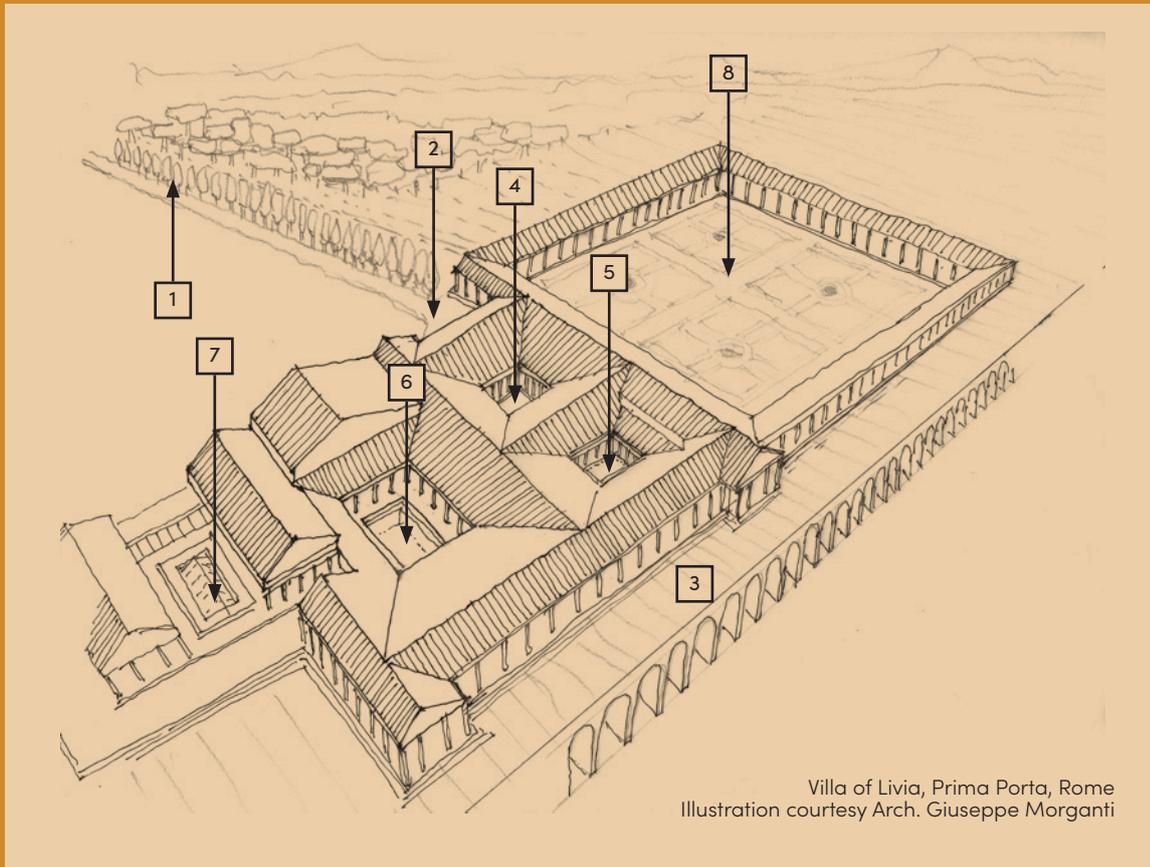


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research





LEGEND

1. ACCESS ROAD
2. ENTRANCE COURTYARD
3. *BASIS VILLAE*
4. ATRIUM
5. REPUBLICAN GARDEN
6. PERISTYLE AND *NATATIO*
7. UNDERGROUND ROOM
8. LARGE GARDEN OR *LAURETUM*

Angelina De LAURENZI

Ministry of Culture, Italy; Director Villa of Livia

VILLA DI LIVIA

Located on a hill overlooking the Tiber Valley, the villa of Livia still appears with its unspoiled nature to represent that discrete and not overdone place where real power was exercised in the Augustan era. Defining it as a residence of otium and rest, although it responds perfectly to the canons of this type of villa that combined the productive aspect with the residential one, could be an understatement. The apparent simplicity and the constant references to nature seem to echo the importance of the characters who inhabited it and who embellished its garden and its rooms with symbols of power.

The villa is referred to by ancient authors as Gallinas Albas, a name that evokes the prophecy that occurred to Livia Drusilla while she visited her lands in the Veian region, between 39 and 38 BC. Caesar Augustus, after his marriage to Livia, restructured the Republican residence she had received as a dowry, transforming it into a villa characterized by the alternation of building blocks and green areas, confirming the couple's preference it be known "not so much for statues and paintings as for arcades and groves" (Suet. Augustus, 72, 6) in a form of ostentatious simplicity. The residence, renovated several times over the centuries, was divided into functional areas: the large garden, the private area, the representative area, the area dedicated to guests, and the spa complex.

The large garden was a large quadrangular terrace bordered by a three-armed portico divided by pillars, the porticus triplex, with the roof covered with tiles and the entablature decorated with

terracotta slabs and painted walls. The southern side of the garden was scenographically open on the Tiber plain; on this side the area was enclosed by a green belt, as evidenced by the discovery of a long row of perforated jars intended to contain shrubs and flowers. The northern side was divided into large rectangular compartments, plantation „boxes" containing small shrubs. The central space was occupied by the *lauretum*, the laurel grove remembered by ancient sources from which the emperors of the Julio-Claudian dynasty took the twigs for the crowns used in the triumph.

The private area has an Augustan-era structure that has remained unchanged over time with restoration interventions in the second and third centuries AD. Here is the main entrance of the villa, marked by a travertine threshold that leads into a vestibule and an atrium. This area was made up of two building nuclei: in the first, a bank of rooms closing the body of the villa towards the large garden; in the second, a private apartment, consisting of two cubicula and an exedra, arranged around a three-wing portico, erected on Republican structures. A small garden was adorned by small shrubs (oleander, rosemary, aromatic herbs, figs, and lemons) and flowers were contained in ollae perforatae.

The representative and reception area was constructed during the Augustan era, with renovations up to the fourth century AD. Large rooms circumscribed the porticoed peristyle and were paved with Augustan mosaic, originally delimiting a third garden, in which in the Flavian

age a basin (*natatio*) was installed, decorated on the edge in the Severian age with a mosaic representing a marine thiasos. On the north-east side of the peristyle, there was a triclinium and three rooms; in the north wing, flanked by the corridor leading to the private area, two rooms connect to the spa; on the south side large rooms are decorated with opus sectile flooring; in the south-western wing, rooms belonging to a *hibernaculum* (winter apartment) are enclosed by the portico of the *frons villae*.

Every corner, almost every flower, represents a symbol of power recognizable by contemporaries, transported and masterfully received in the large frescos of the semi-interred ancient triclinium. The triclinium was built by the will of Livia and Ottaviano, in 38 BC, the year of their wedding, as part of the renovation program of the previous republican residence. The triclinium was from the beginning one of the attractions of the villa, together with the large garden and the overall green layout of the villa. The owners' willingness to re-propose the beauty of the villa's garden in the basement is evident. Equipped with a single entrance, it was covered with a barrel vault decorated with painted stucco coves and frescoed with a continuous painting of a garden with a symbolic value: in the foreground the cane fence and the marble balustrade, in the background a great variety of birds and plants, including the recurrent laurel in all its forms. The triclinium was no longer in use after the earthquake of 17 BC.

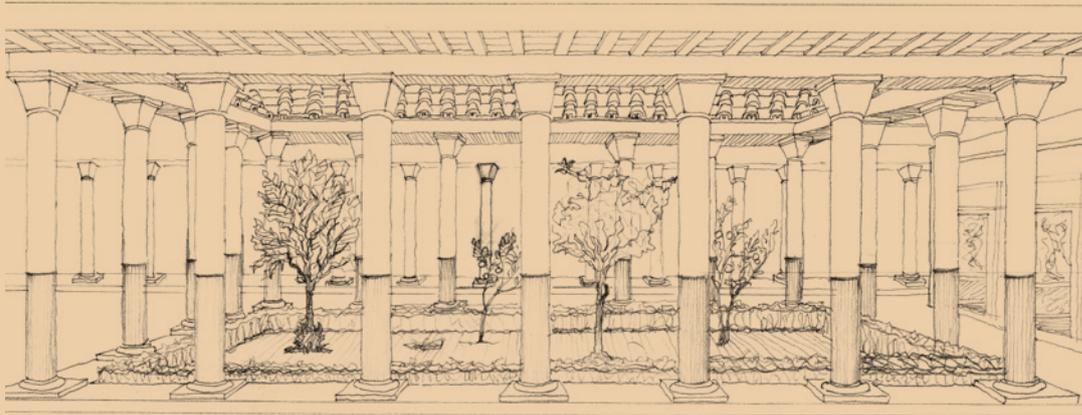
The spa system, built in the Flavian age, connected the private and residential area. Centered on two rooms, *calidarium* and *tepidarium*, delimited by other rooms and initially heated with the 'samovar' system, the complex was renovated in the Severan period. The function of the two rooms changed, one became an *apodyterium* and the other, a *frigidarium*, with the heating system based on the *testudo alvei*.

The outermost strip of the residential district consisted of guest rooms built in the Augustan age with Severian renovations: rooms and corridors with mosaic and opus sectile floors, frescoed in the second half of the second century AD, heated rooms, a latrine.

The villa has had a long life, as evidenced by the restoration interventions and findings datable to the fifth and sixth centuries AD. After abandonment, probably due to a fire, starting from the seventeenth century, the area was subject to devastation and looting in search of antiquities. The discovery in 1863 of the statue of Augustus and of the semi-hypogeal room with the garden paintings gave it notoriety but did not guarantee it protection. Only since 1982, with the Italian State acquisition of this Prima Porta hilltop, has the villa been subjected to protection.

In 2013-2014, on the occasion of the Augustan bimillennial celebration, among other interventions, the Lauretum above ground was reconstituted. It is placed in the space where it was in ancient times, but with the choice of placing the laurel plants in large jars to facilitate any excavation operations and to suggest the discovery of the *ollae perforatae* in the large garden during excavations. The garden, together with the other interventions carried out, reflects a narrative form of spaces and structures that have overlapped over time and that today cannot be dismantled. According to this criterion, the current large roofs of the area of the villa are currently full-scale stratigraphic drawings that take on the color of the sky, like the background of the painting in the hypogeal triclinium, evoking a vision of the sky and at the same time the closure of the rooms.

The Villa di Livia has always been an oasis of uncontaminated landscape on the outskirts of Rome, with a degraded appearance due to the major urban transformations of recent decades. The contrast is evident. As is also evident the predominance of the landscape aspect in the articulation of the villa which alternates structures and green spaces. In this, the intent of the imperial couple Augustus and Livia has remained unchanged and this constitutes the main value of the villa, one of a kind.



Reconstruction of Livia's private domestic garden
Illustration courtesy Arch. Giuseppe Morganti

Giuseppe MORGANTI

Ministry of Culture, Italy

CREATION, RE-CREATION AND UNDERSTANDING OF THE VILLA OF LIVIA IN PRIMA PORTA

Attempts to reconstruct ancient Rome date back to over five centuries. In fact, starting at least from 1430, when Poggio Bracciolini exhorted the study of the Ancients, the representation, interpretation, and reconstruction of the original appearance of the ruins, together with the study of the sources, have since the age of Humanism become a fundamental component of studies on the civilization of ancient Rome, in particular of its architectural production.¹

The architects of the fifteenth and sixteenth centuries were primarily surveyors and designers of ancient buildings. Bramante, Sangallo, Peruzzi, Raphael, Palladio (all born between 1444 and 1508), have “intimately joined the study of the ruins with that of the ancient writers and inscriptions,” in order to learn from them for the new architecture and with the goal of achieving a magnitude similar to that of the ancients. The lessons learned were the basis of their projects and their treatises.²

The representation was aimed at ruins, and therefore constituted a necessarily limited and incomplete knowledge base, but the premise for thoroughly investigating the nature and meaning of the buildings was believed to hypothesize their original consistency, recreating them in

their entirety. This is why Renaissance architects employed a “fervent reconstructive imagination” in their work.³

Most of the time this has resulted in a ‘transfer’ of spatial culture and the architectural conception of the viewer into the objects represented. An eloquent example is the ‘completion’ with three apses of what has remained of the Basilica of Maxentius in the aftermath of the 1348 earthquake, in turn, the root of the projects for St. Peter’s.⁴ In the same way, Pirro Ligorio or Flaminio Ponzio, primarily in a spirit of antiquity, ‘rebuilt’ the Temple of Apollo, the Stadium of Domitian or the Domus Augustana on the Palatine Hill.

The ideal philological reconstruction of ancient buildings starting from ruins always remains a chimera that stretches from Humanism – through Piranesi and the architects of the École des Beaux-Arts – to Viollet-le-Duc and the totalitarian regimes of the last century.

Beyond the ideal or ideological factors, the reconstruction of ancient monuments – moreover impracticable in concrete factuality for technical and compositional reasons – has been definitively condemned by the detachment from the construction tradition due to the industrial

revolution and the advent of modern materials, with the symmetrical affirmation of historicism on which modern theories of architectural restoration are based. Concurrent factors that have definitively exorcised any hypothesis of coincidence of the restoration with the restoration.

However, the need to ‘understand’ ancient architecture has not disappeared, in an attempt to experience its space. Cairoli Giuliani states:

Architecture is a matter of atmosphere, ideas, space, time, not plants or elevations, orders or decorative elements. A building is crossed in successive times, living in it are the various parts of the day depending on the light, climatic conditions etc.; space, that is the third dimension, needs time, the fourth, which implies the memory of what has been seen before and the imagination to foresee it in some way, before verifying it directly, will be seen immediately after. This complexity of elements cannot be addressed by means of abstraction relating to plans or sections ... their study needs reading and interpretative means different from those in use with such positive results in other fields of archaeology. A building sends different messages, in a different language, from an amphora or a statue: therefore a different key is needed. There is a duty to look for it even if it is not said that it is possible or that it exists.⁵

The closest approximation is the ‘model’ (what, in other words, we are also used to call ‘plastic’). With the limit, however, of not appreciating the experience of the interior spaces, if not to a very limited extent, or unless we push the reconstruction up to the ratio of 1:1, which would bring us to an idea of reconstruction of the truth. This type of operation is never or almost never attempted, if not with very few exceptions, the most representative of which is the reconstruction of the Villa dei Papiri in Herculaneum within the Getty Museum in Malibu. Such an operation is valid if

seen as a didactic alternative which does not touch the non-original monument, being out of context and without claims of originality.

Thus, the information technologies applied to this sector of the study of ancient architecture find full legitimacy, and above all efficacy, by offering those “means of reading and interpretation,” the “key” that Cairoli Giuliani talks about.

This is particularly true for a ‘young’ monument such as the Villa of Livia. A complex that remained unknown until the mid-nineteenth century, long known only for the paintings discovered in 1863 in the semi-underground summer triclinium (removed and placed in the museum in the 1950s), and the subject of systematic and extensive excavations that achieved their current consistency from the 1980s onwards.

An exploration that, despite having made it possible to define in an exhaustive way its layout and architectural-decorative events, does not allow us today to view – following centuries of devastation – other than a set of floor plans and wall structures that rarely exceed one and a half meters in height. Moreover, for stringent conservation reasons, the site is covered by a large extension of flat roofs on pillars. A state of affairs that limits an understanding of the Villa of Livia primarily to specialists, for in order to see the building that once was the Villa of Livia, the mental representation of what must have been the original appearance of the villa must be conjured up, before its destruction.

An integral reconstruction of the Villa of Livia using information technology is therefore desirable to effectively proffer the presentation of this monument to the public. A reconstruction based on solid scientific foundations that findings and new archaeological knowledge over the last forty years through excavations and studies have made possible.⁶ A work must be done so as to allow even the common visitor to understand the monument in its entirety, mentally reconnecting the concretely visible remains, and giving him or her the possibility of wandering around inside it, through its atriums, arcades, rooms, and gardens



photo: Andrea Venier, Soprintendenza Speciale di Roma

until he understands the link with the surrounding landscape.

The reconstruction of the villa should be integrated by a restitution – also virtual, projected on the walls – of the pictorial decoration (now in the museum) originally present on the walls of the summer triclinium, here too recreating the spatial quality and the symbolic contents of those ‘deceptive walls’ which represent an irreplaceable part of universal cultural and artistic patrimony – currently largely unexpressed – in the present-day Villa of Livia.⁷

Restoration of the peristyle mosaics in the Villa of Livia

The main uncovered space of the built core of the villa, dating to the first Augustan phase, is the large peristyle, which was surrounded by a portico (22 x 18 m), supported by brick columns resting on travertine stylobates, covered with red and white stucco and probably fluted.

At the center of the open area there was the rectangular basin of the *natatio*, a very large

swimming pool (9.36 x 5.62 m, 1.09 m deep), built in the Flavian age.

The verdant grass strip between the edge of the pool and the portico (the existence here of a third *viridarium* of the villa would be evidenced by the discovery of planting holes and *ollae perforatae*), was raised and decorated with a later black and white mosaic in the Severan phase of the villa, and at that time the tub was equipped with a marble coating and three steps to step down more easily inside.

On the short northern and southern sides and on the long eastern side, the decoration represents a marine *thiasos*, with seahorses and monstrous creatures moving towards the focus of the composition: the Oceanus mask in the center of the north side. On the long western side, in place of the marine cortège, there is a geometric hexagonal motif, to be attributed to a slightly later phase, perhaps a makeover, or an afterthought by the architect.

The state of conservation of both the mosaics and the basin is difficult to appreciate today. The published photographic documentation does not provide clear indications, but, from the little that is available, the mosaics are not in excellent condition.

On the occasion of the 2014 anniversary exhibition marking two thousand years since Augustus' death, the mosaics were covered with pedestrian wooden planks, upon which the most relevant representations of the mosaics were reproduced (Oceanus, the hippocampus, the sea creature). The positions of the columns of the peristyle were marked on the planks with wooden discs. The bottom of the basin was covered with a layer of pozzolan in large grains to protect the remains of the footprints of the marble slabs.

For the reasons just illustrated it is not possible, at this stage, to formulate a real restoration project. This will be possible only after the removal of the wooden structures and the re-illumination of the surfaces (mosaics, cleaning of the mosaics and marble slabs, remains of plaster and perhaps marble slabs, etc.), as well as the in-depth analysis of their state of conservation.

*

However, it is generally possible to state the following:

Prior to any other operation, a detailed archive search must be carried out to recover the existing documentation, as well as a photographic documentation of the current state should be effected.

For the walking surfaces, a careful global intervention of archaeological removal / cleaning shall be carried out, aimed at bringing to light the ancient floors, freeing them from encumbering materials, from accumulated materials and debris, from any vegetation, from biological weeds and any outcrops or efflorescence settled there. The operation must be performed by specialized restorers, carried out manually with the aid of broom brushes and with the assistance of archaeologists.

At the end, once the surfaces have been brought to light, it will be necessary to proceed with a complete documentation of the plans (graphics, with accurate surveys in adequate scale, both traditional and digital in 3D, and photographic,

even with the aid of drones), all of which today as far as is known - seem to be missing, at least in detail.

This will be followed by a revision of the mosaic walking surface, through a careful cleaning of the surfaces and the re-filling of the fissures, to restore the floor surface in as intact and unified a way as possible and thus avoid the possibility of growth of plant weeds and their root systems in the cracks. In order to allow easier accessibility where it is possible by bringing the passage back to level, re-filling the joints between stone elements and filling the gaps with other stone elements or color-matched mortars (at the discretion of the construction management), also to eliminate or reduce, as far as possible, any dips or hollows in the floor that cause (in the event of important meteoric events) stagnation of water that is certainly harmful and a harbinger of further degradation.

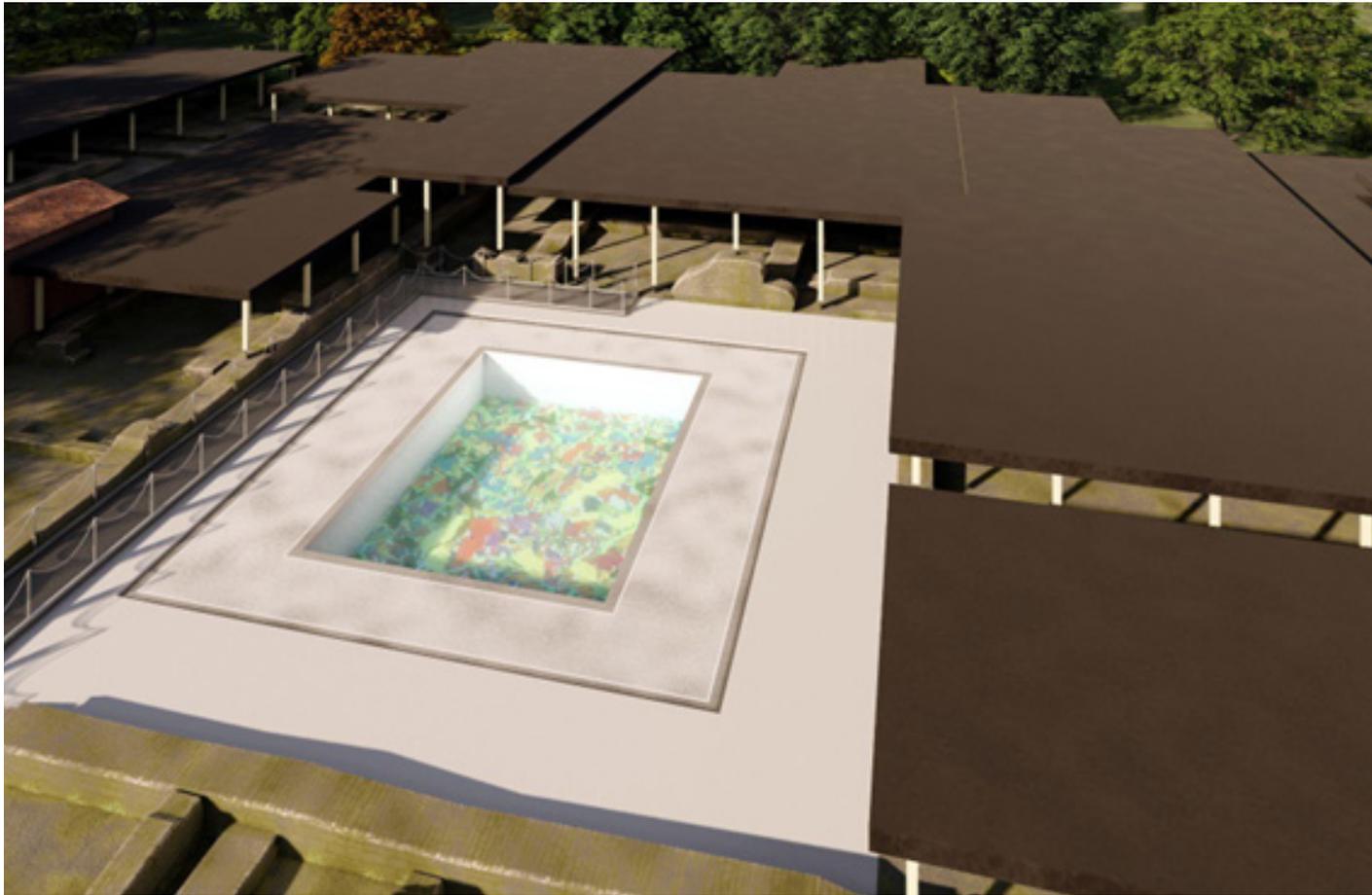
Similarly, work will be carried out on the bedding surfaces of the marble coating of the tank (and any remains of the marble coating itself), with the careful cleaning of the surfaces and - also in this case - at the subsequent survey of what is still in place, carefully restoring and realigning where necessary the stone slabs, while with the other portions we will proceed in a consolidation of the floors and the subsequent protection with a non-woven fabric that also serves as a base for the casting of a layer of mortar based on natural hydraulic lime with the addition of fragments and earthenware powders and stone and marble powders to obtain a chromatic definition that suggests the ancient marble top.

Notes

- ¹ Poggio Bracciolini, *Historia de varietate fortunae libri quatuor*, 1430 (1513).
- ² Jacob Burckhardt, *La civiltà del Rinascimento in Italia* (Firenze: G. C. Sansoni, 1953).
- ³ Albert J. Ammermann, “Adding time to Rome’s *imago*,” in “Imaging ancient Rome. Documentation, visualization, Imagination,” edited by Lothar Haselberger and John Humphrey, *Journal of Roman Archaeology*, supplementary series number 61 (2006): 308.
- ⁴ Udo Kultermann, *Die Maxentius-Basilika. Ein Schlüsselwerk spätantiker Architektur* (Weimar: VDG, Verlag und Datenbank für Geisteswissenschaften, 1996), 25.
- ⁵ Cairol Fulvio Giuliani, “Note sull’architettura delle residenze imperiali dal I al III secolo d. C.,” *ANRW (Aufstieg und Niedergang der römischen Welt)*, II.12.1 (1982): 233-34.
- ⁶ A first step in this direction has been made based on the research undertaken in the first part of the twenty-first century, in Maurizio Forte et al., eds, *La Villa di Livia. Un percorso di ricerca di archeologia virtuale* (Roma: „L’Erma” di Bretschneider, 2007).
- ⁷ Salvatore Settis, *La Villa di Livia. Le pareti ingannevoli* (Milano: Mondadori Electa, 2008).

Bibliography

- Ammermann, Albert J. “Adding time to Rome’s *imago*.” In “Imaging ancient Rome. Documentation, visualization, Imagination,” edited by Lothar Haselberger and John Humphrey, *Journal of Roman Archaeology*, supplementary series number 61 (2006): 297–308.
- Bracciolini, Poggio. *Historia de varietate fortunae libri quatuor*, 1430 (1513).
- Burckhardt, Jacob. *La civiltà del Rinascimento in Italia*. Firenze: G. C. Sansoni, 1953.
- Forte, Maurizio et al., eds. *La Villa di Livia. Un percorso di ricerca di archeologia virtuale*. Roma: „L’Erma” di Bretschneider, 2007.
- Giuliani, Cairol Fulvio. “Note sull’architettura delle residenze imperiali dal I al III secolo d. C.” *ANRW (Aufstieg und Niedergang der römischen Welt)* II.12.1 (1982): 233-258.
- Kultermann, Udo. *Die Maxentius-Basilika. Ein Schlüsselwerk spätantiker Architektur*. Weimar: VDG, Verlag und Datenbank für Geisteswissenschaften, 1996.
- Piranomonte, Marina. *Via Flaminia*. Rome: Electa, 2014.
- Settis, Salvatore. *La Villa di Livia. Le pareti ingannevoli*. Milano: Mondadori Electa, 2008.



