The Sycamore Grove, Revisited

by Catherine Hatinguais

... underneath the grove of sycamore that westward rooteth from the city's side, so early walking did I see your son.

(Romeo and Juliet 1.1.119-121)

Now the trees are in separated stands, the ancient grove cut and hacked away by boulevards and crossings, by building blocks and all the ruthless quirks of urbanization. But the descendants of Romeo's woodland are still growing where they grew in Romeo's day. Rejoined in the mind's eye, erasing the modern incursions, those stands form again the grove that once, four and far more centuries ago was the great green refuge of a young man sick with love. (Roe, 10)

group of Oxfordians and assorted Shakespeare enthusiasts went to Italy in June 2016 to see the cities, palaces and artworks that, judging from his Italian plays, we can be fairly sure the playwright had to have seen with his own eyes. For this pilgrimage of sorts, we followed in the footsteps of Richard Paul Roe, taking his book as a guide. It was a wonderful trip, which left us both dazzled and hungry for more, but all our visits didn't quite turn out as expected.

During our visit to Verona, our bus stopped briefly near Porta Palio to allow us to see Romeo's sycamore grove. I asked our Italian guide – just to be sure – if those trees that we glimpsed through the bus windows were indeed the famous sycamore trees. She answered bluntly and without hesitation: "No, those are plane trees. Sycamores are a different species." Once I recovered from my surprise, I started thinking this question was worth investigating further. Are there really two different tree species, each with its own unique name? Or is there only one species of tree, but with two different names depending, say, on the region or the era? Such cases of terminological confusion are very frequent in botany when one deals with vernacular – as opposed to scientific – names. To get to the root of this problem, we first had to get to the leaves. So, after a somewhat shortened lunch, Julia Cleave, Susana Maggi, and I went back to Porta Palio to gather some evidence. Little did I know how far this modest inquiry would lead.

Verona's Fortifications

From Verona's Castel Vecchio, in the old city center, if you walk almost due west – a five-minute stroll on Stradone Porta Palio in the cool shade of the horse-chestnut trees which line the avenue – you will reach the famous Renaissance gate Porta Palio, built between 1550 and 1561 by the Venetian military architect Sanmicheli.

Porta Palio is part of a string of gates, angled bastions, and low ramparts built by Verona's Venetian rulers between 1531 and 1561, that follow the trace of the previous medieval wall, the old 'Scaligera wall' dating from the 14th century which ran from Porta Catena to Bastione San Francesco and guarded the western and southern side of the old city (Gray 7-13). Such high but thin medieval walls had been shown to be ill-suited to withstand the new siege cannons of Charles VIII of France when he invaded Italy in 1494. In response, Renaissance architects, inspired by Roman, Byzantine, and Ottoman practices (Vigus 4, 13), redesigned their fortifications and adapted their military works to the new reality of gunpowder artillery.

Verona's Renaissance fortifications were destroyed by Napoleon in 1802. Starting in 1833, the Austrians, Verona's rulers at the time, reused the materials left in the rubble to repair the walls and enlarge the bastions, adapting them to 19th century artillery, while still following the same trace as the Renaissance walls (Gray 14). In other words, the Verona fortifications you see today go back only two centuries, but they run along the same line as the medieval Scaligera wall and its Renaissance successor.

Verona's Trees, Then and Now

There is a map of Verona published (1581-1588) as part of the popular atlas of European and world cities, Civitates Orbis Terrarum, showing the 16th century walls. It is hard to know how accurate or up-to-date the maps included in this atlas were (Krogt 12). In particular, the map of Verona shows the Porta Nuova (built in 1531) in its distinctive Renaissance style, topped with the winged lion of Venice, but shows

