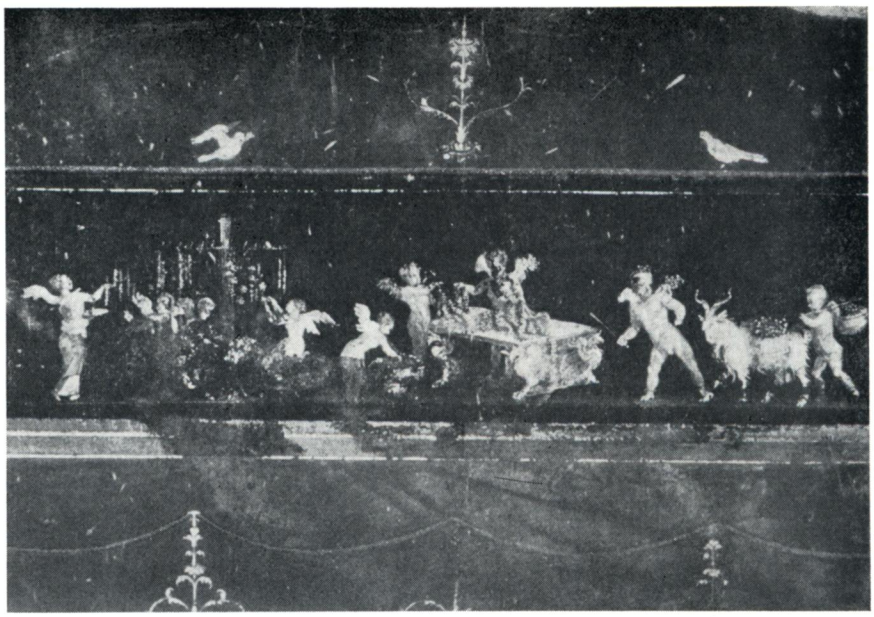


1. Flower dealers, from the House of the Vettii. At the right a gardener brings flowers to market on the back of a goat. A small boy trudges behind, his basket filled with flowers. Cupids make garlands which are displayed for sale on a wooden rack.

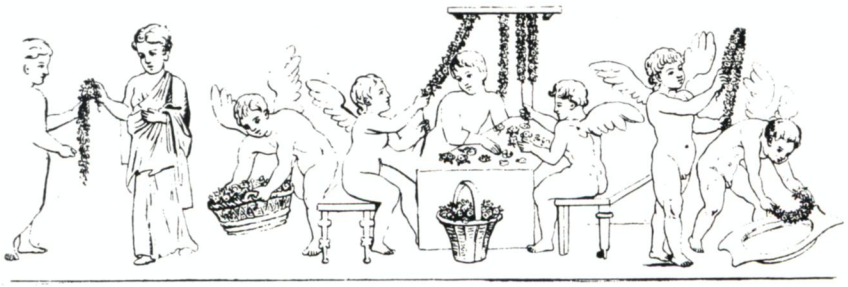
The Flower Industry at Pompeii

By WILHELMINA F. JASHEMSKI

FLOWERS PLAYED AN IMPORTANT PART in the life of the ancient Romans. They were much in demand for festivals, banquets, birthdays, weddings, games and funerals. A garland was the proper gift to honor not only the gods but also the living and the dead. Guests at dinner parties were presented with garlands, while at sacrifices priests, assistants, victims and altars were all decked with flowers. As a result, the cultivation and sale of flowers was an important business. Pompeii, which is slowly yielding the secrets of so many aspects of economic life in Roman times, has valuable information to offer on this subject.

Pompeii lies in the fertile volcanic plain of Campania, which was the center of flower cultivation in ancient Italy. Ancient writers speak extravagantly of the beauty of the Campanian plain, the fertility of its soil—it yielded as many as four crops a year—and the popularity and fragrance of its flowers. The geographer Strabo calls it "the most blest of all plains" (5.4.3). Pliny the Elder, who was stationed across the bay from Pompeii, rhapsodizes over the "blissful and heavenly loveliness" (*Natural History* 3.40) of Campania and speaks of its famed roses. Florus praises the flowers of Campania and calls it "the fairest of all regions, not only in Italy, but in the whole world" (*Epitome* 1.16.3).

