PERFUMERY THEME

PARK MUSEUM

CYPRUS

Back to genesis of “Chypre” a fragrance family that is as acclaimed as it is shrouded in mystery
DEDICATION

The Park would still be nothing but a dream if not for Philachtis Michael, better known as “Pappous” and Amina Thoma, our beloved “Anna”. They both believed in this dream and did contributed greatly in turning this idea from a mere dream into a reality, into an actual business plan. Following their suggestions, Maria Michael better known as “Giagia”, with the help of her grandson brought the Park to life and made it a non profit cultural institution, whose goal is to help those in need.

Taking all this into consideration, we dedicate this booklet to our beloved "Anna" and “Pappus”, who have sadly left us far too early..
“THE CYPRUS PERFUME THEME PARK”
Project on Cyprus cosmetic heritage conservation

Acronym: CYPE-PARK

The relationship between human cultural traditions and genetic legacy is the dual inheritance of the environmental anthropologists Robert Boyd and Peter Richardson. They recognised that in addition to the genetic inheritance that has made all creatures, humans had additionally a unique cultural inheritance and that these two legacies behaved in similar but not identical ways. A genetic past is our inheritance from our evolutionary history and our cultural past is our inheritance from our more immediate ancestors. Millions of years of evolution control our behaviour, but evolution have also given us the ability to modify our genetic behaviour by transmitting culture from one generation to another. Culture is transmitted through learning and the cumulative experience allows the development of skills, cooperative behaviour and conscious identity other creatures don’t have.

We don’t just have to rely on genetically programmed behaviour for survival, supplemented by trial and error and parent-to-child learning. We have a shorter term and more flexible behavioural force. This is the culture and it can only be developed and gained by the retention of a heritage of behaviour accumulated through multiple generations.

Our behaviour and identity is our cultural heritage and the ability to hold such a heritage is what makes us human. Culture is the heritage of behaviour and memory. Culture is heritage and heritage culture......................”


LOCATION:

The park is in the Solea valley near Korakou, Nicosia district. The location was chosen taking into account some parameters and purposes:

- The geological, environmental and weather resources are similar to those of Cyprus in 2000 BC.
- Decentralization inside the forest, near a river and not far from the main copper mines bring back the visitors in the original biodiversity of Cyprus.
- This will help the development of the area and the exploration of the traditional rural life.
- Since the Park will collect experiences and realities from different cultures and time periods, the decentralization from the ancient Cypriot sites is of main importance, not to create confusion.
- It could become an interactive meeting place for every scholar of the intangible cultural heritage of scents.
Eau de Chypre.

This perfume is presumed to be derived from the *Cyperus esculentus* by some, and by others to be so named after the Island of Cyprus. During the national career of Egypt, Persia, Greece, and Rome, the Island of Cyprus was the resort of the élite, learned, and refined. It was at the time of the Crusades, when Richard I. of England assumed the title of King of Cyprus, that the famed eau de Chypre was introduced into Europe.

Extract of musk . . . . . . . . . . . . . 1 pint
" ambergris .
" vanilla .
" Tonquin bean .
" orris .
\[
\text{of each} \quad . . . . . \frac{3}{2} "
\]
Esprit de rose triple . . . . . . . . . . . . . . . . 2 pints

The mixture thus formed is one of the most lasting odours that can be made.
Research and conservation planning

-The Cyprus Perfume Theme Park is an innovative initiative to adopt, safeguard, conserve and to advance the knowledge and public appreciation of the ancient Cypriot perfumes and cosmetics, belonging to the invisible cultural heritage of the island, that had valuable importance until Chypre became one of ten olfactory families of the world at the beginning of 1900.

-The target is to rebuild inside an herbal garden located in Troodos, the structures and implements found at Pyrgos using the ancient methods. Nearby the original size model, some pavilions will be, where the visitors have the chance to see and follow the process of perfume production from 2000 BC till today, and to know more about the different consistence (powder, oil, and hydrosol) and employ, including religion as well as aromatherapy.

-The park aims to educate on the role of Cyprus in the history of perfumes starting from the discovery of Pyrgos perfumery, without interfering on the archaeological site, following the motivating ethos of experimental archaeology applied to the ancient techniques of fragrance and pharmaceutical production.

SUBJECT

(1) The research on the history of the perfumes of Cyprus is based on copious quotations from ancient writers and the archaeological and historical records that have made the island famous as the birthplace of perfume, to the point of identifying with one of the 10 olfactory families, which has the name of a geographical place "Chypre".

(2) Despite this identification was attributed to François Coty, the type of fragrance Chypre had already spread in the '800, and the name is traceable in a medieval "Kypros", very similar to a more ancient perfume of the classical period.

