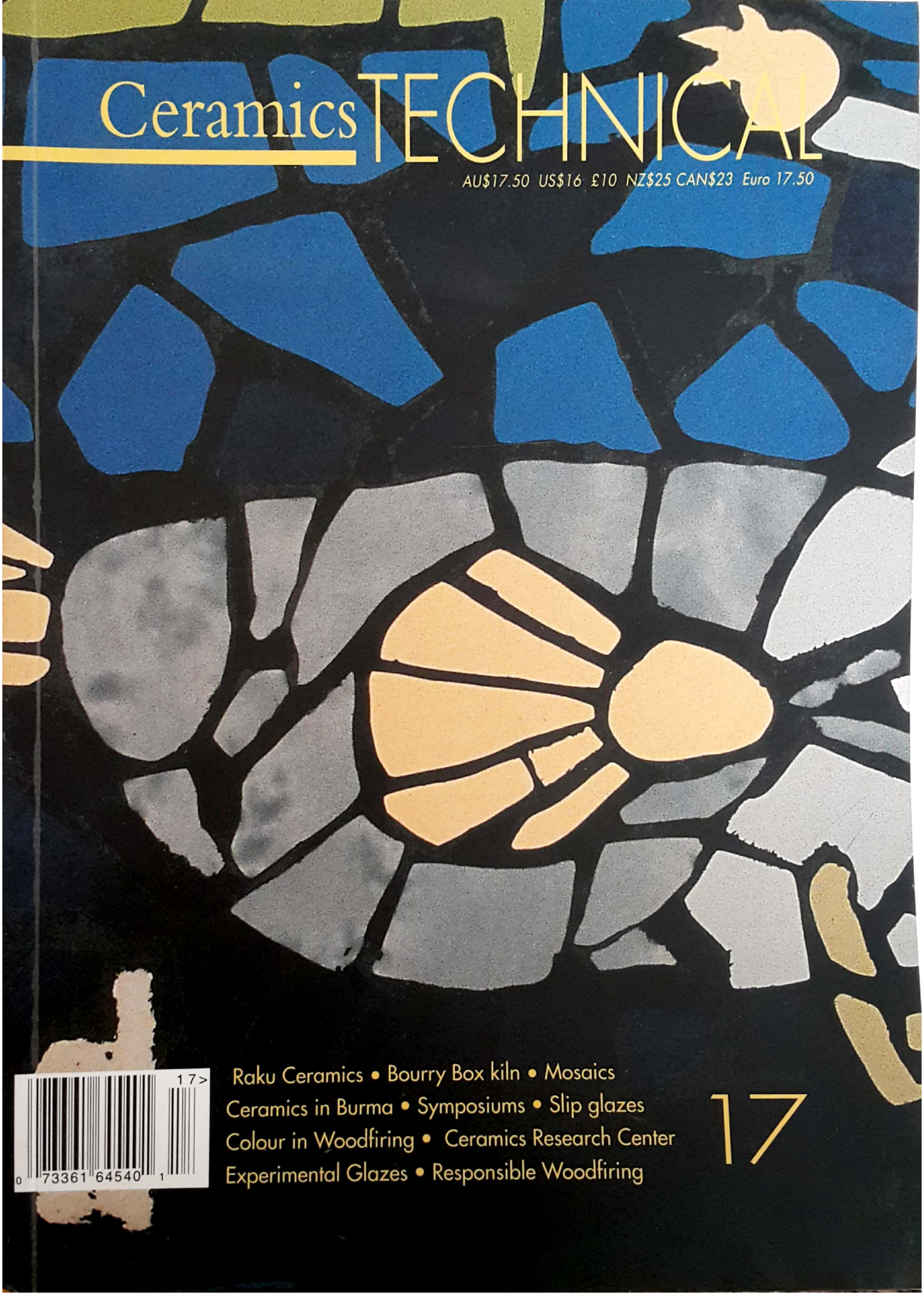
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17

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CONTENTS NO. 17, 2003

3 **The Bourry Box – Past and Present.** *Gary and Daphne Hatcher have been firing a Bourry Box kiln for many years. Gary Hatcher reports*