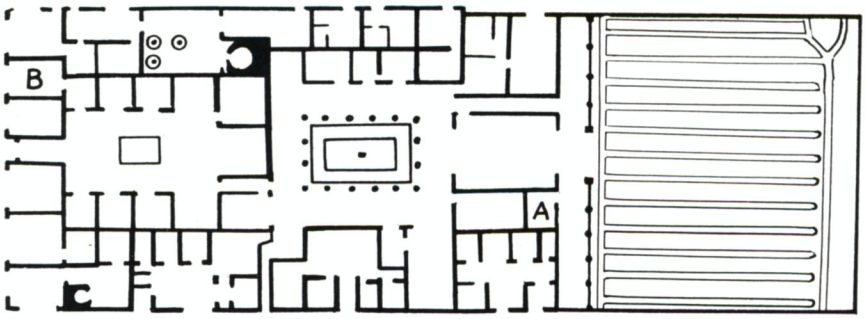
We can learn much about the economic life of Pompeii from its mural paintings. Some of those preserved in shops show scenes from daily life—the fuller treading clothes in a vat, the felter at work in his shop, weary travelers eating and drinking in a tavern, wine being delivered in large amphoras.



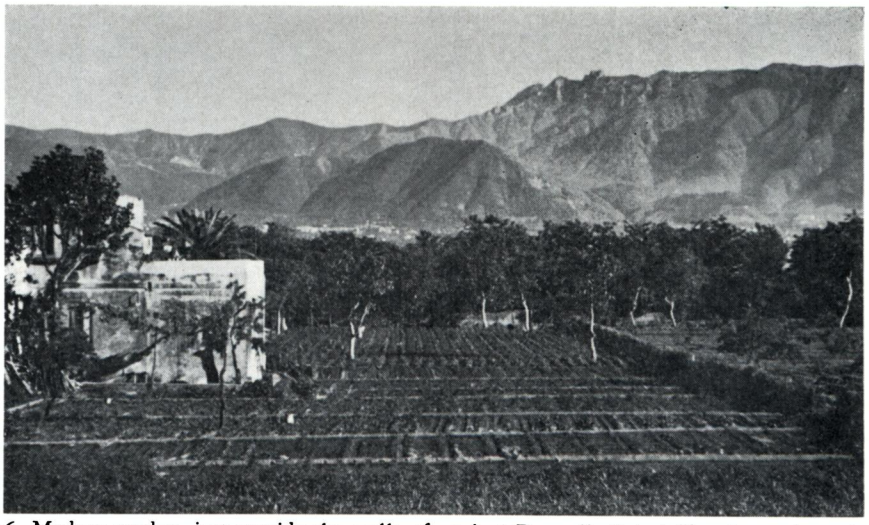
2. Flower dealers, from the House of the Calpurnii. This house, located near the Temple of Apollo to the west of the Forum, was excavated before the time of photographic records, but fortunately this drawing was made before the painting disappeared. *Archäologische Zeitung* 1873, plate 3, 2a.

3. The Vestalia, painting from the Macellum. Cupid bakers celebrate the festival of Vesta, patron goddess of bakers. Ovid, describing this festival, says: "Behold, the bread will hang from the neck of the wreathed donkeys and flowery garlands hide the rough mills" (*Fasti* 6.311-312). This picture is no longer in existence. Jahn, *Handwerks und Handelsverkehrs* (1868), plate VI.4.

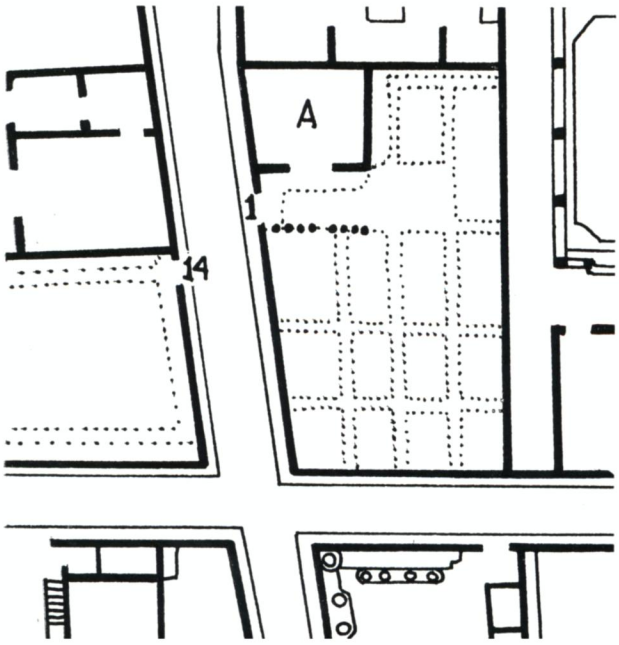
4. The Forum decorated with garlands on market day. The shoemaker and the food seller have set up portable stands. Twelve paintings of the Forum were removed from the villa of Julia Felix, which was excavated and reburied 1755-1757, re-excavated 1952-53. The pictures are in the Naples Museum. Jahn, *op. cit.*, plate II.2.



