

NEO-VERNACULAR ARCHITECTURAL AND FURNISHING PATTERNS OF EUROPE CONCEPTS FOR VALUE-ADDING IN CONTEMPORARY DESIGN

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Abstract:

This analysis is based on the investigation of European neo-vernacular built environment and the specific structures used in traditional vernacular architecture and furniture that inspire it on a conceptual level. This was possible by researching settlements specially chosen for determining what the main characteristics of vernacular are, based on the following criteria: presence of specific structures in the construction and furniture, diversified utilisation patterns of wooden species, architectural and furniture joints, scale, proportion and general characteristics of the interior space.

The case studies illustrate and provide some conclusions in this regard but they provide also an additional practical experience to the theoretical analysis through on-site investigation.

Key words: *European neo-vernacular architecture and furniture; interior space; on-site investigation.*

INTRODUCTION

The originality of traditional Romanian architecture had been exploited in the 19th century on a monumental scale and will continue to inspire Romanian architects like Ion Mincu in the creation of a neo-Romanian architectural current, which had a profoundly reinterpreted vernacular architectural vocabulary. He believed that he had found the „roots of a windfall” (Curinschi 1981).

The aim of the experimental investigations was to determine specific local characteristics of vernacular architecture and furniture in specific European countries. The results and conclusions of this investigation focus upon manifestations of neo-vernacular architecture in national and European context and set the basis for the main value-adding methods proposed in this research.

The tradition of wooden buildings, in spite its fragmented and discontinuous development has always managed to adapt itself to the modern context due to its important role in the (mostly rural) collective conception concerning life and living (Gronegger 2013, Jose 2010, Oikonomou 2011). Regarding the repertoire of construction systems and materials, it can be stated that these reflect general principles on the effective use of local resources (Pănoiu 1977), and offer diverse expressions not only on a structural level, but also on a functional and aesthetic one (Mitrache 2008).

The selected areas from Europe can provide a series of relevant data regarding the stylistic, architectural and structural evolution of neo-vernacular architecture and furniture overlapping with local tradition, geographical context, climate, thus shaping the contemporary neo-vernacular house, as we know it today.

OBJECTIVES AND METHOD

The aim of the project is to create architecture and furniture with value and meaning which increases with time and with the use of local communities. This type of interior design achieves meaning as a part of the variety of cultures of the local European communities and as a symbolic reflection of the context. The first step of the experimental investigations was to determine specific local characteristics of vernacular architecture and furniture in Romania and some other European countries. The results and conclusions of this investigation would set the foundation for the critical analysis of the manifestations of neo-vernacular architecture in national and European context and set the basis for the understanding of main value-adding methods utilized by contemporary architects and designers.

The objective of this research is to address in a critical and synthetic manner forms and structural typologies of neo-vernacular construction and furniture of European countries such as Switzerland, Austria, Hungary and Romania. The aim was to obtain results that will set the basis of the understanding process of an improvement or concept transfer methodology regarding traditional cultural and architectural values in the contemporary context.

TRADITION AS A RESOURCE OF REINTEGRATION AND MAINTENANCE OF LOCAL IDENTITY

Tradition is the first resource for reintegration, rehabilitation and maintenance of local identity (Frampton 1983), on regional or national level. Kenneth Frampton claimed in the 80s in his book on critical regionalism that local tradition can be a tool for the creation of identity.

The role of tradition in the modernization and globalization era has led to a series of debates in the presence of specialists, architects, designers in recent decades (Ruggiero 2009). Tradition is the mass of cultural, religious, ethnographic values and modernity may be associated with cultural transformation, mobility, social class stratification, a consumer-oriented society (Mitrache 2008). At present, tradition and modernity are no longer seen as two opposite concepts, but ones that coexist, overlapping and influencing each other.

The use of wood as primary building material - perhaps a local resource, is an indicator of the local community's way of living and lifestyle evolution. Even though the communication of traditional building methods from one generation to the other has had a fragmented evolution, it has managed to adapt itself to the contemporary context due to the collective interest of local communities and their way of understanding life, living and the importance of traditional wood constructions.

ANALYSIS OF EUROPEAN CONTEMPORARY NEO-VERNACULAR ARCHITECTURE AND FURNITURE

In the last 50 years, in Europe, there have been a number of changes concerning rural areas. The mechanization of specific agricultural activities, rural migration to the city, led to the loss of local traditions and customs, and the degradation of traditional built environment. In this context, rural development policies of the European Union considered a priority the preservation of vernacular architecture. In several European countries, special funds were allocated for the development and conservation programs of rural cultural landscape in the period between 1991-2000.

Regarding vernacular architecture in Europe, the first designs were realised without the use of any „artificial” tools, a large sector that might be regarded, as an example of this is wattlework where pieces of wood are simply gathered and not at all processed. This type of construction could not offer enough stability, so the next measure consisted in weaving the pieces into regular geometric forms, the wattle being used as an infill material for the walls, rural buildings combining wattle walls with skeleton-framed, more solid walls.

