



Gardens of Florence

Reshma Shah June 2024

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Nicholas Dakin-Elliott, Margit Freivogel, Sofia Cavini, Maria Chiara Pozzana and Giorgio Galletti

Itinerary

Sunday 9th June

Giardino Torrigiani

Orto Botanico

Monday 10th June

Villa La Pietra

Villa I Tatti

Tuesday 11th June

Villa Le Balze

Villa Medicea di Castello

Wednesday 12th June

Giardino dell'Iris

Giardino dell'Rose

Thursday 13th June

Villa Gamberaia

Friday 14th June

Giardino Bardini

Saturday 15th June

Boboli Gardens

Objectives

It is becoming more common place for UK gardens – particularly in South-East England - to be considering adoption of Mediterranean plants as the UK trends towards a hotter, drier climate. As a UK based horticulturist, I think it is becoming ever more imperative that we continue to improve our knowledge of Mediterranean plants and their cultivation to assess their suitability and use in response to a changing UK climate.

Additionally, gardening in a climate we are not yet fully familiar with, and in an environment where water may not be as readily accessible, will create pressures to adapt our horticultural practices and prioritize creating more sustainable and climate resilient gardens.

This aim of this tour of Gardens of Florence was to provide an invaluable opportunity to prepare me for a career in horticulture that will need to operate within the above mentioned challenges.

My key aims for this trip were to:

Expand my knowledge of Mediterranean plants and to observe how they adapt to the growing and climatic conditions in this region of the Mediterranean;

Learn about horticultural and cultivation techniques used in a Mediterranean garden within the context of a changing climate and sustainable water usage;

Gain a deeper understanding of Italian style gardens, typical features associated and their influence on garden design particularly on notable historic British gardens at the time.

Giardino Torrigiani

Garden description

Giardino Torrigiani is one of the largest privately owned gardens situated inside the city walls of Florence. I was given a tour by garden owner, Tommaso Torrigiani, who explained that within the 17 acre garden we will find extensive lawns, hedges, specimen trees and architectural features such as follies and temples displayed in a style that is reminiscent of an English Landscape garden.

Giardino Torrigiani has an alkaline soil, a high water table and experiences high humidity. Frost is a rare occurrence but wetter springs, often with damaging levels of rainfall, and increasingly warmer and drier temperatures in the summer months, is becoming increasingly frequent. We looked at examples of trees that had experienced storm damage.

Tommaso explained that the garden can extract water from a bore hole and lake but is largely being managed as an unirrigated garden with the exception of seep hoses for new tree plantings.

Garden highlights

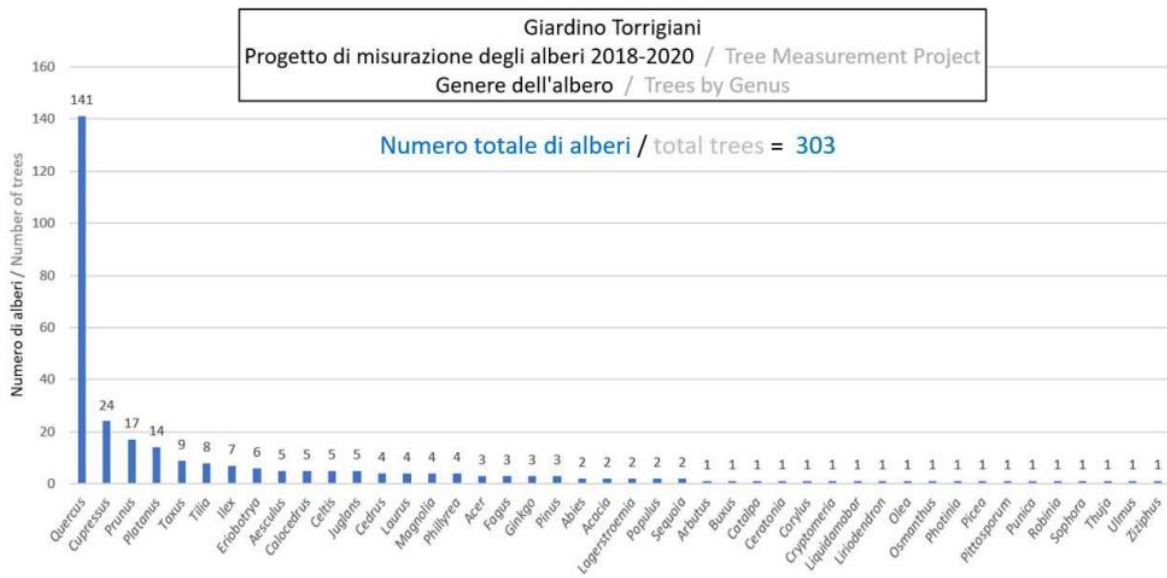
- The Torrigiani family have been working on a Tree Measurement Project which documents the measurement and maintenance of trees in the gardens. The c. 300 trees in the garden have been numbered, assessed and the measurements recorded of tree girth, height, crown and overall health. The aim is to use the data to advise on potential management issues as well as assisting the family with decisions on what new trees to plant and where.
- The garden was mostly stocked with specimen trees (across 40 genera) and evergreen shrubs, with *Quercus* being the most common genera in the garden.
- *Quercus cerris* (Turkey Oak) was highlighted as a potential tree choice for the future. At the time, the species was unfamiliar to me but I learned from Tommaso that *Q.cerris* is prevalent around the Tuscany area and has shown a high adaptability to a range of environmental factors. It is resistant to both cold and high temperatures and moderately tolerant of summer drought. *Q. cerris* can be found growing on sites with poor, dry soils where other oak species may struggle to grow – for example, growing successfully in areas too cold for *Q. pubescens* (Italian Oak) or too dry for *Q. petraea*. (Sessile Oak).
- During the garden tour, Tommaso shared his observations on trees that were performing well in Florence's changing climate of which I saw evidence of new plantings around the garden: *Arbutus unedo*, *Ginkgo biloba*, *Quercus ilex*, *Quercus rubra*, *Quercus cerris*, *Magnolia grandiflora*, *Liriodendron tulipifera*, *Tilia cordata* *platyphylla*.