Rendering by Architect Giuseppe Morganti, 2021

Crispin CORRADO

John Cabot University

THE SWIMMING POOL OF LIVIA: *NATATIO* AT *DOMUS LIVIAE*

The Villa of Livia at Prima Porta is indisputably unique among Roman villas. The familial estate of Livia, wife of the first Roman emperor, the villa at Prima Porta rose in importance during her husband Augustus's principate from a country retreat to an important symbol of empire, and the first imperial villa. Indeed, it is here where the best-known portrait of Augustus, the "Augustus of Prima Porta," was discovered; it was a discovery that announced simultaneously the statue's continued display here and the villa's ongoing importance after Augustus' death. As historians may attest, it is rare to be able to identify with certainty physical remains that are mentioned in the ancient sources. With the Villa of Livia at Prima Porta, we have just this situation. Indeed, it is the ancient author Suetonius who tells the story of the portent that announced to Livia, here at the villa, that her son Tiberius would be the eventual emperor. It is also an ancient author, Pliny the Elder, who tells of the singularity of the villa's garden, for as empire began, new traditions grew along with it, and it would be from the gardens at this villa that laurel would be gathered for the emperors' wreaths – each emperor had his own laurel tree.

An unassuming property perched upon a ridge, the villa complex and its gardens were surrounded by and integrated with lush greenery and blooming nature. In the first centuries BC and AD, Roman villas were typically luxurious locations aimed at welcoming and impressing guests, and were filled

with manmade and natural wonders that delighted the senses. The villa of Livia had several entertaining rooms and spaces whose confines were natural or, if manmade, were adorned in such a way as to make that distinction ambiguous. The *natatio*, or swimming pool, of this villa was a centerpiece of one such entertaining area. Beautifully adorned with a black and white mosaic with an aquatic theme typical to Roman bathhouses at the time, the pool was an addition to the villa made in the first century AD. Roman villas, even those located on the sea or close to the coast, often included swimming pools for the private use and enjoyment of the owners and their visitors. Archaeological finds attest that such pools were often as ornamental as they were utilitarian, as we have evidence of elegant examples of rooftop pools, 'infinity' pools, and swimming pools that merged into the waters of the sea. The Romans were no stranger to innovation, or to incredible extravagance and luxury. To have a swimming pool in the privacy of your own home (especially a home located far from natural waterways), and one placed delicately within surrounding greenery and sumptuous gardens, was the height of comfort and magnificence. The swimming pool in the Villa of Livia at Prima Porta was certainly an example of such a beloved element that provided both visual pleasure and a precious remedy for the heat of the summer.

Giulia CANEVA

University of Roma Tre, Department of Science

A GARDEN OF THE SOUL AND AN INTERPRETATION OF THE LIFE: THE HYPOGEAL PAINTING OF GARDEN ROOM OF THE VILLA OF LIVIA

Introduction

Nature frequently enters with significant prominence into the representation of ancient Rome, playing a leading role in landscapes as the background of human activities, such as in gardens and in views of 'ideal places'.¹ Furthermore, a great number of naturalistic details can be detected inside the fantastic world of the 'grotesques,' or in sculpted surfaces, where they appear in a cryptic and metamorphic continuity, which should no longer be seen only as oddity or eccentricity.

Indeed, looking with attention at such naturalistic data, a high number of botanical taxa (78 families, 159 genera, and 168 species), as well as animals (mostly birds, but also mammals), have been identified in pictures and in carved surfaces of ancient Roman culture.² Why such a significant number? A first reason arises upon considering that the naturalistic knowledge of the ancient people was remarkable, since they depended on plants and animals for all fundamental aspects of life, such as nutrition, medicine, dressing, protection from atmospheric elements, and managing handicraft activities. Obviously, some elements of nature had

a wider recurrence, but also rare species cannot be neglected.³ But this is not the only cause.

A further explanation of such a great quantity of represented and useful plants arises when considering a second question: which was their function and meaning? Today, all too often, images of botanical diversity are simply not recognized, and the use of natural elements in the past appear erroneously to have only been employed as elements of decoration. Indeed, they were much more, since devout believers would have necessitated a further and greatly heightened role.⁴ In fact, we must remember that ancient people lived in direct contact with nature and to their mentality, nothing was casual, but all was related to the favors of the gods, with each phenomenon signifying something in its display. In the ancient society, both the 'ideal' or 'architectonic' garden landscape, from the simpler to the most complex ones, greatly underscored religious values, and always expressed the idea of divinity.⁵ Images represented a powerful tool of symbolic representation and even illiterate people were undoubtedly able to 'read' and interpret the iconographic language, knowing the nature and its phenomena in a deep way.⁶

Alphabet and Syntax of the Representation in the Garden Room of the Villa of Livia

In this view, the garden representation in the underground rooms of the Villa of Livia at Prima Porta (first century BC), have been studied by many authors with different approaches,⁷ but in no manner should be seen as a mere description of an idyllic and beautiful landscape. The Garden Room is often described as a *triclinium* (i.e. dining room), in absence of evidence of specific elements, and because of its rectangular shape and dimensions (11,70 meters long, 5,50 m wide). It has also been interpreted as an interior grotto or *nymphaeum* (i.e. a grotto of the nymphs), which had a sacral dimension, and which were popular in the opulent residences of the Roman elite. In all cases, the room seems to have been designed not only for the private delectation of the imperial family, but also for visitors of a social elite, offering a verdant blessing of peace, a view of blooms or fruiting trees, as the representation of a prosperous era.

Several scholars interpreted the garden view in the whole as a tool of glorification of the fecundity of the Augustan *aurea aetas*⁸. More recently, other scholars underlined “the multiple allusions to Augustan policies and actions, as well as further allusions to deities, areas outside the empire, and foreign power.”⁹ It was also suggested that the “illusionistic features seem to portray the illusionistic-escapist spirit of Augustan times from both the social and the religious aspects,”¹⁰ whereas other contributions gave data on horticultural skills, which can arise from an observation of pruned trees.¹¹

Indeed, the illusionistic idea represented by such a special garden is not only a representation of a perfect place, such as in a modern *trompe l'oeil*, ideal to refresh in the hot seasons. The whole representation had a much more complex and detailed meaning, which requires a deep understanding of the general structures, as well as of their particular details.

Here, the natural landscape has the highest space, and *the place* itself shows differences from a typical garden place, lacking any typical garden statues, *hermae*, or fountains, with the only built-up elements being the marble balustrades and the *incannunciate* (made with reeds). The place also differs from a wild nature representation and the context seems to show an emblematic role, displaying some clear characters of a cave (traces of stalactites on the top of the sky/ceiling). Furthermore, the partition of the space, with paths and geometries contribute to its interpretation.¹² This author considers Nature as a cardinal element for such interpretation, and will analyze both the ‘alphabet’ and the ‘syntax,’ indicated in the selection of natural elements as communication for viewers.

The letters of such an alphabet arise from the different represented plants (24 species¹³), and birds (pigeon, quail, blackbird, thrush, oriolus (golden bird), crow, nightingale, and sparrow¹⁴), each one probably having a specific meaning. In the case of birds, most of them are freely flying and only one is caged. Further, I wish to stress that the highest number of used plants were well known to the visitors of the place, since they constituted (overall wild and some cultivated) a high quantity of autochthonous species in the Latium region, belonging to the Mediterranean maquis and forests (i.e., oaks, laurels, myrtles, boxes, arbutus, such as from ‘flowering elements’). The stone pine has a controversial geographical area of distribution, but it had a clear diffusion in the Roman area still in such times. The few ‘exotic’ elements originate from the Eastern Mediterranean basin (cypresses, quinces) or palaeo-tropical and Iranian regions (i.e. palms, pomegranates), but they were similarly well known; only one species comes from the Euro-Siberian context until the Alps (the spruce), and it was also known considering the wideness of the area of Roman influence.

It is also interesting noting that the plant representation lacks a seasonal consistency, in that some plants are depicted as in springtime (e.g. most flowers) while others are in an autumnal or ‘harvest’ habitus (e.g. most trees bearing fruits, such as quinces, pomegranates, arbutus). It

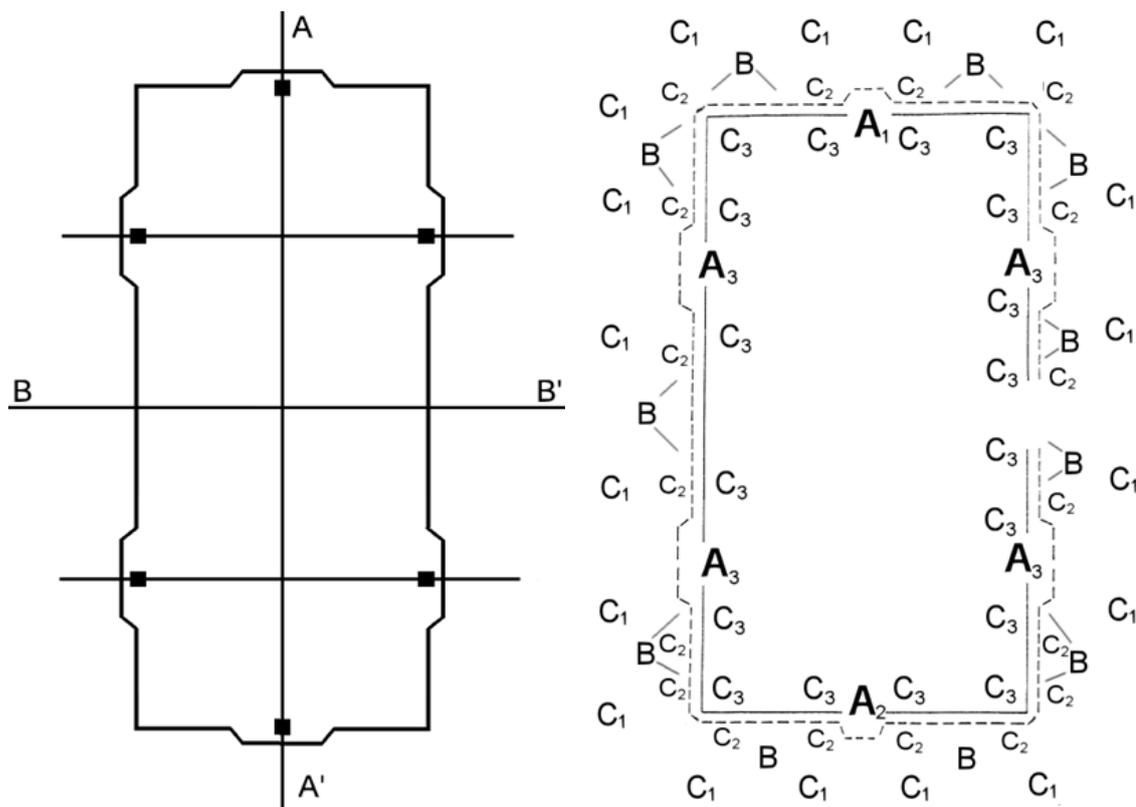


Fig. 1 a) Bilateral axis of symmetry among the plant representation in the Villa di Livia Garden representation; b) A1=*Pinus pinea*; A2=*Quercus robur*; A3=*Picea excelsa*; B=*Punica granatum* + *Cydonia oblonga*; C1=*Cupressus sempervirens*, *Nerium oleander*, *Quercus ilex*, *Buxus sempervirens*, *Phoenix dactylifera*, *Laurus nobilis*, *Arbutus unedo*, *Myrtus communis*, *Viburnum tinus*; C2=*Papaver somniferum*, *Chrysanthemum coronarium*, *Anthemis cotula*; C3=*Phyllitis scolopendrium*, *Viola reichenbachiana*, *Iris*.

probably means that the most relevant objective of the painting is to favor their perception, and they are represented following the season where their most typical elements (flowers or fruits) become clearly detectable.

The syntax of such a means of communication arises from the position of each element, and from the careful and orderly sequence of trees, herbaceous plants, as well as from the representation of birds. The clear symmetry, and hierarchical disposition of the natural elements show a key of interpretation to the entire composition. A special order also arises from the clear symmetry of all the space, with a double bilateral axis, which is

also emphasized by the plant dispositions (Fig. 1a). In fact, the layout of the plants does not appear to be casual: some species have a clear special emphasis, due to their location on a visual plane, whereas others show lower evidence. The most remarkable elements are those which are located inside niches, and despite their low frequency (only one or four repetitions), they have a high visual relevance, as true protagonists of the scene (called A in Fig. 1b, and in Fig. 2). These are a young pine (*Pinus pinea*) in a symmetric opposite position displaying an oak (*Quercus robur*), in the main axis, and four elements of spruces (*Picea excelsa*) in the second axis. A further alternance among

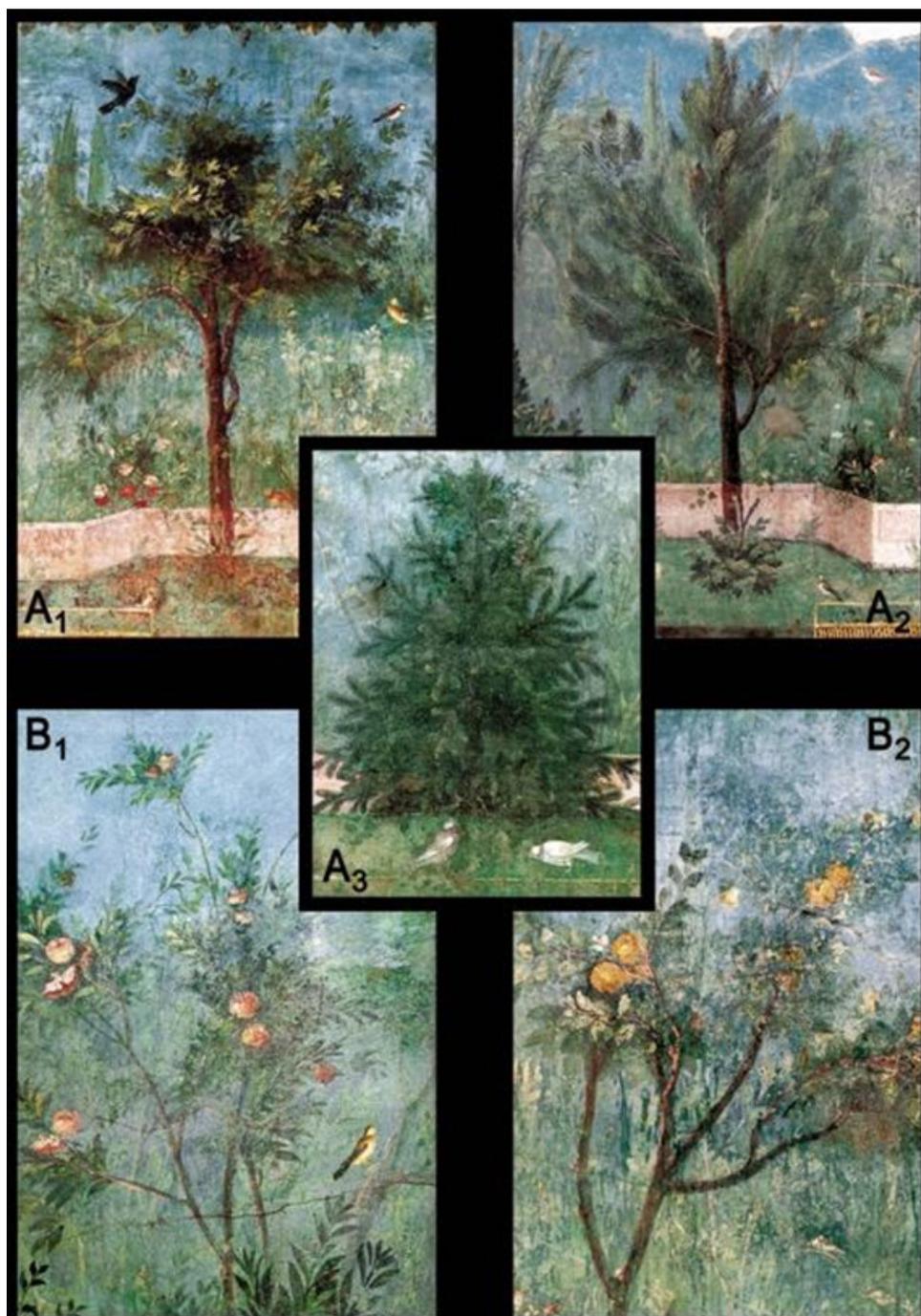


Fig. 2 The most remarkable plant elements of the Livia's Garden: On the top: A1 in the main axis, species, which are located inside niches (oak (*Quercus robur*) in a symmetric opposite position to a pine (*Pinus pinea*); in the central area, plants located along the second axis, A2 spruces (*Picea excelsa*); on the bottom, B, alternance among quinces (*Cydonia oblonga*) and pomegranate trees (*Punica granatum*).

quinces (*Cydonia oblonga*) and pomegranate trees (*Punica granatum*), which are located immediately close to them should be noted (called B in Fig. 1b). In the hierarchical view are plants which occur in the background of the balustrade behind them, or along the small pathways (called C in Fig. 1b).

The Hypothesized Meaning of Nature's Representation

The Plants

Following a previous study,¹⁵ I stress that the dominant elements (oak/pine) seem to be joined to the fundamental binomial elements indicating the creation of life, such as divine power, being symbolically related to Jupiter/Zeus (as the King of the Gods in the Greek-Roman Pantheon) and Cybele/Hera (as the Great Mother and in the role of the Queen and Wife of Zeus).¹⁶ In the classical tradition, all natural phenomena depend on the conjunction and equilibrium among them. Following such valence, some scholars also hypothesized that an ideal linkage could be made to Augustus and Livia¹⁷ in their powerful role. The third element (spruce) has instead a clear funerary valence at the Roman time, considering that Pliny called it “feralis arbor at funebri indicio.”

The binomial continuous alternance among pomegranate and quinces has also a not negligible meaning. Pomegranate is not only linked to the cult of the Great Mother, but also to the moon goddesses Kore and Persephone, besides Dionysus and Aphrodite. It is a symbol of fertility and regeneration. Quinces were consecrated both to Hera and Aphrodite, and they represented the ‘golden apples’ (*mala aurea*) of the garden of Hesperides.¹⁸ Such a garden also was symbolically located in an island where Jupiter and Hera were married and overall, close to the place where the world ends (*finis terrae* and Hesperides originated, *vesperus*, i.e. sunset). Such golden apples represented not only a wish of happiness and prosperity, but also of immortality.

In a striking contrast of meanings, elements linked to death (see *Chrysanthemum coronarium*, *Viola sp.*, *Papaver somniferum*, *Phyllitis scolopendrium*, *Nerium oleander*, *Cupressus sempervirens*), are juxtaposed with those linked to the idea of life and regeneration (*Phoenix dactylifera*, *Laurus nobilis*). Even if illustrated repetitively, the plants belong to Aphrodite's sphere (e.g. *Myrtus communis*, *Rosa sp.pl.*) seem to play a secondary role.¹⁹ Plants of the Dionysian sphere (*Hedera helix*, which is not frequently recurrent) or of Apollonian ones (*Laurus nobilis*, which is represented more frequently but only in the background), do not show an evident role as protagonists in such a representation, even if I would not suggest neglecting discussion of their general symbolic role. Indeed, it is well known that the area of Prima Porta had been named *ad gallinas albas* after the legend of a prodigious event, related by Pliny, in which a white fowl holding a laurel branch in its beak, fell from the talons of an eagle down unto Livia Drusilla's lap. Livia soon thereafter became Octavian Augustus' wife. Following the diviners' orders, the emperor kept the fowl and its offspring, then planted the laurel which soon grew in a dark sacred grove and its branches would serve to make the wreaths crowning the emperor's head to celebrate his triumphs.

The botanical selection in which the seasons are thus mixed, substantiates Kellum's.²⁰ idea that the garden “with its balance of the wild and the cultivated, far more closely resembles the humble garden of the Virgil Georgics, whose owner »matched in contentment the wealth of kings«, and „was the first to pluck roses in spring and apples in autumn.”

The Birds

We must remember that the number of represented bird species is very high²¹ and it overcomes what is detectable in a simply natural place. Various scholars stressed that each species of bird in the ancient representation embodies a different symbolic value²² in relation to their specific attributes. Here, I underline that, as a whole, they

have a common significance as messengers of the gods' divine will, similarly (but with inferior values) to the angels in Christian religion. Birds were a conduit between the sky and the earth, and they were considered able to carry divine prediction (the word 'auspicious' derives from '*aves spicere* = birds looking,' referring to the ancient sacerdotal powers of interpreting avian messages).

Birds also represented the soul, and, as observed by Jones,²³ the appearance of the domestic caged bird in Roman domestic culture is very striking. Birds are a metaphor for freedom, and the caged nightingale is an image of the human soul trapped in the body. Thus, the predominance of birds in the Livian frescos unequivocally substantiates an interpretation of the place as a garden of the soul.

The Place

We cannot neglect that the garden is painted in an underground room, where light could enter only through two cryptoporticus windows opened along the main axis, and despite the illusionistic effect of the garden itself, the representation of an underground world is further underlined by the clear depiction of a cave with stalactites, which surrounds the sky. It clearly has an emblematic meaning, since a cave can be seen as an archetype place of rebirth, or initiation, and it explains why, starting from prehistoric times, such rituals were mainly celebrated in a cave.²⁴ Furthermore, in the Platonic view, a cave represents a place where the souls are captured by the Gods, and where they are waiting for a light, which could indicate the way to reach truth.

Conclusion

It is appropriate to review the interpretations of these paintings, when they are described only from an illusionistic point of view, or as a simple representation of Augustus' promised Golden Age. A more complex symbolic and philosophical purpose was probably inspired by the selection and

representation of natural species, and such value was certainly detectable by the ancient visitors of the Roman elite.

This garden seems an 'ideal place,' in which the plants (each one referring to different gods and myths) and other natural elements (different birds as representation of the soul) communicate the philosophical and religious representation of human life. The driving forces are represented by the archetypes of 'Mother and Father' of the Gods, as the divinities regulating all natural events and life, and by elements which describe the inevitability of death. Prosperity and good luck are also constant repetitive elements, illustrating that life is transitory, but able to renew and regenerate itself in the cosmic cycle of Nature, and that death is not final, being that the soul is immortal.

Notes

- ¹ Giulia Caneva, Ettore Pacini, Maria Adele Signorini and Angelo Merante, “La fitoiconologia per il riconoscimento e l’interpretazione delle rappresentazioni artistiche,” in Giulia Caneva, ed., *La Biologia vegetale per i beni culturali, vol. 2* (Firenze: Nardini Editore, 2005), 85-128.
- ² Alma Kumbaric and Giulia Caneva, “Updated Floristic Biodiversity of Roman Iconography,” *Rendiconti Lincei* 25 (2) (2014): 181-193. In such work the species have been identified based on the most diagnostic morphological aspects (the general habit of the plants, typology, shape, size and color of fruits and flowers, such as morphology and layout of the leaves), such as considering the habitat and the likely frequency in the adjacent natural contexts. Historical data, i.e. *The Natural History* of Pliny the Elder and the most relevant palaeobotanical information about the natural potential vegetation of the Roman area.
- ³ Alma Kumbaric, Valentina Savo and Giulia Caneva, “Orchids in the Roman Iconography: Evidence for the First Representations,” *Journal of Cultural Heritage* 14 (4) (2013): 311-316. In general *Acanthus mollis*, *Vitis vinifera*, *Phoenix dactylifera*, *Punica granatum*, *Ficus carica*, *Laurus nobilis*, and *Hedera helix* proved to be the species represented most frequently, due to their strong association with mythological and religious symbolism.
- ⁴ Giulia Caneva, *Il codice botanico di Augusto. Roma, Ara pacis: parlare al popolo attraverso le immagini della natura = The Augustus Botanical code. Roma: speaking to the People through the images of nature* (Roma: Gangemi, 2010); Giulia Caneva, “Il giardino come espressione del divino nelle rappresentazioni dell’antica Roma,” in Kathleen Coleman and Pascale Ducrey, eds. *Le jardin dans l’antiquité. Tome LX* (Genève: Fondation Hardt, 2014), 301-361.
- ⁵ Pierre Grimal, *I giardini di Roma antica*, translated by Vincenzo Abrate (Milano: Garzanti, 1994); Zohreh Hosseini and Giulia Caneva, “Lost Gardens: From Knowledge to Revitalization and Cultural Valorization of Natural Elements,” *Sustainability* 14 (5) (2022): 2956.
- ⁶ Giulia Caneva, Valentina Savo and Alma Kumbaric, “Big Messages of Small Details: Nature in Roman Archaeology,” *Economic Botany* 68 (1) (2014): 109-111; Valentina Savo, Alma Kumbaric and Giulia Caneva, “Grapevine (*Vitis vinifera* L.) Symbolism in the Ancient Euro-Mediterranean Culture. Notes on Economic Plants,” *Economic Botany* 70 (2) (2016): 190-197; Giulia Caneva, Arianna Monaco, Paola Virgili and Flavia Bartoli, “Re-flowering flowers: the hope of an eternal blooming since Roman times,” *Flora Mediterranea* 29 (2019): 27-44.
- ⁷ “Dr. Möller: die Botanik in den Fresken der Villa Livia.” [Sitzungsprotokolle]. *Mitt. Deutsch. Arch. Inst. Röm. Abteilung V* (1890): 78-80 [66-83]; Mabel McAfee Gabriel, *Livia’s Garden Room at Prima Porta* (New York: New York University Press, 1955); Carmelo Calci and Gaetano Messineo, *La Villa di Livia a Prima Porta* (Roma: De Luca, 1984), 7-20; Salvatore Settis, “Le pareti ingannevoli. Immaginazione e spazio nella pittura romana di giardino,” *Fondamenti XI* (1988): 3-39; Barbara A. Kellum, “The Construction of Landscape in Augustan Rome: The Garden Room at the Villa ad Gallinas,” *The Art Bulletin* 7 (1994): 211-224; Kaja J. Tally-Schumacher and Nils P. Niemeier, „Through the Picture Plane: Movement and Transformation in the Garden Room at the Villa ad Gallinas at Prima Porta,” *Chronika* 6 (2016): 58-71; Nava Sevilla-Sadeh, “Escapism and the Sublime: The Meanings of Illusionism in Livia’s Garden Paintings,” *Studies in Visual Arts and Communication* 6 (2) (2019): 3-14. https://journalonarts.org/wp-content/uploads/2020/01/SVACij-Vol6_No2-2019_Sevilla-Sadeh_Escapism-and-the-Sublime.pdf.
- ⁸ See: Reinhard Förtsch, „Ein Aurea-Aetas-Schema,” *Mitteilungen des Deutschen Archäologischen Instituts, Römische Abteilung* 96 (1989): 333-345; Gabriel, *Livia’s Garden Room at Prima Porta*; Barbara A. Kellum. “The Construction of Landscape in Augustan Rome: The Garden Room at the Villa ad Gallinas.” *The Art Bulletin* 7 (1994): 211-224.
- ⁹ See: Kaja J. Tally-Schumacher and Nils P. Niemeier, „Through the Picture Plane: Movement and Transformation in the Garden Room at the Villa ad Gallinas at Prima Porta,” *Chronika* 6 (2016): 58-71.
- ¹⁰ As mimesis that promises prosperity and abundance; realism that promises everlasting happiness; optical illusion that promises that nothing exists beyond this goodness; and a symmetrical composition that promises a world of equilibrium and harmony, see: Sevilla-Sadeh, “Escapism and the Sublime: The Meanings of Illusionism in Livia’s Garden Paintings.”
- ¹¹ Kathryn L. Gleason, “The Lost Dimension: Pruned Plants in Roman Gardens,” *Vegetation History and Archaeobotany* 28 (3) (2019): 311-325.
- ¹² Frederick M. A. Jones, “Drama, Boundaries, Imagination, and Columns in the Garden Room at Prima Porta,” *Latomus* 72 (4) (2013): 997-1021.
- ¹³ See the list of species: Giulia Caneva and Lorenza Bohuny, “Botanical Analysis on the Livia’s Villa Painted Flora (Prima Porta, Roma),” *Science and Technology in Cultural Heritage* 4 (2003): 149-155. *Picea excelsa*, *Acanthus mollis*, *Arbutus unedo*, *Buxus sempervirens*, *Chrysanthemum coronarium*, *Anthemis* sp., *Cornus mas*, *Cupressus sempervirens*, *Cydonia oblonga*, *Hedera helix*, *Iris* sp., *Laurus nobilis*, *Myrtus communis*, *Papaver somniferum*, *Phoenix dactylifera*, *Phyllitis scolopendrium*, *Pinus pinea*, *Punica granatum*, *Quercus robur* gr., *Quercus ilex*, *Rosa centifolia*, *Viola* cfr. *reichenbachiana*, *Nerium oleander*, *Viburnum tinus*.
- ¹⁴ For birds see: Antero Tammisto, “Birds in Mosaics: a Study on the Representation of Birds in Hellenistic and Romano-Campanian Tessellated Mosaics to the Early Augustan Age,” *Acta Instituti Romani Finlandiae* 18 (1997); Antero Tammisto, “The Representations of the Capercaillie (*Tetrao urogallus*) and the Pheasant (*Phasianus colchicus*) in Romano-Campanian Wall Paintings and Mosaics,” *Arctos-Acta Philologica Fennica* 23 (1989): 223-247; Antero Tammisto, “Gli uccelli nelle pitture di giardino della Casa della Venere in Conchiglia,” *Rivista di Studi Pompeiani* 23 (2012): 29-38.
- ¹⁵ Giulia Caneva, “Ipotesi sul significato simbolico del giardino dipinto della villa di Livia (Prima Porta, Roma),” *Bullettino della Commissione archeologica comunale di Roma C* (1999): 64-79.

