

| English

1. Humankind and water. A cultural relationship

1.0 Without water life cannot exist

The Earth is one of the nine planets that orbit the Sun, and the Sun is only one of the 100,000 stars in our galaxy. The Earth is the only planet in the universe where it is known that life can exist, as it is the only planet known to contain water.

The Earth was formed 4,600 million years ago from a cloud of dust and gas that drifted through space, but the first known forms of life (bacteria and algae) did not appear until some 3,500 million years ago. They originated in water, which covers 70% of the surface of our planet.

1.1 On Earth, life springs from water

The source of life is water and its surrounding areas. All types of life such as plants, animals and humans need water to survive. Life cannot exist without water or when there is a shortage of water, as in the case of deserts. Human life appeared about two million years ago. Throughout history, all societies have mostly evolved in areas where there has been a good supply of water, in order to enjoy the fruits of the Earth and to ensure the survival of these societies.

1.2 Water is the main component of the human body

70% of the human body is composed of water and a human being must consume about 2 litres of water a day to be able to survive. This water is present both in what people drink and what they eat. As well as dietary needs, water is essential for many daily tasks such as cooking, personal hygiene, washing clothes, domestic chores, watering plants.

1.3 The different roles water plays in each human society produces the various cultures.

The relationship between human societies and water is basically a cultural one, where different cultures are formed with a great variety of rituals, customs, beliefs, technology and objects that make up everyday life. Water is taken from rivers, fountains, wells and reservoirs and is used for agriculture, household chores, to produce energy, leisure purposes and for many industrial and handicraft processes.

Water has always been the reason for wars and disputes due to being a scarce commodity, essential for everyday life and for agriculture.

1.4 Society takes a great many different forms and uses a wide variety of materials

Water is the most important element in our lives; thus from pre-historic times humanity has been equipped with receptacles in a great variety of forms and materials, but which all basically perform the same functions: i.e. vessels used for water bearing, transporting and drinking.

1.5 The shapes, materials and uses of water receptacles have evolved with the appearance of new technologies and the welfare society

Water receptacles have evolved just as cultures have, taking new forms and made of new materials that make them more useful, lighter, and more decorative. Nowadays, plastic has taken over from traditional earthenware receptacles. This is causing serious ecological problems as plastic receptacles harm the environment, are not reusable and are not easily biodegradable.

2. The various shapes and functions of water containers

2.1 Morphologies

There is a great amount and variety of earthenware water containers used for different household needs. They are classified according to their basic shape, making up various families of containers or morphologies, of which the jug is merely one; others include pitchers, pitchers with a neck or spout, pails or buckets. Each morphology, can include different varieties or types.

Each container normally has a specific shape depending on the task it must perform.

1. Cánter (Pitcher)

Shape: Large round body for storing water with an open neck on the upper part and one or two handles on the side. Usually larger than jugs.
Use: Transport and storage of water.

2. Pitchers with a spout

Shape: It is a hybrid of a jug and a pitcher. It has the shape of a pitcher but it has a spout for drinking from on the upper part of the container's main body. It is usually smaller than the pitcher.
Use: To drink water directly from the spout.

3. Pail

Shape: This has a body similar to that of the jug but has a rim on the upper part for filling and a single neck through which the water is poured in.
Use: For pulling up and transporting water from the well.

4. Pitchers with a neck: doll, pedarra, dorca, etc.

Shape: Pitcher with a neck for pouring water. Its shape and name vary according to where the pitcher is found.

Doll: Pitcher with a neck and three handles, completely covered in green varnish. It is typically

found in Cadaqués and is made in Figueres. Pedarra: Pitcher with a neck on one side and a handle on the other, normally covered in white varnish. It is typically found in the Basque country and Occitane.

5. Other water containers

Carrying pitcher: A pitcher with an almost spherical body and a flat side to support it, normally suspended from a rope through the two handles. To transport and drink water in the countryside, etc.

Gerra (Large earthenware jar) for washing hands: Medium-sized or large jug with an opening on the lower part where there is a tap. It was set on top of a basin and was used for washing the hands. It is typically found in farmhouses and church vestries.

6. Càntir (Jug)

Shape: A closed container, with a round body for storing the water. It has a handle at the top, and usually has a thick neck for filling the container and a small neck (spout) used to directly drink the water. It can vary in shape and size according to the type of jug.

Use: To transport water and to drink directly from the spout, depending on the type of jug, also used as a storage container, to store oil, as a watering can, as a container to hold water for christenings, for spraying chemicals, as a decorative ornament, etc. They are also used to store oil and wine.

