

## INTERPRETING THE GARDEN SALOMON DE CAUS'S *HORTUS PALATINUS* – HISTORY, DESIGN, COMPOSITION, ARTS AND PHILOSOPHY

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### *Abstract*

*The Palatine g\Garden at Heidelberg was designed at the beginning of the XVII<sup>th</sup> century by Salomon de Caus for the royal couple Frederick V and Elisabeth Stuart. Though never finished due to the beginning of the 30 Years War, Hortus Palatinus is seen as the best example of a Renaissance and both Mannerist garden in nowadays Germany. Though never finished, the Palatine Garden at Heidelberg holds a series of secrets, signs, and symbols hidden in Salomon de Caus's book – Hortus Palatinus (1620). To this end, this paper aims to represent an interpretation of the gardens's design and components by confronting the author's text and drawings with the research in the field of visual arts, architecture and landscape design history and philosophy.*

**Key words:** *interpretation, Hortus Palatinus, palatine garden, Salomon de Caus, symbols.*

### INTRODUCTION

Started but never finished, Hortus Palatinus, the garden from the Heidelberg Castle, was conceived as a landscaping complex full of symbols and a tribute to the palatin elector Frederick V, paid by the polymath architect Salomon de Caus. Together with the neighbouring castle, this allegorical garden should have represented the centre of the imperial couple's power- Frederick V and Elizabeth Stuart- but the beginning of the Thirty Years' War stopped the landscaping work at the garden, which later served as an outpost and a bombing space of the castle. Although the today's ruins do not tell much about the designed allegory, Solomon deCaus's work –Hortus Palatinus (1620) - as well as Jacques Fouquier (1620)'s paintings offer a complex base for researching and analysing the palatine garden from Heidelberg. In this sens, this paper aims to provide a short history and a description of the garden as well as criticism and

interpretation of the architectural and vegetal symbols designed by Salomon de Caus in order to be integrated into this particular landscape design of the 17th century.

### MATERIALS AND METHODS

This chapter will focus on a brief history, personal comments and mostly on a comparative analysis of both historical and contemporary texts and images of the Palatine Garden at Heidelberg.

#### **Brief History**

*Using the image employed by the poets, we may think of Jacobean Heidelberg as arising from the marriage of the Thames and the Rhine.* (Yates, 1998)

The history of the palatine garden from Heidelberg represents an artistic product, the result of an important event from Central and Western Europe at the beginning of the 17<sup>th</sup> century. Therefore, Hortus Palatinus represents a project begun almost simultaneously with the wedding of the elector prince of Rin, Friedrich V and

princess Elisabeth Stuart, the daughter of James I of England and suddenly interrupted by the political and military failure of Frederick V's resistance battle against the Habsburg Empire.

Representing the palatinate's capital, the Heidelberg defined itself as an outpost of culture, a centre "whence strange and exciting influences were to emanate"(Yates, 1998). In this respect, the gardens whose construction started on July 14th, 1614 represented an artistic current in itself - a three-dimensional allegory, a story in images and perspective shapes. Unfortunately, several historical events such as the election of Frederick V as King of Bohemia (August 1619) and the military defeat from the White Mountain (November 1620) discontinued and subsequently permanently closed the garden's landscaping work.

Although unfinished, Hortu Palatinus was considered an eighth wonder of the world; the Heidelberg castle's gardens are thought to have been the inspiration for a number of important texts such *The Chemical Wedding of Christian Rosencreutz*. Thus, Frances Yates considered that Hortus Palatinus as a separate architectural, landscaping, mythical and mystical entity is in the centre of Johann Valentin Andreae's description of the Rosinrucian Manifest *The Chemical Wedding of Christian Rosencreutz* (1616):

*The Chemical Wedding introduces us into a vast castle, full of wonders, and with a marvellous garden—Heidelberg castle and gardens full of the wondrous works of Salomon de Caus. There is a Lion at the gate and a very prominent Lion fountain in the gardens, emphasizing that we are in the domains of the Palatine Lion. Castle and gardens are full of movement, they are inhabited by members of a wealthy court whose life centres on a married pair, a King and Queen, a sponsus and sponsa, who are both emblems of marriage as a mystical experience, and of the alchemical sponsus and sponsa spiritually interpreted, and also have a real basis in history as the*

*Electo Palatine and his wife Elizabeth Stuart* (Yates, 1998).

### **Salomon de Caus's Personality and Frederick V's cult.**

The design of the famous palatine gardens of Heidelberg is especially due to the polymath architect, landscape architect and hydraulic engineer Salomon de Caus. This genius of French origin was raised in the spirit of the Renaissance and was noted in particular for his many hydraulic works made for various nobles or even royal houses from Italy, the Netherlands and England. It should also be mentioned that his works and texts about hydraulics represented "the base of the hydraulic works of the Baroque" (Kluckert, 2007).