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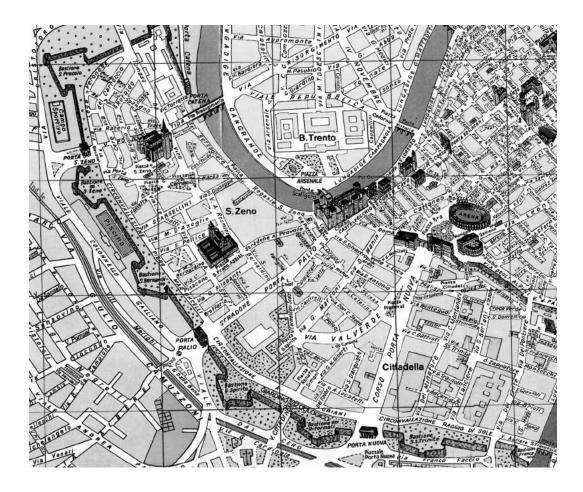
stretches of the medieval 'enceinte,' or curtain wall, crenellated and unchanged and the other 'portas' facing west – Porta Palio and Porta San Zeno – as high and square medieval towers with arched gates. These are not the lower Renaissance structures that Sanmicheli designed and that are still seen today. It is therefore possible that the source drawings on which the map was based were actually made at least three decades earlier, i.e. sometime between 1531 and 1550, and those source drawings reflect the fortifications in a transitional or hybrid state, before Sanmicheli's innovations were fully implemented and the work completed.

Whatever the case may be, the map is interesting as it also shows the countryside to the west and south of the walls. Open fields and roads are clearly seen but hardly any trees, let alone woods. It would have made little sense from a military standpoint to allow trees to grow right outside defensive ramparts, as they would obstruct the view and protect attacking forces from detection by the city's defenders and from projectiles. The immediate surroundings of a fortified city, especially the moats and glacis, were cleared of anything that could give cover to the attackers against the defenders' musket fire. Farther out, it was important that there be nothing within the range of cannon shot that enemies could use to conceal themselves (no hills, valleys or buildings), in order to ensure that a stronghold could 'command the country' (Vigus, 17).

Today, Porta Palio stands at the center of a traffic roundabout and is one of the main access points to the old city. On either side of the Renaissance gate, the sloping ground still rises to the top of the old ring of fortifications, which are remnants of the earthen banks that abutted and reinforced the defensive walls. Outside this narrow green belt of urban park, called Parco delle Mura e dei Forti, with its footpaths, benches and ornamental trees, lies a series of wide boulevards and beyond, modern Verona. (See map on following page.) In particular, the modern Viale Colonnello Galiano, along which Roe imagined the surviving stands of trees were growing, runs precisely where the Renaissance fortifications' moat and glacis were located.

The mounds themselves are planted with a variety of bushes and trees, among them, linden trees, cypresses, cedars and pines, while both the inner ring road ('circonvallazione') and the outer boulevards ('viale') running roughly parallel on either side of the old fortifications, are lined almost exclusively with plane trees. Most of these planes are young – a few still have their planting supports – while some are clearly older, perhaps as much as two centuries old.

These are not the gnarled and besieged survivors of an ancient grove which was reduced by urbanization but who are, centuries later, still defiantly holding out, huddled together near Porta Palio in discernible "separated stands" (Roe 10). No, these trees that line the neighborhood streets and protect passers-by from the beating sun were planted at different times over the last century or two, as Verona expanded and municipal authorities beautified its streets. And there is no substantial ancestor grove visible on that old 1580s map. Something is therefore amiss in Roe's picture.



There is also uncertainty about the actual identity of the trees mentioned by Shakespeare in the 16th century and Roe in the 21st.

A Botanical Exploration

Let us assume for now that there was indeed in the late 16th century a small grove of trees growing in the general direction of Porta Palio or Porta San Zeno, the other gate on the western side of the city, not right against the fortifications but perhaps farther out into the countryside, and that Shakespeare did refer to it in *Romeo and Juliet*. Couldn't the trees that we see today be at least individual descendants of that now-disappeared grove, as Roe also suggests in the opening quote?

Investigating that question will have us diving into a terminological thicket, unfortunately common in botanical vernacular nomenclature (Pavord 31, 42). Let's start with our cast of botanical characters. (See illustration 1, third page following.)

Platanus orientalis (Linnaeus, 1753). Variant: P. vulgaris. Platanus (Gerard, Johnson)

English: Oriental plane tree, chenar

Other languages: Platanus (Lat.); platano orientale (It.); plátano oriental (Sp.); platane d'Orient, plane (Fr.); chinar, chenar (Pers.).

Native Range: Balkans & Anatolia to Northern Iran and as far as India.

Introductions and cultural history: Frequently used in Persian gardens; planted as a shade tree in ancient Greek cities and venerated for its size, shade (Pavord 67) and a longevity measured in centuries. Introduced by the Romans to Sicily around the 4th century BCE, then to Italy and Gaul. Prized in private gardens, country estates and avenues and praised by Pliny, Martial and Vitruvius (Bowe 46).

