ROMAN MEALS AND COOKING WARE IN LYCIA: AN EXPERIMENTAL PRACTICE IN ARCHAEOLOGY / LİKYA BÖLGESİ'NDE ROMA DÖNEMİ YEMEKLERİ VE PİŞİRME KAPLARI: DENEYSEL ARKEOLOJİK BİR UYGULAMA

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Özet

Akdeniz Üniversitesi Arkeoloji Bölümü'nde yürütülen deneysel arkeoloji özlü bir projeyle Roma Dönemi mutfak kültürü etraflıca araştırılmış ve incelenmiştir. Teorik ve uygulamalı olmak üzere iki bölümden oluşan projenin ilk aşamasında, Roma Dönemi yemekleri ve yemek pişirmede kullanılan çömlekler araştırılmıştır. Yemek tarifleri için Athenaios ve Apicius'un antik aktarımlarından yararlanılmış, Roma Dönemi yemek mönüleri incelenerek günümüzde uygulanabilir olanlar tespit edilmiştir. Ayrıca Cato, Varro ve Columella gibi yazarların aktarımlarından antik çağların besin türleri, bunların üretimi ve tüketimi hakkında bilgiler de edinilmiştir. Yemek pişirmede ve servis amaçlı kullanılan seramik kaplar için ise Patara Antik Kenti kazılarında ele geçen seramiklerden faydalanılmıştır. Projenin uygulama aşamasında öncelikle Patara'da bulunan yemek pişirme ve servis kaplarının orijinal benzerlerinden üretmiştir. Üretilen bu seramiklerde daha önce antik kaynaklardan araştırılan Roma Dönemi yemekleri deneme amaçlı pişirilmiş ve test edilmiştir. Seramik kaplar içerisinde yapılan pek çok pişirme denemesi sonucunda antik çağların enteresan ve kalıcı yemek tatlarına ulaşılmıştır.

Anahtar kelimeler: Likya, Patara, Roma Dönemi, Yemek, Pişirme Kapları **Keywords:** Lycia, Patara, Roman Period, Meal, Cooking Ware

INTRODUCTION:

Human being considering eating very precisely at all stages of his lifecycle supplied his food by hunting and collecting whenever he needed herbal foodstuffs in Paleolithic era. However, he generally produced his foodstuffs after he settled in Neolithic era³. This social evolution brought new eating habits. People started to prefer cereals in Neolithic era while they mostly had consumed animal-borne foods previously. People became skilled more and more on agricultural production in Neolithic era. They cook the foods not only for feeding but also for trying new tastes during this era. Geographic factors played an important role in such cooking. Thus, local cuisine cultures appeared. On the other hand, economic and commercial growth caused novelties in dietary habits. As a result, multicultural cuisine traditions consisting of different tastes were created due to the diversity in import foodstuffs.

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³⁻ See also Sevin 2003 and Badisches Landes Museum Karlsruhe 2007 for settlements in Anatolia in Paleolithic and Neolithic times.

Most of the information about cuisine cultures in ancient times belongs to Roman era. The information about cuisine culture in Roman era are not only based on archeological and epigraphic data but also ancient authors telling food varieties, their production or trade (Cato, Varro, Columella), and the authors providing recipes or mentioning meal varieties (Apicius) are known⁴. As understood from these resources, dietary habits improved in Roman era based on the traditions of previous era⁵. For instance, the habit of eating three meals a day (breakfast: *iantaculum*, lunch: *prandium*, dinner: *cena*) was continued in Roman era also. Furthermore, feasts were held after dinner (comissatio). In general, meals consisted of three different categories: mensa gustatio (delicatessens), mensa prima (main menu) and mensa secunda (desserts). Significant changes occurred only in the places in where cooking was done and in the rooms in which meals were had (triclinium). Most important foodstuffs were meat and fish varieties. Beyond them, it is known that, cereals, vegetables and fruits were consumed abundantly.