5. Plan of the house and garden of Pansa. Garden plots about eight feet wide are separated by paths used also as irrigation channels. The gardener, who probably occupied room **A,** may have sold produce from the large garden as well as from the owner's estates in the front shop **B,** connected with the house. Plan of house from *Corpus Inscriptionum Latinarum,* IV. Plan of garden from Mazois, *Les Ruines de Pompéi,* Vol. II, plate XLII.



6. Modern garden, just outside the walls of ancient Pompeii. It is laid out exactly as in the House of Pansa and as recommended by Pliny.



7. Plan of plant nursery, with plots and paths as recorded at the time of excavation. The gardener's quarters **(A)** are near the entrance **(1).** A row of broken amphoras in which seedlings were grown is near the entrance. The owner of the neighboring garden **(14)** had a source of plants near at hand. Plan from *CIL,* IV.

Flower Industry continued

Wealthy Pompeians, however, decorated their homes with more poetic representations, substituting Cupids and Psyches for the toiling workers. The historian Rostovtzeff believed that these wall paintings depicted the business in which the householders were engaged. The best known pictures of this type are those in the House of the Vettii, where various scenes illustrate the wine business, which the archaeologist Della Corte proved was an important source of income from farms owned by this family. It is likely that the Vettii also raised flowers commercially, for in addition to paintings of Psyches gathering flowers, there is a delightful picture of Cupids and Psyches as flower dealers (Figure 1). A similar painting was found in the House of the Calpurnii (Figure 2).

A thriving business in garlands and wreaths went on at Pompeii. Many wall paintings show garlands used as decorations in homes, shops (Figure 3), temples and even the Forum (Figure 4). The shrines of household gods were decorated with garlands three times each month. Many shrines have garlands painted on them. On one altar hooks for holding real flowers are still in place.

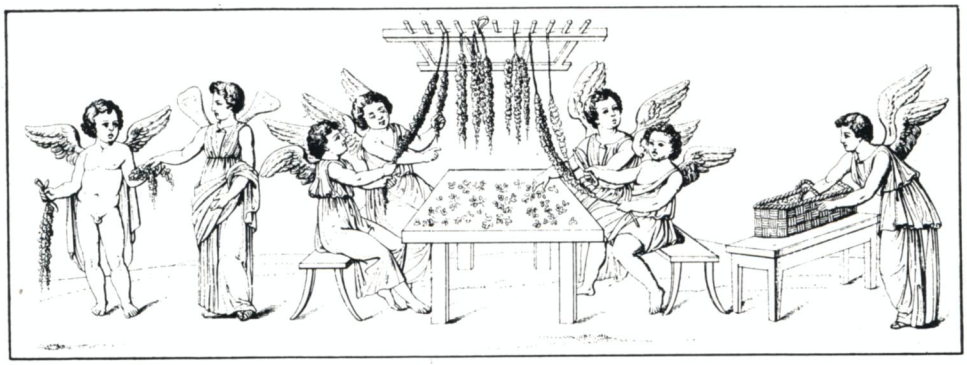
We can be fairly sure what kinds of flowers were used for garlands at Pompeii, since Pliny the Elder gives us an extensive description. In the twenty-first book of his *Natural History* Pliny tells a delightful story to explain how flowers came to be used in this way. At first branches of trees or leaves were used, then the custom of using flowers "began at Sicyon through the skill of Pausias, the painter, and of the garland-maker Glycera, a lady with whom he was very much in love. When he copied her works in his paintings, to egg him on she varied her designs, and there was a duel between Art and Nature."

According to Pliny, the Romans favored three kinds of flowers for garlands—the rose, the lily and the violet, in that order. The most famous roses were those of Campania and of Praeneste. Second only to the rose was the white, or madonna lily *(Lilium candidum)*. "Next in esteem come the violets, of which there are several kinds, the purple, the yellow, the white." According to Pliny, the purple violet was a wild variety, while the most highly esteemed cultivated violet was yellow. The Roman term *viola* included not only our violet but also the stock and gillyflower, and perhaps our viola.

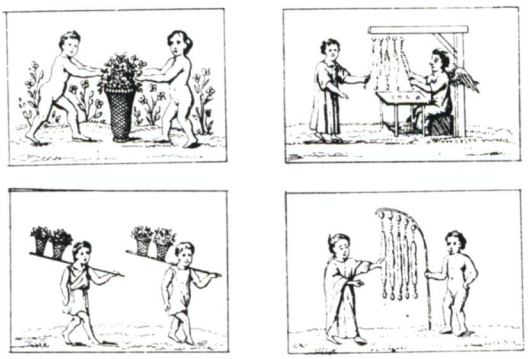
Among other flowers used to add variety to garlands, Pliny mentions the yellow blossoms of the *genista* or greenweed (*Genista tinctoria* or *pilosa*), a relative of the broom, which today covers the walls of Pompeii with masses of gold in the springtime. Oleanders *(Nerium oleander)*, still popular at Pompeii, were also used, as was the *cyanus* or bachelor's button *(Centaurea cyanus)*, the amaranth or cockscomb *(Celosia cristata)* and the cyclamen. There was also the *caltha* (perhaps the pot marigold, *Calendula officinalis*) and various meadow flowers that are difficult to identify.

