## Czech University of Life Sciences Prague Faculty of Environmental Sciences



# Analysis of the historic landscape of Valeč Castle Park and its broader context

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#### **Declaration**

I hereby declair that the work presented in this thesis is, to the best of my knowlede, original work, except as cited in the text. The reserch was completed under the direction of Elzabeth Brabec and Kristina Molnárová.

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## **DIPLOMA THESIS ASSIGNMENT**

Sluter Sage

Thesis title

Analysis of the historic landscape of Valec Castle park and its broader context.

#### **Objectives of thesis**

This research aims to analyze the available documentary data and uses conventional and innovative site-imaging to develop an understanding of the baroque landscape construction of the Valec palace grounds its positioning in the broader landscape context. The outcome will be a series of maps and accompanying text that illustrate and define the baroque axial development of the landscape.

#### Methodology

Using primary and secondary historical documents, the student will develop a preliminary concept of the historic layout of the site in the Baroque period. This concept will be verified by physical site analysis and the aaplication of LIDAR data and conventional satellite imaging. The development of teh site will be comapred to analogical case studies of a similar design style and period .

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cultural landscape, baroque landscape, Valeč, baroque landscape axes

#### **Recommended information sources**

Pregill, P., Volkmann, N. 1999. Landscapes in History: Design and Planning in the Eastern and Western Traditions. 844 pp, Wiley and Sons, New York, USA.

Schama, S. 1995. Landscape and Memory. 624 pp, HarperCollins, London, UK.

Williamson, T. 2003. Shaping Medieval Landscapes - Settlement, Society, Environment. 214pp, Windgather press, UK. Longstreth, R.(ed.). 2008. Cultural Landscapes, Balancing Nature and Heritage in Preservation Practice. 218 pp., University of Minessota Press, USA.

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#### ABSTRACT:

The first step in the future development and management of a site is the interpretation and analysis of the cultural landscape produced by the actions of successive generations. This research focuses largely on the baroque landscape layer, produced between, approximately, 1695-1733. The research is looking for the layers of the cultural landscape of Valeč, particularly the baroque connections made with the natural and man-made landscape. Primary as well as secondary sources were also utilized in this research. Primary sources used were; current maps, historical maps, Lidar mapping, and site visits. ArcGIS and Google Earth were used in the projection of the maps, particularly to explore the Lidar data. Valeč Castle Park was also analyzed with comparisons to other landscapes, including; Lednice-Valtice Estate, and Kuks Hospital in the Czech Republic; the park at Schonbrunn Palace, Vienna; Villa Aldobrandini, Villa Torlonia, Villa Lante, Villa d'Este, Boboli Gardens in Italy; and Bergpark Wilemshohe in Germany. The results of this study have shown that Valeč has significant broader landscape connections, particularly the connections of cultural, religious, natural and astrological events along the major axes of the castle park site and the broader baroque landscape.

#### **KEYWORDS:**

Cultural Landscape, Baroque Landscape, Valeč, Baroque landscape axes

#### ABSTRAKT:

Kulturní krajina zámku Valeč a jeho okolí je důležitým dědictvím předchozích generací. První krok k budoucímu rozvoji a managementu území je jeho interpretace a analýza. Tato práce se především zaměřuje na krajinné vrstvy vzniklé mezi lety 1695-1733. Práce hledá krajinné vrstvy kulturní krajiny, kde se barokní krajina napojuje na přírodní a antropogenní krajinu. Pro krajinou analýzu byly použity primární i sekundární zdroje. Primární zdroje tvoří: současné mapy, historické mapy, Lidar a terénní průzkum. Pro prezentaci vztahů v krajině byl použit program ArcGIS spolu s online aplikací Google Earth. Zámecký park ve Valči byl rovněž porovnán s historicky podobnými areály, zejména s Lednicko-valtickým areálem a zámkem Kuks v České republice, dále se zahraničními areály: parkem Schönbrunn ve Vídni, Vilou Aldobrandini, Vilou Torlonia, Vilou Lante, Vilou d'Este a zahradou Boboli v Itálii a rovněž s Bergparkem Wilhemshöhe v Německu. Výsledky této práce ukázaly, že zámecký areál ve Valči je součástí širších krajinných vztahů, zejména ve vztahu ke kulturním, náboženským, přírodním a astrologickým událostem. Tyto vztahy jsou vyjádřeny hlavními osami, které vedou zámeckým parkem, a které jsou zároveň nedílnou součástí širší barokní krajiny.

#### KLÍČOVÁ SLOVA:

Kulturní krajina, Barokní krajina, Valeč, Barokní krajinné osy

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#### 1. INTRODUCTION

The main interest of Valeč Castle Park is its baroque landscape: a large scale of interconnected planned landscape that emphasizes long distance views, connections to distant landscapes as well as to the equinox and solstice. Currently Valeč is being preserved in the English landscape reconstruction; unfortunately, much of the Baroque elements are being neglected or not recognized in the current landscapes' interpretation. Interpreting this landscape and uncovering the layers that made it what it is today was a unique challenge because no site plan from the baroque period seems to have survived to this age. The population in this area of the Czech Republic was decimated after WWII when 90 percent of the native German-speaking residents were exiled under the Beneš Decree (Thum 2009). The generations of people who had a relation to this land are gone. The consequence of this on the landscape memory is yet to be fully understood.

To a great extent, the wealth of historic and natural landscape wonders of the Czech Republic have not been published outside of the country and Czech language publications. Major Western textbooks on landscape architecture and history do not include the significant establishments of Eastern and Central Europe, even though they hold UNESCO recognition; subsequently, the cultural landscapes in the country remain an uncharted territory to the international community. This thesis deals with the landscape in the area of and surrounding Valeč. The palace and landscape of Valeč a cultural landscape that has significant connections to its context in the natural world.

Several methods, including primary and secondary sources, were used to interpret the landscape of Valeč. The remnants of the designed garden in the current landscape and the historical maps were the primary sources utilized. Secondary sources includes a Ph.D. Dissertation by Pechová (2004) and several archeological reports. To augment that, various other elements were used to distinguish the Baroque features. The importance of analyzing and describing Valec's landscape is eloquently stated by Trpáková (2010);

"These traces left in specific places in the landscape, old maps and written records can be considered as sources of written or drawn landscape memory. They provide tangible evidence of landscape management in a given space and time, in the conditions of a specific socio-cultural metabolism. The extent of human memory, as we perceive it today, does not exceed the lifetime of an individual, and these maps and written sources are objective sources of information on the development of the landscape and therefore also of the culture of the given society" (Trpáková 2010)

It is the goal of this research, therefore, to understand the culture of the Valeč Castle Park and its surrounding landscape. What is the landscape memory that is left, and how should we interpret it?

#### 1.1 AIMS OF THE RESEARCH

Considering all the information briefed in the introduction, significant questions need to be answered concerning Valeč.

- How can the layers of a cultural landscape be identified when there is little documentation?
- What findings can be made with the information that is found, particularly from site analysis?

This research investigates the analysis of the cultural landscape of Valeč --specifically its baroque period (1695-1733). The literature review looks into elements of garden and landscape design, (all capped as a title for the field or none capped) and how they changed throughout the history of development of the site. Several case studies on specific gardens were explored, and newer research methods were used in historical landscape exploration.

#### 2. LITERATURE REVIEW

In this literature review, the interconnected elements that draw the research of Valeč together are brought to form a solid foundation and justification for the work. Initially it is important to illustrate why we interpret the landscape anyway? Where does site analysis fit in with the larger context? The history of land development in this region is then explored to place the estate of Valeč in time and space. A deeper look at Baroque elements is taken because preliminary research and observation indicated that these elements to be significant within the scale of not only the region, but also within the Czech Republic, and perhaps even landscapes in the Italian baroque style in the world. The review also includes a section on how more recent history has affected cultural landscapes, including the political influences after WWII and during the Communism Period of the country. Finally, the analysis looks into the various methods of collecting data on other historical sites. A wealth of research on landscape change, historical mapping and Lidar (light-radar) greatly aided the development of the Landscape Archaeology field, and this research.

#### 2.1 IMPORTANCE OF LANDSCAPE INTERPRETATION:

Landscape interpretation and analysis encompass the necessary steps to take in order to fully understand a landscape and site. Landscape analysis is the foundation of planning; it is a part of the fundamental process in order to plan for future development. Landscape and ecological planning directs or manages the land so that human actions are in sync with nature and environment. (Zaucer & Golobic 2010)) One of the main branches of sustainable planning is Culture (Zaucer & Golobic 2010). With the growing concerns for the environment and resource depletion, a greater push for regulations to support sustainability is advanced by concerned groups and organizations, including the Natura 2000 network, the Water Framework Directive (WFD), Strategic Environmental Assessment (SEA), among

others. Effective landscape and spatial planning can greatly aid in accomplishing these directives (Murat Ozyavuz 2013).

Murat Ozyavuz (2013) outlined the importance of the inventory and analysis of the landscape. His list of factors includes: terrain analysis, slope, aspect, climate analysis, geology, geomorphological analysis, hydrological analysis, soils, vegetation, fauna, and an analysis of socio-cultural resources (Özyavuz 2013). All of these elements are significant to understand in order to plan for the future landscape; furthermore, each one of these elements is somehow shaped by the history of the site. Also, in present research, a strong movement is evolving to monitor landscape changes in history and to apply the results to forecasts future landscapes, particularly when considering climate change (Trpáková 2010).

This thesis is a process of documenting an existing environmental situation that has been for centuries an esteemed part of architectural education. Documentation was valued as a necessary element in the notebooks and sketches from many designers and authors, including Vitruvius, Villard d'Honnecourt, Leonardo Da Vinci, and Le Corbusier (Warden & Woodcock 2005). The value of documentation was clear while the tools for documentation remained manual (Warden & Woodcock 2005). Today the documentation and protection of the historical or cultural landscapes has been defined by the UNESCO World Heritage Center, particularly after the Convention of 1992. During that convention, a group of experts from all over the world gave attention to the necessity of recondition to the value which landscapes hold within their features. Particularly the elements belonging to the original peoples of the region; therefore, these elements should help to define the promotion and protection of the cultural and biological diversity within the landscapes (Rössler 2002).

Cultural landscapes provide the basis for a genetic pool for the crops of tomorrow's world. They are the basis of the culture, identity and beliefs of the people who live within them. - Rössler 2002

Fowler (2002), in reviewing the last 10 years of the World Heritage Centers Cultural Landscape List, identified a necessity to review the landscapes, cultures and religions represented in the list. Fowler asked what should be protected, and weather it is representative of the true diversity of the world? UNESCO's creation of a worldwide community of cultural landscape protection placed it in a leadership role; therefore, it is important that further research be conducted on all cultural landscapes, particularly these areas where landscapes haven't been represented previously (Fowler 2002). Currently, UNESCO World Heritage list does not list any landscape in the Czech Republic, formerly annexed by Germany during WWII (UNESCO 2014).

Cultural landscapes, however, are not just a set of features, as Longstreet (2008) outlines, "Irrespective of such misunderstandings, many preservationists tend to view cultural landscapes as simply comprising physical entities -- comparable to historic districts, for instance -- instead of also as a *method* of

considering, analyzing and evaluating places" (Longstreth 2008). This method is the science behind cultural landscapes, a discipline that is often overlooked.

Cultural landscapes are made up of both natural and manmade elements that, in order to be fully understood must be studied in their whole composition, in the context of the changes over time. Longstreth (2008) defined that many relationships can be found between elements that may be harmonious or desperate or even conflicting. A cultural landscape may even be or contain an unaltered natural setting, but it is still a cultural landscape as it was made significant for humans (Longstreth 2008). An analysis of a cultural landscape can offer suggestions for cautionary decisions in conservation, but it also can act as an inspiration for well-known places to be seen in an entirely different perspective (Longstreth 2008).

In order to fully understand the development of Valeč, the literature review will give a brief recall of the landscape history to help define the landscape culture of the region, including the settlement of the Later Middle Ages to the last major reconstruction of the palace.

## 2.2 MEDIEVAL LANDSCAPES AND THE SETTLEMENT OF THE MOUNTAINOUS REGION OF THE CZECH REPUBLIC

The Czech Republic was settled sometime in the early first century, not only from the south, from the influence of the Holy Roman Empire, but also the east, with the Vandels, Huns and Visigoths moving across Europe (Pregill & Volkman 1999). Many of the early settlements, so-called Inner Colonization (Gojda 2000), were ecclesiastical in nature, inspiring development in areas that would not previously been developed, but were so by using spiritual enticements.(Pregill & Volkman 1999a). Most of the higher elevations in the Czech Republic however, were not developed until the 13th-15th Century AD (Gojda 2000) which is the Later Middle Ages. The forested hillsides became farmed, and the opened landscape was visibly occupied. This time is known as the Great Development, or Outer-Colonization (Gojda 2000). It was a time of peace, and the favorable living conditions within the social structure allowed ideas to be shared across borders by a growing population (Pregill & Volkman 1999). The mixing of cultures and the economic changes were reflected in the landscape development (Sádlo et al. 2005). Part of this reflection was the summoning of German Colonists by the early Czech kings to colonize the hill countries with technologies needed to accomplish the farming and lifestyle necessary for this region to succeed (Molnárová 2008b). This was the final Great Settlement that laid the foundations of Europe's current civilization, and developed current cultural and settlement patterns (Gojda 2000). This settlement of German-speaking people in the Czech region had significant impact in the ethnic tensions it produced, particularly during more recent history such as the after effects of WWII.

It is also very important to understand the subtle differences in soils and climate that shaped the landscapes. As Williamson (2003) states, this is not only a defining element of the structure of the landscape, but also ultimately the structure of the societies, which occupied them:

"The character of fields and settlement patterns cannot be understood in isolation from the practice of farming, and that farming can only be understood in the context of the environment. The fact that any other approach is acceptable to historians merely highlights the extent to which modern urban, industrial society has become dangerously divorced from the realities of food production and the natural world" (199)

This connection to the natural world and the design and settlement of peoples and cultures is persistent throughout most of history.

The pattern of the rural medieval landscape of the Czech region is termed a pluzina landscape which is still visiable in much of the countryside in the Czech Republic and in the Valec region (Molnarova 2008a). The feudal farming method created long strips of agricultural land, sometimes terraced, with a strip of land, termed a messe, separating each plot.

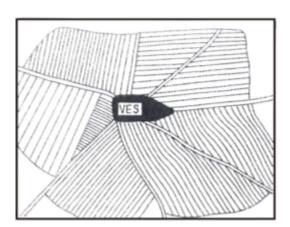


Fig. # 2.1 The sectional pluzina that is common for the old settlement area, founded during the Great Settlement. (Navrátil 1986, in Molnárová 2008a).

Garden designs of this period represented small and enclosed gardens. Inward looking, they are filled with Christian iconography (Pregill & Volkman 1999). Their purpose was to shut out the imperfect world around them to create a Garden of Eden, *hortus conclusus*, within their boundaries (Pregill & Volkman 1999). This can be seen as a reflection of the period when people were afraid of attack, and security was found in the development of walls and fortresses (Pregill & Volkman 1999).

#### 2.3 RENAISSANCE- MAJOR IMPACTS AND DESIGN FEATURES

The Renaissance period in the Czech lands occurred approximately between 1500 and 1620; the rural development in this time was an extension on the pattern started in the Middle Ages (Löw & Míchal 2003) with an addition of many fish ponds and artificial lakes (Lipský 2000). A newfound freedom in the

Czech lands, that ended with the calamity of the Thirty Years' War (1620-1648), resulted in a 43 percent decrease in population (Löw & Míchal 2003). At that time villages were abandoned or largely decreased, and agricultural land was abandoned with the resulting re-emergence of forests (Molnárová 2008b).

The transition from Medieval to Renaissance was a shift from Feudalism to Capitalism. The changes in the economy at this time led to the rise of wealthy individuals who could display their wealth with the creation of idealized landscapes (Pregill & Volkman 1999). The period was also influenced by the lessening in the dominance of the church in people's ideologies. At that time, people started to look for other sources of inspiration, including the classics, i.e. Rome, and later with the development of science (Pregill & Volkman 1999). Estate design laid by Alberti and others focused on simple geometry, seen as inherently perfect and, thus, the way designers would express creativity in the landscape (Pregill & Volkman 1999). Linear perspective and articulating the horizontal view was important to Renaissance designers who moved away from the rigid symmetry and vertical emphasis on design during the Medieval Period (Pregill & Volkman 1999).

The rural estate landscape originally functioned as a *farroria* or productive farm (Pregill & Volkman 1999). During the Renaissance, these were transformed into villas where the wealthy could escape the city bustle to experience the link between nature and urban geometry for intellectual conversation or individual contemplation (Pregill & Volkman 1999); therefore, these gardens were very important icons of the humanist reason and order of the time (Pregill & Volkman 1999).

Understanding the Renaissance garden can be accomplished by looking at the drawings and plans of the Renaissance gardens, but also distinctive features can be noted by looking directly at the important guides of the time. For example, it was very significant for the Italian Renaissance Gardens to be located on a hillside.

"The construction will give pleasure to the visitor if, when they leave the city, they see the villa in all its charm, as if to seduce and welcome the new arrivals. Toward this end, I would place it on a slightly elevated place. I would also have the road climb so gently that it fools those who take it to the point that they do not realize how high they have climbed until they discover the countryside below." [In the interior the garden] "...You should place porticos for giving shade, planters where vines can climb, placed on marble columns; vases and amusing statues, provided they are not obscene. You should also have rare plants... Trees should be aligned and arranged evenly, each tree aligned with its neighbors" (Alberti 2004).

Some famous Italian Renaissance Gardens include Villa Lante, Villa d'Este, and Boboli gardens, further discussed in section 2.7. Renaissance Gardens were the baseline of much of the form for the later Baroque Period. Manny of the gardens of this time were later transformed into the Baroque style, or given Baroque elements.

#### 2.4 BAROQUE LANDSCAPES

The Baroque style, like the Renaissance, originated out of Italy (Pregill & Volkman 1999). Building on the concepts of the Italian Renaissance, the new concepts were characterized by their sheer grandeur of display; everything was magnified and enlarged; long wide connections were made throughout the landscape (Pregill & Volkman 1999). The term Baroque originated from a Portuguese word that described an imperfect pearl: "barrueco" (Conan 2005). That word eventually evolved in English and French metaphorically to describe a strange manner of speech (Conan 2005). When it was used to describe architecture in 1788, it labeled design as looking for the bazar and achieving the ridiculous (Conan 2005). The most renowned comparison of the Renaissance to the Baroque arts was accomplished by Henri Wolffin (Conan 2005). He stated that the Renaissance focused an "ideal clarity of expression with line, surface, closed form, and a unity within the hierarchical arrangement" (Wölfflin & Hottinger 1932 In Conan 2005). Baroque arts had advantaged color, and an open arrangement, with a dynamic integration between composition clarity of expression (Conan 2005). The differences, however, between the two arts should be seen as tensions, and not as exclusive patterns (Wölfflin & Hottinger 1932; Conan 2005); therefore, the difference between Baroque and Renaissance gardens should not be a solid line categorizing between one form and another, but rather as an influence of the two periods that helped to create the composition.