(3) The family Chypre (oak moss, rock rose labdanum, patchouli, bergamot, etc.), is today so characteristic and "loved" that Fragonard 1 reducing the olfactory families of Coty (from 10 to 7) has recently confirmed its importance, dividing it into Chypre fruit, Chypre floral, Chypre aldehyde, Chypre leather, Chypre aromatic or spicy and Chypre green.
Chypre de Limassol
1913 by Malhame Bichara,
“Cristal de Baccarat”
Cork shaped as the
Egyptian Head of the
“perfumier”.

Booklet cover of «papers» perfumed with Cypre Royal, Kofler, Padova, Italy 1925
The historical and archaeological study of the production and use of perfumes in the Mediterranean is directed to the identification of ancient productions and to social and economic factors that influenced the use and trade. The investigation also includes some comparisons with testimonies from the great civilizations surrounding Cyprus, most notably Egypt and Mesopotamia, with attention to the perfume factories, dating to the Hellenistic and Roman period. The aim is to outline the common characteristics that identify a laboratory to produce perfumes in an archaeological context, and to find new interpretations of dubious archaeological evidence.

The investigation of various distillation techniques is based on the archaeometric, archaeological and historical documentation, while the written testimonies come mostly from the biblical East and from the Arab and Persian environment. Our study starts from ceramic equipment used to distil (also represented in the miniatures, drawings and paintings depicting alchemical laboratories), looking for evidence about the cultural continuity that led to the use of clay still until modern times. These stills are produced in Italy by certain industries of ceramics and the comparison with the examples of Pyrgos and Paphos are amazing, if you calculate an interval of 4000 years.

The use of resins and the archetype of the perfume is the subject that refers to the prehistory of the perfume, as the oldest attestations of the use of aromatic substances specifically concern the resin, which is easily available from the barks of trees. Since the resin is dissolved in fat and in wine, the various attempts to extract fragrances have led to the composition of the first ointments. Indeed, in Egypt during the fourth millennium BC, the first seven sacred ointments are all based on resins dissolved in scented Moringa oil. The same resins were already used during religious rituals, and so it is assumed that their first use was linked to religion. Archaeological findings also show that the resins have been used for different purposes: as a sealant to secure tool handles, glue, waterproofing, adhesives, wound healing, and skin disinfectant. Their texture and aroma, along with the fact that ooze from the wounds of tree bark of plants, were considered like human blood, and regarded as expression of lifeblood in which essence of life flows. As a result, the observation that the fragrance of resin is unleashed into the air when burns, gives this substance a metaphysical role, undoubtedly connected to the older concept of supreme entity, which grants all the life on earth. It is a primitive association that justifies the ubiquitous resins in religious ceremonies and rites of passage. The resins of conifers and terebinth, have played a decisive role in social evolution in Cyprus along with other fragrances of the Mediterranean flora.
Some **Chypre** Perfumes and Cosmetics of the beginning of twentieth century
If we try to draw a similarity with Egypt, the country that more than any other has made use of scents for every occasion of life and death, there are huge differences not only in taste, but also especially in the cultural choices. In Egypt, the scent was something sacred and divine, the private property of the Pharaoh and the priests, who completely controlled its production and use. It was so important that its administration was the expression and symbol of power itself. While in Cyprus, everyone produced and used perfumes, especially at the domestic level. Not only the statue of Aphrodite, but also all the girls, who, according to the sacred ritual, went for initiation in the temple, were anointed and perfumed, regardless of their social status. In all the tombs of the island, of any historical period, were found perfume bottles and jars of ointments, cosmetics or like those found in Pharaoh Tombs. We know that trade in perfumes developed in the Bronze Age (particularly in the second half of the second millennium BC) as shown by findings in Egypt and Cyprus.

Because of the Millenary tradition, after the collapse of the Roman Empire, the continuity and reputation of Cypriot perfumes survived in family entourage that continued to produce fragrances without any control by official authorities. Available scents on the Mediterranean market has kept alive the fame of Cyprus, directing probably its taste toward more obtainable than mostly used Mediterranean fragrances.

The continuity of production of perfumes through the centuries in Cyprus seems to be related to special factors and reasons that favoured the choice of specific perfumes in Europe. After the cultural exchanges that occurred during the Crusades, European tastes shifted progressively from plants typical of the Middle East and Egypt, towards the scents of the Mediterranean scrub, blended with floral essences, whose production involved many European regions like France with jasmine and Bulgaria with rose. It is possible that this preference was influenced by a sort of rejection of the Arab world, responsible for invasions, battles, and hateful bloody domains.

So, the taste of Europeans was directed increasingly towards Mediterranean nuances, causing disuse of hot and aggressive oriental perfumes, which are still used in the production of a type of perfume intended principally for the eastern market, and not European. Returning to Cyprus, the fragrances that continued to be exported by merchants in the form of scented talc, oil, tissues, and impregnated carbons were Pine resin, resin of Laudaniferus Cistus (Laubdanum), Styrax, root of Iris, Rose, Oregano and Marjoram, root of the chain Cypress, Neroli (i.e., the perfume extracted from the flowers of wild orange), Bergamot, Oak moss, and Lavender. Coriander instead became the most famous spices of the island, and it was used not only in the manufacture of perfumes, but also in pharmaceuticals and in cosmetics.
Moreover, as is well documented in the history of the perfume, the name of the island was chosen as for excellence (for antonomasia) of a specific olfactory family by François Coty in 1917. In that year, the great perfumer, in dividing the nuances of the ten olfactory families, which represent the standard on which it is possible to classify all the perfumes of the world, launched on the European market “Chypre de Coty”, the first perfume produced at an industrial level.

