Conceptual Precedent: Seven Landscape Architectural Historic Sites Revisited

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Abstract: Designers are interested in the generation of form to guide the development of a particular design. With the advent of the modern design era in the 20th Century, the design "concept" became a driving force for most architecture, landscape architecture, and interior design schools, teaching students how to employ the design concept to guide the generation of form and details. Although, the design concept was employed in some designs before the 20th century, discussions concerning the design concept for historic landscapes has been limited. To illustrate examples of historic landscapes with design concepts, we chose seven projects to be revisited: Bom Jesus do Monte (Portugal), Xiaoling Tomb (China), Vaux le Vicomte (France), Villa Lante (Italy), Stourhead (United Kingdom), Stowe (United Kingdom), and Tapada das Necessidades (Portugal).

Key-words: design process; design theory, design pedagogy, normative theory;

1 Introduction
For the most part, the use of the design concept and the design process is a construct of the 20th Century, promoted formatively in the last century by the Prairie School architects such as Walter Burley Griffin [2, 8] and the Bauhaus designers [22, 32, 34], such as painter and educator Paul Klee [48]. However, there are sites around the globe containing strong concepts that were developed long before the modernists of the 20th Century, as in the case of great Italian gardens such as Villa Lante and its bilateral symmetry, and Stourhead, an English Landscape School design with its wandering lines [11].

In the process of creating a landscape design, there are always ideas and designs in the mind that directly or indirectly influence the designer [20]. However, sometimes the design is governed by a very direct and strong concept [25, 37, 47].

In a broader manner the concept in landscape design may be described as the “big idea” that is often obtained from information extracted from the local geographic, agricultural, topographic, environmental and anthropological studies, among others, in relation to the designer’s experiences and philosophical approaches toward nature, landscape, aesthetics and global composition. Jellicoe illustrates how important the design concept has become in the 20th Century [28].

The concept is normally the result of the critical thinking described by Hideo Sasaki, in the middle of the twentieth Century, as a process that involves research (to understand all the factors to be considered), analysis (to establish the ideal operational relationship of all the factors), and synthesis (to articulate the complex of relationships into a spatial organization) with the objective to reduce negative impacts on the existing site in order to obtain a harmonious and sustainable landscape [30, 42]. For this reason, in the definition of the concept, as Gobster and Barro defend, the challenge is to make the right selection and to liberate our senses to new impressions [24, 31].

2 The relevance of a strong design concept
Designers are often preoccupied with the search for a design concept during the creation of a well designed space [11]. "By developing a concept, there are several benefits in executing a design. The first benefit is that the shapes, forms, materials, and experiences are driven by the concept in a coordinated, unified fashion to express an idea.
Second, a concept often brings a strong sense of uniqueness and a special quality to a designed space” [11].

In this sense, the concept is a “type” of idealization that not only facilitates reaching a better design, but can also shorten the time needed for the process [20]. It is an expression of the problem resolution for the design that enables the creation of innovative and thoughtful design [11].

For this reason, the relevance of developing and applying a strong concept in landscape design is that there is no recipe for good design and thus, the creation of a concept is essential as a guiding form giver [11].

3 Case studies

While Norman T. Newton described the elegant historical projects in Italy, France, Spain, and England, there certainly are other very important sites worthy of closer inspection in Europe and around the world [35]. One of these sites resides in the north of Portugal, north of the city of Oporto, near the town of Braga. Another is in China, the Xiaoling Ming Tomb in Nanjing, Jiangsu Province. Four other sites often investigated by landscape architecture professionals, Vaux le Vicomte, France, Villa Lante, Italy, Stourhead, United Kingdom, and Stowe, United Kingdom also contain strong conceptual design and are revisited in this discussion. The last case study presented in this discussion is Tapada das Necessidades, in the city of Lisbon, Portugal.

3.1 Bom Jesus do Monte – Braga, Portugal

Considered one of the most complex Catholic sanctuaries of the world Bom Jesus do Monte is located in a hillside facing west (Espinho hill), which was claimed to contain, originally, a carved wooden depiction of Calvary, created by a hermit [6, 38].

Built between 1784 and 1811 by Carlos Luis Ferreira Amarante for Archbishop Rodrigo de Moura Teles “it became a site of pilgrimage, and was eventually expanded to heighten the experience [7]. Instead of travelling to Rome or Palestine, pilgrims could travel a less strenuous distance and visit the site of Bom Jesus do Monte (Good Jesus of the Mountain)” [10]. Pilgrims could crawl on their knees up the site, visiting the various stages of Jesus on his way to Calvary (the "Holy Way"), hoping to be blessed with the three virtues: faith, hope, and charity [10].

