

CHRONICA HORTICULTURAE

VOLUME 44 - NUMBER 4 - 2004

A PUBLICATION OF THE INTERNATIONAL SOCIETY FOR HORTICULTURAL SCIENCE



Symposia and Workshops

Rose Hip • Hazelnut • Plum and Prune Genetics, Breeding and Pomology •
Persimmon • Fire Blight

Horticultural Highlights

Horticultural Biotechnology: Challenges for Commercial Development •
Caravaggio's Fruit: A Mirror on Baroque Horticulture • Australian Ginger Industry •
Biodiversity of Tropical African Vegetables • Horticulture in Sri Lanka •
Horticultural Research in the French Agricultural Research Centre (CIRAD)



Caravaggio's Fruit: A Mirror on Baroque Horticulture

Jules Janick

The star of Caravaggio (1571-1610) as a master painter has never been higher. His innovative artistry is recognized as the bridge between the Mannerist style typified by Michelangelo Buonarroti, Agnolo Bronzino, and Titian of the High Renaissance, with the Baroque splendor of Rubens and Rembrandt. His paintings and persona have entered popular culture, his portrait and two of his works were featured on the 100,000 lire banknote of Italy and a movie has been made of his life. Interest in Caravaggio has been enhanced by four current books; three of them biographies: *Caravaggio* by John T. Spike (2001), *M: The Man Who Became Caravaggio* by Peter Robb (1998), *Caravaggio* by Catherine Puglisi (1998), and a recent work *Secret Knowledge* by David Hockney (2001), proposing Caravaggio's use of optical aids.

The life of Michelangelo Merisi, known to us as Caravaggio (Fig. 1), was short and intense, characterized by bouts of brawling, time in jail, banishment, and homicide. His paintings are typified by a dramatic manipulation of light

Figure 1. Michelangelo Merisi, known as Caravaggio from a pastel portrait by Ottavio Leoni.



Figure 2. Paintings by Caravaggio with incidental pictures of fruits; A. Boy Peeling Fruit; B. Self Portrait as Bacchus; C. Musicians; D. Boy Bitten by a Lizard; E. Lute Player; F. Conversion of Mary Magdalen.



(chiaroscuro); reliance on human models, many with multiple appearances in his paintings; by a blatant homoerotic content (see Posner, 1971; Robb, 1988); direct painting without preliminary drawings, a non-sentimental approach to religious art, and an eerie "photorealism" that extends to portraiture, various objects including musical instruments, scores, and plant material. Caravaggio has left few personal records by his own hand but the interpretations of his paintings by generations of art historians, combined with recently unearthed archival information, provides a rich

history of the man and his time. They include analysis of the paintings including style and technique, psychological insights into the artist and subjects in the case of portraits, historical analysis of the period based on patrons, and an analysis of religious meaning through the choice of subject matter and symbolism. This paper takes a different approach. The dazzling "super-realism" of Caravaggio and the concentration of fruit-images (equivalent to finding a cache of contemporary photographs!) are here used to analyze the horticultural information of the period.

THE PAINTINGS WITH FRUIT

Various fruits appear in at least 11 different paintings dated from 1592 to 1603 and definitely attributed to the Caravaggio. They include apple, cherry, citrus (flowers), cucumber, fig, gourd, grape, medlar, melon, pumpkin, peach, pear, plum, pomegranate, quince, and watermelon. Just as the figures in Caravaggio's paintings were painted from life, so too were the fruits. Exact in detail they include precise representations of disease symptoms, insect damage, and various abiotic defects. Fruits are scattered more or less incidentally in six early genre paintings (Fig. 2): *Boy Peeling Fruit*, 1592 (apple, fig, pear, peach, plum); *Self Portrait as Bacchus*, 1593 (peach, grape); *Musicians*, 1595 (grape); *Boy Bitten by a Lizard*, 1595 (cherry, apple); *Lute Player*, 1596 (cucumber, pear, fig); and *Conversion of Mary Magdalen*, 1595 (lemon flower). In five other paintings, an assemblage of fruits is a prominent part of the composition. These will be discussed in sequence, based on the dates of origin (see box), followed by a review of each of the fruits.

