

KATARZYNA ZAWADA-PĘGIEL*, MACIEJ ŻŁOWODZKI**

THE ARCHITECTURE OF WINE MANUFACTURING AND COMMERCIAL SITES IN CENTRAL EUROPE

O ARCHITEKTURZE ZAKŁADÓW PRODUKCJI I SPRZEDAŻY WIN W EUROPIE ŚRODKOWEJ

Abstract

The vast majority of industrial implementation does not show signs of efforts towards high aesthetic quality. However, in a changing market, an increasing number of companies are turning to reputable architects in the search for interesting and innovative projects. In terms of advertising, marketing and image building also via architecture. Studies show that a high number of companies producing wine in Central Europe now combine production with sales and advertising, and creates their image based on high quality modern architecture.

Keywords: wine manufacturing and commercial sites, the architectural form of the manufacturing site, viticultural centre

Streszczenie

Zdecydowana większość realizacji przemysłowych nie przejawia znamion starań o wysoką jakość estetyczną. Jednakże w zmieniającej się sytuacji rynku nadmiarowego coraz więcej firm zwraca się do renomowanych architektów o niestandardowe, ciekawe i nowatorskie opracowania. Chodzi o aspekty reklamy, marketingu i budowy wizerunku również przy pomocy architektury. Przeprowadzone badania wykazują, że wiele firm produkujących wino w Europie Środkowej łączy obecnie produkcję ze sprzedażą i reklamą, a także tworzy swój wizerunek w oparciu o dobrą, nowoczesną architekturę.

Słowa kluczowe: zakład produkcji i sprzedaży win, forma architektoniczna zakładu produkcyjnego, centrum winiarskie

DOI: 10.4467/2353737XCT.15.155.4192

* Ph.D. Arch. Katarzyna Zawada-Pęgiel, Chair of Architecture of Workplace and Recreation of Institute of Architectural Design, Faculty of Architecture, Cracow University of Technology.

** Prof. D.Sc. Ph.D. Arch. Maciej Żłowodzki, Chair of Architecture of Workplace and Recreation of Institute of Architectural Design, Faculty of Architecture, Cracow University of Technology; Commission of Ergonomics of Polish Academy of Arts and Sciences; Ergonomic Commission of Polish Academy of Sciences.

1. Introduction

The highly developed countries of affluent post-industrial societies are developing an economy based on knowledge. As far as the material production in these regions is concerned, these societies are steering away from energy-consuming, material-consuming and environment-threatening technologies and means of production, also including, to a considerable extent, the mining and raw materials industries. Instead, emphasis is put on the development of production with a more limited expenditure on materials and with a considerable contribution of technical thought and innovation. These countries are also characterised by great expenditures on scientific research and the implementation of innovations, as well as considerable effort associated with balanced growth, including renewable energy. There is also a considerable percentage of people employed in the creation, processing, distribution and commercialisation of information, estimated at from 25% up to as much as 40% of professionally-active people, depending on the role of a given country or region in the international, global division of labour. In highly developed European countries the production of foodstuffs, i.e. agriculture, farming, fruit-growing, and agricultural food processing are treated as a strategic sector and a national interest. Special care and protection is expended on these domains which includes:

- customs barriers associated with non-European Union products,
- subsidies to specific products or general subsidies to agricultural activities,
- tax allowances,
- special professional privileges,
- extensively organised promotion and advertising activities in the country and in the region¹.

The wine production industry is intensively developed and promoted in many European countries. The culture of wine is developing; traditions, customs and festivals of wine are created and cultivated. Moreover, regional enological tourism is being established². In this

¹ Of course, this approach also has a political background, strongly emphasised by peasant parties, as well as its economic price. It is estimated that were the protection barriers and the appropriate subsidies to be abolished, the price of foodstuffs in the European Union would reach the same level as the prices at the open global market of food production. This in turn would involve a general decrease of the prices of food by almost 30%.

² A good example of the establishment of tradition and customs in viticulture is the *Beaujolais nouveau* (sometimes referred to as *Beaujolais primeur*). This nouveau, light, tart red wine from the Beaujolais region, located to the north of Lyon in France, took the world by storm, and the uncorking of this wine became a global festival, because more than 50% of the production is exported. Therefore this is proportionally the greatest quantity among all French wines. The ritual of tasting the recently mature wine spread to all continents. The beverage is flown by planes to non-French and non-European consumers, whereas higher quality drinks are transported by ships. It is everything that quality wine is not because it is early, sourish, poor in tannines which yield peculiar and refined sensations and it is not appropriate to be stored for long periods of time. Therefore its producers made recourse to advertising to enhance its value considering the lack of quality as compared with Bordeaux wines, other Burgundy wines, certainly champagne, as well as Languedoc wines which are slightly less renowned, but which boast ancient traditions. The nouveau wine is held in contempt by connoisseurs, who consider it a mere marketing product, *Beaujolais nouveau* became almost a world-wide celebration of wine. The beginning of this celebration in France dates back to 1951. Since 1985, the period when the new vintage enters the market, was established as the third Thursday of November,

case, production is increasingly associated with selling and tasting, with restaurants which serve products, and with other forms of advertising of the alcoholic beverage. In consequence, this contributes to the emergence of a new type of tourism – enotourism (wine tourism) – associated with viticulture³. In such cases, the aesthetic and impression-related factors of the manufacturing sites is lavished with special care, and the design of such structures is entrusted to renowned design offices and to distinguished architects⁴.

The following presentation of these trends refers to six structures associated with the production, advertising and consumption of wine in Hungary, Austria and Slovenia. The following sites will be discussed:

- the site of the French company *AXA-Millésimes* in Disznókő near Tarczal in the Tokaj region of Hungary;
- the Claus Preisinger site near Gols, in Burgenland, eastern Austria;
- the *Hill* site of Leo Hillinger near Jois, also in the Burgenland region of Austria;
- Erwin Sabathi's site in Pössnitz in Styria, southern Austria;
- the *Loisium* (a wine centre, a hotel with a spa) site of Karl Steininger near Langenlois in Wachau, Lower Austria;
- the *Marof* vineyard, in Mačkovci near Murska Sobota in the Prekmurje region of Slovenia.

