior room division occurs during the next period of occupation. A wall is built to divide the living space into two rooms.

E) Post-occupation destruction (possibly post-catastrophe) is depicted in this illustration. The roof has collapsed into the living floor surface covering the hearth area. The presence of a thick, black, soil layer suggests that a fire may have led to this condition.

C) Deterioration of the site continues with the collapse of the walls and an accumulation of soil over the site.

C) The site is further obliterated with the passage of time although a depression still marks the position of the once existing pit house. The absence of wall stones suggests that the pit house ruins were "robbed" for building materials sometime after the structure's demise.

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