

  
I PERCORSI DELL'UOMO DALL'ANTICHITÀ AD OGGI

4-5

ACQUE  
PER L'UTILITAS,  
PER LA SALUBRITAS,  
PER L'AMOENITAS

A CURA DI  
MARIAVITTORIA ANTICO GALLINA



CENTRO STUDI BENI CULTURALI E AMBIENTALI



## ABSTRACTS

ROBERTO CARELLA, CLAUDIO SOMMARUGA

### SPRINGS AND WELLBEING BETWEEN MYTHS AND SCIENCE

Water is essential for man's life. Beside the survival role (drinking) and the agricultural use to grow food, water, especially in the form of springs, has been often in the past considered sacred (partly because of its mysterious origin) and deemed to have extraordinary healing properties.

Some of these attributes continue until the present day. Our paper is a preliminary effort to evaluate, with topographical and geological information, the relation between springs and other water bodies and the testimonials of religious veneration and of ancient health uses. Several such locations were selected and analysed.

It has been possible to ascertain the presence of water sources and related phenomena (like gas emissions) in several of the chosen archeological localities. A more in-depth study would be needed to decide on part of the remaining sites where no evidence of present day springs has been found.

GABRIELLA VANOTTI

### THE INFLUENCE OF WATERS IN SETTLEMENTS IN GREATER GREECE AND SICILY

The Greek settlers, come to the western countries since VIII century B.C., gave great importance to the presence of rivers and springs in the areas they chose for their settlements. This is testified by some responses of the Delphic oracle and by the fact that many colonies took their name from the name of the river running nearby.

CLAUDIA LAMBRUGO

### A SACRED SPACE WITHOUT MARKS. SOME CONSIDERATIONS ABOUT THE ROLE OF RELIGION IN THE EARLIEST PERIODS OF GREEK COLONIZATION: THE SITE OF INCORONATA DI METAPONTO

The article points out the need for a strict research about the role and the nature of Greek religion in the earliest periods of the Greek colonization, when it seems we have only little archaeological evidence for cults and sacred places.

It is pointed out that some miniature vases from the site of Incoronata di Metaponto (MT), located on the west side of the Basento river, where some Greeks settled down at the end of 8th century B.C. and lived before the founda-

tion of Metaponto, can be findspots of votive offerings. As we can see in others sacred contexts of 7th century B.C. (Saturo, Pizzone near Taranto, and the sanctuary of Demeter in Policoro), miniature vases were often votive deposits near springs and rivers.

Water and sacred springs may have sometimes played an important role in the siting of some sacred areas, because they were more apt to evoke feelings of awe and mystery and the presence of nonhuman powers.

ROSANNA MOLLO MEZZENA

#### *AUGUSTA PRAETORIA AND THE USE OF THE WATER RESOURCES*

This contribution is an analytical and detailed study of the urban aqueducts and the water mains of *Augusta Praetoria* over the Roman period: the sub-division of the system and the relative connections, the supply of the various public and private structures (thermal baths, domus, nymphaea and fountains), the location of the intake and collection of the waters, the calculations of the fall and discharge of the individual aqueducts, together with a thorough study of the aqueduct-bridge of Pondel, an important private hydraulic structure built near the city for industrial purposes.

GIOVANNA BONORA MAZZOLI

#### THE AQUEDUCTS OF "CISALPINA" IN THE ROMAN AGE

The aqueduct is a symbolic monument among the constructive technique of roman age and is a meaningful element for the political positioning of a city in the *romanitas* horizon. In this study we examine the frameworks located in the sites pertaining to the western sector of the roman Cisalpina, in a chronological horizon between I and III cent. A.D.

Different technical solutions are adopted due consideration to the specific morphology of the territory where the framework is located: underground culverts could be found more frequently, but elevated architectonic examples do not lack also.