Salomon of Caus's relationship with the royal family of England is due to Elizabeth's brother - Prince Henry. As Frances Yates also stated, "prince Henry, had been deeply interested in Renaissance gardens' design, in mechanical fountains which could play musical tunes, in speaking statues and other devices of this kind [...]. In his employment, as his surveyor, was Salomon de Caus, a French Protestant and an extremely brilliant garden-architect, and hydraulic engineer" (Yates, 1998). The premature death of Prince Henry and Frederick's wedding with Elizabeth sent de Caus to Heidelberg, him being responsible for the design and execution of the palatine gardens. As the royal wedding brought great hope to those who wanted the Habsburgs removed from Europe, the universe accompanying the couple was supposed to represent a strong message in itself sent through different symbols. Thus, Hortus Palatinus being part of this universe was endowed by Salomon de Caus with a series of symbols which make allusions to ancient mythology and glorify Frederick V's personality. In this regard, Salomon de Caus designed the gardens according to the Vitruvian principle of "true architecture" (arts and sciences based on numbers, proportions, music, geometry and perspective,

mechanics, etc.)(Yates, 1998) and aesthetic and compositional principles of the Renaissance offering the architectural and landscaping complex from Heidelberg an aura of mystery fueled by magic-mechanical "wonders" found in caves and hydraulic works.

Through "Frederick's cult" I will refer to the trust shown by his subjects to remove the Habsburgs from Europe, trust manifested through a sum of symbols and titles granted to the palatine elector. Excluding for the moment alchemical symbols designed by de Caus and found at Heidelberg, "Frederick's cult" was powered by granting the title "Order of the Garter", depicting him as a contemporary Saint George about to behead the Habsburg dragon or as a Jason of the Golden Fleece when, travelling on water to Heidelberg, the garter was hung from the ship's mast (Yates, 1998). On the other hand, regarding Hortus Palatinus, this garden has been endowed with a number of alchemical symbols that glorify through their shape or mythical substrate, Frederick V's personality as well as his relationship with Elizabeth and implicitly with James I's England.

### ***Hortus Palatinus* – Examining Salomon de Caus's Print.**

As discussed above, investing Frederick as king of Bohemia interrupted work on the garden from the Heidelberg palace and the military failure at the White Mountain in 1620 ended any hope of resuming the work at Hortus Palatinus. Undiscouraged and confident in the possibility of completing the work at Heidelberg, Salomon de Caus began in November 1619 to describe literary and graphically the garden's composition editing in 1620, shortly after the aforementioned battle, a paper entitled *Hortus Palatinus – a Frederico Rege Boemiae Electore Palatino Heidelbergae Extractus*. This volume contains a series of brief, literary and graphic descriptions of the already carried out, as well as of the works that were going to be included in the

garden. This print is thus the most valuable historical source based on which one can make a criticism of gardens which unfortunately for the modeling landscaping art's history could never be completed.

The document begins with a brief description of the topography and vertical systematization work (the detonation of the slope adjacent to the medieval castle and building terraces) and continues with a brief presentation of the architectural, horticultural and landscape components that will characterize the garden. At the end of the text, the print includes a plan and a general outline as a *perspectiva cavaliere* as well as a series of descriptive quasi-random concatenated drawings pertaining to Matthaeus Merian (McIntosh, 2005). In addition to the text and the descriptive drawings, the print also has a cover full of alchemical symbols closely related to the Rosicrucian program of the seventeenth century. Thus, the garden is presented as a way of interpreting the "Book of Nature", an important element of the Rosicrucian program (the divine truth can be discovered in nature as in the Scripture)(McIntosh, 2005) and tries to mimic the Garden of Eden (artistic motif and a landscape specific to the Renaissance) by using sacred proportions that „vibrates with divine harmony” (McIntosh, 2005).

If the criticism of the text and the description of the gardens represent the subject of the next chapter, the current chapter should be concluded with a brief description of the allegory of the alchemical symbols that make up the cover (figure 1). Therefore, this "Book of Nature" / *Carta Mundiis* flanked by two satyrs with goat legs - demons of Dionysus, the god of wine and vegetation. These two creatures represent, in Christopher McIntosh's view, "nature in its primal state of rawness and innocence" (McIntosh, 2005). The same mythological creatures are accompanied by the two gods of the exoteric wisdom and implicitly of the esoteric hermeneutic tradition, Pallas

Athena and Hermes. Between the two deities one can see the five geometric figures of Plato's *Timaeus*'s: the tetrahedron, the cube, the dodecahedron, the icosahedron and the octahedron. Above mythology and ancient sciences there are four angels. If the two central cherubim support a sphere of stars that is described by McIntosh as consistent with the verse "as in heaven, so on Earth" - everything on Earth has a correspondent in heaven – the cherub situated on both sides of the sphere support a stock of scientific knowledge suggested by the mathematical tools they keep hang on a string. Also, these two angels hold a torch in the other hand which can be interpreted as a flame of wisdom and respectively a mirror, an alchemical symbol possibly interpreted as suggesting that "human arts are merely a reflection of divine creation"(McIntosh, 2005). To summarize, the cover of Salomon de Caus's print can be interpreted as representing the Book of Nature's cover in itself.



Figure 1. Cover symbols (deCaus, 1620)

### **Describing the Palatine Garden**

*Salomon de Caus concentrated on garden design, which, in the Renaissance, was closely related to architecture, dependent, like the queen of the mathematical sciences, on proportion, perspective, geometry, and employing the newest refinements in mechanics for its decorative singing fountains and other embellishments* (Yates, 1998).

