

# TERRACED VINEYARDS – ARCHITECTURAL RESPONSES TERASZOS SZŐLŐMŰVELÉS – ÚJ BORÁSZATOK

SZERZŐ/BY:

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*"Good architecture and good wine have much in common. Although architecture may be of a more permanent nature - wine being rather more quickly consumed - both are manifestations of science and technology, art and culture."*

Al Stratford<sup>1</sup>

## VITICULTURAL LANDSCAPES

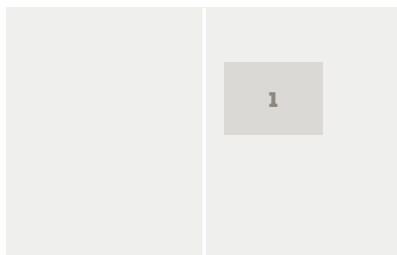
The very first vine-growing landscapes were modelled in the primary era, some 260 million years ago. The vineyards became established preferentially on embankments, the edges of faults, and pebbly plains, as well as volcanic soil, millions of years later. A unique characteristic of the viticultural landscape are the terraced vineyards sustained by dry walling, a perfect example of landscape architecture created by man in inaccessible surroundings. Viticultural use was particularly predominant in the historic terraced landscape found across Europe: in the Cinque Terre

region of Italy, by Banyuls-sur-Mer on the Mediterranean coast and Condrieu in the Rhône Valley in France, along the Douro in Portugal, on the Pelješac peninsula in Croatia, in Austrian Wachau, in the Swiss cantons of Ticino, Vaud and Valais, and in the valleys of the Ahr, Elbe, Mosel, Neckar, Rhine, and in their side valleys in Germany.<sup>2</sup> They are the real evidence of how human life can express itself in the steepest slopes of mountain and coastal areas.

The terraced vineyard landscapes were always appreciated, but the interest in their wise management and broader understanding has been constantly growing since the end of the past century. Some of them have been recognised at international level for their importance. The first vine growing region as a cultural landscape, the Wachau region was listed as a UNESCO world heritage site in 2000. It was followed by the Alto Duoro Wine Region in Portugal (2001), the Tokaj Wine Region in Hungary and Upper Middle Rhine Valley, Germany (2002). The

<sup>1</sup> Architect Al Stratford, President of the South African Institute of Architecture, in Fraser, C. and Fraser, H. (2010). *Modern wineries of South Africa*. Cape Town: Quivertree, p.4.

<sup>2</sup> Petit, C., Konold, W., and Höchtl, F. (2012). *Historic terraced vineyards: Impressive witnesses of vernacular architecture*. *Landscape History*, 33(1), pp. 5-28.



**Pict. 1:** Map of the wineries' location  
(SOURCE: MADE BY THE AUTHORS, 2017)



Lavaux Vineyard Terraces in Switzerland were listed in 2007, the Vineyard Landscape of Piedmont in Italy in 2014, the Champagne Hillsides and the Climats, Terroirs of Burgundy – both in France – were added in 2015. However, against the recognition of some territories others are abandoned or facing the risks of collapse, banalisation or destructive urbanisation, loss of their precious intangible knowledge and soul heritage. Economic considerations, productivity and urban developments have often taken precedence over the aesthetic and heritage aspects. The mechanisation of the vineyards has often been reflected in the banalisation or even degradation of landscapes. The hill-slopes have been restructured and vine plots have often been enlarged following land regrouping operations. The destruction of landscape components (embankments, single trees or rows of trees, hedgerows, copses) or architectural elements (walls, vineyard cabins, etc.) has often accompanied this restructuring process.<sup>3</sup>

Hence, the culture of wine has been redefining itself over the last decades and winery architecture has undergone transformations that have been a consequence of this evolution. The need to update old structures to improve production, taking into account the additional value that a remarkable building can have for marketing and promotional purposes, has led to the establishment of a relationship between architecture and wine. Architects are being challenged to rethink the winery as a bold contemporary expression of tradition and innovation, agriculture and technology, production and hospitality.<sup>4</sup>

#### THE WINERY BOOM

Several wineries and vineyards have captured the public's eye in the recent years thanks to their special architecture, which completely transmits the atmosphere of their surroundings while reflecting the tradition of the winemaker.

<sup>3</sup> About the destruction and decrease of terraced vineyards see for example Incze, J. and Novák, T. J. (2016) Identification of extent, topographic characteristics and land abandonment process of vineyard terraces in the Tokaj-Hegyalja wine region between 1784 and 2010. *Journal of Maps*, 12(1) pp. 507-513.

<sup>4</sup> Webb, M. and Pfeiffer, E. (2005). *Adventurous Wine Architecture*. The Images Publishing Group, Mulgrave, p. 6.