Cuisine culture in Roman era was comprehensively studied through an experimental archeological project executed under the scope of graduated program of Archeology division of Akdeniz University⁶. This project consists of two divisions: theoretical and practical. Roman meals and cooking and serving wares were examined in the first stage of the study. Roman meals were studied with the help of expressions of Athenaios and Apicius for recipes and those adaptable to our times were determined. Ceramic wares, which were brought out in archeological excavations in Patara ancient city, were employed for cooking and serving wares. Imitations of cooking and serving wares found in Patara ancient city digs were produced during the execution of the project. Roman meals studied before were cooked in these ceramic wares and then, tested. Interesting and permanent tastes of ancient times were achieved after many attempts for cooking in ceramic cooking wares.

POTTERY FORMS:

"Daily-use ceramics belonging to Roman era" dug out in Patara excavations is a significant group in Patara ceramics⁷. Mostly seen pottery forms among daily-use ceramics are cooking wares such as casserole, pot and pan. These ceramics may be characterized typologically as a continuation of ware forms in Hellenistic era⁸ and

⁴⁻ Cato, De agri cultura; Varro, Rerum Rusticarum de Agri Cultura; Columella, De re rustica; Apicius, De re coquinaria.

⁵⁻ See also Athenaios, Deipnosophistai for dietary habits pre-Roman era.

⁶⁻ Research assistants from Akdeniz University, Bilsen Şerife Ercan, Hülya Kökmen and Sanem Fırıncı participated in the project executed under the management of Taner Korkut. Mr. Tufan Dağıstanlı, an artist, made us available his workshop and also produced the ceramics used in the study. Research assistant, Çilem Uygun, supported the project technically. Expert Archeologist Mr. Şevket Aktaş took photos and video records.

⁷⁻ See also Korkut 2007 for Roman age daily-use ceramics of Patara.

⁸⁻ See also Rotroff 2006 for Hellenistic era cooking wares.

they contain some sub-groups depending on their functions. Although chronological variations are seen between these sub-groups, it is known that, basic pottery forms were used until early Byzantine era without any significant changes.



Fig. 1: Cooking ware (Chytra / Cortina)

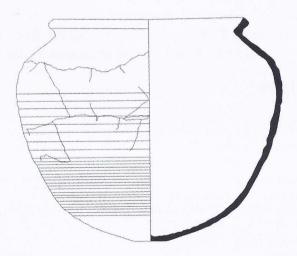


Fig. 2: Cooking ware (Chytra / Cortina)

Casseroles expressed with the words of Chytra⁹ or Cortina¹⁰ were thin-walled depending on their cooking function (Fig. 1-2). They are divided into two subgroups: baggy or bowl -type. Their bottom is oval and closed with a lid. Oval form of the bottom indicates that, they were sat on a tripod¹¹. Handles for carrying them may be vertical or horizontal. Beside them, it was proved in Patara that, double-bin pressure cookers were used in cooking since early Roman era (Fig. 3) (Photo.1) It was found through ancient sources that, similar pressure cookers called as Kerotakis¹² were used for the first time in AD 1st and 2nd centuries¹³. According to archeological findings, pressure cooker was started to be used since late-classical era¹⁴. However, all known pressure cookers until today were designed as single bin with the exception of Patara examples.

Lopas¹⁵ or Sartago¹⁶ words were used to define pots generally having a bi-conical body form (Fig. 5). They are also thin-walled and oval-bottom like casseroles. However, they are more open-inlet and shallow. Their handles are also in two forms: vertical and horizontal like those of casseroles.

Pans are divided into four groups depending on their functions¹⁷. They remind sharp-body, not very deep and large inlet pans¹⁸ used in Hellenistic era for the first time (Fig. 6). The most important feature of these pans called as Tagenon¹⁹ is their spiral handle. These type handles were used frequently in Roman age also. The word of Frixorium²⁰, which is an expression in Latin, was started to be used for emphasizing pan form in early-Roman era. This alteration occurred not only in terminology but also in forms of the pans. Horizontal spiral handles, which had been attached to the body just under the edge of the inlet in Hellenistic era, were designed as filled and long. Pans' walls became thicker since early-Roman age. Their bodies' shapes converted into conical and consequently, their depth increased.

⁹⁻ Liddell - Scott 1951, p. 2013.

¹⁰⁻ Georges 1959, p. 1720.

¹¹⁻ It was emphasized in the literature that, some of the oval-bottom cooking wares were used by hanging them from their handles. See Lüdorf 2006, p. 49 Lev. 10. However, similar examples have not been seen among Patara potteries.