The transition to bronze tools, has influenced the appearance of log construction in Europe and with a slight delay, in Romanian territory. The principle of log construction is that the elements are stacked horizontally one on top of the other and held in the desired position using different types of notches.

If we consider the Romanian territory, vernacular constructions were simple regarding the structural forms, with some of the wooden pillars buried under the earth, the visible part being covered with planks, wattle and clayey soil. These structural systems diversified in time, leading to the construction typology with horizontal logs resting on stone foundations (Olărescu 2012). From a structural viewpoint, these constructions were made of round pillars embedded in the soil, ensuring the stability of the construction (Păcală 1915).

The research proposes the following steps: observation of the existing neo-vernacular environment, the selection of a few representative projects, functional and stylistic interpretation of the selected projects, summarizing the discovered data in tables and drawings. Highlighting these European neo-vernacular examples from Switzerland, Austria, Hungary and Romania, can point out a kind of new approach to the design process that has to be seen as a contemporary need, a specific need in a globalized world, and aims at giving answers to specialists in search of value-adding elements of local tradition in their architectural and furniture projects.

To be able to understand the evolution of the creative process involving contemporary neo-vernacular projects, the first step should consider the profound and pragmatic analysis of the specific manifestation forms of European vernacular. All four countries have their local manifestations and specific elements that set a starting point in the conceptual and inspirational phase of any neo-vernacular project.

All these specific elements are represented in Fig. 1, which aims to highlight in a visual manner the most relevant features of vernacular architecture as a key inspirational factor for contemporary architects and designers.