Initiated in the art of gardens in Italy, Salomon de Caus drew inspiration from the model of Renaissance gardens in Italy to design the palatine gardens. Thus, it seems that Renaissance villas like Villa D'Este, Villa Pratolino, Villa Lante or the Boboli Gardens served as architectural, engineering and artistic models for the architect in drawing the sketches and plans for Hortus Palatinus. Regarding the text, it is considered that works such as of Heron of Alexandria's pneumatics and hydraulics treaties, Francesco Colonna's *Hypnerotomachia Poliphili* (Poliphilus' dream), Vitruvius or Pliny the Elder's texts were the basis of the project for the gardens in Heidelberg. Forced to move to Prague after Frederick was elected King of Bohemia, Salomon deCaus started working on a text describing the garden's composition so that it can be completed in the future, but due to the military failure at the White Mountain, the entire cultural-architectural project was abandoned and the garden was never finished. Although the palatine garden remained in an intermediate stage, being quite badly damaged by the Habsburgs shortly after the victory against Frederick, thanks to de Caus's print, it went down in the history of landscape architecture as a landscaping complex of mixed styles, both Renaissance and Mannerist, a garden of alchemical symbols, a *statement* of the Palatinate's power. In this respect, the following subchapters will provide a brief description, interpretation and critique of the landscape design.

### **The Insertion and the Connection to Topography**

*De Caus had blasted away the rocky hillside to form a flat surface on which he developed geometrical garden designs of great complexity.* (Yates, 1998)

A fundamental characteristic of the Renaissance and Mannerism gardens is represented by the planimetric and level structure of the landscape - terraces with parterres. Thus, because of the rocky terrain adjoining the medieval castle of Heidelberg did not allow people to immediately start the landscape design, Salomon de Caus had to propose detonation of a big slope near the architectural complex so that they can build, according to the Italian model, a series of interconnected terraces at varying altitudes. These works are also briefly mentioned in Salomon de Caus's print – Hortus Palatinus (1620). The vertical systematization work is supposed to have been completed around 1618 as in that year a gardener was employed to take care of planting ([www.heidelberg-fruehe-neuzeit.uni-hd.de](http://www.heidelberg-fruehe-neuzeit.uni-hd.de)). Thus, before the second decade of the seventeenth century, the medieval castle and adjacent gardens occupied a dominant position over the city and the Neckar.

### **The Connection to the Castle**

Although he followed quite attentively the compositional structure of the Renaissance villas in Italy, Salomon de Caus did not create a direct link, on the same line with the castle. Thus, the garden's transition from medieval architecture to the Renaissance garden composition should have been done through an annex which was never built.

This relationship of independence between the castle and gardens is one of the major pieces of criticisms brought to de Caus's project. However, I think that the lack of a direct connection between the architecture and the landscape is a "strong point" of the project as the garden represents a message made up of alchemical

symbols that glorify Frederick's personality, a "green" message attached to an already existing architecture. Therefore, the absence of a perfectly synchronized link with the old castle would have been a message in itself, and given the fact that Friedrich had to create a new future by changing the political map of Europe, an axial connection to the past (the castle) could alter the alchemical message of the garden – the continuity of the past in the future versus a new future rooted in the past.

### **The Connection to the City**

As I previously mentioned, the garden and the castle levitated above Heidelberg, being located at a considerable height over the urban constructions. As people thought that the "castle of Heidelberg will become a center whence[...] strange and exciting influences were to emanate" (F. Yates), this physical and psychological levitation can be regarded as a *statement*, as a foundation of the royal couple's universe's philosophy. Along with the separation between the old medieval architecture and the new Renaissance-Mannerist landscaping, the relationship between the architectural complex and the urban constructions reinforces the idea of a Heidelberg which is an outpost of culture and of the fight against the Habsburgs.

### **The Analysis and Criticism of the Terraces' Composition**

The detonation of the eastern slope allowed Salomon de Caus to design a series of four terraces. Each terrace contains a number of "green" parterres where one can often find architectural objects which form alchemical symbols that glorify the royal couple - Frederick V and Elizabeth Stuart. In the following chapters I will try to make a description of the terraces and green parterres and interpret the design of some more or less architectural elements.

#### **A. The Main Terrace**

The main terrace is the most complex of all 4 terraces, having the most vegetalized

parterres and architectural objects. This terrace was accessed through that annex attached to the medieval castle and was followed by a series of 8 square or rectangular parterres, each having at least one alchemical symbol.

### **The parterre with the Fountain with a Grimace**

This parterre is described in de Caus's print, being assigned the drawing number 16 in *Hortus Palatinus* (1620). Thus, this square parterre, divided into 4 congruent surfaces, but with different vegetal composition, bordered both inside and outside by a series of architectural hedges, coupled with small trees, surrounded by an architectural element shaped as an octagonal basin with a grimace fountain. Finally, the inner alleys had on the outside an arch made of wooden lattice and probably covered with climbing plants.

According to online descriptions, it seems that the smaller parterres were made up of herbs (thyme, lavender or rosemary) inserted on a bed of clay or colored sand; and the fountain would have been an area adorned with stones, shells and tuff ([www.heidelberg-fruehe-neuzeit.uni-hd.de](http://www.heidelberg-fruehe-neuzeit.uni-hd.de)).

### **The Parterre with Pergola**

This parterre, briefly described by de Caus, is believed to have been made up of 8 square parts with hornbeam (*Carpinus* sp.) planted in the grid, squares separated by pergolas and hedgerows with roses (*Rosa* sp.), Jasmine (*Jasminum officinale*) or vine (*Vitis vinifera*). In the center of this predominantly vegetal composition a pavilion with bells was in plan to be constructed.