¹²⁻ Liddell - Scott 1951, pp. 948-949.

¹³⁻ It is mentioned in ancient sources that, pressure cooker was invented in Alexandria by Maria Prophetissa for the first time. See Zosimus, Chemeutika 24.

¹⁴⁻ See Sparkes – Talcott 1970, pp. 225-227 Nr. 1947-1955 Fig. 18 Pl. 94 for the late-Classical era pressure cookers.

¹⁵⁻ Liddell - Scott 1951, p. 1061.

¹⁶⁻ Georges 1959, p. 2495.

¹⁷⁻ Pan forms: 1. Pans with spiral handle 2. Pans with horizontal handled 3. Round-body deep pans 4. Shallow pans in tray form.

¹⁸⁻ See Robinson 1959, p. 18 F 79 Pl. 1; Edwards 1975, p. 131-132 Nr. 700 Pl. 32. 62.

¹⁹⁻ Liddell – Scott 1951, p. 1876 for Hellenistic era pan examples

²⁰⁻ Georges 1959, p. 2850; Hilgers 1969, p. 185 Nr. 166. Also, it is known that, the words such as *bridum* or *patina* were used in philological expressions referring to pots having pans' functions, See Hilgers 1969, pp. 14-15. Similar words were used for metal pans of the era, see Exhibition New York 1990, pp. 191-193 Nr. 90-91.

Spiral handles attached to the body just under the edge of the inlet were shorter and open out diagonally. Also, inside of the handles were left empty probably for using a wooden handle. The fact that, the handles were short and space inside them was narrowing from outside to inside, supports this idea.

Fire earthenware ceramics used for service in Roman era in the forms of dish, bowl, earthenware jug and tray are generally with red gloss (Fig. 7-9) (Photo.2). It is believed that, these ceramics called as Terra sigillata²¹ had been produced in certain places and mostly had been used by families with well-income by importing them initially. However, low-quality domestic ceramics with red gloss were begun to be used at all levels of the society. Beyond them, it is known that, silver or copper service dishes were preferred depending on social and economic statuses²². Terra sigillata dish forms dug out in Patara make the second large group among Patara ceramics²³. Especially, import terra sigillata groups unearthed in Tepecik Necropolis such as ESA, ESB, ESC and ESD were represented in Patara by many dish forms since 2nd century BC. However, the number of the examples, which were considered as domestic according to their fabric and gloss structure cannot be put into any known terra sigillata group, is not low.

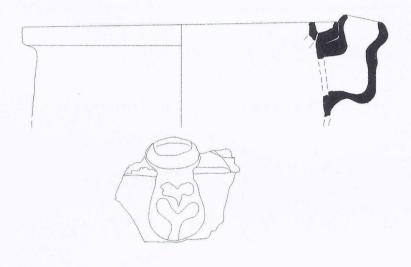


Fig. 3: Pressure cookers (Kerotakis)

²¹⁻ See Hayes 1985, pp. 1-96 for terra sigillata forms in general.

²²⁻ See Ausstellung im historischen Museum der Pfalz Speyer 2006 for metal service dishes in Roman era.

²³⁻ See Uygun 2008 for Patara terra sigillata forms.

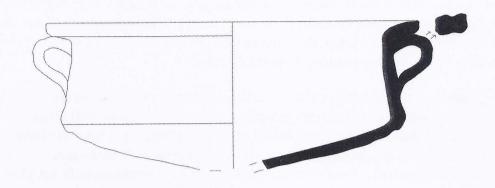


Fig. 4: Cooking ware (Lopas / Sartago)

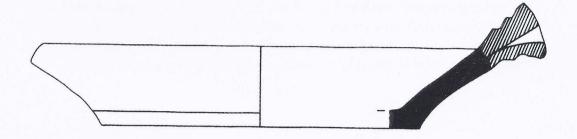


Fig. 5: Fraying Pan (Tagenon / Frixorium)