Above: views of Giardino Torrigiani with English landscape garden features

Below: image 1. Tree audit for Tree Measurement Project Image 2. Example of tree labels used in the garden

Image 3. A Magnolia Grandiflora in flower.



Orto Botanico di Firenze

Garden description

The Orto Botanico di Firenze (also known as Giardino dei Semplici) was founded by Cosimo I de' Medici, the Grand Duke of Tuscany, in 1545. It is Europe's third oldest botanical garden (after Pisa and Padua). Today, the garden is run by the University of Florence, covers an area of about 6 acres and holds a plant collection of c. 4200 plant specimens.

All that is left of the originally designed botanic garden is the central fountain and the main axial pathways, which form a number of avenues that lead you around the various collections in the garden.

Highlights

One of the collections I was keen to see were the 'Monument Trees'. These trees are included in the register of monumental trees in Italy providing individual specimens of historic and landscape value with protected status.

The 5 monumental trees in the collection were:

- ***Taxus baccata***: planted in 1720 and the oldest surviving tree in the garden.
- ***Quercus suber***: planted in 1805. The trunk has never been decorticated to remove the cork.
- ***Zelkova crenata***: planted in 1891. *Z. crenata* is the only Zelkova native to Japan and is often cultivated as an ornamental tree and used to create bonsai. Its conservation status is recorded as 'Near Threatened'.
- ***Zelkova serrata***: planted in 1820. As well as the serrated foliage, this specimen exhibited a beautiful bark, which was peeling in an eye-catching manner.
- ***Taxodium mucronatum***: an impressive specimen in the garden with its specialized root systems (pneumatophores) clearly visible. It was fascinating to see these roots growing vertically upwards in order to help the tree absorb oxygen for respiration.

Another plant collection that caught my interest was the 'Roses in a row' display, which sought to trace the history of the introduction of roses into Europe including wild rose species and antique roses belonging to Gallica, Alba, Damascena and Centifolia groups. The display also explained that Chinese roses were introduced to Europe in the 18th century with modern roses dating from 1967 onwards.

Most of the display had either finished flowering or the plants looked quite stressed in the June heat. Throughout the week I was in Florence, I noticed that *Rosa* 'Blush Noisette' was a popular choice as it was a plant selection in many of the gardens I visited, displayed either a climber for small spaces or as a freestanding shrub. R. 'Blush Noisette' has many positive qualities: it is abundantly repeat flowering, has overall good disease resistance, tolerates heat and whilst it is not hardy in severe winters, it does have some frost tolerance. I thought it was an attractive cultivar as in some of the other gardens I visited, I had observed

specimens with dark pink buds which open to reveal pale pink flowers, which fade to white. This American bred cultivar was introduced by Philippe Noisette around 1814 and was formed from a cross between Champney's Pink Cluster x with an unknown seedling. Because of its many qualities described above, the cultivar has since become a popularly used parent rose.

Speaking to one of the Gardens team, they shared that the rose collection previously consisted of almost 100 specimens however the collection of particularly older specimens and less tolerant varieties has been seriously depleted – largely due to heat waves and climate change. A review of the 'Roses in a row' collection is planned with the inclusion of new varieties and hybrids that demonstrate more effective resistance to biotic and abiotic stresses.



Above: Images 1-4 – Monument trees: *Taxus baccata*, *Quercus suber*, peeling bark of *Zelkova serrata*, pneumatophore roots of the *Taxodium mucronatum*. Image 5: Label for *Rosa* 'Blush Noisette' introduced in 1814.

Villa La Pietra

Garden description

Villa La Pietra is a 48 acre garden located in Fiesole on the outskirts of Florence. The villa and gardens have been in existence since the 15th century and incredibly has only been sold 3 times in its long history.

The gardens at Villa La Pietra are considered as one of the best examples of a 'Renaissance revival garden' in Florence and the design is reflective of the Anglo America community that lived in Florence at the turn of the 19th century.

Laid out by Harold and Hortense Acton from 1908, their will mentions that the garden must remain as it was developed. Their son Harold Acton continued to manage the garden as designed by his parents and subsequently left it in trust to New York University where it is now the Italian headquarters for NYU and primarily for the private use of its boarding students.

Today, the gardens consist of an iconic cypress avenue, pomario (kitchen garden), limonaia (lemon house), historic parterre, productive olive groves and fine lawns.

I met with head gardener, Nicholas Dakin-Elliott, who was incredibly generous with his time and gave me a comprehensive tour of the garden. Nick has overseen the gardens for over 20 years and shared many observations on how climate change has impacted the garden during his tenure at Villa La Pietra and how the Gardens team are evolving their horticultural practices.

Highlights

Plant health and development

We looked at the damage caused by the box caterpillar and box blight within the parterre. Nick advised that they were using several interventions:

For box caterpillar:

- Manually picking off the caterpillars as soon as they are seen
- Using Pyrethrum (an extract of chrysanthemum) which is sprayed on however as it is synthetic, it tends to only last a day or two and requires frequent application.
- For longer lasting results, *Bacillus thuringiensis*, a biological insecticide widely used in Italy, is being used extensively and gives longer lasting results.

For box blight:

- Mulching to avoid rain splash and cover infected leaves from which they are seeing some good results.
- The parterres are not irrigated therefore the routine mulching is also aiding moisture retention to further improve plant health.