10 **Primary Pavers.** *Penny Smith describes an alphabetically-inspired sea-themed community arts project in Tasmania*

14 **Unearthing Bagan.** *Chester Nealie travels to Burma in search of pots and potters and reports on his findings*

21 **Carol Rossman's Precision Raku**. *Jonathon Smith investigates the technical precision and ideas behind these raku ceramics*

26 **The Working Methods of Elizabeth Le Retif.** *Audrey Richardson examines the work of this French artist*

28 **Curiosity, Pots and Fire**. *Marjorie Wade and Rhonda Willers describe the building of an anagama kiln in Wisconsin, USA*

36 **A Humanistic Spirit in a Taiwanese Garden**. *Chen Wen-Hui finds a place where beauty, love of the land and aesthetics come together*

39 **Angels in Clay.** *Deborah Barnard, from South Africa, outlines her experiments with clay using her imagination*

42 **Of Shells and Covers.** *Roy Maayan, from Israel, writes on some experiments with a covering material for clay pieces*

44 **The Dinner Pary.** *Moyra Elliott was invited to this symposium in Kecskemét, Hungary. She writes her impressions*

49 **Fixing Light Fixing Fire.** *Stephen Blake reports on this exhibition and the relationship between raku ceramics and photography*

51 **Of Art and Science.** *Wang Jianzhong looks at the relationship of art and technology in reference to Chinese ceramics*

54 **Connotative Expressions.** *Glenn Williams finds a sense of inventiveness as well as history in the work of Peter Hiort Petersen*

58 **8000 Years of Turkish Pottery.** *Serap Unal looks to the past and finds an unaltered tradition in Anatolia now being lost*

65 **Slips, Glazes & Printing on Clay.** *Haico Nitsche writes from Norway about his experiments on clay surfaces*

69 **Raku – The Universal Language of Clay.** *Frank Colson has been experimenting with raku ceramic techniques for many years*

73 **Cecula's Splendour.** *Stephanie Beare writes about the advanced ceramics experiments of Marek Cecula in Poland*

78 **Falling Down the Rabbit Hole.** *Cybele Blakebrough's figurative ceramic work is described by Sophie Lampert*

82 **Egyptian Faience.** *Andrew Jamieson continues his series describing the ancient ceramics of the Middle East*

88 **Introducing Water in Woodfiring.** *Kwi Rak Choung outlines his research in this field*

93 **Responsible Wood.** *Euan Craig has a concern for the environment and designs a kiln for a responsible use of fuel*

98 **A Handful of Dust.** *Nigel Wood is a well known authority on glazes and glaze technology. He presents his latest findings*

102 **Ceramics Research Centre, Arizona State University.** *Peter Held, curator at the Centre, outlines the aims of this resource*

106 **The Ceramic Spoon.** *Jean-Marie Marquis, conservator of the Carouge museum reports on the competition theme for 2003*

107 **Lighting the Way – Ignition Conference.** *Karen Weiss reports on Australia's 10th National Ceramics Conference*

110 **Book Review.** *Gayl Leake reviews Mike Darlow's book Woodturning Design which the author believes is relevamt to all craftspeople*









COVER

D for Diver. *2002.*

Detail of one of the 26 mosaic pavers from the project at Ocean Esplanade, Blackmans Bay, Tasmania.

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8000 Years of Turkish Pottery

Serap Unal has researched traditional Pekmez Höyük-Karacasu Turkish pottery and reports her findings



Top: General view of Aphrodisias. Above: Pre-historic ceramic jug. Museum of Aphrodisias.

PEOPLE HAVE BEEN MAKING CERAMICS FOR ABOUT 8000 YEARS in the dense geographical area of Anatolia. This endless adventure began during the Neolithic Period at the Hacilar, Kurucay, Alacahoyuk and Pekmez Tumulus (Aphrodisias) settlements; pottery then continued to be made on the wheel from 3000 BC at the Alisar, Bogazkoy and Truva settlements. Nowadays, the endeavour is on the move again with Karacasu, Canakli, Avanos, Diyarbakir, and hundreds of centres throughout Anatolia (Asia Minor).