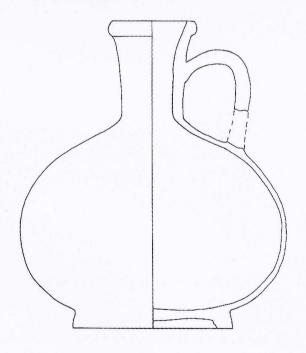


Fig. 6: Jug



Fig. 7: Mug

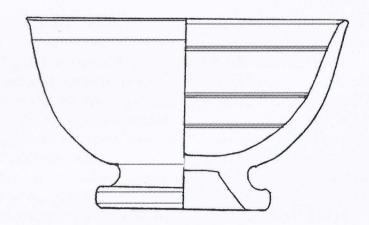


Fig. 8: Bowl

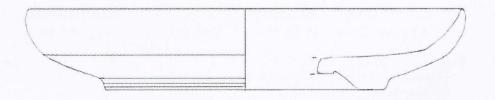


Fig. 9: Plate

POTTERY MANUFACTURING:

Before starting manufacturing of the potteries to be used in cooking and serving, clay type was selected suitable to their forms and functions. Clay was prepared for manufacturing according to ancient methods. For example, the artist kneaded the dough for removing air bubbles inside it, before shaping them on the lathe because these air bubbles come to surface during cooking and this causes voids on the surfaces of ceramics. Separate clay types were used in manufacturing for cooking wares and table wares. Red clay (terra-cotta), which is relatively less resistant to higher temperatures, was used for table wares. High-resistant white clay (chamotte) was preferred for cooking wares because white clay's chemical content makes ceramic dough more durable so that the product is protected against possible damages, which would occur during cooking or uses after cooking. It is known that, a similar application was involved in pot dough in ancient times.

Before starting manufacturing, surface of the lathe was plastered with some ceramic dough. A plane cover was sat on this plaster for avoiding cleaning the lathe's surface before manufacturing of each piece²⁴. The formed piece was cut out by a piece of string and removed from the lathe (Photo. 3) and left to dry for last touches. Before the last touches internal and external surfaces of the products, the dough should release its excess water, still wet but not adhesive as much as in initial stages. Drying time for last touches depends on ambient humidity and temperature. In our study, it took a day. Then, they got ready for last touches.

For last touches, each piece was placed inversely on the lathe and re-fixed on the lathe through the clay in paste consistency. Various tools are used for last touches. Metal-wire tools with various end natures are used in surface shaving. Spatula-like tools made of hard woods are used to produce smooth surfaces. Touches with metal-wire tools mentioned above for final shapes of body and the base cause grooves on the surface as seen on the surfaces of ancient ceramics. These grooves were eliminated from surfaces of some ceramics by polishing with wood-made spatula-like tools²⁵. Because such polishing efforts take time and consequently, increase the costs, it is seen that, polishing was not preferred much for ancient time ceramics, especially, in cooking wares. Polishing makes the surface very smooth and glossy and brings a fake glaze appearance. As a result, this process was employed mostly for thin-walled service dishes. Handles to be attached to the ceramics are prepared retouching process and mounted to the surface.

After the pieces took their final shapes after retouching processes, they were kilned. This is the last stage. The pieces were kept in the kiln for 10-12 hours until 1000 degree Celsius (Photo. 4). In second stage of kilning, they left to cooling

²⁴⁻ This process may not be necessary for manufacturing of pieces in limited number and the piece may be shaped directly on the lathe.

²⁵⁻ It is known that, glass or bone-made tools were used for polishing in ancient times.

for approximately 10-12 hours²⁶. Then, the manufacturing was completed and the pieces were ready for cooking.

COOKING:

In the second step of the execution of the project, ancient meals studied previously were cooked in these cooking wares manufactured according to the original procedure (Photo. 5). A menu²⁷ considered as a Roman dinner (Cena) was prepared. It includes salad with cheese (Lactuca Casi), cabbage salad (Krambe) and olive (Gustatio Olivae) as delicatessens (Gustatio), chicken filled with olive (Pullus Fusilis Cum Olivis), stew with veal (Vitulina Cocta - Minutalis) and fried fish (Sparidae) as main meal (Mensa Prima), and syrupy fried cakes and fruit as desserts (Mensa Secunda).