Ivy garlands are painted on many Pompeian walls. Melilot was known as "Campanian garland" because the plants grown there had short and very fleshy leaves that made them highly desired for garlands. Wild marjoram, thyme, day-lily leaves *(hemerocalles)*, mint and other foliage added variety.

Garlands varied according to the season. At Pompeii violets were the first of the favored flowers to bloom, then roses which were so anxiously awaited that growers forced them by pouring warm water around the roots. Roses were still in bloom when lilies appeared. In August the amaranths came out and lasted until autumn. Although this flower was raised in



8. Flower dealers, from the Macellum. The presence of this painting in the market probably indicates that flowers were sold there. Jahn, *op. cit.*, plate VI.5.



9. Four pictures of flower dealers, found in 1704 on the ceiling of a burial chamber near the church of S. Stefano Rotondo, in Rome. Note the peddler who carries his garlands on a curved pole. Jahn, *op. cit.*, plate VI, 7, 8, 9, 10.

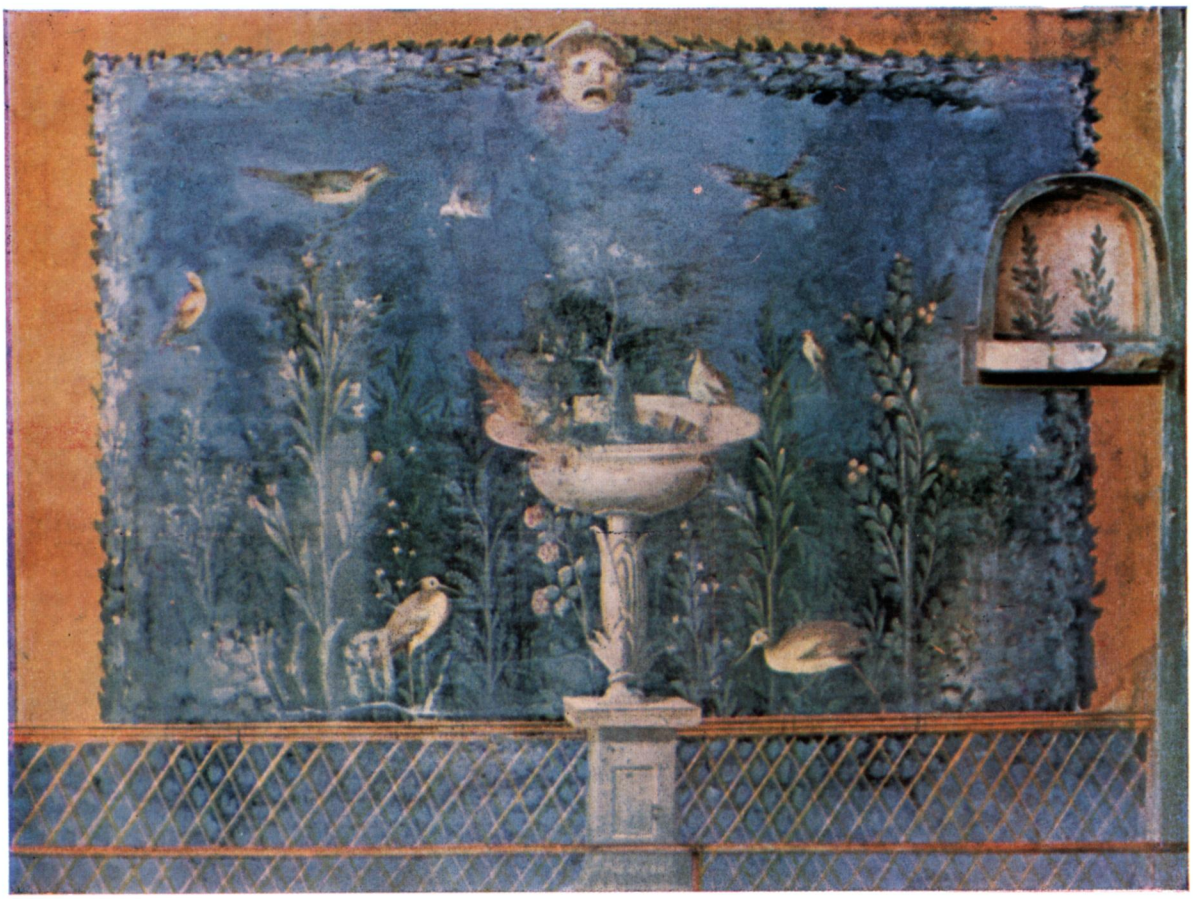
10. Lararium painting, from the House of the Centenary. Although the household shrines were decorated with fresh garlands three times each month, many had painted garlands as well. Here flowers and leaves appear to be stitched upon a band, perhaps the interior bark of the linden tree *(philyra)*. Horace preferred the plain myrtle garland, easily made at home, to the elegant product of the professional garland maker who sewed flowers on the *philyra*.