Located in a wonderful place in Braga, Portugal’s ecclesiastic capital, where nature and man’s works join in a symbiosis, Bom Jesus do Monte is an important work of the late Baroque in Portugal [12, 41].

According to Conan, Bom Jesus do Monte is of special interest, because of its theatrical design, among the many 17th and 18th century gardens that offered a vicarious pilgrimage experience [16]. In the case of Bom Jesus do Monte this “experience begins at the bottom with an entrance gate (portico) and two small chapels housing depictions of the Last Supper and the Prayer of Agony with Jesus at the Mount of Olives. The broad steps wind across the hill with various casinos and resting places including the chapels of: the Kiss of Judas, Chapel of Darkness, Chapel of Flagellation, Chapel of Crown of Thorns, Chapel of Jesus with Pilate, and the Chapel of the Road to Calvary. Then one arrives at a circular plaza with views overlooking the city of Braga and the countryside” [10].

The ascent begins again with the Staircase of the Virtues and with two statues of serpents spewing water representing the passage from one life into the next [15]. “This next stage is a somewhat bilaterally symmetrical step containing a pair of staircases climbing the hill and a series of fountains forming the spine of the experience. From this view, all of the fountains above the plaza form the shape of a large chalice” [10]. There is the gruesome Chapel of the Crucifixion, where Jesus is being nailed to the cross and with broken knees to hasten his suffocation and a Chapel of Simon of Cyrene helping Jesus with the burden of the Cross [10].

The first fountain spews water representing the wounds of Jesus. The pilgrim is encouraged to symbolically drink the water at each station, symbolizing the water of life flowing from Christ's body. Hence spatial design acquires a magical power when the experience of moving through the material world of the garden in present time transports visitors into the different world and temporality of a narrative [39].

Five other fountains spew water for the eyes (the sight fountain), the ears, (hearing fountain), the nose (the smell fountain), the mouth (taste fountain), and from jars (the touch fountain) [10, 41, 45]. Through this figurative and aesthetic experience, the visitors are symbolically invited to partake through their bodily senses.

The climb of the astonishing, 600-step Baroque staircase (Figure 1) zigzagging up to the pilgrimage sanctuary of Bom Jesus do Monte is meant to induce some pain and play with the emotions of a repentant
Above the fountain of touch, another plaza is placed to give rest for the pilgrim. The final set of steps features the staircases of the three virtues with two more chapels at the top: Chapel of the Descent and the Chapel of the Unction [3, 10]. There is one final series of steps and then finally the church with a scene of Calvary in the church at the high altar. Facing west from the church there is a grand view of the city where visitors can experience the fusion of the horizon with the concept in which this landscape design was based. Many statues are located around the stairway and plazas including: Anna, Caiaphas, Herod, Pilate, Joseph of Arimathea, Nicodemus, a Centurian and again Pontius Pilate. Above the church are three final chapels (around a small lake with four fountains dedicated to Matthew, Mark, Luke, and John [10].

These days, Bom Jesus do Monte has lost some of its religious relevance as the 20th Century appearance of the Virgin Mary at Fatima has replaced it as the site of significant pilgrimage [10]. However Bom Jesus do Monte is a protected and classified site, still considered one of the largest religious and tourist attractions of the north of Portugal [12].

The landscape design of this unique landscape drew its power from the topicality it bestowed upon a well known narrative that had personal significance for visitors. This is a site where concept and memory played an essential role in landscape design and construction, revealing an enormous sense of place. The existing conditions were amazingly assimilated in conceptual design, enabling the creation of a unique landscape where one can find the aesthetic of engagement that is so important for developments of environmental art and contemporary landscape design. Thus the meaning of the garden belongs to the interactions between the existing site, social and cultural practice, and visitor perception.

### 3.2 Xiaoling Tomb, China

The Nanjing Ming Dynasty Xiaoling Tomb is located at the south base of Zi Jin Shan (Purple & Golden Mountain) in the east of the suburbs of Nanjing, Jiangsu province [51]. The tomb is a site of the first Ming Dynasty Emperor Zhu Yuanzhang and his Empress Ma. Construction began in 1381 AD and was completed by 1431 AD. The design is experiential, consisting of Xia Ma Fang (Dismounting Archway), Da Jin Men (Great Golden Gate), Si Fang Cheng (Square City), Shen Dao (Sacred Way), Shi Shou (Stone Beasts), Shi Ren (Stone Human Figures), Shi Wang Zhu (Stone Watching Pillar), Bei Dian (Tablet Hall), and Bao Cheng (Treasure City) until the burial is reached.