When the Baroque style reached France, also known as the French Formal, it hit its peak (Pregill & Volkman 1999). The wealth of the elite class and the possibility to extend the landscape to infinity made the Baroque ideal possible (Pregill & Volkman 1999). The Italian influence in gardens starts to lose its strength at this period as people are moving further away from church ideology; the strong presence of the Church in Italy begins to hinder further creative development influenced by the new scientific ideals (Pregill & Volkman 1999). The Italian Baroque seems to therefore have less research and emphasis than French Baroque or French Formal in landscape history analysis.

In some instances the design of the Baroque garden, particularly of French Baroque and Versailles in particular, are subordinate to the house (Conan 2005). The design is intended to be interpreted from the second or third story windows (Conan 2005). From here the long axis and organization can be seen, and the reach to infinity with the broader landscape is evident (Pregill & Volkman 1999). This is not true, however, for all gardens, where the major axes and garden features are separate from the house, making the garden, for the first time an independent element and significant on its own accord (Pregill & Volkman 1999). This was seen as an imitation of nature, taking examples from any leaf tree or creature, and how they were arranged symmetrically these gardens always followed the rules of symmetry, (Conan 2005). Also, quite unanimously, was the inclusion of the "goosefoot" that can be described as three pathways or axis coming together at an acute angle (Pregill & Volkman 1999).

The Baroque Period in the Czech Republic occurred after the Thirty Years War (1618–1648) (Molnárová 2008a). After the war, the Catholic Habsburgs prohibited

all other religions which was reflected in the baroque architecture; it was used by Catholics in the Counter-Reformation (Varriano 1986). This Baroque influence, a display of grandeur and power, was meant to persuade the villagers to Catholicism. The impressive structures were intended to create strong ideologies within the people towards the religion. Much of this development is still visible in the landscape today, with Baroque chapels, crosses, churches, alleys and solitary trees in places of worship. (Molnárová 2008a). During the reigns of Maria Theresa and her son Joseph II, Holy Roman Emperor and co-regent from 1765, development was characterized by Enlightened Absolutism (Carsten 1979). Maria Teresa and Joseph instituted reforms that allowed the Bohemian region to prosper including: eliminating the repressive features of the Counter-Reformation, and an education reform that moved the emphasis from the theoretical to scientific (Crankshaw 1986). This permitted Secular Social Progress (Crankshaw 1986).

That time period is unique when speaking about sustainability. Some argue that it demonstrates how humanity can live in harmony with nature, an equilibrium where the benefit for man is maximized without the destruction of the environment (Löw and Míchal, 2003). In the Czech Republic it is a time looked at as a symbol of useful beauty, an ideal state of the landscape; (Löw and Míchal, 2003) however, not everyone agrees with this statement. Sádlo et al. (2005) state that it is too abstruse of a claim, and a misunderstanding of the historical events that happened. This statement about the Baroque Period is particularly significant in studies seeking sustainability. Currently, a strong trend is emerging to monitor landscape changes in history and to apply the results in models and forecasts for future landscapes, especially in connection with climate change (Trpáková 2010). The significance of the Baroque landscape in Valeč calls for a deeper look into this section of landscape history; therefore there are case studies on Baroque landscapes in Section 2.3 of the literature review.

#### 2.5 ENGLISH LANDSCAPE AND NEOCLASSICAL

The English landscape style started in England in the early 1730's (Jacques 1993). It was claimed to be a complete break of the formal garden beginning with William Kent (Jacques 1993). The inspiration for the new style originated from poetry, painting, theatre, nature, Renaissance and Baroque gardens in decay, sublime and romantic sources of imagery were used to compose images in the garden rather than a geomorphic form of the previous periods (Jacques 1993). England is at the forefront of this period of history because of two events: the worship of nature and the ownership of property (Pregill & Volkman 1999). Without formal religion, a growth of scientific inquiry influenced the arts to be composed from the senses rather than from reason (Pregill & Volkman 1999). Images of the pastoral scenes became popular, and landscapes began to be designed around composed images that were romantic in nature, beautiful sweeping landscapes with elements of past history, and water (Pregill & Volkman 1999). During this time, landscapes like Stowe and others were drastically redesigned to resemble the ideal county landscape Volkman 1999). Water emerged as a major element, and vast land works were

implemented to make ponds, follies, replica ruins and various other elements were added to compose the views. Many Baroque and formal estate gardens were redesigned to this form; and often the single element preserved was the long views out to the landscape.

This period of gardening has largely been compared to the style of the Chinese taste for irregular layout. William Chambers was a proponent of the idea that the Chinese had already accomplished what for the English were aspirating. (Jacques 1993). Horace Walpole, Thomas Gray and William Mason made it their mission to ensure the English were acknowledged for the invention of the style (Jacques 1993). Walpole's well-known Essay on Modern Gardening was written to emphasize the intention of imitating Nature, and to support Kent as the founder of the style (Jacques 1993). He also rejected the regular French gardens and said that the irregular Chinese ones were unnatural (Jacques 1993); nevertheless, Europeans were very interested in the culture and style of China. Mainly because of the presence of Jesuit missions there, the English did not omit from this trend (Pregill & Volkman 1999). The available information coming from China was small. For gardens, only Sir William Temple's secondhand account of Chinese gardens was available (Jacques 1993). In the end, however, the idea that the Chinese gardens were precedent to English was firmly established (Jacques 1993).

The fashion for the landscape garden had passed its peak by the mid 1770's (Jacques 1993). After that time, various antiquarians were reminiscing of the terraces and earthworks of the earlier period (Jacques 1993); consequently, designers like Brown would be seen as destroyers, and their reputations suffered (Jacques 1993). In the nineteenth century, gardens were predominantly horticulture in nature (Pregill & Volkman 1999). The reputation of the English style reached its lowest point in the 1890's (Jacques 1993). People like Reginald Bloomfield wanted to restore architectural organization into gardens (Jacques 1993). The status of the English garden was threatened until the 1930's; nowadays it is widely believed that William Kent's work formed a revolution in gardening style. (Jacques 1993)

The Industrial Revolution (1814-1914) had little impact on the rural landscape in the Czech Republic (Molnárová 2008a). The large farming equipment that changed the landscape in other parts of the world was not available in rural Czech lands. The major changes occurred after the Second World War (Löw & Míchal 2003).

## 2.6 MAINTENANCE OF HISTORICAL LANDSCAPES PARTICULARLY AFTER WORLD WAR II

Part of Valeč's unique landscape interpretation is involved with the most recent history associated with the Beneš Decree. The last owners of the palace and most of the people who were in the village were exiled due to the fact that they were German speaking (Zimek 1996). This resulted in much of the history becoming lost. Valeč, along with many parts of this region are struggling with

how to overcome this loss of the connection with the history and meaning od the landscape. To assess the current state of the landscape and understand how to plan for its long-term development, it is necessary to know its history and what are the prevailing traces of its memory (Trpáková 2010). Special attention should be given to landscapes where most of the landscape memory has been lost (Trpáková 2010). In the Czech lands, a second wave of landscape displacement occurred. During communism large cooperative farms, resulting in a large loss of the Pluzina landscape, were created and many people were displaced from the landscape yet again (Molnárová 2008a).

In other parts of the world, the period after WWII was a time of notable social advance in the concern for the world's cultural heritage, with allied efforts to organize incentives and global agencies to protect it (Taylor & Lennon 2011). With the establishment of in the Venice Charter in 1964, heritage was seen to reside largely as a physical entity in remarkable monuments and sites – mostly being derived from the Classical Period as great works of art (Taylor & Lennon 2011). The UNESCO World Heritage Convention of 1972 firmly placed cultural heritage (and natural heritage) conservation on the world stage (Taylor & Lennon 2011).

The wide scope of study necessary to encompasses cultural landscapes makes their very essence highly multidisciplinary. For their protection, various elements have to work together, including: land use regulations and regional planning, nature preservation, historic, archaeological, architectural, garden and park sites management (Hendrych et al. 2009). Each of these typologies has itsown slightly different agendum, making the whole process highly political. Manny shared aims exist, alongside passionate conflicts; therefore, as stated by the Silva Tarouca Research Institute;

"Just as a cultural landscape is shaped through the layering of structures from different eras, the preservation and conservation of a cultural landscape is the product of different interests, which should be brought into harmony. " (Hendrych et al. 2009)

It is initially an overwhelming task to see and interpret all the layers involved in the landscape. Although this research considered many layers, the baroque is the focus.

#### 2.7 CASE STUDIES ON BAROQUE LANDSCAPES

The best way to understand Baroque and historical landscapes in general is to look directly at the landscapes that are still intact and decipher their elements and qualities. For that purpose, several sites are researched here, including sites within and outside of the Czech Republic. All of the sites examined had Baroque influences. Later in this thesis, several of these sites serve as comparison to Valeč (see section 5.2). As part of the methodology, these comparisions help to illustrate the importance of Valec, and to rationalize the elements found.

#### 2.7.1 THE CITY OF OLOMOUC, CZECH REPUBLIC

The city of Olomouc was included in the UNESCO world heritage list for its Holy Trinity Column (ICOMOS 1999). Olomouc was a very significant city during the Baroque period, so much that it earned the informal title, "The Baroque Metropolis of Morivia" (Jakubec 2011). Most of its wealth was obtained by the promotion of the cathedral, the seat of an archbishop (Jakubec 2011). The city turned into an ecclesiastical metropolis, and the local baroque emanated out of the Church culture (Jakubec 2011). Today the city contains several preserved buildings of the Baroque Period, including the Early Baroque, from the North-Italian regions; the Danube-style High Baroque; and the Later Baroque influenced by French architecture (Jakubec 2011). The city's patrons had a complicated web of contacts, and cultural and artistic connections; these led to the development of a unique baroque metropolis (Jakubec 2011); therefore, the Olonamac owes its grandeur to the Baroque Period. This time era still dominates the city heritage.

Hronova (2012)completed a study on Brno's and Olnamac's Baroque landscapes; she analyzed the structures related to the landscape architecture from the baroque and classical times to the era of the pseudo-historical style, from the end of the 17th century to the end of the 19th century. Using detailed historical maps and plans, the research focused on landscape architecture in smaller or larger scale, and how their development occurred. She offered a for definition the

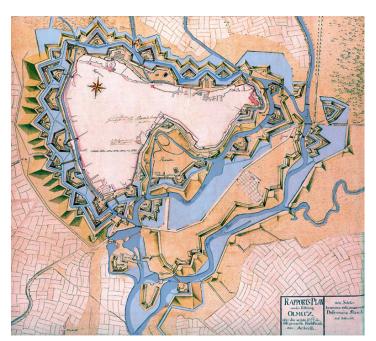


Figure 2.7.1 Historical map of Olomouc fortress (Czech Republic) in 1757. Public domain, retrieved from (http://www.pevnosti.cz/img/pevnosti231.jpg.)

"evolution types' found that were specific for central European cities in general and can be found in some kind of variation in other cities and towns of the region (Hronová 2012). The main focus related to the fortification of these two cities and how the landscape and a green architecture related to it. In this landscape, a baroque urbanism was implemented and still remains. This landscaping, that is a result of the Baroque culture studied, has been preserved on the pilgrimage route between the city, the Hradisko Premonstratensian Monastery and the church on the Svatý Kopeček (Hronová 2012). The analysis of the gardens revealed that the main elements were formal, with axes leading to related buildings (residential house, monastery, etc.) Better identified is the

Baroque Renaissance Fortification of the time (see figure 2.7.1). The historical map of the Olomouc Fortress shows a star-shaped city (Giedion 1967). This fortification came from the influence on the patterning of the Renaissance ideal city: "The Renaissance was hypnotized by one city type which for a century and a half—from Filarete to Scamozzi—was impressed upon all utopian schemes: the star-shaped city" (Giedion 1967).

From Olomouc, the artistic style of the Baroque Period is very nicely preserved. The statuary, particularly the Holy Trinity Column, features the grandeur and religious iconography of the period. The Trinity Column is a part of a complex of monuments including a second Marian column and six Baroque fountains, that illustrates the comprehensive solution of inner city planning using monuments idealizing the Baroque Period (ICOMOS 1999). This construction outlines a unique combination of values crucial to the Baroque Period; first, the purely artistic values that are determined as intellectual trends of the time, and, secondly, the alliance of mythological and spiritual decoration with the municipal body (ICOMOS 1999). In this respect, the complex of the Holy Trinity Column and the other Olomouc Baroque structures resonates with the ideal form of the Baroque thought of the period (ICOMOS 1999).

#### 2.7.2 THE LEDNICE-VALTICE ESTATE, CZECH REPUBLIC

The Lednice-Valtice Estate is probably the most well-known Baroque landscape in the Czech Republic. Located in the southeast region of Moravia, it has been a world heritage UNESCO site since 2006 (UNESCO 2014). The connections made across the landscape to several palaces and manors peaked at the end of the 18th century (Krejčiřík et al. 2012). The Extent of this landscape covers 161 km<sup>2</sup> across three towns, Lednice (Eisgrub), Valtice (Feldsberg), and Břeclav (Lundenburg) (Krejčiřík et al. 2012). The site is one of the largest constructed lansdcapes in Europe; and through its development, it created new ways of desiging the land (Krejčiřík et al. 2012). One example of this is the garden of Rousham where its form, "jumped over the hedge," meaning that the design eased the borders from the garden to the outer landscape (Krejčiřík et al. 2012). This baroque ideal, connecting the landscape to the outer environment, is significant to most major estate developments. The natural setting of the estate is comparable to localities in Northern Italy, and inspired its Baroque development. As previously mentioned, Italy was the guiding principle for the supreme landscape at the time for aristocrats (Krejčiřík et al. 2012). The design connected their estates with long axis, with alleys of tress being a major connecting element.

The great development and the gaining of wealth of the families is largely due to the ruling family, the Liechtensteins, who assimilated to the Hapsburgs' Religion of Catholicism, regardless of the majority of Protestants in the region. (Krejčiřík et al. 2012). This action greatly influenced their political power; between 1606 to 1638, the family acquired the full land unification of the Lednice-Valtice estate (Krejčiřík et al. 2012). The major Baroque design happened with Domenico Martinelli and Domenico Egidio Rossi, particularly after 1690 with

influence from the Vienna Residences and Italian academies (Krejčiřík et al. 2012). The site plans available reveals that this is the strongest evidence in the Czech Republic for large-scale interconnected landscapes implemented here; however, Kuks also has long connections in the broader landscape.

#### 2.7.3 KUKS AND BETLÉM

Included on the tentative list for being a UNESCO World Heritage Site, Kuks and Betlém is another Baroque construction in the Czech Republic (UNESCO 2014). This is largely attributed to the enlightened thinking of the Count František Antonín Špork (1662–1738) who was able to materialize his ideas to create the remarkable landscape along the Elbe River (Ministry of Culture Prague 2001). Voise (1980) describes the enlightenment thinking of the period, "In this period of change, nearly every opportunity was seized to saturate man's life with didactic elements at every possible moment. At the weekends the inhabitants of Prague can view the splendid. This is Kuks, a palace situated 110 kilometers east of the capital. It gives us much to think about."

The Kuks Hospital was originally built for the purpose of health and retreat (Voise 1980). Directly across from the hospital was built a large spa where the waters from the springs were certified for giving healing properties (Voise 1980). Across the landscape Bethlehem, a series of statues completed by Czech Baroque sculptors within the workshop of Matthias Bernhard Braun were displayed. (Rusnak & Yahner 2007). The uniqueness of this landscape is located within the hills where the statues are placed as part of a larger landscape composition that makes up the Baroque landscape of Kuks. In this region, the landscape reveals the foundation of a chapel with axel connections to a graveyard and to the site of Bethlehem. The statue scenes include several hermitages which were originally meant to be Stations of the Cross. The larger than life statues were completed by the iconic Baroque sculptor between 1723 and 1732 (Ministry of Culture Prague 2001). This is a late timeframe for the Baroque Period that is somewhat reprehensive represented in the historic documents (Rusnak & Yahner 2007). Although the general composition outlines the long axial connections in the landscape there, the design is a direct attention to the composition of the view, a typical English Landscape characteristic.

The Department of cultural landscape and sites of the Silva Tarouca Research Institute completed a comprehensive study that outlined these connections and lines in the landscape. They used historic documents, including the first military mapping as proof for the allees of trees connecting the landscape (Ministry of Culture Prague 2001). Although there was evidence of significant compositional features, they had no overarching plan. (Ministry of Culture Prague 2001). The methods used to decipher the landscape were their own tested axial system and analysis of the current condition of the landscape. One of the unique features they saw in Kuks was the use of the natural landscape, i.e., peaks of hills and allees, of trees to bring the composition together (Ministry of Culture Prague 2001). This report was the first of its kind in the Czech Republic to document a cultural landscape in all its complexity,

including questions of maintenance and planning strategies. (Ministry of Culture Prague 2001)

#### 2.7.4 THE PARK AT SCHÖNBRUNN PALACE, VIENNA AUSTRIA

One of the best preserved baroque gardens in the world is at Schönbrunn Palace in Vienna Austria, inscribed on the World Cultural Heritage List since 1997 (UNESCO 2014). Originally the land was the medieval site of a monastery; the structuring of the land began in 1569 with the ownership transferring to the Emperor who had a fondness for hunting; consequently, the grounds became hunting grounds (Iby & Kidd 2010). The development of the garden and broader landscape happened in the Later Baroque Period and began with Jean Trehet, a pupil of Andre Le Notre in 1695; however, most of the construction occurring under the ownership of Maria Teresa in 1743-1763 (Iby & Kidd 2010). At that time, the design was influenced much more by the French Baroque or French Formal, despite the location being closer to the Italian Baroque. The Garden extends past its borders and incorporates monuments or buildings on axis in the wider city along with the baroque ideals; however, it does not include some of the influences found in landscapes that were designed in the Italian Renaissance. Although significant pools are included in the garden, no cascades are created even where the topography would favor it.

Planned during the Baroque time as a Belvedere, and finally realized during the early neo-classical in 1775 (Iby & Kidd 2010), the design of the garden is directly on axis with a Glorette, this structure is the crown of the garden. It is located at the end of the wide axis originating from the center of the palace to the apex of the hill. The Great Parterre is strictly symmetrical behind the palace; this large space terminates at the fountain of Neptune where the hill and crown of the garden looms behind it (Iby & Kidd 2010). The garden is also comprised of large clipped trees and zigzagging pathways. Numerous monuments and statues representing the classics, particularly Roman Mythology line the pathways and adorn the buildings (Iby & Kidd 2010). The garden is at such a scale that to see all of it would take an entire day of wandering through its corridors. The outskirts of the garden include some meandering, non-axial pathways representative of the English landscape; however, they are minimal to the composition.