Scientific observation opportunities appeared during the attempts for cooking from the point of view of cooking and dish forms. Accordingly, a pan with flat bottom sat on the bricks was heated in 4 or 5 minutes by absorbing the heat homogenously and became ready for frying. The olive oil was put into the pan and after a short time (1 or 2 minutes) fishes were added into the olive oil. Frying process was completed in approximately 10 minutes. A significant variation was not seen between ancient time ceramic pans and today's Teflon pans with respect to total frying time. Another observation was the fact that, spiral-form handle was so heated that it could not be hold by naked hand after the fished were added to the pan. Then, the pan could not be moved by directly holding its handle. It was taken from fire by holding it with a wooden tool after the tool was passed through the space inside the handle.

Chicken filled with olive and stew with veal was prepared in separate cooking wares with oval bottom and they were set on a tripod on fire. Although they were in direct contact with fire, heat absorption was one-centered from downward through upward slowly due to the shape of the ware. The surface of the ware was heated completely after approximately 30 minutes and then, cooking started. It was ready for service in approximately one hour. Another significant observation is that, heating and cooking time mostly depend on the wall thickness of the ware. Wall thickness of ancient time ceramics is generally very low. Probably, they are thinned during retouching stage. The fact that, grooves on the surface are generally formed during retouching stage, supports this idea. Moreover, the fact that, the lit may be handled by naked hand, although the vessel boils, is an important observation.

Delos dessert was cooked in a large-volume and inlet pot to emphasize such pots' function. The same observations about the pot's shape were done during this process also. It was generally believed that, small handles on the small pots

²⁶⁻ If ceramics were glazed, this process is repeated. However, second waiting time may be shorter. 27- Specific names were not used for ancient meals mentioned in ancient sources. In such cases, a modern terminology was created based on recipes.

were only for decoration. This experiment evidenced that, they are not only for decoration but also for carrying the pot. Although the surface of the pot was heated completely, the said handles were not heated too much. Then, they were carried by naked hand.

CONCLUSION:

Many pieces of potteries from ancient times are surfaced during archeological digs. Scientists studied on them and publish their articles. Considering literature published until today, it is seen that, generally typological and chronological parameters are taken into consideration during ceramics studies. Beyond them, manufacturing centers and trade have also been studied frequently. Ancient time meals have generally been studied by ancient time historians and epigraphs in the light of written sources. There are also archeologists studying in this area called as Gastro-Archeology. However, there are very few studies in which ancient meals and kitchen wares are evaluated together. Under the extent of this project, which was performed by Akdeniz University Archeology Department probably for the first time, meals and kitchen wares were studied theoretically. Ancient recipes were cooked in the ceramic wares produced according to the original procedure. As a result, ancient meals were tasted going back 2000 years ago for a short time. Archeological findings also were obtained during the manufacturing of these imitations. These are extremely important for the scientific researches mentioned above. For example, it was understood that, small form variations or grooves on ceramic surfaces are not always effective elements in dating in typological studies and they may depend on care and attention of pot-maker. As a result, it was understood that, dating pieces according to the small form variations seen in the same ceramic group from ancient times and creating tens of sub-groups may not be valid in some cases.

REFERENCES:

Apicius, De re coquinaria.

Athenaios, Deipnosophistai.

Der Barbarenschatz, Geraubt und im Rhein versunken, Ausstellung im Historischen Museum der Pfalz Speyer, Stuttgart, 2006.

Vor 12.000 Jahren in Anatolien. *Die ältesten Monumente der Menscheit. Badisches Landes Museum Karlsruhe*, Stuttgart, 2007.

Cato, De agri cultura.

Columella, De re rustica.