The design illustrates the breadth of the empire and the greatness of the emperor.

To begin the experience, Xia Ma Fang (Dismounting Archway) is encountered. The top of the archway is inscribed with several Chinese characters which read "All Officials Must Dismount". Dismounting is a sign of great respect. From Xia Ma Fang, next one will see the first front gate - Da Jin Men (Great Golden Gate). And behind the gate is Si Fang Cheng (Square City), a tablet pavilion describing the merits and virtues of the emperor.

Next is the Sacred Way (Figure 2), more than 1800 meters long, containing stone statues of animals from around the realm and mythic creatures...
associated with the emperor, two grand ornamental stone pillars on which are carved dragons playing in the clouds, and four couples of monolithic stones depicting civil officials and military officials. Concluding at the end of the Sacred Way is Ling Xing Men, another gateway. To the northeast of Ling Xing Men is Yu He Qiao (Imperial River Bridge). After passing the bridge, the front gate of the Ming Tomb actually begins. The gate is called Zi Jin Cheng Da Men (Purple & Golden Gate), leading to a series of enclosures and the final resting place of the emperor. During the Min Dynasty the tomb zone was guarded by more than 5600 soldiers.

Figure 2 - Shen Dao (Sacred Way), Nanjing, Jiangsu province. In the Ming Dynasty, the center path was for the emperor, the paths on the side were for others. (Used by permission of Cheryl J. Burley ©2007, all rights reserved).

3.3 Vaux-le-Vicomte, France

The Château Vaux-le-Vicomte located outside Paris, represents the crystallization of the French Baroque château and is considered by several authors the model for the Palace of Versailles [1, 19, 49]. However, during the early part of the 17th century, Vaux-le-Vicomte was merely an estate that Nicolas Fouquet (a 26-year-old parliamentarian) had inherited from his father. At the time, it was just a place on the map and its reputation was yet to be made [29, 40].

Nicolas Fouquet (The Red Squirrel) loved the arts in every form. In many respects he was way ahead of his time. In order to materialize his idea (create a new type of villa) he hired the architects Louis LeVau and Jules Hardouin-Mansart and the landscape architect André Le Nôtre, to design it. Somehow the three of them came up with a composition of many earlier concepts that represented a new experience. The palace is the center-piece of a composition of gardens that appears infinite in size.

Figure 3 - View of the gardens at Vaux-le-Vicomte. (Used by permission of Jon Bryan Burley ©2005, all rights reserved).

This space is considered the most elegant and geometrically harmonious of all high Baroque gardens [17, 33]. The composition is perfectly proportioned with the gardens organised on a central axis (Figure 3). At Vaux the axis passes through parterres, over basins of water, and forests, until it seems to melt into the luminous sky. Brilliant use of the landform allows many surprises [9, 36]. In fact, expectation and surprise are both present in this genius landscape architecture work [40]. The entire landscape is not discovered at first glance, but rather through a process of unexpected revelation [26].

“The subtle alterations of grade and multiplicity of perspectives at Vaux dramatize and dignify the château and carry the eye along an axial progression to carefully established focal points within the garden, as well as to the remote horizon beyond” [40]. These effects are the result of the application of precise mathematical calculation that allowed Le Nôtre to conceal certain elements of the garden until the visitor finds them revealed as if by some sort of legerdemain [40].

Though - over the years - it may have been under threat of abandon or destruction, Vaux-le-Vicomte has managed to survive intact. It is an example of a strong concept applied in a practical and graceful manner, demonstrating how an idea drives the
design. The design is a play with the concept of infinity and the surprises of the unexpected.

### 3.4 Villa Lante, Italy
Villa Lante, in Bagnaia, Italy, was developed by a series of Cardinals from 1475 until about the 1580s [35]. While Newton does not mention directly the concepts driving the design, there are essentially three strong conceptual ideas in the design. First the design concept is "bilaterally symmetrical," an important feature relevant to Christians who believed that the God's greatest creation, "man" was bilaterally symmetrical, and so the design of Villa Lante represented this approach. Second the design is set on a hill, facilitating the telling of story of the "Flood" from the time of Noah's Ark (at the top) to the spread of God's word to the four corners of the world (Figure 4). Third, the design is created with primarily evergreen vegetation, allowing one to experience the site at any time of the year, and still enjoy a similar experience. These three concepts are weaved together.

