Plants as a major element in the cultural framework of Pompeii

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Riassunto
Le piante erano determinanti per la vita quotidiana nel mondo antico: Pompei, seppellita da una violenta eruzione del Vesuvio nell’agosto del 79 d.C., documenta questo fatto in maniera eccezionale.

I reperti di natura organica, in particolare vegetale, reperiti nell’area vesuviana, confrontati con l’iconografia e la letteratura mostrano come le piante fossero determinanti per lo sviluppo economico e sociale delle popolazioni locali e come ciò, nel caso, ad esempio, della medicina, sia sia protratto nel tempo.

In 79 AD the eruption of Vesuvius “sealed” the urban orchards and gardens of ancient Pompeii: as opposed to most ancient Mediterranean sites, the image of that disappeared civilization can be recomposed, also in those aspects which were irretrievably lost elsewhere.

It is only in the last few years that full attention has been given to this buried treasure, and more sophisticated techniques have been used in its investigation.

The refining of the techniques and methods which are peculiar to other scientific fields, applied to the ancient cultures, increases the disposable data, besides those traditionally “archaeological”.

In light of the difficulties encountered in recognizing both plant and animal species described in literary sources, the naturalistic frescoes adorning Pompeian houses buried in the eruption of Vesuvius in 79 AD hold great importance for science. In addition, finds of ancient macro- and micro-remains (pollen, seeds, woods) that have been identified in the laboratory (Costa and Tenore 1858; Ricciardi and Aprile 1978; Mariotti Lippi and Mori Secci 1997) serve to complete and further amplify the information that iconography provides (Comes 1879; Casella 1950; Ciarallo 2006). Together, art and science provide documentation unique for its breadth within a precisely dated historical moment (Ciarallo 1992; Varone 1992).

Becoming familiar with the plants encountered by ancient Pompeians, with their provenance and their utilization, therefore involves acquiring information concerning the social and economic life of the Vesuvian area (Ciarallo 1993; Mariotti Lippi 1993; Buffone and Ciarallo 2002; Ciarallo 2002a).

The ancient Pompeii, enclosed within its walls, extends for 66 hectares (163 acres). Eleven gates and as many road axes placed Pompeii in communication with the surrounding territory. The then-navigable Sarno River permitted the town’s inhabitants to enjoy commercial exchange with the interior, and the sea put them in communication with the entire Mediterranean basin (Carrington 1931; Jashemski 1979a, 1979b; Ciarallo 1996; Jashemski 2002).

The favourable climate and availability of rich environmental resources made it possible for the town’s inhabitants at various levels of society to lead diverse and animated lives that included performing different arts and crafts (Castagnetti and Renn 2002; Ciarallo 2002c, 2004).

The reeds that grew abundant in the delta of the river were used for supporting plants, delimiting flower beds, as weapons in the hunt and to build the basic structure, to which the plaster was applied, of walls and mezzanine levels: their vestiges have remained well impressed into the plaster itself.

Textile fibers had great importance: they were used for clothing, tapestry and to make sails, fishnets and ropes. In the Vesuvian plain, along the canals formed by

the Sarno river, were cultivated the flax and the hemp but also the broom, native plant, was used (Ciarallo et al. 1997; D’Orazio et al. 1998).

Wood was so important that extremely severe laws regulated the felling of trees. The Pompeii people had extensive knowledge about the mechanical resistance of different species and worked according to the use for which they were intended (Fioravanti et al. 1998).

Vegetal pitch, drawn from the pines, served to waterproof the amphorae that held the wine. The great importance of wine production was due also to the fact that it was an extremely important basic constituent of the so-called medicated wines, which had been steeped with plants containing active essences.

In fact, the oil, the flour and the wine, so as the lemon juice, the sage and the rosemary, which are daily present in our meals, during the Roman times were even present in the home pharmacies, sometimes only as medical plants. So they formed the ingredients used by the perfumers and the chemists to prepare medicines and/or cosmetics (Ciarallo 2001).