Introduced in England as an ornamental tree by the mid 16th century (Pokorný 112; Knight 97) at the latest, and possibly earlier in medieval times (Thomas and Faircloth 266) but it did not naturalize there and remained rare (Pavord 254). In wider cultivation since the 17th century.

Gerard praises it for its shade in his *Herball*; he notes that the tree is 'strange' in Italy (i.e., non-native), is nowhere seen in Germany and the Low Countries, but is plentiful in Asia and Crete (1304). He mentions a "fine plane tree in my Lord Treasurer's garden at the Strand" (Pavord 340).

In 1633, Johnson writes in his revision of Gerard's *Herball* (Johnson 1489) that "there are one or two young ones at this time growing with Mr Tradescant" (the botanist and gardener).

Its tenderness to frost makes it ill-adapted to northern climates, but it is cultivated in temperate regions and is still common in Mediterranean countries.

Habitat: Riverbanks, beside willows, alders and poplars; tolerates dry soils once established.

Botanical description: Tender. Three to six spherical fruit heads, rarely two. Palmate leaves, alternate, deeply lobed, coarsely toothed; 5-7 lobes, lobe longer than wide. The species is highly variable in leaf shape, branching pattern and bark formation.

Platanus occidentalis (Linnaeus, 1753)

English: American sycamore (US), American plane tree, occidental plane, buttonwood

Other languages: platano occidentale, platano americano (It.); plátano occidental, plátano de Virginia, sicómoro americano (Sp.); platane d'Occident (Fr.).

Native Range: Eastern US (Ontario & Maine to Florida & Texas).

Introductions and cultural history: Introduced to England in 1636 by botanist J. Tradescant (David H.). It does not grow well in Britain and failed to naturalize in Europe (More & White, 453); today it has almost disappeared from the Old World.

In North America, used in park landscaping and for furniture. English settlers in America followed a long tradition (Pavord 39) when they chose for this newly encountered tree the vernacular name *sycamore* to signal that its leaves resembled those of the European sycamore maple they remembered from the old country.

Habitat: Riverbanks, wetlands, wastelands.

Botanical description: Tender. One fruit head, rarely two. Alternate leaves, with 3-5 shallow lobes; lobes wider than long.

<u>Platanus x acerifolia</u> (Wildenow, 1805). Variants: P. hybrida, P. hispanica, P. intermedia

English: common or London plane

Other languages: platano comune (It.); plátano de sombra (Sp.); platane commun, platane à feuilles d'érable (Fr.).

Native Range: Fertile and hardy hybrid of *P. orientalis* and *P. occidentalis*. Long disputed, this hybridization has recently been confirmed by DNA analysis (Gibson). The two parents didn't come together in England until 1636 at the earliest. The hybridization event, alternatively located in Spain, Southern France or England depending on the author, was probably spontaneous, and had occurred by 1663 when the new hybrid was first recorded in England (More & White, 451). Propagated at the Oxford Botanic Garden about 1670 (Campanella; Mabey, 57).

Introductions and cultural history: Since the 19th century, it is the dominant tree in the streets of London, Paris, Rome, and in many European cities (Campanella), as well as in towns and along roads and canals in Southern France; now planted worldwide.

In Europe it interbreeds freely with *P. orientalis* so that there is a continuous gradation of traits from the hybrid plane to the true Oriental plane.

Similarly, in the US, it can back-cross with its parent species, *P. occidentalis*, which gives rise to a range of mixed characteristics (David H.).

Habitat: Cities and towns. It is highly tolerant of air pollution, drought and compacted soil. Rarely escapes to the wild.

Botanical description: Hardy. Palmate leaves, broader than long, with five shallow lobes (rarely 3 or 7), scalloped with broad teeth. Two fruit heads, rarely three.

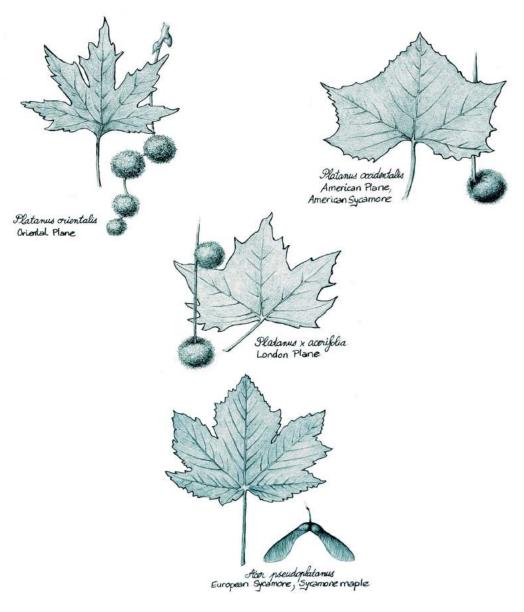


Illustration 1

<u>Acer pseudoplatanus</u>. Linnaeus (1753); Variants: Acer maior (Gerard), Acer maius (Johnson)