### **The parterre of the 6 Squares**

Similar to the pergola parterre, this component was not described in detail by Salomon de Caus. However, from studying Matthäus Merian's perspective and plans and from Jacques Fouquieres's perspective, one can see that these parterres

consisted of vegetal-architectural compositions - probably made up of thyme, rosemary, sage or lavender ([www.heidelberg-fruehe-neuzeit.uni-hd.de](http://www.heidelberg-fruehe-neuzeit.uni-hd.de)) and laid on beds of clay or colored sand. Like the other parterre previously mentioned, these were also bordered by an architectural hedge doubled by small trees, similar to the one at the fountain with a grimace.

### **The Parterre with the Obelisk-Fountain**

Very similar from the point of view of the composition with the fountain with a grimace parterre, this parterre was built around an octagonal basin in the center of which is an obelisk decorated with fantastic sculptures out of which water gushed and which had a tip made as a Ionic capital that supported a sphere. This *Globus cruciger*, symbol of the Christian monarchy, located on top of an obelisk - the archetypal symbol of creation and masculinity, can be another alchemical symbol which might be translated as a leader (men / male) - Frederick V - master, God willing, over the esoteric legacy, ancient knowledge about the world, etc. Unlike the parterre at the fountain with a grimace, this parterre is described by architect through two figures (numbers 3 and 4) in *Hortus Palatinus* (1620).

### **The parterre of the Muses**

Divided into four semi-parterres, similar to those previously mentioned, this parterre is distinguished by the vegetal and architectural design, as well as by the ornaments inserted round its compositional center. Thus, the four squares surrounded by architectural hedges intertwined with deciduous trees of different sizes, have a number of embroideries which make up the following message: *FRIDERICVS V COMES PAL (ALTINUS) EL (ECTOR) D(UX) BA (VARIEAE) 1619- Frederick V, Electoral Palatine, Duke of Bavaria 1619*. This parterre contains, as its name states, a series of nine statues that embody the arts and science muses of Greek mythology. Of

the 9 muses, the statue of Urania, the muse of astronomy, is the one which stands out. It's placed in the compositional center of the parterre and it is equipped with a wand which according to de Caus serves as a sundial. ([www.heidelberg-fruehe-neuzeit.uni-hd.de](http://www.heidelberg-fruehe-neuzeit.uni-hd.de)) The online documents of the University in Heidelberg interprets this parterre as hiding the following alchemical message- Frederick V, ruler endowed with a comprehensive humanities education ([www.heidelberg-fruehe-neuzeit.uni-hd.de](http://www.heidelberg-fruehe-neuzeit.uni-hd.de)).

### **The Parterre with the Orangery.**

This parterre is described in de Caus's print is made up of a complex composition of circles and octagonal stars completed by vases with citrus fruits, especially orange trees. Besides the special architecture, this parterre contains some hidden symbols specific to both the Renaissance as an artistic phenomenon and Salomon de Caus, in terms of his passion for music. Thus, using constantly multiples of 8 in the planimetric architecture of this parterre is in the opinion of Christopher McIntosh that a musical symbol is embedded in the architectural composition (McIntosh, 2005). On the other hand, while the architecture replaces music, the vegetable composition made up especially of exotic trees of the citrus family substitutes the general theme of the *orangery*.

Since plants are rarely used strictly for decoration, the citrus trees used in *Hortus Palatinus* are part of the landscaping patterns of the Renaissance, these representing *green* alchemical symbols. Thus, the lemon tree, symbol of redemption, harmony and fidelity along with the orange tree, symbol of Paradise, chastity, purity and marriage (Impelluso, 2004), and also the musical architecture creates a complex scenography that can be interpreted as the very marriage of Frederick and Elizabeth. Also, since the ancient mythology associates the two citrus species with symbols of the marriage between Jupiter and Juno, I think that a symbolic

comparison between Jupiter and Juno and Frederick V and Elisabeth Stuart is plausible, at least in terms of the decor and alchemical allegory from *Hortus Palatinus*.

### **Father Rhine's Basin**

This basin is right outside the entry into the "Great Grotto" and includes a statue which embodies the Rhine. The plan and the outline for making the basin are graphically described by Matthaus Merian and inserted, along with Salomon de Caus's literary description, in the volume *Hortus Palatinus*.

Probably inspired by the model of statues in the gardens of the Italian villas like the Statue of the Apennines (Villa Castello, 1563) or the Pegasus' basin (Villa Lante), the fountain of Father Rhine appears as an old bearded character, resting among a number of small rocks out of which water jets gushes. This piece of decor can be interpreted as a new alchemical symbol. Although we found no information to confirm or refute my personal hypothesis, I believe that this statue facing the obelisk with a sphere is a promise of Frederick - *son of the Rhine* - as a defender and winner of Protestants (Anglo-Saxons and Germans) against the Catholic Habsburgs.

### **The Great Grotto**

The great grotto consisted of two main rooms and several annexes. This cave was accessible via a portal of red tiles decorated with an array of wild, indigenous and exotic animals, such as deers, lions, monkeys and on the inside it was decorated with mosaic floors and wall covered with limestone and tuff. Regarding the objects which could be found in these rooms, we have to mention a table used for *water arts* and a sphere floating over a waterfall illuminated through a slot in the ceiling. All these descriptions of the cave are accessible through three drawings (numbers 21, 22, 23) attached to Salomon de Caus's volume.