2. The *AXA-Millésimes* wine manufacturing and commercial site in Disznókő near Tarczal, Hungary

The viticultural tradition of Hungary dates back as far as to antiquity, when a part of the present-day Hungary belonged to the Roman Empire. In Poland, it is supposed that Hungarian wines became more widely known from the times of Casimir the Great. With the course of time they became a considerably popular part of Sarmatian cuisine, and our country became one

and the celebration in many countries of the world (in Poland since 1995) begins already on the Wednesday evening. Today, the greatest recipient of this wine is Japan, which last year consumed almost nine million bottles. The United States, with their two million bottles, take second place as far as the consumption of this beverage is concerned. The *Beaujolais nouveau* tradition has become an economic blessing for the region, which, however, pushed far from prominence lesser-known but more noble wines which are produced there.

³ In the course of the last dozen or so years we have been dealing with viticultural tourism – the known as enotourism (wine tourism). Enotourism is a compound of two words: (*o*)*eno-*, a prefix derived from the Greek word for 'wine' – *oinos*, (the Latin equivalent of 'wine' is *vinum*) and the word *tourism*. Such trips consist in the visiting of the places associated with the production of wine (vineyards, processing plants, viticultural farms) and participation in various events with a viticultural profile (tasting ceremonies, presentations of wines, festivals of wine etc.) or learning new things about the culture associated with the production of wine.

⁴ Modern wine production sites were produced by world-famous architects including: Frank Gehry – the *Marqués de Riscal* vineyard in the La Rioja region in Spain; Norman Foster – the *Bodega Portia* in Ribera del Duero in Spain, Mario Botta – the *Chateau Faugeres* in Saint-Etienne in France as well as the *Petra* in Suvereto (Tuscany) in Italy; Álvaro Siza – the *Adega Mayor* in Herdade das Argamassas near Campo Maior in Portugal, Santiago Calatrava – the *Bodegas Ysios* in Camino de la Hoya (Laguardia) in Spain, Zaha Hadid – the *López de Heredia Viña Tondonia* in Haro (the La Rioja region) in Spain or Renzo Piano who designed the *Rocca di Frassinello* vineyard in Gavorrano Grosseto in Tuscany in Italy.

of the principal recipients of Hungarian viticultural products. Carts filled with barrels of wine known as *węgrzyn* (Hungarian wine) drove through Slovakia. Some regions and cities of northern Hungary owed their development to the trade with the Commonwealth of Poland and Lithuania. We imported the greatest amounts of wine from the Eger region. The principal city of that region flourished thanks to the selling of their wines to us, especially their dry red wines. This alcoholic beverage was also imported from the Tokaj region, located ca. 80 km to the east, a viticultural centre located at the confluence of two rivers – Tisa and Bodrog. This wine was imported in slightly lesser quantities – it was exclusively white, more refined, and more expensive.

Tarcal is located 6 km to the east of Tokaj. On its outer edge, there is the Disznókő⁵ estate, which comprises 140 hectares of vineyards. At the beginning of the 1990s, when Hungary saw the transformation of its economic system, it was privatised and sold to the French company *AXA-Millésimes*. The French restructured and modernized the estate. They erected a new wine production site and also expended efforts toward advertising and promoting their products. Within the context of these activities a creative, original, well-recognisable direction was embraced for the new site. This direction was freshly discovered in Western Europe thanks to the international Expo held in 1992 in Seville. The Hungarian pavilion at the Expo, designed by Imre Makovecz in the spirit of Hungarian organic architecture, achieved considerable success, and the Western architectural world “discovered” and appreciated a less-known but original, creative movement, full of fantasy and fairy-tale allegories⁶. The French commissioned Imre Makovecz’s student and, in a sense, collaborator, to the task of designing the project. His name is Dezső Ekler, and in the years he 1993–1995 designed and erected the plant in the spirit of Hungarian organic architecture (Ill. 1).

The production building is a two-storey building. The central element which integrates the whole is the space of internal communication, set upon the plan of an arc (Ill. 2). On each side elements which house the production and storage facilities are located by fours, arranged perpendicularly to this space, in a comb-like arrangement. The overground part comprises rooms set up for the production (fermentation) of wine (Ill. 3); the underground part contains the area where wine matures and is stored (Ill. 4).

In the realisation of the project traditional materials were used – brick walls, a wooden construction for the roof, an external shingle cladding, and an internal covering with planks. A colour scheme which is typical of the architecture of the region was applied – the sandy colour of the plaster, wood which is partially natural in colour, and partially painted in light blue, including the woodwork of the windows and doors (Ill. 5).

⁵ The Disznókő vineyard is characterised by a centuries-old tradition and the high quality of its products. According to the Hungarian wine classification system, the first ever wine classification system in the world, the vineyard was recognised as a first-class vineyard as early as in 1772.

⁶ The Hungarian organic architecture developed in the period of late modernism, in the 1970s, primarily due to the activity of a Budapest architect, Imre Makovecz (1935–2011), and the group of architects who formed the so-called Pécs group. It is characterised by strong allusions to tradition, to folk architecture and local materials, allusions to history, legends, traditional stories, fantasy stories and fairy-tale allegories, by rich symbolism and expression, dynamic, frequently smooth forms and lines as well as vibrant colours. This architecture presents dragon’s eyes, peacock’s tails, strongly emphasised, lofty roofs, towers and gables of wood. This trend developed locally in Hungary and gained local recognition. The structures primarily include cultural buildings, sacred and sports buildings. However, Hungarian organic architecture was discovered by wider audiences in 1992, during the international Expo in Seville, for which Imre Makovecz designed the pavilion which represented his country.