Aromatic plants and resins were put to soak in olive oil, the most precious obtained from olives which were still green, or in wine, sometimes even obtained from unripe branches of grapes, using working techniques which were as common in medicine as in cosmetics, so that very often the producer was the same.

The tradition to use alimentary plants for treating the diseases continued for a long time, in fact it was still alive in our grandparents’ popular medicine and sometimes it remained intact till our days: to fight against the disgust, for example, it is even nowadays a good advice to eat a slice of lemon or to drink a bay infusion (Ciarallo 2002a).

Even the products obtained from the animals were used, even if in smaller quantities, for different aims. For example, the fishes and the molluscs were used to treat several diseases: the parotitis was treated with the ash of murex, the malaria was treated with the liver of dolphin and so on.

Also the garum, the famous fish sauce which was obtained from the fermentation of the discarding parts of the bluefish in salt, was considered an useful medicine to heal the burns, the ulcers, the dog bites and above all those of crocodiles (sic!).

Moreover, in our popular traditions, the best tonic for youths was considered the cod-liver oil, until some decade ago. This mixture between food and medicine goes on in the primitive communities or in those which are too poor to buy the medicines.

In the ancient world the boundary between medicine and cosmetics merged: for example, the flower of garlands were considered sacral, if they were offered to the divinities, or therapeutic if they were used to treat head-ache or insomnia, anticipating in this way the modern concept of “aroma-therapy”.

The vegetable essences also entered the composition of unguents and perfumes, which were in
their turn used for cosmetic and therapeutic purposes. The preparing techniques and tools were essentially similar; a lot of them, as the mortars, were of everyday use, they were part of the “kitchen tools”, as crockery, pewter, glassware. One of the most fashionable therapeutic line of the period used the alimentation, above all to treat gastrointestinal diseases, and this complicated more the situation. One of the principles of the ancient medicine was the diet, in fact the Greek Hippocrates gave great attention to the use of porridge, mushs and decoctions, considering the barley flour the most efficient. Later Cato (234-139 B.C.) considered the cooked or uncooked cabbage, as compress or infuse added with other ingredients (Cato 2002), the way to treat the most diseases. In the I century A.C. Columella (Columella 1977) wanted to help the housewife, who had also the duty to prepare the domestic pharmacy, so he taught her how to prepare not diseases, scilla wine for the digestion and the stomach diseases, absinth, hyssop, southernwood, thyme, fennel and puleggio syrups, efficient for the cough, rosemary and myrtle wines for the dysentery (De re rustica, XII, 32-39). Pliny (Pliny 1938-1963; 1984), on the other hand, enumerated an infinite number of medicinal plants in which we can find the most aromatic plants, not only the oils for the unguents, but also the so-called “medical wines”: horehound wine for general internal use like Apicius (Apicius 1967) in his recipes, use in cooking: garlic, onion, celery, parsley, fennel, coriander, to mention only some of them. About other plants, in ancient times, they knew predominantly the pharmacological value as for rosemary, sage, lemon, peach and pomegranate. About the latter Pliny wrote (Naturalis historia, XXIII, 108): With the sour pomegranate, it called “stomatice”, very efficient against the affections of the mouth, nostrils…and about the peach, their pounded leaves, used as tampon stop the haemorrhages. The stones of peach, with oil and vinegar, are used as compress against the head-ache (ibid., 132). Apicius introduced, among his elaborate recipes intended for the delicate palates of the aristocracy, some intended to solve the problems of indigestion: the flavoured salts, for example, aid the digestion and loosen the stomach; they don’t permit the development of any disease, plague or fever of any kind, or the mash for the stomach, whose different version include the use of chards, scallions and celeries.