However, the perfume Chypre already existed, as demonstrated by some bottles of Nimes dating back to 1840. Eugene Rimmel had invented a Chypre for Catherine of Russia in 1880, and Malhame Bichara 5 in 1913 sold a precious perfume named “Chypre de Limassol,” in a very attractive Baccarat crystal bottle, with the top in the form of a Pharaoh Head. In the series of perfumes that Coty invented in honour of the island of Cyprus, we cannot, however, forget "Origane" from the scent of essential oils of oregano and marjoram, which brings us back to the myth of Amaracus (son of Kinyra see p. XXX) and production of the famous Cypriot perfume Amarichinum, so beloved in the Egyptian world. May be today it survives as “Amarige de Givenchy”.

ABOUT PYRGOS/MAVRORACHI AND ITS COSMETIC FACTORY

Pyrgos/Mavrorachi is an archaeological site that has visual structures to enhance understanding. The ruined state of the site has acquired significantly, and today the site forms part of a landscape that is publicly accepted as having special cultural meaning. All the area is distinguishable by heritage resources, which should be potential to become an interpretive and educational instrument for the public and a tourist attraction.

The Bronze Age settlement is in a privileged position, situated on the slope of a low hill (Mavroraki) in the middle of a valley formed by a crossing of streams. In its proximity, there is the largest harbour of Amathounte and three smaller sheltered anchorages. The excavations brought to light an important Middle Bronze Age industrial settlement (2nd millennium BC) in an exceptional state of in situ preservation material, overlying a previous occupation of the late 3rd millennium BC.

Consequently, Pyrgos has significantly enriched our knowledge of the development of Limassol region and has provided more solid foundations for our understanding of Early-Middle Bronze age. The Pyrgos area was classified as protected, by the Department of Antiquities Decision in 2002 and some plots (for an extension of almost 2 hectares) have been expropriated for the excavation.
Evidence of the first establishment of people in Early Bronze age has been found along the ridge on the north-western side of the excavated area, on the medium slopes of the Mavroraki hill. They consist in architectural remains and an assemblage of pottery that attest to the existence of earlier phases. The inclination of the hill helped the distribution of the buildings on different levels and their reuse and superimposition by later buildings.

The site is important not only for its industrial identity, but for the intact prehistoric levels, buried by the collapse of the walls after the earthquake. This condition allows, through archaeology, Archaeometry, palaeobotany, paleozoology and ethnoarchaeology investigations to reconstruct the II millennium BC process of metallurgy, agriculture, medicine, and textile production.

The perfume factory is in the centre of the industrial and commercial area, which today is within the urban area of the modern Pyrgos village. The structures emerged to belong to laboratories and workshops that have made quality products, such as perfumes, cosmetics, drugs, bronzes, textiles, and wine. Many of these activities have been benefited from the olive oil produced in the large mill and distributed to the various workshops in large storage jars.

The copious number of pottery and stone tools found in their original context in the great hall of the press, has allowed the opening of a specific field of Archaeometry investigations in the ITABC.CNR laboratories, whose primary purpose has been to reconstruct the second millennium BC technology, collecting all possible information through modern analytical protocols of research.

The study of Palaeobotany of the island (which still retains over 50 "botanical fossils," protected by the Berne Convention of the Council of Europe in 2002, including 16 endemic aromatic plants, and two native species: marjoram and laudanum, i.e. Cistus Laudaniferus pink and white) is going on, mainly based on palynological investigations carried out on samples from different excavated units. With attention to the materials of the perfume factory that returned many botanic remains, some stratigraphic sections were analysed from the point of view of mineral deposits, for reconstruction of climate changes on the island since the second millennium BC.
THE PROJECT WILL MANAGE 8 ACTIVITIES, WHOSE RESULTS WILL BE PERIODICALLY PUBLISHED ON THE WEB SITE

1- Investigation and documentation of the archaeological, bibliographical and memory records of objects, technologies, ingredients, and recipes…

2- Preservation. Determination of necessary conditions and precautions to be taken to ensure models and replicas of the material in their original state.

3- The fruition of the site needs to include scientific strategies for better “interpretation” of the invisible cultural heritage, to compensate for the missing documentations. This will include long and short-term actions for the proper acquisition of the data and their inclusion in the reconstruction of the ancient history.

4- Replicas. The concept of intervention is considered based on the current condition of objects and structures. The reconstruction of models of the original workshops found in the Mediterranean entourage will consist in the partial building of the stone foundations and the relocation of the implements.