ALDO BORLENGHI

#### ROMAN AQUEDUCT: THE ROLE OF THE ARCHAEOLOGY RESEARCH BETWEEN OLD AND NEW STUDY METHODOLOGIES

The research of roman aqueducts has seen changes, not only in Italy but also in foreign countries, where different methodologies of study often have entrusted a kind of approach exclusively historic-architectonic or technical-engineering. The recent scientific production emphasized that the analysis of an aqueduct cannot limit itself to a purely literary sphere, architectural and archaeological,

but should be absolutely integrated with topographical, technical, hydraulic, geological, hydrological know-how. This kind of multi-directional approach could give a great improvement to the archaeological and topographical research, as already applied in other cognitive fields. In this way it's possible to understand completely an hydraulic work, in its specificity, and in its diachronic evolution in relation to the environment where is located. This approach offers important contributions to the development of the ancient Topography.

LAURETTA MAGANZANI

THE WATER SUPPLY OF URBAN HOUSES IN THE CLASSICAL  
JURISPRUDENCE'S TEXTS: JURIDICAL CONTRIBUTIONS  
TO THE RESEARCH ON AQUEDUCTS OF ANCIENT ROME

Roman private law, in particular the texts of the Justinian's Digest, can give important contributions to the interdisciplinary studies on roman aqueducts. This is shown through some examples: (1) the classical jurisprudence's reflections on legal status of hydraulic infrastructures of roman aqueducts can help to explain the praxis of *fistula*-stamps, i.e. the fact that private names in genitive, mostly indicating owners, are often inscribed on water private conduits. (2) Combined analysis of literal and juridical texts can show the real significance of *vectigalia ad iura aquarum pertinentia* (Front. *De aq.* 118,1). (3) The results of the archaeological research on roman aqueducts can help the scholars in the analysis of roman jurisprudence's texts, like D. 8.4.2, a real *crux* for romanistic exegesis.

MATTEO DOLCI

WATER ADDUCTION AND DISCHARGE SYSTEMS  
IN ROMAN CISALPINA:  
PRELIMINARY ANALYSIS IN RURAL CONTEXTS

How rural settlements in Roman Po Valley took their water reserve for domestic use? And how they flowed out waste waters?

Archaeological contexts in the Middle Po Valley most of the times attest that the well-system was used: roman settlers drilled one or more wells to capture waters. They were usually built in an open area, using bricks or local stone.

In same situations are present tanks, also. They were probably used in farming or breeding.

Waste waters were instead flowed out through drains, which let it out in cesspool or directly in a river.

These systems have been recognized both in para-urban settlements, as *Bedriacum* (Calvatone, CR) or Ghemme (NO), and in rural *villae* and farmhouses; it demonstrates similar solutions in water use, made easier by large quantity of water availability.

MARIAVITTORIA ANTICO GALLINA

BETWEEN *UTILITAS* AND *SALUBRITAS*:  
EXAMPLES OF GEOTECHNICAL INTERVENTIONS  
WITH EMBEDDED-AMPHORAE STRUCTURES IN MALTA ISLAND

This study examines for the first time tree cases of embedded-amphorae used like soils' improvement under floors of *domus* in *Melite* at the roman times. The finality of embedded-amphorae is once again recognized, based on studies' experiences of author, through analysis of lithological soils characters. In the first book of this Collection (*Itinera. I percorsi dell'uomo dall'antichità ad oggi*, 1996) the author offered some technical factors for analysis of the possible function of this building method and now, using the same method, i.e. with regard to the natural state of land, their static lift. etc., has been possible to understand the aim of amphorae-structures in roman age.

GRAZIA FACCHINETTI

COINS OFFER INTO THE WATERS DURING ROMAN AND LATE  
ANTIQUÉ PERIOD: SOME CONSIDERATIONS

The coins offer is another proof of different waters' cult manifestations certified by literary and archaeological sources.

The most antique certifications found belong to Etruria, VI century B.C., and the ritual has been probably spread by Romanisation in the west Mediterranean.