Flower Industry continued

Italy, those grown at Alexandria were especially prized because of their durability, and they may have been imported, for Pompeii had close commercial contacts with Egypt. Pliny says that the amaranth revived when moistened, which made it ideal for winter garlands. Artificial flowers made of dyed flakes of horn were used when fresh flowers were not available. Evergreen garlands were likewise popular in the winter, and *vicapervica* (periwinkle) was a favorite, as Pliny tells us.

THE QUESTION naturally arises as to where the flowers sold in Pompeii were raised. Flowers had long been a profitable side crop for farmers living near a city. As early as the second century B.C., Cato in his handbook on agriculture advises his readers that if their farm is "near a town, it is well to have a garden planted with all manner of vegetables, and all manner of flowers for garlands" (8.2). The erudite Varro suggests that "it is profitable near a city to have gardens on a large scale: for instance of violets and roses and many other products . . ." (1.16.3). Columella devotes an entire book of a sophisticated treatise on agriculture to the layout of the garden and various plants to be grown. He tells how the farmer piles his basket high with roses and *calthae* and returns from market "soaked with wine, with staggering gait, and pockets full of cash" (10. 309-310).

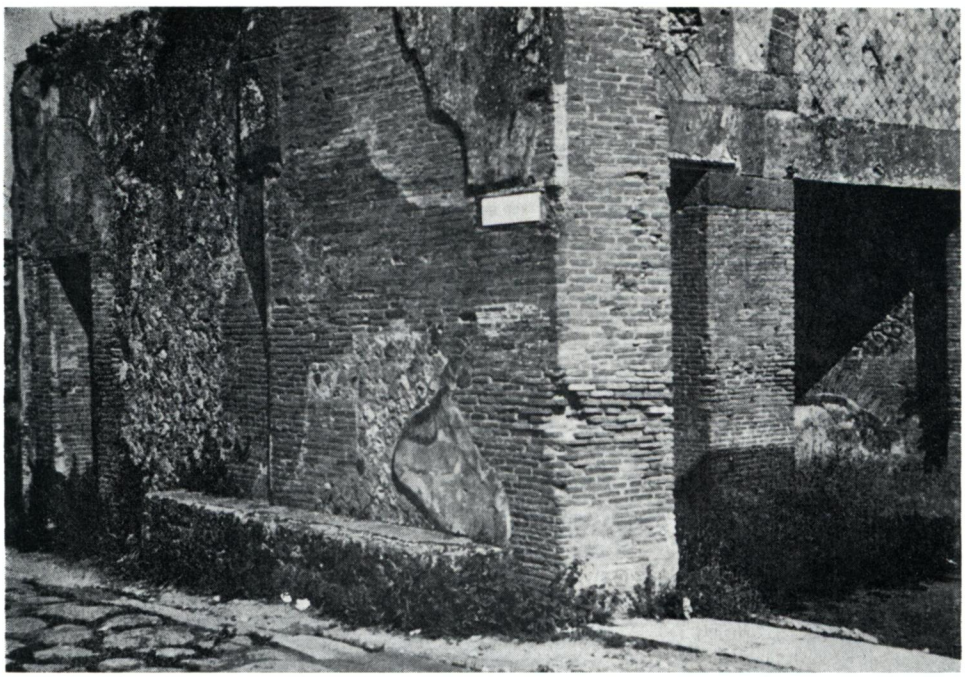
Some of the flowers sold at Pompeii were probably raised by the owners of rustic villas, while others were grown in small plots not connected with a villa. Some flowers were probably raised within the city itself, for many large homes had substantial gardens. For example, the House of Pansa, which covers most of an *insula,* or block, has a garden 87 x 100 feet which takes up almost a third of the *insula.* From an examination of this garden today, it is difficult to tell much about its original use, for almost since the time it was excavated (1813-1827) it has again been under cultivation. Fortunately, how-