III. 1. View of AXA-Millésimes' wine production facility in Disznókő near Tarcal in Hungary – arch. Dezső Eclair, 1995 – as of 2013 (photo by M. Złowdzki)



III. 2. Main circulation area for AXA-Millésimes' wine production in Disznókő near Tarcal – as of 2013 (photo by M. Złowdzki)



III. 3. Wine production hall at the AXA-Millésimes' wine manufacturing facility in Disznókő near Tarczal – as of 2013 (photo by M. Złowodzki)



III. 4. Cellar for the maturing of wine at the AXA-Millésimes' manufacturing plant in Disznókő under Tarczal, as of 2013 (photo by M. Złowodzki)



III. 5. Details in the inside of the AXA-Millésimes' wine manufacturing plant in Disznókő under Tarcalem – as of 2013 (photo by M. Złowodzki)

Care has also been expended to develop the area and other structures. A restaurant serving wine to accompany the meals was established in the residence of the pre-war proprietors – a building dating back to the final years of the 19th century. A retail and wholesale outlet was set up in one of the old cellars, dug in the slope.

These activities yielded the desired result. The production site enjoys considerable popularity. The wines that are produced, although they cannot be counted among the least expensive ones, sell very well considering the excess local market. Considerable numbers of people visit the restaurant and there are also many who are eager to visit the production site itself. The latter is welcome to visitors.

3. The Austrian wine production and commercial sites

Similarly as in the case of Hungary, viticulture in present-day Austria has a long tradition. The first references to viticulture in Austria may be found as early as ca. 700 BC. The time of the Roman Empire and then the rule of the Habsburg monarchy are considered to be the periods in which viticulture flourished.

Today, in spite of the fact that Austria contributes to merely about one percent of the total production in the world, Austrian wines enjoy a very good reputation among connoisseurs. This is mainly owing to the production structure – the majority of production sites are small

farms (half of which have a land area of less than 5 hectares) which emerged on the basis of farms with a varied agricultural activity, or newly-established vineyards which have a regard for the high quality of their products⁷. The majority of vineyards specialise in native grapevines, selectively adapted to climatic conditions and soil type. Quality is also ensured by a general return to traditional, frequently eco-friendly, viticultural methods and manufacturing wine with the application of modern devices.

3.1. The Claus Preisinger wine production and commercial site near Gols, located in the Burgenland region of eastern Austria

In 2009, on the eastern coast of Lake Neusiedl (*Neusiedlersee*), on the Goldberg hill near Gols, away from the urbanised area, within an 18-hectare vineyard, a wine production site was established⁸. The structure, designed by a Viennese architectural office known as *propeller z*, set in the spirit of the deconstructivist architecture with reference to ecological values, was designed according to the principles and the ways of thinking and of perceiving the world of the owner of the vineyard. It is also an example of the application of traditional local materials and traditional architectural solutions. The design of the building was based around the idea of contrast, which refers to the form, the construction, as well as to the materials that were used. The application of the principle of bipolarity translates itself into relations with the surroundings – the structure is located on a broad, non-built-up area; it has no direct points of architectural reference; it creates the impression of a solitary building (Polish: *soliter*⁹), alienated in space.

The building has the form of an elongated quadratic prism of variable height, with slanting walls: the front wall and the back wall. Moreover, the façade of the building is tapered (Ill. 6). The building was distinctly divided into two parts. This aspect manifests itself

⁷ On the one hand, the great dispersion of small wine production sites may impair the process of introducing the product into circulation (export, trade), as well as render difficult the protection of the brand. On the other hand, such a situation contributes to the diversity of the final products and to the creation of beverages of an individualised character. Nowadays, after the period of mass production of frequently inferior-quality beverages, considerable emphasis is placed on the quality of the product. Criteria have been defined concerning not only the flavour, but also include the place of origin, the variety of the grapevine, the progress of the production cycle, the ingredients that are used in the nurturing of grapevines, the production of wine etc. In order to protect the quality and the brand of the wine, *DAC (Distrikt Austriae Contrullatus)* regulations were introduced, prepared by the specialists in the winemaking field (*inter alia* international committees, cooperative associations of winemakers, wine shops and the associations of producers).

⁸ The vineyard stresses the great importance of native varieties of grapevines, among others: *Zweigelt*, *Blaufränkisch* and *St. Laurent*. The procedures for nurturing the plants are associated with natural methods of plant preservation, and production features traditional procedures of wine production.

⁹ The Polish name *soliter* (from the French *solitaire* – solitary) refers to a stand-alone building located in a non-urbanised area or in the tissue of a city. The structure, however, is clearly unique, has peculiar features which form a contrast to its surroundings. The name *soliter* was adapted from the science of botany to refer to an architectural structure which stands out from its environment. According to the dictionary of the Polish language published by Polskie Wydawnictwo Naukowe, the word means a tree or a bush which grows solitarily. It is especially prominent in an open area and is distinguished by ornamental qualities (colour, habit, the shape and the form of leaves etc.) [<http://sjp.pwn.pl/sjp/soliter;2575806.html>, online: 20.11.2014].



III. 6. View of Claus Preisinger's wine manufacturing plant, site near Gols – as of 2013
(photo by K. Zawada-Pegiel)

in the construction, the materials that were used and in the distribution of functional zones. The front, overground, reinforced-concrete part of the building is a two-storey structure; the back, one-storey area is made of prefabricated plywood elements. The front part, on the ground floor, houses the entrance zone with the exposition zone, the office and the common rooms¹⁰. The first floor houses the tasting zone with an expansive view of the vineyard and the surrounding landscape, including an internal footbridge which offers a view of the production hall. The manufacturing zone was located in the one-storey hall, whereas the underground part houses the warehouse and packing zone.

The division in terms of functionality and construction has also found its expression in the application of matte and shiny, smooth and pressed, warm and cool, grey and coloured finishing materials. The production area was lined with strips of wood, whereas the entrance zone features concrete lining of the shuttering (III. 7). Both materials constitute a coherent arrangement by defining the functional zones of the structure; whereas the purpose of setting up of strips of larch wood and a form of lining concrete at 45°, the tapering of the form of the building and its maximum window exposition (the opening of a vista towards the lake) is to achieve a lightness in the building and produce the impression that it is levitating above the ground.