Regarding the interpretation of the components of this suite of underground

rooms, I believe one can mention a hidden message - nature (as defined by the multitude of statues of wild animals and the false stalactites) can be tamed through knowledge (the table of hydraulic works) and also through divine illumination (suggested by the sphere which levitates above a waterfall illuminated through the slot in the ceiling). Also, the physical lighting of the cave can represent an allusion to the Rosicrucian Manifesto *Fama Fraternitas* - Christian Rosencreutz' script and the alchemic sun which "artificially" illuminated the room (Andreae, 2013).

### **The Water Parterre**

The water parterre is described in detail, both from the point of view of the text and graphically in *Hortus Palatinus* (Figures 7 and 8). Thus, its composition is formed by a series of basins, bridges and circular alleys which surrounds five statues - three nymphs and 2 children. Since this garden was begun shortly after the royal wedding of Frederick and Elisabeth and on the adjoining parterre, there is a basin with the statue of the Rhine, I believe that these nymphs must also be integrated into the alchemical allegory. In this respect, I believe that the central nymph represents the Thames, alluding to the marriage of the Rhine (German states) and Thames (England). This nymph can be seen as being the king's ally in the battles that he had to win. My statement is supported by the fact that the central nymph - Thames, the Palatinate's ally - supports a lance in the tip of which there is a small sphere with a cross - symbol of the Christian monarchy - possibly interpreted as "God's will". Also, the nymph, protected by a thin layer of water gushing from under the Christian sphere and the group of statues surrounded by water may represent the British Isles and the protection offered by the sea water.

### **The Orangery**

This part of the garden is described in detail in Salomon de Caus's print and in

two drawings (number 9 and 10). The architect relates how they had brought over 30 trees from a specific garden, on water, to Heidelberg and describes in some detail the way the orange trees will be protected during winter by covering them with a wooden construction richly decorated on the outside.

### **The Seasons' Parterre (figure 2)**

Named by de Caus the "Flower's Garden", this parterre has a complex architectural composition made up of a series of plane geometrical figures in which various species of plants are included. Thus, if the extremities of the parterre are designed as embroidery of small plants, aligned in front of some wooden gazebos, the radial strips from the central area of the parterre are described by the architect as planted along with species of flowers to make a "floral calendar" based on a chromatic sequence. ([www.heidelberg-fruehe-neuzeit.uni-hd.de](http://www.heidelberg-fruehe-neuzeit.uni-hd.de))

The compositional center consists of a circular basin in the middle of which there is an area with stones and species of small conifer trees out of which thin jets of water gush through a series of slots. Since the whole Renaissance program embedded in landscape architecture revolves around the idea of finding the Garden of Paradise, it is assumed that the area from the centre of the floral parterre is meant to be an allusion to Paradise Mount (McIntosh, 2005). Also, this complex composition may have roots in the Persian philosophy, philosophy that describes the "*Paradise Garden*" (Iliescu, 2014) as being divided into four squares symbolizing the four corners of the world and having in the middle a vase or a basin with water which suggests Earth's navel (Foucault, 2001) (in the palatine garden's case - a basin with a "*mountain of Paradise*"). Therefore, this floral calendar represents a sum of allegories and alchemical symbols which are wrapped in a chromatic spiral of a magical time.

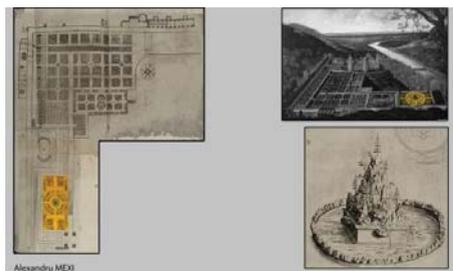


Figure 2. The Season's Parterre and the Paradise Mount (after de Caus, 1620)

### The Rear Cabinets

These constructions are not described in any historical document; however, they might have served as a cabinet of curiosities. This is purely speculative, but it is possible and actually probable that given the fact that these cabinets represent a fashion of that time, and the garden is fundamentally an area of exhibiting works of art (architectural or topiary) I think it would have also accommodate other art objects placed in such rooms which were easily accessible through the garden.

### The Greenhouse Tower

Located in the northern extremity of the garden, this annex is believed to have been started but not completed because of the war. Briefly described, both in writing and graphically (Figure 13 in *Hortus Palatinus* 1620) by the architect, this architectural volume would have provided a panoramic view over the palatine garden, the medieval castle and the Neckar valley.

### B. The Upper Terrace

This terrace in the shape of a longitudinal promenade host 2 of the 3 gallery-caves designed by Salomon deCaus—the "large safe" and the small gallery/grotto as well as a number of other architectural components and plant covered in mysterious alchemical symbols.

### Frederick V's Portal (figure 3)

In the western end of the upper terrace an architectural portal was designed above which there should have been placed a statue of Frederick V dressed in the royal

cloak and the war armor, holding in his left hand a sphere and a sword, and around the neck - a medal. In the centre of the portal there can be found an image of a fountain with the statue of Neptune, god of the seas, leaning triumphantly against his trident and a sea creature. Also, this architectural structure, described from a graphical point a view in the architect's writings (Figure number 20) also contains a Latin inscription which can be translated as:

"Frederick, King of Bohemia, Elector of the Palatinate of the Rhine, count over the Diana's former Holy Land, now ordered by the leveling of the mountains slopes and the coverage of the valleys in honor of the garden god and by incorporating water channels, caves - fountains, statues, plants, flowers and tall trees in a topiary art of bushes. This was continued until the year of God 1619" ([www.heidelberg-fruehe-neuzeit.uni-hd.de](http://www.heidelberg-fruehe-neuzeit.uni-hd.de)).