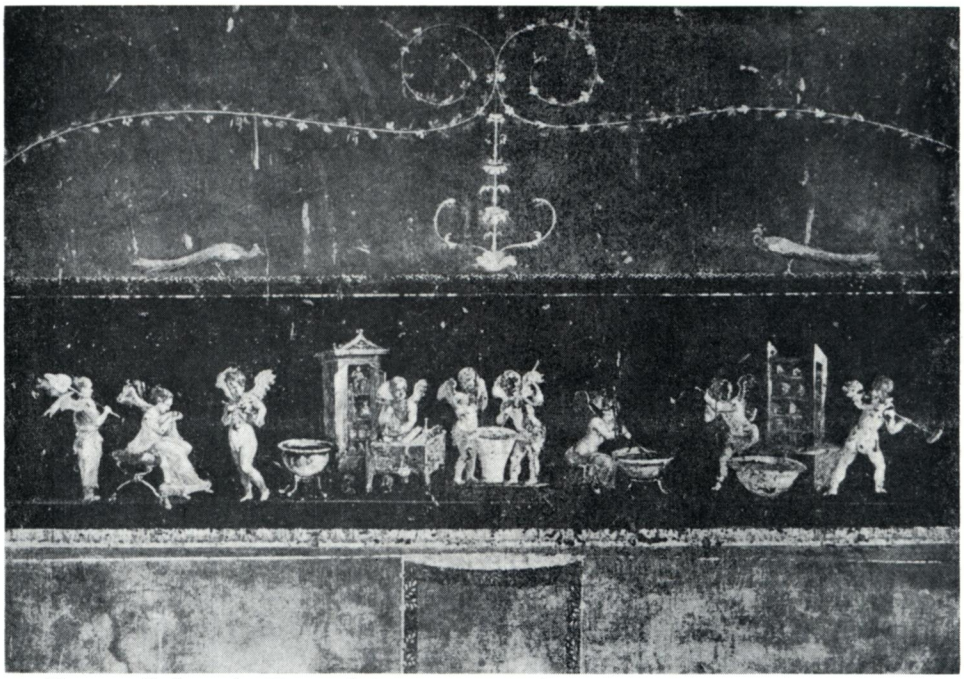
11. Garden painting, from House of Venus Marina (detail). Beyond a painted fence are pictured flowers, bushes and birds.

ever, the French scholar Mazois made a plan at the time of excavation (Figure 5) noting that the garden was systematically laid out in rectangular plots separated by paths which were used also as irrigation channels. The planting arrangement was clearly that of a produce garden and not a pleasure garden, although flowers would normally have been included. The layout is precisely that recommended by Pliny for a farmhouse garden (19.60). He gives directions for marking out the plots and bordering "these with sloping rounded banks, surrounding each plot with a furrowed path to afford access for a man and a channel for irrigation." According to Mazois' plan, the garden in the House of Pansa was laid out in plots about eight feet wide, exactly the same as in present-day gardens at Pompeii (Figure 6).

Even a plant nursery has been found in Pompeii. Located near the heart of the city, two blocks from the Forum and one short block off the busy Via dell'Abbondanza, the area of the nursery was divided into plots by furrows (Figure 7). Amphoras whose tops had been broken off were filled with soil and sunk into the ground, and in these seedlings were started. The gardener—whose humble quarters were at the edge of the plot—no doubt furnished plants to landscape the gardens which were such an important feature of Pompeian houses. The nursery occupied land that had been cleared after the earthquake of A.D. 62, which damaged or destroyed most of the buildings of Pompeii. Numerous vacant lots created by earthquake damage may have been converted profitably to flower or vegetable gardens.



12. Headquarters of the *unguentarii.* In one of the electoral notices put up by the perfumers, who were backing Modestus for aedile, they were joined by the *pauperes,* the beggars who sat on the bench beside the stairway—today a favorite resting place for weary tourists.



13. *Unguentarii,* from the House of the Vettii. Oil is being made on the press at the right. It is stirred as it is heated; other ingredients are added and the finished product is ready to be weighed and sold. A seated customer tests a sample on the back of her hand.

14. *Unguentarii,* from the House of the Calpurnii. A clerk rubs perfume on the back of the customer's hand, while a maid holding a money bag stands waiting for her mistress to make a selection. The drawing was made before the picture disappeared. *Archäologische Zeitung* 1873, plate 3, 2b.