Overall the Park of Schönbrunn Palace is a display of wealth and power, much like other gardens of this time period. Along the French Baroque ideals, the garden and landscape surrounding the palace was intended to be seen as an extension of the interiors of the palace.

#### 2.7.5 BERGPARK WILHELMSHÖHE, KASSEL, GERMANY

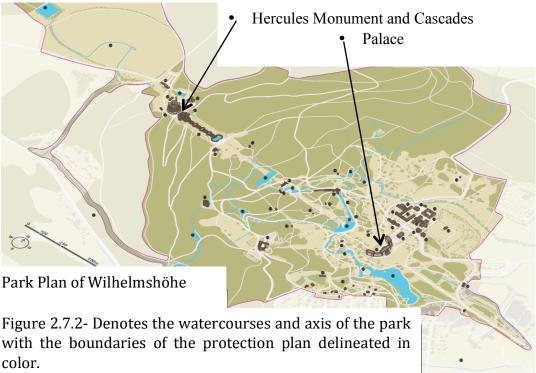
Bergpark Wilhelmshöhe in Kassel, Germany, is a Baroque landscape recently added to the UNESCO World Heritage List greatly because of its water features and impressive water theater (UNESCO 2014). The immense cascade was built on axis from the palace of Weißenstein, built in 1606 on the site of an

abandoned monastery (Weib & Hessisches Ministrium 2011). Landgrave Carl saw the potential of the site as early as the 1680s. The Habichtswald foothills, a ridge about 500 meters high with a flattened top, are in perfect axial alignment with the palace (Figure 2.7.2), it is (Weib & Hessisches Ministrium 2011). The plateau had a concealed back that, combined with a steep slope, created the ideal environment for an invisible water catchment area; therefore, the water would begin at the top of the hill and seemingly flow out from nowhere (Weib & Hessisches Ministrium 2011). Carl was inspired by his 1699-1700 tour of Italy, from where he brought back numerous ideas from the gardens he visited, such as the Villa Aldobrandini and others (Weib & Hessisches Ministrium 2011). The development of this monument and cascade would influence the planning of the city and crucial part of the layout in the estate (Url et al. 2013).

The water displays, throughout the garden developments, were an unchanging feature of this landscape. The Cascade is topped with a quite large Octagonal building, about 60 meters high, dedicated to Hercules. (Url et al. 2013). It is a unique element of the Baroque that, at this period, gardens and garden features are significant on their own accord. The planning had started on the structure with no practical use at all, designed for the sole purpose of a landmark, dominating the city, even before a new palace was being considered (Weib & Hessisches Ministrium 2011). The water from the cascades is now a network through numerous waterways, falls and striking structures as it travels down the hillside (Weib & Hessisches Ministrium 2011).

The chief aquifer for the system has a remarkable volume (Weib & Hessisches Ministrium 2011). A collection of springs able to feed the water network; the water is conducted from the source region of the Ahne Creek, through a ditch to the Sichelbach reservoir, and then on to the cascade (see figure 2.7.2) (Weib & Hessisches Ministrium 2011). The water emerges from the tunnels of the Zeche Herkules, and feeds the park's water displays (Weib & Hessisches Ministrium 2011).

The sitet has created axial connections through the plan. In addition to going straight to the palace, the main axis is also connected to the Orangery, that served as the Landgrave's Summer Residence (Weib & Hessisches Ministrium 2011). The use of the axis as an actual road was a fail-safe way to protect the visual connection between the two. It is a solid straight line, except for the final 500 meters of the five-kilometer connection; this final line could not be built strictly axially because the steep slope prevented it.(Weib & Hessisches Ministrium 2011). Major streets such as Goethestraße and Friedrich-Ebert-Straße were also oriented to the monument during the 19th century (Weib & Hessisches Ministrium 2011).



#### 2.7.6 BOBOLI GARDEN, FLORENCE ITALY

Boboli Garden was originally an estate known as Belvedere con Pitti (Filardi 2007). Its location kept within the medieval city walls, features a "hortus conclusus," or enclosed garden (Filardi 2007). The remnant landform of this enclosure, the theater, or "teatro," is still a part of the garden today. The garden was extended into a Renaissance style garden and estate known as Orto de Pitti (Filardi 2007). The gardens extent at that time was directly behind the palace, a mixture of formal gardens, orchards and lawn (Filardi 2007). The gardens were destroyed during the invasion of the Medici troops in 1530; afterward, the palace was upgraded and refortified (Filardi 2007). The estate was sold in 1549 to the Bobolis; shortly after, construction and improvements on the garden began. By the end of the 16th Century, the garden was a destination for experts looking for new ideas (Filardi 2007).

The extent of the garden as it is today was redesign from a 16<sup>th</sup> Century to a 17<sup>th</sup> Century garden (See figure Figure 2.7.3) (Filardi 2007). Construction began around 1610 was finished by 1652; the exact date of its completion is unknown (Filardi 2007). This development made the main axis of the garden independent to the house, a spatial arrangement normally attributed to the Baroque; however, the elements in the garden were initially of Renaissance design (Filardi 2007). The sculptures and planting arrangement were still in Renaissance fashion, and the large Baroque sculpture was added later (Filardi 2007). The major development of the Boboli Garden in Florence, Italy, is sometimes interpreted as a purely Renaissance Garden, when in fact it has strong spatial arrangement features that are Early Baroque. This point emphasizes that most gardens cannot be analyzed in one period solely because, most often, various influences are possible. Currently, the pathways represent an English landscape redevelopment, where the garden lost some of its strong geometry.

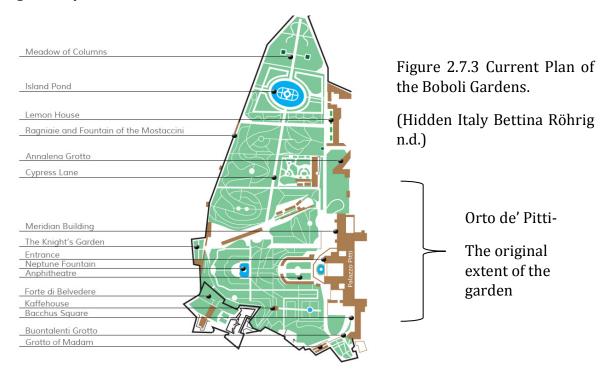




Figure 2.7.4 Francesco de' Cecchi Conti and Marco Credo Vogt, The Garden Seen from Porta Romaina, 1652. Florence, Biblioteca Marucellina. (from Filardi 2007, pg 94) The main axis of the Boboli Gardens, Cypress lane shows the wide and grand scale of a baroque nature after a redesign.

The Botanic Garden was an important element in the garden, not only for the rare exotic plants and edibles, but an herbal medicinal element to the garden existed as well (Filardi 2007). The gardener was ordered to frequently travel to the mountains and retrieve the medicinal plants of the region (Filardi 2007). The landscape for the majority of its development contained some sort of agricultural function, including terraces planted for vineyards; citrus groves for eating; and, perfumes and medicinal tinctures (Filardi 2007).

Although Boboli had no cascade, water features were significant throughout its history. The gardens lacked a natural water supply; therefore, to the design included conduits from the surrounding natural springs and rivers. The elaborate structure of water works and distribution is known as the Acqua Ferdinanda (Encyclopedia Britannica 2013).

#### 2.7.7 VILLA GARZONI, TIVOLI ITALY

The Villa Garzoni, in Collodi, Italy, has very significant cascades and use of water. The primary axis does not intersect the main house, following a new Baroque idealism that shifted the focus away from the home, and made the garden significant on its own. The layout was completed by 1652, with the rest of the garden elements being put into place during the course of the century. Soon after, they were already famous (Fondasion Nazionale Carlo Collodi 2014).



Figure 2.7.7.1

The Garden Plan of Villa Garzoni shows how independent the garden is from the house as well as the strict symmetrical features.

(Gothein & Tran.Turner 1928)

The nature of the design at Garzoni reveals itself all at once (see figure 2.7.7.1) (Gothein & Tran.Turner 1928). The main attraction is the large staircase and grand entrance. The staircase leads to five narrow terraces. The axis and symmetry is well defined, with terraces enclosed by hedges and decorated with niches and statues; the retaining walls and formal stairs are bordered; everything is neatly planned (Gothein & Tran.Turner 1928). Two fountains

border the staircase with pots and vases shutting in the parterre in the front. The cascade beyond the main stairway is topped with two larger than life statues Lucca and Florence (Fondasion Nazionale Carlo Collodi 2014). Above the steps, there is a large reservoir; forward at its upper end, a colossal figure of Pheme pours water from her horn into the basin beneath. (Gothein & Tran.Turner 1928).



Figure 2.7.7.2

Photograph of the central staircase of the Garzoni Gardens.

Photo by Sage Sluter, taken March 3<sup>rd</sup> 2014

#### 2.7.8 THE VILLA'S OF FRASCATI, ROME

#### ALDOBRANDINI & VILLA TORLONIA



Aldobrandini Torlonia

Figure 2.7.8.1 Panoramic view of the Villas of Frascati, Rome. The connections to the villas using the long axial roads are illustrated here. Accessed online April 10, 2014 (Blaeu & Greuter 1620)

Villa Aldobrandini was a villa on the outskirts of Rome, built for the Pope's nephew. A area of Rome called Frascati, it was more densely populated than any other outlying city (Ehrlich 2005). It was a landholding to show the power and establish the class and ranking of the Papal Family. This was important during that time because the Aldobrandini Family was a newcomer to the higher class (Ehrlich 2005). Rome during the Baroque Period experienced a mixing of classes. The working or professional people were allowed to rise to the higher

levels of society (Ehrlich 2005) mainly because with each election of a new Pope, an opportunity also arose for new blood in the aristocracy. Having a recurring family in the position was essentially impossible because each pope was elected celibate (Ehrlich 2005). The villa was an early Baroque design recognized for its physiological power, and the water theater was copied in subsequent villa's (Ehrlich 2005).

The spectacle of water was an important element in most Italian Baroque Gardens; however, Aldobrandini was the first water theater built in the Baroque style (Ehrlich 2005). The Teatro delle Acqua ("Water Theater") was built by Carlo Maderno and Orazio Olivieri (Attlee 2006). It contained playful elements like fountains that would splash people who walked by them (Attlee 2006). The water to feed this fountain and for the other water elements in the garden required an eight km long aqueduct from the Modena spring on Monte Algido to the villa (Attlee 2006). The villa is axially aligned with the cathedral. The aqueduct continued through the town as Viale (avenue) Catone (Attlee 2006). The garden of Aldobrandini was filled with sculpture and iconography relating to the ancient architectural forms based on the classical myths. The connection to the classics and representation for power was so important that it was claimed the villa was built on the former site of Lucullus's Villa (actually located on the current site of the Spanish Steps in Rome) (Ehrlich 2005).



Figure 2.7.8.2 The "goose foot" is well illustrated here in the front of Villa Aldobrandini. This, along with the terracing and garden, the connections and symmetry are all strong Baroque design principals. Accessed online April 10, 2014 (Blaeu & Greuter 1620)

Villa Torlonia (also known as Villa Ludovisi, and Villa Como) is also in the Frascati Region, a Villa that is a part of this network of Villas of Papal nobility (Ehrlich 2005). The Princes of Torlonia were Italian nobles from Rome, who owned several villas by the 18<sup>th</sup> century; Villa Torlonia was one that was named after them (Berger 1974). The villa also has a water theater, but of a different character; it was designed to compete and outdo its predecessors with a unique display of its own (Ehrlich 2005). At the top of the cascades is a large pool with a fountain emerging from the center. The design of this villa was accomplished by the same designer as Aldobrandini, Duke Altemps, who also brought many of the same artists to work with him again (Ehrlich 2005). The complex iconography included into Aldobrandini was not implemented in Torlonia as a narrative course was, at this point, outdated (Ehrlich 2005).



Figure 2.7.8.3 The Water Theater at Torlonia was a nymphaeum includes 22 fountain niches . Accessed online April 11, 2014 (Maggi et al. 1650)

#### 2.7.9 VILLA LANTE, BAGNAIA ITALY

Villa Lante was developed by several successive Cardinals from 1475 until the 1580s (Burley & Loures 2010). The form of this garden encompasses three strong conceptual ideas woven together: symmetry, the great flood, and year-round enjoyment (Burley & Loures 2010). Like many gardens of this period, there was an emphasis on bilateral symmetry. This was important to Christians as it represented God's greatest creation, human beings, who were bilaterally symmetrical (Burley & Loures 2010). The design is also representative of the story of Noah's Ark and the time of the Great Flood (Burley & Loures 2010). This is accomplished by being set on a hill, which also facilitates the spread of God's word to all four corners of the earth; lastly, the design can be experienced at any time of the year because of the use of principally evergreen vegetation (Burley & Loures 2010). Cardinal Gambara added a concept for himself in the garden the crayfish was his emblem, the red color representing that of a Cardinal (Burley & Loures 2010). To that effect, the red crayfish was incorporated into the

stonework of the garden and followed the flowing water throughout the site (Burley & Loures 2010).

The site is organized along the central axis which links the garden levels and features (Burley & Loures 2010). The structures do not dominate the site, but rather they are in proper scale and detail (Burley & Loures 2010). This is unusual for a Baroque timeframe. The architectural components are made of both hard and soft materials which are woven along with fountains water chains; pools; a fanciful water table; and, an overall imaginative use of water (Burley & Loures 2010). Villa Lante is a divergence from the 17th-century villas in the region, particularly when compared to the Baroque Villa Garzoni at Collodi (Pregill & Volkman 1999).

#### 2.7.10 VILLA D'ESTE, TIVOLI ITALY

Villa d'Este, located in Tivoli, Italy, a masterpiece Italian Garden, is included in the UNESCO World Heritage List for its impressive concentration of fountains, nymphs, grottoes, plays of water, and music (Barisi 2004). The composition created at this villa is a much-copied model for European gardens in the Mannerist and Baroque styles (Alberti 2004). The garden is about 4.5 hectares and stretches over two steep slopes from two different directions which descend from the palace down to a flat terrace. The most impressive element of this garden is not its size, but its use of water and terracing. For the first time, massive fountains creating the idea of Water Theater (Barisi 2004). In every direction, water is used for cooling climate, breathtaking display, music, and awe (Alberti 2004).

The garden was primarily built in the Renaissance style under the ownership of Cardinal Ippolito, who employed Pirro Ligorio, a "classicist" who desired to transform the design onto a royal palace (Barisi 2004). Before the construction could begin, Ippolito had to acquire lots of adjacent properties. Once he owned the land, he leveled the existing buildings and began to shape the earth (Barisi 2004). The destruction of the existing structures upset many of the inhabitants of Tivoli; some of the sites were ancient sacred sites (Barisi 2004). The second development stage occurred with Alessandro d'Este in 1605; it continued with the Duke Francesco II (1672-1686) (Barisi 2004). During that time, changes to the layout to suit the Baroque ideals occurred; for example, the completion of the fishponds (Barisi 2004). The fishponds represent part of the difference between Baroque and Renaissance. Originally they were meant to have little paths and ornamentation between them (Barisi 2004). Being completed in the Baroque style, they represent the larger undisturbed ponds that bring the light from the sky to be reflected in the ponds (Alberti 2004).

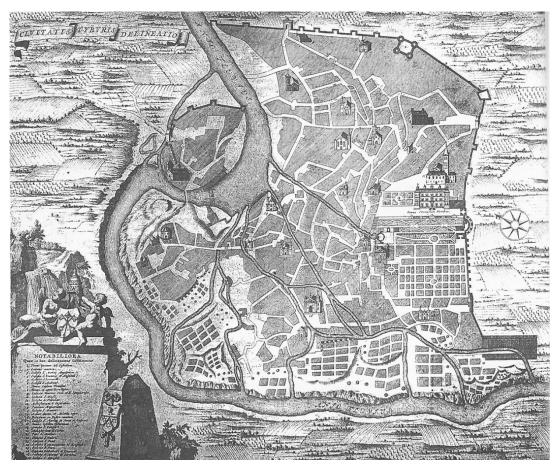


Figure 2.7.10 The Canal network through Tivoli that fed the fountains in the d'Este was completed by Daniel Stoopendal in the 17th century (from Barisi 2004).

Part of the amazing engineering that went into the garden was the hydraulic machine -- powered solely by gravity. The concept of the masses of water was meant to mimic that of rivers and streams flowing down the mountainside (Alberti 2004). The flow was arranged that one fountain would flow directly into another in a network of channels fountains and cascades (Barisi 2004). The river Aniene was diverted to feed the 51 fountains, 64 waterfalls, 220 basins and 875 m of water chains and canals (Barisi 2004). Today the water is still fed using the ancient system of canals from the river; it makes for challenging maintenance considering all the seeds, sediments and lime deposits coming from the river water (Barisi 2004).

## 2.8 CURRENT RESEARCH METHODS IN HISTORIC LANDSCAPE ANALYSIS

How are people analyzing historical landscapes? Historical landscape analysis has been done for centuries. Warden & Woodcock (2005) completed an analysis of the historical documentation throughout time and suggested that the manual manipulation of ruled instruments like rods and tapes combined with hand drawing engross students with the historical environmental context. In present time, the new technologies seem to disengage students from the historic fabric through a redefinition of documentation by using new approaches, i.e., automation, remote

sensing, and remote production (Warden & Woodcock 2005). Warden & Woodcock (2005) examine the educational value of historic documentation for design programs in light of new definitions on how to complete the task. Essentially, they ask, "What do these technologies require in multidisciplinary knowledge?" and. "Is\_this requirement making the documentation process less effective to the development and understanding of design?" (Warden & Woodcock 2005).

Gojda (2011) spoke about the current situation of archaeology in Central Europe. Since the fall of the communist regimes, Central Europe's social development has grown diversely, including the availability of new information and communication technologies, making the discipline of archaeology react in a creative way (Gojda 2011). Some of the major changes are shifting from site-specific research to landscape categorization, with a focus on conservation (mitigating looting), and a proposal that archaeology should move from the history-related disciplines to the scientific or anthropological disciplines (Gojda 2011).

The larger message for historical landscape analysis is a combination of past and present techniques, analyzing the entire system.

## 2.8.1 USING HISTORIC MAPS AND DOCUMENTS TO ANALYZE A HISTORIC LANDSCAPE

An overwhelming amount of studies on analyzing landscape change and historical maps is available. Trpáková (2010) completed a through literature review on the topic of "The use of historical sources and their ecological interpretation in the course of almost two centuries." She identified that historic maps, documents as well as traces left in the current landscape can be used to document and understand the development of a particular culture. In her review, she found gaps in the current research being published, including limits for current research for the theoretical and personal approaches, and the preference for measurability and for accumulation of publications (Trpáková 2010).