Boy with a Basket of Fruit (1592)

This early genre painting by Caravaggio (Fig. 3) is of a sensual young boy holding a huge basket filled with fruit. The model has been identified as Mario Minniti, who appears in many of the early works, and who became a painter in his own right. The basket, the main focus of the painting, contains a great many fruits, all in nearly perfect condition and including a bicolored peach with a bright red blush; four clusters of grapes, two black, one red, and one "white"; a ripe pomegranate split open, disgorging its red seeds; four figs, two of them dead-ripe and black, both split, and two light-colored; two medlars; three apples, two red,

one blushed and the other striped, and one yellow with a russet basin and a scar; two branches with small pears, one of them with five yellow fruits with a bright red cheek and the other, half-hidden, with small yellow, blushed fruits. There are also leaves showing various disorders: a prominent virescent grape leaf with fungal spots and another with a white insect egg mass resembling oblique banded leaf roller (*Choristoneura rosaceana*), and peach leaves with various spots. Incongruously, there are two sprigs with reddish foliage, perhaps mint. While the display of fruits is beautiful, it does not have the super-realism characteristic of some of the later paintings.

Bacchus (1597)

The arresting painting of a young, flushed Bacchus (Fig. 4) is one of the most famous by the artist. It displays a porcelain dish of ripe and rotting fruit, but the face and torso of the model, Mario Minniti, is the focal point. This work is characterized by a new sense of realism and represents a substantial change in style. The suggestion by both David Hockney (2001) and Robb (1998) of the use of a mirror or optical aids is supported by the fact that the goblet of red wine is in the left hand of the model. The fruits include black, red, and white clusters of grapes; a bursting pomegranate; figs; a large green pear; three apples, one greenish and one red with a codling moth (*Carpocapsa pomonella*) entrance hole, a small, golden russet crab with two areas of rot, likely a form of *Botrytisphaeria*; and a half-rotten quince. The basket contains two fig leaves both with a dorsal (abaxial) view and a grape leaf yellowing at the edge suggestive of potassium deficiency. The head of Bacchus is crowned with clusters of black and white grapes and senescing leaves, one of which is turning red, perhaps an indication of crown gall, induced by *Agrobacterium tumefaciens*.

Supper at Emmaus (1601)

Supper at Emmaus is an extraordinary work, painted when Caravaggio was 30 (Fig. 5). The scene depicts a miraculous post-Crucifixion event (Luke 24:30) involving the disciple Cleophas, the apostle Simon, an innkeeper, and a beardless stranger in the center (who has just been recognized as the risen Christ), blessing a repast consisting of bread, a chicken, white wine, water, and a marvelous basket of fruits seemingly hovering precariously over the edge of the table. The picture has some striking technical qualities. The use of perspective and foreshortening is startling: the seated Cleophas seems to move his chair and elbow into the observer's space. However, there is a disturbing perspective error (see Hockney, 2001) in which the distal right hand of Peter is larger than the proximal left one, suggestive of the use of some type of optical aid consistent with the exceptional realism of the painting. Combining separate

views may have caused the perspective problem. The figures are clearly portraits of particular people, and the fruit is not generic but represents unique samples, purchased from the market and forever preserved.

The fruits display an enormous amount of horticultural information. The beautifully painted wicker basket contains fall fruit, somewhat inappropriate for an Easter event, but providing a clue to the date when the picture was made. The fruits are fully ripe and drawn precisely from life with the imperfections one would find in an "organic" production system - no insecticides, no fungicides - but sorely needed. There are three clusters of unblemished grapes, two red and one white (golden) as well as grape leaves with fungal spots; three apples, two bicolored and one russet; a plum; and a quince with leaves attached to the spur; a ripe, splitting pomegranate with spots on the skin; and two small medlars. All of the apples show defects: one has a precise representation of a series of scab lesions caused by the fungal pathogen *Venturia inaequalis*, one has a wormhole (probably from a codling moth), and the russet apple shows a rotten spot, perhaps black rot. The pomegranate has spots on the skin, and the plum is overripe and splitting. The golden cluster of grapes is fully ripe and there is at least one split berry, while the black cluster is rather loose, suggesting poor pollination; the leaves show fungal spots. The large quince and the small medlars are blemish-free. The prominent position of the fruit bowl is arresting and contrasts with the upended chicken behind it with upright legs suggesting rigor mortis. Symbolism has been attributed to both the fruit and the chicken, but it is just as likely that Caravaggio was confidently showing off his extraordinary talent.