PREHISTORIC POTTERY IN THE REGION

The Goller Region and its environment was a densly populated settlement during the Neolithic Era. The oldest site in this region is Kurucay, which extends back more than 7000 years. Excavations have revealed pottery that is polished with different colour tones ranging from dark grey to brown. Characteristic of this style is a vertically located tube-shaped handle. These paint-decorated pots are specific to the Goller Region and the primitive pioneers in the eras that follow.[1]

Hacilar is an important ceramics production centre in the Lakes District, 35 km southwest of the city of Burdur with its cream and red coloured, geometric patterned pottery, of the Late Neolithic and Calcolithic Eras. Handmade pots of this era are classified into single and multi-coloured types. Handles positioned under the edges of the mouths in the shape of a tube are characteristic for Kurucay, Catalhoyuk and Bademagaci in the early Neolithic age. Cream coloured cups, decorated with simple vertical red painted bands have been found. These two groups show little difference in their forms. However, the first group, with its well-polished style and dark red or brown decoration on a

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bright background is special for Anatolia, as well as the Near East and Aegean world. The patterns of the cups feature geometric and fantastic styles.[2]

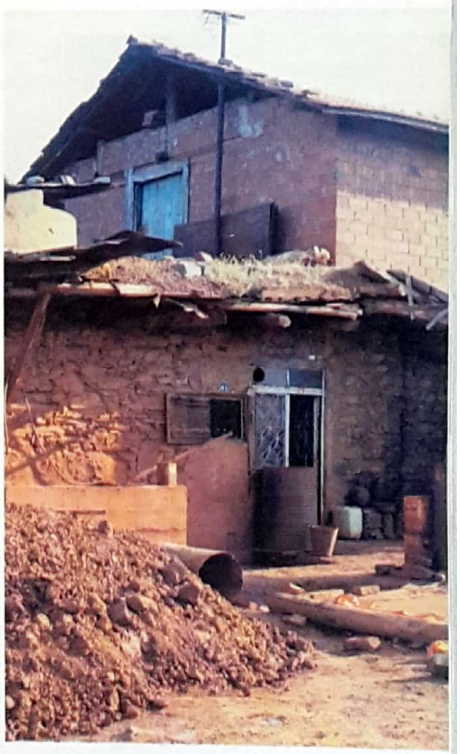
If we travel to Karacasu from pottery settlements in Goller Region, we come to Aphrodisias in Geyre Village, in the Karacasu district (in the city of Aydin). Aphrodisias belongs to the Late Neolithic and Calcolithic Era. It is interesting to discover pottery that has been made here for 1000 years is still alive in Karacasu. Aphrodisias' earliest settlement in Pekmez Tumulus (6000-5800 BC) is well known for its earthenware. Neolithic earthenware is hand-made, 59 per cent slipped, and mostly red. Scarlet-brown and black colours follow and 58 per cent are polished and their upper sides are striped. Carved decorations can be seen. Cup-shaped earthenware is dominant. Variations in convex earthenware with open vertical mouths are also seen. Dimensions are generally small (*Joukowsky* 1986:348).[3]

The Calcolithic Period in Aphrodisias is divided into four main phases in the Post Calcolithic settlement in Pekmez Tumulus. Calcolithic's first phase (4360-3500 BC) and second phase (3500-3300 BC.) show simple, rough, black slip, white paintings. The forms of the bowls are open-mouthed. In the Calcolithic 3 period (3300-3100 BC), white painted bowls begin to decrease in numbers, black slipped shapes differ and concave shapes began to appear. In Calcolithic Period 4 (3100-2915 BC.), white painted bowls disappear completely but there is a return in earlier shapes (*Alkim* (H.) 1973:41; *Joukowsky* 1986; 1989:227-228).[4]

POTTERY IN KARACASU – Geographic Position and History

Karacasu, a district of Aydin, is 87 km from Aydin. Karacasu is located on the plain on the eastern side of Dandalas Valley and is at the foot of Karincalidag to the southeast. Kuyucak, Bozdogan, Tavas, Babadag and Kale districts surround Karacasu, which has a population of 6200. Karacasu with its archeology and history has always been an active centre from late Neolithic and Calcolithic periods to Classic (Hellenistic, Roman and Byzantine) periods, and from Classic periods to Beylikler and Ottoman periods.