5- Video virtual “Reconstruction” using the most advanced system of 3D visual reconstruction will be available. However, such visual renderings return hypothetical images and will be identified in these limits. The reconstruction will be made using plans, sections, elevation, and axonometric drawings showing the possible original state of buildings and instrumental measures.

6- A special area dedicated to young students will be arranged of seating/group assembly benches and visitor information points, with stone-built tables and information panels.

7- Replication of ancient activities and artefacts. The Replication will focus on the main identified industry and arranged in the sector, which is not interested by ancient structures, using the Experimental Archaeology techniques and locally available organic and inorganic material.

INSTITUTIONS INVOLVED


- "Armonia" Associazione Culturale, via Canino 10 Roma, Italy. tel 0039 3472845169.

- “Cyprus Perfume Theme Park of Yannulla Lazarou Foundation (CYPEPARK-YLF). 14, Av Eleftherias.Korakou - Solea, Nicosia Cyprus, tel 00357 99644237.
Perfumery Theme Park Logos elements

Triangle: as the stone of Aphrodite found in the Temple of Paphos, at Kouklia Museum.

Around, the colour notes of the perfume Olfactive Families

In the middle the alchemical symbol of distillation and constellation of the Virgin.
Welcome for the Opening of the Perfumery Theme Park of Cyprus

I thank the Lazarou Foundation and Maria Rosaria Belgiorno, associate researcher of the Institute for the Technologies Applied to Cultural Heritage of CNR that I lead, for the kind invitation to attend the inauguration of the Perfumery Theme Park of Cyprus. Unable to come for institutional commitments already in the calendar, I am pleased to submit this brief personal greeting with my wishes for the achievement of the results illustrated in the project.

The ITABC CNR, was born as a service of Sciences Subsidiary to Archaeology, has always considered of primary importance Archaeometry, the science that manages to draw data from the invisible. Among the various multidisciplinary researches, it has been dealing with for decades, the investigation on perfumes and cosmetics of the past is perhaps the one that boasts a thirty-year continuity, which goes back to the professor Giuseppe Donato and his first laboratory focused on Cleopatra’s perfumery found in Israel. The discovery of the perfume factory of 2000 BC at Pyrgos, where the Mission of ITABC-CNR, directed by Maria Rosaria Belgiorno, has therefore not caught us unprepared and has allowed us to investigate a much older historical period of Theophrastus, Pliny the elder, and Dioscurides, that of the Mediterranean perfumes of the Bronze Age.

Archaeometric analyses, verified by experimental archaeology, have confirmed that already at the beginning of the 2nd millennium BC, Cyprus was able to produce perfumes, using the endemic plants of the Troodos, the same fragrances reported by the Bible and by the Greek and Latin writers, used to produce the ancient fragrance "Kypros", and other "Cypriot" perfumes, whose name has changed or disappeared in the mists of centuries, but that helped to create the myth of Cyprus as homeland of perfume, so much to preserve its fame and nuance in one of the seven olfactory families in which today all the perfumes of the world are divided, the Chypre.

In recent years the research carried out by Maria Rosaria Belgiorno has shifted towards the investigation of the environmental reality and biodiversity from which this olfactory family originates, widening the study to the circum-Mediterranean area of the island.
This research, which already makes use of some publications, has today found an important collaboration with the Lazarou Foundation, which, together with the Troodos community, opens today this Park of research and experimentation of extreme importance for the continuation of the investigation, widened in a horizon that ranges from Mesopotamia to Sardinia and the Aegean in Egypt, considering Cyprus as the bridge between the different cultures.

The intent is to revive and compare the most ancient traditions, creating strong synergies between scientific research and humanistic heritage, together with the intent to preserve and transmit part of a cultural identity that we can consider as Mediterranean.

If it is true that the continuity of the production of Cypriot perfumes is attested through the centuries by the historical-literary documentation and the perfumes spread throughout the "Old Europe", it is also undeniable to everyone that without distillation many of those essences could not be produced. The first phase of the research promoted by the Theme Park is dedicated to this very ancient and primary technique, which will be followed by other equally important themes in the coming years. So, I wish you all the best success in this research.

Salvatore Piro ITABC-CNR
Traditional distillation of roses at Agròs, Cyprus
The ancient appeal of a group of fragrances that are based on oakmoss is being rediscovered by a growing number of men and women. With fragrances, as with many things in life, subtlety provides its own attraction. One source of such an attraction, and an increasingly popular one, according to those who sell and manufacture scents, is a family of subtle fragrances called Chypre. Pronounced shee-pr - it is French for Cyprus - Chypre is a varied and enticing group of perfumes based on mousse de chene, or oakmoss. In ancient times, this tree lichen was procured from the Mediterranean island that gives Chypre its name. It is the same island where Aphrodite, the goddess of love and beauty, was said to have been born. Be its mythical antecedents what they may, the marketplace reality is that Chypre, although far from a recent discovery, is suddenly selling extremely well. Both women and men seem to be rediscovering its ancient appeal.