Still Life with a Basket of Fruit (1601)

This stunning still life (Fig. 6), with *trompe l'oeil* realism, consists entirely of a basket of fruit. Spike (2001) attributes it to 1596 while Puglisi (1998) assigns it 1601, the same year as *Supper at Emmaus*. The 1601 date seems more likely to me for a number of reasons, and I have assigned that date here. The fruit baskets in both *Supper at Emmaus* and *Still Life with a Basket of Fruit* are the same, both perched precariously on the edge of a table, but with a different collection of fruit (possibly excluding the quince) that appears almost identical in both paintings. (Could it be the same specimen?) We will never know for certain but I suggest this may have been a preparatory painting for the larger *Supper at Emmaus*. Perhaps pleased with the result, Caravaggio added it to the *Supper at Emmaus* as an afterthought. This basket contains a peach, a summer fruit, suggesting that this image was painted first. Six different fruits are visible. The uppermost fruit is a good-sized, light-red peach attached to a stem with wormholes in the leaf resembling damage by oriental fruit

Figure 3. Boy with a Basket of Fruit.



moth (*Orthosia hibisci*). Beneath it is a single bicolored apple, shown from a stem perspective with two insect entry holes, probably codling moth, one of which shows secondary rot at the edge; one blushed yellow pear with insect predations resembling damage by leaf roller (*Archips argyospita*); four figs, two white and two purple - the purple ones dead ripe and splitting along the sides, plus a large fig leaf with a prominent fungal scorch lesion resembling anthracnose (*Glomerella cingulata*); and a single unblemished quince with a leafy spur showing fungal spots. There are four clusters of grapes, black, red, golden, and white; the red cluster on the right shows several mummied fruit, while the two clusters on the left each show an overripe berry. There are two grape leaves, one severely desiccated and shriveled while the other contains spots and evidence of an egg mass. In the right part of the basket are two green figs and a ripe black one is nestled in the rear on the left. On the sides of the basket are two disembodied shoots: to the right is a grape shoot with two leaves, both showing severe insect predations resembling grasshopper feeding; to the left is a floating spur of quince or pear.

Still Life with Fruit on a Stone Ledge (1603)

This gorgeous painting (Fig. 7), a recent attribution, consists of a collection of tree fruits and cucurbits on a slab that resembles one in a startling 1602 religious work, the *Entombment of Christ*. There is a basket of fruits containing apple, grape, peach, pear, and plum, with two pomegranates. The basket resembles the ones in the 1601 paintings; Caravaggio uses his studio props over and over. The apple has wormholes; clearly blemish-free apples were rare. Eight figs (three light and five purple), two showing wounds of red flesh, are on fig leaves outside of the basket. Most prominent are nine large fruits in the right of the painting, which represent four different genera of the gourd family (Cucurbitaceae) as identified by Harry Paris (personal communication). There are three round striped melons (*Cucumis melo*) with yellowish flesh in the foreground, one of which is burst open and from which a slice has been cut. Two of these melons show thick unfurrowed peduncles and one shows the beginning of abscission or separation (slipping) from the fruit. To the right are three smooth dark fruit, one of which has been sliced revealing the red flesh of a watermelon (*Citrullus lanatus*). In the background is a large green and yellow striped fruit with a very thick furrowed stem that is clearly a pumpkin (*Cucurbita pepo*). Most unusual are two very large, serpentine bottle gourds (*Lagenaria siceraria*).

THE FRUITS

A total of at least 17 different fruits are depicted in the standard paintings attributed to

Figure 4. Bacchus.



Caravaggio, more if some questionable attributions are included (Fig. 8 and 9). Many are clearly different cultivars and a number show various biotic and abiotic defects. Viewed together, they represent a unique perspective on baroque horticulture between 1592 and 1603.