After the defeat of the Anadolu Selcuklu State in the Kosedag war, which took place in 1243, tribe leaders began to settle in this region. The Karacasu region was in the control of Mentese Beyligi. The region, which started out-



Top: Inside the studio; slipping and drying. Above: Clay in front of a ceramic studio.

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Outer view of the studio.

being controlled by the Aydinogullari Beyligi, later was dominated by Ottoman Empire under Sultan II Murat Han. Karacasu became a district in the year 1895, and maintained its position as a district since then.[5] Only 1 km east are today's ceramics studios in the Yalinayaklar Mahallesi Quarter. When this fact is taken into consideration, it can be remarked that this settlement has been developed in the Aphrodisias-Cuma Mahallesi Quarter.[6]

KARACASU TODAY. Twenty-five years ago the clay that was used to make the pottery was brought from Esekkocagi place by donkey. Today tractors bring it from Yaziralti, which is 8 km south of Karacasu. The important features of Karacasu clay are its ability to sinter at a low temperature (650 – 750°C), to contain high amounts of iron, and an 8 per cent shrinkage rate. This high rate gives rise to problems for potters during production. Because of the size of the pots, cracks occur during drying and firing . This causes production losses.[7]

STUDIO CHARACTERISTICS. Today there are nearly 30 studios and potters in Karacasu. Locally named *Bardakci Kernesi*, they are located in the south of Karacasu (Cuma Mahallesi in Karsiyaka) and are not standard in size. In general, the pottery studios are three-roomed structures; they have stonewalls, and roofs made of earth, with wooden ceilings. The broadest room is the one which has two or three bench-wheels). The shaping process is performed here. Other rooms are used for drying and storage purposes. The bench is always put near a window to have the best light. The courtyard and roofs of studios are also important places for production. Clay preparation, slipping, drying and packing are carried out at these places.

CLAY PREPARATION. Although primitive methods are still used at some studios, the clay brought from Yaziralti is processed by filterpresses and vacuum-press machines. In the primitive method, the clay is hammered by a tool, which is called *tokuc*, and is dumped in front of the courtyard (*sergilik*). Afterwards it is cleaned by the use of a fine sieve. The sieved clay is mixed with water in order to have a plastic body which potters call *davut*. This mix is kneaded well and wrapped in cloth.

In the technological-equipped modern method, after the crushing process is completed, the clay and water are put into a mixing machine. This machine

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has a propeller. After sieving, the mix is transferred to one of the two resting pools (there are two resting pools which are adjacent to each other). Wet clay is siphoned through a channel on the bottom of the pool and is transferred into the second pool, rested for a day and the water is filtered off and removed. The pools have an area of 1 x 1.5 m. and are 15 cm high. The walls of the pools are made from bricks, and the bottom of the pool is equipped with nylon sacks. Other methods used include ball mills and grinding machines. Today, in Karacasu both primitive methods and technological-equipped methods are used in clay preparation techniques in about equal numbers.

WHEELS. Karacasu primitive pottery wheels are extensively used in Anatolia. According to G. Guner's research, they can be rotated by foot or by long poles. On the side of the bench that is shaped like a desk, there is a long board. The wheel is in front of the board. The artisan sits on the right side of the wheel. The upper flat surface where clay for throwing is placed is called *bardak kellesi*, and the wooden wide flat surface, which is rotated by electricity or foot is called the *teker*. The upper flat surface (*kelle*) may be adjusted according to the form's shape. On small upper flat surface (8-10 cm in diameter), ashtrays and vases forms can be produced and, on larger wheelheads (25 cm in diameter), earthenware cooking pots, jugs and large earthenware jars can be produced.