**EXPRESSIVE ELEMENTS
OF VERNACULAR ARCHITECTURE**

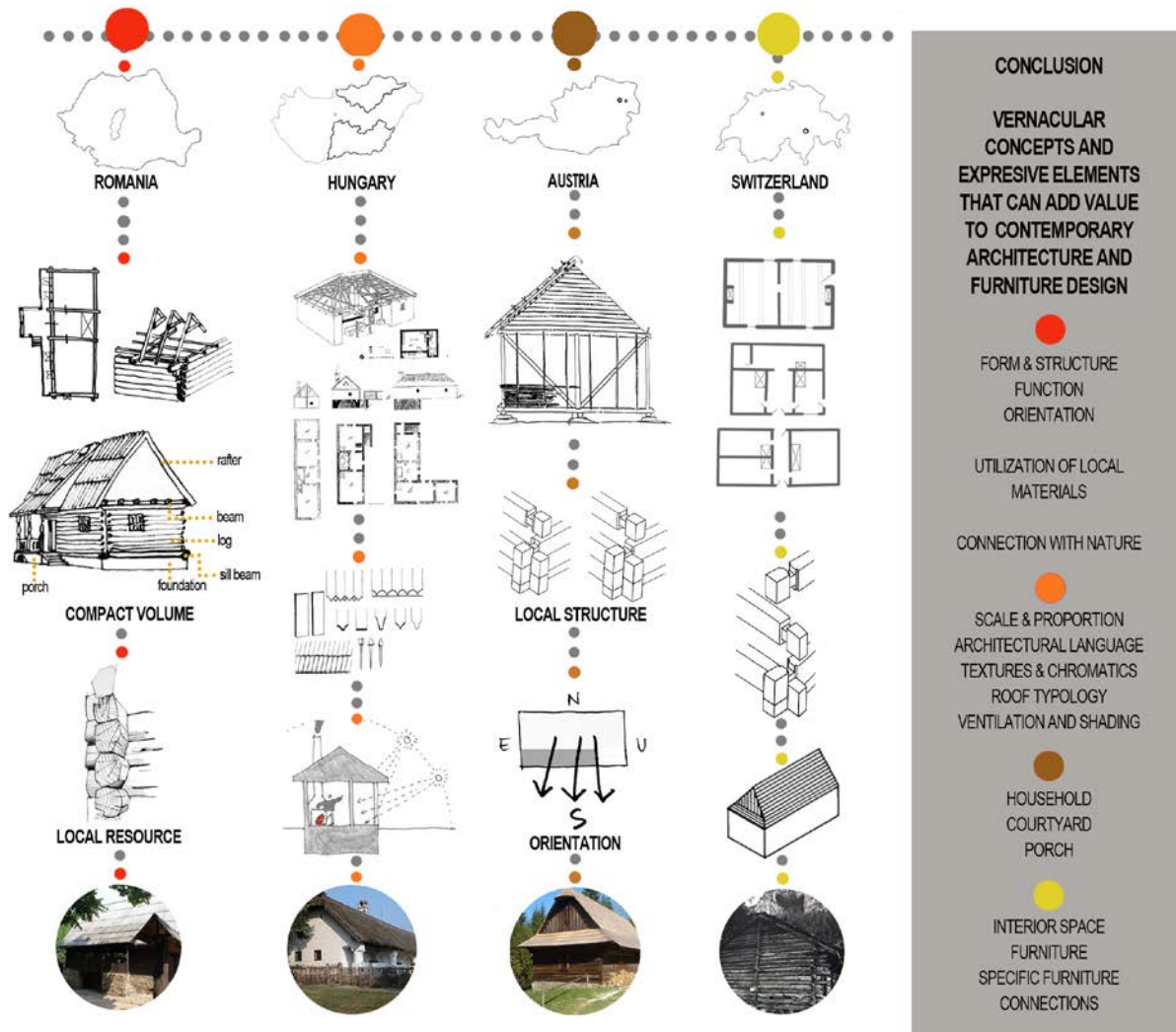


Fig. 1.

Summarizing table with European vernacular concepts that inspire contemporary architecture.

Several common characteristics can be observed when analyzing the four selected countries, (Fig.1.) mainly we can discuss about a compact shape of the house, utilizing local materials (mainly wood for walls/roof and stone for the foundation), the structure being defined by horizontal logs, a porch facing south and efficient use of interior space (Bartha & Olărescu 2017). All these vernacular concepts inspired the architects of the four case studies presented in the upcoming paragraphs.

The first case study of this research, the one of Switzerland, Vrin, is located in the southeast part of the country, in a mountainous region with a characteristic alpine climate (cold and long winters, short summers). Vrin is a small mountain village with a population of 240 situated in the Lumnezia valley in the Graubünden Canton surrounded by the Alps.

The small population of the village is formed mostly of farmers and shepherds, struggling with contemporary tourism while managing to keep the unique culture of the village. The community faced economic difficulties and motivated by these changes in the context of community and rural built environment in 1979 a *Pro Vrin Foundation* was formed, in order to preserve the specific culture and lifestyle of the area. The aim was to actively seek alternatives and methods, both in architecture and planning, against the tide of globalization. This approach began by preserving the existing heritage, but also developing new ways to build in this isolated mountain community, respecting the existing harmony of the natural environment.

The study case illustrates one of the most representative interventions of Swiss architect Gion Caminada in the rural context and built heritage of Vrin (Fig.2). One of the proposed construction methods implemented by Caminada together with the Vrin community was the construction of specific structures employing horizontal wooden beams ("strickbau"). *Strickbau* is extremely common in most alpine regions and is made of "wooden beams" knitted "together at the corners for stability". The distance between these barns is determined by the hay storage capacity of each structure, therefore the distance is regular in terms of space, and the buildings have approximately equal sizes. The storage for the hay is at the top, with the entrance door high above the average height of snow in winter. All barns are situated perpendicular on the slope of the hill, also to allow access from the back in the small space at the bottom of the construction for the animals (Caminada 2009).

Caminada's interventions have a robust character with simple geometric shapes and present simple joints. Subsequently furnishings were given a series of painted or incised ornaments with various geometrical, vegetal or floral patterns.

The second case study is situated in Austria in the village of Rekawinkel, which is located in northeastern Austria, 29km from Vienna, in a hilly area with a diverse and rich forest fund. Traditional wooden architecture in Austria had diverse manifestations in the east of the country, not only in the mountain region, but also in the hills, especially in the regions of Lower Austria (northeast of Styria), Vienna, and in particular, in Burgenland. The existence of vernacular wooden architecture of this country should not be seen as an isolated phenomenon, but rather in conjunction with other examples of vernacular architecture in the region of the Danube basin and the Pannonia Plain regions. (Zwenger 2000).

Earth has been traditionally used as an auxiliary material of construction to cover the walls formed of round beams by applying an exterior layer of plaster (protection against bad weather, rain), covering the joints between logs, paving the ground floor, filling joist to obtain a good floor insulation, or to construct bread ovens. This use of frames or wooden beams with earth plastering is characteristic for the region of the Austrian Danube and has a similar manifestation, with specific construction techniques met in the Pannonia Plain. However, the extensive use of clay mixed with ground straw, locally known, as *Stampflembau* should be noted in particular.

This particular method of plastering inspired architect and sculptor Thomas Gronegger in overlapping two strong chromatic elements: wood (with its warmth and rich fiber texture) and plaster (with its matt, neuter and smooth surface). This concept is visible on the scale of the four facades: two of them being entirely clad in plaster and two in wooden planks with two different sections offering a tactile vertical rhythm for the main façade facing the natural landscape of the neighboring forest (Fig.3).