English: sycamore (UK); sycamore maple (US); European sycamore maple

Variants: false plane tree, great maple, Scottish maple, mount maple, mock-plane, plane-tree maple, Celtic maple.

Other languages: arce blanco, falso plátano, arce sicómoro (Sp.); acero di monte, acero montano, sicomoro (It.); grand érable, érable sycomore, faux platane, érable plane (Fr.).

Native Range: mountain ranges in Central and Southern Europe (Pyrenees, Alps, Carpathians).

Introductions and cultural history: possibly introduced initially to Great Britain by the Celts. Its presence was recorded in England as early as 1280 (More & White, 633; Mabey, 265).

In his *Herball*, Gerard praises *Acer maior* for its shade. He notes that it is "a stranger in England and only it growth in the walkes and places of pleasure of noblemen where it especially is planted for the shadowe sake and under the name sycomore tree."

Nowadays in widespread cultivation, it is tolerant of air pollution, wind and salt spray and is used for shade and for wind breaks on the sea coast (More & White, 633). Its wood has been used for musical instruments and spears.

Habitat: Alpine and maritime, cool and temperate climates (Pokorný, 136).

Botanical description: Hardy. Double samaras (two winged seeds), bunched. Palmate leaves, opposite, with five lobes.

Analysis

Which of those four trees would Shakespeare have known in England? Which could he have seen in Verona in the mid-16th century? Let us proceed by elimination.

He could not have known the American plane tree (aka American sycamore, *P. occidentalis*), which arrived in Europe (more specifically, in England) in 1636; nor *a fortiori* the London plane hybrid (*Platanus x acerifolia*) which arose only in the late 17th century in England.

He may seen have seen some of the rare specimens of *Platanus orientalis* on the estates of a wealthy botany and garden enthusiast (such as Lord Burghley's on the Strand) (Pavord 340). It is known that noblemen had imported the tree from south-

east Europe by the mid 16th century and planted it as an ornamental. He could also have read about it in Pliny and Vitruvius, and in Gerard's *Herball*.

It is highly probable that he was familiar with the European sycamore maple (aka simply "sycamore" in British English, *Acer pseudoplatanus*), which was a common feature "in the walkes and places of pleasure of noblemen" (Gerard, 1300), notably at Theobalds and Wimbledon where it was planted by the Cecils (Thomas and Faircloth, 331). But it is unlikely that this tree of mountains or cool climates was present in Verona, as it is notably rare in the lower altitudes of the Po valley with its torrid summers. The one tree that was common in Italy at that time – thanks to the Romans, and whose leaves could easily be unwittingly confused with, or deliberately compared to those of a sycamore maple – is the Oriental plane tree (*P. orientalis*). It seems only natural that, based on this resemblance, he would name the Italian plane trees for the trees he knew back home. This, after all, is what travelers, explorers, conquerors, and settlers have done since ancient times when encountering strange new plants (Pavord 39). Now, let's go back to the 21st century.

Which Trees Would Roe Have Seen Near Porta Palio?

Judging from the admittedly very limited but totally random sample that we took of two different and neighboring trees near Porta Palio [see Illustration 2, next page], we can be reasonably certain that:

Sample (1), with its two fruit heads and shallow-lobed leaves, is from a London plane tree (*P. x acerifolia*) – a recent (19th century) but extremely successful introduction in Italy – and

Sample (2), with its three fruit heads and deeply lobed leaves, is from an Oriental plane (*P. orientalis*), or possibly a hybrid of an Oriental with a London plane (since such back crosses are not uncommon). Only DNA analysis could establish the true identity of this second plane.