Mackovčin (2009) studied land-use in past periods for the better understanding of the present-day state of the landscape to help in the prediction of its further development. He discusses the present cultural landscape, and how it reflects the current and past activities of the human society. The location of forests and settlements have not changed substantially in the Czech lands during time, forming a stable foundation of the landscape structure (Mackovčin 2009).

A cultural landscape study was completed in the Grabens Dyjsko-svratecký úval and Dolnomoravský úval region on the border of the Czech Republic, Slovakia and Austria, by Demek et al. (2009) for the period 1764 to 2009. The methods used were computer-aided analysis of historical and current topographic maps, combined with the study of aerial photographs and field research; this allowed them to quantify the landscape changes, establish the number of changes and characterize stable elements in the landscape. Skaloš & Bendíková (2009) were also interested in landscape

change and characterizing stable elements in the landscape. The objective of their work was to test the method for identifying historical and ecological elements for stability. Another study completed using historical cartographic maps from 1836 to 2006 determined the most stable parts of the landscape are the currently existing ecologically significant landscape segments (ESLS) (Drobilová 2009). Chrudina (2009) used historical maps to analyze the changes in streams. He found that the major changes were: "(1) foundation and abandonment of water reservoirs, (2) straightening of the originally sinuous, and meandering streams, (3) extinction of side channels, and (4) changes in the location of headwaters and spring area." (Chrudina 2009)

Pirnat & Kobler (2012) completed a study on the landscape changes within the area of Nové Dvory and Žehušice based on the available old maps, aerial photographs and archive documentation. According to the outlined landscape history of the area, they described seven periods of its development. The most important turning points were the events of the medieval settlement, the Hussite Wars, the Thirty Years War, industrialization and collectivization (Pirnat & Kobler 2012). The area investigated represented an intensively utilized agricultural landscape with significant marks of Baroque and the Classicistic landscape design activities (Pirnat & Kobler 2012) (See Figure 2.8.2).

Eremiášová et al. (2007) studied land use changes between 1878 and 1989 and compared them to the social and economic changes in the area of Kašperské Hory. They found that the Ist Military Mapping was relatively accurate, despite not being able to geo-reference. This finding was in agreement with the study by Zimová et al. (2006) who suggests the First Military Mapping is more suitable for visual comparisons.

In general it is recognized that comparisons between the historical state and the current state are noteworthy to assess the level of preservation that should take place. It is necessary to evaluate multiple parameters in the landscape in order to understand the endurance of the landscape character (Trpáková 2010). In short, the studied literature emphasized that an integrated approach is necessary.

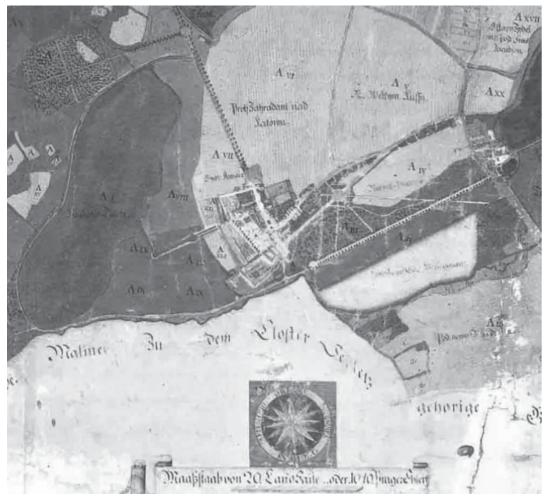


Fig. 2.8.2 This map is an exceptional source on the Czech Baroque landscape. Showing Nové Dvory on the Glocksperger's map (1734) (Source: National Museum of Agriculture, Kačina, photo J. Vidman, 2007, from Pirnat & Kobler 2012)

#### 2.8.2 MODERN TECHNOLOGY FOR LANDSCAPE ARCHAEOLOGY

Gojda (2011) completed a review of the state of current day archeology and emphasized that archaeology is now supported with non-destructive methods through technology and equipment. He states that although excavation cannot be entirely replaced, these methods are faster than excavation and provide high quality data, suitable for research (Gojda 2011). For analysis of data, various systems or programs are used including: geographical information systems (GIS), satellite navigation systems (GPS), satellite image data of a previously unmatched resolution (QuickBird; IKONOS), hyperspectral scanners, aerial orthophoto maps, (Google Earth, www.mapy.cz), or laser scanners for 3D terrain modeling (Lidar) (Gojda 2011). LIDAR (Light Detection And Ranging) data was very important in this study; it is a system for detection, much like radar, however it uses light from a laser that results in very accurate ground-level interpretations.

An example of technology based research is Gojda & Hejcman's (2012) study on orthophotos. They found that buried, i.e., sunken, sub-surface and sub-soil, archaeological features can frequently be discovered due to visible crop-marks or changes in crop growth. Therefore it is necessary to consider these elements when studying orthophotos (Gojda & Hejcman 2012). Similar research was completed in England by Cowley (2010). With these methods several sites that were previously not recorded were outlined and recorded. He also advocates use of broad-brush characterization to provide a framework for future research (Cowley 2010).

Haddad (2011) completed a review of the modern technology used for spatial documentation of historic sites. He noted that the fast development in technology created a gap between users and non-users, making a remedy (perhaps) between the specialized technicians necessary (Haddad 2011); however, he states that the strict portrayal-school users will have to deal with other new documentation and interpretation methods which have replaced hand measuring and tachometry because, when considering the obtained quality, accuracy, time, costs and specific skills required, the accuracy obtained with the technology is greater (Haddad 2011). LIDAR techniques in recent years underwent progress that is widely used for architectural surveys on historical buildings and archaeological sites. (Haddad 2011). The development of the LIDAR data used in the landscape was discussed by Shaw & Corns (2011). currently in a large reassessment of historical sites within the Irish Heritage agencies. The data and discoveries possible with LIDAR is proving to be a significant contribution to the studies of their landscapes for management strategies (Shaw & Corns 2011). He (who?) even discusses the possibility of replacing conventional survey, particularly for larger areas of study (Shaw & Corns 2011). The weaknesses identified, much like Haddad, were the training and technology.

#### 3. CHARACTERISTICS OF THE STUDY AREA

Valeč is located in the Karlovy Vary region of the Czech Republic (see figure 3.1), in an area historically known as the Sudetenland. The site borders the Ústi nad Labem region, it is approximately 28 km from the city of Karlovy Vary, 27 Km from Žatec, and 13 km from Podbořany (see figure 3.2).

The Karlovy Vary region is unique in the Czech Republic for its mineral springs which have made Karlovy Vary, or Carlsbad in German, famous for its spa treatment centers in Europe (KarlovyVaryTouristPotral 2007). However the region is economically and environmentally depleted, with a higher unemployment rate, lesser income, and many brownfield sites (CzechInvest 2006). It is also bordering the "Black Triangle Region" which has been combating pollution due to the high level of industrial activity and mining (Abraham et al. 2003). This region belongs to the northern moderate climatic zone with sunshine duration equaling between 1600-1800 hours per year (Abraham et al. 2003). Valeč is part of a dryer area of the region, the rainfall around Žatec is quite low; it ranges around 450 mm/year and is called the

"precipitation shadow" (Abraham et al. 2003). The region does have many parks, nature reserves and the highest forest coverage rate (50.7%) in the country (KarlovyVaryTouristPotral 2007).

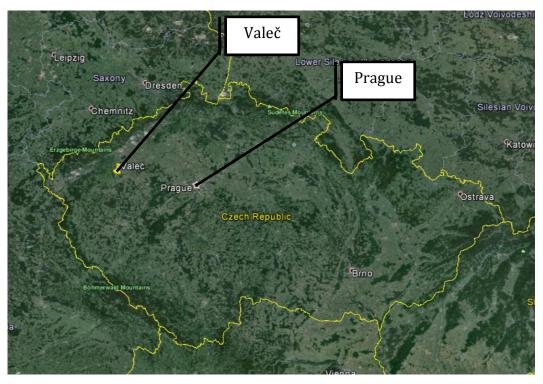


Figure 3.1 Location of Prague. Map created using Google Earth April  $10^{th}\ 2014$ .

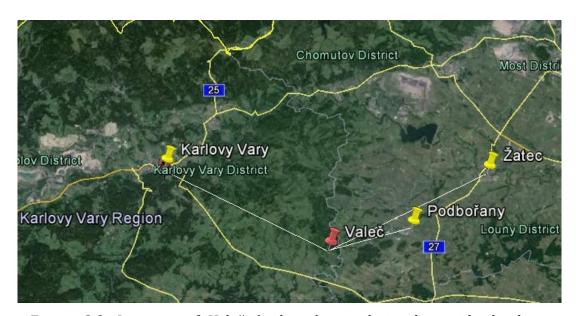


Figure 3.2. Location of Valeč (red pin) in relationship with the larger surrounding cities. Map created using Google Earth April 10<sup>th</sup> 2014.

The town of Valeč is located on the base of the Doupovské mountains at an altitude of 540 meters, was founded during a late wave of colonization (Beran 2001). First written mention of the settlement was in 1358, but it did not become a town until 1514 under King Vladislav II (Beran 2001). The history of the Palace and grounds goes through many owners and transformations, from the site of a medieval fortress to a palace and garden in the English landscape. The most notable time period for the castle and grounds was during the Baroque era, where it was described as a pearl among gardens (Karlovarský Kraz 2013). Today most of the impressive architecture and statures are from the Baroque period, notably being the Statues around the fountain that were created by the school of Mattias Braun (Karlovarský Kraz 2013).

# Ring Pond Lusthaus False Gates Fortress Hillock Site of Fortress Cascade Church Penzion Palace Palace Palace

Figure 3.1 A composite map of Valeč that shows the location of all the major elements described in the thesis. It was made using the current map from the brochure (see appendix I, (Karlovarský Kraz 2013))

The castle complex has several other buildings besides the castle itself (see figure 3.3). These include a Summer Palace, (The Pavilion), A church (Holy Trinity Church) a building that holds offices and a penzion (motel), a greenhouse, and a few other buildings that in the premises. Of noted Landscape interest, there are ruins of a Lusthaus (fun/pleasure house in German) on axis with the palace which goes through a set of false gates. Also there are the remnants of a large cascade and cascade pools on the top of a nearby hill. Next to this hill is a site of a medieval fortified settlement from the second half of the 13th century; an archaeological survey recently proved it was connected with underground tunnels to the palace, later they were used as a brewery cellars (Beran 2001; Pechová 2004).

Valeč was for a period used as a home for veterans, then an orphanage, later it was decimated by a fire and it is still undergoing renovations (Pechová 2004) Currently the garden used by people of the area for tourism and by hunters. The form of the garden is managed in the last major reconstruction, the English landscape style. This is the standard practice by the National Heritage Institute.

# 3.1 PHOTO TOUR OF VALEČ

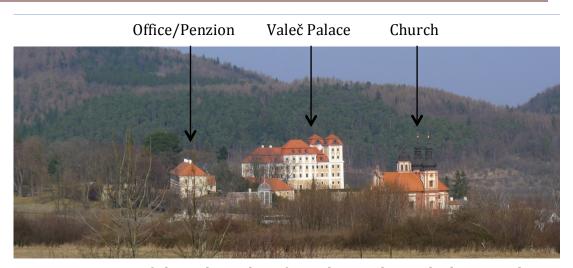


Figure 3.1.1 View of the Valec Palace from the southwest looking Northeast. Photo by Elizabeth Brabec Febuary 2014



Figure 3.1.2 View of the Palace from the Lusthaus, the cut in the trees to delineate this view is still visible, but it is fading. Photo by Sage Sluter, August 2013



Figure 3.1.3 The pools at the top of the cascades, looking northeast. Photo by Elizabeth Brabec, August  $28^{th}$  2014.



Figure 3.1.4 Archival photo of the cascade ruins with the large baroque fish at the top (The archives of Valeč 2013).

Despite some of the sites Baroque features being analyzed ten years ago in 2004 by (Pechová 2004) none of the Baroque features are part of the tourism interpretation. The site is currently being interpreted only in the English Landscape form. The major Baroque elements are not seen or have been properly analyzed to express their true meaning. The larger landscape connections, for example the strong axis to the lust house, not indicated on the map, furthermore the previous study did not include the findings of the axes discovered in this research.

The map on the brochure is does not show a hierarchy of elements or spaces (See appendix I). Therefore the highlights and layers of the garden are lost or not understood. Trees are out of scale, significant pathways are not delineated.. Many of the garden features need maintenance, and to do this maintenance, the castle park will need more funding. However the entire region is economically depressed, with a low population, which is part of the larger problem of rural depopulation in Europe. Since the significance of this garden is not widely known, publishing to a wider audience will potentially generate the interest and the funds to support its preservation.

# 4. METHODOLOGY

In this research, we were looking for what Schama (1995) calls 'moments of realization'. This is when, all of a sudden, a place exposes its links to the ancient ideas of the past. For example, Schama's analysis of the word 'meander' illustrates this fact; the meander, today it is perceived as a naturalizing element in the designed landscape. However the word originated from the name of a holy river of the Phrygians in Asia Minor. This word 'meander' was later a symbol of goodwill, taking the metaphor of the river offering fertile lands for farming and harvest (Schama 1995).

The methodology of this thesis relies on a compilation of primary and secondary resources. The process to gather this information can be explained much like a watershed, the current time would be the final discharge point of the river, the information the water, with a lot available about the current time in relatively the same location. Traveling up the watershed, would be compared to going back into time, the information becomes more and more sparse more spread out, and some of the leads or tributaries completely run dry.

A major element of the research revolved around looking for the axis in the garden and comparing the form on the LIDAR mapping with the historical maps. This comparison was done using both GIS and Google Earth platforms. ArcGIS was used to project the axes over different maps. Google earth was useful in looking at the topography in 3D, and comparing the axes with the setting and rising sun of the equinox and solstices.

Part of the research that was completed was a comparison to other baroque gardens in the Czech Republic and Europe, using site visits, journal articles, reports and other published material to analyze the gardens. For more information about each of these gardens, see section 2.3 of the literature review.

### 4.1 PRIMARY SOURCES

The main source for information of the thesis relied on the actual site visits to Valeč. Numerous observations and ground analyses were conducted in order to understand the site. The explicit garden form was not described in historical mapping accurately, but other elements were. So to understand the landscape, the process consisted of looking into the historical map elements, then the Lidar, then site visits, back to historical mapping, etc. in an iterative process

A series of comparisons to eight other significant gardens was completed using literature and personal visits to the gardens. All gardens were visited except Villa Lante and Bergpark Wilemshohe. See section 5.2 in Results for the comparisons.

The best primary source available for the interpretation of Valeč during the Baroque period is the  $1^{\rm st}$  military mapping. The remaining historical mapping was used to describe the changes between the periods up to today's current orthophoto and Lidar data.

# 4.1.1 IST MILITARY MAPPING (1763 – 1787)

The 1st military mapping was completed during the Austro-Hungarian monarchy; it was the first mapping of its kind. Most of these surveys were done during the reign of the Empress Maria-Theresa, some being finished during the reign of her son Emperor Joseph I. The survey of the Czech lands was completed in 1764-1767 (Zimova et al. 2006).

A significant element of Valeč is its representation on the first military mapping which denotes a strong designed landscape. The first military mapping is significant as outlined by Sádlo and Karlik; "The advantage of the 1st military Mapping (1763 – 1787) is that it depicts landscape at the time of an evolutionary breakthrough, when features connected with the late Middle Ages and the early Modern Period are fast disappearing, the baroque landscape is fully developed and the first signs of a modern landscape start to appear" (Sádlo & Karlík 2002). However, there are large inaccuracies in the scale and the relationship between the parts, so the maps should only be used for illustrative purposes and cannot be taken completely literally on how they appear (Sádlo & Karlík 2002). The chosen process of drawing from small to large scale, and the lack of a survey based on trigonometric principles, lead to a map that was descriptive instead of definitive (Trpáková 2010).

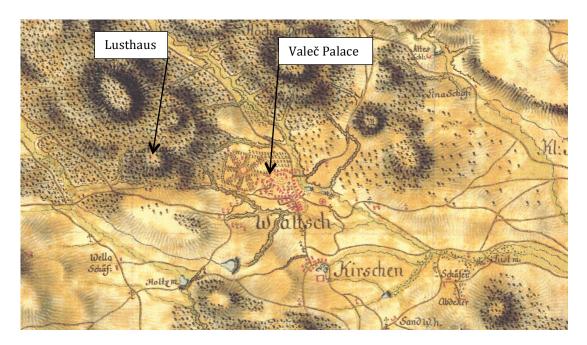


Figure 4.1.1 The first Military mapping used to for analysis of the garden Valeč. The image of the strong axially designed garden can be used for illustrative purposes only. Two significant locations, the Lusthaus and Valeč Palace (Castle), are labeled (Austrian State Archive / Military Archive Vienna Acessed January 10 2014).

# 4.1.2 II<sup>ND</sup> MILITARY MAPPING (1807 –1869)

Inadequate information and quality of the maps from 1st military mapping made it necessary for new surveys under the reign of the emperor Franz II in the 19th century (Zimova et al. 2006). The second military mapping was done during 1819-1858 in the territory of the current Czech Republic. This era of mapping depicts the land in the beginning of the industrial revolution. The topographic content of this mapping for the Czech lands was entirely reliable, because they were created based on trigonometric principles (Trpáková 2010). The terrain appears is somewhat comprehensible with the use of hatching, however, this leads to problems where the topography is more complex or steep. The increased hatching can make it difficult to understand and read. However the hatching is useful to understand watershed and the movement of water over the landscape as the lines were drawn in the direction which water flows down the slope (Trpáková 2010).

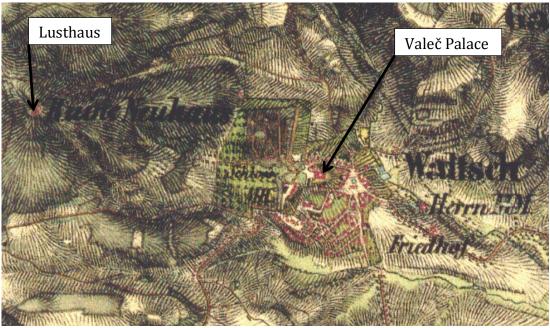


Figure 4.1.2 The second military mapping used for analysis of the landscape features of Valeč. Two significant locations, the Lusthaus and Valeč Palace, are labeled over the historic map (ArcGIS Server on geoportal.gov.cz 2014).

# 4.1.3 IIRD MILITARY MAPPING (1870 – 1883)

This mapping depicts the landscape at the end of 19th century, the beginning of the industrial revolution. These maps are based on a scaled down cadastral map, which was supported by a system of trigonometric points, therefore, reliability varies between the sections (Trpáková 2010). The terrain still was denoted by hatches, but now included some dimensions, elevation marks, and contours; unfortunately these were not very accurate (Trpáková 2010).