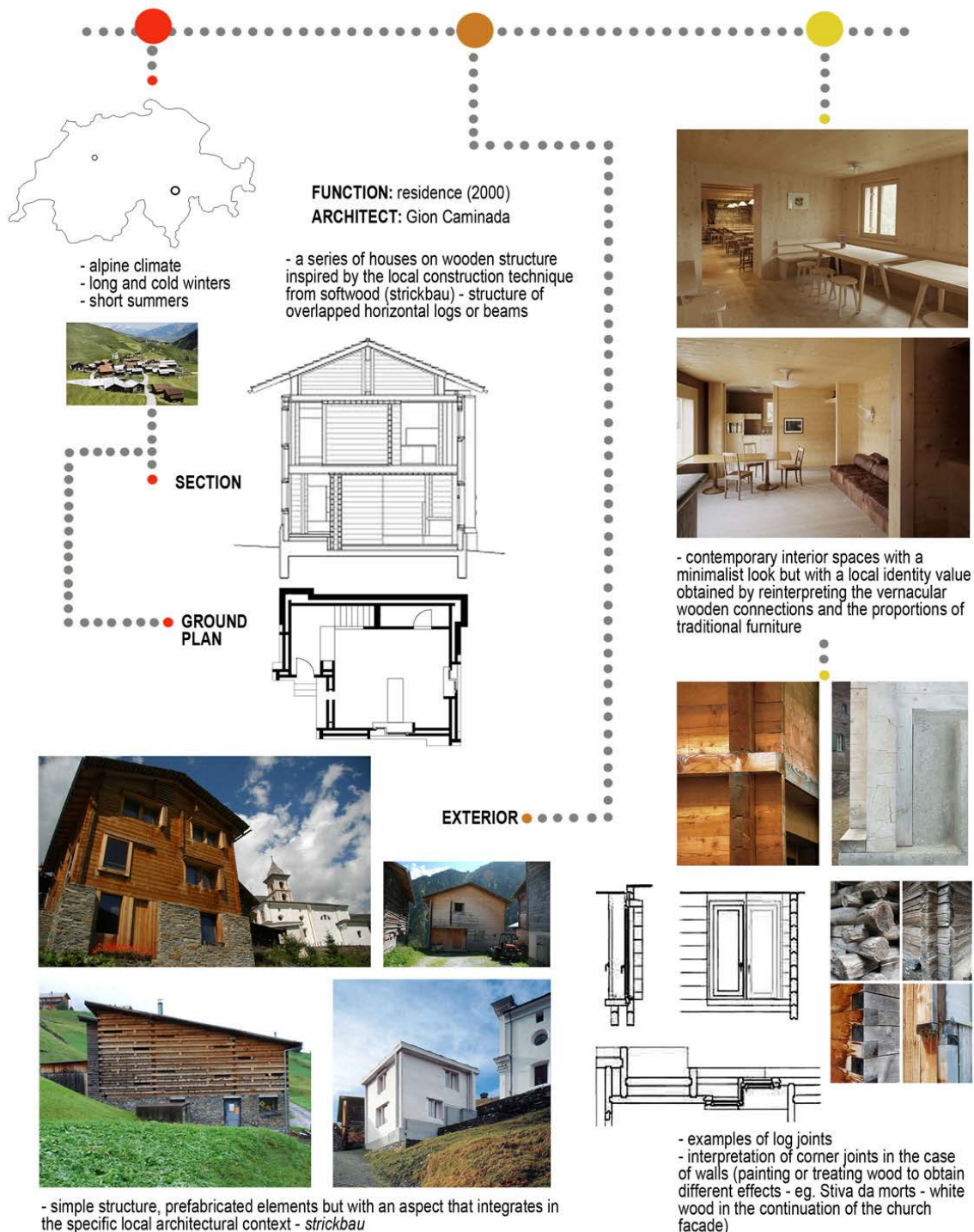
The general shape of the house is simple and resembles the ones of vernacular barns; also, the scale reflects this source of inspiration. This clean geometry and spatial organization is in strong connection with the ones found in any vernacular house of this region.

In the case of the third analyzed project, from Hungary, the situation is somewhat different. If in the first two cases (Switzerland and Austria), the contemporary interventions had to be integrated in a rural environment, in this case we have the urban setting of Budapest. The presented house is a clear reinterpretation of the typical Hungarian household with longitudinally arranged outdoor (porch – *tornac*) and indoor spaces.

The architect had as source of inspiration the spatial-functional typology of the kitchen-porch-room or room-kitchen-room display house. Thus, the longitudinal axis became a dominant in the interior composition each space having a separate entrance from the porch. This linear display of the spaces also creates a continuous effect of the gable roof ending in a generous porch area with visible wooden beams supporting it (Fig.4). The main facade is oriented towards the court and under a continuous gable roof; it can include the living areas and the storage spaces. Similar as in the case of vernacular houses, wood is used not only in the roof structure but also in the case of the wall structure (frames consisting of horizontal beams and columns and horizontal logs of softwood mounted on a stone foundation).

Traditional materials were given new light in this contemporary context, the house being both -modern and vernacular – in the same time.