Apple (*Malus x domestica*)

There is great diversity in the apples painted by Caravaggio based on size, color, and presence of russet. Some of the apples resemble modern cultivars; they are attractive with red striping and yellow ground color. Insect and disease problems are clearly evident (Fig. 5B). Codling moth seems to be a severe problem and entry holes are evident in many of the fruits. Apple scab is shown in one fruit; the disease is still the bane of apple growers. Apples have a continuous tradition of representation in Italian paintings since ancient Roman times and clearly were and continue to be a favorite Italian fruit. Although there are a number of small-fruited, bitter species native to Europe, the domestic

apple was imported to Europe from central Asia in antiquity and was well known in ancient Rome.

Cherry (*Prunus avium*)

The painting *Boy Bitten by a Lizard* (1595) includes both black and light-red cherries. There is archeological evidence of the cherry in Europe 7000 years ago. Theophrastus was the first to describe the cherry and refers to it as *kerasus* after the town of Kerasun in ancient Pontus on the Black Sea. By Roman times, cherry was a common fruit described by Virgil (first century BCE) and Pliny the Elder (first century CE) but generally as a product of wild trees.

Citrus (*Citrus species*)

Citrus is represented in Caravaggio's *Conversion of Mary Magdalen* (1599). One of Caravaggio's popular models, a courtesan name Fillide Melandroni, born in 1581, is holding citrus blossoms close to her bosom, a symbol of bridal fidelity. The flower, based on pigmentation of the unopened buds, appears

Figure 5. A. Supper at Emmaus; B. Close-up of fruit basket.



A

to be lemon (F. Gmitter, personal communication).

In *Boy Peeling Fruit* (1592), the first picture conceded by all to be by the hand of Caravaggio (Fig. 1A), the fruit being peeled has been described by Gregori (1985) as either a pear, apple, or bergamot (*bergamotto* in Italian, *beramote* in French, a citrus hybrid involving sour orange and perhaps acid lime (Reuther et al., 1967) and whose rind oil is used as the base of cologne (*eau de cologne*) and for other perfumery products. However, this fruit is unlikely to be a bergamot, which is described as lemon yellow; furthermore, peeling it does not seem like a reasonable activity since the bergamot is inedible due to extreme acidity. A pear is most likely the fruit as stated by Giulio Mancini, a contemporary and friend of Caravaggio who wrote about the painting in 1617-1621. Bergamot is often pear-shaped and that may explain the confusion.

A painting of disputed attribution, *Still Life with Flowers, Fruits, and Vegetables* (Fig. 8) in the Galleria Borghese in Rome, contains a large citron (*Citron medica*) that looks very similar to citron painted by Bartolomeo Bimbi in the 18th century (Consiglio Nazionale Delle Ricerche, 1982) as well as an orange. The citron, the first citrus introduced to the West, was frequently used in Roman mosaics to represent the winter season (Parrish, 1994). The citron is considered a sacred tree to Jews who know the fruit as the etrog, still used for the celebration of Sukkot, the Feast of the Tabernacles. The orange is a late introduction to Europe, introduced in the Mediterranean basin by the Arabs.

Cucumber (*Cucumis sativus*)

A single cucumber peeks out of the painting *Lute Player* (1596) in Fig. 2E and is very simi-



B

lar in aspect to one found in an early still life sometimes attributed to Caravaggio (Fig. 8). The cucumber was long a favorite fruit in Roman antiquity. Pliny the Elder in the first century relates that the emperor Tiberius was so fond of out-of-season cucumbers that he forced its growth in a *specularium*, an early greenhouse using mirrorstone (mica).

Fig (*Ficus indica*)

Caravaggio is attracted to figs and displays them in five paintings. At least four different types are shown: green, light tan, reddish, and black. Black figs are often shown split at the suture. Most figs are shown unblemished but there is evidence of leaf damage by various insects. There were many cultivars of figs in Italy in the 17th century and Bartolomeo Bimbi (1648-1720), names and paints 33 of them in one painting (Consiglio Nazionale delle Ricerche, 1982). The figs painted by Caravaggio are similar to three figs 'Cosagnolo Lungo' (black), 'Lardaiolo vero' (white) and 'Corboliere Lunghi' (red), illustrated in an

undated manuscript by P.A. Micheli (1679-1713), the first director of the Botanical Garden of Florence. The fig is native to the Mediterranean area, mentioned in an Egyptian stele about 2700 BCE, commonly referred to in the Hebrew Bible, and widely cited by Greek and Roman agricultural writers.

