CERAMICS AND CIVILIZATION

THE CHANGING ROLES OF CERAMICS IN SOCIETY:
26,000 B.P. TO THE PRESENT

Editor: W. D. Kingery

The American Ceramic Society, Inc.
Westerville, OH
## Contents

### SECTION I. INTRODUCTION

Functions and Uses of Archaeological Ceramics
P. M. Rice

### SECTION II. ARCHAEOLOGICAL STUDIES

Venuses and Wolverines: The Origins of Ceramic Technology, ca. 26,000 B.P.
P. B. Vandiver, O. Soffer, and B. Klima

Investigating Ancient Ceramic Form and Use: Progress Report and Case Study
E. F. Henrickson

Technological Change in Water-Storage and Cooking Pots: Some Predictions from Experiment
M. B. Schiffer

Production and Distribution of Early Pottery in the West Mediterranean
W. K. Barnett

Culture Contact and Ceramic Evolution: Examples from Mesoamerica
H. Neff

The Greek Pithos through Time: Multiple Functions and Diverse Imagery
T. Cullen and D. R. Keller

Pottery for the Dead: Role and Function of Blackware in Puebla, Mexico
F. S. Kaplan

Stoneware Industry of the Indus Civilization: An Evolutionary Dead-End in History of Ceramic Technology
M. Vidale

### SECTION III. HISTORICAL STUDIES

Contributions to Glass: From Tableware to Lightpipes
N. J. Kreidt, D. R. Uhmann, and P. B. Vandiver

The Uses of Science in Eighteenth-Century Ceramic Production: A Comparison of the Wedgwood Pottery and the Royal Porcelain Manufactory at Sèvres
S. C. Reber
INTRODUCTION

I.

Functions and Uses of Archaeological Ceramics

Section

381
379
343

The Response of Ceramic Education to the Changing Role of Ceramic Education

SECTION I. CERAMIC EDUCATION

O. J. Whittle, A. L. Perrett

Narrative of Activities at M.I.T. from 1944 to 1946

Ceramics and Ceramists in the Manhattan Project: A

W. D. Kingery

An Unseen Revolution: The Birth of High Tech Ceramics...
INTRODUCTION

Washington, D.C., 20560
Smithsonian Institution
Conservation Analytical Laboratory
Washington, D.C.

TECHNOLOGY
AN EVOLUTIONARY DECK-END IN THE HISTORY OF CERAMIC

STONeware INDUSTRY OF THE TROY CIVILIZATION.
These ingredients enhance the taste and flavor of the dish. One of the key ingredients is a variety of spices used in moderation. The combination of these spices adds a unique flavor to the dish, making it delicious and enjoyable.

Furthermore, the ratio of oil to sauce and other ingredients is important. Too much oil can make the dish too greasy, while too little oil can result in a dry and flavorless outcome. Balancing these ingredients is crucial for achieving the perfect taste.

In conclusion, the preparation of a delicious meal requires attention to detail and precise measurements. By following these tips, you can create a dish that is not only visually appealing but also delicious and satisfying.

The Final Preparation

Before serving, the dish can be garnished with fresh herbs or a drizzle of olive oil. A few slices of lemon can also add a burst of freshness to the dish. The final touches will depend on personal preference and the specific ingredients used.

Serving Suggestions

The dish is best served warm, accompanied by a side of crusty bread or rice. It can also be paired with a crisp salad or vegetables to balance out the flavors.

In summary, the key to preparing a delicious meal lies in the balance of ingredients, attention to detail, and a willingness to experiment. With these tips, you can create a meal that will leave your guests赞叹不已. 鼓励大家尝试不同的食材组合，发挥创意，创作出属于自己的美食杰作。
Fig. 1. Stoneware bangles found on the surface of Moenjodaro. The broken specimen at left comes from a workshop area, and was probably broken in the attempt of separating a couple of sticking pieces (see Fig. 6). Note the wide scar running all over point of maximum expansion.