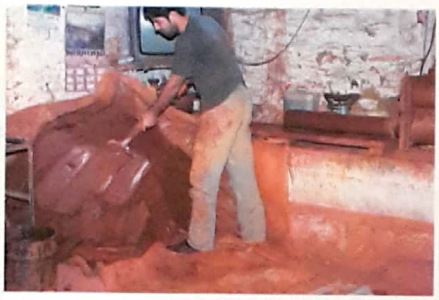
SHAPING TOOLS AND APPLICATION TECHNIQUES. The potter's clay, which is ready after the kneading operation comes to an end, is separated into pieces according to the size needed. These clay lumps are called *kunte*. Kuntes are put on the upper head (*kelle*) of the wheel for shaping. This operation is called *kunteyi kelleye vurma*. Afterwards, the lower disc of the wheel is rotated with the feet and the clay is centred. The process of centring is called *sikma*. The shaping process starts when the clay is centred with one hand inside and the other outside. This process is named *oyma*. Next, the clay ball is stretched upwards by the use of a *Patros Tahtasi* which is made of metal; wooden patros are used to shape the belly of the form. This process is called *tahta verme*. The metal patros is used in operations that require detailed work whereas wooden patros are used in operations that do not require such fine detail.



Top: Preparation of slurry for clay in the court yard. Above: Map showing the Anatolia region.

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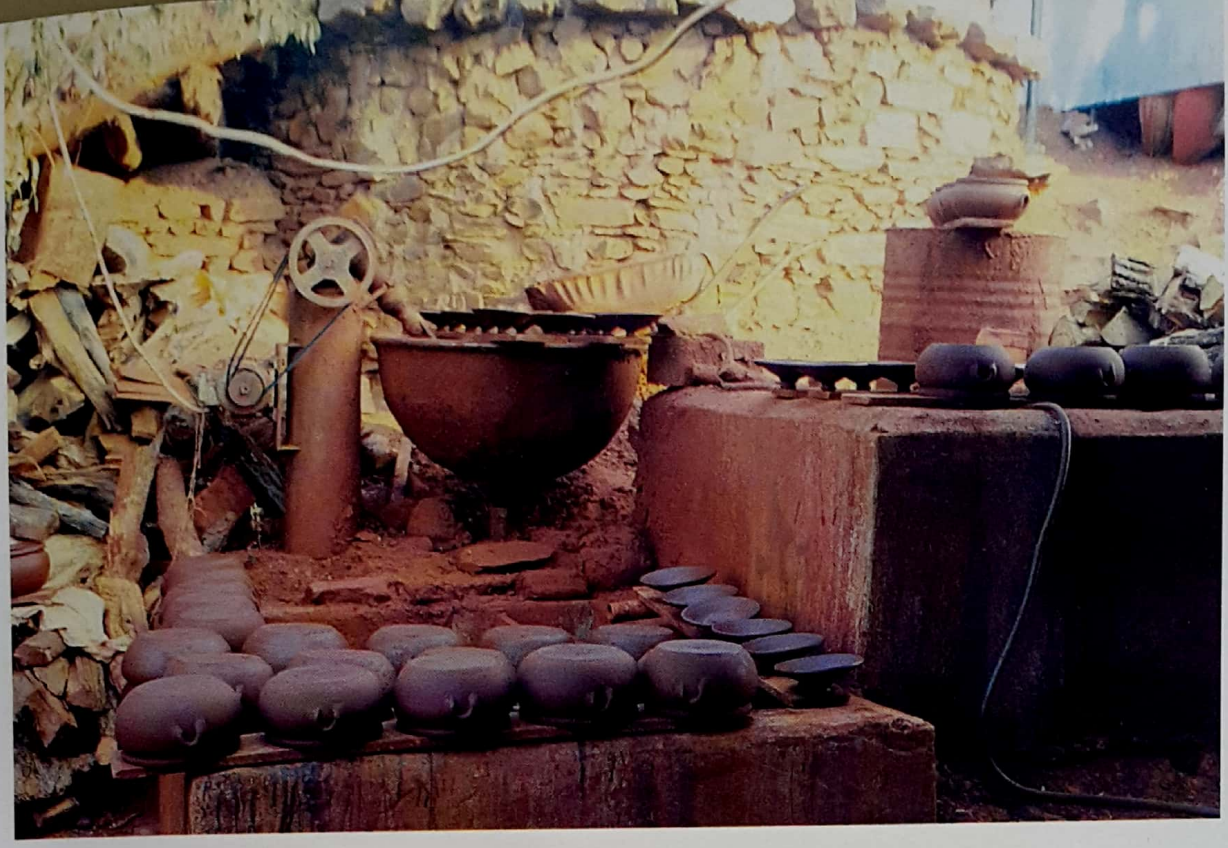
Top: Wheels inside the studio. Centre: Getting clay from the heap. Above: Giving shape to the clay.