It’s just in the I century A.C. that a lot of alimentary plants lost their medicinal value, because they were supplanted by imported essences, but this happened for the higher social classes; the lower ones continued to use the so-called “popular” medicine and the common plants. In the I century A.C. the survey of the medicine, as it is presented in the classical texts, is very diversified: on one hand there is Columella’s practical medicine, who wanted to help the housewife to treat the workers and slaves, on the other hand there is Celso, the fashionable doctor, who prepared sophisticated medicines and made complicated operations, but this remained prerogative of the richer social classes. The first came from the Roman traditional medicine of Cato and used ingredients deriving from the autochthonous flora and fauna, calculating the measures by sight; the second used exotic essences, often in irrelevant quantities because of their cost, so that Pliny said with great irony: plasters, cataplasms, poultices, collirium, antidotes are not created by the divine mother, creator of the universe. The are produced in the laboratory, or better produced from the human.. The works of nature are already complete ad perfect, and only a few elements are chosen to be mixed in a justified way and not by chance: for example, the dried essences are mixed with some liquid to make them fluent, the liquid ones with solid materials to make them substantial. But combining and mixing the characteristics of the essences, measuring the quantities is an action the mankind do not by chance but by insolvency. (Naturalis historia, XXII, 117).

The introduction of technical expedients (or artifices), the use of exotic drugs, marked the passage
from the “popular” medicine, that considered the infusion of parts of animals, vegetables or minerals in oil or in wine, to obtain in the first case products for external use, and in the second case infuses and potions to drink for which Cato was the forerunner, to the “officinal” medicine, rich and bourgeois, for which Celso was the most important representative.

This difference lasted for centuries, causing the protraction of a popular medicine, spread above all in the countries, beside a formal medicine, that continued to use alimentary plants but smaller quantities and with a limited range of action. The tradition of medical wines still survives in 1800, as you can see, consulting the recipe book of that period, kept at the pharmacy of the abbey of Trisulti, and it was still long the list of alimentary plants for pharmaceutical use mentioned by M. Tenore (Tenore 1820), in “Essay on the medicinal characteristics of the Neopolitan flora” published in 1820. In this latter work divided in different classes according to the pharmaceutical effects, we can also find among the tonics: the sage and the fennel; among the astringents: the myrtle, the strawberry, the quince and the sorb; among the diffusive: the mint, the lemon-balm, the thyme, the savory, the rosemary, the mustard, the rocket and the rue; among the unblocker: the chervil; among the plants against scurvy: the radish, the cress and the reccurrent; among the emmenagogue: the lemon-balm, the mint, the origanum, the sage, the rue and the thyme; among the plants against the catarrh: the fig, the plum and the peach; among the diuretic: the asparagus, the onion, the garlic, the parsley, the lettuce, the celery, the radish; among the anthelmintic: the garlic; and among the emoliement: the oats, the wheat, the barley, the panic, the olive, the onion, the chard, the turnip, the quince, the almond, the lupine, the chickpes and the fig. It’s interesting remarking how, in the work of Tenore, there appeared some plants imported with the discovery of America: the coffee, the cacao, the paprika, the tomato. In their original communities they had a medicinal value, and it is with this purpose that they were spread in our country, too. It’s only some century later, in the second part of the 18th century, that first the coffee and the cacao, then the tomato and the paprika were introduced in our daily alimentation: this shows how the consideration of the alimentary plants as medicines is usual to every culture. It’s above all in the last two centuries that the habits changed, so a great part of the aromatic plants used some time ago, in cooking, in medicine and in cosmetics, nowadays are considered only flavouring, while others, like lemon and rosemary, peach and pomegranate passed from the pharmacy to the table. In some cases the formal pharmacopoeia recognized the great efficient of the active principles of some species, like for example the garlic o recently, of the pomegranate, while in the nutritional field, the “Mediterranean diet” is considered fundamental for preserving a good health. Beyond the scientific acknowledge and the persisting of popular traditions, we can notice that the fennel helps the digestion and a decoction of bay leaves and lemon rinds help us to recover better from a cold.
References


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