Next, we looked at the Irish yellow yew which was originally planted in the 1930's by the Actons. However, it is now perceived that this yew is being cultivated at its limits in Florence. We looked at specimens that were showing extensive signs of chlorosis and some specimens had succumbed to phytophthora. Nick explained that Florence gets twice the annual rainfall vs York. Because of the topography of the garden (which is on clay), the soil can sit waterlogged and because there is not much wind, the soil tends not to dry out and will sit wet for long periods. Due to the covenants of the Actons' will, at present the Irish yellow yew will need to remain in the garden instead of being replaced for a different cultivar. This insight led to an interesting discussion on the box/yew alternatives being informally trialled within the garden.

Nick explained that historically in Renaissance gardens, *Myrtus* was used in parterres, instead of box, and this worked well because the villas were not in use in winter so owners would be less concerned about how the parterres looked. *Myrtus* typically doesn't like cold and wet winters although it does tend to bounce back well in the spring.

At the time of my visit, the low hedges in the pomario were awaiting a clipping session the following week. The Gardens team would then be monitoring how the plants respond. Informally, the team are trialling:

- ***Myrtle communis* 'Tarantino'**: it responds well to clipping. Needs regular pruning, perhaps up to 5x per growing season. Currently, the Gardens team clip their box 2-3x so they would need to consider resourcing impact on maintenance schedule. 'Tarantino' does not like damp winters although it will bounce back in spring.
- ***Teucrium fruiticosa* (dwarf) and *Phillyrea angustifolia***: Tolerates full sun well and looks good during the Florentine summer. However, regular pruning is needed. Nick also mentioned interest in a new (as yet unnamed cultivar) of *Phillyrea* which has been bred with shorter internodes which may help to reduce the need for regular pruning.

Cultural changes

From an irrigation point of view, the garden is allowed to extract 36 cubic metres per day of water therefore an element of prioritisation is needed for watering. Rainwater is also harvested and used from underground cisterns. The box hedges are watered once a week during dry spells and the parterres are not watered at all.

In the Pomario (kitchen garden), seep hoses were used as the primary method of irrigation. As a result, the team have adopted a no dig approach to conserve soil moisture and are routinely mulching with garden compost (there is a wood chipper on site). In other parts of the garden, the team have experimented with keeping the grass long (7 native species of wildflowers have already been observed – alas the flowering was over at the time of my visit). Examples include bee orchids and *Salvia pratensis*.

With the adoption of 'No dig' – combined with routine mulching – the team are seeing a positive impact on crops, plant health has improved and there are noticeably less weeds. Prior to 'No Dig' and routine mulching, blossom end rot was a common complaint with growing tomatoes, which typically signified erratic moisture / irrigation.

We finished the garden tour with views of the olive groves that form the garden perimeter. I was interested to learn that whilst Xylella has not impacted on La Pietra's groves, there is a Xylella resistant cultivar which was found in Florence in 1929. Otherwise known as the weed olive, the *Olea europea* 'Lecho del corno' is a relatively fast growing cultivar, putting on 50cm of growth per season. It's root network develops extremely quickly and the cultivar is frost tolerant, has high drought resistance and some resistance to low winter temperatures.

Below Images 1. Box parterre 2. Irish yellow yew with symptoms of chlorosis and phytophthora 3-4. Box alternatives being trialled and awaiting clipping 5. Olive groves surrounding the gardens 6. The Pomario (Kitchen Garden) 7-8. On site wood chipper and compost bay





Villa I Tatti

Garden description

Villa I Tatti is probably the best known of the Anglo-Florentine gardens, located in Settignano on the outskirts of Florence. The garden at Villa I Tatti was impressive and immaculately maintained with spectacular Renaissance parterres, well stocked cut flower beds and fine lawns.

Head gardener, Margrit Freivogel, was very generous with her time with a detailed guided tour of the garden and I really enjoyed my discussions with her which touched upon some of the modern day challenges of managing an esteemed historic garden.

Highlights

Margrit explained that historically, the garden had been designed with a large cistern sunk into the ground, fed from a local spring, which provided an adequate water supply for the planting in the garden. In particular, the water supply was necessary to keep the fine lawns flourishing which even in the 19th century was considered a luxury in the Florentine climate. Today, the water requirement to adequately manage the garden is twice the level that it was historically and therefore the Gardens team are required to make prioritisation decisions on what will be irrigated. Horticultural practices have also needed to adapt to bolster plant resilience in order to cope with reduced water availability.

To illustrate these points we looked at a number of areas in the garden:

The Upper Terrace was a beautiful small courtyard area with an established parterre and walls covered in wisteria. The aspect was very exposed and in full sun. The surrounding stone walls retained the heat and therefore the area felt exceptionally hot in the afternoon sun.

Margrit explained that because of the site conditions, the box parterre in this part of the garden had been prioritised for irrigation and water sprinklers were being used. One of the misconceptions I had prior to my visit to Florence was that Renaissance gardens used minimal to no flowering interest in the design. Margrit explained that Renaissance gardens originally were highly floriferous gardens and parterres would have been well stocked with flowers.

At Villa I Tatti, the team had been selecting plants inside the parterre based on their adaptations to cope with an exposed, hot site. Currently, *Helichrysum petiolare* was being used as ground cover in the parterre – making use of its silver and hairy leaf to reflect light and reduce transpiration. The flowers were being removed as it was the leaf adaptation that was most valuable in this case.

Next, we looked at the Lower Terrace which was predominantly pot displays. Margrit explained that this area of the garden previously had a large azalea collection because the terrace benefitted from being shaded and protected from the wind by the surrounding

cypress trees. However, since losing some of the trees to cypress canker, the site has become more exposed and the azaleas were eventually re-sited in pots to shadier corners.

We also looked at some lovely displays of *Brunfelsia pauciflora* which Margrit explained was a very useful choice as *Brunfelsia* was a hardworking plant for the Florence climate, giving two flushes of highly scented flowers all throughout summer.