Gourd (*Lagenaria siceraria*)

The two enormous, serpentine fruits in the 1603 still life (Fig 7) are bottle gourds native to Africa, but also found in Asia and the Americas. *Lagenaria* was known to the ancient Egyptians and probably reached Europe from Africa at a very early date. The Italians may have selected these long fruited types, bulbous at the styler end, and known today as *cucuzzi*. When very young they are consumed as is summer squash (*Cucurbita pepo*). This fruit was recorded in Europe in the 15th century,

and is famously represented in the festoons painted by Giovanni da Udina surrounding Raphael's frescos of Cupid and Psyche in the Villa Farnesina (1517-1519) (Janick, 2004).

Grape (*Vitis vinifera*)

Grape is found in six of Caravaggio's paintings in the form of fruit, leaves, and wine. Many cultivars are displayed and often in the same picture, with colors ranging from black to various shades of red, green, and amber. Most of the clusters are in excellent condition; defects include an overripe berry and mummies. Both red and white wine are displayed. The changing color of senescing leaves is featured along with insect damage; two leaves contain insect egg masses. Some leaves show evidence of nutritional deficiency symptoms. Grape has been cultivated in Italy since antiquity and is one of the most ancient of fruit crops.

Medlar (*Mespilus germanica*)

Medlars are included in two paintings of Caravaggio and all are small and appear similar. Cultivated by the Assyrians, the fruit was



Figure 6. Still Life of a Basket of Fruit.



introduced to Greece and was referred to by Theophrastus. The fruit is disappearing from most European markets but can still be found in Italy, Germany, and France. The medlar must be fermented (bled) to be enjoyed. Shakespeare ridiculed the fruit in a famous quote:

I'll graff it with you and then I shall graff it with a medlar; then it will be the earliest fruit i' the country; for you'll be rotten ere you be half ripe, and that's the right vertue of the medlar. (As You Like It, III.2).

Melon (*Cucumis melo*)

The three melons (*melone* in Italian) shown in the 1603 painting *Still Life with Fruit on a Stone Ledge* (Fig. 7) resemble heirloom cultivars of the *Cantalupensis* group (the rock melon or the true cantaloupe). These are rounded in shape and often have prominent ribs. 'Noir des Carme', named for the Carmelite monks who cultivated it in France, is similar in appearance although the flesh is a deeper orange than the one painted by Caravaggio. A photograph of 'Noir des Carme' in Amy Goldman's *Melons for the Passionate Grower* (2002) shows this melon bursting when ripe, as does the one painted by Caravaggio, and also shows the remains of an abscission zone in the peduncle. Robb (1998) misidentifies this fruit as marrow, which is a form of pumpkin (*Cucurbita pepo*) with a club rather than a round shape, but this designation is unlikely since the shape is round, and the peduncles lack the furrowing that is definitive for this species. In Caravaggio's painting the wrinkled peduncle is unusually thick, a feature not unknown in melons, but is not 5-ribbed as is *Cucurbita moschata* or *C. pepo*. The *Cantalupensis* group appears to originate in Central Asia and, according to Amy Goldman (2002), was taken by missionaries to the gardens at Cantalupo, the papal country home

near Rome from which it derives its name. It was known to be exported to France in 1495 and from there found its way to the rest of Europe. In Caravaggio's *Still Life with Fruit on a Stone Ledge*, two of the three melons are dark green and one is yellow, suggesting genetic segregation.

Peach (*Prunus persica*)

Caravaggio illustrates the peach in at least four paintings with a remarkable diversity in color. Insect damage, as well as brown rot incited by *Monilinia laxa*, was clearly a problem then as it is today. This fruit has been popular in Italy since antiquity and was introduced from China via Central Asia. The binomial *Prunus persica* suggests that it was introduced from Persia, obviously a way station. A painting from Pompeii shows large, green fruit with yellowing flesh and a freestone pit (Jashemski, 1979).