With the availability of technology and methods, the military mapping reflects its time period. Therefore it is hard to quantify its reliability, as it can change from section to section depending on the accuracy of the individual mapmaker, as there was little control with the methods used. On the other hand, it could facilitate a higher accuracy, as they are the direct record by the map maker. With a comprehensive study of the map, taking into account its discrepancies, the concept behind the appearance is comprehensible (Trpáková 2010).

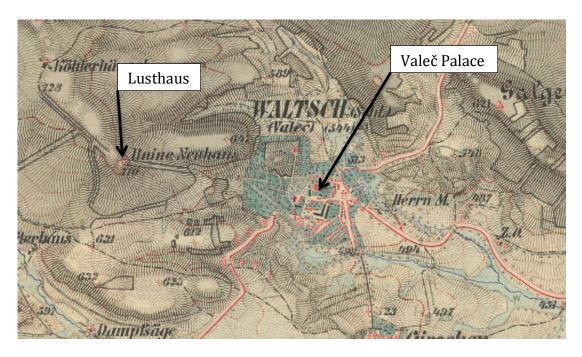


Figure 4.1.3 The third military mapping used for the analysis of the landscape features of Valeč (Geoportal.gov.cz 2014).

# 4.1.4 STABLE CADASTRE (1817 - 1860)

The Stable Cadaster depicts the landscape before industrialization. This mapping is the most comprehensive source for landscape study, covering the whole area of Bohemia and Moravia and it is based on trigonometric measurements. It covers a large range of elements in the landscape, including: rocks, wetlands, waterbodies, small quarries, unused land, land in agricultural use, a representation of the riparian vegetation, trees and shrubs in the open landscape, alleys along roads, the shape and location of settlements, which houses were wooden and stone was differentiated, and the positions of sacral objects, etc. (Trpáková 2010).

The quantification of the individual landscape elements is definitely less exact in the maps of the Military Mapping than on cadastral maps. Nevertheless, with the use of written records, comparisons between these maps and the present day terrain or other maps, it is possible to make an accurate interpretation of the basic structures, especially permanent structures, in larger landscape units. For an analysis of changes in land cover, it is necessary to make a correct definition of identical types of land cover in different periods of time (Trpáková 2010).

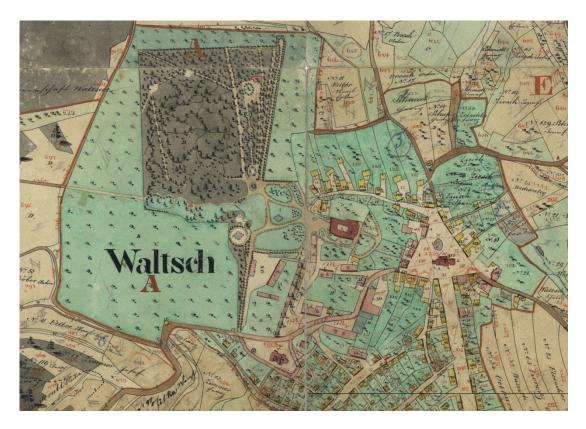


Figure 4.1.4 Cadastral Maps used for analysis of Valeč show the palace grounds in the English landscape style (Zeměměřický úřad Český úřad zeměměřický a katastrální 2012) Accessed October 15th, 2013.

# 4.1.5 AERIAL PHOTOGRAPHS

In the region of the Czech Republic, monochromatic aerial photographs have been taken since 1936, amounting to around 800,000 negatives (Sklenička 2002). The negatives cover the whole country, and were periodically updated (from the 1950s to the 1980s). Since the 1980s, other types of images have been used, such as color photographs, multispectral photographs, and others (Trpáková 2010). It was primarily the newest aerial photograph and the oldest available photograph that was used in the analysis.

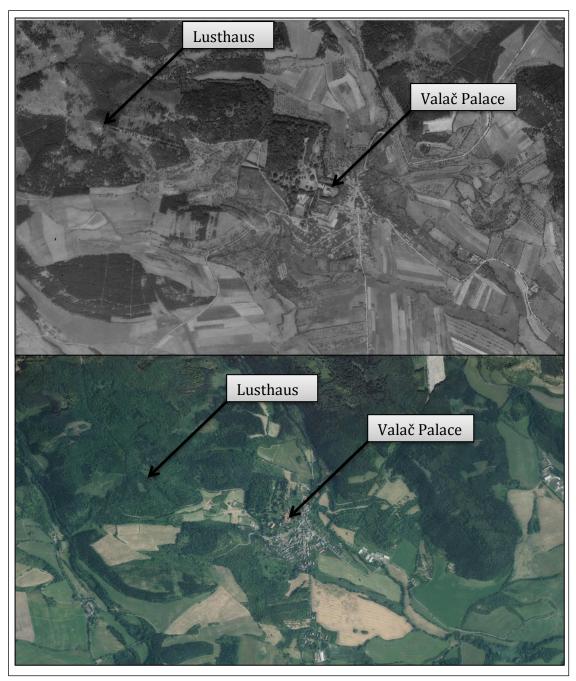


Figure 4.1.5 Top: The oldest aerial photograph from 1953 used for analysis of Valeč. This aerial is interesting as it shows the landscape pattern before the collectivization. Bottom: The newest aerial photograph from used for analysis of Valeč. Top photo (NIKM - I. etapa národní inventarizace kontaminovaných míst 2012) Accessed March 15th, 2014. Bottom photo Google Earth, Accessed March 15th, 2014.

# 4.1.6 LIDAR DATA

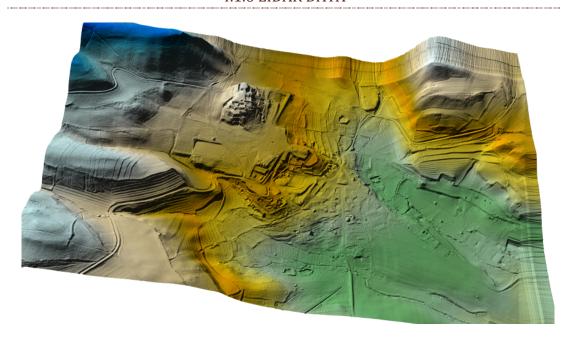




Figure 4.1.6 A major element in analyzing this landscape was the Lidar data. The top image is a 3D model of the village of Valec and the castle complex completed by Malina (2013) with color gradients to illustrate the elevation, the lower is a close-up image of the castle complex used in the comparisons (Malina 2013).

### 4.2 SECCONDARY SOURCES

The secondary sources were original research that interpreted and analyzed primary sources. These sources are research on Valeč that are more current, so therefore they are one or more steps removed from the time period of interest. Some of the secondary sources had pictures, quotes or graphics of primary sources in them. Many of the secondary sources were in Czech, so translations had to be completed.

In 2004 there was a PhD dissertation completed by Jana Pechová on the Baroque gardens of Valeč and its connection to the surrounding countryside. The author was an architect and describes in detail the individual elements of the formal garden area with sketches, diagrams and plans. She proposes steps to be taken for restoration of the garden and future management. The PhD was completed in Czech, and there was no translation easily available; therefore the bulk of this research was analyzed based on the images and diagrams provided. Much of the work in this dissertation was looking at individual elements and it had an architectural focus. The primary observations on the site that are noted on this dissertation were completed independently and previously of the review of this dissertation, thus the dissertation was used to confirm, or compare the findings.

There was a series of archeological digs completed on the Valeč site. These were used to date and understand the development around Valeč. For example, the archeologist report made it possible to confirm the hillock next to cascade was a medieval site (The archives of Valeč 2013) .

# 5. RESULTS AND DISUCSSION

Through the research of Valeč it seems more questions were formed than answers solved. The major contributions of this research that are attainable now are the connections of the axis in the Baroque design of the garden to the wider landscape. The comparisons to other gardens give a broader look at the garden's composition. The majority of the analysis of the axis will be a comparison of different maps.

# 5.1 MAP ANALYSIS

The map analysis will go through each one of the axis identified and provide the justification for each axis as seen on aerial photos, the Lidar mapping, the historical maps and by photographs from site visits.



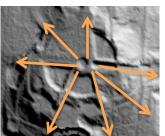


Figure 5.1.1 A major assessment of this landscape analyzing the veracity of the first military mapping. This pattern shown, of the eight wedges could be a representation of the axis coming off of the cascade pools. (Left photo accessed online, Austrian State Archive / Military Archive Vienna 2014; right Malina 2013).

# 5.1.1 MAIN AXIS

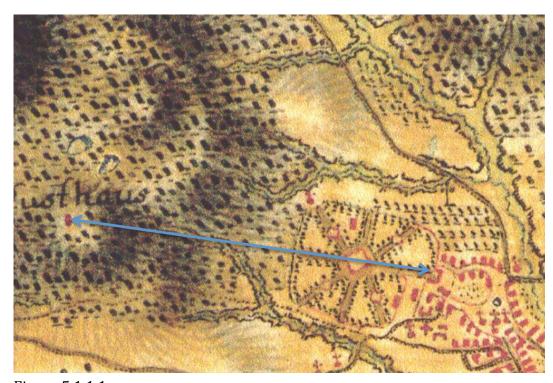
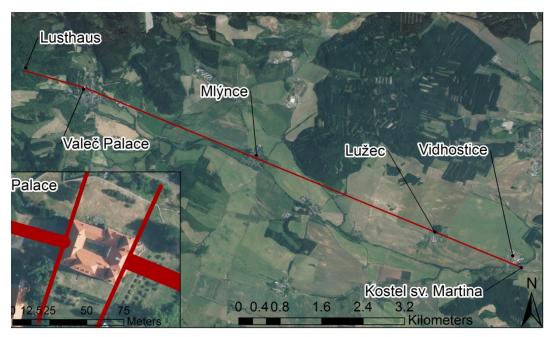


Figure 5.1.1.1.

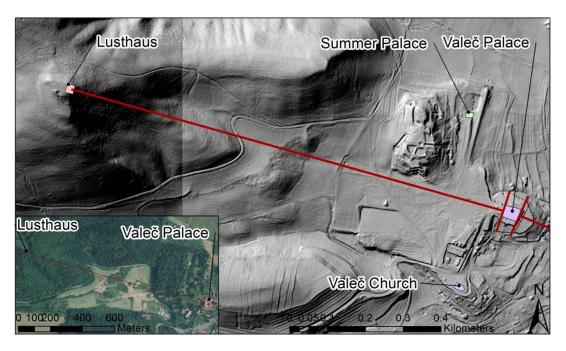
The main axis as it is shown on the first Military mapping. This is in agreement with the research completed by Pechová (2004) (accessed online January 2014 from Austrian State Archive / Military Archive Vienna 2014).

The main axis of the castle park goes through the castle. During the Baroque redevelopment of the castle the front façade of the castle was reoriented, i.e. slightly skewed on purpose, in order for the alignment down the valley to be realized. This finding is in agreement with the research completed by Pechová et al. (2004). Figure 5.1.1.1 shows the alignment of the facades and how that effects the axis on either side of the building.



Map 5.1.1.2 The main axis shown superimposed over the current orthophoto. The Palace is enlarged to detail the orientation of the facades.

On one side of the Palace the axis goes through the immediate formal garden, through a set of false gates, to the Lusthaus (German for pleasure/fun house) on the hill (See Figure 5.1.1.3). This axis is still preserved by the cut in the trees going up the hill. The site of the Lusthaus is unique as it is an old ruin that is placed on an earthen platform that takes the shape of a teardrop or a triangle. This shape is seen elsewhere in the garden as well. The Lusthaus is not able to be dated at this point, the very latest it could have been built was during the Baroque, as it is present on the first military mapping. Although preliminary archaeology has identified only baroque period artifacts (Malina 2014) it is possible that this could be the site of a much older fortress.



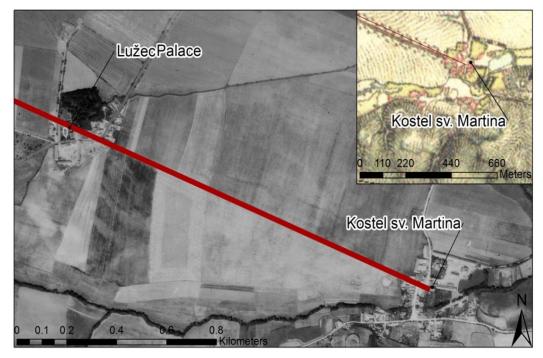
Map 5.1.1.3 The second half of the axis which extends from the Palace to the Lusthaus. This is the main area of the designed garden. The axis is shown over the Lidar image.

On the other side of the Palace it extends down the valley heading southeast into Vidhostice. The last leg of the axis is in perfect alignment with a straight segment of road. This road terminates at the site of an old Baroque Church, Kostel sv Martina, which is where the Baroque-era owners of the palace Valeč were buried. The axis also intersects through the village Mlýnice and a palace in Lužec. This axis is also followed by the Mlýnice Brook (Mlýnecký Potok) from Valeč to Vidhostice. The watershed from Valeč flows into the Mlýnecký Brook, and this brook is likely the source of at least a portion of the water for the cascades.

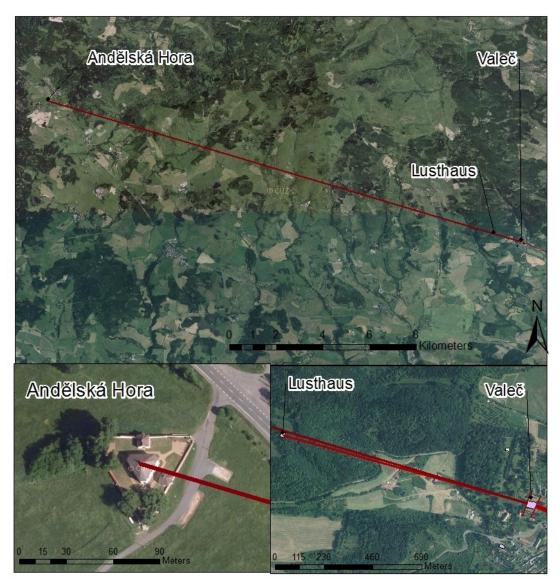
If the axis is extended beyond the Lusthaus to the west, it intersects within just a few meters to a chapel in Andělská Hora. This church is in fact connected to Valeč. Too many people were pilgrimaging to the church in Valeč that it maximized its capacity. This church was built to accommodate the people who could not fit in the church in Valeč.



Figure 5.1.1.4. Photograph of the Lusthaus site. The mounding of the earthwork appears to have a teardrop shape. Photograph by Elizabeth Brabec, February 2014.



Map 5.1.1.5 -The close up of the terminus of the axis from the East of the Palace in Valeč shown on the 1952 orthophoto. The image in the top right corner is the second military mapping where the allée of trees lining the road can be seen.



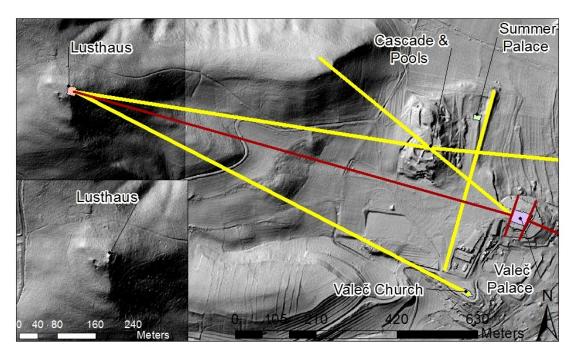
Map 5.1.1.5 The primary axis through the site reaches all the way to Andělská Hora. The top map shows the extent of this connection, bottom left is a close up of this triangular church, bottom right is shows the axis when compared to the Lusthaus axis is only a couple meters off.

# 5.1.2 SECONDARY AXIS

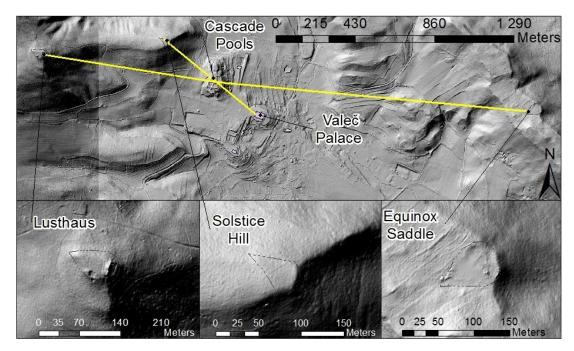
There are a series of axes that intersect with the main axis of the Valeč complex but are not major or the main design features present in the formal garden. Many of these axes are used to make up good geometry. Remarkably, other axes are aligned with the equinox and solstice. Either way they are the interconnected web that the designers used in order to make sense of their world. For visuals on the following descriptions see figure 5.1.2.1.

One of these axes extends from the Lusthaus to the Valeč palace church. This axis is aligned with the roof the church through the front door, and holy trinity column that is in front of the church.

On the Lidar map, and from ground survey it is apparent that there are several pathways and the remnants of a designed garden on the hillside northwest from the Palace, this is where the cascade and pools are located. Looking into this complex, there is an axis that leads from the front of the Valec palace, through the center of the pools, to the top of a nearby hillside. This axis is located partially along an old pathway that is visible currently from the ground and on the Lidar. Along this axis, when placed into Google earth, it was discovered that the sun sets in alignment with the axis on the summer solstice, the longest day of the year. This hill is labeled Solstice hill (Figure 5.1.2.2). Furthermore, the landing on the top of the hill appears to have a teardrop shape.



Map 5.1.2.1 The secondary axes of the site are shown in yellow.



Map 5.1.2.2 Except for the axis leading from the palace, the connections made by the axes crossing over the cascade pools all seem to lead to a teardrop shaped landform.

The cascades and ponds comprising a circle on the top of the hill is, in multiple layers, a major feature of the garden. When the axis that leads through the circular ponds down the cascades is extended, it leads to a saddle in a nearby hillside that contains two ponds. This axis also has an alignment with the sun. Simulation of the rising sun in Google Earth shows that the sun on the equinox rises in this location (figure 5.1.2.4). This is labeled Equinox Saddle. The shape of the landform also seems to have a triangular or teardrop shape, however this must be confirmed with conventional surveying, as the Lidar data here is not complete. However it was a cleared area on the 1953 Aerial (figure 5.1.2.3) so it appears that area was homogenously level.

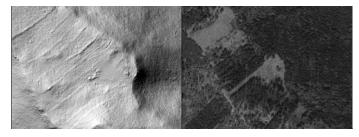


Figure 5.1.2.3 Comparison of the hilltop called Equinox saddle on LIDAR and the 1953 Arial photograph, the location was a clearing at that time.



Figure 5.1.2.4 this image is a projection of the axis from the center of the cascade pools down the cascade, in the direction of Equinox saddle. Modeling the axis in Google Earth, the alignment directly points to the rising of the sun on the Equinox on March 20. (Map created using Google Earth April  $5^{th}$ , 2014.)