Some of these buildings are designed to establish brand identity and excite public attention in a fiercely competitive market, others blend into the landscape or abstract the local vernacular. Nowadays, the wineries like religious buildings, are the must-visit destinations for tourists. This popularity has given rise to some unique new architecture. The content of wineries has been changed, alongside the physical requirements of a winery - the fermenting cellar (receiving, sorting, destemming, crushing, maceration, fermentation, pressing etc.), wine storage area, bottle warehouse, packaging and shipping - certain of these buildings include tasting area, shop, restaurant and even accommodation. Such buildings are typically situated alone and surrounded by vineyards, offering to wine lovers the privilege of experiencing the exceptional ambiance and landscape vineyards. Therefore, they do not serve only for collecting and producing, but also for "selling" the landscape. This situation is even more challenging, when the landscape itself is extreme and dramatic, namely when the buildings are located into terraced vineyards.

The built forms in the historic terraced vineyards and their interactions are

the particular focus of the research. The aim of our research was to answer to the following questions: How do the new wineries react on the extreme and dramatic landscape? What are the architects' intentions, how do they realise and interpret them? Do they intend to hide the building or do they intend to put a contrast to the landscape? There were two criteria for the selection of case studies: their location and their architectural appreciation. For this we searched new wineries or recent extensions of wineries built on UNESCO listed cultural landscapes defined by terraced vineyards. Due to the above restrictions it was impossible to find the same number of examples from each territories, but study focuses not on regional architectural specialities but on the relationship between a characteristic landscape and new architecture. We selected six case study buildings. The Franz Keller Winery and Abril Winery are both settled in the Baden wine region, namely in the Kaiserstuhl wine district, Germany. The Swiss example, Lavaux Vinorama is established in Lavaux sub-region of Vaud wine region. The Quinta do Vallado Winery, Quinta do Nápoles Winery and Adega Quinta da Faísca are established in Douro Valley wine region, Portugal. (Pict. 1)

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**Pict. 2:** Franz Keller Winery  
(SOURCE: [HTTPS://WWW.COMPETITIONLINE.COM/UPLOAD/IMAGES/4/7/5/4/E/B/D/F/4754EBDFOA8782A71D9C199C8A249BOC\\_1.JPG](https://www.competitionline.com/upload/images/4/7/5/4/E/B/D/F/4754EBDFOA8782A71D9C199C8A249BOC_1.JPG))

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**Pict. 3:** Franz Keller Winery  
(SOURCE: [HTTPS://WWW.BO.DEWIRT.SCHAFTREGIONALDES.KAISERSTUHL-NEUEWEINGUETER](https://www.bo.dewirt.schaftregionaldes.kaiserstuhls-neuweingueter))





To carry out the study, we rely on written materials: designers' texts, architectural critics' reviews and on the detailed analysis of the selected buildings.

#### BADEN WINE REGION

The Baden wine region is part of the Upper Middle Rhine Valley – which was listed as a world heritage site in 2002 – and has a long tradition of wine-growing on the steep slopes. It is the southernmost of Germany's 13 official wine regions, which is approximately 400 km long, reaching from the border of France in the north to Lake Constance in the south, and is situated on the eastern bank of river Rhine. Much of Baden is situated in the Rhine rift, which is protected by the Black Forest and the Vosges mountains to the west of Rhine, and therefore is Germany's warmest location. Due to its very large north-south length, Baden is divided into nine districts, which is more than any other German wine region.

The Kaiserstuhl, one of Baden's wine districts, is centred around a compact range of volcanic hills on the eastern banks of the Rhine River. The Kaiserstuhl

hills are the most impressive geological features of the Rhine Valley and rise up majestically from the Upper Rhine Plain. The terrain has been altered by the people living there since it was settled. They conquered the slopes, creating terraces to increase the acreage and prevent the soil from erosion and sliding into nearby river. These were mostly used as vineyards, as well as fruit growing or for other agricultural uses. With their hands and some rudimentary tools they have sculpted huge and amazing works of art. More recently, in the process of consolidation of vineyards, modern techniques have been used to transform the small terrace landscape into one of large-scale terracing. Between 1968 and 1980 about four square kilometres of new terrace slopes have been produced. The large-scale terracing is carried out in units of about 100 ha, each unit being denuded and reconstructed.<sup>5</sup>

The climate is borderline Mediterranean and is characterized by mild winters and warm summers. The Kaiserstuhl range is, in broad geological terms, an alkali-carbonate rock formation created by numerous volcanic eruptions about 16–19 million years ago.<sup>6</sup> The surface soils are largely made up

<sup>5</sup> Fischer, A., *Vegetation development from denuded ground to grassland*, in Van Andel, J., Bakker, J.P. and Snaydon, R.W., *Disturbance in Grasslands: Causes, effects and processes*, (1987). Dr W. Junk Publishers, Boston, pp. 119-130.  
<sup>6</sup> <http://www.wine-searcher.com/regions-kaiserstuhl> (Accessed 10, March 2017)



of Quaternary loess (loose sedimentary soil) formed during the last Ice Age.