- ¹⁶ Giulia Caneva, *Il pino domestico. La Nazione delle Piante* (Bari: Laterza, 2019).
- ¹⁷ Reinhard Förtsch, „Ein Aurea-Aetas-Schema,“ *Mitteilungen des Deutschen Archäologischen Instituts, Römische Abteilung* 96 (1989): 333–345.
- ¹⁸ As later misinterpreted (see the orange garden of Giacomo Boni on the Aventine hill in Rome) the famous *mala aurea* in the Hesperides' Garden clearly could not possibly be orange trees, which came from the East much later: first, the bitter orange tree with the Arabs, and then, the sweet orange tree with the Portuguese colonies.
- ¹⁹ Giulia Caneva, *Il codice botanico di Augusto. Roma, Ara pacis: parlare al popolo attraverso le immagini della natura = The Augustus Botanical code. Roma: speaking to the People through the images of nature* (Roma: Gangemi, 2010).
- ²⁰ Barbara A. Kellum. “The Construction of Landscape in Augustan Rome: The Garden Room at the Villa ad Gallinas.” *The Art Bulletin* 7 (1994): 211–224.
- ²¹ Mabel McAfee Gabriel. *Livia's Garden Room at Prima Porta*. New York: New York University Press, 1955.
- ²² See: Antero Tammisto, “Birds in Mosaics: a Study on the Representation of Birds in Hellenistic and Romano-Campanian Tessellated Mosaics to the Early Augustan Age,” *Acta Instituti Romani Finlandiae* 18 (1997) René Guenon, *Simboli della scienza sacra = Symboles fondamentaux de la Science sacrée* (Paris: Gallimard, 1962), translated by Francesco Zambon (Milano: Adelphi Edizioni, 1975); Ashleigh Green, “Lesbia's Controversial Bird: Testing the Cases for and against Passer as Sparrow,” *Antichthon* 55 (2021): 6–20.
- ²³ Frederick M. A. Jones, “The Caged Bird in Roman Life and Poetry; Metaphor, Cognition, and Value,” *Syllecta Classica* 24 (1) (2013): 105–123.
- ²⁴ E.g. Eleusian and Mythraic rituals.

Bibliography

- Calci, Carmelo and Gaetano Messineo. *La Villa di Livia a Prima Porta*. Roma: De Luca, 1984.
- Caneva, Giulia. *Il pino domestico. La Nazione delle Piante*. Bari: Laterza, 2019.
- Caneva, Giulia, Arianna Monaco, Paola Virgili and Flavia Bartoli. “Re-flowering flowers: the hope of an eternal blooming since Roman times.” *Flora Mediterranea* 29 (2019): 27–44.
- Caneva, Giulia, Valentina Savo and Alma Kumbaric. “Big Messages of Small Details: Nature in Roman Archaeology.” *Economic Botany* 68 (1) (2014): 109–111.
- Caneva, Giulia. “Il giardino come espressione del divino nelle rappresentazioni dell'antica Roma.” In Kathleen Coleman and Pascale Ducrey, eds. *Le jardin dans l'antiquité. Tome LX*, 301–361. Genève: Fondation Hardt, 2014.
- Caneva, Giulia. *Il codice botanico di Augusto. Roma, Ara pacis: parlare al popolo attraverso le immagini della natura = The Augustus Botanical code. Roma: speaking to the People through the images of nature*. Roma: Gangemi, 2010.
- Caneva, Giulia, Ettore Pacini, Maria Adele Signorini and Angelo Merante. “La fitoiconologia per il riconoscimento e l'interpretazione delle rappresentazioni artistiche.” In Giulia Caneva, ed., *La Biologia vegetale per i beni culturali*, vol. 2, 85–128. Firenze: Nardini Editore, 2005.
- Caneva, Giulia and Lorenza Bohuny. “Botanical Analysis on the Livia's Villa Painted Flora (Prima Porta, Roma).” *Science and Technology in Cultural Heritage* 4 (2003): 149–155.
- Caneva, Giulia. “Ipotesi sul significato simbolico del giardino dipinto della villa di Livia (Prima Porta, Roma).” *Bullettino della Commissione archeologica comunale di Roma C* (1999): 64–79.
- Möller, O. “Die Botanik in den Fresken der Villa Livia. [Sitzungsprotokolle].” *Mitteilungen des Kaiserlich Deutschen Archäologischen Instituts: Römische Abteilung V* (1890): 78–80 [66–83].
- Förtsch, Reinhard. “Ein Aurea-Aetas-Schema”. *Mitteilungen des Deutschen Archäologischen Instituts, Römische Abteilung* 96 (1989): 333–345.
- Gabriel, Mabel McAfee. *Livia's Garden Room at Prima Porta*. New York: New York University Press, 1955.
- Gleason, Kathryn L. “The Lost Dimension: Pruned Plants in Roman Gardens.” *Vegetation History and Archaeobotany* 28 (3) (2019): 311–325.
- Green, Ashleigh. “Lesbia's Controversial Bird: Testing the Cases for and against Passer as Sparrow.” *Antichthon* 55 (2021): 6–20.
- Grimal, Pierre. *I giardini di Roma antica*. Translated by Vincenzo Abrate. Milano: Garzanti, 1994.
- Guenon, René. *Simboli della scienza sacra* (tit. orig. *Symboles fondamentaux de la Science sacrée*. Paris: Gallimard, 1962). Translated by Francesco Zambon. Milano: Adelphi Edizioni, 1975.

- Hosseini, Zohreh and Giulia Caneva. "Lost Gardens: From Knowledge to Revitalization and Cultural Valorization of Natural Elements." *Sustainability* 14 (5) (2022): 2956.
- Jones, Frederick M. A. "The Caged Bird in Roman Life and Poetry; Metaphor, Cognition, and Value." *Syllecta Classica* 24(1) (2013): 105-123.
- Jones, Frederick M. A. "Drama, Boundaries, Imagination, and Columns in the Garden Room at Prima Porta." *Latomus* 72 (4) (2013): 997-1021.
- Kellum, Barbara A. "The Construction of Landscape in Augustan Rome: The Garden Room at the Villa ad Gallinas." *The Art Bulletin* 7 (1994): 211-224.
- Kumbaric, Alma and Giulia Caneva. "Updated Floristic Biodiversity of Roman Iconography." *Rendiconti Lincei* 25 (2) (2014): 181-193.
- Kumbaric, Alma, Valentina Savo and Giulia Caneva. "Orchids in the Roman Iconography: Evidence for the First Representations." *Journal of Cultural Heritage* 14 (4) (2013): 311-316.
- Savo, Valentina, Alma Kumbaric and Giulia Caneva. "Grapevine (*Vitis vinifera* L.) Symbolism in the Ancient Euro-Mediterranean Culture. Notes on Economic Plants." *Economic Botany* 70 (2) (2016): 190-197.
- Settis, Salvatore. "Le pareti ingannevoli. Immaginazione e spazio nella pittura romana di giardino." *Fondamenti XI* (1988): 3-39.
- Sevilla Sadeh, Nava. "Escapism and the Sublime: The Meanings of Illusionism in Livia's Garden Paintings." *Studies in Visual Arts and Communication* 6 (2) (2019). on-line.
https://journalonarts.org/wp-content/uploads/2020/01/SVACij-Vol6_No2-2019_Sevilla-Sadeh_Escapism-and-the-Sublime.pdf.
- Tally-Schumacher, Kaja J. and Nils P. Niemeier. "Through the Picture Plane: Movement and Transformation in the Garden Room at the Villa ad Gallinas at Prima Porta." *Chronika* 6 (2016): 58-71.
- Tammisto, Antero. "Gli uccelli nelle pitture di giardino della Casa della Venere in Conchiglia." *Rivista di Studi Pompeiani* 23 (2012): 29-38.
- Tammisto, Antero. "Birds in Mosaics: a Study on the Representation of Birds in Hellenistic and Romano-Campanian Tessellated Mosaics to the Early Augustan Age." *Acta Instituti Romani Finlandiae* 18 (1997).
- Tammisto, Antero. "The Representations of the Capercaillie (*Tetrao urogallus*) and the Pheasant (*Phasianus colchicus*) in Romano-Campanian Wall Paintings and Mosaics." *Arctos-Acta Philologica Fennica* 23 (1989): 223-247.

Crispin CORRADO

John Cabot University

BIODIVERSITY IN THE ANCIENT ROMAN WORLD, THE VILLA OF LIVIA

The ancient Romans certainly had a concept of biodiversity, though it may not have been recognized or called by the same name. To the Romans, nature and its cultivation were tied to life and prosperity from the earliest of times. Later Romans often looked back to the early Republic, for example, as a time when hard-working and honorable men – Rome’s richest and best, in fact – lived an honest and simple life tilling their own fields and harvesting their own crops. This sweet situation placed nature at the core of man’s existence, and man was fully invested in the process of cultivating it.

Authors such as Cato the Elder, Varro, Columella and Vergil, wrote treatises and verse about farming, flora, and the natural world. Cato the Elder’s treatise on agriculture, *De Agri Cultura* (ca. 160 BC), is in fact our oldest surviving work of Latin prose. A relatively informal manual of farming and animal husbandry, it was written from Cato’s own experience. This work was so impressively full of essential and objectively true information, however, that it would be cited afterwards by authors on the same topic even centuries later.

Both Varro (ca. 37 BC) and Columella (mid-first century AD) for example refer to Cato’s work in their own treatises of the same name, *De Re Rustica*. Varro’s work is an incredibly precise guide, discussing every aspect of farming from land choice to necessary equipment. But the concept of biodiversity is vividly alive within the text, for much of it is dedicated to flowers and gardens, trees, and hedges, as Varro discusses in detail when, where, how, and for what reason to grow every species:

Certain trees, such as the fir and the pine, flourish best and are sturdiest in the mountains on account of the cold climate, while the poplar and the willow thrive here where the climate is warmer; the arbute and the oak do better in the upland, the almond and the Mariscan fig in the lowlands.

(De Re Rustica, I.6.4)

Indeed, the Romans well understood the precious concept that though man may change, the land stays the same. Therefore, it was vital – indeed it became a form of art – to know one’s land, what it would best produce, and to subsequently plant and care

for it in the most efficient way so that it would yield the best results. In fact, the Augustan poet Vergil so advises in his *Georgics* (I.51-53):

Be it our care to learn betimes the winds and
moods of heaven, To learn the tillage of our
sires and nature of the place,
What fruits each district does produce and
what it does refuse.

Land cultivation was thus a traditional and respected science whose detail was studied and passed down for centuries.

As Rome expanded, it appropriated customs of the elite from the nations that it conquered, and it also amassed an incredible new wealth. By the second century BC, notions of what the rich should be doing with their time and money changed to reflect Rome's new status as wealthy world capital. At this time, the elite began to build *horti*, or expansive villa estates, where they could escape city life and the work associated with it, and retire to a place where they could enjoy their own leisure time and activities. *Horti* were filled with the beauty of gardens, art and the natural world.

It is these villa estates that we hear so much about from writers such as Pliny the Younger (late first century AD), who, in his letters to friends, took great pride in describing his villas in astounding detail. This was particularly true of his gardens, as he methodically described the shape of their shrubs, the design of their walkways, and the species of flora that filled the areas. These passages were provocative tours for the imagination.

One favorite instance is Pliny's description of his Tuscan villa in a letter to Domitius Apollinaris (*Ep.* 5.6). Pliny begins by describing the area's healthful aspects, as evidenced by the (unusual) fact that area residents survive to very old age. It is here, for example, that we witness Pliny's quite accomplished knowledge of plant species, though painted in broad strokes to outline the natural characteristics of the area as well as the benefits of biodiversity for the health of man:

The air in winter is sharp and frosty, so that myrtles, olives, and trees of that kind which delight in constant warmth, will not flourish here: but the laurel thrives, and is remarkably beautiful, though now and then the cold kills it.... The summers are extraordinarily mild, and there is always a refreshing breeze, seldom high winds. This accounts for the number of old men we have about, you would see grandfathers and great-grandfathers of those now grown up to be young men, hear old stories and the dialect of our ancestors, and fancy yourself born in some former age were you to come here. The character of the country is exceedingly beautiful. Picture yourself in an immense amphitheater, such as only nature could create.

But it is the following passages in particular that demonstrate the care with which domestic gardens were laid out and planted, within these estates. Here, Pliny recounts walkways and areas framed by greenery, or alternatively green areas planted as focal points; all of it very carefully curated. He furthermore reveals the purposeful selection of particular species for specific areas of the residence, each chosen for its individual virtues and the particular benefits it provides:

[The hippodrome] is set round with plane-trees covered with ivy, so that, while their tops flourish with their own green, towards the roots their verdure is borrowed from the ivy that twines 'round the trunk and branches, spreads from tree to tree, and connects them together. Between each plane tree are planted box-trees, and behind these stands a grove of laurels which blend their shade with that of the planes. This straight boundary to the hippodrome alters its shape at the farther end, bending into a semicircle, which is planted round, shut in with cypresses, and casts a deeper and gloomier shade, while the many inner

circular walks, enjoying an open exposure, are filled with plenty of roses, and correct, by a very pleasant contrast, the coolness of the shade with the warmth of the sun. Having passed through these several winding alleys, you enter a straight walk, which breaks out into a variety of others, partitioned off by box-row hedges. In one place you have a little meadow, in another the box is cut in a thousand different forms, sometimes into letters, expressing the master's name, ... while here and there rise little obelisks with fruit-trees alternately intermixed, and then on a sudden, in the midst of this elegant regularity, you are surprised with an imitation of the negligent beauties of rural nature. In the center of this lies a spot adorned with a knot of dwarf plane trees. Beyond these stands an acacia, smooth and bending in places, then again various other shapes and names.

Letters like these, written by learned men who were not strictly farmers, show how much a deep knowledge of plants and the natural world was still valued by the elite, even when the farming villas of old had been replaced by new luxury villas. As we learn from Pliny, an understanding of the unique gifts provided by different plant species and types was vital for creating for oneself the best and most coveted living situation, what he describes as the most "profound and undisturbed retirement;" a place where "all is calm and composed."

Villas such as Pliny's have been discovered and excavated in modern times, with astounding results that corroborate ancient testimony as to these types of carefully planned garden areas. In the cluster of luxury estates perched on the cliffs of ancient Stabiae, for example, every villa was found to have a large external garden area. The recently excavated Great Peristyle Garden at the Villa Arianna (ca. 118 x 30 meters) in fact revealed to excavators the most marvelous and carefully fashioned area, laid out with man's physical and visual enjoyment in mind, and thrilling with an

encyclopedic list of plants. Here, excavators found that the rectangular garden space was planted on each side with two long flower beds or bushes that ran the entire length of the garden, which framed three long central rows of small trees. In between the rows of trees, there were grassy paths for strolling; thus the carefully planned layout encouraged a specific movement through the area. Quite interestingly, the rows of trees did not just feature one species type, as we see perhaps in the porticoes in Rome, such as that located at the back of the Theater of Pompey complex. There, Pompey dotted the interior space with the newly imported plane or sycamore tree, chosen for its aspect of providing shade. Instead, at the Villa Arianna, numerous different species of tree were found, which together must have created a visual symphony.

It is precisely this type of luxury estate – precisely this type of garden – that we see represented in the garden wall painting from the Villa of Livia at Prima Porta, now housed in the Museo Nazionale Romano, Palazzo Massimo. It is evident in this wall painting that biodiversity is at work, for on the major expanse of every wall in the room, indeed in the rich background of this wondrous depiction, the natural world is shown growing wild and unsuppressed, representing nature unbounded, as far as the eye can see.

But there is much more to the wall painting, which provides a precious glimpse into the Roman world of the Augustan era. For the painting is not generic. It is precise. Scholars have identified over 23 species of plant and 69 species of bird within the room¹. Many of these were specifically and powerfully symbolic in carrying Augustan ideology, highlighting the idea that the garden was carefully cultivated in this painting. More than just a scene of nature, then, the painting is therefore a study of species, and a testament to Roman knowledge of the natural world – particularly because the species shown do not usually appear together in the same season.

Indeed, the entire garden painting is cultivated, if we may use that word – and not just

in the farming sense, but in the curatorial sense. For if we look closely, the painting contains areas that represent different levels of cultivation and care. The area closest to the viewer is a carefully manicured lawn located between two man-made structures (fences) and highlighting particular species of trees that are delineated as focal points by the winding form of the white wall behind. There are even domesticated fowl walking on the lawn, and a bird cage rests on a fence on the far wall, its occupant inside. This is the curated zone, a zone touched by man. The area beyond the white wall, instead, shows little of man's touch, as again, the effect is one of unbounded nature continuing far into the distance. The painting thus represented a voyage for the viewer from the domestic sphere from which he peered, to the structured, orderly and curated nature of the first area, to the wilderness beyond.

The garden painting from the Villa of Livia at Prima Porta was not the only example of its type, as paintings within the contemporary Auditorium of Maecenas, for example, share many of its aspects, including a blue sky, birds flying or sitting on fountains – even the wickerwork wooden fence. Pliny the Younger also describes such a painted space in this same Tuscan villa (*Ep.* 5.6):

There is, besides, another room, which, being situated close to the nearest plane-tree, enjoys a constant shade and green. Its sides are encrusted with carved marble up to the ceiling, while above the marble a foliage is painted with birds among the branches, which has an effect altogether as agreeable as that of the carving, at the foot of which a little fountain, playing through several small pipes into a vase it encloses, produces a most pleasing murmur.

The same types of paintings have been found in villa structures further afield, in situations that make it clear that these cultivated garden images consistently appeared on the interior walls of domestic structures located within manicured

garden spaces, purposely placed within truly planted areas. Scholars have thus understood that these painted examples of curated nature, then, actually served to physically and seamlessly blend the interior domestic spaces with what lay immediately beyond the walls, namely sophisticated spaces that included manmade gardens with short walls, fountains, shrubbery, and fruit trees, that would in turn attract beautiful birds and even insects.

Garden paintings such as that from the Villa of Livia at Prima Porta therefore linked the Roman elite to their true, curated gardens, which, in some way, linked them back to what lay directly beyond: wild nature, growing without bounds, and highlighting life and biodiversity and all of their intertwining beauty. The paintings and their curated gardens thus also linked the Romans back to their traditional and respectable early beginnings as farmers, nurturers and benefactors of nature.

Notes

¹ See the article by Giulia Caneva, in this volume.

Bibliography

A.a.V.v., *In Stabiano: Exploring the Ancient Seaside Villas of the Roman Elite*. Castellammare di Stabia: Nicola Longobardi Editore, 2008.

Caneva, Giulia. *Il codice botanico di Augusto, Roma – Ara Pacis: Parlare al popolo attraverso le immagini della natura*. Rome: Gangemi, 2010.

Farrar, Linda. *Ancient Roman Gardens*. Gloucestershire: Sutton Publishing Limited, 1998.

Gasparri, Carlo, and Rita Paris. *Palazzo Massimo alle Terme: Le Collezioni*. Rome: Mondadori Electa, 2013.

Giesecke, Annette Lucia. "Beyond the Garden of Epicurus: The Utopics of the Ideal Roman Villa." *Utopian Studies* 12, no. 2 (2001): 13-32.

Jashemski, Wilhelmina F. *Gardens of the Roman Empire*. Cambridge: Cambridge University Press, 2017.

Jashemski, Wilhelmina F. *The Gardens of Pompeii: Herculaneum and the Villas Destroyed by Vesuvius*. New Rochelle, N.Y.: Aristide D. Caratzas, 1993.

Kellum, Barbara A. "The Construction of Landscape in Augustan Rome: The Garden Room at the Villa *ad Gallinas*." *The Art Bulletin* 76, no. 2 (June 1994): 211-224.

Messineo, Gaetano. *La Villa di Livia a Prima Porta*. Rome: Istituto Poligrafico e Zecca dello Stato, 2004.

Ancient Authors

Cato the Elder, *De Agri Cultura*

Columella, *De Re Rustica*

Pliny the Younger, *Epistulae*

Varro, *De Re Rustica*

June di SCHINO

University of Roma Tre

LIVIA'S GARDEN: A PARADISE FOR THE TABLE

Throughout time, the search for Paradise has materialized in the arts, oscillating between the memory of a 'Lost Eden' and the vision of a 'Heavenly Jerusalem' to be conquered. The *giardino felice* appears like a *paradeisos*, a citadel of Nature beyond time, like a timeless image of a paradise on earth.

The elements of Livia's garden appear to celebrate nature by offering a glimpse of the seasons, while the senses transform the garden into the grand theatre of the table. Livia's extraordinary *triclinium*, instead of looking out onto the real gardens of the villa, was an indoor garden of the imagination painted on its walls in ca. 30-20 BCE. The enclosure - an underground barrel-vaulted hall 40 feet long by 20 feet wide - was most impressive for the spatial play of the room itself, with its illusionistic quality, and the incredible accuracy and variety of plant species, which provided a unique landscape.

The superb painting conveyed a sense of luxury and a certain kind of prosperity, which held the strong political message that Augustus seems to have wanted to convey. With insight, Giulia Caneva describes the language of plants in the *Augustus botanical code*.¹ Understanding the human-plant relationship is critical to understanding culture. We seem to have lost touch with the immediacy of our

very lives' dependence on plants, but the ancients were extremely aware of this, and often expressed the idea by drawing similarities between humans and plants. While Caneva emphasizes the subtle significance of the images of nature, both our vision and understanding are richly rewarded. While various exotic birds play in the marvellous vegetation which springs from the regeneration of Mother Earth, she expertly describes 24 diverse species, bringing date palms, strawberry trees, and pomegranates to life.² Symbolic of abundance, fertility, virtue and knowledge the pomegranate was the only tree planted by Aphrodite, hence it represented love.³

This magical Eden appeared as an idyllic expression of a moving, sublime art whose beauty evoked a sense of the sacred. The outside garden entered the interior of the villa, and permeated into the soul. The walls themselves exulted all embellished and adorned to perfection and "so marvellously painted with Art that they put Nature to shame."⁴

Mythology tends to mark a sacred beginning. As narrated by Pliny the Elder in his *Naturalis Historia*, XV (136-137), one day a flying eagle dropped a white hen from its claws into Livia's lap, holding a branch of laurel with berries in its beak. As advised by the oracles, Livia took care to raise

the bird's offspring and planted the twig, creating a sacred grove that would provide laurel wreaths to crown emperors and for the triumphs of the generations to come. In time the vicinity became known as *Ad Gallinas Albas*.

The Empress Livia was a powerful historical figure - the first woman to be depicted on coins and portrayed in sculpture.⁵ Able, intelligent, and astute, she was an outstanding influencer and counsellor during fifty years of marriage to Augustus. Her personal life, however, was fraught with suspicions of shady conniving and aberrant conduct to attain her goals and to assure the imperial crown for her son. A legend recounts that Rome's first emperor, Augustus, was poisoned with figs from his garden, reputedly smeared by Livia. But such a reputation might just as easily be the result of a smear campaign instigated by her son Tiberius, resentful of her persistent authoritarian attitude and meddling in his affairs. For this reason, or perhaps because of her horticultural expertise, a variety of fig known as the *Liviana* was cultivated in Roman gardens.

Although women were not permitted to drink alcoholic beverages,⁶ it is not difficult to picture Livia transgressing in the garden at sunset, sipping her favourite wine. Pliny the Elder describes the vines which produced *Vinum Pucinum*, today well known as Prosecco. This special, rare wine came from the sunny slopes northeast of Barcola close to a place called Prosecco near the historic Castellum Pucinum. According to Pliny, Livia loved this wine for its particular medicinal properties and at 87, nearing the end of her long life, she attributed her healthy old age to the regular consumption of the only known psychotropic beverage, which she recommended as a true "elixir for a long life."

The empress was renowned for her beauty and resembled the modern woman of today, inasmuch as she took an active interest in her health and appearance. Not by chance was Livia associated with Venus and Cybele. She studied and grew many fruits, vegetables, herbs, and is still remembered for her potent 'Livia's Inula,' to which she attributed her good health and handsome appearance. For those interested in following suit, *Enula campana*⁷ is a wild

plant with yellow flowers similar to daisies. The well-cleaned, ripened root is chopped into small pieces, boiled in vinegar, and left to dry for three days in the shade, then placed in a ceramic container with *sapa* (wine must) to marinate. Finally *mulsum* (honeyed wine) and *defrutum* were added, to preserve the liquor.⁸

The garden was a superb sanctuary, an idealized haven which captured the imagination and all the senses including taste. A theatre of memory was revived. In time, replicas of gardens and *natura architecta* for grand dinners have been documented from the fourteenth century and were present especially in the Renaissance and Baroque period.⁹ Among the several historical treatises was a spectacular creation called "The Garden" in *Libro della cocina* (late fourteenth or early fifteenth century), written by an anonymous Tuscan. The table was animated with 'cavorting beasties,' fountains spurting white wine and a lake of jumping fish, eels, giant crabs, and baby turtles. For grand feasts a tree made of pastry, was erected in a beautiful garden on the table.¹⁰ All studded with apples, pears, birds, grapes, and multi-coloured figs according to the season.