¹⁰ Apart from the exposition of products and awards received owing to the high quality of the beverage, viticultural sites eagerly present architectural award statuettes in the exposition zone – e.g. the awards for the design of the building, the realisation of the design, the design of the interior of the winery and the materials that were used. The winery which is here discussed received an award in the *Bauherrenpreis 2010* competition from among the 114 buildings and structures that entered the contest. The prestigious award of the Austrian Architects Association is presented in recognition of distinguished merit in the field of architecture – the contribution of new architectural solutions and the creation of remarkable buildings associated with a perfect collaboration with investors.



III. 7. The external façade of Claus Preisinger’s wine manufacturing plant, site near Gols (photo by Herth Hurnaus; source: <http://www.dailytonic.com/claus-preisinger-vineyard-by-propeller-z-at>, online: 19.02.2015)

3.2. Hill – Leo Hillinger’s wine production and commercial site near Jois, in the Burgenland region in eastern Austria

In 2004, in the area of the city of Jois, a modern wine production site was established within a vineyard¹¹. Its owner, Leo Hillinger, who belongs to the generation of young Austrian producers and who continued family traditions, combining the traditional, multigenerational viticultural method with the use of state-of-the-art technology for wine production and a new marketing strategy. This line of thinking manifests itself both in activities whose aim is to create a brand of wine, as well as in efforts to increase the recognisability of the company and the product. Consequently, these activities contributed to the creation of a distinctive logo for the company and the architectural form of the manufacturing site. The Viennese office – *gerner°gerner plus* – was commissioned with the task of designing the site. When they designed the site, the architects, who pursued the trend of organic architecture¹², attempted to create a symbiosis between the existing natural environment and the newly-designed production site. They skilfully used the features of the area by inscribing a considerable part of the ca. 2000 m² site into the slope of a mountain. Only a small area in the form of a horizontal quadratic prism was designed to create the impression of levitating above the ground.

The structure, designed upon an L-shaped plan¹³, was divided into two legible functional zones. The shorter, front part of the building is a two-storey reinforced-concrete quadratic prism which is glassed in from the front, juts out to the front on the level of the storey,

¹¹ The design for the structure was completed in 2001, whereas the structure itself was completed in the years 2003–2004. In 2008, the structure received the second *Best of Shop Architecture Award 2008 in AIT*, one of the leading German-language periodicals devoted to interior architecture.

¹² Organic architecture is an offshoot of the modernist trend. It makes references to family values, tradition and culture, climate, and the features of the region. This trend puts great emphasis upon the possibility of embracing innovative, energy-saving solutions.

¹³ The name of the owner, HILLINGER, became a point of departure for the design of the site: the plan of the building alludes to the shape of the letter “L” as well as to the name of the vineyard – HILL, also spelt as HILJ J, which is an abbreviation of the name and a trademark.

supported by two V-shaped pillars. The ground floor of this part houses the administration of the site, whereas the first floor constitutes the showy entrance part which communicates with a glassed-in staircase (Ill. 8), as well as the tasting zone and the conference zone with an external terrace.



Ill. 8. The entrance area of Leo Hillinger's wine production, site near Jois – as of 2013
(photo by K. Zawada-Pęgiel)

The second, longer, crosswise part of the site – the production and warehouse zone – was designed in such a manner as to make it invisible from ground level. The acute gradient of the slope was taken advantage of and it is there that the production facilities have been located (Ill. 9). The area was formed in such a way as to make it resemble a steep slope. As far as the earth-covered roof is concerned, grass was planted there (there were also plans to plant grapevines there). This part of the building received further exposition thanks to eight sloped roof windows in the form of truncated pyramids facing the north.

The zone where the wine matures was exposed at the juncture of both of these zones. The former zone is crossed by a footbridge which links the tasting room with the conference room. The colour scheme of the interior of the entrance zone, with its great glassed-in area which forms a framework for the vista of the surrounding area and Lake Neusiedl (*Neusiedlersee*), features white, grey and dark, warm wood tints. The production area uses steel and polished concrete.

The structure, situated on the top of a hill, against the backdrop of the vineyard, attracts attention with its wide, “screen-like” panorama of the valley, thus becoming a landmark in the area. Moreover, the owner promotes his products by undertaking a range of various activities. He allows visitors to visit the structure and see the production process, offers wine-tasting opportunities and the sale of wines. The latter are also sold in factory outlets. Considerable



III. 9. The production zone at the Leo Hillinger factory, located near Jois – as of 2013
(photo by K. Zawada-Pęgiel)



III. 10. Icon Hill – red wine bottle designed by Zaha Hadid (source: <http://creoflick.net/pl/creo/Designerska-butelka-na-wino-Zahy-Hadid-1980>, online: 21.11.2014)

emphasis is placed not only on the quality of the wine produced but also on the distinctive packaging, and meticulously designed bottles and labels. In 2009 the so-called *Ikon Hill* – a high-quality red wine in a limited collection of bottles and packaging (999 pieces) was produced, designed by the well-known and recognised architect, Zaha Hadid¹⁴ (Ill. 10).

3.3. Erwin Sabathi's wine manufacturing and commercial site in Pössnitz in the Styria region of southern Austria

The vineyard in Pössnitz was established in 1938 by Johann Sabathi¹⁵ – the grandfather of the present-day owner – Erwin Sabathi. With the appearance of subsequent generations the vineyard gradually increased its assets and the quantity of wine produced. It also gained a considerable number of recipients, including those outside the region. The turning point in the history of the development of the vineyard is when it was taken over (in 1992) by the present-day owner, Erwin Sabathi, whose motto is “above all else, quality”. The owner embraced the strategy of the company which concentrates farming on as many varieties of grapevine as possible, management of the vineyard, and the production of wine in conditions which are as natural as possible¹⁶, using modern technology. Therefore, in August 2004, a new wine manufacturing and retail site was erected¹⁷, designed by Igor Skacel from Graz, according to the tenets of organic functionalism (Ill. 11).