Flower Industry continued

ONE WONDERS which of the numerous little shops throughout the city were flower shops. It is easy to detect a bakery, a fullery or a dye shop, while wares finished and unfinished betray the shop of the gem cutter, the marble sculptor, the furniture maker and the maker of tools. Since no wood is preserved at Pompeii, however, it is hard to identify a flower shop, whose distinguishing feature was the rack on which garlands were displayed. A painting on a wall of the Macellum showing Cupids and Psyches as flower dealers (Figure 8) indicates that garlands were probably sold in this large market. Some of the shops attached to grand houses may have sold garlands made of flowers produced at the owners' villas, and made by their slaves or freedmen. T. H. Dyer, writing on Pompeii at the end of the nineteenth century, noted that "the produce of the farms of the modern Italian nobles is still vended in the same way, in a small room, on the ground floor of their palaces."

From the wall paintings, too, we learn how a garland shop looked. Its furnishings were simple—a table and benches, and a rack on which to hang the finished garlands. In one painting a worker appears to be freshening a garland in a basin of water.

Garland sellers were probably among those who on market day set up portable stands in the Forum or on one of the main streets of Pompeii. Inscriptions from Rome refer to garlands sold in booths along the Sacred Way and to a candle and garland shop operated by two freedmen. In one of four pictures illustrating the flower business (Figure 9), a flower peddler is displaying his wares to a customer.

WE DO NOT KNOW EXACTLY how ancient garlands were made. Pliny dismisses this matter with the remark that he won't "put garlands together—for that would be mere trifling," that is to say, there is no point in giving directions for making garlands, because that is something his readers know well. He does say, however, that flower garlands were called *serta,* from the verb *serere,* to weave together or to plait, and he says that sometimes several kinds of flowers were woven together. This is a difficult passage to interpret, but it seems that strings or festoons of flowers were made into rings which were linked together, and the resulting chain then coiled or looped in an elaborate fashion. (Pliny, as he says, is not giving instructions!) Garlands were sometimes made by stitching together rose petals, while in other cases flowers or foliage were attached to bands (Figure 10).

The ancient garland was not unlike the Hawaiian lei, which originally had religious significance but today is offered as a gracious welcome to visitors, and these may throw light on the way ancient garlands were made. Some leis are made of single blossoms strung together; others are elaborately plaited. The open stalls of the lei sellers are also reminiscent of the Pompeian flower shops; passers-by can watch the Hawaiian girls plaiting the leis that they offer for sale, just as in Pompeii they may have stood and chatted with the garland makers.

For the appearance of ancient flowers we are fortunately not dependent upon literary description alone. The Pompeians decorated their walls with the same flowers that grew in their gardens, and the size of the garden was frequently extended by a painting on the garden wall (Figure 11). In these we see the ever-present oleander, as well as the rose, viola, myrtle, laurel, ivy and many other plants. In one unique ceiling painting individual lilies, bachelor buttons, roses and other flowers are scattered at random on a dark background.

CLOSELY ASSOCIATED WITH FLOWER CULTURE was the production of honey. Fortunately many of the

Flower Industry continued

flowers that were raised for garlands produced excellent honey, which was the only sweetening the Romans knew and which, as Pliny points out, was "a source of very great profit at slight expense" (21.41). Perhaps it is significant that an amphora of thyme honey was found in the House of the Calpurnii, a family that apparently engaged in the flower business.

Another aspect of the flower industry at Pompeii was the making of perfumes and unguents. The reputation of Campanian perfume, especially that of the rose, was widespread. Pliny says that the fields of Campania, after bearing three crops during the year, in the spring when "allowed to have a moment's repose . . . produce a rose with a sweeter scent than the garden rose . . . hence there is a common saying that the Campanians produce more perfumes than other countries do oil" (18.111). Elsewhere Pliny says "Egypt is of all countries in the world the best adapted for the production of unguents, but Campania with its abundance of roses runs it close." (13.26).

More is known about the perfume trade at Capua than elsewhere in Campania. Inscriptions from there record several *unguentarii* or *thurarii,* but none of them mentions a guild of perfumers.

Pompeii's perfume industry is not so well known, but there are two inscriptions (*CIL* IV.609; Della Corte, *Case ed abitanti di Pompei,* no. 340) which attest the presence of *unguentarii.* Both are election notices in which the *unguentarii* gave their support as a group to a specific candidate in the municipal elections. Della Corte made a careful study of the electoral notices painted on the walls of Pompeii and succeeded in locating the homes and places of business of many of its inhabitants. Since the electoral notices of the perfumers were painted on the outside wall of the Macellum, beside a stairway leading to second-story shops, Della Corte concluded that the headquarters of the guild of perfume manufacturers and sellers were in the two northern upstairs shops of this building, facing the Forum (Figure 12).

15. Perfume bottles *(unguentaria)* of blown glass which were found in the excavations at Pompeii.

With the exception of an otherwise unknown *unguentarius* named Phoebus (*CIL* IV.2184), no names of the individuals engaged in the perfume business are known at Pompeii, unless we assume with Rostovtzeff that the picture of perfume-making on the wall of the House of the Vettii (Figure 13) shows that they engaged in this business. Another such picture was found in the house of the Calpurnii (Figure 14).