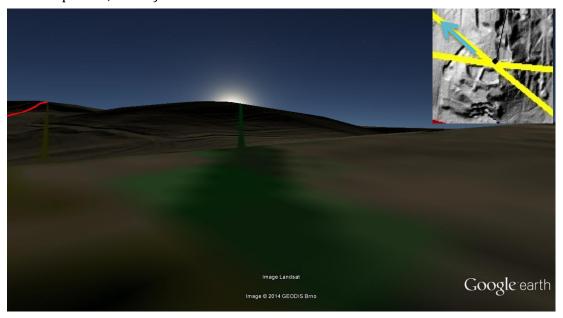


Figure 5.1.2.5 This image is a projection of the axis from the center of the cascade to the hilltop labeled 'Solstice Hill." Modeling the axis in Google Earth, the alignment of the axis directly points to the setting of the sun on the June 21. (Map created using Google Earth April 5<sup>th</sup>, 2014.)

### 5.1.3 TERITIARY AXES

The Tertiary axes are elements help to make up the geometry of the designed garden. These are minor axis, but are important to understand the unity of the entire composition. Furthermore they extend beyond the back of the Lusthaus connecting the garden with the landscape to the distant west (figure 5.1.3.1.).

In the immediate garden, there is a small axis that extends from the main axes to the summer palace. This is visible from the Lidar as well as historical maps. Next to this axis, originating from the same point, there is an axis that is visible on the Lidar that lines up with the bottom of the cascades. The series of parallel paths are most visible on the Stable cadaster and the second military mapping.

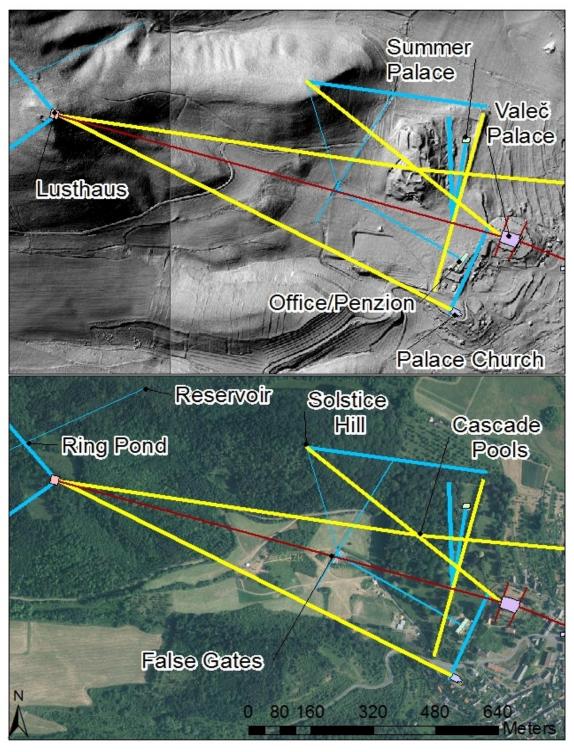
The front façade of the Valeč Church is on axial alignment with an old road which extends to the courtyard beyond the west entrance of the palace; this is visible in the landscape today as well as in historical mapping.

The false gates that lie between the palace and the Lusthaus are not perpendicular to the main axis that runs through it. Therefore, if a perpendicular line is drawn between from the center of this gate, it intersects with the center of the building currently being used for offices and a penzion (figure 5.1.3.1).

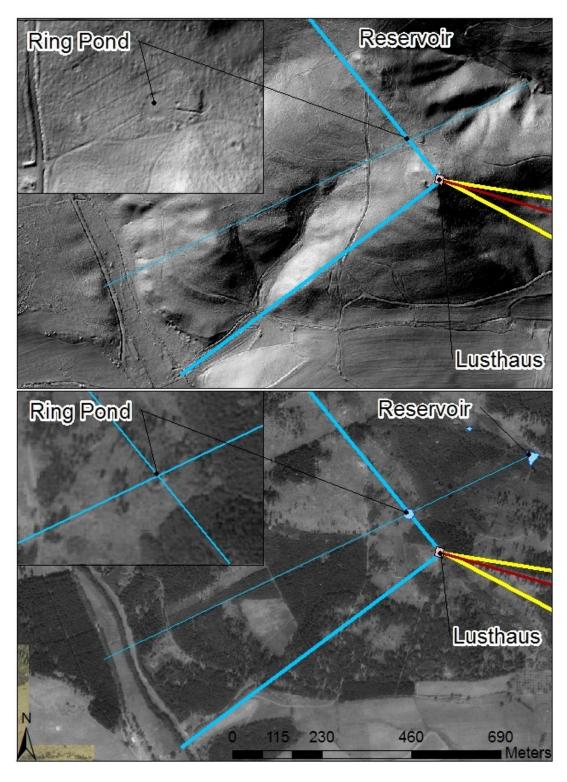
From Solstice Hill, the property boundary lines up perfectly with this point. Another possible axis from Solstice Hill is the connection to the false gates (figure 5.1.3.1). Justification for this axis is possible from an alignment with the teardrop landform which points to the center of the false gates, however this connection is not as strong.

The area and axis to the west of the Lusthaus are showing some interesting elements visible both on the Lidar and the 1953 aerial (figure 5.1.3.2). From the Lusthaus there are two tertiary axes. One leads southwest following the ridge of the hill which transforms to a valley and terminates at the site of an old glassblowers house. (figure 5.1.3.3) There's a secondary axis that leads from the Lusthaus to a pond shaped into a ring torus, a circle with an island in the center of it, this has been labeled, "ring pond". This axis also is in direct alignment with a road that is on the top of the hill. From the ring pond, it is possible that there was an alignment made with a reservoir. In the 1953 photo, as well as today, there was a cut in the tree line that leads directly to this wheel pond when if it is continued, it leads to the reservoir in the valley. The area surrounding the ring pond also has some fragments of squares remnant on the Lidar. It is possible these marks indicate a formal garden surrounding the pond.

The geometry of the cascade complex is explored in figure 5.1.3.2. From this process, some of the former pathways could be discovered as well as a former channel that fed a fishpond that used to be located behind the summer palace.



Figures 5.1.3.1 and 5.1.3.2 - The tertiary axes are delineated in blue, secondary yellow, and primary axis in red. The top photo (5.1.3.1) illustrates these axes on the Lidar data with the major buildings labeled. The bottom photo (5.1.3.2) shows the axis on the current orthophoto with landscape elements labeled.



Figures 5.1.3.3 to 6 - The axes and elements discovered behind the Lusthaus make this site much more important than currently being interpreted. The top photo (5.1.3.3) and inset (5.1.3.4) is the current LIDAR with the axis superimposed. In these photos the use of topography in creating the axis is visible. The bottom photo (5.1.3.5) is the 1953 aerial photograph, which shows more cleared land than the current state, with a close-up of the pond (5.1.3.6) inset.

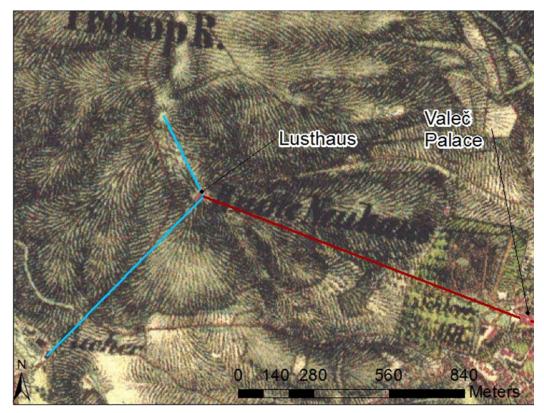
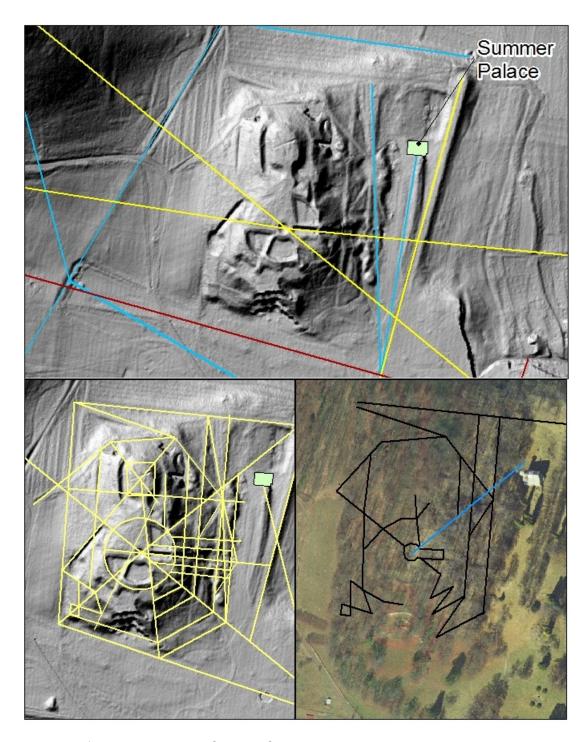


Figure 5.1.3.7- The third military mapping with the main axis (in red) and Lusthaus tertiary axes (in blue) drawn over it. This part of the mapping could not be accurately geo-referenced, however, the general location and justification for the axis is visible.



Figures 5.1.3.8 to 10 Cascade Complex.

Top photo (5.1.3.8) is a close up view of the Lidar image of the Cascade Complex. The axes are drawn: red- primary, yellow-secondary, blue- tertiary. Bottom Left (5.1.3.9) indicates the guidelines for the geometry of the formal garden layout that can be seen on the Lidar imaging. Bottom Right i(5.1.3.10) are the primary pathways through the formal hill garden that are theorized using those guidelines, shown over the 2005 ortho-photo. The blue line is possibly a channel that fed a pond to the north of the summer palace.



Figure 5.1.3.3 Marking out the pathways with orange flags along the axis which runs from the palace to the Solstice Hill. Photograph by Sage Sluter February  $20^{th}$  2014

# 5.2 COMPARISIONS

Comparisons to other Baroque Landscapes and gardens provides not only the context to where Valeč sits in history but it also is a way to justify some of the findings in Valeč as being human constructed elements in the landscape. The comparison section was completed by looking at each garden studied and the elements within them and comparing those elements with Valeč. These gardens have been introduced in section 2.7 of the literature review.

Many of the sites that Valeč has been compared to are of UNESCO status, others have been listed. All of them have a significant impact on the community and area around them, each one preserving its cultural history for future generations to enjoy. Placing Valeč next to these other gardens and landscapes is not an attempt to say they are of equal or greater value, but rather this section gives one the chance to analyze what is typical of Valec, what is unique and what is extraordinary.

# 5.2.1 COMPARISON CHART

	Features										
Gardens	Grotto	Theater	Axial Connections offsite	Fountain	Cascade	Botanic Garden	Maze	Corresponding building on Axis	Main Axis through Palace	Area of Recognized Landscape (approx.)	Distance from Valeč
Sites personally visited:											
Valeč, Karlovy Vary (Czech Republic)	yes	yes	yes	yes	yes	yes	?	yes	yes	70 ha	-
Schönbrunn Palace (Vienna, Austria)	yes	yes	yes	yes	no	yes	yes	yes	yes	176 ha	314 km
Kuks Hospital (Czech Republic)	no	yes	yes	yes	no	no	no	yes	yes	36 ha	190 km
Lednice-Valtice Estate (Czech Republic)	yes	yes	yes	yes	no	yes	no	yes	yes	16100 ha	299 km
Boboli Garden (Florence, Italy)	yes	yes	no	yes	no	yes	yes	no	no	45 ha	729 km
Garzoni (Tivoli, Italy)	yes	yes	yes	yes	yes	yes	yes	no	no	1.73 ha	725 km
Villa Torlonia (Frascati, Italy)	no	yes	yes	yes	yes	?	no	no	yes	6.3 ha	923 km
Villa Aldobrandini (Frascati, Italy)	yes	yes	yes	yes	yes	?	no	yes	yes	10.1 ha	931 km
Villa d'Este (Tivoli, Italy)	yes	no	no	yes	yes	no	yes	no	yes	4.5 ha	914 km
Other Sites Studied:											
Bergpark Wilhelmshöhe (Kasel, Germany)	yes	no	yes	yes	yes	no	no	yes	yes	240 ha	295 km
Villa Lante (Bagnaia, Italy)	yes	yes	yes	yes	yes	yes	no	yes	no	15 ha	866 km

	Features									
Gardens	Medieval Development	Renaissance Development	Baroque Development	English landscape/ Neoclassical Redevelopment	UNESCO Status	Current Management Authority				
Sites personally visited:										
Valeč, Karlovy Vary (Czech Republic)	Fortress.	1585- 1622	1695- 1733	1798- 1847	No	Národní Památkový Ústav				
Schönbrunn Palace (Vienna, Austria)	Monastery	1548- 1600	1695- 1750	1750- 1780	yes	Schönbrunn Kultur- und Betriebsgesellschaft				
Kuks Hospital (Czech Republic)	n/a	n/a	1723- 1732	n/a	Tentative	Národní Památkový Ústav				
Lednice-Valtice Estate (Czech Republic)	Estate of Liechtenstein	1606- 1638	1656- 1799	1805- 1938	yes	Národní Památkový Ústav				
Boboli Garden (Florence, Italy)	Agricultural/ Orto	1549- 1564	1610- 1652	1807- 1813	Florence- yes	Polo Museale Fiorentino				
Garzoni (Tivoli, Italy)	Fortress/ Castle	n/a	1652	n/a	no	Fondasion Nazionale Carlo Collodi				
Villa Torlonia (Frascati, Italy)	Abbott's land	1571- 1596	1607- 1625	n/a	Tentative	Public Park- City of Rome				
Villa Aldobrandini (Frascati, Italy)	Claimed Lucullus's villa	1598- 1623	1623- 1760	n/a	Tentative	Public Park- City of Rome				
Villa d'Este (Tivoli, Italy)	Monastery	1560- 1572	1605- 1686	n/a	no	Architectural Heritage				
Other Sites Studied:										
Bergpark Wilhelmshöhe (Kasel, Germany)	Monastery	n/a	1680- 1713	1760- 1785	yes	Hessian State Office for the Preservation of Historical Monuments				
Villa Lante (Bagnaia, Italy)	Park 1475	1568	n/a	n/a	Tentative	Public Park- Bagnaia, Viterbo				

### 5.2.2 LEDNICE-VALTICE

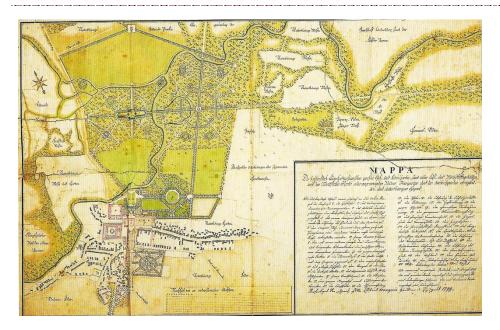


Figure 5.2.2.1 Plan of the Chareau park in Lednice, Ignatz Holle, 1799 retrieved from (Krejčiřík et al. 2012)

Comparing Valec to Lednice-Valtice is natural as this site is the most well-known Baroque landscape in the Czech Republic. The site at Lednice is larger in scale than Valec. The long distance connections span over 161 km², across three towns, Lednice, Valtice, and Břeclav. Nevertheless, this does illustrate the Baroque connections desired to be made in the Czech Lands during that time period. The connections between Lednice and the surrounding area have been documented with site plans and maps made of the time period. Since the site plan for Valeč no longer exists or is yet to be found, using what is found in other landscapes can be used to support the findings in Valeč. Comparing the site of Lednice-Valtice to Valec, it is not unlikely that the main axis went all the way to Vidhostice, through Mylince connection the major palace and the Church and site of the fortress behind it. At Lednice-Valtice, the main axis that was defined by allee's of trees turned into cuttings of trees when the axis entered a forested area (Figure 5.2.1.1).

The estate of Lednice -Valtice is certainly more flat than the landscape of Valeč, therefore the style has been compared to that of the French Formal gardens like Versailles. The iconic podium directly across from the palace can be compared to Valeč as well. In many of the landscapes studied it was important to have an anchor of sorts on the main axis of the house. This was a trend that began in the renaissance; however it persisted throughout the development times through to the English Landscape (Figure 5.2.1.2). The analysis in this figure completed by Přemzsl Krejčiřík, is the kind of landscape change that was likely to occur in

Valeč. Notice through all of the developments of the site, the main view that went through the building into the anchor building persisted (at Lednice this is the Minaret). This can be compared to Valeč, as the view to the Lusthaus persists today.

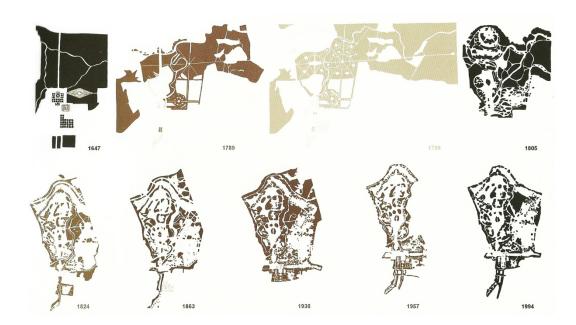


Figure 5.2.2.2 Přemzsl Krejčiřík, Development of the chateau park in Lednice from 1647 to 1994 (Retrieved from Krejčiřík et al. 2012).

### 5.2.3 KUKS AND BETLÉM

The site of Kuks and Betlém is the closest site to Valeč that is being compared. The development of this site is of a later baroque period, thus the strict geometry is no longer apparent throughout the whole design, particularly when investigating the area of Betlém where the sculptures from Matthias Braun are located. The same sculptor, Matthias Braun has his work in Valeč as well.

Through the research of Hendrych et al. (2009), long axes are drawn across the landscape with various elements that intersect (figure 5.2.3.1). It is interesting these long distance Baroque connections have been researched in this Kuks landscape as well. Like in Valeč, these connections are not readily apparent in the landscape today. This trend, now found in two locations, begs the question; perhaps there is a unique quality to the Czech Baroque landscapes that connect the land in a more subtle way.

There is a specific element that is directly comparable to Valeč as well. In Betlém near where the sculptures were, there was a hermitage that was placed on a raised platform (figure 5.2.3.2). This area is comparable to the Lusthaus in Valeč (figure 5.2.3.3). Not only does the figure show a raised platform, but also

there are two axes running off from this point, like what was discovered in Valeč (figure 5.2.3.2).