Location: Since the 15th century they were used in the regions of Girona and Barcelona. From the 19th century this use was spread throughout the Peninsula, Rossellon, the Languedoc, and North Africa.

3. History of the jug

3.1 Jugs used in ancient times

3.1.1 From the beginning of earthenware creation to the invention of the pottery wheel

The first jugs in history: a model for future jugs. First civilisations: Mesopotamia and Egypt.

A huge evolution in ceramics took place during the first civilisations in the Mesopotamian valley area (Sumeria, Babylonia and Assyria) and in Egypt, between the years 5,000 and 2,500 BC. At first ceramics were still far from perfect as they were made completely by hand. Later ceramics were improved with two significant inventions: the pottery wheel and the double chamber oven. During this period the first jugs appeared, almost always in the shape of animals, and were used for storing highly valuable liquids such as perfumes and oils.

3.1.2 The Bronze Age in the Mediterranean (2500 - 1000 / 800 BC)

The first golden age of jugs

While the technique of metal making was being mastered, notably with the development of smelting ovens, techniques for making ceramics were also being improved. Bronze was obtained with copper and tin alloy, marking an entire era in Humanity in which jugs were to greatly evolve. This period was one of the most splendid in the history of humankind. The jugs of the Bronze Age stand out due to their technical perfection and variety of shapes. They are small jugs, used for storing oils and perfumes for religious and burial rituals.

3.1.3 The Iron Age: Mycenae and Phoenicia (1600 - 500 BC)

Jugs spread throughout the entire Mediterranean area

In the Iron Age, two Mediterranean cultures stood out from the others: Mycenae, in Greece and the

Phoenician culture which introduced the potter's wheel, among other technological advances, around 700 BC. Most Phoenician and Punic jugs are small in size and are animal-shaped.

3.1.4 Classical and Hellenistic Greece (750 - 200 BC)

The last golden age of jugs in ancient times

There are relatively few jugs from this era, and they are small in size, varnished in black, with a single neck. During the Hellenistic era (from the 4th - 3rd century BC) the Greek culture spread throughout the Mediterranean and especially in Magna Greece (in southern Italy) and a great many jugs were produced, of a great many shapes and sizes, some of which are over 50 cm in height.

3.1.5 The Iberian Peninsula. The Iberians.

The first jugs in the Peninsula

The jug arrived on the Iberian Peninsula through colonisation by other cultures. The Iberians produced grey ceramic (black earth) jugs with a single neck, generally small in size, that have been found in excavated graves, among other offerings to the dead.

3.1.6 Rome: hegemony of the Latin culture (750 BC - 414 AD.)

Decline and disappearance of the jug

Although many very high-quality ceramics were produced during the Roman era, we have very few examples of jugs, which lead us to think that at this time there was an important backward step in their production. At the end of the Roman period every trace of jugs disappeared, resulting in a period of several centuries with no presence of jugs until the 14th century.

3.2 Jugs in the Middle Age

3.2.1 The Visigoth (414 - 711) and Moorish (8th - 9th / 15th century) eras

The dark ages of jugs

The decline of the Roman Empire and the arrival of invaders from central and northern Europe (the "Barbarians"), saw the beginning of a period of decadence and social, economic and cultural decline. Jugs, which had been around for many centuries, completely disappeared. The Moorish invasion of the 8th century saw the rebirth of the Peninsula's earthenware products.

3.2.2 The creation of the Catalan nation (9th - 15th century)

Appearance of the jug in Catalan pottery

From the time of the re-conquest of Catalan territory, the drinking jug appeared in the form of a container unique to Catalan pottery and was very popular among the people. The shapes and sizes are practically identical to current examples.

3.3 Jugs during the Modern Age

3.3.1 The Renaissance (16th century)

Popularisation of the jug

During the 16th century mass-scale production of varnished red and black earth earthenware jugs began in the majority of Catalan pottery workshops, giving rise to a real upsurge in the use of the jug as the container most often used to store water, together with pails, of which there was also a great number.

3.3.2 The Baroque and Rococo period (17th and 18th centuries)

The appearance of new kinds of jugs

During the 17th and 18th centuries, earthenware jugs continued to irrepressibly spread and have

been found in large quantities in the vaults of the buildings of that period. The most important innovation was an increase in the variety of models, the start of the great diversification of types that has characterised the jug.

3.4 Contemporary jugs

3.4.1 The 19th century. The Industrial Revolution

Spread of the jug throughout the Peninsula

With the Industrial Revolution and the arrival of the steamboat and the railway, the jug began its extensive spread from Catalonia into Aragon and Valencia and from these centres into the rest of the territory as far as Portugal and North Africa.