The **Franz Keller Winery**<sup>7</sup> (2013, architects: Geis and Brandtner) with its 57 hectares of vineyards, is best known for producing dry wines reflecting the extraordinary terroir of the Kaiserstuhl. For generations, the wine-growing estate Franz Keller, has put its passion for wine growing and good wines into practice, carefully blends a history of wine-making tradition with modern technology and methods.

The first impression of the new complex is the terraced layout. (Pict. 2, 3) The building seems to be the continuation of the terraced vineyard levels, it extends towards the settlement but does not reach it. While the roof follows the shape of the hill, the large part of the building mass is sunk into the ground. All roofs are green with a layer of soil up to four meters and planted with grassy seeds from neighboring Badberg which has been specially made from the nature reserve. The three levels of the building reflects to a different wine producing process, leveraging gravity. On the top floor, the grapes are culled, while the second floor contains mash tanks and squeezing machines, and oak and wood barrels are stored on the

bottom floor. On the top, adjacent to the working area, are wine tasting facilities, a restaurant, offices and an exhibition space, and several private event spaces on different floors. The reinforced concrete structure, the tapered columns and the huge windows make the building open and communicative both inside and outside. The interior provides interesting insight into the production processes and a unique panoramic view from the terraces.<sup>8</sup>

According to the architects the concept of the design was based on a great extent on the landscape of the Kaiserstuhl. Their intention was to integrate the building volume harmoniously into nature. The design concept reflected the emblematic layers and terraces of the mountain, to connect the building and nature. The integration of the new winery into the situation of the terraced surrounding was at the forefront of the task.<sup>9</sup>

The **Abril Winery** – located at the edge of the town Bischoffingen – was founded in 1740 by Hans-Frieder Abril. Over the time, with the growing demands on cultivation and production, the original manor house became too small. The new owners came to the conclusion that

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**Pict. 4:** Abril Winery  
(SOURCE: [HTTPS://  
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PHOTOS/](https://www.facebook.com/pg/weingutabril/photos/))

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**Pict. 5:** Abril Winery  
(SOURCE: [HTTPS://  
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the reconstruction of the traditional building proved to be very difficult due to the high groundwater level, and in 2008 was taken the decision to create a completely new winery. The production was moved from the center of the village to an easily accessible hillside site.<sup>10</sup>

The new Abril Winery (2012, architect: Wolfgang Münzing) is located on a gentle slope, surrounded with 20 hectares of vineyards. (Pict. 4, 5) The building has a double function: it serves for wine production, and includes a tasting area for the visitors. It has a simple box-like mass, which appears as an architectural element in the landscape, standing as a distinctive feature, though most of the rectangular concrete mass is concealed underground. Wine production processes are all spread over three storeys, under one roof. The most of the mass is covered with Corten-steel cladding and is interrupted by a perforated metal sheet with ornamentation. The walls along the foyer and exhibition area are made of glass and steel, offering to the visitors an amazing view to the landscape.

„The building should be carefully inserted into the landscape.” – defined the architect his intention.<sup>11</sup> The rusty colour of the Corten-steel envelope has

a reference to the surrounding soil, recalling its brown tufa, while the additional steel band around the building reminds to the archaeological finds from the time of the band ceramics.<sup>12</sup> It should refer to history, namely that some artifacts from this pottery culture of 7,000 years were discovered at this part of the Kaiserstuhl.

#### VAUD WINE REGION

Vaud wine region is one of Switzerland's 26 administrative cantons and the country's second-largest wine region. The Vaud wine region is distributed across three wine sub-regions: Chablais, La Côte and Lavaux.

The Lavaux wine terraces consist of 830 hectares, stretch for about 30 km along the south-facing northern shores of Lake Geneva and cover the lower slopes of the mountainside between the villages and the lake. This area was inscribed on the UNESCO World Heritage List in 2007. Lavaux is a structured landscape where the main shapes reflect the rocky geological formations beneath the surface. The various levels were formed through the natural process of erosion which led to hills made of steps on which

<sup>7</sup> Meyhöfer, D. and Frahm, K. (2015). *The Architecture of Wine*. Avedition, Stuttgart, p. 101.

<sup>8</sup> <https://www.akbw.de/architektur/beispielhaftes-bauen/preamierte-objekte/detailansicht/objekt/weingut-keller-5579.html> (Accessed 10, March 2017)

<sup>9</sup> <http://www.geis-brantner.de/aktuell/weingut-keller.php> (Accessed 10, March 2017)

<sup>10</sup> Meyhöfer, D. and Frahm, K. (2015). *The Architecture of Wine*. Avedition, Stuttgart, p. 121.