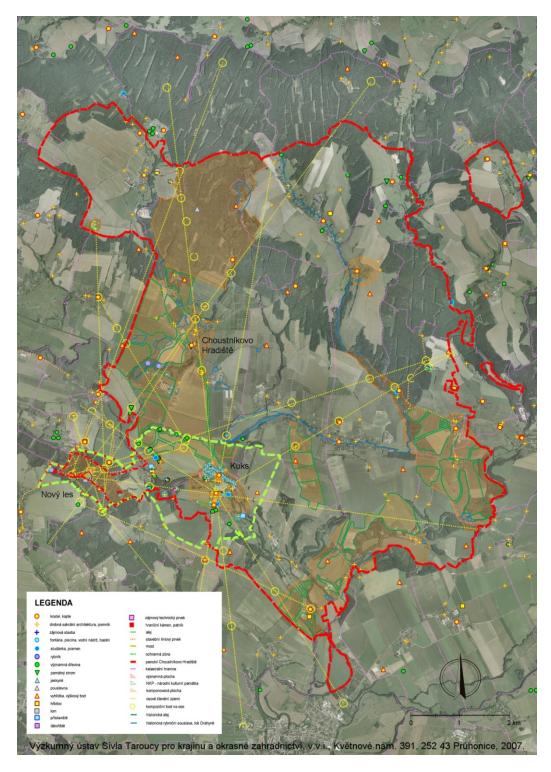


Figure 5.2.3.1 This figure outlines the extent of the landscape analyzed in the Kuks landscape. (Hendrych et al. 2009)



Figure 5.2.3.2 The landform of the Lusthaus at Valeč is still visible. Photo by Elizabeth Brabec, Febuary 2014.

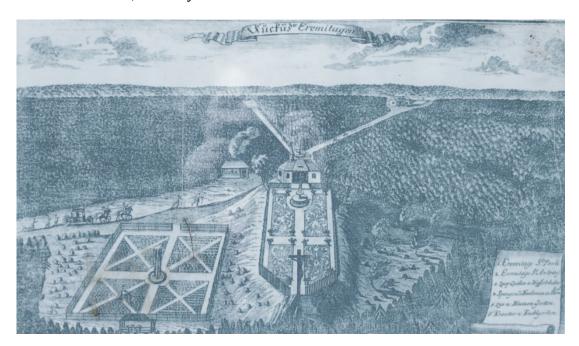


Figure 5.2.3.3 Hermitage of St. Antonína was founded by count Špork; This structure standing on a raised platform overlooking a vegetable and herb garden. Next to it was a wooden statue of hermit with skull in his hand. People would put messages to the skull for the count (Photograph by Sage Sluter of Kuks interpretive board April 2014 Unknown 1718).

# 5.2.4 THE PARK AT SCHÖNBRUNN PALACE

The park at Schonbrunn Palace has a Summerhouse on top of the hill that overlooks the garden and palace, this is much like the site of the Lusthaus. Also from this garden are meandering back and forth pathways up to the top of the hill. The Gloriette at the park of Schönbrunn near Vienna and the monument to Hercules at the Bergpark Wilhelmshohe has been compared to the dominant terminal point of an axis ascending the hill. Much like Valec and the Lusthaus.

### 5.2.5 ALDOBRANDINI AND TORLONIA

Visiting Aldobrandini and Torlonia was interesting as they are not completely restored or preserved gardens, however the baroque and renaissance garden features could still be interpreted. Both of these gardens have reservoir ponds above their cascades. This type of arrangement is the same that is found in Valeč, however the area that the ponds cover in Valeč is significantly larger, being over 2000m²; Torlonia is approximately 430 m² and Aldobrandini is 318m². All three locations also contained larger than life statues at the top of the feature to feed the water down the cascade.

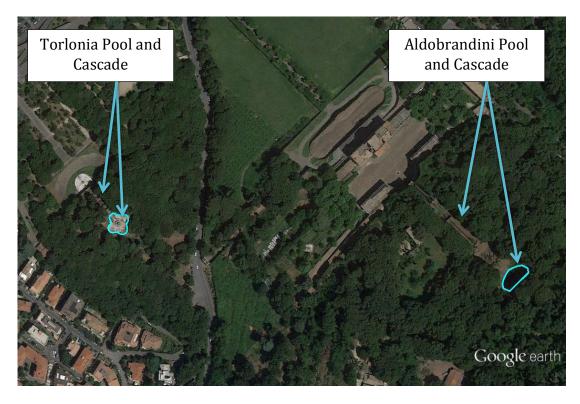


Figure 5.2.5.1 The cascades with corresponding pools in Torlonia and Aldobrandini. Image made with Google Earth, 2014.





Figure 5.2.5.2 and 5.2.5.3 Left photograph shows an archival photo of the fish sculptures that were placed on the top of the cascade in Valeč (The archives of Valeč 2013). The fish of Valeč are compared to the larger than life statues in Aldobrandini (Photo by Sage Sluter March 2014).

# 5.2.6 VILLA LANTE

Villa Lante can be compared with Valeč as it contains two parts of the garden. The main axis of the garden is largely symmetrical; however the secondary part of the garden is axial, but not strictly symmetrical. (See Figure 5.2.6) This type of free axial arrangement can be seen in Valeč, where portions of the garden are more free form, and the other part is more aligned with particular elements in the landscape.

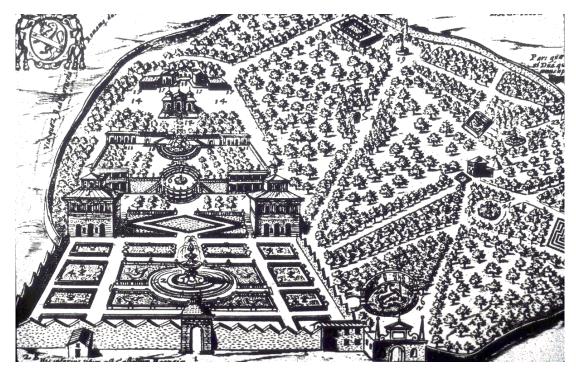


Figure 5.2.6.1 Plan of Villa Lante. Public Domain, accessed April 11, 2014 (Galvini 1568)

### 5.2.7 VILLA D'ESTE

Villa d'Este is the pinnacle garden of water elements. The hydraulics of this garden is an illustration on how much water could be manipulated during that time. The canals and channels that feed the system from the river show how much work was willing to be done in order to create the water theater. Comparing this system to Valeč, is conceivable that the water could have come from the upper reaches of the Mlýnecký Brook. Also it is very possible that the remnants of the two reservoirs located in the valley to the north of the palace in Valeč also fed the water features.

### 5.2.8 BOBOLI GARDENS

Using the medieval landscape constructed to make a 'hortus conclusus' or enclosed garden, and later transforming it into a theater has been indicated at boboli Gardens (Filardi 2007). A similar approach was possible at Valeč with the site of the fortress, which during the Baroque probably held a gondola (The archives of Valeč 2013). Also comparable between these two gardens is the ring torus pond. Both gardens have a circular pond with an island in the center, which is located a distance away from the palace (see figure 5.2.8.2)



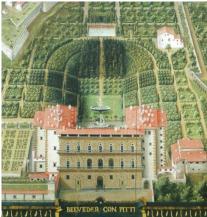


Figure 5.2.8.1 and 5.2.8.2 - Left image is the LIDAR from Valeč (Malina 2013). The mound shape with tunnels underneath are leftover landform from a medieval development of a fortress (The archives of Valeč 2013). This is compared to the remnant landform behind the Boboli Gardens, where the enclosed garden from the medieval times was transformed into a garden theater (Filardi 2007).





Figure 5.2.8.3 and 5.2.8.4 - Left photo shows the ring torus pond in Boboli Gardens (Photo by Sage Sluter March 2014). Photo on the right is the ring torus pond in Valeč (Photo by Sage Sluter August 2013).

#### 5.2.9 BERGPARK WILEMSHOHE

The monument to Hercules is on axis with the palace; however it was built before the reconstruction of the palace (figure 5.2.9.1). This is possibly similar to the development of Valeč. The Lusthaus on axis with the palace, but the Lusthaus is an independent complex with strong indications that this site was very significant. Also the Monument to Hercules contains three axes that are extending down the hill, much like what was found at the Lushaus in Valeč (figure 5.2.9.2).

The Lusthaus at Valeč and the Wilhelmshohe also share the steepness in the slopes that become evident from a far distance when approaching.



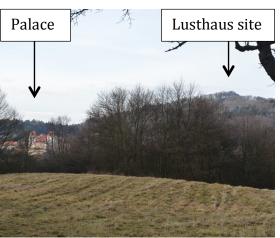


Figure 5.2.9.1 and 5.2.9.2 - The impact view of the Hercules monument (left) comparable to the site of the Lusthaus. In the current photo of the Lusthaus site (right) the landform is still visible from a distance (Left Photo accessed April 15<sup>th</sup>, 2014. Public Domain, De.Wikipedia.org/Benutzer:Hafenbar; Right photograph by Elizabeth Brabec October 12<sup>th</sup> 2013)



Hercules Monument

Palace

Figure 5.2.9.3
Bergpark Wilhelmshöhe plan of 1810
In the historical plan of Wilhelmshöhe, the axis cut in the forest is clear even in 1810 after the pathways are clearly English Landscape Photo accessed April 15<sup>th</sup>, 2014, Public domain /commons.wikimedia.org/wiki/File:Berg park\_wilhelmshoehe\_karte\_1.jpg 1810).

#### 5.3 AREAS FOR FUTURE RESEARCH

The complexity of this site warrants further research and investigation. There were many elements that were initially discovered in the research, some of which need validation. The prospect that the rising and setting of the sun aligning up with the axis of the garden is very exciting, however this needs to be validated using either ground observations or more precise method than Google Earth.

## Areas for future research:

- The lost meanings of the cultural landscape due to the Benes Decree and how the management of Valeč can serve as a model for other landscapes.
- What could the garden structure actually look like? Using examples of known baroque gardens of the region and the archeological reports and examples, recreate a master plan of Valeč.
- How was the water system functioning? Investigating the Water System of Valeč:
  - How much water was needed?
  - Calculate the capacity of the ponds
  - Calculate the flow possible from the fish's mouth
  - Where did the water come from?
  - Where did the water go?
  - Investigate the ponds and springs on site.
  - Calculate how much the pond in the valley could provide before silting in.

- How should the garden be managed or interpreted to highlight the Baroque elements?
- A more detailed study analyzing the landscape changes that took place in the Valeč region. Quantitate data analyzing the cultural and ecological stability of the area would be useful in determining future planning and preservation of the area.

### 7. CONCLUSION

The result of this research is primarily the identification of the Baroque axes that connect the Castle Valeč to the broader landscape. Of particular interest is the axes termination in a specific and unified landform shape; the teardrop. Why the teardrop was used in Valeč is still unknown as this shape was not a common form of geometry in the Baroque. Also these axes, originating from the cascade, align with the solstice and the equinox. The connections to nature and the surroundings is a unique feature. This design intent is a unification of geometry and science with the astrological events and possibly earlier pagan beliefs. However the persistence of Pagan ideologies surviving in the Christian belief system is not uncommon. Christmas trees and Easter eggs for example are both elements of pagan holiday traditions transferred to Christianity. These findings are not only interesting in the context of Valeč, but perhaps future research may find similar relationships in other Baroque landscapes.

The comparisons to other gardens provide justification for the design intent. They are examples of other gardens recognized for similar baroque features found in Valeč. The case studies of Baroque gardens were also essential in order to understand the whole of the Baroque period. Visiting these gardens made it possible to recognize the traces of the Baroque landscape memory. Throughout the entire study, there was considerable knowledge gained on landscape history and how to recognize those traces in the landscape; not only from the baroque period, but from all historical periods. This was essential in order to discern the features. Furthermore, an understanding of the interpretation of different maps and map data was gained.

Using both conventional as well as innovative methods the established goals have been met. Although more analysis and understanding of the castle grounds of Valeč is possible, the analysis of the landscape of Valeč in its broader context a great breath of knowledge was gained, giving a solid foundation to future work.

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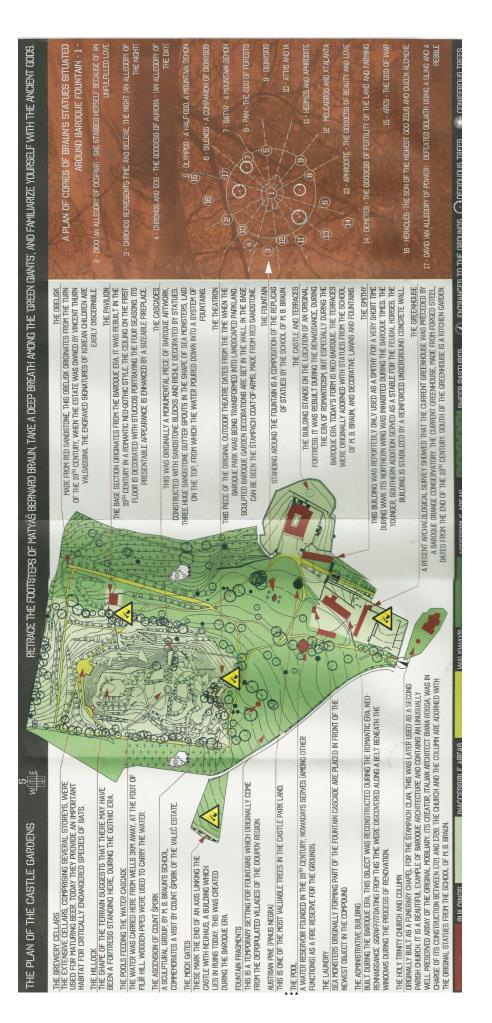
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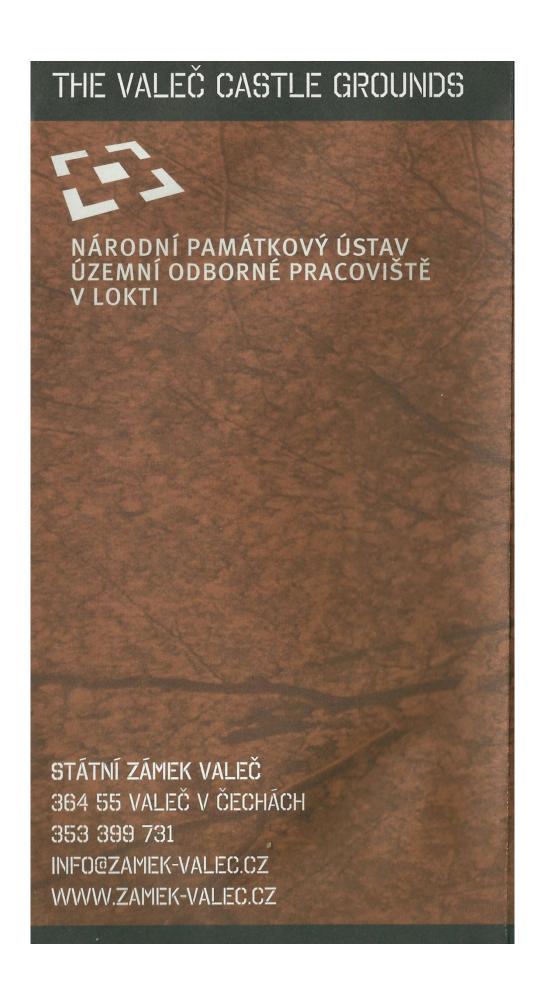
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## APPENDICES

# PIGNAICH, A FAMOUS MINER FROM OSTRAMA HE PURCHASED VALE IN 1937. HE ONLY HAD ENDUCH TIME FOR SOFTEN HAD SOFT MINER AND THE ADAILY HAD ENDUCH TIME FOR SOFTEN HAD SOFT MINERADED TO INCREASE THE COMPEDIATION. THE ADAILS SERVED BRIEFLY AS A NURSING-HOHE FOR WAR VETERANS. IN THE 1950'S IT WAS TURNED INTO AN ASYLUM FOR CHILDREN FROM KOREA AND THEN FOR A NUMBER OF YEARS AFTERWARDS, SERVED AS A CHILDREN'S HOME IN 1976 THE CASTLE WAS DEVASTATED BY FIRE. TWENTY YEARS LATER, STATIN PAMATKOY USTAN INATIONAL INSTITUTE FOR THE PROPERTION AND CONSERVATION OF THE CASTLE, SAWING IT FROM THE POINT OF BEING ON THE VERGE OF DEPOLITION. SINCE THEN, THE ENTIRE CASTLE GROUNDS RECONSTRUCTION HAS BEEN CARRIED OUT WITH DOMATIONS FROM PAMAY RESOURCES, SOME OF THESE INCLUDE FM EMPINORMAY - RENURCHMENT OF THE OFFICE OF DEPOLITION. SINCE THEN THE DATE CASTLE APPRICATION OF THE ENTRANCES OF DEPOLITION OF THE ENTRANCES OF DEPOLITION OF THE ENTRANCES OF BREWARY CELLARS' - 2009 = 2011, MINERADIOL OF THE ENTRANCES OF BREWARY CELLARS' - 2009 = 2011, MINERADION OF THE ADMINISTRATIVE BULIDING - 2008 - 2010, MINERADION OF THE ADMINISTRATIVE BULIDING - 2008 - 2010, RURAL DEVLEDMENT INITIATIVE BULIDING - 2008 - 2010, RURAL DEVLEDMENT INITIATIVE BULIDING - 2008 - 2010, RURAL DEVLEDMENT INITIATIVE BULIDING - 2008 - 2010, RUSARDONY - 2010, BESIDES OTHERS. | KARLOVARSKÝ KRAJ CREATED WITH THE SUPPORT OF: VINCENT THURN VALSSASSIN, WHO DWNED VALEC FROM 1890 TO 1937, IS RESPONSIBLE FOR THE NEO-BRADDIE PROBLE PROBLE SHOUTHON TO THE CASTLE. THE TERRACE ARRANGEMENTON OF A SALLA TERREM IN THE SOUTHERN WING OF THE CASTLE AND THE COUNTRICTON OF THE PARM TREE GREENVIOUSE. THE COUNT HAD THE FRAME FOR THE GREENVIOUSE MADE FROM FORGED STEEL DELIVERED FROM VIENNA IN 1994. HE ALSO PLANTED A NUMBER OF RADE EVENGREEN THE ALSO PLANTED A NUMBER OF RADE STELL BE SEEN AROUND THE DANK. STATUES ADDITION THE CASTLE GARRENS. WHICH REPRESENT WITHOLOGICAL FIGURES AND ALLEGORIES ON THE HURWAY CONDIOUR. IT IS, ANOWAD THE GARRENS. WHICH REPRESENT WHICH WAS CONSIDERED A PEARL AMONG GARDENS DURING THE GARDENS DURING THE BARROULE ERA. THE ORIGINALS OF THE BRAND STATUES ARE NOW. STORED IN THE LAPIDRAY OF THE KLADRUSY OF THE WATHER PRIOR TO THE KLADRUSY OF THE WATHER WERE STITUTED ON TOP OF THE MALLS SURROUNDING THE CASTLE. NOWADAYS YOU CAN SEE THEIR REPLICAS IN FRONT OF THE CASTLE, SET IN THE MATHER SURROUNDINGS IN A LOGGE COMPOSITION. THE KORBS OF WICHCHEM WERE STITUTED OF THE MATHER SURROUNDINGS IN A LOGGE COMPOSITION. THE KORBS OF WICHCHEM WERE AND THE REALSH IN THE RIGHT PART OF THE SAT OF MATHER THE SAT OF SAT OF SAT ON. GARDENS, WHICH THE CASTLE IS FIRST MENTIONED IN 1528, WHEN KING LADISLAUS II, JAGIELLON GARE VALEC TOWN STATUS. IT HAS HAD MANY UPEREATO OWNERS SINCE THAT TIME, THE MOST FANDUS BEING THE CLAN OF STAMPACH WHO BROUGHT THE ESTATE TO ITS HEYDAY. IN 1694, VALEÖ WAS INHERIDED BY JAM KRYSTOF KAGER, LOND STAMPACH HE INTRODUCED AN ITALIAN ARCHITECT BY THE NAME OF FRANCESCO BARELLI TO VALEĆ AND STARTED A HALOR BARDOUCE AND STARTED A HALOR STANDES AND THE RABISLAND OF WHAT WAS A RENABSANCE CASTLE. THE RESULT OF THIS RECONSTRUCTION IS A TWO-STOREY BUILDING WITH FOUR WINGS AND A RECTANGULAR COURTYARD. COMPRESING BO ROOMS. THE CASTLES PARK LAND, WHICH IS THOUGHT TO HAVE PREVIOLOSY SERVED AS A COPHIERDA. BARDOUC CAPIGASTRON, HEAVILY INFLLENCED BY THE TALLAN ART OF COUNTRY LANDSOLAPING. THE CASTLE BETWEEN USES AND TOS WAS THUS SERVED AS AND TYSE IS A PRECIOUS JEWEL OF PARAMOUNT BARDOULE ARCHITECTHE. ITS CREATOR WAS AN ITALIAN ARCHITECT, GIOVANNI ANTONIO BIANA ROSSA THE CANSTRUCTION OF THE CHURCH WAS COPIELETED BY JAN ERROHALD FOR THE HOLY TRINITY, BUILT BETWEEN LORD OF STAMPACH TO FULL ITE WHISH CASER, LORD OF STAMPACH TO THE HOLY TRINITY, RICHAY DECORATED BY STAMPS FROM THE SOLLPTURES FROM THE SCOLLINN IS DECORATED WITH SOLLPTURES OF THE BOHEMIAN PATRON SAINTS ST. LUDHIAL, VOLTEGH (ADALBERT), PROKIDI PROCONICKY WITHING WITHIN FROM THE PAST TO THE PRESENT THE VALEČ CASTLE GROUNDS NÁRODNÍ PAMÁTKOVÝ ÚSTAV ÚZEMNÍ ODBORNÉ PRACOVIŠTĚ V LOKTI STÁTNÍ ZÁMEK VALEČ 364 55 VALEČ V ČECHÁCH WWW.ZAMEK-VALEC.CZ INFO@ZAMEK-VALEC.CZ [1] 353 399 731