In the making of local jars, after the throwing processes are finished, a two-staged mouth-making operation is done. This is called *agiz pisirme*. After this, the inside of the form is corrected with the sponge and a handle is attached. The jar, after the shaping operation is completed, is cut from upper head of wheel and taken out for slipping. A master is able to complete approximately 100-150 jar forms a day. In the process of jar making, the clay is centred, lifted up and shaped in one movement. The form that is shaped is scraped with the wooden shaping tool (*titrec*) and a decoration tool called *yarma cubugu*. Then, horizontal grooves are opened on the shoulder and belly parts in equal intervals starting with neck (five grooves for medium-sized jars). Parallel grooves are opened with a metal tool (called *sari makara*) between these lines. Between the first grooves on the shoulder, the decoration is made with a roller that has vertical lines. At this stage, the decoration shows both parallel and vertical lines.

After this process, white slip (*kristal desen*) that is characteristic of Karacasu jars, is applied on the outer sections with a brush. In the final stage of decoration, the jar is incised from top to bottom by leaving nine equal areas on the surface by the shaping tool (*kanal taragi* or *yarma cubugu*). Later, the jar is again incised from bottom to top through previously incised lines. Finally, as the decoration operation is finished, the form is taken from *kelle* (the wheelhead with a wire or a fishing line. One of the main attributes of Karacasu potters is, apart from the jar forms being dipped in red slip, all shaping operations are completed on the wheel from the clay lump to firing process.

SLIPPING AND DRYING. Karacasu potters add sodium and lime soluble substances to the red slip. Forms that are taken from the bench (only local jars are dipped in a red slip) are put out in drying areas. Local jars, after reaching the leatherhard stage (named as *kapatma tavi*), are allowed to become dry. The other forms are slightly moistened and then polished with a nylon sock after this operation. Drying areas (*sergenler*) are generally closed places where sunlight cannot enter. Slipped and burnished wares are taken out to the sunlight after the pre-drying is done. Drying periods depends on the season (whether the season is summer or winter).

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White slip (*madina*) is used on all forms except for the local jars. This slip is taken from Kullu Kernesi Ocagi in the Dedebag region of Karincalidag Mountain. It is extracted by digging from veins of clay (3-4 cm thickness), which are 2 m under the ground and are used after being crushed and sieved. When the form is on the wheel, it is decorated with 3-toed decoration brush. Another decoration material is the talc which can be obtained from Camkoy region, 8 km from the district, in the southwestern direction. This material is used for decoration on jars and pithos-ware. It is applied to the body with the finger and a felt-tipped tool after the drying operation is complete. After these forms are taken out from the kiln, yellow silvery coloured patterns can be seen.

KILN AND FIRING CHARACTERISTICS. Two kinds of primitive kilns, namely a dome type and a cylinder type are used in Karacasu. The walls of these kilns are made up of stone and plastered with wet clay. Karacasu kilns are composed of two main parts: the firebox (*ateslik*) and the main chamber with30-35 holes with the dimension of 8 – 9 cm. (The firing is from the bottom or *delikli tavla*). In dome-type kilns, the firing is from the hole that is open at the side of the dome. Firebox sections are under the ground in both kilns.

In the cylinder-type kilns, the firebox height is 1.5 m, the second chamber is 1.6 m and the diameter of the kiln is 1.4 m. Wall thickness is 25-30 cm in dome-type kilns and similar in the cylindrical kilns. Kiln capacities range from 300 to 400 jars and local jar forms.

