

Pottery Reconstruction

Until recent times when storage vessels were created from plastics, pottery was the most widely used vessel for cooking, storage and use on the table. The only trade off was that these pots were, unlike plastic, very breakable and hence would be discarded when broken. However the broken pieces themselves were very durable and could survive buried for many years. Because of its widespread use and durability, pottery pieces or sherds are the most common finds in archaeological digs. The styles of clay, the methods of firing the clay as well as many other technical and design factors help archaeologists accurately categorise pottery found in their dig sites. They examine the clay colour, type, grain, as well as foreign matter. Glazes, slips and decorations within the clay as well as on the surface give a classic picture of the origins of each pottery piece.

These sherds, or pieces of pottery, could be categorised into the different components of the pot. You would look for pieces belonging to the base, the rim, the body and special components such as handles, spouts and legs. Once these are grouped, the archaeologist/conservator would then sort pieces within each group, fitting them together on a flat surface much like sorting a 3D jigsaw puzzle. It was actually quite rare to find all the pieces of a pottery object. In the case of a small amount being found, as little as 10% could give an indication of the structure and design of the pot.

Once the pieces are sorted the conservator would then piece together the adjoining fragments using glue that would not affect the structure of the pot and could be removed with soaking if necessary. Working around a rim or base and then slowly but progressively up the sides, each piece would be added until all pieces were used. Any missing pieces could be substituted with coloured plaster to complete the project.

Once this task was complete the object could be examined and researched as a whole. Analysis of its contents could be done from samples taken from the inside of the pot and a complete report presented.

Research

Using your local library and internet access if available, find as much information as possible on:

The work processes of a museum conservator.

The tasks of an Archaeologist and his team.

What are the possible reasons that so much excavated pottery is found broken rather than intact.

Each student should draw the piece of pottery that they have just excavated, and write a report on the basic characteristics of the piece. As this lamp is found out of context, you will be restricted in your means of identifying the time frame of your find. That should not however stop you from presenting your own report on the culture based on the pottery style found.

Teacher objective:

Find examples or images of the following items and have the students write a report on each item describing the culture and overall lifestyle of possible owners of each item.

1. Greek painted pottery (images available at our website)
2. Roman Pottery
3. Ming Vase
4. Victorian Delftware
5. Art Nouveau piece
6. Coca Cola bottle

The first objective you need to do after you have excavated your pottery is to examine the pieces, before you restore it. There are factors that are visible only while the pot is in pieces.

- ✱ Examine the edges of the pieces. Observe the clay and the temper of the pottery. (Temper is the additives added to the clay to make it more pliable and easier to shape). Examine the colour of the clay, whether it is of an even colour through the thickness of the clay. If the colour is uneven it could indicate that the pot was fired at a low or inconsistent temperature. They may not have had access to proper kilns and may have resorted to using small kilns or even the use of a pit to fire the pottery items.
- ✱ Examine the surface of the pottery on the inside and outside. The inside of a narrow neck jug can reveal a lot of information that would be difficult to see once the lamp is restored. The inner surface of the pottery if made without a potter's wheel would have been made by stacking coils of clay and then smoothing the outer surface particularly toward the top of the pot. A coil made pot should show signs of these coils on the inside but not the outside. On open pots this would be less obvious as the potter can get his hand inside to smooth the coils. Can you see a spiral finger impression that indicates the pot was made on a wheel, the finger impression being from where the potter drew up the clay on the wheel when forming the pot? Are there signs of use of the pot? Can you see a residue of food on the inside surface of the pot? Archaeologists use lipid analysis to test what these residues are actually made of to get more information about the use of the item. You would need to rely purely on your own observation. Is the outside surface burnished, that is has it been smoothed using a hard object to give it a shiny surface or has it been left plain. Has it had a slip added, a slip being a thin wash of liquid clay to cover blemishes in the clays surface? The more basic the treatment the more mundane its use, the more a potter has spent on improving the appearance of the item the more purposeful its use. This is much like your own use of everyday cups that are plain and cheap versus the fine china that you bring out when guests arrive. Course and even blackened pottery indicated a cooking pot.
- ✱ Examine the form of the item. Does it have a spout? Does it have handles, and if so are they purely decorative or functional? Necks, spouts and lips indicate that the pot was used for liquids, whereas a large open rim usually indicated it was for storage. A narrow cylindrical item could indicate a drinking vessel.
- ✱ Are there any decorations on the item? The decoration along with the shape indicated the cultural belief systems of the owners. What sort of decoration is visible on the item that can tell you about the cultural or religious beliefs of the owner? It is often this decoration that helps you classify the particular culture of the piece.

Overall these three categories help you understand the overall culture of the civilisation from which the item comes:

Handmade pottery – hand shaped and coil made pottery was the oldest form of pottery development and indicated either a more primitive society OR a small scale production that made more complex methods unpractical. If you were only making a few pots for your own use, you wouldn't necessarily invest in a potter's wheel or a complex kiln. This could indicate an individual making his own pottery or a small village making small amounts.

Wheel made pottery – pottery made on a wheel meant the maker was serious, both in technique and quantity. They used a wheel to produce larger amounts as well as finer pottery items. This indicated the potter would most likely have been a full time crafts person in a society where a larger amount of pottery would be required.

Mould made pottery – Pottery made using moulds indicated mass production to a mass market. Pottery would most likely be considerably more decorative, produced in large numbers of identical items and even may have been produced for export outside the place of manufacture.

Pottery can therefore tell you many things:

1. The *culture* of the people based around design, manufacture and use of pottery items.
2. *Activities* of the people based around methods of manufacture, pottery design and styles.
3. *Decoration* indicating the *cultural beliefs* and preferences of the people.
4. *Importance of the People* based on the situation in which the items are found. Pottery found in tombs indicated how the deceased were treated and their place in society.
5. *Technology* as indicated by the methods of manufacture. How advanced the method of manufacture was indicated the parallel position of the culture of the local people.
6. *Trade* was demonstrated when items were not manufactured within a particular culture but imported from elsewhere or vice versa. (This process cannot be viewed within the confines of this kit).
7. *Dating* could be performed for a particular culture based on methods developed first by William Flinders Peterie in Egypt. He noticed that particular styles of pottery gradually developed over time and could be used to date a piece of pottery within a culture. This is based upon a technique called “seriation”.