CASE STUDY - Local contemporary architecture - Switzerland, Vrin



Context - Architecture

Exterior - Perspective

Interior details

Fig. 2.
Summarizing table with neo-vernacular case study from Switzerland.

CASE STUDY - Contemporary local architecture - Austria, Rekawinkel

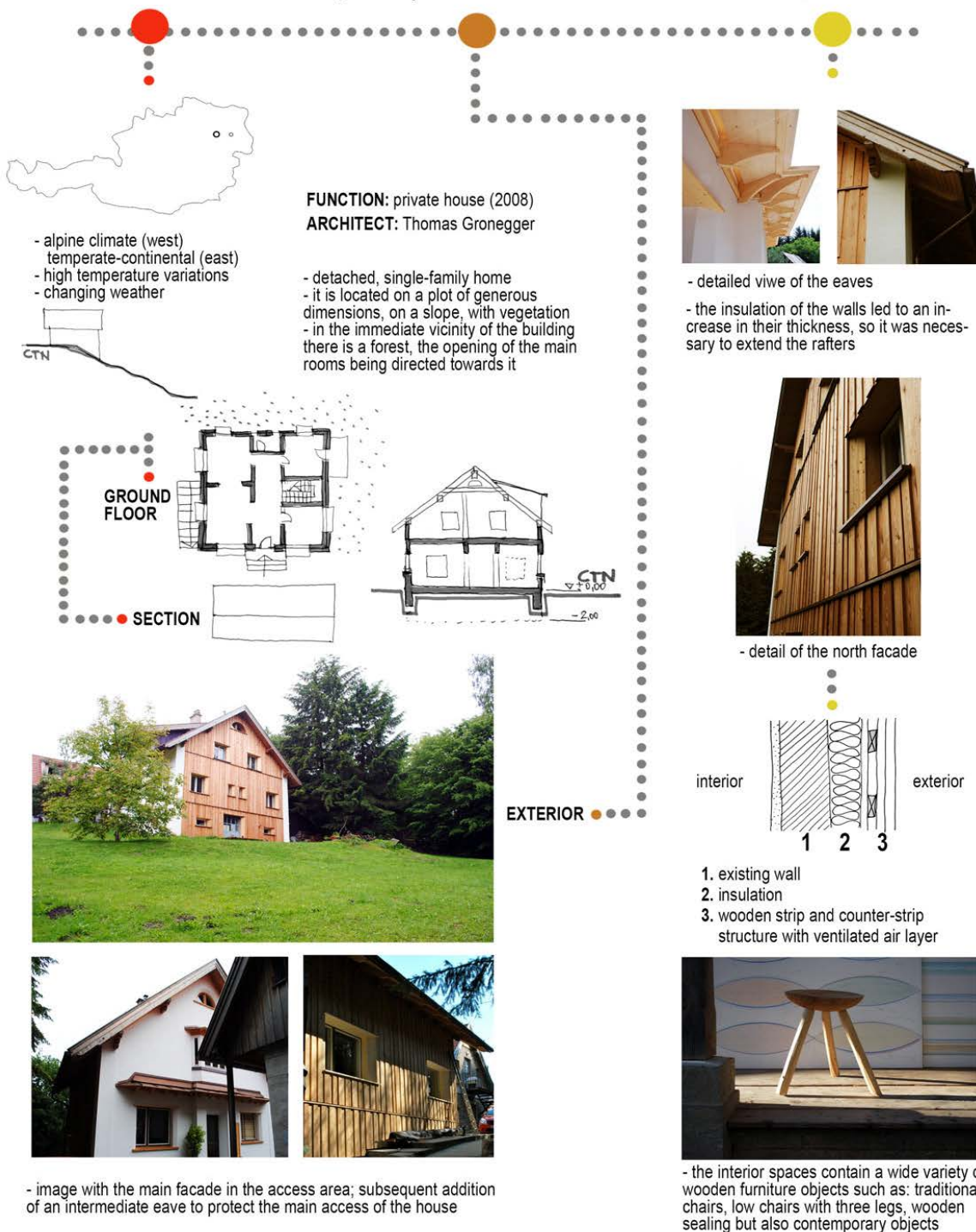


Fig. 3.
Summarizing table with neo-vernacular case study from Austria.