Pear (*Pyrus communis*)

Pears are found in six of Caravaggio's paintings. A great number of types are displayed including yellow, green, and red with size varying from small to very large. The small bright red ones in *Boy with a Basket of Fruit* resemble 'Moscadella' ('Moscatele') types described by Bimbi as well as the Micheli manuscript, and also resemble one of the pears in the famous painting by Vincenzo Campi entitled *Fruit Seller* (1580) as well as paintings by Giovanna Garzoni (Trkulja et al., 2000). There is evidence of leaf roller damage on one yellow pear. The soft-fleshed European pear (*Pyrus communis*), native in Europe, North Africa, and Asia Minor, has been considered part of the cultural heritage of Europe. The pear has been consumed since prehistoric times and dried slices have been unearthed in Swiss cave dwellings of the Ice Age. The first literary mention of the pear is found in Homer's epic poem *The Odyssey* and is included as one of the "gifts of the gods" which grew in the legendary gardens of Alcinoös. They are mentioned by Theophrastus and the Roman agricultural writers; Pliny the Elder writes extensively of pear, mentioning many types. The pear is found in a number of religious paintings of the Renaissance; the most famous is Giovanni Bellini's *Madonna of the Pear*. Pears still find a large place in Italian horticulture although the most popular pear grown in Italy is now a French cultivar called 'Abbé Fétel'.

Plum (*Prunus domestica*)

European plums are found in two paintings by Caravaggio. A greengage plum ('Reine-Claude') is one of the fruits in *Boy Peeling Fruit* (1592), and purple plums resembling 'Damson' are found in *Still Life with Fruit on a Ledge* (1601). European plums are thought to be a hybrid between *Prunus cerasifera* and *Prunus spinosa*, which originated in Iran and

Figure 7. Still Life with Fruit on a Stone Ledge.



Figure 8. Still Life with Flowers, Fruits and Vegetables, attribution.



Asia Minor and spread across Europe. They have been known in Europe since antiquity, and Pliny the Elder described 12 different plum cultivars in the first century. Greengage plums are still grown.

Pomegranate (*Punica granatum*)

A prominent crown-like calyx characterizes the pomegranate, sometimes known as the Chinese apple. This ancient fruit is a favorite subject of Caravaggio, who includes it in four paintings. All but one of these fruits are shown split open to highlight the seeds enclosed by brilliant red pulp. There are two skin colors, red and light brown. Pomegranate appears to have originated in Iran, with archeological remains found at Nimrud. It spread throughout the Mideast including Egypt where it was known 4000 years ago. It is referred to in the Hebrew Bible and was used for juice and wine. It is presumed to have been introduced into Europe by the Carthaginians, and this is the basis of its Latin name *Punicus*. It is described by Theophrastus; Pliny the Elder considered it one of the most valuable of fruits both for its beauty and medicinal properties.

Pumpkin (*Cucurbita pepo*)

Caravaggio has painted a single striped, ribbed pumpkin very similar to some kinds now grown in Europe and Asia. This fruit is known in the United States, depending on its shape, either as pumpkin (if fruits are round) or squash (non-round); as *citrouille* and *courge* in French; and *zucca* in Italian. Shakespeare about 1590 derogatorily compares the rotund Falstaff to this fruit:

We'll use this unwholesome humidity, this gross watery Pumpkin (Merry Wives of Windsor, III.3).

Cucurbita pepo is very polymorphic and various cultivated types have been selected (Paris 2001), including Halloween, pie, and oil-seed pumpkins, and scallop, acorn, vegetable mar-

row, crookneck, cocozelle, straightneck, and zucchini squash. Native to southern North America, the species was introduced into Europe in the early 1500s and was rapidly commercialized. The German botanist Fuchs included images of the pumpkin in *De Historia Stirpium* (1542) and by 1566, ribbed fruits appear in a market scene painting (*Markttafereel op het Land*) by Joachim Beuckelaer.