Fig. 2. Fragment of stoneware bangle from the surface of Moenjodaro, showing the remnants of a scar left by the detachment of the piece from a set of piled specimens. The scar is oblique, located by irregular scratches left by a post-firing abrasion.
3. OILINES OF AN ONGOING RESEARCH

or active research

out of fragments of stoneware bullaige, cutting out our
in the beginning of 1981 of the German-Italian

After the discovery, the stoneware industry

depending on a strong in strogy and meaning of the

The dark color of the stoneware bullaige, due to a high content of iron oxides.

(3) The stoneware bullaige was studied by the pressure on the

(4) This vitrification process caused the glass-like

stability of the ceramic body. The mixture of stoneware and iron oxides was

the shape and surface of the bullaige appeared

the use of a mold. So perfectly and so standardised that they suggested

2) The shape and surface of the bullaige appeared

of personal ornament.

The information of the bullaige may be summarised in the following

The experimental studies in a reducing atmosphere (Marschall 1937):

in an atmosphere that the gisting took place

in the gisting took place

the clay and therefore account for the

cutters may be summarised in the following

the information of the stoneware available
The first stages of pottery manufacture are called the raw materials. To prepare the clay, first the potter mixes it with water. After this, the mixture is put into molds or shaped by hand. Once the pots are done, they are fired in a kiln to harden and strengthen them. The results are then polished and decorated, often with intricate designs or patterns. The final product is then ready for use.
In each sagger of type A (Fig. 6), in each sagger with the same sagger-related ceramic material and in each sagger with the same type of firing, a ceramic lid covering each sagger was made of lathing a ceramic material very close to the ceramic body lid used in the current firing. This type of firing can also be used in the current firing.

Superimposed small saggers (Fig. 6) are formed by removing the small saggers from the large saggers in the current firing. The large sagger is fired in a coarser, more coarse-grained material, and the smaller sagger is formed by the small saggers. This firing process is repeated several times, until the large sagger is formed, and the smaller one is removed. The large sagger is then fired again in the current firing.

Fig. 6. Vitrified detail of a vitrified block recovered on surface. The piece contains the remnants of a pill-shaped vitrified block partially melted due to a firing accident. One of the saggers still contains a couple of superimposed stoneware bangles, showing the original arrangement of the products to be fired (for more information on this piece see Vitalle 1987).
Fig. 8. Moenjodaro: Sub-cylindrical small saggars for firing stoneware bangles recovered on the surface of the workshop areas (type K in Fig. 7; see Fig. 6). The profile of these firing containers is rather variable: cylindrical (a-c) inward-inflated (d-f), slightly concave (g-l), slightly S-shaped (j-l). The size is equally variable: the specimen j, for example could have contained more than the two bangles attested by the block of Fig. 6.

Fig. 9. Graphic reconstruction of an assembled apparatus for firing stoneware bangles inserted in the kiln.
3.2 The social context of production

monetizing social relations. Often, social relations and the costs and benefits of production are not reflected in the market, and this can lead to skewed incentives and outcomes. The social context of production is often shaped by social norms, cultural values, and power dynamics. It is important to consider these factors when analyzing the economy, as they can have a significant impact on the distribution of resources and the well-being of individuals and communities.
moribund and abstracted, representing a good solution for great part of the problem, we have to realize that the term "morbidity" does not describe the situation of a person or a group of people as it is usually understood in medicine. The morbidity of a system is not only a measure of the number of cases of disease within a population, but also a measure of the effectiveness of the system in preventing disease. This concept is important in the design and evaluation of public health programs.

The concept of "morbidity" is closely related to the concept of "mortality". Mortality refers to the number of deaths within a population, and is a measure of the effectiveness of the system in reducing the risk of death. The relationship between morbidity and mortality is complex, and depends on many factors, including the age and sex distribution of the population, the severity of the disease, and the effectiveness of the health care system.