# FROM THE PAST TO THE PRESENT

THE CASTLE IS FIRST MENTIONED IN 1526. WHEN KING LADISLAUS II. JAGIELLON GAVE VALEČ TOWN STATUS. IT HAS HAD MANY DIFFERENT OWNERS SINCE THAT TIME. THE MOST FAMOUS BEING THE CLAN OF STAMPACH WHO BROUGHT THE ESTATE TO ITS HEYDAY. IN 1694, VALEC WAS INHERITED BY JAN KRYŠTOF KAGER, LORD ŠTAMPACH. HE INTRODUCED AN ITALIAN ARCHITECT BY THE NAME OF FRANCESCO BARELLI TO VALEC AND STARTED A MAJOR BAROQUE RESTORATION OF WHAT WAS A RENAISSANCE CASTLE. THE RESULT OF THIS RECONSTRUCTION IS A TWO-STOREY BUILDING WITH FOUR WINGS AND A RECTANGULAR COURTYARD, COMPRISING 80 ROOMS. THE CASTLE'S PARK LAND, WHICH IS THOUGHT TO HAVE PREVIOUSLY SERVED AS A COMMERCIAL GARDEN, WAS CONVERTED AT THE SAME TIME AS THE CASTLE. BETWEEN1695 AND 1733 WAS THUS CREATED A UNIQUE BAROQUE COMPOSITION, HEAVILY INFLUENCED BY THE ITALIAN ART OF COUNTRY LANDSCAPING.

THE CASTLE CHURCH OF THE HOLY TRINITY, BUILT BETWEEN 1721 AND 1728, IS A PRECIOUS JEWEL OF PARAMOUNT BAROQUE ARCHITECTURE. ITS CREATOR WAS AN ITALIAN ARCHITECT, GIOVANNI ANTONIO BIANA ROSSA. THE CONSTRUCTION OF THE CHURCH WAS COMPLETED BY JAN FERDINAND KAGER, COUNT OF GLOBEN, A COUSIN OF JAN KRYŠTOF KAGER. LORD OF ŠTAMPACH. TO FULFIL THE WISH OF HIS DECEASED WIFE MARIE JOSEFA, WHO WAS ORIGINALLY FROM THE STECHAU CLAN, HE HAD A COLUMN BUILT IN FRONT OF THE CHURCH DEDICATED TO THE HOLY TRINITY, RICHLY DECORATED BY STATUES FROM THE SCHOOL OF M. B. BRAUN, THE MOST FAMOUS BAROQUE SCULPTOR IN BOHEMIA. THE COLUMN IS DECORATED WITH SCULPTURES OF THE BOHEMIAN PATRON SAINTS -ST. LUDMILA, VOJTĚCH (ADALBERT), PROKOP (PROCOPIUS), VÍT (VITUS), VÁCLAV (WENCESLAUS) AND JAN NEPOMUCKÝ (JOHN NEPOMUCENE).

ALSO MADE BY THE BRAUN SCHOOL IS A SET OF STATUES ADORNING THE CASTLE GARDENS, WHICH REPRESENT MYTHOLOGICAL FIGURES AND ALLEGORIES ON THE HUMAN CONDITION. IT IS, AMONG THE GARDENS' OTHER QUALITIES, ONE OF THE REASONS WHY THIS PLACE WAS CONSIDERED A PEARL AMONG GARDENS DURING THE BAROQUE ERA. THE ORIGINALS OF THE BRAUN STATUES ARE NOW STORED IN THE LAPIDARY OF THE KLADRUBY CONVENT, WHERE THEY ARE PRESERVED FROM THE INFLUENCE OF THE WEATHER. PRIOR TO THEIR TRANSFER TO KLADRUBY, THEY WERE SITUATED ON TOP OF THE WALLS SURROUNDING THE CASTLE. NOWADAYS YOU CAN SEE THEIR REPLICAS IN FRONT OF THE CASTLE, SET IN THE NATURAL SURROUNDINGS IN A LOOSE COMPOSITION.

THE KORBS OF WEIDENHEIM WERE ANOTHER NOTEWORTHY FAMILY, OWNING VALEC FROM 1798. IN THE FIRST HALF OF THE 19<sup>TH</sup> CENTURY, THEY CONVERTED THE MAIN PART OF THE BAROQUE GARDENS INTO AN ENGLISH STYLE PARK AS IT WAS EASIER TO MAINTAIN. THEY ONLY PRESERVED THE ORIGINAL BAROQUE GARDEN AROUND THE CASTLE ITSELF. THE KORBS EXTENDED THE FRUIT ORCHARDS AROUND VALEC AND SOLD THE FRUIT AS FAR AS SAXONY.

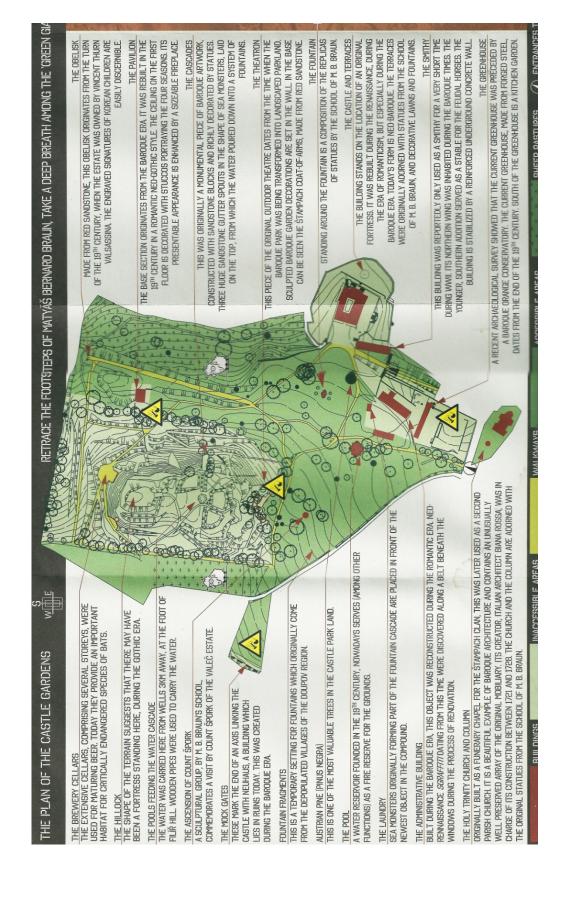
VINCENT THURN VALSSASSIN, WHO OWNED VALECTOR FROM 1890 TO 1937, IS RESPONSIBLE FOR THE NEOBAROQUE MODIFICATIONS TO THE CASTLE, THE TERRACE ARRANGEMENTS, THE CREATION OF A 'SALLA TERRENA' IN THE SOUTHERN WING OF THE CASTLE AND THE CONSTRUCTION OF THE PALM TREE GREENHOUSE. THE COUNT HAD THE FRAME FOR THE GREENHOUSE MADE FROM FORGED STEEL DELIVERED FROM VIENNA IN 1894. HE ALSO PLANTED A NUMBER OF RARE AND EXOTIC SPECIES OF EVERGREEN TREE, WHICH CAN STILL BE SEEN AROUND THE PARK.

THE LAST OWNER WAS COUNT JAN LARISCH-MÖNNICH, A FAMOUS MINE OWNER FROM OSTRAVA. HE PURCHASED VALEČ IN 1937. HE ONLY HAD ENOUGH TIME FOR SOME MINOR ADAPTATION, INTENDED TO INCREASE THE COMFORT OF LIVING. AFTER WWII, THE CASTLE WAS CONFISCATED IN ACCORDANCE WITH THE DECREES OF PRESIDENT BENIEŠ. SINCE THAT TIME, THE CASTLE SERVED BRIEFLY AS A NURSING-HOME FOR WAR VETERANS. IN THE 1950'S IT WAS TURNED INTO AN ASYLUM FOR CHILDREN FROM KOREA AND THEN FOR A NUMBER OF YEARS AFTERWARDS, SERVED AS A CHILDREN'S HOME. IN 1976 THE CASTLE WAS DEVASTATED BY FIRE.

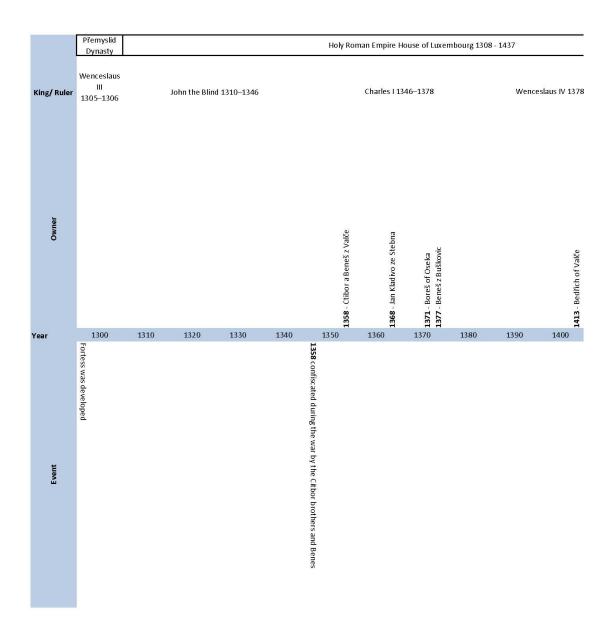
TVVENTY YEARS LATER, STÁTNÍ PAMÁTKOVÝ ÚSTAV INSTITUTE FOR THE PROTECTION (NATIONAL CONSERVATION OF MONUMENTS AND SITES) BEGAN A RECONSTRUCTION OF THE CASTLE, SAVING IT FROM THE POINT OF BEING ON THE VERGE OF DEMOLITION. SINCE THEN, THE ENTIRE CASTLE GROUNDS RECONSTRUCTION HAS BEEN CARRIED OUT WITH DONATIONS FROM MANY RESOURCES. SOME OF THESE INCLUDE FM EHP/NORWAY -"RENOVATION OF THE HOLY TRINITY CHURCH AND COLUMN" -2009 - 2011. STRATEGICAL PROGRAMME FOR THE ENVIRONMENT - "SAVING THE VEGETATION OF VALEČ CASTLE PARKLAND" AND "STATIC FIXATION OF THE ENTRANCES OF BREWERY CELLARS" - 2008 - 2011, MK "FIREPROOFING, REPUBLIC -ENGINEERING NETWORKS AND RECONSTRUCTION OF THE ADMINISTRATIVE BUILDING" - 2008 - 2010, RURAL DEVELOPMENT INITIATIVE -"VALEC ENVIROMENTAL CLASSROOM" - 2010, BESIDES OTHERS.

CREATED WITH THE SUPPORT OF:





# ANTS', AND FAMILIARIZE YOURSELF WITH THE ANCIENT GODS. A PLAN OF COPIES OF BRAUN'S STATUES SITUATED AROUND BAROQUE FOUNTAIN - 1 -2 - DIDO (AN ALLEGORY OF DESPAIR) - SHE STABBED HERSELF BECAUSE OF AN UNFULFILLED LOVE 3 - CHRONOS REPRESENTS TIME, AND SELENE, THE NIGHT (AN ALLEGORY OF THE NIGHT) 4 - CHRONOS AND EOS - THE GODDESS OF AURORA - (AN ALLEGORY OF THE DAY) 5 - OLYMPOS - A HALF-GOD, A MOUNTAIN DEMON 6 - SILENOS - A COMPANION OF DIONYSOS (16) 7 - SATYR - A MOUNTAIN DEMON (10)8 - PAN - THE GOD OF FORESTS (3) 9 - DIONYSOS (12 10 - ATTIS AND IA 11 - HERMES AND APHRODITE (13)(6) 12 - MELEAGROS AND ATALANTA 13 - APHRODITE - THE GODDESS OF BEAUTY AND LOVE 14 - DEMETER - THE GODDESS OF FERTILITY OF THE LAND AND FARMING 15 - ARES - THE GOD OF WAR 16 - HERACLES -THE SON OF THE HIGHEST GOD ZEUS AND QUEEN ALCMENE 17 - DAVID (AN ALLEGORY OF POWER) - DEFEATED GOLIATH USING A SLING AND A PEBBLE

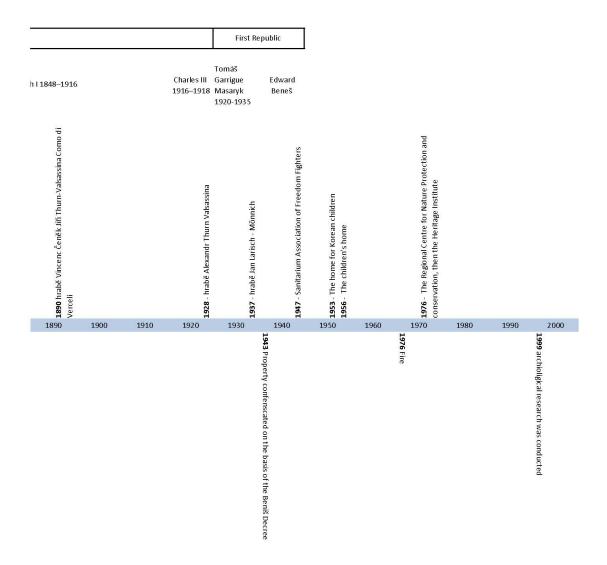


		House of I	Habsburg	2				House of J	agiellon	
:–1419	Sigismund 1419–1437						Vlad islaus II 1471–1516			Louis the J 1516-
1416 - Nevlas a Jan of Doupova			<b>1454</b> - Sezem of Doupova			<b>1487</b> - Jan z Doupova		<b>1505 -</b> Jakub Kyšperský of Vřesovic (sons of indřích, Jakub, Vojřěch, Jetřích)		
1410	1420 1430	1440	1450	1460	1470	1480	1490	1500	1510	1520
								o o	<b>1514</b> The village was given municipal rights December	1526 Jan Kyšperský died in the Battle of Mohács

agiellonian -1526	Ferdinand I 15	526–1564	Maxmilián I	. 1564–1576	Rudo	olph II 1576–10	511	Mathias 1611–1619	Ferdinand II 1	.619–1637	Ferdinand III & Ferdi 1646-
2 2 1530 - Hugo hrabě z Leisnecku 1538 - Vilém Hasíštejnský z Lobkovic				<b>1570</b> - Κηÿtof Štampach ze Štampachu			<b>1603</b> - Václav Štapmach ze Štampachu		<b>1623</b> - Barbora Štampachová	1638 - Brothers Jiří, Jan, Erazim and Jaroslav Štampachové	
1530	1540	1550	1560	70 1570 Christopher Štampach of Štampach bought Valeč Developed Renaissance castle	1580	1590	1600	1610	0 1623 Valeč was bought by Barbora Štampachová of Poutnov Václav Štampach joined the Estates Uprising, left the country,	1630	1640

House of F	Habsburg										
I 1627–1657 nand IV -1654		Leo	pold   1657–17	705		Joseph I 1705–1711	Charles II 17	11-1740 A	harles Ilbert 1–1743		Maria Theresa 1740–1780
				<b>1694</b> - Jan Kryštof Kager Šťampach ze Šťampachu		<b>1718 -</b> Kateřina Therezie Štampachová	1721 - Jan Ferdinand Kager 2 Globenu		1745 - Karel Josef August hrabě z Lymburg-Styrum a Globenu		<b>1760</b> - Marie Alžběta z Lymburg-Styrum a Globenu (za nezletilou dceru Marii Josefu)
1650	1660	1670	1680	1690	1700	1710	1720	1730	1740	1750	1760

	House of Habsburg-Lorraine											
ì	Joseph II 1780–1790		Francis   1792–1835			Ferdinand V 1835–1848			Francis Josepl			
	<b>1780 -</b> hrabě Václav Kulhánek Klaubenstein – Pott-Pus ch (poručnik Marie Josefy_)	1797 - Jan Antonin hrabě RR z Pergenu Johann Goffried Korb Ritter z Weidenheimu			<b>1826</b> - Franz Korb Ritter z Weidenheimu					<b>1876</b> - Karl Korb Ritter z Weidenheimu	<b>1884</b> - Chrildren of Karla Korba Ritter	
1770	1780	1790	1800	1810	1820	1830	1840	1850	1860	1870	1880	



## DATA STORAGE DEVICES - CD/DVD