![Figure 4 – View of one of four boats in the bottom pools. gardens at Villa Lante (Used by permission of Jon Bryan Burley ©2005, all rights reserved).](image)

In addition, Cardinal Gambara even had a concept for himself or at least applied to him. He was portrayed by the red crayfish, as his emblem, which fit nicely with the color of a Cardinal (red). The red crayfish also fit well with design of flowing water through the site, as the emblem of the crayfish can be found on stonework (Figure 5).

![Figure 5 – The crayfish (gambero) detail at Villa Lante for Cardinal Gambara (Newton 1971). (Used by permission of Jon Bryan Burley ©2003, all rights reserved).](image)

While Newton describes the site in great detail, he seems to ignore the three easily evident conceptual details guiding the design [35]. Yet when visiting the site, these three concepts are fairly obvious.

### 3.5 Stourhead, United Kingdom
Stourhead, in Wilshire, UK, is a stroll garden built around an impoundment, meant to be experienced in a counter-clockwise manner. It was designed in the 1740s by an amateur, Henry Hoare II, for his estate, and is one of the finest English landscape gardens. Stourhead is based upon the notions of the Virgilian landscape [27]. Virgil, a Roman poet wrote the epic poem _Aeneid_, the story of Aeneas fleeing Troy and helping to found Rome.

Aeneas has many adventures and experiences along the way. Claude Larraine painted an image of Aeneas’ adventure in Delos (an island of Greek holy sanctuary and became the birthplace of the twin gods Apollo and Artemis), and Jellicoe believes this painting possibly inspired Henry Hoare. Paintings by Poussin and Gasphar Dughet may have also influenced the development of the landscape. Dughet painted utopian views of Italian landscapes. The walk begins by strolling along the woodland slopes, crossing a stream (beginning of life), and arriving the Temple of Flora (Temple of Ceres). Ceres is the Roman goddess of growing plants (especially cereals) and motherly love. The temple is next to a spring, marking the beginning of life.
One then walks along the lake with many special trees and crossing a stream, a signal of another change in life. Eventually, one enters the underworld through a series of grottoes and caves (Figure 6), emerging on the other side and entering the world of the living again as Aeneas did. Next one visits a small version of the Pantheon, signifying Rome (Figure 7). Eventually one arrives at the Temple of Apollo to reside with the gods, overlooking the stroll garden. A Palladian bridge completes the circle back to the Temple of Flora and new life (Figure 8).

The design is supposed to represent an allegory for life with deep moral and philosophical inquiry [50].

During the Victorian era, as the British Empire explored the world for plants to bring back to England, the woodland landscape was enhanced by Sir Hugh Richard Hoare, with many trophy plants from around the world such as western red cedars (Thuja plicata) and redwoods (Sequoiadendron giganteum) (The National Trust undated). This collection of plants enhances the original conceptual design, by presenting a primal earth experience before the birth of man and the development of civilization.

**3.6 Stowe, United Kingdom**

Stowe is well known and studied as a landscape that was transformed from a formal garden to one representing the English Landscape School style. During this transformation, a well developed concept for the garden emerged too. In the 1730s, the 4th Baronet Viscount Cobham with William Kent and later, Lancelot “Capability” Brown, developed a landscape with the concept addressing the philosophic position of the Whig political party (the liberal party of the time).

Values such as independent thinking, ethics, the importance of the individual, and egalitarianism were expressed in an informal stroll garden containing many features expressing these values [43, 44].
Greek (representing intellectual equality) and Gothic (a tribute to the Saxons) architecture was placed in the garden, symbolic of these philosophic perspectives. The Temple of Ancient Virtue (Figure 9) honoured Socrates (a Greek philosopher known for his contribution in ethics), Homer (poet writing epic poetry), Lycurgus (a Spartan leader known for promoting three Spartan virtues: equality, military fitness, and austerity) and Epaminondas (a Theban general known as a liberator and idealist). In addition, the Temple of British Worthies (Figure 10) honoured Britons such as John Milton (writing epic poems), Queen Elizabeth I, Alexander Pope (England’s greatest poet), Shakespeare, and John Hampden (parliamentarian and a central figure in the English revolution). These temples were placed in the Elysian Fields (paradise for heroes of the gods). The Elysian Fields also contained such features as the Grenville Column (a hero who died fighting the French in 1747) and The Cook Monument (for Captain James Cook). Farther east, the Seven Saxon Deities (Sunna, Mona Tiw, Woden, Thuner, Friga, and Seatern—the days of the week) are used to represent the notions of liberal government that was supposedly brought to England by the Saxons. The stroll garden allows one to contemplate the ideals promoted by Viscount Cobham.