CASE STUDY - Local contemporary architecture - Hungary, Budapest

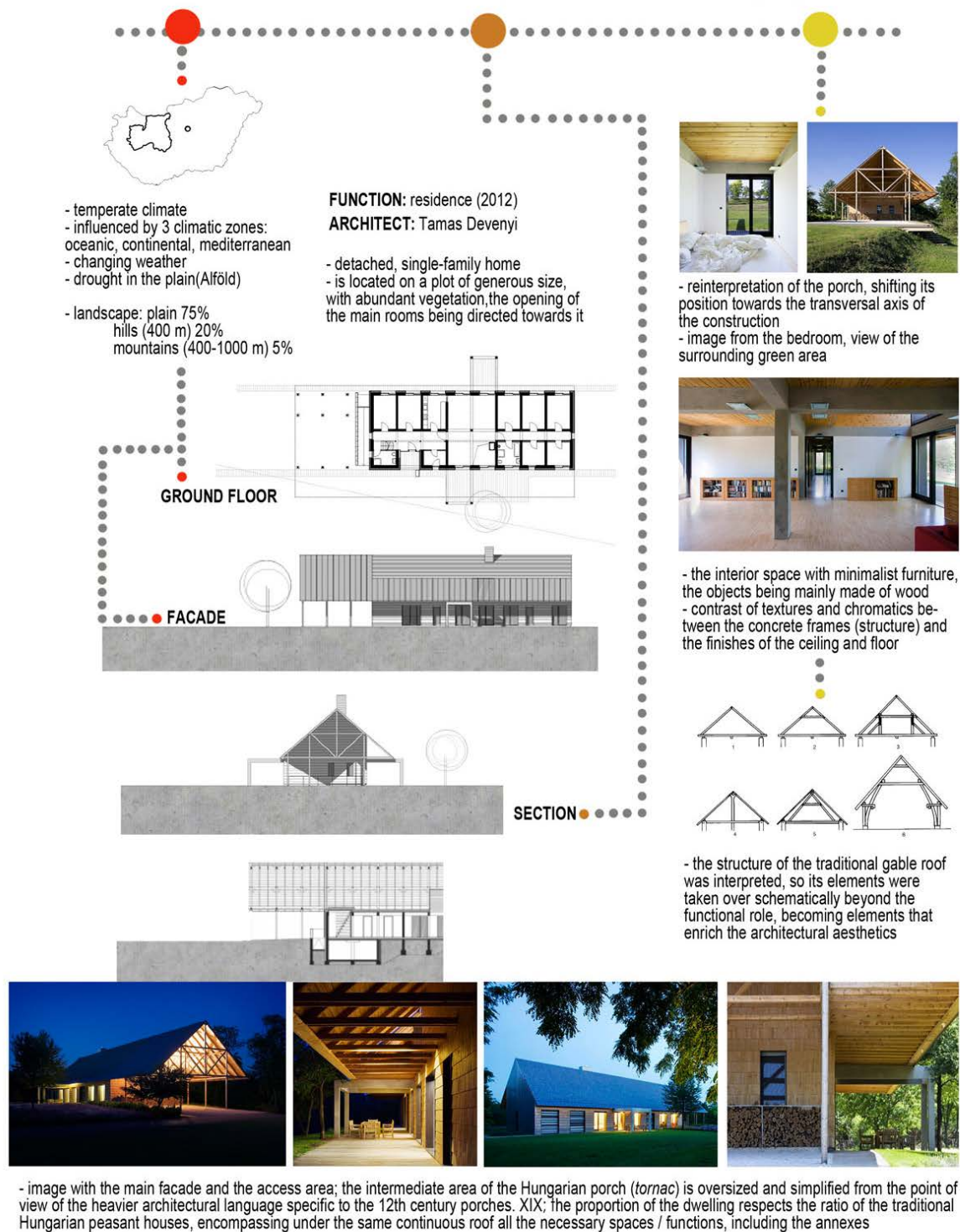
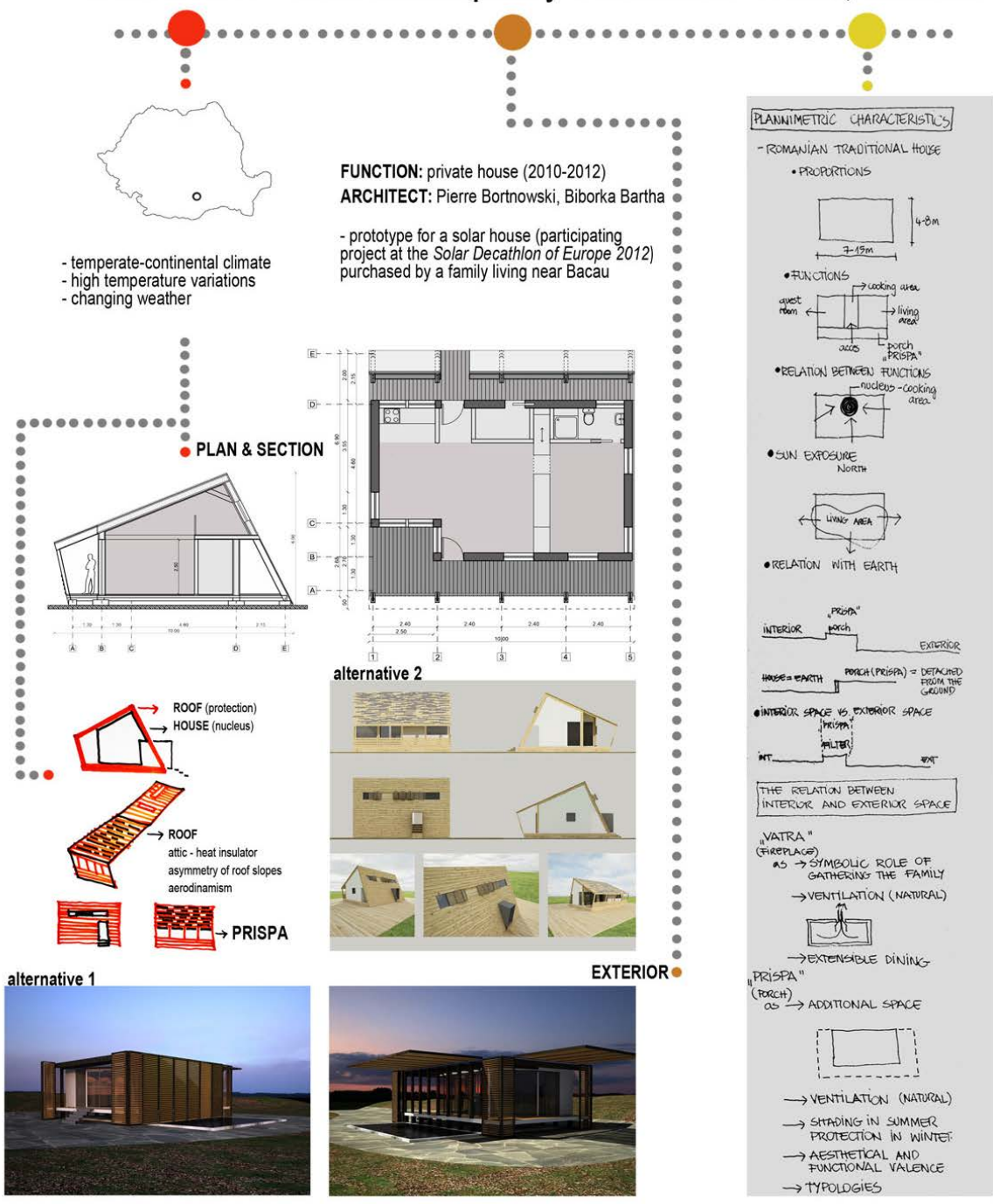