3.4.2 Art nouveau and 20th century jugs

The jugs as a work of art

At the end of the 19th century, art nouveau took root in Catalonia. This was one of the most prolific periods in Catalan art. In the world of ceramics, art nouveau jugs deserve a special mention. The production of artistic jugs continues in 20th century art, an artistic trend that came after the art nouveau movement in Catalonia.

3.4.3 The first third of the 20th century

The greatest production of jugs in history

The beginning of the 20th century saw the period of the greatest production of jugs in history. Pottery making factories produced large numbers to meet the needs of the urban and rural population.

3.4.4 From the post-war period to the welfare society (1939 - today)

The crisis in traditional earthenware and the realisation of patrimonial value of jugs.

The Spanish civil war (1936 - 1939) saw the end of the previous golden production period. Many pottery workshops disappeared and others survived by any means they could amid the general poverty of the period. However, it was with the arrival of industrialisation in the decades 1960 - 70 that earthenware almost completely disappeared, reduced to a purely symbolic role.

4. A jug for every use: The typologies

Clearly, the jug is the water container with the most different varieties, which we can group according to type. Each type has its own characteristics that differentiate it from the others and each type is designed for a specific use.

We can distinguish over thirty different types of jugs in all, which proves the great adaptability of this wonderful container that meets the most diverse needs of society, from drinking, watering plants and christening to simply decorating the home.

As a result of the industrialisation process and the predominance of urban society, the jug has gone through a great decline in its functional use, meaning that many of these containers are now more appreciated for their historical, ethnological and patrimonial value, than their value as an object for practical use.

4.1 Jugs for collective use: To transport and drink water for group working parties.

4.2 Oil jugs: To store oil.

4.3 Storage jugs: To transport water from springs or farmhouse ponds and used as storage containers in the home. It is used for the same function as pitchers in other areas.

4.4 Ordinary jugs: To transport and drink water directly from the spout.

4.5 Winter jugs: The same as that of ordinary jugs, but used above all in cold places or during the winter.

4.6 Glass jugs: To serve water at the tables of well-off families.

4.7 Jugs for use by fishermen or on boats: To store and drink water on boats, used especially by fishermen along the coasts of Catalonia.

4.8 Cylindrical jugs and cork-shaped jugs: To drink directly from the spout and to fill the spray device worn on the back used for spraying vineyards.

4.9 Country jugs: To transport water (and wine) in the countryside.

4.10 Jugs used as water bottles: To transport and drink water on trips and excursions.

4.11 Cooling jugs: To cool water in the fridge and to drink directly from the spout.

4.12 Ring-shaped jugs: Ornamental and to symbolise the solar orb.

4.13 Jugs for children: Used by children to fetch water from springs.

4.14 Watering can jugs: To water plants.

4.15 Double neck jugs: They were placed on the wooden wheels of carts to cool the rims.

4.16 Jugs with a base: Ornamental and for drinking directly from the spout.

4.17 Fake jugs: Ornamental and for playing practical jokes.

4.18 Anthropomorphic jugs: Decorative and to represent man.

4.19 Jugs with animal forms: Ornamental and to represent the animal world.

4.20 Tree-trunk jugs: Ornamental and represent trees as a symbol of the infinite.

4.21 Metal jugs: To transport and drink water where the jug could easily receive knocks: factories, workshops and farms.

4.22 Wooden and cork jugs: To transport and drink water, normally in factories, workshops and farms and, in general, wherever earthenware jugs are not suitable for use due to their fragile nature.

4.23 Knick-knack jugs: They are used as a children's game.

4.24 "Tower" or belfry jugs: Ornamental use and symbolising the concept of height.

4.25 Christening jugs: Used in religious christening ceremonies.

4.26 Soul jugs: Ornamental use and to symbolise the inner soul.

4.27 Decorative jugs: Ornamental and decorative use.

4.28 Artistic jugs: Aesthetic use. They are very important those made during the Modern Style period and those made by contemporary authors.

5. The manufacturing process of the jug

5.1 Preparation of the clay

Traditional preparation process of the clay that was to become a ceramic product:

1. Extraction of the earth from clay sites, called terreres.

2. Grinding and removing stones and other impurities that the clay may contain.

3. The earth was placed in a shallow pool to obtain the clay, while the rest of the impurities were removed.

4. The clay was cut into pieces and taken to the workshop, where it was kept until being used. Nowadays, all the work involved in preparing the clay is completely mechanised, but until the 1970s the pottery maker carried out the work by hand, such work often being heavy-duty in nature and requiring great physical exertion.

5.2 Modelling techniques for earthenware

The modelling stage is the part of the process in which the clay is given its shape.