Luscious violet figs were exalted in the splendid frescos of Pompei, while black figs strutted among gorgeous peacocks at the *Casa degli Amanti*. They were depicted with other dried fruits, such as dates, on the walls of the *Casa dei Cervi* at Herculaneum. The blonde figs of Chio, considered a rare delicacy, were praised by Martial. The fig, and not the proverbial apple, was considered to be the original fruit of primordial sin.

Figs were a familiar source of food for the ancient Romans, and centuries later became a staple food for the poverty-stricken in the *Meridione* (the Italian South). Cato the Elder, in his *De Agri Cultura*, (ca. 160 BCE) lists several strains of figs grown at the time: Mariscan, African, Herculanean, Saguntine, and the black Tellanian. Figs were also used to fatten geese for the production of an evident precursor of *foie gras*. *Perna* shows up the sophisticated taste of the aristocratic Romans with whole hams covered with

figs and cooked. When ready, the skin was sliced into diamond shapes, covered with honey and baked in a pastry case, similar to the contemporary Virginia ham.

Athenaeus of Naucratis, in *Deipnosophistae* converses on the art and philosophy of dining in fifteen volumes, providing us with an inestimable wealth of knowledge on biodiversity, including the numerous species lost today. Here Magnus¹¹ declares, "(...) for on the subject of figs I will yield to no man, even if I am hanged on a fig-branch, I am so extraordinarily fond of them; I will tell what occurs to me - the fig tree, my friends, was made to be the guide of civilization. This is proven by the fact that Athenians call the place where it was discovered the Sacred Fig-tree, while they call its fruit the Leader because it was the first cultivated fruit to be discovered."¹²

Androtion, in *The Farmers' Handbook*, makes an impressive list of current figs: Laconian, phibalian, autumn queen, swallow-fig, regal-fig, yellow-belly, wild-fig, venison-fig, white-fig, cake-fig, bitter-fig, wake-robin, dusty-white, dusty-black, fountain-fig, mill-fig, scallion-fig, dwarf figs, phormynians, and double-bearing Megarian, to begin with.

Aristophanes joyfully exclaims in *The Olynthian*, "That god-given heritage of our mother country, the darling of my heart, is a dried fig, brought to light from a Phrygian fig-tree." That figs were more healthy to man than all other tree fruits is sufficiently proven by Herodotus of Lycia in his treatise on figs, and he clearly states that new-born children grow sturdy if nourished with fig-juice.

Livia was well aware that grand dining was a ritual of immense social and political significance and she cultivated the important pleasures associated with the final presentation of sweetmeats for the banquet. It is of interest to note how these confections have continued to please through the centuries. At this time, sugar was almost unknown although Theophrastus and Pliny mention a honey not produced by bees, but from a cane. According to Martial, the *pistore* (pastry chef) used *caroenum*, *defructum e sapa* obtained from boiling grape must in three different concentrations as a sweetener.

Many confections, amply described by Athenaeus were prepared with *tractae*, sheets of pastry made with wheat flour, filled with fresh cheese, honey, and pepper, not unlike the Greek baklava. Cato leaves us a good recipe for *spira*, redolent of the contemporary cheesecake and he also cites the *mustaceus*, a simple spicy biscuit made in anthropomorphic shapes still produced in Calabria today.¹³ A very similar biscuit of a feminine figure with three breasts recalling the cult of the Great Mother can be found in the Roman hill towns even today, although she sometimes wears an anachronistic garter. Doubtless a precursor of the well-known *crème brûlée* is evident the *tiropatinam*, a sort of baked custard, made with milk, honey then sprinkled with pepper. The Romans also enjoyed *aliter dulcia*, a semolina cake cut into diamond shapes, fried and covered with honey which continued all through the Renaissance. A recent novelty in Italy are *crêpes* of all sorts. In imperial Rome, *ova sfongia ex lacte*, thin fried, *crêpes* were already popular, all covered with honey and pepper as described by Apicius in *De re coquinaria*.¹⁴

Marcus Gavius Apicius was a gourmet - gourmand who indulged in spending extravagant amounts of money on food, and when he became unable to continue squandering lavish sums on luxury fare, he committed suicide. The first cookery book has been attributed to him, but in point of fact there were three Romans with this very name and there is no proof whatever of his authorship. Eugenia Salza Prina Ricotti,¹⁵ a major authority on Ancient Roman dining, categorically excludes this possibility. Anecdotes of all kinds abound on Apicius from Athenaeus to Seneca, from Plinius the Elder to Martial.¹⁶

The art of staging the supernatural in interior gardens in the villas in Pompei was not an infrequent phenomenon.¹⁷ Pompeian indoor gardens were multimedia environmental experiences often populated with insinuating satyrs, (sometimes dancing), deities, *situla* (silver vessels) and many male sex symbols. The renowned archaeologist Wilhelmina F. Jashemski discovered an orchard where masonry *triclinia*, shaded by wooden pergolas and the spreading branches of large trees, offered Pompeians an

opportunity to immerse themselves completely in a rich environment, essentially to live an experience through all the senses.¹⁸ She pioneered the interdisciplinary study of ancient Roman gardens, utilizing ancient literary, documentary, archaeological, and archaeobotanical evidences.

A spell seemed to be cast on nature, creating an enchanted realm. Interior gardens allowed the Pompeian homeowner to enjoy his wealth and afforded a fleeting experience of the elite life of Roman citizens. The abundant, sometimes fantastic scenarios in Pompeian houses boast the fruits of conquest in ingenious installations and breathtaking illusions. These document contemporary style, while also creating visionary worlds in which wild animals rambled and heroes and gods sojourned.

Livia's garden of Paradise represents the quintessence of the elements vital in the mythical *Aetus Aurea*, the Golden Age governed by divine providence. This wondrous splendor recalls the timeless utopian *banquet of the gods*. Here Augustus and Livia acquire an arcane aura to become archetypes of the Great Mother and Father of the Gods, an emblem of supreme power. Miraculously this inimitable idealized paradise of classical antiquity has survived until today.¹⁹ Enraptured with its unique magic, all will be transported into a new dimension of Ancient Rome. This superb botanical banquet represents a *summa* for the senses and the spirit.

Notes

- ¹ Giulia Caneva, *Il codice botanico di Augusto. Roma, Ara pacis: parlare al popolo attraverso le immagini della natura = Speaking to the People Through the Images of Nature* (Rome: Gangemi, 2010).
- ² Giulia Caneva, "Ipotesi sul significato simbolico del giardino dipinto della villa di Livia (Prima Porta, Rome)," *Bullettino della Commissione archeologica comunale di Roma C* (1999): 63-80; Giulia Caneva and Lorenza Bohuny, "Botanical Analysis on the Livia's Villa Painted Flora (Prima Porta, Rome)," *Science and Technology in Cultural Heritage* 4 (2003): 149-155.
- ³ August Pauly and Georg Wissowa (Pauly-Wissowa) et al, eds. *Realenzyklopädie der klassischen Altertumswissenschaft. Neue Bearbeitung.* (Stuttgart: Verlag J. B. Metzler, 1894-1980), Vol. XIV, pp.926-42.
- ⁴ June di Schino, *Tre Banchetti in Onore di Cristina di Svezia 1668* (Rome: Académie Internationale de la Gastronomie, 2000). An interpretation of the Hebrew *pardes* (the orchard, generally citrus fruits) introduced the biblical concept of the "veiled to the unveiled."
- ⁵ See: Livia's well-preserved bust in the Museo Oliveriano, Pesaro.
- ⁶ Pliny the Elder, *Natural History* (14, 89-90) It was not permitted to women at Rome to drink wine. Among the examples is the case of the wife of Egnatius Maetennius who was clubbed to death by her husband for drinking wine from the jar. He was acquitted of her manslaughter by Romulus. Fabius Pictor wrote in his *Annals* of a lady who broke the seal on the cupboard in which were the keys of the wine-cellar, and was compelled by her relatives to starve herself to death. Cato wrote that this was the reason why close relatives (to the fifth degree) gave women a kiss to perceive if they smelt of wine.
- ⁷ *Inula campana.*
- ⁸ Tom Stobart, *Il libro delle erbe, delle spezie e degli aromi* (Milano: Mondadori, 1972).
- ⁹ Mirella Levi d'Ancona, *The Garden of the Renaissance: Botanical Symbolism in Italian Painting* (Florence: Leo S. Olschki Editore, 1978).
- ¹⁰ Anonimo Toscano, *Libro della cocina*, Biblioteca dell'Università di Bologna, Ms 158, cc. 86r-91v.
- ¹¹ One of the 24 characters (or *sophists at dinner*) who take part in the banquet described by Athenaeus of Naucratis in the *Deipnosophistae*.
- ¹² Quote after: "The *Deipnosophistae* of Athenaeus published in Vol. I of the Loeb Classical Library edition, 1927," Excerpts from Book III (Part 1 of 5), entry "Figs," LacusCurtius, https://penelope.uchicago.edu/Thayer/E/Roman/Texts/Athenaeus/3A*.html. The LacusCurtius website project is based on The Loeb Classical Library. Quote from a publicly available source. However, the author is working on a text in Latin.
- ¹³ Soriano Calabro is famous for its traditional specialized production of *mustazzoli*.
- ¹⁴ *Pompeii and the Roman villa: Art and Culture around the Bay of Naples*. Edited by Carol Mattusch et al. Washington: National Gallery of Art and New York: Thames and Hudson, 2008. Exhib.cat. *Pompeii and the Roman villa: Art and Culture around the Bay of Naples*. Curator Carol Mattusch. National Gallery of Art, Washington, D.C., October 19, 2008–March 22, 2009. Other Venues: Los Angeles County Museum of Art, October 19, 2008–October 4, 2009; Modern Art Museum of Fort Worth, February 24–May 18, 2008; February 24–May 18, 2008, November 8, 2008–January 25, 2009.
- ¹⁵ Eugenia Salza Prina Ricotti, *L'Arte del convito nella Roma antica* (Rome: "L'Erma" di Bretschneider, 1983).
- ¹⁶ Annette Giesecke, "Outside In and Inside Out: Paradise in the Ancient Roman House," in *Earth Perfect: Nature Utopia and the Garden*, eds. Annette Giesecke and Naomi Jacobs (London: Black Dog Publishing, 2012), 118-135.
- ¹⁷ Bettina Bergmann, "The Gardens and Garden Paintings of Villa A," in Elaine K. Gazda and John R. Clarke, *Leisure and Luxury in the Age of Nero: The Villas of Oplontis near Pompeii. Kelsey Museum publication, 14* (Ann Arbor, MI: Kelsey Museum of Archaeology, 2016), 96-110; Bettina Bergmann, "Staging the Supernatural: Interior Gardens of Pompeian Houses," in Carol Mattusch et al., *Pompeii and the Roman villa: Art and Culture around the Bay of Naples* (Washington: National Gallery of Art and New York: Thames and Hudson, 2008), 53-70. Exhib. cat.
- ¹⁸ Wilhelmina F. Jashemski, *The Gardens of Pompeii: Herculaneum and the Villas Destroyed by Vesuvius* (New York: Cambridge University Press, 2017); Wilhelmina F. Jashemski, *Gardens of the Roman Empire* (Cambridge: Cambridge University Press, 2017).
- ¹⁹ Annette Giesecke, "The Afterlife of Paradise: Near Eastern Origins of the Ancient Roman Garden," *Dumbarton Oaks: Art – Nature – Scholarship*, accessed May 10, 2022, <https://www.doaks.org/research/garden-landscape/fellows/giesecke-2019-2020>; "From Paradise to Pompeii: Q&A with Annette Giesecke," <https://www.doaks.org/newsletter/from-paradise-to-pompeii>; Annette Giesecke, "Autopsy and Empire: Temporal Collapse in the Designed Landscapes of Ancient Rome," *Studies in the History of Gardens & Designed Landscapes* 36 (4) (2016): 225-244.

Bibliography

- Bergmann, Bettina. "The Gardens and Garden Paintings of Villa A." In Elaine K. Gazda and John R. Clarke, *Leisure and Luxury in the Age of Nero: The Villas of Oplontis near Pompeii*. Kelsey Museum publication, 14, 96-110. Ann Arbor, MI: Kelsey Museum of Archaeology, 2016.
- Bergmann, Bettina. "Staging the Supernatural: Interior Gardens of Pompeian Houses." In Carol Mattusch et al. *Pompeii and the Roman villa: Art and Culture around the Bay of Naples*, 53-70. Washington: National Gallery of Art and New York: Thames and Hudson, 2008. Exhib. cat.
- Caneva, Giulia. *Il codice botanico di Augusto. Roma, Ara pacis: parlare al popolo attraverso le immagini della natura = Speaking to the People Through the Images of Nature*. Rome: Gangemi, 2010.
- Caneva, Giulia. "Ipotesi sul significato simbolico del giardino dipinto della villa di Livia (Prima Porta, Rome)." *Bullettino della Commissione archeologica comunale di Roma C* (1999): 63-80.
- Caneva, Giulia and Lorenza Bohuny. "Botanical Analysis on the Livia's Villa Painted Flora (Prima Porta, Rome)." *Science and Technology in Cultural Heritage* 4 (2) (2003): 149-155.
- d'Ancona, Mirella Levi. *The Garden of the Renaissance: Botanical Symbolism in Italian Painting*. Florence: Leo S. Olschki Editore, 1978.
- di Schino, June. *Tre Banchetti in Onore di Cristina di Svezia 1668*. Rome: Académie Internationale de la Gastronomie, 2000.
- Giesecke, Annette. "The Afterlife of Paradise: Near Eastern Origins of the Ancient Roman Garden." *Dumbarton Oaks: Art – Nature – Scholarship*. Accessed May 10, 2022. <https://www.doaks.org/research/garden-landscape/fellows/giesecke-2019-2020>; "From Paradise to Pompeii: Q&A with Annette Giesecke." <https://www.doaks.org/newsletter/from-paradise-to-pompeii>.
- Giesecke, Annette. "Autopsy and Empire: Temporal Collapse in the Designed Landscapes of Ancient Rome." *Studies in the History of Gardens & Designed Landscapes* 36 (4) (2016): 225-244.
- Giesecke, Annette. "Outside In and Inside Out: Paradise in the Ancient Roman House." In *Earth Perfect: Nature Utopia and the Garden*, edited by Annette Giesecke and Naomi Jacobs, 118-135. London: Black Dog Publishing, 2012.
- Jashemski, Wilhelmina F. *The Gardens of Pompeii: Herculaneum and the Villas Destroyed by Vesuvius*. New York: Cambridge University Press, 2017.
- Jashemski, Wilhelmina F. *Gardens of the Roman Empire*. Cambridge: Cambridge University Press, 2017.
- Out of Time: Temporality in Landscape History*. Edited by Luke Morgan. *Studies in the History of Gardens & Designed Landscapes*, Volume 36, Issue 4 (2016).
- Pauly, August and Georg Wissowa (Pauly-Wissowa) et al, eds. *Realenzyklopädie der klassischen Altertumswissenschaft. Neue Bearbeitung*. Stuttgart: Verlag J. B. Metzler, 1894-1980. Vol. XIV, pp. 926-42.
- Pompeii and the Roman villa: Art and Culture around the Bay of Naples*. Edited by Carol Mattusch et al. Washington: National Gallery of Art and New York: Thames and Hudson, 2008. Exhib. cat.
- Salza Prina Ricotti, Eugenia. *L'Arte del convito nella Roma antica*. Rome: "L'Erma" di Bretschneider, 1983.
- Stobart, Tom. *Il libro delle erbe, delle spezie e degli aromi*. Milano: Mondadori, 1972.

Ancient Authors

Pliny the Elder, *Natural History*

Quintus Fabius Pictor, *Annales Graeci*

Athenaeus of Naucratis, *Deipnosophistae*

Margaret KNELLER

John Cabot University

OUTSIDE PRIMA PORTA, AND WITHIN - INSTANCES OF BIODIVERSITY

The Mediterranean basin is recognized as a biodiversity 'hotspot.' Hotspot, implies high numbers of endemic species and their unique, associated behaviors. The forces underlying this high biodiversity are climatic, geographic and geological (including volcanism) in general, with more specific ecological to physical factors operating on the local scale. Biodiversity is a contraction of 'biological diversity:' a concept that became accepted in the mid-1980s.¹ Thus, its study is recent - from the biodiversity standpoint, there is much to be described and understood.

Biodiversity is not static; two of the important dynamic forces of the last one hundred thousand to two hundred thousand years of earth history - are climate and human action. This longish time period encompasses major global changes in earth's climate: the relatively warm Interglacials from about one hundred and thirty thousand to seventy-four thousand ago, and from ten thousand to present; and the recent cold Glacial maximum at twenty one thousand years ago. The Italian peninsula was not covered by continental glaciers during this maximum (the closest ice boundary was in northern France) although alpine glaciers were significantly larger. The peninsula still experienced profoundly shifting climatic regimes over centuries

to millennia. Is biodiversity, found in ecological niches including those of the Italian peninsula today, a result of such major climate changes?

While present-day species, their associations, and their genomes may be mapped today, recreating past species types and distributions must be based upon fossils studies *in proprio*, including archeology-based research. At the end of the 1990s, the technology to analyze genomes, of fossils, commences. Most of this newer genomic analysis focuses on human remains, followed by important domesticates (dogs, bovines, cereal grasses, for example). With radionuclides used to date the fossils (¹⁴C, radiocarbon is very popular), and genomic analysis to provide species identification, a very partial but exciting picture of biodiversity, going back in time, may be recreated. How did humans, increasing in number and settlements over today's Western Europe, during the last 10.000 years, influence the region's biodiversity?

Research, to understand species types and their distributions back into time, is driven by these two major questions. The questions are posed for a Western European region, Prima Porta, but the endeavor is global.

Is a species occurrence natural? In other words, is human influence absent or negligible?

The *potential natural* vegetation around Rome today is mixed evergreen and deciduous oak species, very generally.² The managed agricultural lands are now at 57 percent, and 25 percent remains forest (much managed).³ These natural tree species replaced the steppe and *Picea* vegetation, representative of glacial climate. Further from Rome, some mesophilous and thermophilous trees did grow during the glacial period.⁴ The vegetation changes driven by climate forcings, were most rapid from about fourteen thousand to nine thousand years ago during the transition into the warmer, moister Holocene epoch (demarcated ten thousand years ago). Likely the meso- and thermophilous tree types expanded their ranges from glacial refugia (imagine topographic niches with relative warm, moist microclimates) mysteriously located throughout the whole Mediterranean basin. Plant migration (their seeds) came even from outside the peninsula. The physical mode of this migration - wind, birds, other mammals, water - can be imagined. The evidence of natural vegetation, prior to historical records, derives primarily from plant pollen and macroremains - seeds, leaves, and charcoal, in sediments. Identification of these fossils is not as precise as actual visual identification - the taxa are identified to genus (not species) level usually.

Studies of particular interest to biodiversity affected by human action, are based on genomes from actual plants and their macroremains. Domesticated olive and grape were not part of the natural vegetation of this region in the past; their expansion into the Italian peninsula indicates cultural support from modern humans, evidence that humans began altering the region's biodiversity. These plants do not leave abundant traces. Relatively more fossils have been found of wheat's early domesticates (*Triticum* and *Aegilops* species). All these taxa are the focus of many recent paleoecological studies, for the Southern Europe Mediterranean region, due to their importance as food crops.

The term, expansion, is deliberately vague: olive and grape can be wild, or domesticated; the

wild and domesticated types may be assigned the same species name, or not; the domesticate can derive from selective breeding of a local wild taxa or an introduced taxon, or some combination thereof. In summary, the breeding of new plant species was deliberate and/or casual, and participants (both plants and humans) were both wild/local and invasive/foreign. Assigning an origin, and known 'breeder's pedigree,' to these important plants, is difficult. Here is one summary of the likely origins of domesticated olive, *Olea europaea* ssp. *europaea*, based on DNA analyses of both wild and domesticated olive trees:

Regional hotspots of plastid diversity, species distribution modelling and macrofossils support the existence of three long-term refugia; namely the Near East (including Cyprus), the Aegean area and the Strait of Gibraltar. These ancestral wild gene pools have provided the essential foundations for cultivated olive breeding. [Our analysis] indicates the cradle of first domestication in the northern Levant followed by dispersals across the Mediterranean basin in parallel with the expansion of civilizations and human exchanges in this part of the world.⁵

Phylogeographical analyses exists also for *Laurus nobilis*,⁶ and then there are numerous volumes and papers devoted to the wheat and barley cereal grasses.

Such botanical-based research, addressing plant species distributions during Roman times and earlier, rarely addresses the plants in the frescos of Livia's villa at Prima Porta, Rome.⁷ Therefore, to put a biodiversity framework onto the 24 species shown - is to imagine a mosaic, with very few pieces available. In order to puzzle-out the dynamic forces (e.g., climate, human interference including domestication and migrations) which may have influenced the plant assemblages (or associations) on the frescos, each species could be assigned to a category: potential natural

vegetation of Rome ca 40-30 BCE; taxa not local but still endemic to the peninsula; taxa relevant to domesticated or cultivated crops, and; taxa derived from ancestors with no known local examples (call them allochthonous or foreign). Applying these categories raises one's curiosity. Three fruit trees are represented, all allochthonous in origin: *Cydonia oblonga* (quince); *Punica granatum* (pomegranate), and *Phoenix dactylifera* (date palm). *Arbutus unedo* (*corbezzolo*) and *Myrtus communis* (*mirto*) produce edible fruits, although not in high volumes, and they are autochthonous to the peninsula. Can we hypothesize any meaning for these associations - that is the research puzzle!

Myers (p. 40) writes, "Livia's commission in this new Second Style of painting (ca 40-30 BCE) visually celebrates garden and plant knowledge and seems to confirm her participation in contemporary elite (male) competition for fame in plant breeding and collecting." Were the painted fruit trees the subjects of plant breeding efforts? This is fun speculation.

Earth's biodiversity, now, is experiencing erosion of genomic diversity and species extinction; and humans are greatly responsible for these losses. However, a few taxa that are adaptable to domestication, have actually shown the opposite trend.⁸ Crop domestication and breeding of new taxa (cultivars, landraces, varieties, etc.), has actually created new species.⁹ *Vitis vinifera* L. subsp. *sativa* (domesticated grapevine) is related to, but still a different sub-species from *Vitis vinifera* subsp. *sylvestris* (syn. *Vitis sylvestris* C.C. Gmel, wild grapevine).¹⁰ Common bread wheat, *Triticum aestivum*, grown over much of western Europe today (and other continents), is a different species from its mix of ancestors located in the Karacadağ region (Turkey), and the upper Jordan valley.¹¹ The domestication process is linked to the selection of traits, as humans decide whose seed to save and carry, and whose to ignore - it is a global phenomenon of the last ten thousand plus years.

Modern commodity-based agriculture, whose metrics are production and yield for the global markets, favors monocultures with short

life spans. The result, widely acknowledged, is reduction in biodiversity. This biodiversity loss is evident in wildlife, pollinators, insect pests, their natural enemies, soil invertebrates, and microorganisms.¹² However, some of the first studies addressing biodiversity concepts, also did recognize the importance of so-called traditional agroecosystems, in supporting high biodiversity. Traditional agroecosystems, pre-industrial age forms, are fast disappearing globally. Innovative research methods are applied to identify the remaining systems, and even to parse out traces of past systems. For Italy and the Lazio region, examples are in Porfiri et al. (2008)¹³ and Frattaroli et al, (2014).¹⁴ Very far away, on the Pacific Ocean coast of North America, comes one of the most exciting discoveries about past-high biodiversity agroecosystems: the deliberate cultivation of 'forest gardens' by indigenous gardeners. These managed agroecosystems were so strange to our standard models of domestication and cultivation, that their traces were overlooked. Actual plant surveys reveal that "isolated patches of fruit trees and berry bushes in the region's hemlock and cedar forests were *deliberately* planted by Indigenous peoples in and around their settlements more than 150 years ago" of now British Columbia.¹⁵ These studies are for the past few centuries at best, so we can speculate for earlier times.

The frescos of Prima Porta also show fruit trees (quince, pomegranate) with berry bushes (*corbezzolo* and *mirto*) amidst conifers, other local trees, and flowers. With these very few puzzle pieces, one can optimistically imagine Livia and her gardeners, experimenting with associations of exotics along with local wild plants, to create forest gardens. Doing her part, to support biodiversity.

Notes

- ¹ See: Edward O. Wilson, *The Diversity of Life* (New York: W.W. Norton, 1999).
- ² Carlo Blasi et al., *The Ecoregions of Italy. A thematic contribution to the National Biodiversity Strategy* (Rome: Ministry of the Environment, Land and Sea Protection - CIRBFEP - University of Salerno, 2010), 11-12, Retrieved from www.mite.gov.it/sites/default/files/archivio/biblioteca/protezione_natura/ecoregioni_italia_eng.pdf
- ³ European Commission, "Factsheet on 2014-2020 Rural Development Programme for Lazio" (Ec.europa.eu, 11/2021), 2, Accessed August 7, 2021 from https://ec.europa.eu/info/sites/default/files/food-farming-fisheries/key_policies/documents/rdp-factsheet-italy-lazio_en.pdf.
- ⁴ Maria Follieri et al., "Palynostratigraphy of the Last Glacial Period in the Volcanic Region of Central Italy," *Quaternary International* 47-48 (March 1998), 3-20, [https://doi.org/10.1016/S1040-6182\(97\)00065-7](https://doi.org/10.1016/S1040-6182(97)00065-7).
- ⁵ Guillaume Besnard et al., "The complex history of the olive tree: from Late Quaternary diversification of Mediterranean lineages to primary domestication in the northern Levant," *Proceedings of the Royal Society B: Biological Sciences*, 7 April 2013, <https://doi.org/10.1098/rspb.2012.2833>.
- ⁶ Francisco Rodríguez-Sánchez, et al., "Late Neogene history of the laurel tree (*Laurus L.*, Lauraceae) based on phylogeographical analyses of Mediterranean and Macaronesian populations," *Journal of Biogeography* 36, no. 7 (July 2009): 1270-1281, <https://doi.org/10.1111/j.1365-2699.2009.02091.x>.
- ⁷ Giulia Caneva and Lorenza Bohuny, "Botanical Analysis on the Livia's Villa Painted Flora (Prima Porta, Rome)," *Science and Technology in Cultural Heritage* 4, no. 2 (2003): 149-155.
- ⁸ Jared Diamond, *Guns, Germs, and Steel: The Fates of Human Societies* (New York: WW Norton & Co, 1997).
- ⁹ The definition of Species, varies, and should be evaluated as one writes of 'new species.' But for this paper, the common definition is used - sexual reproduction results in fertile offspring. Animal domestication has also created new species.
- ¹⁰ Claudio D'Onofrio, "Introgression Among Cultivated and Wild Grapevine in Tuscany," *Frontiers in Plant Science* 11, no. 2 (February 2020): Article 202, <https://doi.org/10.3389/fpls.2020.00202>.
- ¹¹ Hatice Bilgic et al., "Ancient DNA from 8400 Year-Old Çatalhöyük Wheat: Implications for the Origin of Neolithic Agriculture," *PLoS ONE* 11, no. 3 (2016): e0151974, <https://doi.org/10.1371/journal.pone.0151974>.
- ¹² Biodiversity loss: 1. Power and Flecker give a late twentieth century perspective, written for general science readers; 2. while Johnson et al., (2017) publish a complete research-level review; 3. then the 1992 UN Convention on Biological Diversity (CBD) is the major intergovernmental instrument, while; 4. the 2021 UK report "The Economics of Biodiversity: The Dasgupta Review" marked the overall acceptance of Biodiversity's critical importance to human welfare. Full reference citations are in the Bibliography.
- ¹³ Oriana Porfiri, Maria Teresa Costanza and Valeria Negri, "10. Landrace Inventories in Italy and the Lazio Region Case Study," in *European landraces: on farm conservation, management and use*, edited by Veteläinen, Merja, Valeria Negri and Nigel Maxted, *Biodiversity Technical Bulletin* no. 15 (Rome: Biodiversity International, 2009), 117-123.
- ¹⁴ Anna Rita Frattaroli et al., "The disappearance of traditional agricultural landscapes in the Mediterranean basin. The case of almond orchards in Central Italy," *Plant Sociology* 51, no. 2 (December 2014): 3-15, <https://doi.org/10.7338/pls2014512/01>.
- ¹⁵ C. G. Armstrong et al., "Historical indigenous land-use explains plant functional trait diversity," *Ecology and Society* 26, no. 2 (2021):6, <https://doi.org/10.5751/ES-12322-260206> is the research article. Andrew Curry writes a summary, "Pacific Northwest's 'forest gardens' were deliberately planted by Indigenous people," *Science*, published online April 22, 2021, <https://doi.org/10.1126/science.abj1396>.