Fig. 4.

Summarizing table with neo-vernacular case study from Hungary.

CASE STUDY - Local contemporary architecture - Bacău, Romania



- solar dwelling that from a spatial, functional, architectural point of view interprets typology of the traditional dwelling with a porch on 3 sides (alt. 1), respectively one side (alt. 2)
- this project was developed for participation at the international Solar Competition Decathlon Europe organized in Madrid in 2012

- specific characteristics of the traditional dwelling that can be taken over and add value to the final project

Context - Architecture **Exterior - Perspective** **Interior details**

Fig. 5.
Summarizing table with neo-vernacular case study from Romania.

CASE STUDY - Contemporary architecture - Romania, Bucharest

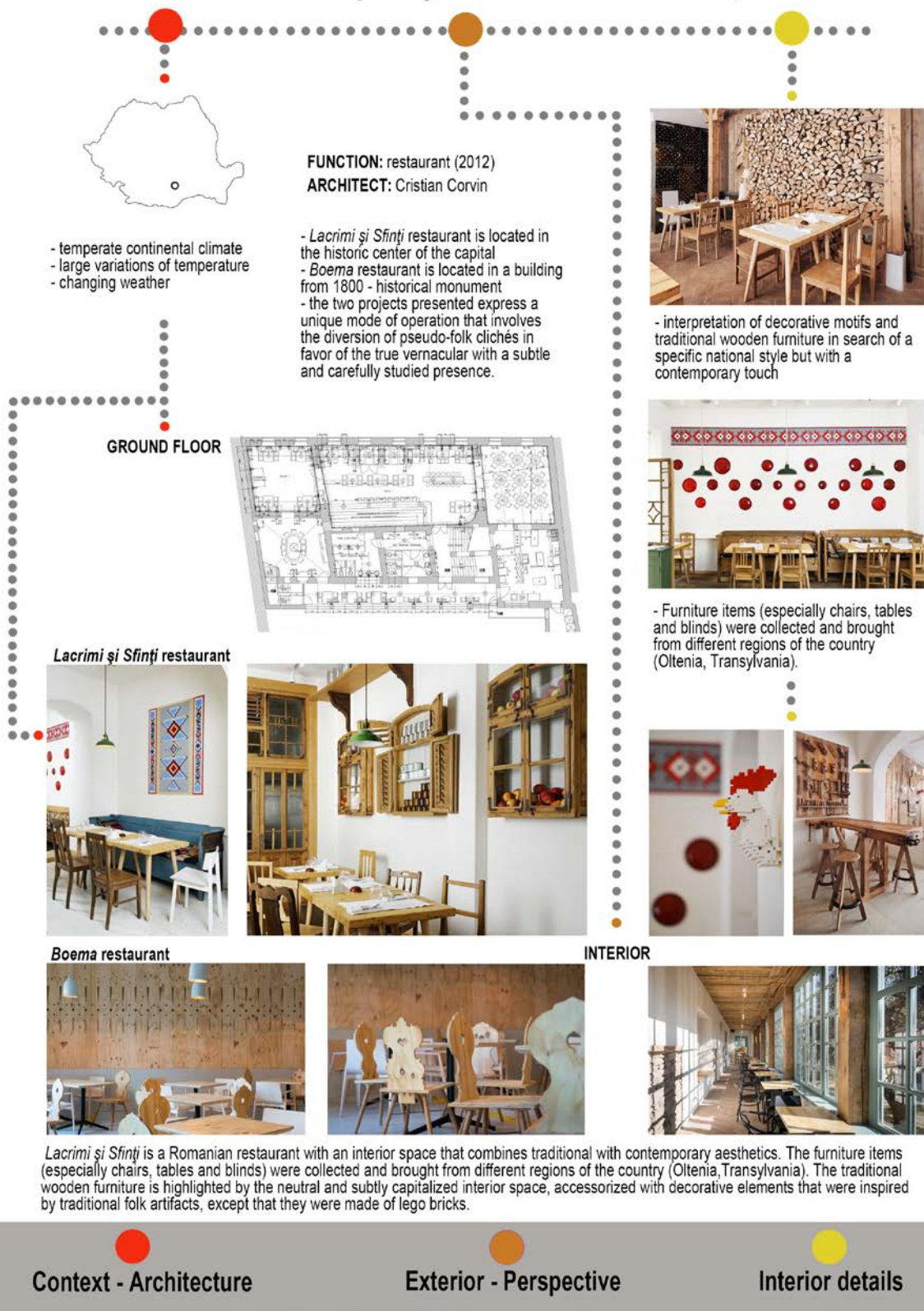


Fig. 6.

Summarizing table with neo-vernacular case study from Romania.

In the case of the fourth analyzed project, we focus on Romania and its central-east region of Bacau. The intervention represents a single-family house – subject of an international architecture contest for solar houses. The winning project was implemented in 2012 and has set a healthy neo-vernacular trend for architects and designers in Romania since (Fig.5).

The general volume of the house is opaque, with small openings (because low temperatures are present six months of the year). The porch is the only element of the main façade, which can change its status: becoming open in the summer (for outdoor activities) and closed in the winter (mainly for storage and protection from cold weather and snow).

The interior space of the house is organized according to four compositional principles or centers (resembling the vernacular ones): heating and cooking area, sleeping area, sitting area (long benches), storage areas (in chests, cabinets). All these spaces are organized according to the longitudinal compositional axis of the house as follows: the porch facing the street, the entrance hall and two rooms (guest and living room) placed in the core, and finally, facing the courtyard, in the back of the house, the kitchen and storage space.

The shape of the gable roof was also reinterpreted and put into a new geometric vision, becoming also a source of solar energy through the photovoltaic panels placed on the south slope. Thus, combining energy efficiency in a contemporary key with local materials such as wood (structure of the walls and roof) and earth/clay (flooring), this example can become a high-tech neo-vernacular architectural object.

The fifth case study focuses on furniture design specially created for restaurants situated in the historic center of Bucharest. The designer, Cristian Corvin, throughout his work, experimented with combining traditional with contemporary aesthetics. The obtained eclectic effect is highlighted by the presence of vernacular furniture items that were collected from different regions of the country.

Vernacular items, such as wooden window blinds, are given a new purpose; wooden planks that closed the railing of the vernacular porch, now cover entire walls giving a warm texture and natural feel to the interior space (Fig.6). High chairs, three legged chairs, long benches, all these seating options reflect the creativity and versatility of vernacular furniture; and the fact that it can be easily integrated into contemporary spaces with minimalist architecture.

CONCLUSIONS AND DISCUSSIONS

The traditional household has seen many changes over time (Olărescu 2012, Bartha 2014). The general shape of vernacular housing is defined by a series of socio-cultural factors and is influenced by climate, local resources and construction techniques of the region. Using local materials as wood, earth or stone had a major impact on the development of specific manifestations of vernacular architecture and furnishings, this course offering varied sources of inspiration concerning new directions of approach in the contemporary design process and creation.

As seen in the selected case studies, contemporary architecture still knows how to rely on specific values such as local identity, spatial constants, tradition and culture. It is not a surprise that the neo-vernacular house embodies a set of valuable assets that can provide inspiration and coherent guidelines also for the upcoming generations of architects and designers.

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