There are many different modelling techniques, which can be grouped as follows:

1. Static modelling or modelling by hand.
2. Low potter's wheel or manually operated wheel (slow).
3. High potter's wheel or foot-operated wheel (fast).

5.3 Modelling a jug using a potter's wheel

1. The pottery maker takes a piece of clay and puts it in the centre of the potter's wheel.
2. Aided by the rotary force of the potter's wheel, the pottery maker shapes the body of the jug or earthenware part of the jug with his hands until the piece is completely closed over. The air inside the piece means that it will not implode.
3. When the clay has dried out a little and has acquired a certain consistency, the neck holes are made and the "ornaments" are added, i.e. the handle, the neck and the spout.

5.4 Drying and decoration

After the shaping stage has been completed, the piece must be dried so that the remaining water evaporates, thus reducing its weight and volume. The pieces may crack if the drying process is too quick.

Once it is dry, the jug can be decorated using various techniques:

1. Decoration by incision
2. Decoration by addition
3. Polishing
4. Engalbes (red or yellow clays)
5. Varnishing or glazing
6. Painting without glazing
7. Painting on white glaze

5.5 The workshop

The earthenware workshops were large indoor or outdoor areas where the pottery maker carried out the entire pottery making process. This workshop was also normally the home of the entire family.

The clay was prepared in the outside areas, with the sinks occupying a large part of the courtyards; the pieces were also left to dry outside.

In many towns the kiln could be used by the whole community and was therefore not located in the workshop. Nowadays, work is carried out in smaller areas, and the process has been made easier due to mechanisation and the use of industrial materials that the pottery maker need not prepare (clay, glazes and varnishes, etc.)

5.6 Firing

The firing stage finishes the long process to create the earthenware, where fire is used to complete the work of many weeks or months.

The unfired pieces had to be very carefully stacked up inside the firing chamber, making the best possible use of the space available.

Black or smoked earthenware: In the case of black or smoked earthenware, all the kiln's ventilation holes are covered after the pieces are fired and some damp wood is burnt, producing a large cloud of smoke, which removes all the oxygen from the air and saturates it with carbon monoxide, which produces a reduction effect (the opposite of oxidation) in the earthenware, giving it its characteristic grey-black colour. The kiln is completely turned off for three or four days, so that the full effect can be achieved, and then earthenware is ready to be removed from the kiln.

5.7 Transport and marketing

In the past, the pottery maker was the most important person in the whole pottery-making process, from selecting the clay in the terra to actually marketing the product in fairs and markets,

as craft products were sold in a limited area, which did not normally require more than one day's journey by cart.

With the arrival of the railway in the middle of the 19th century and later with road transport by lorries, the markets for earthenware products were extended.

Nowadays, wholesalers and retail shops carry out most earthenware sales, although the pottery maker still attends some theme fairs in order to directly sell the products to customers.

Picasso and ceramics

From 1946 until 1952, Pablo Picasso devoted himself very intensely to ceramics, a material he kept working in until the late 1960s. The brilliant artist became enthralled with this new material when he visited the ceramics workshops in Vallauris (France), a small village in Provence near Cannes, where ceramics had been made since before the Romans.

Picasso entered into contact with the Ramié'e9 family, husband and wife, owners of the Madoura workshops. He thus embarked on an interesting and extensive ceramic production that totally revolutionised the tiny production centre of Vallauris, whose workshops were experiencing a great deal of difficulties due to the drop in sales of traditional ceramics. With the presence of Picasso, the ceramics industry in this city got a new lease of life, reaching its true "golden age" during those years.

Within Picasso's ceramic output we can find extremely spontaneous, direct designs, often made over pieces from the more traditional repertoire, including plates, trays, pitchers or jugs, taking advantage of the shapes of the pieces to decorate

them with motifs such as bullrings, animals, faces, and the like with extremely simple yet highly effective strokes. This is an essentially "pictorial" type of sculpture, since in the majority of cases the artist's intervention was limited to decorating it.

Picasso's jugs

The jugs make up an extremely interesting part of Picasso's production, since these vessels were quite familiar to him from his stint living in Spain and Catalonia, though not so much in France, where jugs were not as common, except in the south. The artist took advantage of the shapes of the different jugs to give them the personalities of people or animals, such as the heads of men, women, fish and birds, painted gracefully, simply and ingeniously.

The fact that these are limited edition pieces (in numbered series) has made these pieces more accessible to collectors and museums around the world, such as the Jug Museum of Argentina, which is grateful for the people who through their contributions have made it possible for the public to enjoy the works of one of the most brilliant artists in the history of art.