The object was located on a steep, southern slope which facilitated the location of a considerable part of the building underground. This in turn allowed forms which overlap in various ways to project forward, starting from the top-most supply zone – the initial stage of production – to the bottom-most zone – the entrance zone – and the final stage – the sale of the prepared product – from the southern side of the two-storey building, which assumes the form of a square. The arrangement of the structures unequivocally indicates the functional

¹⁴ Zaha Hadid is a world-famous British architect of Iraqi descent, recognised as the representative of deconstructivism. She is the author of many structures which are distinguished through their unique, dynamic form, e.g. the building of the depot of the *Vitra* factory in Weil am Rhein in Germany, the Museum of Modern Art in Cincinnati in the United States of North America, the *Riverside* museum in Glasgow in Scotland, the *Hajdar Alijew* centre in Baku in Azerbaijan, the *Bergisel 2002* ski jump in Innsbruck in Austria and many more. Apart from architectural design, Hadid does project design, interior design (e.g. the project of the interior for the Nela Barret shop in Tokyo, the futuristic interior of the interior of the Stuart Weitzman shop in Hong Kong) and applied art design (e.g. the shoe design for the Lacoste company, the design of the *Viso*, *Manifesto* vases for the French company *Lalique*). She is the winner of the Mies van der Rohe award (2003), the Stirling award (2010), and the Pritzker award (2004).

¹⁵ According to the extant historical data, family souvenirs and data, it is known that the viticultural traditions (the farming, maintenance of grapevines and the production of wine) of the Sabathi family date back a number of generations. The earliest accounts date back to 1650 and they mention the ancestor of the Sabathi family – Jerg (George) Sabathi [<http://www.sabathi.com/geschichte.html>, online: 20.06.2014].

¹⁶ The natural methods of farming not only have a positive influence upon the image of the vineyard but they also confirm the quality of the beverage itself. Examples of this are the awards presented at prestigious wine festivals, e.g. in 2011, at the *Gault Millau* wine festival, the wine *Sauvignon Blanc 2009* from the vineyard in Pössnitzberg received 18,5 out of 20 points from the jury.

¹⁷ In 2005, the building received the *Geramb 2005* (the mark of a good building) architectural award for the well-organised interior and the legible functional arrangement.



III. 11. Erwin Sabathi's wine manufacturing facility, located in Pössnitz – as of 2013
(photo by K. Zawada-Pęgiel)



III. 12. The entrance zone of the Erwin Sabathi wine manufacturing facility – as of 2013
(photo by K. Zawada-Pęgiel)

zones in the building. The entire layout was designed on the basis of “walking distance” i.e. the shortest amount of time needed to pass from one zone to the other. The northern side houses the grape supply zone; the part immersed in the slope – the processing, fermentation, maturing, bottling and storage zone; while the southern zone houses the entrance zone, the retail zone, the administration, and the shipping zone. The first floor houses the tasting zone as well as five comfortable rooms for rent.

In the realisation of the building two finishing materials were used: burnt wood and concrete. In the supply and export zones fair-faced concrete with an impression of boarding was used. The materials that were used allude to the oak barrels and the cool atmosphere which dominate the cellars. The colour scheme of the interior of the structure features contrasts – dark walls (wood) and the light floor and the furnishings (Ill. 12). A system of moving walls was employed in order to conceal the compressed rooms with irregular outlines i.e. the office, the kitchen and the toilets. The system of moving walls occludes the stairs which lead to the first floor with rooms for rent and to the tasting room, integrated with the green terrace. From here one enjoys a view of the hill and the vineyard thanks to the great glassed-in area and the mirror-lining.

3.4. Karl Steininger's *Loisium* (a viticultural centre with a system of historical cellars, a hotel with an extensive SPA zone) near Langenlois in the Wachau Valley in Lower Austria

At the outer edge of the city of Langenlois in Lower Austria is the *Loisium* complex. This is an example of presenting wine as a cultural phenomenon.

Karl Steininger, the owner of the vineyard, selected Steven Holl¹⁸, a distinguished architect, to design the complex. The project involved three areas of activity. The first activity was associated with the adaptation of 900-year-old sections of the system of cellars to store wine and create a museum area there – an interactive museum of viticultural traditions. The second activity was associated with the realisation of a viticultural centre (wine gallery) linked with the system of cellars. The third activity was associated with the construction of a hotel with a relaxation zone which offers cosmetic treatment using the properties of grapes¹⁹. The development project was begun in 2001 and was divided into two stages. In 2003 the construction of the wine centre was completed and the system of cellars was adapted to new functions; in 2005 the hotel with the relaxation zone was erected.

¹⁸ Steven Holl, an American architect whose works are designed in the spirit of postmodernism and deconstructivism. He received many awards; he completed a series of architectural works in the field of the fine arts: museums, galleries, exhibitions (e.g. the *Kiasma* Museum of Modern Art in Helsinki in Finland (1998)), residential complexes (e.g. the residential and service complex known as the *Linked Hybrid* in Beijing in China (2003–2009)), as well as educational institutions and campuses (e.g. the *Simmons Hall* dormitories at the Massachusetts Institute of Technology in Cambridge in the United States (1999–2002)). His architectural projects have also included the design of public amenities, office buildings (e.g. the building of the *Shaw* brokerage firm in New York in the United States (1992)), as well as the fields of spatial planning and urban design (e.g. the *Sliced Porosity Block* multifunctional complex in Chengdu in China (2012)). He is an academic teacher at the Columbia University in New York and an author of numerous scholarly works.

¹⁹ Apart from the traditional beauty treatment procedures, the complex offers innovative forms of biological regeneration, including acupuncture and enotherapeutical treatment in which products acquired from local grapes, e.g. the olive oil from the seeds of grapes, are used.