"Fragrance is going toward something complex and rich like Chypre," reports Annette Green, the executive director of the Fragrance Foundation in New York. "The move is away from the obvious. There are many kinds of Chypre, but nothing about any of them is obvious."
First official recipe of "eau de Chypre" in "Traité des odeurs, suite du traité de la distillation" by Antoine Hornot (Déjean), Paris 1764
Richard Loniewski, the vice president of fragrance development for Charles of the Ritz, concurs: "We have investigated the market very closely, and we have found that Chypre is where fragrance is heading now. Women are asking for Chypre, and men, too. They seem to want mainly subtle fragrances with these warm, attractive notes in them."

Perfumes - some standbys, some brand-new - as different as Miss Dior, Ara-mis, Cabochard, Zen, Antaeus Pour Homme, Intimate, Senchal, Calvin, Givenchy III, Femme, Tuxedo, Halston 1-12, Kouros, Aromatics Elixir, Missoni, Oscar Pour Lui and Azuree are all Chypres. And so is Mitsouko, the oldest (1916) extant Chypre classic, which Guerlain, its manufacturer, is now promoting anew. In each of these perfumes, the extracts from oakmoss serve as a fixative for numerous other ingredients and also contribute a distinctive mossy scent of their own.

The Chypres are more elusive and less easily recognized than the florals, say, or the Orientals, although they often can be quite explicit and compelling.

"Fragrances in the Chypre family tend to be very sexy," says Bernard Chant, a vice president and chief perfumer of International Flavors and Fragrances and the "nose" responsible for many of the current offerings that men and women are finding most pleasing. "The oakmoss gives them their mysterious, heavy and long-lasting quality," he explains. "But it is not the oakmoss that makes a Chypre sexy - it is the oakmoss that makes it a Chypre. What makes a Chypre sexy is its special warmth, and this comes from combining the oakmoss with sweet, fruity and woody ingredients." Spicy notes, animal notes and green notes can also be interplayed in countless Chypre variations.

Oakmoss - *Evernia prunastri* to the botanist - grows on the trunks of trees, including oaks and fruit trees, in forests and orchards. Its virtues in perfumery were recognized as early as the 12th century, according to David Richardson, author of "The Vanishing Lichens" (Hafner Press, 1974).
SAUZÉ a joint aux essences de la Sicile toute la volupté des fleurs de l'île de Chypre pour en faire sa merveilleuse eau de Cologne Chypre qui est un véritable parfum.

Eau de Cologne
CHYPRE
SAUZÉ
"un véritable parfum"

En vente dans les grands magasins, les parfumeries et chez les bons coiffeurs.

Gros : SAUZÉ Frères
25, rue d'Hauteville. PARIS

Agences à l’Etranger :
PHILIPPE (Paris) - Passarhoff & Cie
BRUXELLES : 86, rue Galire
VIENNE : 14, Favoritenstrasse
Buenos Aires, Marsella

Achats exclusifs demandés pour tous pays autres que ceux cités.
At that time, it was collected in Cyprus and traded in the bazaars of Syria, Asia Minor and Egypt. There are reports of "Eau de Chypre" being brought back from the Levant by the Crusaders, but just what this was composed of is not clear. It might have been the perfumed water called Cyprium, made since biblical times from the small white flowers of the henna plant, which also flourished in Cyprus.

The earliest reference to a blend called "Chypre" - and specifically based on oakmoss - is late 14th century, Miss Green says, and Chypre recipes with oakmoss and various other ingredients turn up periodically after that, especially during the 18th century.

Among modern Chypre fragrances, the first two launchings of this century were Guerlain's Chypre de Paris in 1909 and Mitsouko in 1916, followed a year later by Francois Coty's Chypre. The Cyprian name for the fragrance category remains, but now the oakmoss comes mainly from Yugoslavia.

Replica of 1300 BC Tripod from Teratsoudhia Paphos during the test of distillation: October 20 2018.
When the crusaders conquered the island in the late twelfth century, they brought the recipe back to the rest of Europe, naming it ‘Chypre’, a term we still use today.

Made of a mixture of herbs and resins (labdanum, styrax, calamus) and glued together with gum tragacanath - they were placed in homes as potpourri or burnt for fumigating the space. They became popular in Europe after the crusaders arrived in the island of Cyprus (in the 12th century) and didn't turn into an alcohol-based "Eau de Chypre" till the 14th century - way before Coty's Chypre (1917).
NOTANDISSIMI
SECRETI DE L'ARTE
PROFUMATORIA,
Per far Oghi, Acque, Pastè, Belle, Moscardini, Vesceli
tetti, Paternofibri, e tutta l'arte intiera,
come si ricorda,
Così nella città di Napoli del Reame, come in
Roma, e quivi in la città di Venetia
novamente rilampati.

CON PRIVILEGIO.

IN VENETIA.
SECRETI NVÔVI

Pouere di cipri maistrale bianca.