I believe that this portal can be interpreted as representing an alchemical message that glorifies the Elector Palatine as being that Man that connects the wild landscape of ancient mythology and nature's metamorphosis through the science of the Renaissance and Mannerism. Thus, by brute force (the sword) and knowledge (the sphere), Frederick manages to tame Diana's realms and master Neptune's waters, and through the waters of Neptune, I think we can refer to both the Rhine and Neckar, as well as to the British Thames.

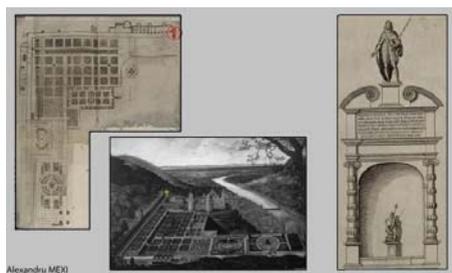


Figure 3. Friedrich's Portal (after de Caus, 1620)

### The Big Seif

This first cave on the upper terrace is described in some detail by the architect,

both literary and graphic (Figures numbers 28, 29 and 30). The "vault" was divided into three rooms that had different functions. The west room served as an orangery –a storage space of the vases with citrus trees in winter; the central chamber had a series of "water machines" ([www.heidelberg-fruehe-neuzeit.uni-hd.de](http://www.heidelberg-fruehe-neuzeit.uni-hd.de)); and the third room functioned as a royal Terme heated by ovens. In this thermos one was supposed to find a statue of a satyr playing the flute (by means of machines to make sounds) and two statues – perspective heads located along the thermal spa. Thus, one end was made in the shape of a cave in the middle of which, floating on a circular platform, there was the figure of a child with two domestic dogs; while the opposite end was designed as a grotto with a waterfall which integrated two characters - a creature which comes out of a rock and spreads water through a series of holes found in the eyes, mouth, nose, ears, phalanges, belly or breasts and a young man who pours water from a kettle on a platter.

Regarding a critical approach to this safe-cave, I do not think that this is a complex or a conglomerate of alchemical symbols, but rather, a series of rooms designed to provide entertainment especially in winter.

### **The Gallery and the Small Grotto**

This gallery impresses the public through the architectural embroideries of the facades and through the 10 reliefs showing the glorious deeds of Hercules, and also through the rich interior decorated with mosaics, stone carvings, coral and shells (Figures numbers 25, 26, 27 - HortusPalatinus 1620). These interiors do not lack mythological reinterpretations or hydraulic artworks. Thus, in the gallery's annex – in the small cave – one can find bass reliefs showing a number of sea creatures, nymphs and gods, as well as a basin with fountains of coloured coral lit through a slot in the ceiling. This basin of corals can be interpreted, as Frances Yates

also suggests, as an alchemical symbol depicting the Philosopher's Stone.

Unlike the "large safe", I think that this gallery with grotto hides many alchemical symbols camouflaged in mythological reinterpretations and engineering works. But perhaps the most impressive symbol is represented by Hercules's allegory – an allegory specific to the "royal motifsof the seventeenth century Europe" ([www.heidelberg-fruehe-neuzeit.uni-hd.de](http://www.heidelberg-fruehe-neuzeit.uni-hd.de)) - a tribute to that cult of Frederick.

### **The gardiner's Annex**

This construction attached to the upper terrace is not described by the architect, but it appears both in Matthaeus Merian's plan and perspective and in Jacques Fouquieres's perspective drawings. The architecture of this building is, however, similar to the one of the "greenhouse-tower".

### **Venus's Basin**

This pool is situated above the Great Grotto and as Salomon of Caus also states, it would provide water for the cave, thus representing a quasi-water tank. In the compositional center of the fountain there was a statue of Venus, the goddess of beauty, love and prosperity, accompanied by Cupid, the god of attraction, affection and erotic love. These two deities were projected on a pedestal supported by four sea creatures and four reliefs from which water jets were gushing. I believe that this mythical-erotic duality can represent an alchemical symbol that completes the message and promise supported by "Friedrich's Portal" - a mystical realm, ruled by feelings and reason.

### **The Oval Stairs (figure 4)**

The stairs represent an architectural element designed according to the principles of Renaissance perspective geometry. Also, the sequence of basins' model which accompany the stairs can represent a reinterpretation of some architectural patterns similar to those of

Villa Lante, Villa D'Este, Palazzo Farnese in Caprarola etc. I believe that this part of the garden can also be interpreted as an alchemical symbol. Thus, this architectural vision requires a distortion of the de Caus's projected image and transforms the geometrical circularity of the stairs into an apparent hourglass that together with the water's kinetic gravitational movement can give the impression of the "passage of time".

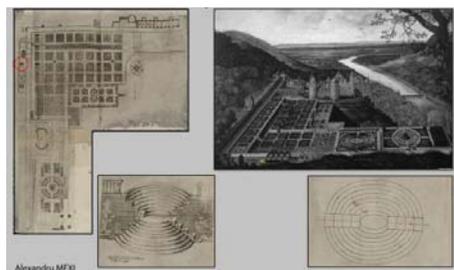


Figure 4. The Oval Stairs  
(after de Caus, 1620)

### The Cabinets

Unlike the "back chambers" on the main terrace, these cabinets are described by Matthaeus Merian in Figure 17 of Hortus Palatinus. These areas enclosed by hedges, accessible through some architectural carved stone gates, should have incorporated a well which would ensure the water supply necessary for a number of fountains in the garden, but also provide ample views of the castle and the palatine gardens. On the other hand, although their design and location differ from the cabinets on the main terrace, it can be assumed that they would have also served as a cabinet of curiosities. Given the absence of a direct connection with the medieval castle, I believe that these cabinets could represent a true *piano nobile* through their location and panoramic openings on the garden.