The Patio area very much encapsulated the history of Villa I Tatti as a highly floriferous and colourful Renaissance garden. It was packed full of cutting flowers such as Cosmos, Pelargoniums, Chrysanthemum, Forget-me-nots, Coleus and Salvias - which were used for pot displays in the villa. Margrit explained their approach was to treat all the planting in these seasonal flower beds as annuals. The first planting would take place earlier in the year with a second succession planting taking place once the summer heat had passed. Their rationale for doing this was so that they were collecting seed and taking cuttings from healthier plants and not plants that had been stressed by summer heat and drought conditions.

Finally, we stopped at the Lower Parterre and had an interesting discussion on the specific challenges – and successes – Margrit and her team have had in this area.

A key challenge has been managing box blight and age related decline of the box parterre. Margrit explained that when removing the dead Boxwood, the team discovered that the roots had not penetrated deeply into the soil and had remained very shallow. Suspecting that drought conditions may be accelerating the decline of the box, the team have been using air spading as a way to break up compacted soil. By blasting high pressure air through compacted soil, air spading loosens the soil consequently improving soil drainage and aeration. By the soil taking on a looser consistency, it makes it easier for the Box roots to absorb water and air therefore improving plant development and resilience.

Box caterpillar is also a concern and the team were using *Bacillus thuringiensis* (similar to Villa La Pietra) which was showing positive results.

It was nice to finish the garden tour looking at one of the successes the team have enjoyed in the garden. Margrit spoke about how many gardens in Florence, and more widely in Italy, have lost increasing numbers of cypresses to cypress canker. The fungal disease reached pandemic proportions during the 1950/60's decimating the common cypress population, which led to the development of a canker resistant cultivar.

Cupressus sempervirens 'Agrimed' is ideally suited to climates with hot dry summers and wet mild winters. Margrit showed me the hedge her team replaced 20 years ago with Agrimed, which has been flourishing since and providing an impressive frame to the parterre.

Below Images 1. Health of historic Box parterre managed with airspading 2. Use of leaf adaptations to cope with site conditions 3 *Brunfelsia pauciflora* 4. Pelargoniums in pots adding to the floriferous feel of the garden.



Villa Le Balze

Garden description

Villa Le Balze is a 3 acre garden perched high on the hilltops overlooking Florence. Designed and constructed in 1913 by English landscape architect Cecil Pinsent (who in 1909 also renovated Villa I Tatti which I went to visit on Monday), the garden was set out in a Renaissance style with 7 formal garden areas.

What I was not expecting to think about whilst visiting this garden is what Villa Le Balze and Cecil Pinsent have in common with Sissinghurst Castle Garden, now a National Trust property. The archives document that Vita Sackville-West and Harold Nicolson frequently visited Florence during the 1920's to admire Pinsent's work and that they would almost have certainly been influenced by his ideas when developing Sissinghurst.

Highlights

Whilst receiving the garden tour, I learned that Pinsent's work was most admired in Italy for creating garden rooms and his use of vertical and horizontal axes – using plants, paths and focal points – to direct the eye and lead visitors through the garden. I saw lots of examples of these design principles all over the garden. The garden had nods to Renaissance design everywhere from geometric bed shapes bordered by Boxwood to caves, fountains and grottos decorated with coral and seashells.

Features pertaining specifically to Pinsent's design ethos included the use of garden rooms of which there were 7. The planting in these 'rooms' was relatively simple and predominantly featured perennials such as agapanthus, lavender, roses and potted lemon trees. Groves of holm oaks ran parallel to paths which were bordered by Iris. This was a successful technique that helped to guide my eye to the views of the Florentine countryside or to a grotto/statue that was placed at the end of the path.

I really liked the 'windows' that were cut out of the hedges and walls, again giving glimpses of the countryside views beyond. Whilst it was a simplistic garden in terms of planting, Pinsent's design principles were very clear to see as I walked around the garden. Stone staircases and pergolas framed with jasmine, wisteria and roses also led my eye up paths, inviting me to explore areas of the garden hidden from initial view. There was almost always the surprise of another great view of the countryside or of the garden itself. I also enjoyed seeing the contrast of Pinsent's formally designed garden with the more natural landscape of the olive groves and hillside outside of the garden perimeter.

Below Images 1-2 Views of the garden rooms at Villa Le Balze 3. Holm Oaks lined pathways edged with iris and lavender, leading the eye to countryside views.



Villa Medicea di Castello

Garden Description

Villa Medicea di Castello is one of the oldest residences of the Medici family, who owned the villa from 1477 onwards. The garden was a favourite of Cosimo I, and designed in 1538, at one time it housed a vast plant collection to signal the power and influence of the family as significant botanical collectors of their time.

The Garden is often described as one of the original prototypes of an Italian Renaissance garden and was declared a UNESCO World Heritage Site in 2013. The splendid garden is now state-owned and consists of a grand parterre called the Secret Garden, the medicinal herb garden and a wilder woodland area mostly stocked with holm oaks, oaks and cypresses.

Several people I met in Florence also mentioned that the garden is home to the rare *Jasminium Sambac* 'Gran duca di Toscana' which gave me another reason to visit.

Highlights

Walking around the vast parterre in the Secret Garden, one could easily imagine how grand and magnificent it must have looked in its heyday, showcasing plants from all over the world. Today, there were signs of disrepair and neglect with weedy parterres and broken paths and a more simplified planting palette.

The planting within the parterres largely consisted of the following and was flourishing in the summer heat: *Santolina chamaecyparissus*, Euphorbias, *Salvia officinalis*, Pevrovskia, Phlomis russeliana, Lavender, Leucanthemum, Plumbago, Rosmarinus officinalis, and Valerian.