G. R. Edwards, Corinthian Hellenistic Pottery, Corinth VII, 3, Princeton, 1975.

Rediscovering Pompei. Exhibition New York. IBM Gallery of Science and Art, 12

- July 15 September 1990, Roma 1990.
- K. E. Georges, Ausführliches Lateinisch-Deutsches Handwörterbuch, Hannover, 1959.
- J. W. Hayes, Sigillate Orientali, in: EAA, Atlante dell Ceramiche II. Ceramica fine Romana Nelbecino Mediterraneo, Roma 1985, pp. 1-96.
- W. Hilgers, Lateinische Gefäßnamen, Dusseldorf, 1969.
- T. Korkut, "Die kaiserzeitlichen Gebrauchskeramik aus Patara", in: S. Lemaitre, (Ed.), Les Produits et les Marches, Ceramique antique en Lycie, Poitiers 21-22 Mart 2003. *Céramiques Antiques en Lycie*, Études 16, Paris 2007, pp. 191-224.
- T. Korkut, "Die spätantike und frühbyzantinische Keramik aus Patara", in: B. Arslan, (Ed.), *Proceeding of the First International Symposium on Late Antique, Byzantine, Seljuk and Otoman Pottery and Tiles in Archaeological Context,* Çanakkale 1-3 Haziran 2005, Byzas 7, İstanbul, 2007, pp. 147-168.
- T. Korkut, "Roma Dönemi Patarası Yemek Pişirme Kapları: Tavalar", in: B. Karasu (Ed.), *IV.Uluslararası Katılımlı Seramik, Cam, Emaye, Sır ve Boya Semineri, Eskişehir 26-28 Kasım 2007*, İstanbul, 2007, pp. 431-449.
- H. G. Liddell R. Scott, A Grek-English Lexicon, Oxford, 1951.
- G. Lüdorf, Römische und frühbyzantinische Gebrauchskeramik im westlichen Kleinasien, Rahden, 2006.
- H. S. Robinson, *Pottery of the Roman Period*, The Athenian Agora 5, Princeton, 1959.
- S. I. Rotroff, Hellenistic Pottery, *The Plain Wares*, The Athenian Agora 33, Princeton 2006.
- V. Sevin, *Eski Anadolu ve Trakya. Başlangıcından Pers Egemenliğine Kadar,* İstanbul, 2003.
- B. A. Sparkes L. Talcott, *Black and Plain Pottery of the 6 th, 5 th and 4 th' Centuries B.C., The Athenian Agora 12*, Princeton, 1970.
- Ç. Uygun, *Patara Tepecik Nekropolü'nde Ele Geçen Kırmızı Astarlı Seramikler*, Unpublished Doctor's Thesis, Akdeniz University of Antalya, 2008.

Varro, Rerum rusticarum de agri cultura.

Zosimus, Chemeutika.

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Photo. 1: Imitation of the pressure cookers

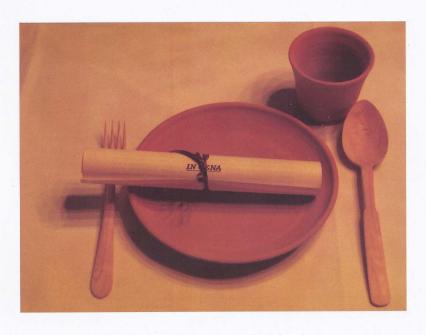


Photo. 2: Imitation of the plate and of the glass

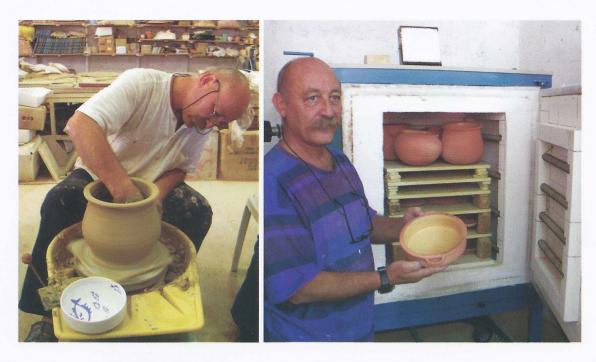


Photo. 3: Pottery manufacturing

Photo. 4: Kilning process

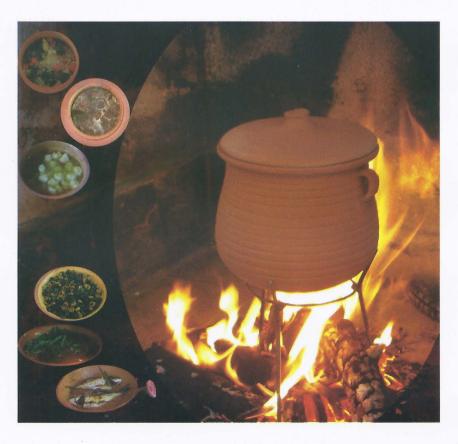


Photo. 5: Cookink process and Meals