<sup>11</sup> Ökoweingut findet einen potenten Retter [Eco-winery finds a potential saver], 23. August 2012. Stuttgarter-Zeitung.de, <http://www.stuttgarter-zeitung.de/inhalt/kaiserstuhl-oekoweingut-findet-einen-potenten-retter.489584de-5f25-4a1f-8c88-b5600556fff7.html> (Accessed 11, March 2017)

<sup>12</sup> Abril-Weingut des Tengelmann-Seniorchefs öffnet Mitte September [Abril Winery is to open in the middle of September]. 24. August 2012. Badische-Zeitung.de, <http://www.badische-zeitung.de/vogtsburg/abril-weingut-des-tengelmann-seniorchefs-oeffnet-mitte-september-63297175.html> (Accessed 11, March 2017)



**Pict. 6-7:** Lavaux Vinorama  
(SOURCE: [HTTPS://ARCHITIZER.COM/PROJECTS/VINORAMA/](https://architizer.com/projects/vinorama/))

vines grew. What rendered the Lavaux landscape remarkable is mankind's exploitation of the land, local inhabitants converted the landscape to make it suitable for farming.<sup>13</sup> The wines were grown in the area in Roman times, the present vine terraces can be traced back to the 11th century, when Benedictine and Cistercian monasteries controlled the area. The main elements are the series of walls running in parallel or perpendicular directions to the slope, and were traditionally constructed of local limestone laid with lime mortar and maintained for centuries by the livestock farmers or craftsmen. Today some of the terraces are constructed of concrete with stone facings.

The climate of the Lavaux region is milder than its immediate surroundings because of its south-facing slopes and the modulating effects of Lake Geneva. While technically not Mediterranean climate, this part of the lake exhibits characteristics that are closer to Mediterranean type regimes than the mountain and continental climates that prevail just a few kilometers away. The soil is characterized by freshwater molasse, which was deposited with the formation of the Alps. The Rhone glacier made the most recent

contribution, leaving behind debris during its retreat over 15,000 years ago. While primary rock soils dominate the upper slopes, the vines take root in the lower areas, on parent material containing active chalky limestone.

The Lavaux Vinorama (2010, architects: Fournier-Maccagnan) was built as a "teaching and social centre"<sup>14</sup> on the most stunning vineyard landscape. (Pict. 6, 7) Compared to the earlier examples this project misses the production facilities of a usual winery, it focuses on wine tasting and selling. The building has a monolithic cube nestled like a fortress into the steep slopes, emulating the rocky cliff where grape vines enjoy the warm and moisture-laden air. The reception with its wine-tasting bar is the central element of the building. The corridors and stairways, evoking typically maze-like wine vaults, lead to the self-service enomatic area, to the projection theater in the basement, and to the conference space on the upper floor. The facade is covered by a sculptural steel rain-screen, designed by Swiss artist Daniel Schleapfer. Its pixelated surface depicts grapevines, which impart a dappled light to the interior tasting rooms. From

<sup>13</sup> Reynard, E. (2006). *Geography. Vignoble en terrasses face au lac et aux Alpes. Lavaux World Heritage Site Application File for UNESCO, Cully*, p. 40-42, <http://www.lavaux-unesco.ch/en/N5672/geography.html> (Accessed 11, March 2017)

<sup>14</sup> Woschek, H-G., Duhme, D. and Friederichs, K. (2012). *Wine and Architecture. Edition Detail, Munich, Germany*, p. 125.





here the cascade, vineyards and lake are visible – the only place in the structure from where these may be viewed.

The project won the 2013 Architizer A+ Jury Award in the bars & nightlife category. The jurors appraised the architects strive to fit into the historic and natural context. „They choose to build with concrete—a material both historic and modern, used by the ancient Romans and Swiss modernists. To pay further homage to local building traditions, the concrete was composed of local sand and aggregate, physically including the earth of the site into the structure.”<sup>15</sup>

#### DOURO VALLEY WINE REGION

The Douro Valley wine region, located in the northeast of Portugal, is surrounded by mountains and extends for about 250 000 hectares. The region, birthplace of Port, is one of the oldest and most beautiful of the historic European wine regions. Wine has been made there for two thousand years and its landscape has been shaped by human activities. This cultural landscape was included into the UNESCO list of world heritage sites in 2001. Most of the finest vineyards are planted on the steep hillsides

bordering the Douro river and its tributaries, such as the Pinhão, the Távora and the Rio Torto. About two thirds of the vineyard area is planted on slopes with a gradient of over 30%.<sup>16</sup> The traditional vineyard scenery, dominated by the old, narrow, stone-walled terraces, has changed in many places, though preserved in the central section of the region by World Heritage Site status. Until the early years of the 20th century, this was done by constructing dry stone walls and then back filling them with soil to create stable terraces. Today the cost of building these magnificent handmade structures would be prohibitive. On steeper slopes they have been replaced by 'patamares', terraces carved out of the hillsides using earth moving equipment and separated by tall earth banks. On gradients of up to around 30%, an increasing number of vineyards have been converted to 'vinha ao alto', a planting system in which the vines are laid out in perpendicular rows running vertically up the slopes.