Bibliography

- Armstrong, Chelsey Geralda, Jesse E. D. Miller, Alex C. McAlvay, Patrick Morgan Ritchie, and Dana Lepofsky. „Historical indigenous land-use explains plant functional trait diversity.” *Ecology and Society* 26, no. 2 (2021): 6. <https://doi.org/10.5751/ES-12322-260206>.
- Besnard G., B. Khadari, M. Navascués, M. Fernández-Mazuecos, A. El Bakkali, N. Arrigo, D. Baali-Cherif, V. Brunini-Bronzini de Caraffa, S. Santoni, P. Vargas, and V. Savolainen. “The complex history of the olive tree: from Late Quaternary diversification of Mediterranean lineages to primary domestication in the northern Levant.” *Proc R Soc B Biological Sciences* 280: 20122833 (2013). <http://dx.doi.org/10.1098/rspb.2012.2833>.
- Bilgic, Hatice, Erdogan E. Hakki, Anamika Pandey, Mohd. Kamran Khan, Mahinur S. Akkaya. “Ancient DNA from 8400 Year-Old Çatalhöyük Wheat: Implications for the Origin of Neolithic Agriculture.” *PLoS ONE* 11, no. 3 (2016): e0151974. doi:10.1371/journal.pone.0151974.
- Blasi, Carlo, Giulia Capotorti, Daniela Smiraglia, Domenico Guida, Laura Zavattoni, Barbara Mollo, Raffaella Fronzoni, Riccardo Copiz. *The Ecoregions of Italy. A thematic contribution to the National Biodiversity Strategy*. Rome: Ministry of the Environment, Land and Sea Protection – CIRBFEP – University of Salerno. www.mite.gov.it/sites/default/files/archivio/biblioteca/protezione_natura/ecoregioni_italia_eng.pdf
- CBD (1992) The United Nations Convention on Biological Diversity. Reprinted in *International Legal Materials* 31 (5 June 1992): 818. (Entered into force 29 December 1993).
- Caneva, Giulia and Lorenza Bohuny. “Botanical Analysis on the Livia’s Villa Painted Flora (Prima Porta, Rome).” *Science and Technology in Cultural Heritage* 4, no. 2 (2003): 149-155.
- Curry, Andrew. “Pacific Northwest’s ‘forest gardens’ were deliberately planted by Indigenous people.” *Science*. Published online April 22, 2021. <https://doi.org/doi.org/10.1126/science.abj1396>.
- D’Onofrio, Claudio. “Introgression Among Cultivated and Wild Grapevine in Tuscany.” *Frontiers in Plant Science* 11, no. 2 (February 2020): Article 202, <https://doi.org/10.3389/fpls.2020.00202>.
- Dasgupta, Partha. *The economics of biodiversity: the Dasgupta review*. Hm Treasury, 2021.
- Diamond, Jared. *Guns, Germs, and Steel: The Fates of Human Societies*. New York: WW Norton & Co, 1997.
- Ec.europa.eu, 11/2021, https://ec.europa.eu/info/sites/default/files/food-farming-fisheries/key_policies/documents/rdp-factsheet-italy-lazio_en.pdf.
- Follieri, Maria, Marco Giardini, Donatella Magri and Laura Sadori. “Palynostratigraphy of the Last Glacial Period in the Volcanic Region of Central Italy.” *Quaternary International* 47-48 (March 1998): 3-20. [https://doi.org/10.1016/S1040-6182\(97\)00065-7](https://doi.org/10.1016/S1040-6182(97)00065-7).
- Frattaroli, A. R., S. Ciabò, G. Pirone, D. M. Spera, A. Marucci, and B. Romano. „The disappearance of traditional agricultural landscapes in the Mediterranean basin. The case of almond orchards in Central Italy.” *Plant Sociology* 51, no. 2 (2014): 3-15. <https://doi.org/10.7338/pls2014512/01>.
- Johnson, Christopher N., Andrew Balmford, Barry W. Brook, Jessie C. Buettel, Mauro Galetti, Lei Guangchun, and Janet M. Wilmschurst. „Biodiversity losses and conservation responses in the Anthropocene.” *Science* 356, no. 6335 (2017): 270-275. doi: 10.1126/science.aam9317
- Porfiri, Oriana, Maria Teresa Costanza, and Valeria Negri. “10. Landrace Inventories in Italy and the Lazio Region Case Study.” In *European landraces: on-farm conservation, management and use*, edited by Veteläinen, Merja, Valeria Negri and Nigel Maxted, 117–123. *Biodiversity Technical Bulletin* no. 15. Rome: Biodiversity International, 2009.
- Power, Alison G. and Alexander S. Flecker. “Agroecosystems and Biodiversity.” Smithsonian’s National Zoo & Conservation Biology Institute, Smithsonian Migratory Bird Center. [nationalzoo.si.edu](http://nationalzoo.si.edu/scbi/migratorybirds/research/cacao/power.cfm). Accessed May 10, 2022. <https://nationalzoo.si.edu/scbi/migratorybirds/research/cacao/power.cfm>.
- Rodríguez-Sánchez, F., B. Guzmán, A. Valido, P. Vargas, and J. Arroyo. “Late Neogene history of the laurel tree (*Laurus L.*, Lauraceae) based on phylogeographical analyses of Mediterranean and Macaronesian populations.” *Journal of Biogeography* 36, no.7 (2009): 1270-1281. <https://doi.org/10.1111/j.1365-2699.2009.02091.x>.
- Wilson, Edward O. *The Diversity of Life*. New York: W.W. Norton, 1999.

K. Sara MYERS

University of Virginia

BOTANICAL IMPERIALISM AND METAMORPHIC BIODIVERSITY: LIVIA AND OVID

Since the garden and gardening practices define humanity's relation to the natural environment, it is of utmost importance to retrace and re-examine the garden's symbolism, history, and life-sustaining potency

Annette Giesecke and Naomi Jacobs ¹

At the Empress Livia's suburban Roman estate at Prima Porta, there was a venerated laurel tree. According to the ancient sources, in 39/38 BCE, a white hen, which had in its beak a laurel branch, was dropped by an eagle into Livia's lap when she was at her suburban property. From this sprig was planted a laurel grove from which the Julio-Claudians took their victory crowns² and the property took its name from the white chickens: *Ad Gallinas Albas*. The story instantly and consciously legitimated both Augustus' marriage to Livia and his extraordinary rise to power through the creation of a 'mythological landscape' in the real Italian countryside.³ Augustus liked to appropriate trees. Two laurel trees were planted by his doors on the Palatine (depicted frequently on coins) and he claimed a palm tree sprang up in the pavement in front of his house and he had it transplanted to Apollo's Temple next-door.⁴ The vegetal imagery on public monuments such as the Altar of Peace proclaimed a new 'Golden Age' of prosperity and fecundity under Augustus' protection. A common iconographic representation of Livia was as the

grain goddess Ceres. In Rome, Livia dedicated the *Porticus Liviae*, a public portico and garden; the *Villa ad Gallinas Albas*, however, was evidently private.⁵

Livia had probably inherited the estate from her father. Recent excavations⁶ have revealed that there were once four gardens at the villa, one of which occupied a huge terrace with a double-aisled portico (ca 68 m long and 74 m wide) that would have contained some 100-150 columns.⁷ Livia's most famous garden, however, is the painted one now recreated at the Palazzo Massimo. This painted room was originally in a subterranean chamber some four meters below ground, accessible by a steep staircase. Recent analysis of the paintings reveals 24 species of plants, flowers and fruits all blooming simultaneously, some out of season, all young plants.⁸ The laurel appears throughout the background, but is not framed in the niches. Scholars hotly debate the symbolism in the choice of plant species, and see connections with the shared vegetal imagery of the Altar of Peace.⁹ The exceptional plant variegation, unparalleled

in its detail, of Livia's commission in this new Second Style of painting (ca 40-30 BCE), visually celebrates garden and plant knowledge and seems to confirm her participation in contemporary elite (male) competition for fame in plant breeding and collecting.¹⁰ The late first century BCE saw a flowering of interest in horticulture and botany. Exotic trees (such as ebony and balsam) were displayed as booty or prisoners in triumphal processions, and agricultural and botanical treatises seized during Carthaginian and Mithridatic wars were brought to Rome and translated. Some two hundred types of plants have been identified in Roman iconography (list 202 taxa, 78 families, 159 genera and 168 species¹¹). The trees and plants depicted in the Garden Room are both domestic and foreign, included are the northern pine and the palm, perhaps expressions of botanical imperialism. Perhaps similar plantings were to be found outside at the villa in the real gardens. The search for a religious, mythological, political, or philosophical key to the interpretation of the paintings will no doubt continue, but perhaps in the original private space the point was merely to imbibe the paradoxical pleasure of a cool underground garden when it was too hot to be outside.

The poet Ovid, born in 43 BCE, was witness to the rise of Augustus and his appropriation of Roman myth, architecture and iconography, religion, and even time, in the service of the dissemination of his new values and the legitimization of his power. Through his poetry Ovid probed and challenged these authoritative and authoritarian maneuvers in subtle and often provocative ways. When Augustus was claiming Venus as his ancestress, putting a Cupid at the foot of the Prima Porta statue, Ovid in his poetry insistently depicted Venus and Cupid as promoters of erotic affairs, heterosexual, homosexual, incestuous, adulterous. At the very time Augustus was passing Rome's first moral legislation against adultery, Ovid's *Art of Love* professed to teach adultery. He reminds the reader that the prominent pairing of Venus and Mars in Augustus' Mars Ultor Temple in Rome could evoke their famous

adulterous affair. Ovid frees the iconography and narratives of poetry, art, and nature from the interpretive grip of imperial power.

In the *Metamorphoses*, the origin of the Augustan laurel is told in the story of the transformation of Daphne (the Greek name for laurel). Daphne begged to be transformed because Apollo was attempting to rape her; even as a tree she shuddered at his touch. Apollo's arboreal appropriation mirrors Augustus'. Biodiversity in Ovid's *Metamorphoses* and *Fasti* is created from human suffering; trees and flowers represent the sufferings of humans, male and female, caused by the powerful gods. In the *Fasti*, Ovid tells the origin story of the Roman flower-goddess Flora and the first flower garden, given to her after she was raped by the wind-god Zephyr. Her garden is filled with metamorphosed boys, all of whom became flowers after tragedy ("through me beauty springs from their wounds"¹²). In a remarkable act of originality, Ovid says that Mars, god of war and father of Romulus, sprang from a unique flower in Flora's garden. Juno had wanted to conceive without a male and Flora touched her with a magic flower. Are we to recall that Livia was never able to conceive a child with Augustus? In Ovid's version, Rome thus originates in a flower produced by Flora, the goddess at whose festival, the Floralia, prostitutes famously danced naked. Ovid never finished his calendar poem (*Fasti*) - it ends before he gets to the moths named after Caesar and Augustus. He was banished by Augustus in 8 CE because of a poem and an 'error,' as he tells us. From the cold shores of the Black Sea at the edge of the Empire (modern Romania) where he died, Ovid never stopped asking Augustus, Livia, and later Tiberius, for a pardon and return. He never received one. In a late poetic letter *Ex Ponto*,¹³ he recalls his own Italian garden on the same Via Flaminia as Livia's gardens and dreams about weeding and watering his plants.

Notes

- ¹ Annette Giesecke (editor) and Naomi Jacobs (editor), *Earth Perfect?: Nature, Utopia and the Garden* (London: Black Dog Publishing, 2012), 14.
- ² *Pliny the Elder, Historia Naturalis* 15.136–137; Suetonius, *Galba* 1.1; Dio Cassius 48.52.3–4
- ³ Allan Klynne, “The Laurel Grove of the Caesars: Looking in and Looking Out,” in Barbro Santillo Frizell and Allan Klynne, eds. *Roman Villas Around the Urbs: Interaction with Landscape and Environment. Proceedings of a Conference at the Swedish Institute in Rome, September 17–18, 2004. Projects and Seminars 2* (Rome: Swedish Institute in Rome, 2005), 167–175.
- ⁴ Suetonius, *Divus Augustus* 92.1–2.
- ⁵ This is disputed by Allan Klynne, “The Laurel Grove of the Caesars: Looking in and Looking Out,” who suggests the Villa would have invited visitors. The famous statue of Augustus Prima Porta, which was discovered at the villa in 1863, might support this.
- ⁶ Allan Klynne and Peter Liljenstolpe, “Investigating the Gardens of the Villa of Livia,” *Journal of Roman Archaeology* 13 (2000): 220–233; Peter Liljenstolpe and Allan Klynne, “The Imperial Gardens of the Villa of Livia at Prima Porta: A Preliminary Report on the 1997 Campaign,” *Opuscula Romana* 22–23 (1997–1998): 127–148.
- ⁷ Klynne, “The Laurel Grove of the Caesars: Looking in and Looking Out.”
- ⁸ Caneva, Giulia and Lorenza Bohuny. “Botanical Analysis on the Livia’s Villa Painted Flora (Prima Porta, Rome).” *Science and Technology in Cultural Heritage* 4 (2003): 149–155.
- ⁹ Barbara A. Kellum, “The Construction of Landscape in Augustan Rome: The Garden Room at the Villa ad Gallinas,” *The Art Bulletin* 76 (2) (June 1994): 211–224; Reinhard Förtsch, “Ein Aurea-Aetas-Schema.” *Mitteilungen des Deutschen Archäologischen Instituts, Römische Abteilung* 96 (1989): 333–345; Bernard Andreae, *Am Birnbaum: Gärten und Parks im antiken Rom, in den Vesuvstädten und in Ostia* (Mainz am Rhein: Philipp von Zabern, 1996).
- ¹⁰ *Pliny the Elder, Historia Naturalis* 15.70, figs named for Livia and Pompey the Great; Ann Kuttner, “Looking Outside Inside: Ancient Roman Garden Rooms,” *Studies in the History of Gardens and Designed Landscapes* 19 (1) (1999): 7–35. Published online: May 31, 2012.
- ¹¹ Alma Kumbaric and Giulia Caneva, “Updated Outline of Floristic Richness in Roman Iconography,” *Rendiconti Lincei* 25 (2) (2014): 181–193. <https://doi.org/10.1007/s12210-013-0279-4>.
- ¹² Ovid, *Fasti* 5.228.
- ¹³ Ovid, *Ex Ponto* 1.8.

Bibliography

- Caneva, Giulia. “Ipotesi sul significato simbolico del giardino dipinto della villa di Livia (Prima Porta, Rome).” *Bullettino della Commissione archeologica comunale di Roma C* (1999): 63–80.
- Caneva, Giulia. *Il codice botanico di Augusto. Roma, Ara pacis: parlare al popolo attraverso le immagini della natura = Speaking to the People Through the Images of Nature*. Rome: Gangemi, 2010.
- Caneva, Giulia. “Il giardino come espressione del divino nelle rappresentazioni dell’antica Roma.” In Kathleen Coleman and Pascale Ducrey, eds. *Le jardin dans l’antiquité. Tome LX*, 301–361. Genève: Fondation Hardt, 2014.
- Caneva, Giulia and Lorenza Bohuny. “Botanical Analysis on the Livia’s Villa Painted Flora (Prima Porta, Rome).” *Science and Technology in Cultural Heritage* 4 (2003): 149–155.
- Carrara, Matilde. “La Villa di Livia a Prima Porta da praedium suburbanum a villa Caesarum.” In Barbro Santillo Frizell and Allan Klynne, eds. *Roman Villas Around the Urbs: Interaction with Landscape and Environment. Proceedings of a Conference at the Swedish Institute in Rome, September 17–18, 2004. Projects and Seminars 2*, 167–175. Rome: Swedish Institute in Rome, 2005. <http://www.isvroma.it/public/villa/print/carrara.pdf>.
- Forte, Maurizio. *La villa di Livia: un percorso di ricerca di archeologia virtuale*. Rome: „L’Erma” di Bretschneider, 2007.
- Gabriel, Mabel McAfee. *Livia’s Garden Room at Prima Porta*. New York: New York University Press, 1955.
- Giesecke, Annette (editor) and Naomi Jacobs (editor). *Earth Perfect?: Nature, Utopia and the Garden*. London: Black Dog Publishing, 2012.
- Jones, Frederick M. A. “Drama, Boundaries, Imagination, and Columns in the Garden Room at Prima Porta.” *Latomus* 72 (4) (2013): 997–1021.

Kellum, Barbara A. "The Construction of Landscape in Augustan Rome: The Garden Room at the Villa ad Gallinas." *The Art Bulletin* 76 (2) (June 1994): 211-224.

Klynne, Allan. "The Laurel Grove of the Caesars: Looking in and Looking Out." In Barbro Santillo Frizell and Allan Klynne, eds. *Roman Villas Around the Urbs: Interaction with Landscape and Environment. Proceedings of a Conference at the Swedish Institute in Rome, September 17-18, 2004. Projects and Seminars 2*, 167-175. Rome: Swedish Institute in Rome, 2005. <https://isvroma.org/wp-content/uploads/public/villa/screen/klynne.pdf>.

Klynne, Allan and Peter Liljenstolpe. "Investigating the Gardens of the Villa of Livia." *Journal of Roman Archaeology* 13 (2000): 220-233.

Kumbaric, Alma and Giulia Caneva. "Updated Outline of Floristic Richness in Roman Iconography." *Rendiconti Lincei* 25 (2) (2014): 181-193. <https://doi.org/10.1007/s12210-013-0279-4>.

Kuttner, Ann. "Looking Outside Inside: Ancient Roman Garden Rooms." *Studies in the History of Gardens and Designed Landscapes* 19 (1) (1999): 7-35.

Liljenstolpe, Peter and Allan Klynne. "The Imperial Gardens of the Villa of Livia at Prima Porta: A Preliminary Report on the 1997 Campaign." *Opuscula Romana* 22-23 (1997-1998): 127-148.

Malizia, Eleonora. "Les peintures murales du IIe siècle de la Villa de Livie à Prima Porta (Rome): un exemple de mémoire décorative?" *Archeologia Classica* 7 (2017): 603-615.

Reeder, Jane Clark. "The Statue of Augustus from Prima Porta and the Underground Complex." In Carl Deroux ed., *Studies in Latin Literature and Roman History VIII*, 287-308. Brussels: Latomus, 1997.

Reeder, Jane Clark. *The Villa of Livia ad Gallinas Albas. A Study in the Augustan Villa and Garden. Archaeologica Transatlantica XX*. Providence, RI: Joukowski Institute for Archaeology & the Ancient World, 2001.

Tally-Schumacher, Kaja J. and Nils P. Niemeier. "Through the Picture Plane: Movement and Transformation in the Garden Room at the Villa ad Gallinas at Prima Porta." *Chronika* 6 (2016): 58-71.

Zarmakoupi, Mantha. "Designing the Landscapes of the Villa of Livia at Prima Porta." In Donna Kurtz, Caspar Meyer, David Saunders, Athina Tsingarida and Nicole Hartris, eds., *Essays in Classical Archaeology for Eleni Hatzivassiliou 1977-2007*, 269-276. Oxford: Studies in Classical Archaeology, The Beazley Archive Series, 2008.

Ancient Authors

Pliny the Elder, *Historia Naturalis (Natural History)*

Suetonius, *The Lives of the Caesars: Galba*

Suetonius, *The Lives of the Caesars: Divus Augustus (The Divine Augustus)*

Dio Cassius, *Historia Romana (Roman History)*

Ovid, *Fasti*

Ovid, *Ex Ponto*

Ovid, *Metamorphoses*

Silvia RONCHEY

University of Roma Tre

Laura BORGHETTI

Mainz University

Giulia Maria PAOLETTI

University of Oxford

BIODIVERSITY IN BYZANTIUM: BETWEEN PATRONS, MANUSCRIPTS, AND BOTANICAL TRAVELS

I. Preliminary remarks on Byzantine biodiversity and its study

Not much has been written so far about biodiversity in Byzantium *per se*. There is, however, a very interesting essay on botany recently written by Alain Touwaide and included in the *Companion to Byzantine Science*.¹ The essay addresses the concept of biodiversity related to the variety of plants recorded in Byzantine (scientific) written sources and opens by mentioning the illustrated manuscripts of Dioscorides' *De materia medica* (especially the well-known Viennese version)² as

an initial reference point for research. The main sources for the study of botanical biodiversity in Byzantium are, in addition to Dioscorides, obviously also the *Hippocratic Corpus*, Aristotle and Theophrastus, Galen and Greek translations of Arabic treatises.

Since the studies carried out so far have been purely based on Dioscorides and on a concept of botanical biodiversity based on a division of plants according to geographical area and phyto-physiological properties, Touwaide proposes to extend the manuscript research from the catalogue of medical codices compiled by Diels at the beginning of the twentieth century (*Die*

Handschriften der antiken Ärzte) to the entire deposit of Byzantine manuscripts, which are now made more traceable and accessible by the paleographic databases and digital resources like the online TLG.³ This would make it possible to examine both hitherto unknown sources and sources not yet considered from a botanical point of view. According to Touwaide, and rightly so, recent developments in archaeobotany and palaeoclimatology are decisive. Adam Izdebski, an expert in environmental history at the Max Planck Institute and co-editor together with Johannes Preiser-Kapeller (Vienna) of *the Companion to the Environmental History of Byzantium*, has for years been studying pollen deposited on lake bottoms in former Byzantine territories as evidence of changes in biodiversity, climate change, and from them even migrations and changes in the socio-economic structure of those regions.⁴ Touwaide also stresses the need not to underestimate the possible contribution that texts such as monastic *typika* and legal documents can make to the issue of botanical biodiversity.⁵ The scholar, however, argues that it does not appear that “Byzantine scholars developed a scientific concept of Mediterranean botanical unity or regional diversity.”⁶ It is clear, nonetheless, that the Mediterranean is a rich biodiversity hotspot and Touwaide’s essay provides us with some bibliography on this, though not yet specifically on the Byzantine millennium.⁷

Touwaide also notes the coincidence of the recurrent provenance of several medical specialists from Tarsus in Cilicia, not far from Anazarbo, the birthplace of Dioscorides,⁸ arguing that it cannot be a coincidence that Cilicia is also the region of the Mediterranean basin with the highest presence of botanical biodiversity. Even though in ancient and Byzantine authors, there is no clear trace of any explicit awareness of this richness, it seems that climate change (and this is where Izdebski’s work could come in) and deforestation in the Byzantine era probably affected biodiversity.⁹ Another rather interesting aspect is that the presence in the Byzantine area of exotic botanical varieties from Persian and Arab territories as early as the

thirteenth and fourteenth centuries could serve as a further key to understanding how Byzantium’s role as a cultural melting pot and bridge between East and West also contributed to the growth and development of its botanical biodiversity. The type of knowledge produced by the Byzantines’ botanical observations is perhaps also worth noting. Their approach shows three different tendencies: speculative (focusing on the genesis and ontology of plants), analytical (taxonomy and classification), and utilitarian (plants in relation to agriculture, food, medicine, body hygiene, etc.).¹⁰ While the first two trends are more scientific and theoretical, the third rather relates to the practice of everyday life.

Since the topic of biodiversity constitutes a *Knotenpunkt* of philology, codicology, literature, history of science, environmental studies, palaeoclimatology and archaeobotany, the interdisciplinary aspect is fundamental. It is exactly this aspect that encourages the versatility and multitasking attitude which is typical of Byzantine civilization scholars, fascinated by a subject that is in some ways very topical and, in some cases, closely dependent on modern scientific research technologies.

If we then consider biodiversity as it appears in literary texts, observing both the cognitive perception of the different (botanical) species and their literary rendering opens up truly stimulating analytical horizons. On the one hand, literary biodiversity can result into fascinating encyclopaedic works such as the eleventh book of the *Geoponika*. Here, the mythological origin of different flowers and trees harmoniously entangles with technical advice about the best season for their planting and harvest, deriving from deep-rooted rural practices.¹¹ On the other hand, the widespread presence of floral and arboreal elements in fictional and poetic texts reveals a complex and fascinating metaphorical apparatus, consisting in the shimmering entanglement of the natural world and human perception. In the Byzantine hymnographical production, for example, plants or fruits often represent the female appearance of Mary, Mother of God, and convey the imagery of the garden, which in turn

identifies with the terrestrial paradise.¹² As we can see, botany, religion, and human virtues, such as purity and innocence, blend here into a multifaceted conceptual structure. In this case, the application of literary theories is accompanied by philosophical and theological analysis of the text, but also by the use of cognitive science, e.g. with Lakoff and Johnson's fundamental theory of conceptual metaphor.¹³ An 'ecocritical' approach could also be adopted in the literary analysis of biodiversity, i.e. focusing on the active role of different plant species in the textual context.¹⁴ This is possible on the assumption that literary agency can be ascribed to all elements, both human and non-human, present in a narrative or epigrams, and that the faculty of action (in a text) is not exclusive to humankind, as argued by the more traditional approach.¹⁵

Biodiversity in Byzantium is therefore a theme that lends itself to a scientific, historical and literary analysis that is, to say the least, multifaceted, even with the possibility of potentially very fruitful contemporary references, such as the encounter between East and West, a particularly hot topic in recent times, and the focus on nature, environment and climate change in relation to human intervention, as well as on the concept of diversity, all key words that are particularly appealing these days - unfortunately or fortunately - when it comes to applying for funds of any nature and entity.

(L. B.)