Seeing this planting palette reminded me of what Margrit had told me the previous day at Villa I Tatti about using plant adaptations to balance maintaining the historical integrity of a garden with choosing the right plants for today's climate. Most of the plant choices I noticed had a range of leaf adaptations including small leaved, hairy, oils, thick waxy cuticles etc. It was nice to see a thriving, floriferous parterre based on the principle of maximising on plant adaptations.

The garden also boasts an exceptional collection of citrus fruits, consisting of about a thousand plants of unique historical and botanical importance descending from the ancient Medici varieties. Some specimens are reputed to be over three hundred years old. The plants are brought outdoors from April to October but kept sheltered in the winter period within the historic lemon houses.

I then headed over to the medicinal herb garden to look for the *Jasminium sambac*, also known as Arabian Jasmine.

Native to India and Bhutan, and difficult to propagate, this rare cultivar of jasmine is a slow growing shrub with a climbing habit and can reach 3-4m in height. The cultivar on display in the garden was 'Gran Duca di Toscana', it blooms from May to October and has highly scented flowers that look like a small rose.

Jasminium sambac is hardy to 0C but needs to be moved indoors in the winter. The jasmine in this garden was displayed in pots outside the glasshouse where presumably it is moved under protection later in the year. It prefers to be grown in light, free draining soil and needs a sunny aspect sheltered from the wind.

I finished my visit by walking through the woodland area of the garden. Amongst the holm oaks and cypresses, I noticed there were lots of trees with cavities and hollow trunks that had been bricked up, with the tree starting to grow around the bricks and encasing them. At the time I had not been familiar with this practice but having spoken to a staff member, they explained this was a traditional arboricultural practice from the 1960's and 70's that was believed to be beneficial for the tree but this is no longer a theory that prevails or a practice that continues in the garden.

Below Images

1. Potted citrus on display outdoors from Apr-Oct
2. View of the grand parterre with *Pevrovskia* providing punctuations of purple throughout
- 3-4. Rare cultivar of *Jasminium sambac* and *J. sambac* 'Gran Duca di Toscana' on display
- 5-9 Potted citrus, *Pevrovskia*, *Santolina* and *Plumbago* providing flowering interest in the parterre
10. Outdated arboricultural practice of bricking up tree cavities.





Giardino dell'Iris

Garden Description

Giardino dell' Iris was built in 1954 , on wasteland given by the Florence municipality to the Italian Iris Society. The goal of the garden was to create a space to host an annual International Iris competition as a way to showcase the best varieties and to promote knowledge of Iris. I thought it was very fitting that a city whose emblem is the Florentina iris should have an entire garden dedicated to the genus.

The garden opened in 1957 and is unique in the world as the first botanic garden for a specific plant genus. Today, the Giardino dell'Iris is managed by the Italian Iris Society and entirely run by volunteers.

I met with Sofia Cavini, Vice President of the Society, who showed me around the garden displays which range from species, natural hybrids and human led experimental hybrids.

Highlights

What I liked most about this garden was how the Iris were displayed in amongst trees and shrubs as they would be found in amongst a traditional Tuscan landscape. There were a wide range of tree planting including *Olea europaea*, *Arbutus unedo*, *Cercis siliquastrum*, *Laurus nobilis* and *Sambucus nigra* to name a few.

Sofia explained that the garden hosts an international Iris Competition annually in May. Entrants send in their iris specimens 3 years in advance of their competition entry (Flowering in irises improves in Year 2 of planting but is at its best in Year 3). The Giardino team of volunteers would then grow the plants on until competition year. Sofia also gave me an overview of the competition judging criteria which was very comprehensive and ranged from assessing distinctiveness to plant health and development as well as flowering performance.

The garden has on display the winning irises from every year since 1957. As a result, it has become a unique living and genetic database for the genus and breeders often use the garden to access plant material for hybridisation. A category of Iris that was unfamiliar to me was 'Space Age' irises, which are primarily bred by US breeders and typically have distinctive flounces, horns or spoons projecting from the beard tips.

We discussed the ideal conditions to grow Iris. Sofia pointed out that Iris do not like to be congested and typically in the garden they are lifted and divided in Year 4 or 5 onwards once the plant's best flowering performance has passed. Division usually takes place after flowering ideally between July to October. The rhizomes develop annually and can at least double in size therefore spacing is important and the Iris are planted 30-35cm apart.

The ideal growing conditions include free draining soil, which has been improved with organic matter, and a sunny position. We also looked at beds where a combination of purple and yellow iris had been planted together and Sofia shared insights that in the

garden's experience, they are finding that in time the purple irises outcompete and colonize the yellow ones so in time, the yellow irises are lost from the planting scheme.

Whilst my visit was a few weeks too late to see the garden in full bloom, Sofia showed me pictures of the evolution of Iris over the decades and it was interesting to learn how much the shape and features of the Iris have changed over the decades due to hybridisation and breeding. Hybridisers are aiming to breed a red iris (which is not found naturally) and Sofia shared some pictures of 2024 winners to illustrate the most recent efforts in trying to achieve this feat.

Sofia explained that modern Iris now has double the number of chromosomes (four sets of chromosomes instead of two). The term used is tetraploids and almost all our modern bearded hybrids are now tetraploid.

The extra chromosomes translate into thicker, wider and heavier leaves, the flower parts are also thicker and larger and because the petals are thicker the colour is often deeper and brighter.

Below Images

1. View of Giardino dell'Iris on the banks of the River Arno
2. Iris' planted amongst trees to reflect natural Tuscan landscape
3. Year 2 Iris' grown on by garden volunteers for entry into next year's competition
- 4-5. 2024 category winners. Breeding efforts concentrating on achieving a red iris.