### The Labirinth with a Sundial

Undescribed in Salomon de Caus's writings, but present in Jacques Fouquieres's perspective drawings, it appears that the labyrinth should have been

made up of concentric hedges which would have surrounded the compositional center where an obelisk bordered by a basin of water would be placed – possibly a sundial. Perhaps this circular maze could have been designed so as to represent "a green miniature" of the road to enlightenment, but this aspect can only be presupposed as the information about this part of the garden is insufficient.

### C. The Intermediate Terrace

The intermediate terrace consists of 8 architectural parterres—covered with plants, each of them different from the point of view of the vegetal embroidery, but similar in terms of compositional symmetry. Moreover, besides the 8 parterres, one can also find a basin in the shape of a square adorned with a central piece which wasn't described in any historical document.

### D. The Inferior Terrace

The lower terrace is described in de Caus's volume both through the text and especially through two figures (numbers 14 and 15). This lower part of the garden appears as a semi-independent courtyard with two squares decorated in palmettes and a central basin guarded by the architectural figures of the Main and Neckar rivers and of the nymphs Flora and Ceres. The garden is accessible via a series of three pyramidal stairs which go down from the main terrace. Regarding the author's literary descriptions, he proposes that the two sides with embroidery in palmettes be equipped with a number of vases with Seville Orange Trees (*Citrus aurantium*) and as for the central basin, Salomon de Caus designed it so that it collects water from all the fountains in the garden. ([www.heidelberg-fruehe-neuzeit.uni-hd.de](http://www.heidelberg-fruehe-neuzeit.uni-hd.de))

## RESULTS AND DISCUSSIONS

### Complex Alchemical Symbols

*De Caus's intention in the garden was to present the visitor with a vision of this*

*divine order operating within nature, but a nature refined and uplifted – in a sense, a paradise regained. And, since nature is so diffuse and multifarious, he used certain standard images from mythology to illustrate its various aspects. Thus the garden combined music, mathematics, geometry, architecture, mechanics and mythological iconography. In a richly detailed analysis of the garden's symbolism, Richard Patterson has written that 'in the Hortus Palatinus de Caus was concerned to articulate a path which would reconnect humanity to Nature in some absolute sense.* (McIntosh, 2005)

We believe that this Palatine Garden offers not only punctual alchemical symbols (statues, topiary art, engraved texts) but also complex messages, messages which make up the magic of this garden. I will therefore list four complex symbols that I believe Salomon de Caus inserted through architectural, horticultural, landscaping or engineering artifices as well as mathematical means - symmetry, perspective, repetition etc. I will define the four "magical arts" the following way: musicology; architecture, religion and mythology; reason and feeling; tempology.

### **Musicology (figure 5)**

*Soon after entering the garden one comes upon an octagonal stone basin, which is all that remains of a fountain. However, the octagonal form immediately gives us a clue to the message of the garden, for eight, the octave, is the number of musical completion and wholeness, and the musical theme is one that is repeatedly taken up in de Caus's design* (McIntosh, 2005).

Salomon de Caus is known to have been not only an incredible engineer and architect, but also passionate about music. He managed to endow numerous statues with the ability to sing through the hydraulic techniques. To this end, Christopher McIntosh relates about a machine designed by de Caus that it was able "the three models of ancient music, the diatonic, the enharmonic and the

chromatic" (McIntosh, 2005) and about another one, seen as a satirical statue of the god Pan playing the flageolet, that it was able to play a kind of nature's music - „the passionate, rude and inarticulate origin out of which refined melody might emerge" (McIntosh, 2005).

Moreover, his music was not only acoustic but also but also architectural / compositional - symbolic. Thus, besides the statues endowed with voice, the garden's symbolic music also consisted of a series of objects related to the number 8, objects designed based on an ordonate geometry ranked by multiples and divisors of the figure 8: the statue with a grimace's basin, the obelisk-statue's basin, the mountain basin's vases etc. Also, the figure 8 is also found in the planimetric geometry of the garden and parterre models: the intermediate terrace (Annex 26) comprises an amount of 8 parterres described by Christopher McIntosh as having the shape of a musical theme of the AABAABAA type „in the form of a modal scale or an octave of dimensions which complete one harmonic interval (McIntosh, 2005); The main terrace with the pergola parterres (parterre subdivided into 8 squares), the 8 squares parterre and the orangery parterre (designed as a star with eight corners); as well as the lower terrace which consists of two parts situated symmetrically to a central basin and summing eight squares. Although I haven't found any information to confirm or refute my personal opinion, I believe that the palatine garden from Heidelberg could be read as a mystical musical stave as it brings together music in its classical auditory form, and also the visually and tactile through the architectural-vegetal composition. As a matter of fact, Frances Yates himself compares Heidelberg with a garden of sounds similar to those on Prospero's island (Yates, 1998).