This custom goes on until the Late Antique Period when it becomes a christian ritual with coins deposition in the Baptismal fonts.

ILEANA CHIRASSI COLOMBO

ABOUT WATER BEINGS. MEPHITIS THE NYMPH ALBUNEA  
AND THE SIBYL OF TIBUR

The paper investigates the collectivity of nymphs, the female extrahuman beings who play a very peculiar role in greek and roman polytheistic systems as well as in European lore.

First of all we have focused our attention on the meaning of nympe as the just married young woman who in greek perception keep an ambiguous adolescent androgynous sexuality in connection with water as fluidity, flux as principle of life. We have chosen however to deal particularly with a special kind of water beings and a special kind of waters, the sulphureous waters which are well known for their noxious but also healing properties and mostly for their relations with the so called altered states of consciousness (ASC).

We have put in evidence the connection of this kind of waters with special types of ordeal judgments, oracular inquiries and the relationship with special

superhuman characters, divine beings who perform specific roles in specific cultural and historical circumstances. We have chosen as explanatory cases the Italic, Oscan goddess *Mefitis*. She acquires the peculiar status of pestilential daemonic being from the geological features of her cult place in Irpinia (Rocca San Felice near Avellino, Campania) particularly through the enigmatic interpretation of the poet Virgil in his *Aeneid*.

Further a sulphureous link intertwines the goddess Mephitis the white waters Nymph of the fons Albunea and the Italic White Sibyl Albunea of Tibur. Only historical reasons however give reason of their correlated emergence as supernatural beings with peculiar powers in the first century B.C.

LUISA ERBA

#### FOUNTAINS IN LOMBARDY FROM THE XV TO THE XVII CENTURY FORMS AND SYMBOLS

Within a larger study of the garden in Lombardy, on which I worked for some years, there are several branches of study relating to the presence of water. These start from: channels and small lakes (which are connected together and suitable for recreational boating), pools made for the amusement of the dukes, fisheries (for the desks of lords and monks), wells built for water supply and finally fountains made for 'practicality' and for 'amusement'.

By virtue of their particular aesthetic and symbolic value, my attention fell upon fountains. I identified the three most common types: the cup or chalice type, the wall type and the 'naturalistic' type, with the intention of offering a small iconographic review in this text which previews much wider ongoing research.

The area considered was Lombardy (which included, in the XV-XVII centuries, the shore of Lake Maggiore, which is now part of Piemonte); even though it is correct to specify that the different forms examined didn't belong exclusively to this region, but were used elsewhere and in other periods.

The noted fountains are not necessarily in existence or well preserved, often only the images (planned but never realised) or the description (for temporary constructions) remains, sometimes we have simply a sculpted or painted representation, created with narrative or evocative intent.

The investigation already offers many leads for interesting further research. It is clear that similar forms are often used indifferently for fountains and wells and also holy water stoups and baptismal fonts, and even for the precious table wash-stands used for princely banquets. One can immediately see the intriguing game of innumerable formal variations but one can also try to accomplish the more complex task of decoding the various symbolic meanings. In fact, the topic of fountains opens a wide range of meanings which include the fountain of youth, the fount of poetry and the spring of eternal life.

In consequence of highlighting aesthetic characteristics, issues related to the often costly and complex supply systems of the fountains and their complicated and refined functioning mechanisms (which are anyway the subject of many technical essays present in the centuries-old tradition of architecture and garden art literature) get left to one side.



LAURA MOSCATI

WATER RIGHTS IN MODERN ECONOMY

The most important features concerning modern water rights consist of problems related to state ownership in parallel to those attaining coercive or legal waterworks facilities. Medieval law provisions exhibit some remarkable innovations and open the way - through 18th century Kingdom of Sardinia constitutional directives - to solutions that are not fully applied until the period of codification. The problems examined are unwound through public and private law and are closely connected to agricultural development and to growing economical and social needs.