The main features of the gardens are surrounded by one of the earliest and possible the longest “Ha-Ha” every built (Figure 11). It was installed during the formal period of the garden, designed by Charles Bridgeman. Beyond the Ha-Ha, the extensive parkland contains features added by the owners of Stowe. However, these features are not necessarily in keeping with the concept developed by Viscount Cobham. Nevertheless they do not distract from his original concept, employing architect and landscape as allegory for his political beliefs.

### 3.7 Tapada das Necessidades, Portugal

The history of this space began with a legend dated from 1580, according to which the city of Lisbon was affected by a huge pandemic pest, which lasted for more than 20 years and promoted a massive exodus from the city [13]. A family that was running away from the city stopped in a small church where they found a statue of “Nossa Senhora da Saúde” – a health saint, to pray for their live’s. Once they survive this pandemic pest which has victimized thousands of people, they assumed it has been a miracle conceived by the Saint [13]. So, when they...
returned to Lisbon, they brought the statue and built a church for it on a hilltop at Alcantra, Lisbon (1606) [13]. The “miracles” attributed to this saint became widely acknowledged and several people started to visit the church trying to find a cure for their diseases and a solution for their “needs” [18, 21]. This fact was responsible for the name attributed to the chapel – “Nossa Senhora das Necessidades” – “Our Lady of Needs” [14].

This sanctuary became so famous that D. Pedro de Castilho, counselor of the King D. João IV bought the land adjacent to the church that was often visited by the King [13, 14]. Since then this space was increasingly protected and developed by the royal family, however its great mentor was the King D. João V, whose ideas were outstanding and ahead of his time. Considered by many the “Sun King of Portugal”, he was the one that delineated the program, the design, and the concept of this entire landscape [5]. Both architecture and landscape were used as an affirmation of power connected with a religious concept. Being a baroque palace, the “Tapada das Necessidades” was constituted by a palace, a church, a convent, a garden and a piazza which was thought of as a unique piece. To develop this landscape D. João V required the help of the Engineer Custódio da Sá e Faria, to help design all the necessary plans [46]. The primary objective of the creation of the garden was the development of a space able to dignify “Nossa Senhora das Necessidades”. The application of this design concept allowed the creation of several different, but interconnected spaces as it is the case of multiple piazzas, parterres and “allees”, a lake, a topiary garden, a small farm and a woodland [5]. The garden was irregular, following a much elaborated design with several parterres de broderie and the small farm constituted a re-interpretation of the hortus conclusus from the medieval period [13, 14]. In the center of the garden one can find the lake (Figure 12), a central point not only for the garden but also to the circulation.

As it was usual in other baroque gardens the relationship with the palace was very strong. Although the conceptuality and the quality of the garden were evident since the beginning, the King D. Fernando II appointed the French gardener Bonnard [13] in order to improve it and create a unique landscape. The main objective was to transform the formal baroque structure of the garden into an English style park [13]. The way in which the king saw the landscape was the catalyst for this change. Conversely, this break from the baroque structure did not mean a change in the concept, but in the way of interpreting its relation with landscape.

The fact that D. Fernando II had a huge passion for nature associated with his will to collect different species enabled the introduction of several exotic ones [13]. In order to acclimatize some of them a greenhouse was constructed. The quality of this space, in part attributed to the close cooperation between the king and the gardener – contributed to turn Bonnard into one of the most famous gardeners of the country.

The religious concept had not hindered the gardener from developing an English garden considered the first of its kind in Portugal [4, 13]. The great vistas were highlighted as well as the views where statues and ornate flower pots (Figure 13) were carefully located. Walkways and trees were strategically placed in order to enhance the notion of perspective. As mentioned before, the introduction of several exotic species constituted an important factor in the overall process of change [4, 13].
4 Conclusions

As Burley notes “the importance of a concept is that it drives the design solution, creating an environment that is more than just a collection of unrelated shapes and forms” [11]. These seven projects illustrate the deployment of the concept to drive design details and site layout during a time when the "design concept" was not necessarily a "mainstay" of design. The seven projects illustrate that concepts were at times used before the 20th century.

All seven of the designs are highly experiential, meaning that the user must wander through the site before features are revealed; yet each design employs different concepts to guide the details of the design. These seven projects present just a few of the potentially infinite range of concepts that may be utilised in design.

References:


[38] Pimentel, D., Memórias do Bom Jesus do Monte e Roteiro e abreviada notícias de Braga. Coimbra, 1876.