The Douro Valley is the only significant wine producing area in the world to practice hot climate hillside viticulture. The region is sheltered from Atlantic winds by the Marão and Montemuro mountains and has a

<sup>15</sup> Tucked Into A Cliffside, A Swiss Winery Preserves The Landscape—And Wows Guests, 5. April 2013, <http://architazer.com/blog/tucked-into-a-cliffside-a-swiss-winery-preserves-landscape-and-wows-guests/> (Accessed 11, March 2017)

<sup>16</sup> Taylor's Port, The Douro Valley, 2013, <http://taylor.pt/en/what-is-port-wine/douro-valley-vineyards/> (Accessed 11, March 2017)



mediterranean climate, with hot and dry summers and cold winters. The steep vineyards are predominantly composed of schist with sizable granite deposits. The total vineyard area is around 45 000 hectares, and is divided into the three sub-regions: Baixo Corgo, Cima Corgo e Douro Superior.<sup>17</sup> The Baixo Corgo lies at the western end, closest to the Marão mountains, where the rainfall and vineyard yields are highest. It is the smallest of the three areas, but has the largest viticulture site with 13,500 hectares of vineyards. The grapes grown here are used mainly for the production of inexpensive ruby and tawny ports. The steep vineyards of Cima Corgo, with a drier climate and lower yields, is located further upstream from the Baixo Corgo and is centered on the town of Pinhão. With 17,000 hectares, this sub-region is the heartland of (port) wine-growing. The grapes grown in this zone are considered of higher quality, being used in bottlings of Vintage and Late Bottled Vintage Ports.

**Quinta do Vallado Winery** founded in 1716, is one of the first port houses in the Douro Valley. The winery lies on both banks of the Corgo River, a tributary of the Douro river, in Baixo Corgo wine sub-region. In 2003 the Quinta do Vallado Douro Reserva received its first prizes, afterwards the wine estate became one of the most highly regarded in Europe and can now look back on a number of international awards. This recognition increased demand for the wines, so in 2006, the proprietors were already thinking about extending the estate.<sup>18</sup> The proposal of enlargement of the winery included two areas of intervention – production and leisure – and a supplemental challenge: to maintain and to integrate the pre-existing buildings in a new complex with a clearly contemporary vocabulary. The extension was completed in 2010 by Guedes + de Campos Architects.

The enlargement of the Quinta do Vallado Winery conciliated the need of the extension of the existing cellar with the proper integration in the landscape. (Pict. 8, 9) The intervention aimed to maintain the existing buildings, completing them with the necessary reorganization of the construction of new buildings: fermentation warehouse, hogshead warehouse and reception. The linear shape of the production part stretches along the layers, while it is also embedded into the ground. All the volumes are built in concrete with a roughening finishing in the interior. On the outside the buildings are coated with local burnt shale worked in a contemporary way. The orange gleam of the quinta can be seen from a distance, in contrast, the slate-covered exterior of the new building has a minimal impact. The guest rooms and passageways offer friendly decors, huge windows and views..

According to the architect, the project was supposed to "ideally blend into the natural landscape and not look too bulky and heavy". For Vieira de Campos, there were two key aspects: making use of traditional regional building materials, and emphasizing the building's relationship to the surrounding landscape.<sup>19</sup> The new structure should not compete with the estate's existing historical buildings, but rather present a natural contrast to them. Each gesture had to be incisive, adapting itself to the given program while conquering an expressiveness that could value both the built complex and the surrounding landscape.<sup>20</sup>

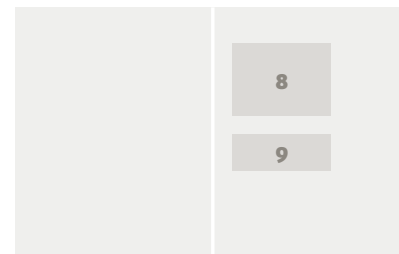
**The Quinta do Nápoles Winery**, with nearly 30 ha of terraced vineyards at an altitude of 80-250 m, was purchased by Dirk van der Niepoort in 1987. The winery sits undisturbed atop a beautiful hill of terraced vineyards, hidden along the banks of the Têjo River, which flows southeast from the Douro River. In the nineteen eighties Quinta do

<sup>17</sup> Chronicle Vineyards, Douro region: An exceptional example of a traditional European wine region, 2014. <http://www.chroniclevineyards.com/douro.html> (Accessed 11, March 2017)

<sup>18</sup> Woschek, H-G., Duhme, D. And Friederichs, K. (2012). Wine and Architecture. Edition Detail, Munich, Germany, p. 44.