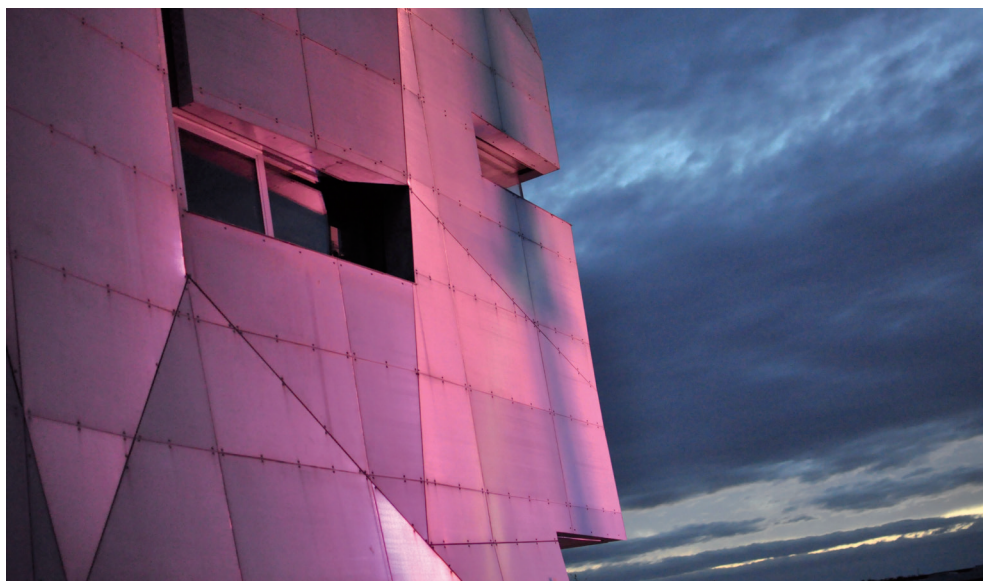


Ill. 13. Loisium – Karl Steininger’s viticultural centre near Langenlois – as of 2013
(photo by K. Zawada-Pegiel)

The viticultural centre is a cube, slanting by 5 degrees to the south²⁰. This cubic shape is deformed by deep, irregular indentations (the irregular arrangement of the glassed-in linings repeats the sections with the projection of the cellars), in which the entrance to the building, the access to the terrace, and a row of windows of varying shapes are located (Ill. 13). The interior of the three-storey building was designed in such a way as to achieve the maximum amount of open space with a system of narrow passages in the form of galleries, ramps and stairs which link the particular floors of the building. The futuristic, cubic building houses a café with an external terrace, a shop with wines, liqueurs and regional culinary products, and a tasting zone. The uppermost level houses a seminar room, office rooms, and the access to the terrace located on the roof which offers a splendid view of the city and the surrounding area. In addition to the wine booth, the lower floor of the structure (level –1) houses the exposition zone as well as the entrance to the elaborate system of cellars. The historic cellars, incorporated into the modern concept of the vineyard do not so much perform the function of yet another place for a stage in the wine production process as an interactive museum of wine²¹.

²⁰ The gradient of the form of the building continues the gradient of the underground ramp which connects the building with the wine storage zone.

²¹ The underground route is furnished with interactive presentations which demonstrate the distinctive features of the site (farming areas, geology etc.) which greatly influence the taste of wine, the means of farming the grapevines, the history of viticulture in Langenlois, along with the presentation of the cultural elements which have to do with the viticultural tradition (the vintner’s house with its furnishings, the influence of viticulture upon the vintner’s life, the means of wine production from the last century), as well as the contemporary means of acquiring the beverage from grapes.



Ill. 14. Detail of the elevation of the Loisium building – as of 2013 (photo by K. Zawada-Pęgiel)

The external form of the building received a distinctive spatial and visual expression thanks to irregularly-arranged brushed aluminium plates. Their slanting arrangement and their deep glassed-in indentations constitute an interplay of light and shade (Ill. 14). This effect is enhanced by using two types of glass – neutral glass and glass produced by melting beer bottles, with a bottle-green colour – and night-time illumination. The wine gallery features subdued colours. The décor of the walls features chip boards with a light wood colour; the whole is enhanced by an impressive concrete staircase.

The second building is the modern four-star *Hotel Loisium* with a *wellness* zone, featuring an elaborate spatial form. As in the case of the wine centre, the concept of the form of the building was based on the transposition of the underground geometry of the network of cellars and the transformation of this system into the form of the building. The latter is set upon the plan of an open square with an internal courtyard which opens toward the vineyards and the wine gallery. According to their functions, the purpose of the great glassed-in areas is to integrate the interior of the structure with the external zone – the vineyards which stretch to the horizon. Moreover, owing to the maximum number of glassed-in surfaces on the ground floor, these areas give the impression that the building is levitating. The higher parts of the building are two-storey cubes which extend beyond the face of the ground floor. They are kept in one line, except the front façade which was elaborated upon and which constitutes an irregular line of design. The building is enhanced by a colourful façade. The outside of the building features a yellow colour scheme, whereas in the courtyard there are red and green tints. Moreover, the internal façade was enhanced by a see-through aluminium grid with variously sized cut-in apertures.

As far as the functional aspects are concerned, the building was divided into two parts. The ground floor comprises the following: the lobby, a bar, a restaurant, a wellness centre as well as conference rooms with auxiliary facilities. A heated swimming pool, which may be used throughout the entire year, is located directly adjacent to the building. The two top floors comprise 82 luxury rooms with large glassed-in surfaces overlooking the vineyards.

The complex enjoys great popularity and is frequently visited not only thanks to the products made there and the opportunity to see modern architecture²² in the deconstructivist style designed by a world-famous designer, but also due to the desire to learn about the history of wine and viticulture as well as the cultural attractions which are organised in the historical and modern interiors of the vineyard.