PIGLIATE hírios eletto bianco oncìe sei, et sandali bianchi ouer citrini oncìa una e mezza, canella et legno aloe quarto uno, cipri et garofali quarto uno belzoi oncìa una, muschio caratti quattro ambracà caratti sei, zibetto caratti quattro, farina d’animo oncìa una, et mescolate ut supra.

Pouere di cipri maistrale beretina.

PIGLIATE hírios, sandali citrini aña oncìa otto, ro se’damaschine oncìa una, cinnamomo et legno aloe, oldano te rosò aña oncìa meza, cipri garofali aña quarto uno, belzoi oncìa una, muschio caratti quattro, ambracan caratti tre, zibetto caratti doi, et fareti come dice di sopra ad incorporare, et tanto a moltiplicare per portione.

A fare acqua gomata.

METTETI degli draganti ouer gomma arabica a moglie in aquarosa a discrezione, et poi come è disfatta e bona, et notati che la gomma arabica aleandrina e la miglior da fare l’acqua che ogni altra gomma.

Pouere de cipri.

PIGLIATE sterco di boue, et scaldatelo bene al So le, et poi pestatelo sottile, et pestatelo per manega che sia impulabile, et profumatelo nel tanismo, come si narra ne la prima ricette de la pouere di cipri, cioè lira una di questa pouere, de laqual medesima portione di profumo acceso, et profumata che la sera daretei il muschio, et l’ambracane, et il zibetto al modò nostro, come state uso di fare, ouero se la uorreti saluare faretine ballotte con acqua gomata, et questa po tretti accioncire secondo il dibisogno, et se uorreti farla piu
DE L'ARTE PROFUMATORIA 55

sto modo: dateli muschio, zibetto, et ambracane insieme con il zuccaro in poluere.

Poluere di cipro roscata.

Pigliate rose damaschine oncia doi, sandali rosi oncia una, legno aloe, cipri alessandrini, ana dragme tre, hierios eletto, garofali dragma una, muschio carattiotto, zibetto caratti doi, ciascheduna cosa pestate sottilmente, et incorporaste insieme, et ponete in una ampolla bene astroppata, et se la uoleti profumare dateli muschio, zibetto, et l'ambracane.

Poluere di cipro maistrale.

Pigliate cipri oncia una, e meza, sandali citrini, rose damaschine, oldano, ana oncia meza, garofali, dragme tre, muschio caratti tre, zibetto caratti doi, et la profumaretii.

Poluere di cipro commun.

1.2.1 - Introduction to the protocol:

- It is obviously impossible the use of chemical “reverse engineering” to remake the ancient perfumes, however a correct protocol of experimental archaeology may reveal much information about the knowledge, process, and philosophy regarding the production of something that still today has a primary importance in human life and around which a turnover of incalculable value moves.

- Considering that a protocol of experimental archaeology is valid when it respects the archaeological original parameters on which the hypothesis has been made, regarding materials, the archaeological context, the geographical location and social environment, our protocol regards the evolution of the techniques to produce perfumes in ancient circum-Mediterranean cultures, in BC time, including maceration, effleurage of animal and vegetable fats, distillation, and binary employ of different techniques.

1.2.2 - Aim

The aim of the protocol is not simply to demonstrate that it is possible to produce perfumes following the ancient recipes and using replica apparatuses, but to experiment with various organic materials (plants) which have been utilized in the production of ointments, essential oils, hydrosol and oil perfumes. Specifically, to learn how different objects/apparatuses and different plants responded in the production and preserving of fragrances. How many people and what time factors were involved in the various stages of manufacture, considering the causality, knowledge and cultural heritage in terms of evolution of the different technologies.

1.2.3 - The experimental archaeology steps:
1 - Converting hypothesis into a verifiable form
2 - Selecting the experimental materials
3 - Operating with the objective and effective materials
4 - Observeing the results of the experiment
5 - Interpreting the results of the experiments in different inferences.
1.2.4 - The investigative parameters of each case include:
1 - The recognition of the archaeological and historical data
2 - The formulation of an indicative inference
3 - The distinction of convincing data
4 - The formulation of a probable interpretation

1.2.5 - Archaeological evidence:
For implements and apparatuses five orders of evidence are considered:
- Formal properties size and typology.
- Analogy with objects coming from similar environment, contemporary situation and geographic area.
- Skeuomorphism with more recent and modern objects used for the same purpose.
- Limitations imposed by the formal properties for a possible different use.
- Social involvement and cultural evolution of the people that produced and used fragrances.

1.2.6 - An example of the methodology applied to each case.
- **Indicative data**: the alembic of Pyrgos is composed of four pieces.
- **Indicative conclusion**: the apparatus was used for distillation.
- **Probative data**: the four pieces of pottery match together.
- **The form** is almost identical to apparatus still used in India.
- **India apparatus** is extensively used for distillation of fragrant plants and flowers.