Quince (*Cydonia oblonga*)

Quince was clearly familiar to Caravaggio, for he paints it at least three times, and each time as a relatively large fruit as it is known today. In two paintings the fruits are unblemished, although in one example, the leaves show

spots, and in another the fruits are half rotten. The quince, native to western Asia, is an ancient fruit known in Mesopotamian cultures. The name *cydonia* is derived from Cydonea, now Canea (Khaniá), a city in Crete, which, according to Pliny the Elder, was the origin of quince. Although once widely admired, quince has lost popularity, probably because they are acid and astringent, thereby restricting their use to preserves, but there are types grown in Turkey that are nonacid and can be consumed fresh.

Watermelon (*Citrullus lanatus*)

Three luscious watermelons, called *cocomero* in Italian, are illustrated in the 1603 still life. Of African origin, watermelon has been known since antiquity and is mentioned in the Hebrew Bible (Numbers 11:5). It was introduced to India about 800 and to China about 1100. The Arabs brought it to Spain, from which it reached Italy; it is mentioned in European herbals of the 1500s. Watermelons became popular subjects in 17th-century still lifes.

FRUITS AS METAPHOR

There are many ways to interpret the fruits images of Caravaggio. Artistically they can be viewed for their beauty or for the painter's skill or style. Art historians are prone to interpret them symbolically including religious, philosophical, or erotic overtones. Horticulturally they can be viewed in the context of genetic diversity, biotic associations, or management practices. That these interpretations are not mutually exclusive, can be shown in an analysis of the painting *Still Life with Fruits on a*

Figure 9. Still Life with Flowers and Fruits, attribution.



Stone Ledge (Fig. 7). Artistically and horticulturally this painting represents a stunning array of temperate fruits and cucurbits brilliantly depicted. Art historians have been quick to interpret both religious and erotic overtones. Thus, J.T. Spike (2001) assumes the stone ledge is an altar table, seeing the pomegranates as a Christian symbol of the resurrection, associating the grape and vine leaves with the Eucharist, the apples as a symbol of original sin, and the wormholes and other blemishes as symbols of the transience of human life. At the same time he notes that the painting abounds with visual puns of erotic content, a view shared by Peter Robb (1998) and Catherine Puglisi (1998). I was skeptical, but an analysis of a vast literature on the erotic imagery of fruit paintings by Renaissance artists (see Vasari, 1550 on Giovanni da Udina; Morel, 1985; Von Lates, 1995; Janick, 2004) leaves no doubt that Caravaggio has used subtle erotic double entendres in this painting.

I also suggest that the fruits pictured by Caravaggio might be of help in authenticating the attribution of two disputed works; *Still Life with Flowers, Fruits, and Vegetables* (Fig. 8) and *Still Life with Flowers and Fruits* (Fig. 9). These two paintings had been in the collection of Giuseppi Cesari (Cavaliere d'Arpino), 1568-1640, who employed the young Caravaggio to paint flowers and fruits. Whether they are by Caravaggio alone, or by a team including Caravaggio, has been debated, but the suggestion of collaboration for a studio commission is not beyond the pale, despite some compositional and style differences from his known fruit paintings. The inclusion of apple, cherry, cucumber, fig, gourd, grape, lemon, medlar, melon, peach, pear, plum, pomegranate, pumpkin, and quince is consistent with Caravaggio's later works; included here are also arbutus, citron, hazelnut, orange, strawberry, walnuts as well as vegetables such as artichoke, bean, cabbage, cardoon, celery, eggplant, onion, parsnip, and tomato. Melon, pumpkin, and gourd are found in both *Still Life of Flowers, Fruits, and Vegetables* (Fig. 8), and *Still Life with Fruits on a Stone Ledge* (Fig. 7). Interestingly a partial representation of a cucumber (Fig. 8) is almost identical to, but a mirror image of, the one found in *The Lute Player* (Fig. 2E). In my opinion, these and other similarities such as the ubiquitous basket and the vases of flowers support the assumption that the young Caravaggio had a hand in these paintings, for they presage his later work.