Nativi dell'Amazzonia



Léon c'est moi

Giardino dell’Rose

Garden description

Giardino dell’Rose is sited next door to the Giardino dell’Iris so I made a quick pit-stop at the garden. It is relatively small compared to its more famous neighbour. Opened in 1895, the garden is a public green space in the city centre. The garden is a series of grassed terraces, hosting a collection of around 400 varieties of rose. On the afternoon that I visited it was lovely to see many people enjoying the gardens, relaxing amongst the rose displays on the terraces.

There was evidence of lots of new plantings of commercially and readily available roses.

Rosa ‘Dorothy Perkins’ caught my eye as it was a variety I had seen in many of the gardens I visited on this trip. ‘Dorothy Perkins’ was bred in 1901 in the US by Jackson & Perkins from a cross between Turner’s Crimson Rambler x unknown seedling. Over the years it has become a popular variety because it’s a vigorous rambler growing up to 6m high. With good disease resistance and flowering late in the season, it produces a mass of pink, double rosette shaped flowers. Reputedly, the same variety is also grown at Windsor Castle.



Above

1. Grassed terraces of Giardino dell’Rose with views over Florence
2. *Rosa ‘Dorothy Perkins’*, a popular choice observed in several Florentine gardens

Villa Gamberaia

Garden description

Villa Gamberaia is located in Settignano, a picturesque village on the outskirts of Florence. Historically, the Villa was owned by the Romanian princess, Catherine Jeanne Ghyka, who undertook the most significant intervention in the garden since its creation. She designed the iconic parterre d'eau (water parterre) in the period 1896-98 and installed flower beds packed with colourful herbaceous planting.

I met with landscape architect and garden designer, Maria Chiara Pozzana and her team who were overseeing the restoration of the garden back to Princess Ghyka's original plans. They very kindly gave me a tour of the garden and invited me to accompany them as they assessed the installation of the new planting plans.

Highlights

We started off by looking at the replanting of a hedge near the nymphaeum. Today, the roots of the existing cypress trees are damaging the foundations of the nymphaeum so as part of the remediation, the new hedge planting is being positioned a little further back from the nymphaeum. Maria Chiara pointed out evidence that the existing cypresses would have originally been planted as a hedge as the trees were in a straight line and planted quite close together.

To avoid repeating further damage to the nymphaeum, the new hedge was positioned further back and the team measured out spacing of 80-85cm apart. The mixed evergreen hedge was typical of Florence and included a mix of *Cupressus*, *Viburnum* and *Ligustrum*. Maria Chiara explained that they had decided to go with medium sized planting to strike a balance between immediate impact for visitor interest and managing the logistical challenge of transporting larger plants on the very narrow lanes approaching the villa.

Next, we moved onto the sylvatico boschetti (woodland areas). Maria Chiara explained that due to declining health, some of the cypresses have already been removed but many of the other trees in the area were protected as they were historically important. Any interventions required to manage these specific trees would have to be done in consultation with the local Forestry Commission. The task for today was to confirm the planting positions for the new *Quercus ilex*. Some of the factors the team were considering when marking out the planting positions was to identify where the restored paths would run along and assessing the canopy of the existing trees to maximise the available light for establishing the new *Quercus ilex* trees. *Viburnum tinus*, *Vinca major* (as ground cover) and *Ruscus aculeatus* were also in plan to be added to the bosco.

A misconception I had about formal Italian gardens was that they are predominantly evergreen with very little flowering interest. Maria Chiara shared that from her research into the original planting at Villa Gamberaia, the garden was actually a very floriferous one and therefore as part of the restoration many of the herbaceous borders were going to be reinstated. By reviewing the archives and plant inventories, Maria Chiara had created a

planting plan that included perennials and shrubs ranging from Peonies, Roses, *Hemerocallis*, *Agapanthus*, *Achillea filipendula*.

The original garden also featured a border of summer autumn flowering asters largely in a purple-blue palette - and these were to be incorporated into the herbaceous planting. The planting plan included a range of Aster cultivars including 'Looman's Blue', 'Vasterival', *A.alpinus* 'Dunkle Schone', *A. cordifolius* 'Blue Heaven', *A.ericoides* 'Pixie Red Eye', *A.novi-beigii* 'Leuchtfeuer', *A. novi-beigii* 'Marie Ballard', *A. radula* 'August Sky', *A. thomsonii*.

We spent some time looking around the stunning, now restored, water parterre and Rabbit Island. The parterre has been restored with box which is displayed in many forms – from waist high hedges to low parterres and topiary. There was a distinctive topiarised ball of *Phillyrea latifolia* and columns of *Taxus baccata*. The borders around the water parterres have been interplanted with over 600 Iris plants. *Lilium macabeum*, *Santolina chamaecyparissus* and *Lavender* was also to be added to the planting scheme.

The beds have been installed with seep hoses with a manual timer to support the irrigation needed to establish the new plants. The parterre was also interplanted with *Rosa* 'Dorothy Perkins' – a popular choice I had seen used in some of the other gardens I visited.

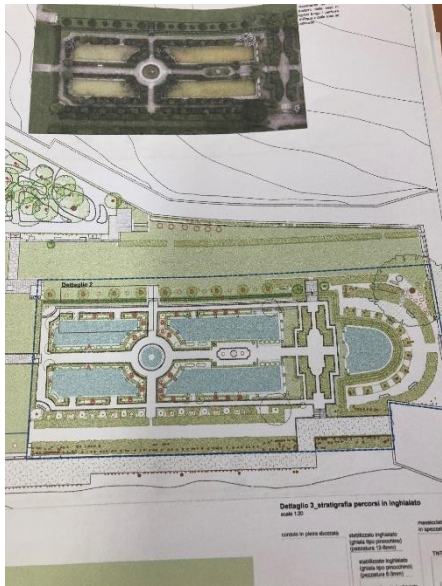
We also discussed the maintenance requirements for the parterre and what Maria Chiara felt would be important instructions to hand over to the Gardens team (2 horticulturists). She highlighted the importance of relaying specific measurements to maintain the hedges, topiary and parterres to retain the character of the water parterre. She would also look to outline the timing, duration and estimated cost of the maintenance tasks. Maria Chiara also confirmed that if any of the herbaceous planting was unsuccessful in establishing then the Gardens team would have autonomy to select an alternative cultivar (not restricted to historical planting plans). Part of this decision may also have something to do with being able to source the large number of plants needed to stock the parterre beds and local nursery capacity in being able to produce the plants (Maria Chiara pointed out the challenges the project has had in being able to source mature multi stemmed box topiary and Iris in the size and quantities required).