Pyrgos/Mavroraki Cyprus 4000 BC  
Manipur India today

- **Probabilistic inference**: the Pyrgos’ apparatus is a primitive alembic for distillation.
- **The experimental replica proof** demonstrates it is really an apparatus for distillation.

1.2.7 - Conclusion
We hope that from the result of the comparative study it will be possible to understand if the technological process put in place is the one used in the past. In the impossibility of having direct testimonies, these results can be considered plausible proofs of the hypotheses formulated. From the same results, the social aspects and the commercial implications on which much of the current academic discussion is running can be assessed through historical comparisons. For each of these cases of study, we will give a vote of credibility, between one and five, to compare with the experimental parameters used to make the text and equate the differences.
Experimental Archaeology Activity: October-December 2018

Investigation on ancient distillation

1° Tepe Gawra

The case concerns the peculiar pots from Tepe Gawra Iraq found in 1935 supposed to be a distiller by Martin Levey in 1949. It is a deep conical jar with a double rim forming a channel with a series of holes to collect back liquids inside the vase belonging to the end of the Ubaid period end of the 5th millennium BC.

In practical terms, the vessel has a 50cm diameter mouth circa, with a channel ring 8-cm thick and 10/12 cm deep, corresponding to a capacity of 37/40 litres for the pot and 2 litres for the gutter.

The lid or cover was considered lost and different hypothesis have been made about the missing parts to assemble the original device, considering that the size of the channel ring around the mouth occupies a large percentage of the total height of the vase, offering room to locate berries, resins, flowers, or parts of plants.

Moreover, in the huge amount of crashed pottery found at Tepe Gawra there are some intriguing vases which could be considered accessories of the apparatus. The most interesting is a spouted pot having a correct size (h. 30,2cm) and diameter of mouth (38cm) to be positioned upside down on the channel vase as cover. The pot (n° 2233) conserved at the Penn Museum of Philadelphia is complete and has the spout inserted closer to the base than the mouth, making the vessel unusable to contain liquids after few centimetres over the bottom. Moreover, the position is perfect for a traditional cover of a distiller. The pots together form a normal still apparatus, giving reason for the channel/rim where it is possible to locate the rim of the cover, recovering the surplus of the dripping coming down from the walls through the holes of the channel and to the side spout to collect outside the condensation of the vapour, adding a simple reed.

Furthermore, considering the importance given by many scholars to the presence and position of filters in still apparatuses, it is possible that some strainers from Tepe Gawra were connected with distillation, especially the specimen n° 360, shaped like an elongated flask completely pierced, which has perfect dimensions (h. 33,6cm, d. 22,2cm) to be inserted inside the lower pot holding plants for steam distillation.

The experiment made to test the functionality of 3 different apparatus was made with replicas handmade in Kornos (Nicosia) without wheel.
Tepe Gawra replicas of the apparatus composed by a double rimmed jar, strainer and cover, and sequence in distilling pine tree.
2° Paphos Terathsoudia

The case concerns a peculiar pot found in the Tomb 104 of Teratsoudhia near Paphos in Cyprus, published in 1990 by prof. Vassos Karageorghis. It belongs to the half of the second millennium BC. It is a tripod cooking pot of a known type, modified adding a second rim at the base of the cylindrical neck to form a channel with a large spout to collect liquid overflowing from the rim. The pot was made with hard, gritty reddish ware, partly by wheel and partly by hand, carefully polished and covered with a grey slip, outside and inside. It is evident that the ceramist who made this vessel worked far from the typological schemes, smartly assembling elements belonging to traditional cooking systems, to make a more functional contrivance.

In practical terms, the vessel is 33cm high, 33cm wide at the base, the mouth diameter is 20cm, two opposite, rounded handles connect the external rim of the channel running in correspondence with shoulder, in line with the top of the mouth. A deep bent spout is positioned in front between the two handles for conveying immediately outside the liquid that collects in the channel. A possible lid was not recognized among the other goods of the tomb. Furthermore, we made the replica of a four spouted bowl, type known in Cyprus since the Early Bronze age, to arrange its lid. Even if the presence of the channel and the double rim remand to the device from Tepe Gawra, no part of the object or its assembling can be compared directly with it.

In 2014 courtesy of prof. Karageorghis Maria Rosaria Belgiorno had the opportunity to take the photos of the specimen and the license from the Department of the Antiquities to make Archaeometry investigation on one fragment coming from the base of the pot. The fragment had abundant remains of the acetone-based glue used for the restoration with drips along the entire outer edge. After instrumental cleaning of the fragment the analyses made in the laboratory of the Institute for Technologies Applied to Cultural Heritage of the Italian National Council of Research by Alessandro Lentini (conducted with High Performance Liquid Chromatography and High Pressure Liquid Chromatography, results compared with standards certified by Extrasynthese – Z.I. Lyon Nord B.P 62) reported remains of turpentine oil and small spots of rosin on the external surface. Probably the same material still visible inside the spout. The replica of the pot was handcraft made without wheel, using local red clay, producing a coarse grit tempered ware, refined with the simple polishing of the surface without slip. The experiment made to test the functionality of the apparatus has been organized on a small bench using leaves and branches of myrtle to test distillation
Paphos Terathsondia original pot and Sequence of the replica distilling myrtle.
The case of Spišský Stvrtok Slovakia concerns a 1500 BC channel spouted pot, which suggests a long story of survival and diffusion of the ancient technology born in Mesopotamia in the 4th millennium BC. Spišský Stvrtok is a Bronze age fortified site, completely excavated and published with a controversial influence from the Mycenaean culture and civilization, based on many comparisons of archaeological material. The prehistoric village is in the Carpathian Mountain Area, that provides one of the strongholds of biodiversity of Central Europe of the plant and animal life, protected by the “Convention on Biological Diversity CBD, Article 2”.