<sup>19</sup> Woschek, H-G., Duhme, D. and Friederichs, K. (2012). Wine and Architecture. Edition Detail, Munich, Germany, p. 45.

<sup>20</sup> <http://divisare.com/projects/202621-menos-e-mais-arquitectos-fernando-guerra-fg-sg-quinta-do-vallado-winery> (Accessed 11, March 2017)



**Pict. 8:** Quinta do Vallado Winery  
(SOURCE: [HTTP://2.BP.BLOGSPOT.COM/-X1KKX6EJ50I/UNWLBtNTQCI/AAAAAAAAACEO/V-OTQUPKNHS/S1600/DSC\\_0690.JPG](http://2.bp.blogspot.com/-x1kkx6ej50I/UNWLBtNTQCI/AAAAAAAAACEO/V-OTQUPKNHS/S1600/DSC_0690.JPG))

**Pict. 9:** Quinta do Vallado Winery  
(SOURCE: [HTTP://WWW.QUINTADOVALLADO.COM/QUINTA-VALLADO/13/WINERY-AND-CELLAR/EN/](http://www.quintadovallado.com/quinta-vallado/13/winery-and-cellar/en/))



Nápoles was merely a disparate group of crumbling stone buildings surrounded by old vines, although, with a centuries old noble Port making history.

The new building (2007, architect: Andreas Burghardt) is an almost seamless continuation of the existing natural stone terracing. (Pict. 10-12) The winery is situated on top of a hill, overlooking the river and offers a fantastic view to the valley. To embed the winery in the landscape, the main parts of the building are situated underground and the exterior walls are covered with natural stone (slate) which is the traditional local material for the retaining walls of the terraces. In addition to the technical requirements of the winery, the building includes a tasting room which opens to a huge patio and has a cantilevered steel terrace overlooking the river. The whole construction - walls, floors and ceilings - is built in concrete. The metal parts are made in Corten-steel.

From the valley of the Tedo River, and while approaching the winery, the

building looks like a medieval castle. This impression is even stronger if we look at the complex from the air, or we enter into the precinct and notice the small, traditionally white painted houses. According to the architect, his first idea was to make an invisible building. "Essentially, we had an idea to erect an invisible winery - a building that disappears completely into the terraced landscape." In the end, however, that was not entirely feasible, "we would have had to blast away too much rock to do it, and that would have swallowed huge sums of money."<sup>21</sup>

**Adega Quinta da Faísca**, built in 1946, is a 20 ha property located at 650 m altitude and owned by Gonalo Sousa Lopes' family since 2000. With 16 hectares of vineyards, the farm is located in the Favaio upland, Cima Corgo wine sub-region. The existing winery, was once renovated and adapted to the new technologies and standards. Due to the presence of history, tradition and good

<sup>21</sup> Woschek, H-G., Duhme, D. and Friederichs, K. (2012). *Wine and Architecture. Edition Detail, Munich, Germany*, p. 68.





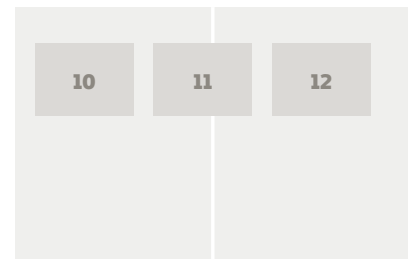
wine, this place became an attractive destination for tourists. Consequently, the winery proved to be too small for the development of commercial activity, and in particular, too small to host the curious and keen tourists in the area. So, the owner decided to extend the winery.

The new volume of the winery (2013, architect: Carlos Castanheira) is composed of three different parts. (Pict. 13, 14) The flat roof volume, clad in slabs of black slate, comprises all the staff facilities, bathrooms, stores and kitchen. The volume covered by the large roof (which is very similar to the existing) includes, on the first floor, a big hall to host guests, and two terraces: one to the North, to receive visitors and to the South, to enjoy the landscape and the succession of mountains and valleys. Below this hall, in the basement, there are two rooms for the treatment and resting of the wine, and at the lower level, which is attached directly to the existing winery, there is a space for temporary storage and distribution. The third volume is simply a covered space that shelters the exterior route between the existing winery and the new areas. The architect used the local materials, schist and granite, combined with wood and glass.