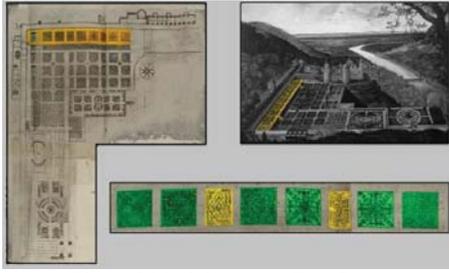


Figure 5. Musiology - AABAABAA  
(after de Caus, 1620)

### Architecture, Religion and Mythology

Not incidentally, the statue of Friedrich is placed in the highest point of the garden –it watches everything that happens in the scenography of the garden, in its alchemical microcosm. This is so because of the symbolism in the architecture and fine arts in the garden, a messenger of religion and divine creation on Earth (see details of the construction of the statue of Frederick: the sphere with a cross, the medal and the conquering sword) but also a master over the mythology, culture and knowledge of the antiquity (locating the statue of the elector above that of the sea god- Neptune). In this regard, the mythological allegory contains ancient nymphs and goddesses (Venus - beauty, love, prosperity, Cupid - attraction, affection, love, erotic, Urania - astronomy; Neptune - waters; Pan - pasture and orchard, Flora, Ceres, etc.) but also deities who embody Frederick's familiar geographical frame (Neckar, Main, Rhine, etc.), all of which follow each other in a well defined order in front of the statue of the elector palatine on Frederick's portal. I believe that all this alchemical scenography exalts the future King of Bohemia and puts him forward as a monarch who will conquer and rule in the name of God, but not so much by the sword, but especially through culture and knowledge.

### Reason and Feeling

*The notion of 'reading the book of nature' was an important element in their programme, as they believed that divine truth is revealed in nature as clearly as in*

*scripture. The whole universe, in this view, is constructed according to sacred proportions and vibrates with divine harmony.* (McIntosh, 2005)

The entire Renaissance garden art, as presented by Tom Turner, revolves around the idea of a mathematical nature, a nature created by a *Deus Geometer*, that landscape architects and artists have to render in their designed compositions. To this end, since the garden was supposed to be an exact copy of the Garden of Eden, it had to be equipped with a range of architectural or vegetable artifices to inspire different feelings or to appeal to the human conscience and reason. Although we can confidently state that the garden in Heidelberg was created around the "cult of Friedrich", it does not lack some components to "deify" compositional parts which make the transition from art to divine art. Architectural components such as The Basin with Mount Eden gives the garden this "divine nature", while other architectural and vegetal elements stimulates the human senses and offer different sensations (basins, water organs, singing statues, herbs, etc.).

### Tempology

Time plays a fundamental role in Frederick's mission. Thus, to implement the Garden of Paradise summarized as a mythical – religious heterotopia in the reality of the 18<sup>th</sup> century Western Europe, Frederick's Palatinate had to overcome a series of obstacles that could be surpassed only by enlightenment, and this process was directly proportional to time. If the enlightenment can be read in the garden by studying the architectural composition or vegetal symbols, time is visible in the garden through the Oval Staircase, through the Floral Calendar, but especially through the Maze with a Sundial. The latter one probably best describes this race against time to attain enlightenment - a mythical religious enlightenment - which can not be personified other way than as an obelisk lit by sunlight.

## Hortus Palatinus in the present

As we gaze at Matthieus Merian's fascinating engraving of the Heidelberg gardens, we may reflect that here, perched on this hillside in the heart of Germany, was:

"[...] *an outpost of Jacobean England, a citadel of advanced seventeenth-century culture. But this most promising new growth, fertilized by the marriage of the Thames and the Rhine, was to have no future. The date, 1620, of the publication of the engraving, is the year of the brief reign of Frederick and Elizabeth in Prague as King and Queen of Bohemia, the year which ended with the events leading to the outbreak of the Thirty Years War which was to devastate the Palatinate and destroy the splendours of Jacobean Heidelberg. The Palatinate was in the front line of the battle and the devastating impact of the reaction can be clearly seen in the fate of Heidelberg.*"(Yates, 1998)

Unfortunately for history, the magic of the palatine was interrupted by the war's curse, but despite these adverse events, HortusPalatinus survived due to Salomon de Caus's drawn print.

Currently, a number of reconditioned ruins can be seen in Heidelberg. The castle's ruins, the incomplete construction of terraces, Father Rhine's Basin, The Big Gallery remind us of the designed scenography and of the architectural-vegetal alchemical allegory, underlining "Frederick's cult". On the other hand, although in ruins, the former palatine garden is a living space; a public garden that offers a beautiful view of the castle and of the old town and which through some reconditioned elements pertaining to the original design, is a portal that connects contemporary reality to 17<sup>th</sup> century magic.

## CONCLUSIONS

*The Heidelberg garden was therefore a complex visual text, designed to convey its message on many different levels* (McIntosch, 2005).

Whether it's about "Frederick's cult", or about allusions to his marriage with Elizabeth, the heterotopic allegories which recreates a mythical and utopian microcosm, Hortus Palatinus (the print and the garden) is a codex (Clavis Universalis – the universal key) that can be deciphered and read as required by the Renaissance ideal, as a "Book of Nature", but a book that involves nature and mythology to create a scenography that revolves around the royal couple made up of Frederick V and Elizabeth Stuart. The rosincrucian program from the palatine garden amazes even today through its complexity and alchemical compositional depth, but at the same time, the real depth of the message which Salomon de Caus wanted to convey through the architecture, engineering and horticulture can be only partially deciphered and interpreted as real history did not allow it to be really truly implemented.

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