4. The Marof Vineyard in Mačkovci near Murska Sobota in the Podravska (Prekmurje) region of Slovenia

Slovenia is a country which has an equally long viticultural tradition as the countries discussed above. German influence (the region was a part of Austria-Hungary and was known as Lower Styria – *Untersteiermark*) contributed a great deal to the kind of vines that are cultivated there. The restructuring of the vineyards, which were nationalised during the existence of Yugoslavia, and the modification of the technology contributed to the revival of the viticultural industry and the considerable enhancement of the quality of the wines. Today, we may register a gradual development of the viticultural industry, which is associated with the modernisation of the existing production sites and the construction of new ones.

We may distinguish three viticultural areas in Slovenia: the western area – Primorska, the south-eastern area – Posavje, and Podravska, which is located in the western part of Slovenia and which is the largest viticultural region. Despite the annual production of ca. 100 million litres, Slovene wines are not well-known beyond Slovenia because almost the entire production is directed to the local market and only 5% is exported. According to data provided by professional companies which research the viticultural market, about 70% of wines are quality and premium wines²³. This high quality ensures that they may compete with the wines of southern Europe by receiving awards in prestigious, world-wide contests, e.g. the Slovene vineyard *Dveri-Pax* received the *Decanter World Wine Award 2011*.

The Marof vineyard is located in north-eastern Slovenia, in the Prekmurje region. The vineyard comprises an area of ca. 40 hectares of grapevine land extending over the local, smooth rolling hills. The vineyard comprises a small historical palace which was refurbished under the supervision of the Institute of the Protection of the Cultural Heritage of Slovenia, along with two farm buildings, adapted to new conference and hotel functions²⁴, and a new

²² The Loisium complex received a number of architectural awards. In 2003, it received the *AIA Design Award 2003 New York*, presented by the American Institute of Architects, and in 2006 – the *Bauherrenpreis 2006*, presented by the Austrian Architects Association (*Zentralvereinigung der Architekten Österreichs*). In the same year, it also received the *European Hotel Design Award* in the field of design, hotel furnishings, in the category of interior decoration and architecture.

²³ In Slovenia, the viticultural law strictly defines the rules concerning the selection of the varieties of grapevines, the production – the techniques of vinification, as well as the terminology itself. The classification of wines is defined according to the geographical and quality classification. The geographical classification involves three marks and indicates the geographical origin. The quality classification (three degrees) defines the quality norms which the wine must fulfil and the peculiar features of a given region which the wine must represent.

²⁴ The history of the vineyard dates back to more than 120 years. In 1905, a little hunting palace was



Ill. 15. View of wine production – *Marof* and the small historical palace in Mačkovci near Murska Sobota – as of 2013 (photo by K. Zawada-Pęgiel)

wine production site located on the western slope of a hill. The complex was designed by Studio Kalamar and was built in 2009²⁵. The building, designed in the spirit of neoregionalism, which alludes to the form, roof angles, and the materials that were used, is located in the direct vicinity of the historical palace and the farm buildings – in keeping with the directives of the restoration specialists (Ill. 15).

This two-storey building constitutes an arrangement of two, elongated, adjacent quadratic prisms. One of the quadratic prisms, two storeys high, is accessible from the ground level and contains an underground and overground level. It is crowned by a pitched roof whose gradient and colour scheme allude to typical farm buildings of the region. The entrance part extends west in order to emphasise the wine tasting area and to frame the view of the vineyard. This part of the building also features the entrance zone, the commercial zone, and the common rooms. On the other side of the entrance there is the wine reception zone, whereas the underground level houses the production zone, a laboratory, technical rooms, and a warehouse (Ill. 16).

The second, one-storey quadratic prism, hidden underground, comprises the rooms where the wine matures, is stored, and shipped. Owing to its underground location thermal conditions could be taken advantage of – a constant temperature of 14°C and other conditions which are appropriate for the wine to mature and mellow.

built with farm buildings as well as a wine cellar.

²⁵ The project was nominated for the 2010 award at the *World Architecture Festival (WAF)* – an annual festival with the ceremony of presenting awards in the field of architecture.



III. 16. The production zone of the manufacturing plant – *Marof* – as of 2013
(photo by K. Zawada-Pęgiel)

The external façade features a cover of vertical grey and brown panels which imitate the arrangement of grapevine support stakes. In keeping with the guidelines of the conservation team, the roof of the building was made of red ceramics. The interior, which contrasts with the external façade, features white lining panels. The technological zone features concrete. Considerable emphasis was put on the arrangement of the interior with the preparation of the individual pieces of furniture of light wood.

5. Conclusions

The architecture of industrial plants has many peculiar features which differentiate it from the architecture of other functions. Certainly, it must be perfectly functional because this conditions technological efficiency and economy of production. This type of architecture requires a considerable deal of flexibility because machinery undergoes frequent and rapid changes – technologies change rapidly, as entire production profiles sometimes do. The industry builds fast; it prefers to assemble rather than build, by taking advantage of modern materials. The first cast-iron constructions were applied in industry. It is also here that the first steel constructions were used, as well as steel in the façades of buildings. In spite of this, the architecture of the vast majority of production structures, with all its technical and material appropriateness, is made with little reference to high aesthetic quality.

However, the world is changing rapidly, and in the excess global market, where it is easy to produce and difficult to sell, more and more investors find out that good modern architecture, featured in the international professional press, and may be a profitable showcase for the company. We may speak about the development of thought which was initiated by the management of a lesser-known company with Canadian capital, which produces alcoholic beverages – Seagram. This company asked Ludwig Mies van der Rohe to design its office building in New York (as a matter of fact, the building was only partially occupied by the company), thus gaining world-wide prominence.

In her account of the changes in attitude towards industrial architecture in the modern age, Nina Juzwa (2010) presents her view of the changes in the attitude of investors in the following way:

“The increasing competitiveness of industrial companies and consortia, and the accompanying development and variety of new technologies make the architecture of the industrial structure play an increasingly greater role” [3, p. 104].

“And further on: The branches of the industry with great demands in the technical and technological field, located in the regions which put great demands upon the quality of the environment, brought about a situation in which the industrial structure becomes a marketing product with the product itself on an equal footing. New technologies are placed within structures of an architecture whose aims include the representation of the quality of the product which is made there. Thus the architecture of the modern industrial structure becomes a marketing showcase for the company, as well as a showcase for the civilisation and progress in the region” [3, p. 159].