“The timber for the structures, the slate for the walls or the granite for the edging are not mimetic or *pastiche*, but rather the interpretation of the continuity of what we have and know how to do in our (Portuguese) construction, in particular in the Douro Region.” – explained the architect.<sup>22</sup>

#### DISCUSSION AND CONCLUSION: POWER OF LANDSCAPE

Based on the architects’ expressed intentions (and on the reviewers’ evaluations) it can be concluded that the adaptation to the existing cultural landscape was a determining criterion in every case. The architects’ intention – not to disturb the landscape – is a recurrent motive, although not always a fully realised one. The explanation is not only in the usually huge built-in mass of the production facilities, but also in the tourism function. The new wineries must have an attractive appearance from the outside and they should offer a view on the surrounding landscape from inside. Consequently, though the architects intended to hide the buildings, they only partially could: the wineries built for visitors



**Pict. 10-12:** Quinta do Nápoles Winery  
(SOURCE: PHOTO BY SIMON MARIANNA, 2016)



could not have been hidden fully under the ground like a traditional cellar.

"We lowered the winery deep into the loess - and then raised it up again, in some cases above ground level, by taking the typical Kaiserstuhl terraces - on which the vines can bask in the sun so splendidly - as a motif that impacted on the design more than anything else. I am glad that the building does not impinge too heavily on the eye", said one of the architects of the Franz Keller Winery, Michael Geis, being interviewed.<sup>23</sup> They were not the only ones who hid the big part of the building under the ground, this layout is common in each of our exemplary buildings and in the most of other wineries. The difference is in the proportion of the underground and above-ground parts.

As the architects could not fully hide their buildings, they intended to follow the form of the terraced landforms. They were influenced and inspired by terraces and steps where the vineplants grow. The Franz Keller Winery models the terraces covered with green, while the Quinta do Nápoles building reflects on the stone buttresses of the landscape by shape and used material. The Lavaux Vinorama seems to be an extension of the ascent above the building: the

vineyard covers the top and the concrete facade recalls the usual terrace support of the surroundings. Finally the elongated strips of the new production wing of the Quinta do Vallado extends the lines of the neighbouring terraces, following the architects's intention to shape it like to become a rock.<sup>24</sup>

Although the above examples may prove the power of landscape, impressing by the shape of the wineries, however two of those six examples seem to follow different considerations. The Abril Winery explores the slope, but the box-like shape and especially the Corten-steel coat of the facade, makes it attractive as against the surrounding landscape. The dark red mass can be seen from far away, but it is sharply separated from the green vineyards on the slope behind, except in Autumn. Another architectural element of the building, the running around steel band as a memory of the pottery findings has nothing to do with the existing landscape and history, it is a story for the visitors. The Adega Quinta de Faísca extension - although it is situated outside the village - reflects the traditional buildings of the neighbourhood. The complex recalls a rural mansion not only in construction and materials but also in its arrangement.

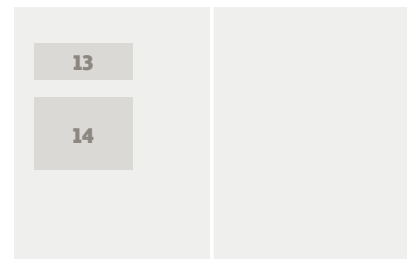
<sup>22</sup> <http://www.archdaily.com/542406/quinta-da-faisca-carlos-castanheira> (Accessed 12, March 2017)

<sup>23</sup> Meyhöfer, D. and Frahm, K. (2015). *The Architecture of Wine*. Avedition, Stuttgart, p. 118.

<sup>24</sup> <http://www.archilovers.com/projects/55352/quinta-do-vallado-winery.html#info> (Accessed 12, March 2017)

<sup>25</sup> Meyhöfer, D. and Frahm, K. (2015). *The Architecture of Wine*. Avedition, Stuttgart, p. 125.





**Pict. 13:** Adega Quinta da Faísca (SOURCE: [HTTP://VINHOPORTOVINTAGE.BLOGSPOT.HU/2014/11/SECRET-SPOT-WINES-COM-ADEGA-PREMIADA.HTML](http://vinhoportovintage.blogspot.hu/2014/11/secret-spot-wines-com-adega-premiada.html))

**Pict. 14:** Adega Quinta da Faísca (SOURCE: PHOTO BY SIMON MARIANNA, 2016)



Well, though officially the precinct belongs to the Duoro river neighbourhood, here the slopes are not so steep, not all the vineyards are terraced. However, even in these two cases the architects and reviewers consider the buildings' integration into the environment as a priority. „By exploring the slope, the building looks small and elegant, nestling comfortably into its environment, it does not disturb the landscape at all, on the contrary, it actually complets it” – a reviewer appreciated the Abril Winery.<sup>25</sup> A wine touristic website advertises the Adega Quinta de Faísca as follows: „The architecture of the Adega is part of the landscape, respecting the Douro architecture of schist and granite, combined with noble materials, such as wood and glass, offering comfort and hospitality.”<sup>26</sup>

To preserve, moreover not to touch, an appreciated cultural landscape became a kind of “must be” by nowadays. „If you see the old stone walls that climb the mountains for thousands of kilometers, you'll want to pack up

your laptop and do nothing.” – wrote the architect, Andreas Burghardt, after his first visit of the Duoro landscape.<sup>27</sup> However – to conclude our paper – the landscape as such as the landform has a driving impact on architects only in extreme, dramatic cases.