II. Byzantine biodiversity and botanical knowledge: the example of the Viennese Dioscorides

Ogier Ghiselin de Busbecq

Just as a mosaic, history is made by the entirety of all the pebbles put together, and like a domino every tiny piece could set off a process hardly mutable and rather unpredictable. It might be argued, with a pinch of salt, that some personalities may have played a larger role in some dynamics. The Habsburg ambassador Ogier Ghiselin de Busbecq should be considered one of them. He, whom Emperor Ferdinand had named ambassador to the Ottoman court in the years 1554-1562, went to Constantinople in two separate occasions: the first journey lasted less than a year, while the second one almost seven, during which he defines himself as "a virtual prisoner in his own mansion."¹⁶

His personality has not attracted much attention from scholars, and his value in making history is on the one hand broadly acknowledged,¹⁷ yet, on the other hand, some information has not been properly explored nor uncovered.¹⁸ This is, however, not the place to discuss such elements, and we shall instead focus our attention on how he contributed to our understanding of not only Medieval but also Renaissance biodiversity, in particular of the flora of what once was the Ottoman Empire, and before the Byzantine Empire, and of all the bordering countries he had to pass through on his way to Constantinople. To do this, we gather information from his collection of four letters, the so-called Turkish letters, in which he discusses Turkish costumes, in terms of dress-codes, rituals, relationship with their allies and enemies, but also about the structure and architecture of the city, and the flora and fauna.¹⁹

Plants and flowers seem to have had various uses, such as medical or ritual, already in the ancient Greek world, though "tentacles of Byzantine medicine extended into areas that we would now consider nonmedical."²⁰ According to

Busbecq, “Turks were fond of flowers” and used them also in ceremonial rituals.²¹ Such a fondness of flowers came unexpected to Busbecq, who, as a fan and sort of expert himself, did not think that the Turks, who were “otherwise anything but extravagant,” would have joined him in such an obvious simple pleasure.²²

In the first letter, Busbecq describes his meeting with the Janissaries, who, as customary, greeted him “with a bunch of hyacinths or narcissi.”²³ The origin and meaning of this tradition is not explained by Busbecq, who later mentions that he found hyacinths and narcissus “pretty much everywhere” in Adrianople: an abundant flowering which caught him by surprise as “winter is not a favorable season” for flowering.²⁴ About the hyacinth and narcissus he also adds that a large quantity of them “causes a headache in those who are not accustomed to them.”²⁵ This apparently does not hold true for tulips, also found in Adrianople, which though praised for their “beauty and the variety of colors,” have little or no scent.²⁶ We may find a sense of surprise in these lines, which might indicate that these species were not common in the West. Lavender is also mentioned in the following pages as a ‘fragrant’ plant found through some fields after leaving the city of Scutari.²⁷ He also talks about medicinal plants, such as, for example, the *scordium*, an hoppiaceous used against plagues or insomnia, which emanates “an odour of garlic” and that was previously “unfamiliar” to him.²⁸

In the concluding pages of the letters, he describes what he found worthy of being brought back to the emperor, and among such things, he said he “hardly brought back any plants or herbs but some botanical drawings which he was keeping for Mattioli.”²⁹ Mattioli was a famous Italian physician, who worked for Archduke Ferdinand and Emperor Maximilian II, and generally remembered for his herbal, firstly published in 1554, which seems to have been inspired by the writings of Pedanius Dioscorides.³⁰ This botanical interest of Busbecq, coupled with a strong passion for manuscripts, results evident in his desire of buying and

bringing back the oldest copy known to us of the Dioscorides’ *Materia Medica*, a fundamental treatise to Byzantine pharmacology written in the first century AC, now to be found in the Austrian National Library as Cod. Med. gr. 1. This manuscript preserves and bears 383 botanical pictures of plants, accompanied by descriptions and analysis. The manuscript is unique in its own, and has attracted scholarly attention for centuries, with its relevance testified by the copious reproductions even in the twentieth century³¹ and by its nomination as part of the UNESCO’s Memory of the World Register. He describes the codex as follows:

The only one I left at Constantinople was a copy of Dioscorides, evidently a very ancient manuscript, written throughout in uncial characters and containing drawings of the plants, in which, if I am not mistaken, there are also some fragments of Cratevas and a treatise on birds. It belongs to a Jew, the son of Hamon who was Solyman’s physician, and I wanted to buy it, but was deterred by the price. For he demanded 100 ducats, a sum suiting the imperial purse, but not mine. I shall not leave off pressing the Emperor till I induce him to ransom so famous an author from such foul slavery. The manuscript is in very bad condition from the injuries of age, being so worm-eaten on the outside that hardly anyone, if he found it on the road, would take the trouble of picking it up.³²

Due to the high price of the manuscript, Busbecq was at the beginning unable to buy it. However, as promised in the letter (“I shall not leave off pressing the Emperor till I induce him to ransom so famous an author from such foul slavery”), he managed at the very end - many years later, when the son of that stingy enough emperor raised to the throne, whom Busbecq himself was tutor to - to acquire the precious manuscript, together with another copy of it of much less value nonetheless.³³

To conclude, it would not be surprising if, once home, Busbecq confirmed his perceptions of such plants by looking at the Dioscorides' descriptions.

The manuscript and its dedicatee

It would now be interesting to look at the origin of this manuscript. We shall present the dedicatee of the book and give some information on her personality. The exemplar is clearly rather prestigious, as it can be seen by its size - 38 × 33 cm, it weighs 14 pounds - structure and internal content. Brubacker points out that it was possibly made for imperial use³⁴ and describes it as “a self-consciously deluxe reference book presented as a learned text with encyclopedic pretensions.”³⁵ This assumption of hers is justified by the dedicatee of the book: the aristocrat Anicia Juliana (ca 462–ca 528). Born to one of the wealthiest family in Byzantium, she is known for her endless commitment to artistic and architectural patronage. She is mostly remembered for the foundation of the Constantinopolitan churches of Saint Polyuktos and of Hagia Euphemia.³⁶ What is rather striking about this personality is not just the dedication and commitment to art sponsorship, but rather the fact that, unlike other more famous Byzantine patronesses, she was not directly related nor tied to the somewhat *parvenue* family of future emperor Justinian I. She was the great-granddaughter of the celebrated Byzantine emperor Theodosius II, and her other forbears were all of the highest rank, such as, for example, her grandfather Emperor Theodosius II and the sainted empress Aelia Eudocia. Although her father Olybrius was one of the last Western emperors, and her husband Areobindus briefly occupied the throne, to shortly later flee it, and although her son Olybrius jr was almost crowned, Anicia Juliana's economic, artistic, and political power mostly relied on her own familiar lineage, which seems to go back to through seven centuries of roman statesmen.

The importance of her ancestry is well-stressed also by an epigram of the Greek Anthology,

in which Anicia Juliana is implicitly compared to her great-grandmother, the Empress Eudocia. Such a poem is relatively surprising, as one would expect that in the comparison, the empress would always come out as the best out of the two:

Eudokia *the empress*, eager to honour God, first built here a temple of Polyeuctus the servant of God. But she did not make it as great and as beautiful as it is, not *from any economy or lack of possessions* — what doth a Queen lack? — but because her prophetic soul told her that she should leave a family *well knowing how better* to adorn it. Whence Juliana, *the glory of her blessed parents*, inheriting *their royal blood in the fourth generation*, did not defeat the hopes of the *Queen, the mother of a noble race*, but raised this from a small temple to its present size and beauty, increasing *the glory of her many-sceptered ancestors*

This poem is beautifully constructed, thoroughly permeated by a slight irony nor difficult to grasp, neither alien to Byzantine's literature, and does the opposite of what commissioning and praising texts are supposed to do. If one looks closely at it, something stands out: Eudocia's imperial title is there mentioned not to praise her, but it is instead used to make the other shine, adopting the well-known *escamotage* of *synkrisis*, proper of classical and biblical literature. Eudocia is an empress, does not lack economical means, but she is implicitly considered not worthy enough to deal with “God's possessions” so that she needs to leave it to “a family *well knowing how better* to adorn it.” A female succession of course, culminated in her grand-grandaughter Anicia Juliana.

Conclusions

To conclude we could argue that in a sort of ring composition the manuscript traveled from one empire to another, first from the Greeks to the Turks, and then back from the East to the West, that is, from the Ottoman empire, successor of the perished empire of the Second Rome, to the Sacrum Romanum Imperium of the Habsburg emperors. It survived the cruel and inescapable flux of time, the fall of a city, a likely daily use by physicians, to finally end up in the Austrian National Library. This manuscript and all the people revolving around it, that is to say the patroness Anicia Juliana, the ambassador Busbecq, the Ottoman and Habsburg empires, are all pawns in the broader world's chessboard, and it is their actions and interactions that to some extent contributed to the development of global history.

(G. M. P.)

III. *Hortus conclusus, soror mea, sponsa* (A garden enclosed my sister, spouse)³⁷

Julia Augusta and Julia Anicia. Two women very much alike in every aspect, even in the name they went by in past scholarship and by which they were widely known; although the former was born as Livia Drusilla, and gained the name Julia Augusta from her marriage with Octavianus, and the latter's name was actually Anicia Juliana.

Both of them were linked to imperial figures. Livia first married a member of the Gens Claudia, and then the very founder of the *principatus*. Anicia Juliana was not just a wife but also a daughter, niece, and grand-daughter of emperors. Both of them were connected to the ruling class and the roman *intelligencija* through a privileged network of family ties.

By marrying her cousin Tiberius Claudius Nero, the sixteen-year-old Livia not only entered the highest Roman patrician class, but also the fervid

environment of the anti-cesarean conspirators, led by Brutus and Cassius, and it was for this valuable pedigree that Augustus, the ambitious nephew and self-proclaimed heir of Caesar, married her. As for Anicia, countless 'Proustian kinships' linked her to the empire of the First Rome and the new aristocracy of the Second Rome, Byzantium. We may mention here, beside the many figures of statesmen, that of the philosopher Boethius.

Both of them were the heirs of a *lignée* of women, which had made women power a family tradition. Livia's mother, Alphidia, coming from a dynasty of high-ranking magistrates, was a powerful figure, widely known as such even to our contemporary literature and mass culture. Political activism and artistic patronage were already a prerogative of the long line of matrons and patronesses which Anicia Juliana came from.

It is to this feminine tradition that we cannot not pinpoint the most evident feature the two had in common: their botanical interests and their commission of a *hortus*. A botanical garden mirrored in a stone garden, in the case of Livia: the first century frescos of her Villa at Prima Porta, that can still be admired today, in their original form, at the National Roman Museum, re-enact with a sublime pictorial technique the scenes of real plant life. A parchment garden, in the case of the codex of Anicia, a book-garden: almost 500 sheets and 435 (today 383) full-page plates compose that equally illusionistic herbarium that is the Dioscorides of Vienna, illuminated at the beginning of the sixth century.

These powerful women's relationship with nature, or rather the making of nature the very source of their power, is clearly stressed by the primary sources. Plinius, in his *Naturalis Historia*, recounts the famous tale according to which, once the wedding with Augustus was arranged, an eagle dropped on Livia's lap a perfectly intact (*inlaesam*) white hen, which was carrying in her beak a laurel branch. Livia bred the offspring of that *gallina alba*, and from that *lauerum ramum*, that Livia planted, was born a sacred wood (*mira sylva*), from which the future emperors would have picked out the laurel

of their crowns and the one they held in their hands in their triumphs.

Even the emperors' male power, therefore, drew its legitimacy from the female contiguity with the animal and vegetable world, with its ancestral strength, with its mysterious messages. It is no coincidence that among the multiple iconographies of Livia Julia Augusta, the most famous statue, now in the Louvre, depicts her in the guise of Ceres, goddess of fertility, her veiled head surmounted by a laurel wreath, the *cornucopia* supported by the left hand, the ears of corn clutched in the right.

Among the representations of Anicia, the most significant one is found in one of the initial *folios* of the Dioscorides of Vienna, in which she appears at the center of a miniature, enclosed among the rope knots of an esoteric mandala formed by an eight-pointed star bounded by a circle. On the outer edges of the star, a little people of *puttos* in the guise of masons and carpenters climb up, painted in grisaille. The matron/ patron is in the middle of the star, seated on a throne in a sacred and ceremonial posture, in the act of giving alms. She is flanked by two equally hieratic female figures, personifications of Magnanimity (*megalopsychia*, as can be read in the inscription above the figure seated to the left) and Prudence (*phronesis*, again written above the personification seated to the right). At the feet of Anicia kneels the 'Gratitude of the arts,' personified in a *putto*, who hands the manuscript to the benefactress. Above the latter's figure stands out the attribute of *sophia*, 'wisdom.' Anicia is thus presented as the personification of that same sacred Sophia from which the grandiose Constantinopolitan basilica of Hagia Sophia takes its name, which would shortly thereafter be re-erected by Justinian on the remains of the Theodosian basilica, due to Anicia's great-grandfather, Theodosius II, and destroyed during the Nika revolt of 532, almost twenty years after the creation of Dioscorides' manuscript. A Wisdom, in the case of Anicia, explicitly and eminently feminine.

According to a theory that has been famously put forward by Robert Graves in his book, *The White Goddess*, which in turn was based on that

masterpiece of the history of religions that is Frazer's *The Golden Bough*, all religions of Indo-European peoples have originated from the common cult of a female deity, known under different names, inspired and represented by the phases of the moon and linked to the cultivation of the earth, lady of the harvest and the underworld, and therefore of love, death, and rebirth.

Regardless of the theories on matriarchy put forward by the historians of the nineteenth century and refuted by the anthropologists of the twentieth, in that archaic world the supremacy of women was based on the channeling of voices and vibrations of an *anima mundi*: of that 'soul of the world' that includes everyone and everything and thus first of all the language of non-human life, the speech of animals and plants: a feminine capacity for perception and inclusion that marked the muse, the Pythia, the Sibyl, the Platonic priestess, as well as the medieval witch, which were considered psychic mediators between the natural and human worlds.

The changing face of this ancestral *Mater nostra* is hidden behind the various female personifications of pagan myth, but also behind the Christian cult, if we think of the divine mother-son couple that remains and that reworks beliefs and rites of a pre-existing religious corpus. The earthly queens, already according to Graves, are hypostases of the Goddess in each of their kingdoms. It is to this ancient and never forgotten matriarchy that the imaginary that surrounds those women and *dominae* refers, in whose figures and in whose political, artistic and cultural eminence a power survives that is given by the connection with the natural world and the intimacy with the whole living nature.

(S. R.)

Notes

- ¹ Allan Touwaide, “Botany.” In Stavros Lazaris ed., *A Companion to Byzantine Science* (Leiden and Boston: Brill, 2020), 312.
- ² The manuscript is listed as Vindobonensis med. gr. and kept at the Austrian National Library. It is a sixth century deluxe manuscript of a rather large size (38x33 cm, weight 14 pounds), which preserves the earliest illustrations of Dioscorides’ *Materia Medica*, accompanied by the pharmaceutical properties of each plant. See: Leslie Brubaker, “The Vienna Dioscorides and Anicia Juliana,” in *Byzantine Garden Culture*, ed. Antony Robert Littlewood, Henry Maguire, and Joachim Wolschke-Bulmahn (Washington, D.C.: Dumbarton Oaks Research Library and Collection, 2002), 189; Ch Christian Gastgeber, ‘Der Wiener Dioskurides-Codex med. gr. 1. Beobachtungen zu den Widmungsblättern’, *Mitteilungen zur Christlichen Archäologie* 20 (2014), 9-35. doi 10.1553/micha20.
- ³ Touwaide, “Botany,” 310. Digital resources are the *Thesauri linguae graecae* and *Pinakes, Textes et manuscrits grecs*.
- ⁴ Johannes Preiser-Kapeller and Adam Izdebski ed., *A Companion to the Environmental History of Byzantium* (Leiden and New York: Brill, 2021). [forthcoming]. For an overview about potentialities and perspectives of the environmental topic in the Late Antique and Early Middle Ages, see: Adam Izdebski, “Setting the Scene for an Environmental History of Late Antiquity,” in Adam Izdebski and Michael Mulryan ed., *Environment and Society in the Long Late Antiquity* (Leiden and Boston: Brill, 2019), 3-13.
- ⁵ Touwaide, “Botany,” 302-352.
- ⁶ Ivi, 319.
- ⁷ Ivi, 320.
- ⁸ Ivi, 321.
- ⁹ Ivi, 322.
- ¹⁰ Ivi, 328.
- ¹¹ Andrew Dalby, *Geoponika: Farm Work. A Modern Translation of the Roman and Byzantine Farming Handbook* (Totnes, Devon, UK: Prospect Books, 2011), 235-245.
- ¹² Helena Bodin and Ragnar Hedlund eds., *Byzantine Gardens and Beyond. Acta Universitatis Upsaliensis. Studia Byzantina Upsaliensia*, 13 (Uppsala: Uppsala Universitet, 2013), 128-147.
- ¹³ George Lakoff and Mark Johnson, *Metaphors We Live By* (Chicago: University of Chicago Press, 1980).
- ¹⁴ A pioneering work for the ecocritical approach to the Byzantine literature is: Adam J. Goldwyn, *Byzantine Ecocriticism: Women, Nature, and Power in the Medieval Greek Romance* (London: Palgrave-MacMillan, 2018). A more recent publication by Thomas Arentzen, Virginia Burrus and Glenn Peers, *Byzantine Tree Life. Christianity and the Arboreal Imagination* (London: Palgrave-MacMillan, 2021), explores representations of trees in Byzantium, by drawing on broader scholarship on Plant Humanities and eco-criticism.
- ¹⁵ For a thorough investigation of the relation between agency and plants, see: Paul Cloke and Owain Jones, *Tree Cultures: The Place of Trees and Trees in Their Place* (Oxford and New York: Berg Publishers, 2002).
- ¹⁶ George Sarton, “Third Preface to Volume XXXIII: Brave Busbecq (1522-1592),” *Isis* 33 (5) (1941/42): 558.
- ¹⁷ On Busbecq see: Ignace Dalle, *Un Européen chez le Turcs: Augier Ghiselin de Busbecq: 1521-1591* (Paris: Fayard, impr., 2008); Dominique Arrighi, “Le récit de voyage dans l’empire ottoman: traditions et variations dans les *Lettres turques* de Busbecq,” *Camaenae* no.1 (janvier 2007): 1-11; Dominique Arrighi, *Ecritures de l’ambassade: les “Lettres turques” d’Ogier Ghiselin de Busbecq* (Paris: Honoré Champion éditeur, 2011); Hubert Le Bourdelles, “Busbecq: 1521-1591. Un humaniste et un homme d’action européen,” *Bulletin de l’Association Guillaume Budé* 2 (1991): 204-209; Christian Gastgeber, “Ogier Ghislain de Busbecq und seine griechischen Handschriften,” in André Binggeli, Matthieu Cassin, Marina Detoraki and Anna Lampadaridi eds., *Bibliothèques grecques dans l’Empire ottoman* (Turnhout, Belgium: Brepols, 2020), 145-181; Silvia Ronchey, “Libri quos mari transmisi Venetias. Busbecq, Prodromos Petra e i giacimenti librari costantinopolitani al tempo di Solimano il Magnifico,” *Engramma* 174 (2020): 199-229; André Rousseau ed., *Sur les traces de Busbecq et du gothique* (Villeneuve-d’Ascq: Presses universitaires de Lille, 1991); Zweder von Martels, “On his Majesty’s Service. Augerius Busbequius, Courtier and Diplomat of Maximilian II,” in Friedrich Edelmayr and Alfred Kohler eds., *Kaiser Maximilian II. Kultur und Politik im 16. Jahrhundert* (Wien and München: Verlag für Geschichte und Politik and R. Oldenbourg Verlag, 1992), 169-181; Zweder von Martels, “A Stoic Interpretation of the Past: Augerius Busbequius’s Description of his Experiences at the Court of Süleyman the Magnificent (1554-1562),” *Journal of the Institute of Romance Studies* 2 (1993): 165-179.
- ¹⁸ It is undeniable that the position of Busbecq as ambassador at the Turkish court might have had various implications that may have gone beyond the apparent scope of the diplomatic mission. As his figure is still partially shrouded in mystery, one might for the moment only speculate on what other aims he might have wanted to accomplish during his two journeys. His position as an insider in the Greek Constantinopolitan world and his ties with the patriarchal entourage should be further investigated as well as his role in bringing such a copious number of manuscripts to the West, probably acquired from the monastery of Prodromos Petra, which is also a rather understudied topic. Busbecq’s acquisition of Greek manuscripts in the sixteenth century, more than a century after the fall of Constantinople, sheds light and speaks for the status of monastic libraries in the post-fall world, and how they managed to survive and remain active after the Turkish conquest, a fact that should not be underestimated, considering what on the other hand happened in the aftermath of the 4th crusade. The vicissitudes surrounding

his shipment of manuscripts to Venice should also deserve further studies. About this last point, see: Silvia Ronchey, "Introduzione storico-filologica," in Paolo Cesaretti and Silvia Ronchey edd., *Eustathii Thessalonicensis exegesis in canonem iambicum pentecostalem. Recensuerunt indicibusque instruxerunt. Supplementa Byzantina, Bd 10* (Berlin and Boston: De Gruyter, 2014), 187*-313*.

¹⁹ Ogier de Busbecq, *Turkish Letters*, translated by Edward Seymour Forster, introduced by Philip Mansel (London: Eland Books, 2001).

²⁰ Brubacker, "The Vienna Dioskorides and Anicia Juliana," 213.

²¹ Ogier de Busbecq, *Turkish Letters* (Eland 2001), 16.

²² Ibidem.

²³ Ivi, 6.

²⁴ Ivi, 16.

²⁵ Ibidem.

²⁶ Ibidem.

²⁷ Ivi, 28.

²⁸ Ivi, 45.

²⁹ Ivi, 163.

³⁰ John Bidwell et al., *Mattioli's Herbal: A Short Account of Its Illustrations, with a Print from an Original Woodblock* (New York: Pierpont Morgan Library, 2003).

³¹ Touwaide, "Botany," 302.

³² Ogier de Busbecq, *Turkish Letters*, 163.

³³ Sarton, "Third Preface to Volume XXXIII: Brave Busbecq (1522-1592)," 566.

³⁴ Brubacker, "The Vienna Dioskorides and Anicia Juliana," 206.

³⁵ Ivi, 209.

³⁶ Ivi, 212.

³⁷ *Canticum Canticorum*, 4,12.

Bibliography

Arentzen, Thomas, Virginia Burrus and Glenn Peers. *Byzantine Tree Life. Christianity and the Arboreal Imagination*. London: Palgrave-MacMillan, 2021.

Arrighi, Dominique. "Le recit de voyage dans l'empire ottoman: traditions et variations dans les *Lettres turques* de Busbecq." *Camena* no.1 (janvier 2007): 1-11.

Arrighi, Dominique. *Ecritures de l'ambassade: les "Lettres turques" d'Ogier Ghiselin de Busbecq*. Paris: Honoré Champion éditeur, 2011.

Bidwell, John, et al., *Mattioli's Herbal: A Short Account of Its Illustrations, with a Print from an Original Woodblock*. New York: Pierpont Morgan Library, 2003.

Bodin, Helena and Ragnar Hedlund eds. *Byzantine Gardens and Beyond. Acta Universitatis Upsaliensis. Studia Byzantina Upsaliensia*, 13. Uppsala: Uppsala Universitet, 2013.

Bourdelle, Hubert Le. "Busbecq: 1521-1591. Un humaniste et un homme d'action européen." *Bulletin de l'Association Guillaume Budé* 2 (1991): 204-209.

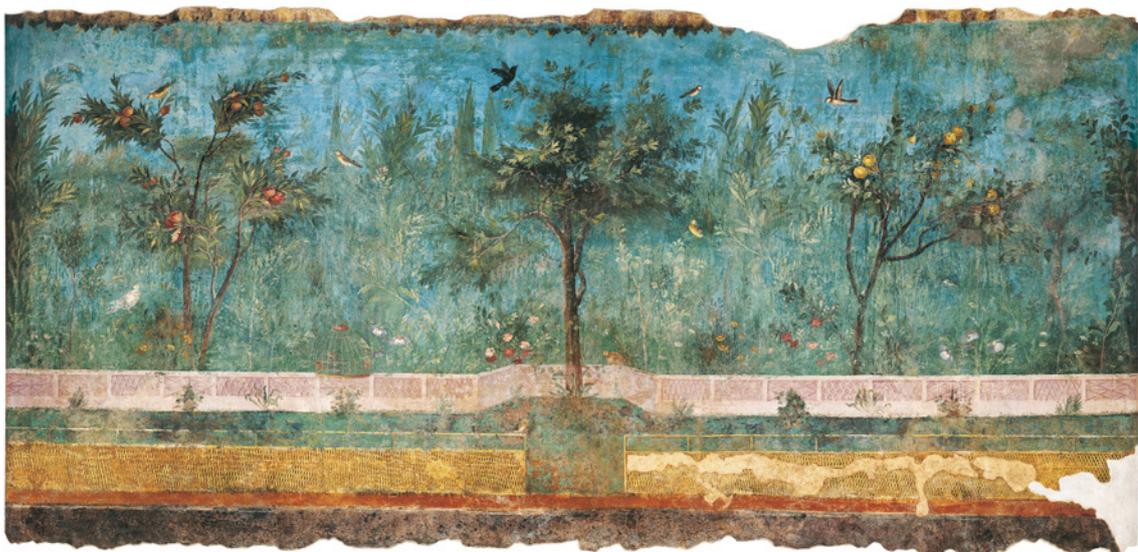
Brubaker, Leslie. "The Vienna Dioskorides and Anicia Juliana." In *Byzantine Garden Culture*, ed. Antony Robert Littlewood, Henry Maguire, and Joachim Wolschke-Bulmahn, 189-214. Washington, D.C.: Dumbarton Oaks Research Library and Collection, 2002.