The burning process begins at the firebox mouth section with resinous pieces of wood (*savlik*). Next, embers are pushed into the inner sections of the firebox in a controlled way. The burning duration is about 8-9 hours in the summer and 10-11 hours in the winter. Within these times the kiln temperature reaches approximately 650-800°C. One-1.5 *ster* of wood is burned during these periods. The potter has to recognise the brightness (called *nisan parlamasi*) in order to understand the required temperature by looking in from the top. When this brightness is sensed, the kiln has reached the required temperature. The kiln is left to cool for 8-12 hours, depending on the season, after these operations are accomplished.

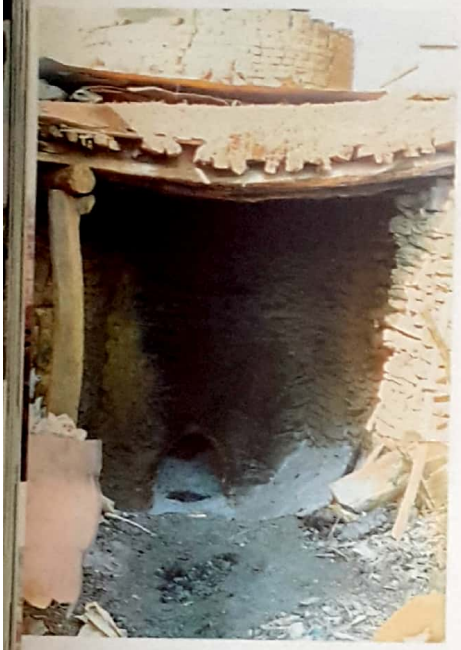




Top: A machine used for making clay. Centre: Tools that are used on the wheel. Above: White-slipped jugs.

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Top: Burning from the top to prevent works becoming over-carbonised. Centre: Kiln, firebox section. Above: Wares ready for sale.

THE FORMS. In general, Karacasu jugs, which are a part of Anatolian style, have circle profiles with handles and have a wide body with narrow mouths. The names of the jugs change according to the purpose of usage and size.

Zavrak (one kind of jug) are those that have wide bodies with handles and have narrow necks, 35 x 25 x 4 cm; lip thickness: 0.7-1; wall thickness: 0.5. *Sivri Bardak* (Pointed jug): wide-bodied with handles and narrow tall necks. The difference between the pointed jug and the Zavrak is its tall neck and decoration. Height: 40 x 25 x 3.5 cm; wall thickness: 0.5 cm. *Emzikli Bardak* (Spouted jug): wide bodied with handles and wide necks, and concave circle-shaped mouths that ends in a lip. It has approximately the same size as the Zavrak and Sivri Bardak. *Kupali Bardak* (Jug with glaze): is not spouted and doesn't have handles. The feature of this type of jug is that it has a glaze on the top. 35 x 26 x 3.5 cm; wall thickness: 0.5 cm. *Minik Bardak* (Small Jug, Juglet): These are the forms that do not have standard measurements and are mostly used as toys and souvenirs. 10-14 cm/h. *Guvec* (Jar): used for cooking. It has a lid and handles. 14 x 20 x 23 cm; wall thickness: 0.7-1 cm. *Kupler* (Pithos, Storage jar): These forms are used to keep water and oil or other liquids, also flour and wheat or dry goods. Two kind of pithos-ware exist. One with handles and the other without handles. 70-75 x 40 – 45 x 20-25 cm; wall thickness: 0.7-1 cm. Except the forms that are mentioned above, candy cups, ashtrays and vases can be seen as souvenirs and for daily usage. And also *Gelin Bardagi* (Bride jugs) are made as souvenirs with their unique forms.

Karacasu is one of the tens or even 100s of examples of traditional Anatolian pottery centres. It is exciting to consider and accept Karacasu pottery as an extension of an 8000-year-old tradition. Yet, it would be tragic for this traditional process to be lost. The annihilation process has started. The change in use of earthenware goods, the development of plastics and glass industries, the rise in energy costs and the use of refrigerators has serious implications in this process. But one shouldn't consider this conclusion for only social and economic perspectives. Yet, the process we are losing is an old handcraft tradition. For this reason, the 8000-9000 year old Anatolia tradition must not be left to fade away.

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