I found this conversation very valuable as it helped me to think about what to consider in future roles if I was to take on responsibility for a garden or if I was to be involved in a project to renovate a planting plan. The discussions today also introduced me to cultivars I was not previously familiar with.

Images below:

1. Placement of new hedge by the nymphaeum
2. The restored water parterre
3. Planting plan for the bosco area.
4. Restored box parterrem, interplanted with iris. Seep hose irrigation with manual timer installed.
- 5&6. Planting plans and plant list for water parterre and planned restoration of herbaceous beds.





- PIANTAZIONI ATTUALI E DI PROGETTO** in Consegna al progettista
- PIANTE ESISTENTI**
- Alberatura lignida specie
 in progressivo piante in specie
 -1) Cupressus sempervirens
 -2) Quercus ilex
 -3) Laurus nobilis
 -4) Olea europaea
 -5) Carpinus betulus
 -6) Pinus nigra
 -7) Pinus pinea
 -8) Pinus sylvestris
 -9) Prunus domestica
 -10) Prunus domestica
 -11) Prunus domestica
 -12) Quercus ilex
 -13) Tilia cordata
 -14) Viburnum tinus
- Specie a basso ingombro specie
 in progressivo piante a / a spazio
 -15) Buxus sempervirens
 -16) Cupressus sempervirens
 -17) Laurus nobilis, Viburnum tinus
- Agromi
 7 Citrus limon L. Burm. f. (var. Florentina)
 8 Citrus aurantium L.
 9 Citrus aurantium var. Papeda
 (ex Citrus aurantium var. decumana L.)
 10 Citrus aurantium var. Papeda
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Esempi di Anemone sotto rasoio per alberature (M. C.M.E. voce n. 39)

Giardino Bardini

Garden description

This garden represents seven centuries of Florentine history and changing tastes in garden styles. In the 16th and 17th C it was a Florentine Baroque garden with grottoes, statues, fountains, flower gardens and copses of holm oak. In the 19th century, there were influences from English parkland gardens and Victorian gardens with lots of flowers including camellias, roses and peonies which coincided with the age of exploration in botany.

Today the garden is largely split into three distinct identities:

- The restored Italian garden with the Baroque staircase at its centre
- The English woodland style garden with non native planting
- The productive area with fruit orchards

Highlights

I was given a garden tour by Giorgio Galletti (consultant responsible for the maintenance and restoration of the garden). The focus of our discussion was on how to develop and maintain the garden in the post restoration phase and how to improve its appeal to visitors, which is currently 200k per year

We spent some time assessing the Giardino Bardini wisteria pergola. The pergola was completed in 2005 and is a key springtime visitor attraction in Florence as well as being considered as one of the finest wisteria displays in the region.

The pergola measures at 70 metres long and 4.6 metres wide and is planted with 72 Wisteria plants which include *Wisteria floribunda*, 'Black Dragon' (a dark purple double flower), 'Showa Beni' (pink flower) and *Wisteria sinensis* 'Prolific'.

At the bottom end of the slope, the pergola is planted with *Schizophragma hydrangeoides*. To further extend the season of interest, the pergola was underplanted with a range of *Hydrangea aspera*, *serrata* and *macrophylla* varieties. One of the *H. macrophylla* in the collection was 'Otaksa' which is one of the original parents to many *macrophylla* cultivars.

The hydrangea collection appeared relatively happy underplanted in the shade of the wisteria and *Schizophragma hydrangeoides*. At the bottom end of the slope, the hydrangeas looked healthy and were flowering abundantly.

Giorgio pointed out that the beds have become dominated by the wisteria roots which was making the beds very dry. The roots are now outcompeting the hydrangea for moisture and nutrients which has resulted in the hydrangeas at the top end of the pergola looking much smaller and chlorotic. The plan is now to transplant a small number of the wisteria and transplant them to other areas of the garden, as well as to relocate some of the hydrangeas to the bottom end of the slope, where they will be able to benefit from water run-off.

We then stopped off at the orchard. The existing orchard was planted very formally to reflect the traditional Baroque style of planting in rows. It was encouraging to learn that there are early thoughts to potentially remodel the orchard. Giorgio explained that traditional Tuscan landscapes would have featured mixed planting, a more informal planting placement and introduction of plants like roses as they are traditionally used as sacrificial plants for pests.

There were also ideas to install paths that traverse the orchard so visitors can immerse themselves within the landscape. The grass is now kept long throughout spring, with cut back happening in June. By keeping the grass long, it has encouraged wildflowers, wild orchids and wildlife. It is hoped that in future a partnership with a local university can be formed to help monitor wildlife and insect numbers.

Other areas of the garden we looked at included the Dragon Canal area which took influences from Anglo-Chinese gardens from the Victorian era and reflected woodland edge planting. Planting observed include: *Dryopteris erythrosora*, *Hellebores*, *Vinca major*, *Ophiopogon*, *Alchemilla mollis*, and *Reineckea carnea*.

Another priority area for the garden was to continue increasing visitor numbers throughout the seasons. Giorgio shared his thoughts on areas of the garden where bed sizes can be increased to include more flowering interest. By creating new island beds, the amount of lawn could be reduced (which takes up a lot of resource to maintain) as well as opening up pathways in the garden to make the visitor experience more immersive.