- Busbecq, Ogier de. *Turkish Letters*. Translated by Edward Seymour Forster. Introduced by Philip Mansel. London: Eland Books, 2001.
- Cloke, Paul and Owain Jones. *Tree Cultures: The Place of Trees and Trees in Their Place*. Oxford and New York: Berg Publishers, 2002.
- Dalby, Andrew. *Geoponika: Farm Work. A Modern Translation of the Roman and Byzantine Farming Handbook*. Totnes, Devon, UK: Prospect Books, 2011.
- Dalle, Ignace. *Un Européen chez le Turcs: Augier Ghiselin de Busbecq: 1521-1591*. Paris: Fayard, impr., 2008.
- Gastgeber, Christian. „Der Wiener Dioskurides-Codex med. gr. 1. Beobachtungen zu den Widmungsblättern.“ *Mitteilungen zur Christlichen Archäologie* 20 (2014), 9-35. doi 10.1553/micha20.
- Gastgeber, Christian. “Ogier Ghislain de Busbecq und seine griechischen Handschriften.“ In André Binggeli, Matthieu Cassin, Marina Detoraki, Anna Lampadaridi eds., *Bibliothèques grecques dans l'Empire ottoman*, 145-181. Turnhout, Belgium: Brepols, 2020.
- Goldwyn, Adam J. *Byzantine Ecocriticism: Women, Nature, and Power in the Medieval Greek Romance*. London: Palgrave-MacMillan, 2018.
- Izdebski, Adam. “Setting the Scene for an Environmental History of Late Antiquity.” In Adam Izdebski and Michael Mulryan ed., *Environment and Society in the Long Late Antiquity*, 3-13. Leiden and Boston: Brill, 2019.
- Lakoff, George and Mark Johnson. *Metaphors We Live By*. Chicago: University of Chicago Press, 1980.
- Martels, Zweder von. “On his Majesty’s Service. Augerius Busbequius, Courtier and Diplomat of Maximilian II.” In Friedrich Edelmayer and Alfred Kohler eds, *Kaiser Maximilian II. Kultur und Politik im 16. Jahrhundert*, 169-181. Wien and München: Verlag für Geschichte und Politik and R. Oldenbourg Verlag, 1992.
- Martels, Zweder von. “A Stoic Interpretation of the Past: Augerius Busbequius’s Description of his Experiences at the Court of Süleyman the Magnificent (1554-1562).” *Journal of the Institute of Romance Studies* 2 (1993): 165-179.
- Preiser-Kapeller, Johannes and Adam Izdebski ed. *A Companion to the Environmental History of Byzantium*. Leiden and New York: Brill, 2021. [forthcoming].
- Ronchey, Silvia. “Introduzione storico-filologica.” In Paolo Cesaretti and Silvia Ronchey edd., *Eustathii Thessalonicensis exegesis in canonem iambicum pentecostalem. Recensuerunt indicibusque instruxerunt. Supplementa Byzantina, Bd 10, 187*-313**. Berlin and Boston: De Gruyter, 2014.
- Ronchey, Silvia. “Libri quos mari transmisi Venetias. Busbecq, Prodromos Petra e i giacimenti librari costantinopolitani al tempo di Solimano il Magnifico.” *Engramma* 174 (2020): 199-229.
- Rousseau, André, ed. *Sur les traces de Busbecq et du gothique*. Villeneuve-d’Ascq: Presses universitaires de Lille, 1991.
- Sarton, George. “Third Preface to Volume XXXIII: Brave Busbecq (1522-1592).” *Isis* 33 (5) (1941/42): 557-575.
- Touwaide, Alain. “Botany.” In Stavros Lazaris ed., *A Companion to Byzantine Science*, 302-352. Leiden and Boston: Brill, 2020.

Nicolas LINEY

University of Oxford

BIODIVERSE POEMS, POSTHUMAN POETS: GARDENS IN/AS ROMAN POETRY



Images courtesy Museo Nazionale Romano, Rome, Ministry of Culture, Italy

Let us begin with an image. It comes from the cycle of frescos found in the famous subterranean room - probably the triclinium - of the Villa of Livia ad Gallinas Albas at Prima Porta, now housed in the Palazzo Massimo, and which provides the focus for the collection of essays in this volume.

If we look closely, it is clear that the scene is an *adynaton*, a natural impossibility. Pomegranates and quinces jostle with iris, daisies and chamomile, flowering and bearing fruit with no regard for seasonal propriety. Roses, poppies, and chrysanthemums spool out against a backdrop of



Rene Magritte, *La Condition Humaine / The Human Condition*, 1933, National Gallery of Art, Washington DC, USA. © Peter Barritt / Alamy Stock Photo

oak, pine, cypress, palm, and oleander. Partridges and goldfinches feast on the fruit trees and rest on their branches. At first viewing, we are looking at a scene of hyper-fertility and abundance, at the idealized and unbridled play of nature (*natura*), free from human intervention. When we lower our gaze, however, the perimeter wall with a solitary birdcage perched suggestively upon it, and the garden path, the *ambulatio*, tell us otherwise. We are looking, in fact, at the imposition of culture (*cultus*) upon nature, at nature contained, an enclosed space, ‘paradise’ in the most literal sense of the word (*paradeisos*, from the Persian *pairidaeza*, *pairi* [around] + *daeza/diz* [brick]). Of course, what we are looking at is a garden. At their most basic level,

gardens always imply an interplay between nature, art and artifice, suggesting a level of cultural control over the natural, whilst also presenting nature itself as a work of art. The garden is where nature and culture come together.

It is also important to understand the fresco itself as another layer of artifice and technology, a cultural lens through which nature is mediated. This is further complicated when we consider where the fresco stood in relation to Livia’s villa: one of its functions was to give the viewer the appearance that she was looking out into the gardens that surrounded the villa complex, including the central courtyard and the grand terrace garden that lay beyond the triclinium’s

walls. The fictive garden is placed in front of the real garden, not so much replacing it as merging with it. We might be reminded, at this point, of René Magritte's *La Condition Humaine* (1933).

Magritte gave a concise account of his own work: "In front of a window seen from inside a room, I placed a painting representing exactly that portion of the landscape covered by the painting. Thus, the tree in the picture hid the tree behind it, outside the room. For the spectator, it was both inside the room within the painting and outside in the real landscape."¹ Magritte's last sentence quietly deconstructs the conventional divide between nature and cultural artifice, between reality and representation: as much as Livia's fresco or Magritte's painting occlude nature, they also collapse any distinction, inviting the viewer to identify the boundary of the fresco or the painting directly with the boundaries of the gardens and landscapes themselves. Nature is not something 'out there,' brought into domestic space through copy and reproduction, but a presence which can exert direct control over culture, can even display its own technologies of art and artifice, a point that writers in Antiquity often extol (epitomized by Ovid's description of the grove of Diana in the *Metamorphoses*, in which "nature had imitated art in its design"). The afterlife of Livia's frescos tells a wonderful story. After the subterranean room was discovered in the 1800s, the report of the Pontifical Ministry of Public Works recorded that, "the ceiling had entirely collapsed and the stucco decoration which once decorated the vault was found among the rubble which filled the room."² Over time, nature had imposed itself upon its own representation. Horace predicted something similar of Roman luxury villas in *Epistle* 1.10:

A forest nursed among colorful columns, and a house which looks out on distant fields is praised.
You will drive out nature with a pitchfork, but she will always hurry back,
and, stealthily, she will burst through your foolish disdain, triumphant.

In the garden of Livia, we arrive at something not far from Donna Haraway's notion

of 'natureculture,'³ which eschews the traditional structuralist 'nature/culture' binary in favor of a more entangled and ontologically flat model, in which nature and culture are co-dependent, and who and what counts as an actor is constantly up for grabs, making it very hard to determine where the human and non-human (i.e. culture and nature) definitively begin and end. This is a posthuman perspective that is gaining traction in the classics,⁴ and equally so in the art world, as the recent *Natureculture* exhibition at Fondation Beyeler, Basel (June 13 to September 21, 2021) shows.

In this article, I turn to the poetic correlative of Livia's naturalcultural world, and explore the interactions between nature and culture in the literary gardens found in (some) Greek and (mainly) Roman poetry. I attempt to map out the networks of solidarity that emerge between poets, poems and gardens, and the literary procedures whereby the human and non-human, nature and culture, impact each other and become entangled with each other. Although plants in literature might often seem mere background details, they constantly evoke and intersect with the central themes of classical literature. Latin poetry and its Greek predecessors canvas vast biospheres in their descriptions of plantlife, gardens and natural landscapes; plants and flowers also constitute a rich metaphorical field through which poets can define their poetry, their poetical subject matter, and their own poetic identity. But if we push beyond the figurative implications of this imagery, we find numerous points of contact and influence between the realms of nature and culture. When, for example, a poet describes her poetry as a flower or a garden, what happens when we think about the processes by which Roman poetry books were manufactured from a richly biodiverse plant-world, and how this can impact the meaning of the text? Or, when a poet compares humans (the poet, the lover, the young hero) to flowers or gardens, how does this reflect the ways in which categories of 'human' and 'non-human' were defined and interrogated? And finally, it is important to

consider the political contexts of these poetic blossomings, and their relationship to empire and imperial forces. Uprooting, transplanting, grafting, bordering: these are all terms that apply equally to humans as well as plants, and can point to an affinity between the two. For Roman poets in the Imperial period, the garden represented a tool to reflect on the nature of imperial power, on relationships between ruler and ruled, and the poet's complicity in, or resistance to, the imperial project, both in terms of the autocratic power of an emperor, and in terms of the practices of colonial expansion.

Biodiverse Poems

Poets in antiquity like to think of their poems as flowers. It is a metaphor that never grows old, constantly reseeds, forms new roots (you get the idea). In rhetorical texts, variations on the word *flos* (flower) are often used to denote an embellished, 'florid' style. This could be a pejorative term: Quintilian mocks the self-indulgences of the contemporary style of composition with its 'flowerets' (*Inst.* 2.5.22: *recentis huius lasciviae flosculis*). But, as often as not, it was deployed as a point of praise. Columella says of Virgil's *Georgics fourth* that "he illuminated (*illuminavit*) the subject of bees with poetic flowers (*poeticis floribus*)," and Sidonius Apollinaris, writing in the fourth century CE, describes Horace's *Odes* as "blossoming with many-coloured flowers of words" (*Ep.* 9.13.2: *vernans...verborum violis multicoloribus*). The weaving and arrangement of flowers as a common metaphor for poetic composition is present in Greek poetry from the early lyric poets onwards (Sappho 55.2-3, for example, or Pindar *Olympian* 6.86-7 and 9.48-9), and extends right through to the Roman authors of Late Antiquity. An entire garden could symbolize a poem: the imperial author composes his *numerosus hortus* to discuss gardening in Book 10 of his prose work *De Re Rustica*, slipping into verse to pick up where Virgil left off in the *Georgics*.

Michael Roberts observes that one purpose of this floral imagery was to promote the desired virtue of literary variety (*varietas* in Latin, *poikilia* in Greek), both in the composition of the poem itself from a wide choice of words, but also in the arrangement of a collection of poems.⁵ In other words, a book of poetry was expected to display rich verbal and literary biodiversity. Writers titled collections of shorter poems with words that suggested such a variety of different flowers: Aulus Gellius (*Attic Nights*, pref. 5-6) writes how authors, "since they had laboriously gathered varied, manifold and indiscriminate learning, therefore invented ingenious titles to correspond with that idea:" Cicero's *Limon* ('meadow'), is a case in point, as is Statius *Silvae* ('woods'), which Sidonius Apollinaris later described as a 'jewelled field' (*Carm.* 22.9: *gemmea prata Silvularum*). Words for joining, blending, weaving, and combining (*miscere*, *iungere*, *serere*) often point to the arrangement and combination of these flower-poems. In Greek literature, such collections of various poems were called *anthologia*, which comes from the word *anthos* (flower), or *stephanoi* (garlands); in Roman poetry, Martial describes his eighth book of epigrams as a *serta*, the Latin word for garland. In his monumental *Natural Histories*, Pliny, referencing Cato, describes the process of creating a real garland, emphasising the importance of variety, and noting that the plants used should come directly from the garden.

Cato bade us include among our garden plants flowers for garlands, especially because of the indescribable delicacy of their blossoms, for nobody can find it easier to tell of them than Nature does to give them colours, as here she is in her most sportive mood, playful in her great joy at her varied fertility... not even the painter's art, however, suffices to copy their colours and the variety of their combinations.

(NH 21.1)

For Pliny, the flowers of the garland create an artform of nature that exceeds the artifice and technologies of human culture, to which the poets and painters themselves strived to assimilate

their own creative labour. The poetic *anthologos* or *stephanos* stressed the identification of poems as flowers, and highlighted the poetic diversity the collection worked to display. Take the famous *Garland of Meleager*, published in the first century BC, a collection of choice epigrams by forty-six different Greek poets from every lyric period up to the editor Meleager's own time. In the elegiac poem that introduces the anthology, Meleager describes each poem as the flower, fruit or plant of its respective poet, all woven into a garland of verse by the editor himself. Here is a small cutting:

Many lilies of Anyte he wove, and many of Moero,
only a few flowers of Sappho, but they are roses ;
narcissus, too, heavy with the clear song of Melanippides
and a young branch of the vine of Simonides ;
and there he wove in the sweet-scented lovely iris of Nossis,
the wax for whose writing-tablets Love himself melted;
and with it marjoram from fragrant Rhianus,
and Erinna's sweet crocus, maiden-hued, the hyacinth of Alcaeus,
the vocal poets' flower, and a dark-leaved branch of Samius' laurel.

(5-14)

The rest of the poem proceeds in a similar way, matching poet with flower and linking them together with verbs that denote gathering or weaving. Included is “the young branch of Simonides' vine” (νέον οἰνάνθης κλήμα Σιμωνίδεω) and “the first flowers of Menecrates' pomegranate” (ῥοιῆς ἄνθη πρῶτα Μενεκράτεος); the invective poetry of Archilochus is represented by the cardoon, or thistle. Meleager goes on to describe the more recent poems as, “newly-written shoots” (ἄλλων τ' ἔρνεα πολλὰ νεόγραφα), and his own offerings, humbly, as little snowdrops (λευκόια). It is an extraordinary poem that describes both poems and poets in botanical terms, whilst also attributing creative agency to the flowers themselves, blurring the line between nature and culture. Importantly, it also represents the variety of poets included in the garland as an extremely rich biodiversity canvassing the entire Mediterranean, which matches the geographical diversity of the Greek poets themselves, from ‘Sicilian anemones’ to the ‘Syrian nard of Hermodorus’ in the east. The garland embodies a vast ecosystem of plant-life, and there

are obvious *political* consequences of the control of and imposition of order upon such an expanse in imperial terms, in which the poetic text participates (on which more below). But fundamentally, there is a compelling sense of exchange and affiliation at play between humans and plant-life: nature is imbued with the creative cultural drive of poetry, and poetic creation can be parsed as a natural phenomenon, aimed at creating and sustaining diversity. The anthologist plays the role of the gardener, pruning, taming, editing “living extracts from global nature,” as Diana Spencer puts it.⁶

In the context of the imperial Roman villa garden, the production of poetry was synonymous with the production of fruit and vegetables, and by the time of the emperors, *otium studiosum*, had in fact replaced agriculture as the main priority of the villa. An anonymous poet praises the Augustan patron Maecenas for “cultivating Apollo and the Muses in his luxurious gardens” (*Elegiae in Maecenatem* 35: *Pieridas Phoebumque colens in mollibus hortis*). The Flavian poet Statius constantly praises his patrons' creation of poetry in their villa gardens. For Pliny, the villa garden was synonymous with literary production, a text to be read in combination with his own literature: his box hedges were arranged to spell out his name, inscribing his authorial identity upon the garden (*Ep.* 5.6.35).

Catalogues of plants with similar metapoetic implications are a staple feature of Greek and Roman poetry.⁷ Virgil employs numerous lists of plants in both his *Eclogues* and *Georgics*. At *Georgics* 4.116-48, he describes the flowers and produce of the old Corycian's allotment in Tarentum, a garden we shall revisit shortly, and which is often interpreted metapoetically; the gardener may well represent the Alexandrian poet Nicander, who influenced Virgil's writings.⁸ In *Eclogue* 2, the shepherd Corydon attempts to attract Alexis with a garland, adding to the gifts of the nymphs his own contribution of apples, plums, and myrtle:

Come here, O lovely boy: for you the Nymphs bring lilies,
look, in baskets full; for you the Naiad fair,
plucking pale violets and poppy heads, combines them
with narcissus and flower of fragrant dill;

then, weaving marjoram in, and other pleasant herbs,
 colours soft bilberries with yellow marigolds.
 Myself, I shall pick the grey-white apples with tender down
 and chestnuts, which my Amaryllis loved;
 I shall add the waxy plum (this fruit too shall be honoured).
 I shall pluck you, O laurels, and you, neighbour myrtle,
 for so arranged you mingle attractive fragrances.

(45-55)

Like Meleager's garland, words that denote weaving, combining, and arranging dominate the passage, as Corydon creates an arrangement from a wide botanical selection, emphasizing the diversity of his gift. But we are also meant to read Corydon's gift metapoetically,⁹ and particularly in reference to Meleager's garland, and to understand the selection and arrangement of the variety of flowers in terms of the various poetic sources that Virgil is drawing on to create his own pastoral poetry (Theocritus, Nicander, Moschus). For Virgil, as for Meleager, the creation of poetry is assimilated to nature. Elsewhere, in *Eclogue 4* - the famous poem in which Virgil celebrates the birth of a child who will bring a new Golden Age to the World - it is the Earth itself (*tellus*), which creates an arrangement of flowers, formed with no cultural artifice (*nullo cultu*):

But first, child, as small gifts for you, Earth with no artifice
 will pour the straying ivy rife and baccaris
 and colocasia mingling them with the smile of the acanthus.

In the passages above, it is the poem which is depicted as a natural occurrence. But the trope is reversed here: it is not the act of poetic creation that is likened to the botanical world, rather it is nature that is presented as a creative force, capable of transcending the artifice and cultures of human creativity and producing art *sua sponte*. The idea is encapsulated in Ovid's description of the Grove of Diana in the *Metamorphoses*: we are told that the site has been created "with no artifice" (3.158: *arte laboratum nulla*), but that nonetheless, "nature has imitated art through its talent" (3.158-9: *simulaverat artem | ingenio natura suo*). We also find, in descriptions of gardens, a concentration on nature's own 'creative drive' rather than the

imposition of artifice by any human cultivator. Pliny's *Letters* often make this case. In his description of a natural amphitheater in his Tuscan villa, for example, he writes that "you will take great pleasure if you should look down on the countryside from the mountain, for you will seem to see not the lands but some form painted for its exceeding beauty," praising nature's artistic talent (5.6.13).

This notion of nature as the supreme artist was familiar from several philosophical schools of thought in Antiquity, including the Platonist tradition, which imagined nature as a designing, demiurgic force, and the Stoics, who viewed nature as identifiable as the universe itself, a living, designed, and rational thing, "in which no randomness but rather order is displayed and a certain resemblance to art" (Cicero, *De Natura Deorum* 2.81-2). And if nature could be understood as the ultimate force of creativity, then aligning poetry with nature allowed the poet to identify as something tantalisingly more-than-human, as a divine force in their own right. When, in the first lines of the *Metamorphoses*, Ovid talks of the creator of the world as either 'god' (*deus*), or 'better nature' (*melior natura*), we recognise the poet himself standing behind this divine creator, the manufacturer of the expansive, totalising universe of the *Metamorphoses*. At its roots, the representation of poems as flowers always hints at this identification of the poet with divine nature.

We can clearly see how poetic biodiversity is a metaphorical trope that runs through Greek and Latin poetry, using the plant-world to describe the creative actions of humans, but also attributing creative agency to the natural world. But this metaphorical language of literary creativity and variation also hints at the material contexts of the production of poetic texts in antiquity, a process that was deeply reliant on botanical and other natural resources, drawn from a vast geographic expanse across the Roman empire. The poetry book, as a physical artifact, could itself constitute a form of natural diversity, a point to which the poets were highly sensitive. A number of words for writing implements that frequent Roman poetry attest

to this. *C(h)arta*, the word often used by poets to signify a sheet of paper, also refers to the leaf of the papyrus plant itself, which came predominantly from Egypt (Pliny *NH* 13.21); similarly, the original meaning of *liber*, the word for book in Latin (= 'library', 'livre', 'libro') is 'bark', the thin rind of tree from which the papyrus leaf was taken. The Egyptian name for the plant, *Byblos*, said to derive from the Phoenician city of Byblos, provides the Greek noun for book, *biblos* (= 'bibliography'). Roman poets were especially aware of the material properties of the poetry books, and - as with flowers - often identify their literary creations directly with the plant-based *charta* themselves (the *longa carta* of Horace, *Satire* 1.5), for example, or the *cacata carta* of Volusius that Catullus denounces in Poem 22). Pliny suggestively describes *charta* as the "commodity by which immortality is ensured to mankind," stressing the underlying connection between the natural resources that link the poetry book, poetry, and the poet, and the enduring legacy, beyond the limits of mortality, that such a connection ensures.

Wax tablets, another common symbol of poetic creativity and production in Latin poetry, are often described in relation to their origins in nature. The wooden board over which the wax was stretched was procured from the boxtree, the *buxum*, similar to the root of our word 'book' (= Old English *bōc* (beech), related to Germanic 'Buche'). Propertius describes his well-worn tablets as 'cheap wax on common boxwood' (3.23.8: *vulgari buxo sordida cera fuit*). Metaphors for writing on wax tablets were often agricultural, aligning literary composition with working the land: one might 'plough' (*arare*, *exarare*, *sulcare*) through the wax, and the stylus used to write might also be referred to as a 'plough' (*vomer*).¹⁰ The wax itself was identified with the flowers from which bees collected the pollen needed to produce it. In *Amores* 1.12, Ovid, discussing his writing tablets which now bear a rejection letter from his mistress, curses them on strictly botanical terms. The wax is denounced as being made from hemlock, and pollinated by Corsican bees, infamous for the bitterness of their honey:

quam, puto, de longae collectam flore cicutae
Melle sub infami Corsica misit apis.
Extracted, I bet, from honey of long hemlock,
Flowers delivered by the famous Corsican bees.

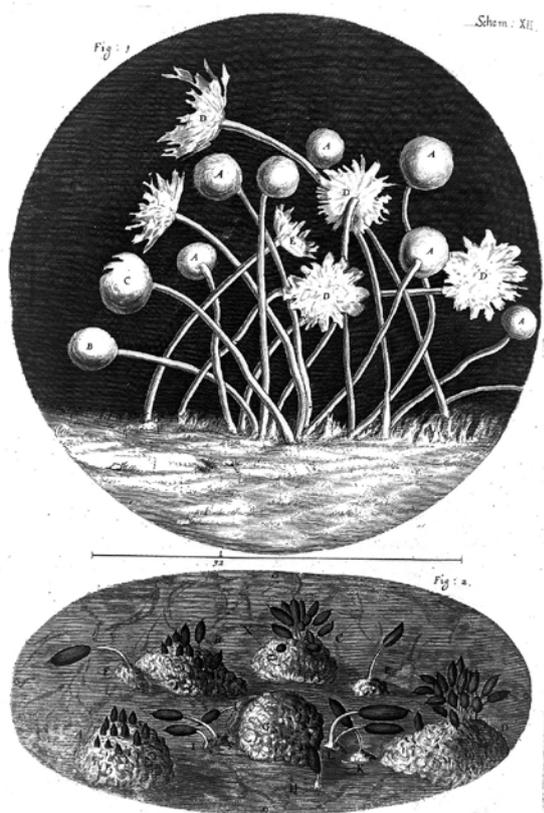
The metaphorical biodiversity explored above is thus never far from the actual diversity of natural materials that the poetry book in antiquity demanded. The description of flowers that fill the poems of Greek and Latin literature were physically inscribed on the pulped and pressed flowers, plants and trees from across the Mediterranean. The poetic artifact can constitute a miniature ecosystem. But we can go further than this, and recognise this diversity on an even smaller, microbial scale. As the poetry book moves through the time, passing from readership to readership, from geographical location to location, it accrues and develops new forms of microbial and bacterial life. If we pay attention to this thrumming diversity of biological life that fills the pages of classical poetry, we are able to engage with it on a wholly new hermeneutic level. Such an interpretative practice exists, and is referred to as 'biological hermeneutics,' already extant in the seventeenth century with Robert Hooke, who placed his books beneath a microscope (a recent invention at the time) to study their microbiome. On the sheepskin cover of one book, he discovered:

... a small white spot of hairy mould, multitudes of which I found to bespeck & whiten [the book]. These spots appear'd, through a good Microscope, to be a very pretty shap'd Vegetative body, which, from almost the same part of the Leather, shot out multitudes of small long cylindrical and transparent stalks.

(*Micrographia*, Schema 12)

Hooke provided illustrations for his observations, drawing small white flowers blooming against an ink-dark background, an image that unwittingly looks back to the floral metaphors the poets of antiquity use to describe their own poetry-books, now presented as a reality.

More recently, the artist Sarah Craske has explored the possibilities that biological hermeneutics presents. Arguing against an



Robert Hooke, *Micrographia*, London : Printed by J. Martyn and J. Allestry, 1665. Schem. 12, fig. 1. Of blue mould, and of the first principles of vegetation arising from putrefaction; Figure 2: Of a plant growing in the blighted or yellow specks of Damask-rose leaves, bramble leaves and some other kinds of leaves. Source: Wikimedia Commons, https://commons.wikimedia.org/wiki/File:Robert_Hooke,_Micrographia,_Wellcome_L0010931.jpg.

overreliance on the digitalisation of literary archives, Craske “develops the concept of books as centres of microbial life and data transfer”¹¹ by mapping out the biological information gathered in books over decades and centuries. The book she chose to investigate was a 1735 edition of the *Metamorphoses*, Ovid’s epic riot of mutation, transformation and human/non-human connections. By submerging pages from the book in a blood agar mix and incubating the pages, Craske revealed “the incredible diversity of microbial life that had been coughed onto the book’s pages by generations of readers,”¹² with hundreds of colonies blooming in the plates. Craske’s images present the poem, poetry book, and readership in a rich, entangled web of microbial biodiversity. Over time, the poetry book develops a life of its own, and poetry is preserved by nature in its most infinitesimal and microscopic form, providing an exhilarating dimension to the

concept of ‘literary immortality’ pursued by poets even as it decentres human agency.

Posthuman Poets

We can thus construct a formula that looks something like this: poem = flower = poet. Meleager’s garland shows how both poet and poem can be identified as flowers within a diverse system of language. The poem can be understood as a natural creation, but we are also prompted to view nature through an anthropocentric lens, and to see nature as an act of poetic creation and artifice. The poem - and, by extension, the poet - becomes something more than human, metaphorically and materially entangled with the natural resources that it both describes and utilizes, and assimilated to the divine creative impulse of nature, the ultimate



Sarah Craske,
etamorphoses chapter p73.

fabricator. This identification with flowers provides a means of transcending human limitations, and also to reflect on what it means to be human. We turn now to look at some of the ways in which the identities of plants and humans intersect, the ways in which nature can assume human qualities, and the ways in which humans are embodied as flowers in poetry.

The attribution of human qualities to nature is a theme that runs right through classical thought. This often belies an anthropocentric approach that views the purpose of nature as to benefit mankind.¹³ Aristotle attributes a basic form of soul to plants (*De anima* 413a-b), and the Neoplatonist philosopher, Plotinus, maintained that plants have some share in reason and soul (*Enn.* 3.2.7.36-7). On the other hand, Theophrastus, a student of Aristotle who wrote some of the earliest extant botanical works (*Historia Plantarum, de Causis*

Plantarum), argued rather that plants were not intended to benefit humans, but were endowed with the ability to pursue their own happiness and flourishing - namely the propagation of their own species: if humans eat the flesh of a fruit and throw away the seed, for example, it ultimately benefits the fruit rather than the human. If this asks us to understand plants in strict terms of human embodiment and agency, it also subtly decentres an anthropocentric view which, when taken to the extreme, reveals nature's complete disregard for humans, reminding us of our insignificance and undermining any sense of human exceptionalism. As Lucretius likes to insist throughout the *De Rerum Natura*, "in no way is the nature of things divinely arranged for us" (*DRN* 5.198-9).