Pliny gives the general recipe for making unguents. There are "two ingredients, the juice and the solid part, the former of which usually consists of various sorts of oil, and the latter of scented substances. . . . A sprinkle of salt serves to preserve the properties of the oil. . . . Resin or gum is added to retain the scent in the solid part, as it evaporates and disappears very quickly if these are not added." (13.7). There were many variations of this basic recipe. Pliny's recipe for rose perfume used as a base *omphacium,* an oil or juice made of unripe grapes or olives, which was preferred because it was less greasy than olive oil. To this rose blossoms, oil of roses and saffron blossoms, cinnabar, reed, honey, rush and wine were added. Other recipes used olive oil, the expensive balanos oil, made from the behen nut, and sweet almond oil.

According to Pliny (13.9), rose was the scent most widely used. One wonders if the iris pictured on many wall paintings at Pompeii was also raised for perfume. For this the root and not the blossom was used. Pliny mentions a laurel perfume in which lilies, marjoram, myrtle oil, oil of roses, olive oil and other ingredients were used.

In 1929 the careful examination of the subsoil in a shop excavated a century earlier yielded portions of an oil-press sufficient for reconstruction. One cannot help but wonder whether this press, found just a few doors from the headquarters of the perfumers, might not have been set up to furnish oil for them. The idea becomes more plausible when we realize that this is the only oil press thus far found in the city, and that oil presses are usually found near where olives are produced. It was cheaper to transport the oil than the olives.

The last step in the perfume business, the bottling and retailing of the product, is illustrated in both of the pictures with Cupids and Psyches. Pliny advises bottling perfume in alabaster or lead containers and storing it in the shade. We know, however, that glass containers were also used (Figure 15).

ANY DISCUSSION of the flower industry would be incomplete without mention of the extensive use of flowers in medicine. Again Pliny is our best source. He tells us that the rose was an important ingredient in many medicines, for example, in a salve for the eyes which was highly esteemed (21.15). Salvia, portulaca (purslane) and aster were among the plants raised for their medicinal value.

We do not know whether Pompeii exported flowers and their products, but we know that it did a thriving import and export business. Martial tells us that Campanian roses were popular at Rome, as was "Campanian garland." Pliny speaks of fashionable stitched crowns made from the leaves of foliage imported "from India or even beyond," and such luxuries may have been enjoyed by some of the wealthy Pompeians, for there is evidence that Pompeii had contacts with India.

In studying the ancient flower industry at Pompeii I discovered that an important flower industry exists in modern Pompeii as well. Vesuvius continually enriches the land: the last eruption (March 1944) sprinkled volcanic ash to a depth of almost twelve inches over the surrounding countryside. The rich soil yields at least three crops a year, as it did in antiquity, although irrigation is still necessary, and water is expensive. Cauliflowers are ready for the market by the end of January or February; the same plot may then be planted in potatoes, which mature in two and a half months. Finally, flowers are planted, and these mature in three or four months. Frequently land is sublet in smaller areas for the portion of the year when flowers are raised. Although many flower plots are five to ten acres in size, some are as small as a quarter of an acre. Flowers are also planted in orchards under the trees, just as they were in antiquity.

But the flowers that are grown in Pompeii today are neither for garlands nor for perfume; they are grown for seed. One company has a total of 250 acres under contract within a three to five-mile radius of Pompeii. Large seed companies with headquarters in France, England, Holland, Germany and Denmark have a total of one thousand acres of flowers under contract. Varieties grown with great success are the pansy, marigold, salvia, aster, portulaca and zinnia. Many of these flowers were known in less developed varieties by the ancient Romans. Among other flowers grown for seed at Pompeii, but in lesser amounts, are the amaranth and the bachelor button, whose humbler ancestors were favored by the Romans for garlands. The modern Pompeian is still finding the advice of Cato very sound—flowers can be a very profitable crop.

In antiquity, Campanian melilot and roses were exported throughout Italy. Today the market is wider, for the flower seed raised at Pompeii is planted throughout the world!

DR. JASHEMSKI studied at York College (B.A.), the University of Nebraska (M.A.) and the University of Chicago (Ph.D.), and she is now Associate Professor of Ancient History at the University of Maryland. Her research on Pompeian gardens was assisted by grants from the American Philosophical Society and the General Research Board of the University of Maryland. *Letters from Pompeii,* a book for young people which draws on her work at that ancient site, has just been published by Ginn and Company.

Photographs by Stanley A. Jashemski