Short of a complete census of trees found in the park and along the avenues around Verona's western gates, it is impossible to know the present distribution of the various tree species or cultivars in that neighborhood. Our sample is unlikely to be representative in that regard. But at least it attests to the presence in today's Verona of both London planes, the newcomers, and Oriental planes, present in Italy since antiquity. The continuity presumed by Roe lies here and only here: not in surviving or self-propagating 'stands' living in the exact same location as their 16th century ancestors, but in the often hybridized genomes of relatively young trees, grown in Verona's nurseries and planted by the city. They are the modern descendants of Oriental planes now long dead and of the cosmopolitan and ubiquitous London planes.

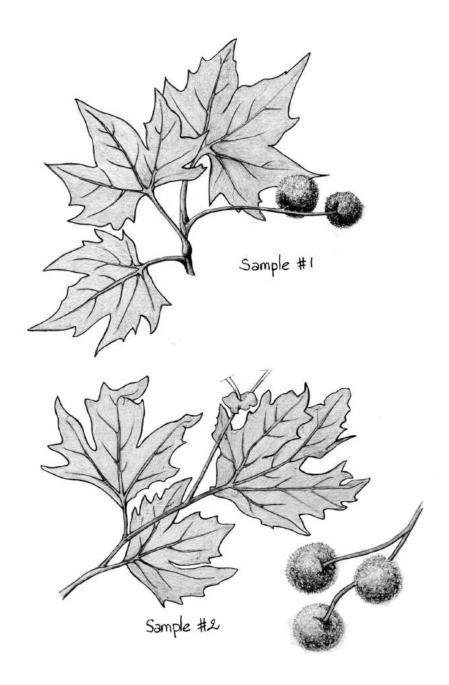


Illustration 2

But then, why did Roe call them sycamores? Was he so eager to agree with Shake-speare that he ignored the obvious diagnostic feature of the spherical fruiting heads of *Platanaceae* and thus misidentified the trees as *Aceraceae* – sycamore maples, when any field guide would make it easy to distinguish between the two? In fact there is a

simple explanation to this puzzle. Roe (9) did identify them correctly as *Platanaceae* – he did note their "broad-lobed leaves and mottled pastel trunks" after all – but being an American he gave them the name commonly given in the United States to the Occidental plane (*P. occidentalis*): i.e. 'sycamore' which is short for 'American sycamore.' And not being a botanist, he did not realize that broad lobes are a specific trait of the modern London plane and that the only tree that Shakespeare could have seen in Verona, *P. orientalis*, had – and still has – narrow lobes.

It would seem therefore that Shakespeare and Roe both gave the name *sycamore* to Verona's plane trees, but for different reasons: Shakespeare, by analogy with a tree he knew in England whose leaves looked similar, *Acer pseudoplatanus*, or sycamore maple. Roe gave the name by analogy with the American plane tree he knew, *Platanus occidentalis*, a.k.a. American sycamore.

A question nevertheless remains: was there, in the 16th century, a grove of 'sycamores' – or, as we now know, Oriental planes – somewhere out in the countryside west of Verona's walls, that Shakespeare could have recalled in *Romeo and Juliet?* It is doubtful. Roe certainly did not settle it and neither did we. Only further research might.

Only two things seem sure. If there was a grove, it would not have been growing right outside the city walls where Roe pictured it, along Viale Colonnello Galiano. And today, there is no identifiable stand or remnant of an ancient grove of *P. orientalis* near Porta Palio, but only – at most – individual descendants, heavily hybridized with the modern London plane and deliberately planted by Verona's authorities.

In conclusion, we are left with another question. As we have seen, it was usual for early travelers to name the plants they observed on their journeys by analogy with similar plants they remembered from their home country. We have also seen that Shakespeare would likely have been familiar with the Sycamore maple, common in gardens of noblemen, and also with the Oriental plane, which was much rarer in England, but was a prized ornamental and was famously extolled in classical literature. In other words, he may have been aware of both trees and quite capable of differentiating between the two. If so, why didn't he, at least in his plays?

The reason might be that, as a poet, Shakespeare would have delighted in the won-derful resonance of the word *sycamore* as compared to the duller sound of *plane*. Several authors have also plausibly argued that he devised a clever bilingual pun with the meaning of *sick amore* (or 'lovesick'), since the context in all three occurrences of the word in the canon is indeed love sickness. The combination of a beguiling sonority and an added layer of meaning might have proved irresistible to the poet, especially one as addicted to verbal wit as Shakespeare. *Sycamore* it had to be. In this particular case at least, we should not exclude the possibility that the poet's playfulness may have spoken louder than the traveler's memory.

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