The literary device in which nature is made to react to a human situation, or to express human emotion, was defined by Ruskin as the 'pathetic

fallacy,' pejoratively meant to indicate a weakness in poets unable to see the reality of nature as it really is. The poet might see in nature instead a perfect reflection of their own disposition. Ennius can talk of 'happy meadows' (*laeta prata*, *Ann.* 537 Sk.), and Cicero of the 'happiest flowers' (*laetissimi flores*, *Ver.* 4.107). Virgil describes 'a tree with fortunate branches' (*ramis felicibus arbos*, *Georg.* 2.81). Such happiness and fortune indicate the harmonious relationship between humans and nature, where the plants, fruits and trees willingly and happily serve humans. The description of the natural world in human terms is a particular trait of pastoral poetry, which imagines an ideal rural existence in nature, free from urban constraints. Like Theocritus and the Hellenistic pastoral poets before him, Virgil constantly describes the emotional capacity of the landscape, and particularly its ability to articulate and to respond to poetry. When Tityrus leaves his homeland in *Eclogue* 1, the pines and the orchards call for him (1.37-8). In *Eclogue* 5, the mountains and woods and groves "joyously fling their voices to stars" and "ring out with song" (59, 64). *Eclogue eighth* praises the "ever-tuneful groves and speaking pines" of Maenalus (22).

This quasi-poetic ability of nature is often employed in pastoral laments for the dead. In *Eclogue tenth*, "the laurels and the tamarisks, and the pines on Mount Maenalus weep" for the dying poet Gallus. Here, Virgil is looking back to the pastoral laments of Hellenistic poetry, and particularly that of Bion, who wrote a *Lament for Adonis*, in which nature effusively mourns the hero's death:

The rivers lament Aphrodite's suffering,
the springs in the hills are weeping for Adonis,
from grief the flowers turn red.

In turn, as Aphrodite weeps and Adonis bleeds, "the tears and blood become flowers on the ground" - roses and anemones, respectively (64-66) - enacting a reciprocal exchange: flowers exhibit human emotions, and the emotions of humans lead to the creation of flowers. To a degree, the

connection between human and nature that the pathetic fallacy presents points to the doctrine of universal sympathy extant in classical thought, and particularly in Stoic philosophy, which assumed that a natural bond connected all elements of the well-ordered and inter-connected universe (Cicero *de Div.* 2.34). But the ability for the landscape to respond empathetically and articulately also re-emphasises the idea of nature as the ultimate poetic creator, capable of generating meaning and emotional value.

Equally common in ancient poetry is the presentation of humans as flowers. In the *Timaeus*, Plato makes a curious connection between plants and men, describing humans as a form of 'heavenly plant' (φυτόν ἢ οὐράνιον), whose head is a 'root' which tends upwards (*Tim.* 90a). The comparison of humans to flowers is present in classical literature from Homer onwards. In the military world of the *Iliad*, young heroes are described as "the new shoots of olive trees" (17.52); when they are killed in battle, they are compared to wilted poppies in gardens, like Priam's son Gorgythion: "and he bowed his head to one side, like a poppy that in a garden is laden with its fruit and the rains of spring" (8.306-8). Virgil imitates this simile in his account of the fateful young heroes Nisus and Euryalus in the *Aeneid*: when Euryalus is slain, his head falls limp, "just as when a crimson flower, cut down by the plough, droops as it dies, or poppies with weary neck lower their heads" (*Aen.* 9.436-7). Before Virgil, Catullus had repurposed the image as a metaphor for his unrequited love:

Nor may she look back upon my love as before,
which by her lapse has fallen, just as on the meadow's edge
a flower has been touched by the passing plough.
(11.21-24)

The blossoming of Catullus' love is felled by the apathetic agricultural technologies of his mistress, oblivious to nature. The flower could stand as a symbol of both youth and beauty, as well as a reminder of the transience of life and love. It was also a means of embodying the lover as an object of desire and sexuality. The use of

plant imagery for human beauty and sexuality was long-standing in the ancient world: in the *Odyssey*, the nubile Nausicaa is a young palm tree (6.162-3); Sappho compares a bride to an apple and hyacinth (105a and b). This trope could be extended to indicate an entire garden: the lyric poet, Archilochus, regards his intended lover as a garden (*P.Colon. inv. 7511*), and in Catullus 62, the bride is a “flower in a secluded garden,” anticipating the Christian *hortus conclusus* of the Vulgate *Song of Songs* (*hortus conclusus soror mea, sponsa, hortus conclusus, fons signatus*: “A garden enclosed is my sister, my spouse; a garden enclosed, a fountain sealed up.”). For Ibycus, the entire expanse of youth is a fertile garden, the appropriate time to love. In this amatory context, diversity could indicate a degree of promiscuity: boy-mad Meleager returns with another garland, this time composed not of poets, but of his young lovers:

For you, Cypris, Eros plucked with his hand at harvest the fruitful flower of boys as a soul-bewitching crown. For he wove the sweet lily Diodorus into it, and Asclepiades the pretty wallflower. Yes, he wove Heraclitus in, like setting a rose from its thorn, and Dio bloomed like a vine. He bound in Theron, a golden crocus from his hair, and he added Uliades, the twig of thyme. He harvested Myiscus with his beautiful locks, an evergreen branch of olive, the lovely branches of courage. Holy Tyre is the most blessed of islands! It contains the myrrh-breathed grove of the boys who bear the flowers of Cyprus.

Like the poets included in the earlier garland, each beautiful boy here constitutes an individual flower or plant, which come together to represent the proverbial ‘flower of youth.’ Meleager again slips between comparison and identification, allowing a number of different images to stand at the same time: plants arranged in a garland, boys embodied as flowers, boys arranged in a pageant, *eros* as a garland-weaver, and the poet-lover himself as Eros-the-garland-weaver, and poems about boy-flowers gathered together within a poetic ‘garland.’

Behind these different configurations of human-as-flower stands the poet, who often self-presents as a form of flower. At the end of the

Georgics, Virgil says that he ‘flowered’ in Naples (*Georg. 4 563–4: illo Vergilium me tempore dulcis alebat | Parthenope studiis florentem ignobilis oti*); we still refer to the productive period of a creative’s life as their *floruit*. Lucretius calls Homer ‘always-blossoming’ (*semper florentis Homeri...speciem*), the evergreen (ἀειθαλής) poet. The poetic identification with a flower can allow the poet to advertise his poetic capacities, but also to dwell on the fleeting nature of life experienced by all; the transience of flowers reflects our own brief lives. As Ovid grows old in exile, he describes his skin as “the colour of autumn leaves, struck by the first frost when winter spoils them” (*Tristia 3.8*). Seneca identifies with the superannuated plane trees that he planted as a child, “now parched, knotted and without foliage,” synonymous with his own aging body (*Epistle 12*). The Greek lyric poet, Mimnermus, laments the human condition, “as leaves born in the teeming spring” before the “fruit of youth, like one day’s worth of sun, dies fast” (Poem 2). But on the other hand, flower-imagery can be employed to make a *distinction* between the terminal fate of humans and the regenerative capacity of nature. In his *Lament for Bion*, the Hellenistic poet Moschus looks to the garden:

Alas! When the mallow and fresh parsley
and the springing crumpled anise perish in the garden
they live yet again and grow another year,
but we men, so tall and strong and wise,
as soon as we die, in a hole in the earth we sleep
Without end or waking.

(3.99-104)

The flower can symbolise the ephemerality of life; but, like ‘evergreen Homer,’ it can also suggest a form of immortality achieved through regrowth and renewal, to which the poet might compare their own poetic immortality through the process of being reread and reread. In the last poem of the *Odes*, the ‘monument-poem’ which predicts the poet’s eternal fame, Horace talks of “growing fresh with praise in posterity,” an image of renewal that evokes associations with flowers. Similarly, the presence of flowers in epigrams on the tombs of poets symbolizes a desire for immortality beyond

the grave, playing up the nourishing power of plants, flowers and vines and their metaphorical association with poetry. One sepulchral epigram explains how the acerbic poet, Hipponax, “even now dead, does not cause cultivated vine to grow (ἐπιτέτροφε) on his tomb, but brambles and acerbic fruits” (AP 7.536); another epigram exhorts ivy to “flourish green on top of the tombstone of Anacreon” (AP 7.24). Poems, poets, and tombs are grouped together in various floral combinations, associating the immortal power of poetry with the regeneration of flowers, through which the poet will live on. Human bodies directly give way to the (poetic) bodies of flowers, such as in one particularly one particularly touching funerary epigram from Sardinia:

May your bones, Pomptilla, grow into violets and lilies:
May you flower in the petals of roses, sweet crocus and
ageless amaranth,
and of the beautiful flowers of the white pansy,
like the narcissus and the sad amaranth,
also the time that will always will have your flower.

There is an acknowledgment here of the deep connectivity and symbiosis between humans and nature, and that the death of one yields new forms of life, in which the deceased may also take part. But we are also asked to imagine the works of the poets in similar terms, as the blossoms through which they will survive. Walt Whitman poignantly expresses this combination of poems, flowers and bodies in the exequy *Scented Herbage of my Breast*, where the poet’s body seems to quite literally yield flower-poems for posterity:

Leaves from you I glean, I write, to be perused best
afterwards, Tomb-leaves, body-leaves growing up above
me above death,
Perennial roots, tall leaves, O the winter shall not freeze
you delicate leaves,
Every year shall you bloom again, out from where you
retired you
shall emerge again...

Both Whitman and the ancient poets push us gently towards a posthuman perspective, recognising not only that humans don’t just inhabit the world but *are* inhabited by the world as one

object among many others, but also that we are organisms that, like poems, display a staggering diversity of human and non-human life. The beginning of Donna Haraway’s *When Species Meet*¹⁴ encapsulates this sentiment perfectly:

I love the fact that human genomes can be found in only about 10 percent of all the cells that occupy the mundane space I call my body; the other 90 percent of the cells are filled with the genomes of bacteria, fungi, protists, and such, some of which play in a symphony necessary to my being alive at all, and some of which are hitching a ride and doing the rest of me, of us, no harm. I am vastly outnumbered by my tiny companions; better put, I become an adult human being in company with these tiny messmates. To be one is always to *become with* many.

Perhaps the poets of antiquity who spend their time with flowers were more aware of this fact than we like to give them credit for. Nature and culture are constantly destabilised in the poetic flowers and gardens of ancient texts, forcing the reader to constantly question the relationship between the natural world and the production of poetry, and the relationship between humans and non-humans.

Containing Diversity

There is, however, a further layer to this story. The flowers of Greek and Latin poetry can gesture towards a posthuman imaginary, and facilitate the collapse of traditional structuralist binaries or progressive solidarities. But we should not forget that the reduction of certain types of humans (women, slaves) to the status of non-human was a standard practice of power and exploitation in antiquity.¹⁵ The poetic celebration of botanical diversity and geographical variety can also slip easily into a celebration of the imperial powers that govern such expanses; this is particularly true of the Imperial Roman period, in a period in which Rome enjoyed a global market and facilitated the free-flowing movement of produce and people. Walls and borders defined the garden in the ancient world. In Rome, the word *hortus* signified an enclosure before it meant garden.¹⁶ Much like imperial

borders, garden borders impose order, harmony and structure upon a natural space whilst keeping out hostile and undesirable aspects. The English poet-gardener Ian Hamilton Finlay might have the last word on this matter when he claims that “the dull necessity of weeding arises because every healthy plant is a racist and an imperialist; every daisy wishes to establish for itself an Empire on which the sun never sets.”¹⁷ The poetic gardens of Latin poetry can thus shed light on the processes of control and order of empire, on the creations of borders, and on competing notions of local self-sufficiency and globalised markets, as well as reveal the poet’s complicity in, or resistance to, the imperial project.

The vast expanses of private pleasure parks (the *Horti Agrippae*, *Horti Luculliani*, *Horti Sallustiani*, *inter alia*) in imperial Rome could represent miniature empires in their own right, creating the illusion of whole worlds and realms, teeming with foreign plants from foreign conquest, symbols of botanic imperialism. For imperial gourmards, the borders of the dinner-table were also interchangeable with the borders of the world, where plates heaved with produce from across the empire. Gowers puts it well: “imperium had turned Rome into the world’s emporium: its alimentary choices are presented as almost infinite, from the turnips of Romulus to the larks ‘tongues of Elagabalus.’¹⁸ In literature, Trimalchio’s feast in Petronius’ *Satyricon* is an obvious example, and Seneca offers numerous cases of exotic banquets of which he vehemently disapproves. Juvenal, a satirist deeply wary of external pressures and globalising tendencies of empire, constantly pushes back against import culture in his *Satires*. The small garden (*hortulus*) is to be preferred to any pleasure garden, and when he gives us a glimpse of his dinner table in *Satire* 11, it’s loaded with local, organic produce: asparagus, eggs, grapes, apples, pears. We get a similar portrait of the self-sufficient garden in the fourth book of Virgil’s *Georgics*, where the poet recalls an old Corycian gardener:

For I remember once, beneath the walls of hill-top
Tarentum, where black Galaesus waters golden crops,

I saw an old Corycian, who had a little plot of unwanted
land, not rich enough for cattle, no use for sheep,
unsuitable for vines. Yet here he dotted cabbage-plants
among the brambles, with white lilies and verbena and
slender poppies in between. To his mind, such wealth was
equal to a king’s; and when he came home late at night,
he piled his table high with unbought feasts. He was the
first in spring to pick the roses, and in autumn fruit, and,
when bitter winter still made rocks explode with cold and
rivers’ flow was frozen up with ice, there he was already
trimming dainty hyacinths’ locks, and cursing summer and
its zephyrs for being late in coming. Yes, he was first to
overflow with families of bees and bounteous swarms and
force the spurting liquid from squeezed honey-combs. His
lime-trees and his pines were all abundant, and all the fruit
these fertile trees gave promise of from early blossom came
to ripeness in the autumn. Elms he planted out, full-grown,
in lines, along with hardy pear, thorn-trees full of plums,
and planes already serving shade to drinking-parties.

(*Georgics* 4.123-48).

The self-sufficient garden of the Corycian, occupying a tiny corner of the empire and in the final margins of Virgil’s *Georgics*, nonetheless carves out its own imperial expanses (“such wealth was equal to a king’s”). Virgil’s praise of the gardener’s ability to respond to the constraints of local times and seasons contrasts with the global *imperium sine fine*, upon which the sun never sets and where everything is available. We do not know who the Corycian gardener is supposed to represent. Ancient traditions associated him with a pirate settled on land by Pompey the Great; others have interpreted him as a figure of Epicureanism, or utopian thought. He is also synonymous with the poet himself, laying out trees in lines much like Virgil lays out lines of poetry. But he might also be a symbol of resistance to empire, the separateness of his garden a symbol of poetic and political self-reliance and autonomy, a garden from which Virgil is also excluded, “shut out by space and time’s unfair constraints,” placing the poet ambiguously on the garden fence, both part of the mechanisms of empire and tacitly critical of them. The small size of the garden stands in contrast to the vast swathe of imperial space. Similarly, in the pseudo-Virgilian, *Moretum*, the peasant’s garden is “tiny in size, but lush with different plants,” and Martial’s epigram on his modest garden villa similarly teem with homegrown produce, straight from farm to

table - even though he complains that his estate is so small a cucumber can't lie straight. (11.18).

Imperial control of natural expanses and produce can also double as the imperial control of nature itself. In Statius' *Silvae*, the poet praises the emperor Domitian as "better and even more powerful than nature itself" (*Silvae* 4.3.135 *natura melior potentiorque*), a divine being capable of bringing climatic stability to the world. For a ruler, control over exotic plants could signify authority over far-flung regions, and a well-ordered garden could signify a well-ordered state. Xenophon tells us about the Persian king Cyrus' gardening abilities (*Oeconomicus* 4.21-22). As Totelin points out "a king like Cyrus, with a love of such order, can be trusted with the administration of a kingdom." In Rome, exotic plants and trees were led in triumphal processions, as Pliny observes ("...it is a remarkable fact that since the time of Pompey the Great we have led even trees in triumph" 12.112). Pompey led the ebony tree in the triumph over Mithridates VI Eupator (Plin. 37.12-14). The Flavian emperors Vespasian and Titus led the balsam tree, native only to Judaea, in their triumph over the Jews; Pliny recounts that the tree "was now a slave, and paid tribute together with its race," a bold move that combines the human and non-human in one act of subjugation, the botanising rulers, ruling over their plant-like subjects.¹⁹ Vespasian's Temple of Peace, built in 71 CE, contained garden beds eighty meters long,²⁰ populated with exotic flora unknown to Italy. In the *Natural History* Pliny praises the 'peace' Vespasian has bestowed upon the world, which has allowed plants brought to Rome from across the empire, a passage which Elizabeth Pollard²¹ suggests must be read in close relation to the temple:

other [plants] moreover are brought from elsewhere hither and thither throughout the whole world for the welfare of humanity, because the immense majesty of the *pax Romana* presents in turn not only humans with different lands and races among them, but also mountains and peaks rising up into the clouds, and their offspring and even plants.

(*HN* 27.3)

Just as imperial gardens aimed to contain the world within its borders, so too does Pliny's text, compressing the flowers and plants of the world within the confines of the manuscript, which in turn burgeons with the miracles of nature. Emperor and poet coalesce in the same project of domination, structure and order.

When we look at frescos of Livia, the wife of the first emperor of Rome, it is important to acknowledge the implications of power and imperial control these images could connote; the vegetative iconography of the frescos is mirrored by the Ara Pacis, Augustus' monumental altar aimed at communicating abundance and prosperity under his rule upon his return to Rome in 13 BC. The abundant diversities and various arrangements of flowers and plant-life that we find in poetry are never far from questions of imperial control, the relationship between the natural world and cultural domination, and the poets' role in producing cultural and political meaning. Diversity could be parsed in opposite ways, both as symbolic of self-sufficiency and autonomy in the face of an imperial, globalising culture, but also as a celebration of the expansive reach of Roman power. In Imperial Roman poetry, biodiversity can be parsed as an imperial practice, and gardens can represent microcosms of empire, but it is important to note the flipside of this observation: that nature is more than capable of displaying its own imperial tendencies, and the non-human always stands to conquer, contain and colonise the human. But more than this, the rich diversity of plantlife in literature prompts fundamental questions on the poetic and real relationships between humans and nature, and the endless configurations of and connections between both, stretching far beyond the limitations of a lifespan.

Notes

- ¹ Quoted in Harry Torczyner, *Magritte: Ideas and Images* (New York: H. N. Abrams, 1977). Wikipedia article, "The Human Condition (Magritte)," https://en.wikipedia.org/wiki/The_Human_Condition.
- ² Quoted in *Understanding Rome*, "Paradise regained: the painted garden of Livia at Palazzo Massimo," <http://www.understandingrome.com/2014/01/08/paradise-regained-the-painted-garden-of-livia-at-palazzo-massimo-3/>.
- ³ Donna J. Haraway, *The Companion Species Manifesto: Dogs, People, and Significant Otherness. Vol. 1* (Chicago: Prickly Paradigm Press, 2003).
- ⁴ See: Emanuela Bianchi, Sara Brill and Brooke Holmes, *Antiquities beyond humanism* (Oxford: Oxford University Press, 2019); Giulia Maria Chesi and Francesca Spiegel eds., *Classical literature and posthumanism* (London: Bloomsbury Publications, 2019); Francesca K. A. Martelli, *Ovid* (Leiden and Boston: Brill, 2020).
- ⁵ Michael Roberts, *The Jewelled Style: Poetry and poetics in Late Antiquity* (Ithaca, NY: University Press, 2010).
- ⁶ Diana Spencer, [Review of *Hortus: The Roman Book of Gardening; Morals and Villas in Seneca's Letters: Places to Dwell*, by John Henderson], *The Journal of Roman Studies* 95 (2005): 275-278.
- ⁷ Eleni Peraki-Kyriakidou, "The Ovidian Leuconoe: Vision, Speech and Narration," in Stratis Kyriakidis ed., *Libera Fama. An endless journey* (Newcastle upon Tyne, UK: Cambridge Scholars Publishing, 2016), 71-93; K. Sara Myers, "The *Culex's* metapoetic funerary garden," *Classical Quarterly* 70 (2020): 749-755
- ⁸ Stephen J. Harrison, "Virgil's *Corycius senex* and Nicander's *Georgiaca: Georgics* 4.116-48," in Monica Gale ed., *Latin epic and didactic poetry: Genre, Tradition and Individuality* (Swansea UK: The Classical Press of Wales, 2004), 109-124.
- ⁹ See: Wendell Clausen, *A commentary on Virgil, Eclogues* (Oxford: Clarendon Press and New York: Oxford University Press, 1994).
- ¹⁰ Mary A. Rouse and Richard H. Rouse, "The vocabulary of wax tablets," *Harvard Library Bulletin* n.s. 1 no.3 (1990): 12-19.
- ¹¹ Sarah Craske and Charlotte Sleight, "The art of biological hermeneutics," in Arthur Clay and Timothy J Senior eds., *On media, on technology, on life: interviews with innovators* (Gistrup, Denmark: River Publishers, 2021), 82-99.
- ¹² See: David Farrier, *Footprints: in search of future fossils* (London: 4th Estate, 2021).
- ¹³ Rebecca Armstrong, *Virgil's green thoughts: Plants, humans, and the divine* (Oxford: University of Oxford Press, 2019).
- ¹⁴ Donna J. Haraway, *When species meet* (Minneapolis, MN: University of Minnesota Press, 2008).
- ¹⁵ See: Tom Geue, "The Imperial Animal: Virgil's *Georgics* and The Anthro- /Theriomorphic Enterprise" in Giulia Maria Chesi and Francesca Spiegel eds. *Classical literature and posthumanism* (London: Bloomsbury Publications, 2020), 103-110.
- ¹⁶ Emily Gowers, "Vegetable Love: Virgil, Columella, and garden poetry," *Ramus* 29 (2) (January 2000): 127-148.
- ¹⁷ Ian Hamilton Finlay, *Selections* (Berkeley, Los Angeles CA: University of California Press, 2012).
- ¹⁸ Emily Gowers, *The loaded table: Representations of food in Roman literature* (Oxford: Oxford University Press, 1996).
- ¹⁹ Laurence Totelin, "Botanizing rulers and their herbal subjects: plants and political power in Greek and Roman literature," *Phoenix* 66 (2012): 122-144.
- ²⁰ R. B. Lloyd, "Three monumental gardens on the Marble Plan," *American Journal of Archaeology* 86 (1982): 91-100.
- ²¹ Elizabeth Ann Pollard, "Pliny's *Natural History* and the Flavian *Templum Pacis*: botanical imperialism in first-century CE Rome," *Journal of World History* 20 (2009): 309-338.

Bibliography

- Armstrong, Rebecca. *Virgil's green thoughts: Plants, humans, and the divine*. Oxford: Oxford University Press, 2019.
- Bianchi, Emanuela, Sara Brill and Brooke Holmes eds. *Antiquities beyond humanism*. Oxford: Oxford University Press, 2019.
- Chesi, Giulia Maria and Francesca Spiegel eds. *Classical literature and posthumanism*. London: Bloomsbury Publications, 2020.
- Clausen, Wendell. *A commentary on Virgil, Eclogues*. Oxford: Clarendon Press and New York: Oxford University Press, 1994.
- Craske, Sarah and Charlotte Sleight. "The art of biological hermeneutics." In Arthur Clay and Timothy J Senior eds. *On media, on technology, on life: interviews with innovators*, 82-99. Gistrup, Denmark: River Publishers, 2021.
- Farrier, David. *Footprints: in search of future fossils*. London: 4th Estate, 2021.
- Finlay, Ian Hamilton. *Selections*. Berkeley, Los Angeles CA: University of California Press, 2012.
- Gowers, Emily. "Vegetable love: Virgil, Columella, and garden poetry." *Ramus* 29 (2) (January 2000): 127-148.

- Gowers, Emily. *The loaded table: Representations of food in Roman literature*. Oxford: Oxford University Press, 1996.
- Geue, Tom. "The Imperial Animal: Virgil's *Georgics* and The Anthro- /Theriomorphic Enterprise." In Giulia Maria Chiesi and Francesca Spiegel eds. *Classical literature and posthumanism*, 103-110. London: Bloomsbury Publications, 2020.
- Haraway, Donna J. *When species meet*. Minneapolis, MN: University of Minnesota Press, 2008.
- Haraway, Donna J. *The Companion Species Manifesto: Dogs, People, and Significant Otherness. Vol. 1*. Chicago: Prickly Paradigm Press, 2003.
- Harrison, Stephen J. "Virgil's *Corycius senex* and Nicander's *Georgiaca: Georgics* 4.116-48." In Monica Gale ed., *Latin epic and didactic poetry: Genre, Tradition and Individuality*, 109-124. Swansea UK: The Classical Press of Wales, 2004.
- Lloyd, R. B. "Three monumental gardens on the Marble Plan." *American Journal of Archaeology* 86 (1982): 91-100.
- Martelli, Francesca K. A. *Ovid*. Leiden and Boston: Brill, 2020.
- Myers, K. Sara. "The *Culex's* metapoetic funerary garden." *Classical Quarterly* 70 (2020): 749-755.
- Peraki-Kyriakidou, Eleni. "The Ovidian *Leuconoe: Vision, Speech and Narration*." In Stratis Kyriakidis ed., *Libera Fama. An endless journey*, 71-93. Newcastle upon Tyne, UK: Cambridge Scholars Publishing, 2016.
- Pollard, Elizabeth Ann. "Pliny's *Natural History* and the Flavian *Templum Pacis*: botanical imperialism in first-century CE Rome." *Journal of World History* 20 (2009): 309-338.
- Roberts, Michael. *The Jeweled Style: Poetry and poetics in Late Antiquity*. Ithaca, NY: University Press, 2010.
- Rouse, Mary A. and Richard H. Rouse. "The vocabulary of wax tablets." *Harvard Library Bulletin* n.s. 1 no.3 (1990): 12-19.
- Spencer, Diana. [Review of *Hortus: The Roman Book of Gardening; Morals and Villas in Seneca's Letters: Places to Dwell*, by John Henderson]. *The Journal of Roman Studies* 95 (2005): 275-278.
- Totelin, Laurence. "Botanizing rulers and their herbal subjects: plants and political power in Greek and Roman literature." *Phoenix* 66 (2012): 122-144.

Ancient Authors

Archilochus, *P.Colon*
 Aristotle *De anima; Historia Plantarum; de Causis Plantarum*
 Aulus Gellius, *Attic nights*
 Bion of Smyrna, *Lament for Adonis*
 Catullus
 Cicero, *De Natura Deorum; Verrine; de Divinatione*
 Columella, *De Re Rustica*
 Ennius, *Annales*
 Hipponax
 Homer, *Iliad; Odyssey*
 Horace, *Epistle; Satire*
 Ibycus
 Juvenal
 Lucretius, *De Rerum Natura*
 Meleager, *Garland*
 Moschus
 Nicander of Colophon
 Ovid, *Metamorphoses; Tristia*
 Petronius, *Satyricon*
 Pindar, *Olympian Odes*
 Plato, *Timaeus*
 Pliny the Elder, *Natural History; Letters*
 Quintilian, *Institutio oratoria*
 Sidonius Apollinaris, *Epistulae*
 Sappho
 Statius, *Silvae*
 Virgil, *Eclogues; Georgics; Aeneid*
 Vulgate, *Song of Songs*