The device is completely different from the type of Tepe Gawra as it has a flat base, an ovoid body with a cylindrical, straight edge and a second rim added outside to form the collecting collar. The channel collar doesn’t have the holes for recovery liquid inside the pot, on the contrary is provided by a spout were the liquid converge from both sides.

According with the reconstruction proposed by J. Ryšánek & V. Václavů the pot had as a counterpart a hypothetical double-grip ovoid lid, in which the vapour condenses in drops of liquid running down in the channel rim to be collected outside from the beaked spout bent over a bowl positioned straight down.

The shape of the pot reminds the Tepe Gawra device for the straight large mouth, but the body is more cylindrical than oval and has a flat base. The channel around the mouth is formed by the same system of adding a second ring of clay to shape the channel, that in the case of Spišský Stvrtok is everted and spouted. The dimensions and proportion (H. 35cm., D. M. 28,5cm) are not far from Tepe Gawra’s jar (48cm, D.M. 38cm).

The main difference between Tepe Gawra and Spišský Stvrtok devices is the spout, which suggests a different use and technology. In fact, while the apparatus of Tepe Gawra can be used both for distilling perfumes and spirits (as it has a tubular spout that can be inserted into a reed to allow the liquid to cool), the device from Spišský Stvrtok can be used only for distilling aromatic essences or medicines, since it has the spout open on the rim of the jar. Its presence during the distillation of alcoholic beverages causes the immediate vaporization of the alcohol, which releases at 79 °, not having time and room to condense in liquid as it happens in normal devices for distilling alcoholics, all provided by reeds and tubes, which refreshing the alcoholic vapours helps the formation of the liquid.

Our replica was hand made in Kornos with local tempered ware refined with the simple polishing of surface with a piece of wet skin. To make the experiment of distillation we used a fire stand composed of two pieces, made according to the old Mediterranean tradition, consisting in a cylinder pot with a front opening to control the fire, and a perforated large slab as cover. A second test carried on open air in a fire place arranged with basalt pebbles.
Spišský Stvrtok original pot and reconstruction by Ryšánek & Václavež

Replicas of the apparatus composed by a double rimmed jar and cover, on a fire-pot distilling laurel.
La distillazione retrocessa al 4° millennio a.C

22/10/2018

La ricerca riguarda 12 vasi con doppio orlo trovati nel 1935 a Tepe Gawra, e poi in altri villaggi vicini dell’alta valle dell’Eufrate, appartenenti alla cultura Ubaide del 4° millennio a.C. riconosciuti come apparati distillatori da Martin Levey nel 1950, grazie a confronti riportati nei testi accadici. La teoria è da decenni oggetto di discussione poiché mancando la parte superiore dell’apparato, la cui base conteneva circa 40 litri, non era possibile provarne la funzionalità. Nell’esaminare il materiale pubblicato e l’inventario Maria Rosaria Belgiojno del Cnr-Itabc ha riconosciuto la parte superiore mancante nel vaso n° 2233 conservato insieme al resto del materiale nel Penn Museum di Philadelphia, che combacca perfettamente. Infatti, la presenza di un versatolo tubolare posizionato nei pressi della base rende il vaso inutilizzabile per usi domestici, mentre posizionato al di sopra del vaso con doppio orlo, forma un perfetto alambicco.

La sperimentazione è stata fatta con repliche eseguite senza il tornio seguendo le misure e i dati pubblicati.

All’apparato è stato aggiunto un altro vaso rinvenuto nello stesso contesto di Tepe Gawra consistente in una fiasca di 34 centimetri completamente forata sulle pareti, che può essere riempita con le piante da distillare. Posizionandola all’interno si realizza un perfetto sistema di distillazione in corrente di vapore.

L’esperimento effettuato alla presenza degli intervistati all’inaugurazione del Parco Tematico del Museo del Profumo a Cipro, patrocinato dal presidente della Repubblica Nicos Anastassiade, è pienamente riuscito poiché l’apparato ha distillato per 5 ore continuative, dimostrando come già nel quarto millennio a.C. la distillazione era conosciuta, forse già da tempo in considerazione dell’elaborata tipologia dei vasi.

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