In highly developed countries the task of designing more and more industrial structures is commissioned to distinguished architects and renowned companies, although these structures continue to constitute a minority in the huge volume of industrial realisations. Here the major role is played by the obvious will to achieve high aesthetic quality on account of advertising, prestige and the will to build the image of a brand. Such works, which are registered in world literature, include works by Lord Norman Foster: the Renault distribution centre in Swindon (1982) and the McLaren technological centre in Woking (2004), both located in southern England; the arrangement of the rooms in the “57 Metal” Renault factory by Claude Vasconi in Billancourt near Paris from 1984; the factory of the l’Oreal company near Paris by the Valode & Pistre team from 1992; and the assembly plant (frequently referred to as the *workshop*) of exclusive Volkswagen cars in Dresden, completed in late 2001 according to the design of the Gunter Henn office.

An interesting and peculiar example of the changes which pursue this direction is the French chemical enterprise which specialises in the production of industrial gases – Air Liquide S.A. The company, which has been operating since 1902, is currently the world leader in the field of technical and medical gases and in the provision of associated services. The basic products include: oxygen, nitrogen, argon, hydrogen and other noble gases acquired from the atmospheric air²⁶. Until now, the arrangement and the aesthetic expression of the

²⁶ The Air Liquide concern operates in the majority of the developed countries, for the number of countries of operation exceeds 80. It employs more than 43 thousand employees, subject to the head office located in the centre of Paris. In Poland, the Air Liquide company initiated its operations in 1995. Today, it possesses three plants which produce oxygen, nitrogen, argon and krypton xenon. The first of these plants is the air separation installation in Dąbrowa Górnicza (the largest installation of this kind in Poland); the remaining two plants are located in Kraków and Puławy. Bottle refilling stations are located in Białystok, Dąbrowa Górnicza, Poznań and Pruszcz Gdański.

Air Liquide production sites had not been the object of architectural research work. This arrangement and expression was primarily a result of production premises and it resembles other chemical plants with elaborate installations such as distilleries and refineries. However, the management of the company reached the conclusion that the time had come to enhance the compositional values of their sites, mainly due to advertising reasons. The managers decided to tap the imagination and inventiveness of young people for innovative visions by organising an international (European) student contest for the design of the factory of the future. The intention of the managers of Air Liquide was to seek completely new engineering and architectural solutions. The group of young future architects was deemed as routine-free, regulation-free people, brimming with futuristic ideas, and the student designs of as those that constitute the final period of architectural freedom, the visionary approach to form, and the freedom of creation before their employment practice²⁷.

The analyses which were conducted by the Authors indicate that the industrial sites where a great emphasis is put upon high aesthetic qualities are quite frequently embraced by the viticultural structures whose production function is more frequently associated with the selling and advertising of products. In this line of business the pioneering achievement is considered to be the vineyard of Mominus in Yountville in California, USA, completed in the late 1980s according to a design by the Herzog & de Meuron team. The structure which on the one hand has a minimalistic expression, but on the other hand features organic aspects as well, was widely discussed and commented upon. It seems that now also the companies from Central Europe, which seek their place and strive for success in the market for their wines, embrace good modern “quality” architecture in the creation of their brand and advertising.

6. The basis of the work

The basis of the present work is the information and photographic data acquired during two research expeditions in 2013 – one was devoted to Hungarian organic architecture, and the second was part of recurrently organised cognitive expeditions conducted by the Cracow Division of the SARP under the general name: *Śladami współczesnej architektury (Following the paths of modern architecture)*; the expedition took into account wine manufacturing sites in Austria, Hungary and Slovenia. The expeditions were realised as elements of the long-standing research theme elaborated upon in the Department of Industrial Architecture of the Institute of Architectural Design: *The current problems of the design of work place architecture*.

The Authors also used the information provided in the publication by Kinga Bauman: *Wine Culture Architecture. Smak Architektury*, published by the Foundation of Architects in Warsaw in 2010 [1] and the materials (photographs of buildings and publications which include texts written by supervisors and the catalogue of the structures that were

²⁷ The contest, which was announced by Air Liquide to unveil the factory of the future as well as the results of this contest, including the successes of the students of the Department of Architecture of the Cracow University of Technology, was presented in: K. Ludwin, A. Taczalska, A. Wiszowaty, K. Zawada-Pęgiel, M. Złowodzki, *Oxygen plant of the future architectural design competition – studencki, międzynarodowy konkurs na fabrykę przyszłości*. ARCH 3(23)/2014; p. 62-65.

presented) presented during the exhibition entitled *Architektura i wino w Europie Środkowej* (*Architecture and wine in Central Europe*²⁸), held in the Museum of Architecture in Wrocław since 6 February until 30 March 2014.

However, the information about the changes and trends in industrial architecture is based upon the Authors' own material and the following work devoted to modern architecture and industrial urban planning – a work which is rarely mentioned in the Polish literature on the subject: *Architektura i urbanistyka współczesnego przemysłu* was written by Nina Juzwa et al.

References

- [1] *Architecture and Wine in Central Europe*, Galerie Jaroslava Fragnera&Architektura, Praha 2013.
- [2] Bauman K., *Wine Culture Architecture, Smak Architektury*, Fundacja Architektów, Warszawa 2010.
- [3] Juzwa N. i inni, *Architektura i urbanistyka współczesnego przemysłu*, Wydział Architektury, Politechnika Śląska, Gliwice 2010.

²⁸ 38 contemporary vineyards, established in selected seven countries of Central Europe – Austria, Bohemia and Moravia, Germany, Slovakia, Slovenia, Italy and Hungary – were presented at the exhibition. The latter was organised by Jaroslav Fragner's Gallery in Prague; the exhibition was prepared by the Museum of Architecture in Wrocław with the collaboration of the *Design Factory* in Bratislava and the FUGA Centre of Architecture in Budapest.