In this research we focused on new, architecturally highly appreciated wineries situated mainly in extreme, terraced surroundings, and we analysed how they reflected on the double challenge of hiding and being attractive. The question was raised by the emerging wine tourism with an aesthetic demand, but this trend also affects environmental and social questions which should be touched in further research. ©

<sup>26</sup> <http://www.greatwinecapitals.com/best-of/porto/adeqa-quinta-da-faisca-secret-spot-wines> (Accessed 12, March 2017)

<sup>27</sup> Balkonsitz über den Porto Terrassen [Balkony above the Porto terraces], 8. July 2009. *der Standard* [derstandard.at/1246541628714/Balkonsitz-ueber-den-Porto-Terrassen](http://derstandard.at/1246541628714/Balkonsitz-ueber-den-Porto-Terrassen), (Accessed 12, March 2017)

## TERASZOS SZŐLŐMŰVELÉS – ÚJ BORÁSZATOK

A teraszos szőlőműveléshez alakított domboldalak jellegzetes kultúrtájat képeznek, melyek közül mára több is felkerült a világörökségi listára. A táj szépsége maga is turisztikai vonzerő, amit tovább erősít az elmúlt évtizedekben kibontakozott és divatossá vált borkultúra, borturizmus. Kutatásunkban arra kerestük a választ, hogy az új borászati épületek hogyan reagálnak az erős karakterű, a világörökségi rang miatt különösen védett tájakra. Mintánkba hat új, az elmúlt tíz évben épült, építészeti magassra értékelt, több helyen publikált, díjnyertes projektet választottunk, melyek három világörökségi területen valósultak meg: a németországi Rajna mentén, a svájci Vaud vidékén és a portugál Douro folyó völgyében.

Az építész tervezők kimondott szándéka (és a kritikusok értékelése) szerint a tervezésnél valamilyen esetben központi szempont volt, hogy az épület illeszkedjen környezetéhez, sőt, minél észrevétlenebbül simuljon bele abba. Ez utóbbit per-

sze nem csak a borászati üzemek nagy mérete tette nehezen megvalósíthatóvá, hanem a megbízói igény is, hiszen minden együttesnek szerves részét képezte a közönségforgalmi rész: legalább egy borkóstoló biztosan bekerült a programba. Az épületeket észrevehetővé kellett tenni, sőt, a már megérkezett vendégek számára is biztosítani kellett a kilátást a tájra. Előbbiek okán – bár a tervezők minden esetben éltek azzal, hogy több-kevesebb funkciót a földben helyeztek el – a vizsgált projektek egyike sem került teljesen a föld alá.

Az épületek teljes elrejtése helyett az építészek a táji adottságokat próbálták másolni, az épületek formájával a teraszos lépcsőzést, a teraszok vonalát követve. A Franz Keller Borászat zölddel fedett lépcsős tömege a szomszédos teraszokba olvad, a Quinta de Nápoles kőfala anyagában és formájában a környező teraszok kő támfalait idézi. A Lavaux Vinorama kis épülete a mögötte magasodó hegy folytatásaként jelenik meg, az épület tetején is szőlő nő, míg a Quinta do Vallado kőburkolatú üzemi épülete úgy kanyarog, mint ahogy a hegyoldal teraszai.

Bár az előbbi négy példa mintha azt bizonyítaná, hogy a táj-forma meghatározza az építészeti formát, a hatból két példa ennek ellentmondani látszik. Az Abril Borászat – miközben kihasználja a lejtő adta szintkülönbséget – szigorú téglatest formájával és vörös Corten acél burkolatával nagyon is elüt a környezetétől, bár az ősz rozsdabarna színeivel már összhangba kerül. Nem így az Adega Quinta de Faísca, amely – bár méreteivel túlnő a környék hagyományos borászati épületein – a korszerű szerkezetek ellenére anyagában, formában, mégis tudatosan azokat idézi meg.

A hat, példaként választott projektben közös a kultúrtáj jellege, a teraszos szőlőművelés. Az Abril Borászat és az Adega Quinta de Faísca közvetlen környezetében azonban sokkal lágyabbak a dombok, távoliak a teraszok, így nagyobb teret kap az építészeti forma, legyen az absztrakt geometrikus vagy épp a hagyományosra rímelő. Úgy tűnik, hogy a természeti tájforma csak akkor hat kikerülhetetlen mintaként az építészeti formálásra, ha szélsőséges, sőt drámai megjelenésű. ©