Caravaggio's images of fruits tell us much about baroque horticulture. They underscore the rich diversity of fruits available in the fruit markets of Rome and the genetic diversity within individual species, especially noted for apples, pears, and peaches. They demonstrate that diseases and pests were a problem then as they are now, describing a horticulture in

desperate need of pest control. The most startling fact is that the fruits of 1600 surely looked as luscious as these same fruits do at present, 400 years later. Their similarity to present day cultivars suggests in many cases there have been only trivial changes in the last 400 years, and in some cases 2000 years.

REFERENCES

- Consiglio Nazionale Delle Ricerche. 1982. Agrumi, Frutta e uve nella Firenze di Bartolomeo Bimbi Pittore Mediceo. Edizione Fuori Commercio, F.&B. Parretti Grafiche, Florence, Italy.
- Goldman, A. 2002. Melons for the Passionate Grower. Artisan, New York.
- Gregori, M. 1985. Caravaggio today. p.200-202. In: The Age of Caravaggio, Metropolitan Museum of Art, New York.
- Hockney, D. 2001. Secret Knowledge: Discovering the Lost Techniques of the Old Masters. Viking Studio, New York.
- Janick, J. 2004. Erotic use of *Lagenaria* in Renaissance art. Cucurbit Network News 11(2):7.
- Jashemski, W.F. 1979. The Gardens of Pompeii: Herculaneum and the Villas Destroyed by Vesuvius. Carfatzas Brothers, New Rochelle, New York.
- Morel, Philippe. 1985. Priape á la Renaissance. Les guirlandes de Giovanni da Udine á la Farnésine. Revue de L'Art 69:13-28.
- Paris, H. 2001. History of the cultivar-groups of *Cucurbita pepo*. Hort. Rev. 25:71-170.
- Parrish, D. 1994. Variations in the iconography of the winter season in Roman mosaics. p.45-56. In: La Mosaïque Greco-Romaine, IV, Paris, pls. XIII-XIV.
- Posner, D. 1971. Caravaggio's homo-erotic early works. The Art Quarterly. (Autumn). p.301-355.
- Puglisi, C. 1998. Caravaggio. Phaidon Press, London.
- Reuther, W., Batchelor, L.D. and Webber, H.J. (eds.). 1967. The Citrus Industry. Vol. 1. Rev. ed. University of California, Berkeley.
- Robb, P. 1998. M: The Man Who Became Caravaggio. Duffy & Snellgrove, Sydney, Australia.
- Spike, J.T. 2001. Caravaggio. Abbeville Press Publishers, New York.
- Trkulja, M., Fumagalli, W. and Fumagalli, E. 2000. Still Lifes: Giovanna Garzoni. Bibliotheque de l'Image, Paris.
- Vasari, Giorgio. 1550, 1568. Giovanni da Udine, Painter (1494-1564). In: The Lives of the Most Excellent Painters Sculptors and Architects, Florence.
- Von Lates. 1995. Caravaggio's peaches and academic puns. Word & Image 11(1)55-60.

PAINTINGS BY CARAVAGGIO

[Dates Based by Puglisi (1998) or Spike (2001)]

- Boy Peeling Fruit*, 1592. Philips, London
- Boy with a Basket of Fruit*, 1593. Galleria Borghese, Rome
- Self-Portrait as Bacchus*, 1593. Galleria Borghese, Rome
- Musicians*, 1595. Metropolitan Museum of Art, New York
- Boy Bitten by a Lizard*, 1595. National Gallery, London
- Lute Player*, 1596. Hermitage, Saint Petersburg
- Bacchus*, 1597. Galleria degli Uffizi, Florence
- Conversion of Mary Magdalen*, 1599. Detroit Institute of Arts, Detroit
- Supper at Enmaus*, 1601. National Gallery, London
- Still Life of a Basket of Fruit*, 1601. Pinacoteca Ambrosiana, Milan
- Entombment*, 1602. Pinacoteca Vaticana, Vatican City
- Still Life with Fruit on a Stone Ledge*, 1603. Private collection

ABOUT THE AUTHOR



Jules Janick

Prof. Jules Janick
James Troop Distinguished Professor of Horticulture at Purdue University, West Lafayette, Indiana, USA is a Board Member of ISHS and Director of ISHS Publications.
email: janick@purdue.edu