Overall, it was a very insightful discussion raising some interesting points on what to consider when maintaining gardens but also when evolving a garden space. I also found it very interesting to see different garden styles represented within one garden and the features and planting that was used to connect different styles to make a garden feel more cohesive.

Images below:

1. Seed pods visible on the Bardini wisteria pergola
2. Wisteria underplanted with collection of *Hydrangea macrophylla*, *H. aspera*, *H. serrata*.
3. Central staircase in the Baroque garden
4. Orchards planted in traditional Baroque style of straight rows. Recently the grass has been kept long to attract wildlife and pollinators.



Boboli gardens

Garden description

I spent some time looking around the Boboli Gardens, which is an iconic and historical park that was opened to the public in 1766. Originally designed for the Medici family, it represents one of the first and most important examples of the Italian garden, which later served as inspiration for many European courts.

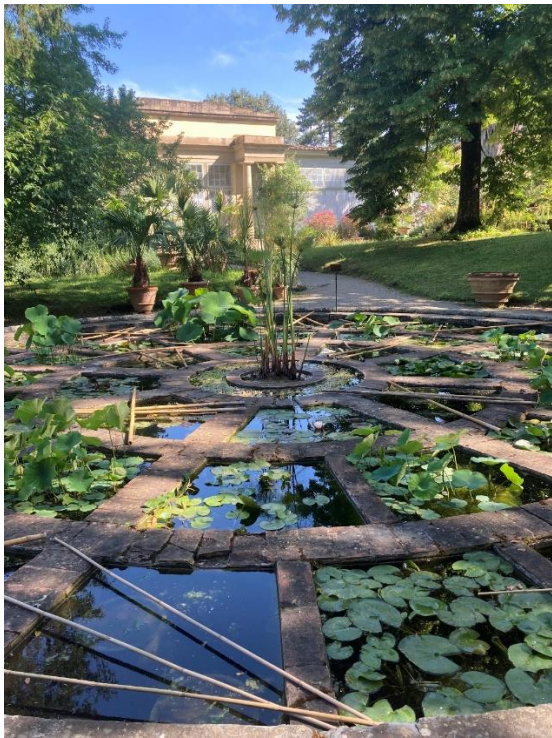
The gardens display many of the typical Italian Renaissance features one would expect to see – from geometrically laid out beds and positioning of trees, avenues of cypress and holm oak, grottoes, ornate fountains, parterres.

Aside from appreciating the Italian Renaissance features of the garden, it was also interesting to come across the following parts of the garden:

- The grand row of plane trees positioned in a curve which was planted in 1813. It appears that the trend for keeping the grass long has reached Boboli as on the morning of my visit, a member of the Gardens team had just finished mowing the long grass and there were signs of wild flowers, *Trifolium pratense* and *Ophrys classica*.
- The Botanica Superiore part of the garden dates back to 1852 and the plants are organised according to their geographic provenance. There was an attractive water parterre stocked with marginal and aquatic plants.
- I also observed lots of new plantings of *Paeonia ostii*. Native to China's Gansu and Hunan provinces, *ostii* has come to be considered an endangered tree peony species particularly because of the excessive collection of its roots for medicinal use. Named after Italian peony expert, Dr Gian Lupo Osti, details of *P.ostii* were first described in 1992. It is supposedly a very hardy plant and can flourish in extreme temperature ranges from 40C in summer to -27C in winter and in environments with variable rainfall so it could be a potentially useful plant for Florentine gardens.

Images below:

1. *Ophrys classica*
2. Row of plane trees planted in 1813
3. Water parterre showcasing aquatic and marginal plants in the Botanica superiore
4. New plantings of *Paeonia ostia* in the Botanica superiore



Reflections

This trip has been an enriching experience for me on so many levels. As a recent career changer into horticulture, the experience of preparing for, and visiting, gardens independently has given my confidence a real boost. To that end, I have been able to deliver a presentation to the curatorial team at RHS Wisley to share the insights I learned from this trip which was my first horticultural presentation since changing careers.

I have most valued the opportunity to have professional discussions with fellow horticulturists, who collectively between them had over 100 years practical experience.

Each of them managed gardens that were all at different phases. Through our discussions, I was exposed to a range of insights which I can take forward and apply to my role:

- Managing gardens in a changing climate is complex. It will become increasingly necessary to incorporate a range of perspectives into garden management and the basis on which plant selections are made (e.g. topography, microclimates, availability of resources, monitoring plant health and performance, adapting plant selections to address specific challenges or balancing the needs and priorities of different stakeholders).
- An increasing need for UK gardens to reconsider how plant hardiness is assessed. Florence already experiences many of climatic trends also predicted for the UK. Successful plants of the future will need to be able to tolerate a range of weather conditions therefore selecting alternative species within a genus from the appropriate provenance will be critical.
- A range of ideas on how cultural interventions and exploiting plant adaptations can help to bolster the resilience of a garden.
- It was inspiring to see how more informal and wilder areas can be introduced to a formal garden aesthetic to support biodiversity.

I am grateful to all the horticulturists on this trip who shared their insights and experiences. I have already felt the benefit of their experience as it has greatly helped with my confidence in my job, enabling me to feel more confident to showcase my knowledge and ability when contributing to broader horticultural discussions.

Additionally, my experience in Florence has been very helpful to see a broad range of plants in situ in a different climate. Although some plants were already familiar to me, over the course of the week I was introduced to over 100 species and cultivars of plants spanning tree, shrubs and herbaceous plants. This has helped to vastly increase my knowledge of planting selections for Italian style and formal gardens.

On a final note, the experience has shown me that horticulturists are a generous community who are passionate about sharing their time, knowledge and experiences and I am very grateful to all those I met whilst in Florence and who helped to make this trip such a valuable – and memorable - learning experience for me.