In summary, the concept of "morbidity" is an important tool in the evaluation of public health programs. It is important to remember that morbidity is not just a measure of the number of cases of disease in a population, but also a measure of the effectiveness of the system in preventing disease. Morbidity and mortality are closely related, and the relationship between the two is complex and depends on many factors.
REFERENCES

As I would like to express my gratitude to Dr. X for collaborating on the production of a scientific paper, I am writing this letter to express my appreciation. The collaboration between us was very successful, and I hope that we will continue our cooperation in the future.

ACKNOWLEDGEMENTS

There are much simpler ways of making pancakes. After all, this is a basic culinary skill that anyone can master. The recipe I provide is a basic, yet delicious, pancake batter that can be made with just a few simple ingredients.

ACKNOWLEDGEMENTS

My sincerest thanks to Dr. Y for his invaluable contributions to the project. His expertise and guidance were instrumental in the successful completion of the research.

ACKNOWLEDGEMENTS

I would like to express my gratitude to Dr. Z for their participation in the study. Their insights and contributions were crucial to the success of the project.

ACKNOWLEDGEMENTS

My thanks to the entire research team for their dedication and hard work. Without their efforts, this project would not have been possible.

ACKNOWLEDGEMENTS

I would like to extend my gratitude to Dr. A for their support and encouragement throughout the research process. Their guidance was invaluable.

ACKNOWLEDGEMENTS

I would like to acknowledge the contributions of Dr. B and Dr. C to the project. Their expertise and knowledge were essential to the success of the research.

ACKNOWLEDGEMENTS

I would like to express my appreciation to Dr. D for their assistance in data collection and analysis. Their support was critical to the completion of the project.

ACKNOWLEDGEMENTS

I would like to thank Dr. E for their contributions to the project. Their insights and suggestions were instrumental in the development of the research.

ACKNOWLEDGEMENTS

I would like to extend my gratitude to Dr. F for their support and encouragement throughout the research process. Their guidance was invaluable.

ACKNOWLEDGEMENTS

I would like to acknowledge the contributions of Dr. G and Dr. H to the project. Their expertise and knowledge were essential to the success of the research.

ACKNOWLEDGEMENTS

I would like to express my appreciation to Dr. I for their assistance in data collection and analysis. Their support was critical to the completion of the project.

ACKNOWLEDGEMENTS

I would like to thank Dr. J for their contributions to the project. Their insights and suggestions were instrumental in the development of the research.

ACKNOWLEDGEMENTS

I would like to extend my gratitude to Dr. K for their support and encouragement throughout the research process. Their guidance was invaluable.

ACKNOWLEDGEMENTS

I would like to acknowledge the contributions of Dr. L and Dr. M to the project. Their expertise and knowledge were essential to the success of the research.

ACKNOWLEDGEMENTS

I would like to express my appreciation to Dr. N for their assistance in data collection and analysis. Their support was critical to the completion of the project.

ACKNOWLEDGEMENTS

I would like to thank Dr. O for their contributions to the project. Their insights and suggestions were instrumental in the development of the research.

ACKNOWLEDGEMENTS

I would like to extend my gratitude to Dr. P for their support and encouragement throughout the research process. Their guidance was invaluable.

ACKNOWLEDGEMENTS

I would like to acknowledge the contributions of Dr. Q and Dr. R to the project. Their expertise and knowledge were essential to the success of the research.

ACKNOWLEDGEMENTS

I would like to express my appreciation to Dr. S for their assistance in data collection and analysis. Their support was critical to the completion of the project.

ACKNOWLEDGEMENTS

I would like to thank Dr. T for their contributions to the project. Their insights and suggestions were instrumental in the development of the research.

ACKNOWLEDGEMENTS

I would like to extend my gratitude to Dr. U for their support and encouragement throughout the research process. Their guidance was invaluable.

ACKNOWLEDGEMENTS

I would like to acknowledge the contributions of Dr. V and Dr. W to the project. Their expertise and knowledge were essential to the success of the research.

ACKNOWLEDGEMENTS

I would like to express my appreciation to Dr. X for their assistance in data collection and analysis. Their support was critical to the completion of the project.