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Architectural resonance. The Luzi House by Peter Zumthor as an archetype for the synthesis of tradition and innovation in rural areas

Abstract

In response to the observation that the majority of our energies are concentrated on the urban landscapes of the world when it comes to housing, it seems urgently necessary to direct the discourse, which has so far been focused on urban areas, to rural areas as well. The *Luzi House* in Jenaz, Switzerland, designed by Peter Zumthor as a multi-generational house in traditional log construction, can serve as an example of this.

It combines environmental compatibility and human needs through techniques based on local tradition, the use of local raw materials and a planning and construction process based on collaborative work. The concept of a multi-generational house also seems to do justice to an understanding of housing that is not only interested in the preservation and regeneration of ecosystems, but also in concepts that utilize the opportunities and potential of demographic change for society, such as the transfer of everyday practices and social skills between young and old.

The article aims to illustrate why the *Luzi House* embodies a connection between past and present, tradition and innovation through its anchoring in the history of the village and the integration of modern sustainability principles, and how Zumthor succeeded not only in staging it as an architectural landmark, but also in making it a symbol of sustainable development and cohesion in rural communities.

Key words: innovation, tradition, Peter Zumthor, Swiss architecture, timber construction

Introduction

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The *Luzi House* in Jenaz, Switzerland, designed by Peter Zumthor as a multi-generational house in traditional log construction, can serve as an example of this. It combines environmental compatibility and human needs through techniques based on local tradition, the use of local raw materials and a planning and construction process based on collaborative work. The concept of a multi-generational house also seems to do justice to an understanding of

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In order to visualize the production process by linking material, technology, purpose and form, the study focused primarily on the personal and non-personal actors involved in the design process. This approach was based on the author's findings from empirical research in the form of interviews with experts and clients on the conditions and circumstances under which the building was created.

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State of research

The fact that the Swiss architect Peter Zumthor lives in Graubünden, in a farming village surrounded by mountains, and works from this location, does not seem to leave his buildings uninfluenced, but rather to connect them with both the character of the landscape and the mentality of the people living there (Zumthor 1999a, 35). As individual interviews conducted in 2016 with clients of Zumthor houses in this region showed, it is therefore not surprising that Zumthor's architectural concept seems to appeal precisely to the kind of Graubünden residents for whom living in harmony with nature and regional culture plays an important role. While Peter Truog emphasized the importance of traditional farmhouses for the conversion and complementary construction of his weekend *Gugalun House* (Fig. 1), which is situated in a secluded location on a terrace at the

entrance to the Safiental valley, and Ruth and Klaus Räch highlighted the connection to the Calanda massif directly adjacent to their house (Fig. 2) as essential, the owners of the Luzi House in Jenaz (Fig. 3), which was also designed by Zumthor, Lilian and Valentin Luzi-Brunner, emphasized the fact that the values of the people they live with are also important. They highlighted that the values of the local associations that shaped their lives and united several generations and different social classes should also be reflected within their house, as they liked the idea that people of different kinds could build a relationship with each other by being willing to learn from each other beyond the boundaries that set them apart, thus forming a community where the individuality of each person was also respected. At the same time, the need for a certain self-sufficient way of life also appears to be a common feature of the owners of Zumthor houses in Graubünden. According to Luzi this



Fig. 1. Peter Zumthor, Gugalun House (also Truog House), Versam (Switzerland), 1990–1994 (photo by H. Schiefer)

Il. 1. Peter Zumthor, Gugalun House (również Truog House), Versam (Szwajcaria), 1990–1994 (fot. H. Schiefer)



Fig. 2. Peter Zumthor, Räch House, Haldenstein (Switzerland), 1981–1983 (photo by H. Schiefer)

Il. 2. Peter Zumthor, Räch House, Haldenstein (Szwajcaria), 1981–1983 (fot. H. Schiefer)

is primarily linked to the desire, often found in that region, to maintain a connection to concrete reality through proximity to food, be it through their own vegetable garden or the production of meat and dairy products from their own animals. This regional connection to nature and culture, as well as independence and sustainability, which are equally transferable to their homes, can ultimately be attributed to the desire to harmonize respect for tradition and nature and to create a synthesis of the existing, the purpose and the terrain (Thun 2014, 8).

In connection with such considerations, the work of Rudolf and Valerio Olgiati, Hans-Jörg Ruch, Miller & Maranta and Atelier-F and especially Gion Antoni Caminada can be cited. Their buildings are characterised by a strong engagement with regional, historical and cultural aspects of architecture in Graubünden. These architects develop new forms of expression that are orientated towards the traditional architecture of the region without falling into nostalgia. They use local materials and techniques that respect the regional heritage and integrate the buildings into the landscape. At the same time, their work is characterised by a minimalist design language, which is reflected in the clear lines and simple, geometric shapes of the buildings, which focus on materials, structure and spatial atmosphere. In addition to the aforementioned architects from Graubünden, there are a number of architects around the world who are also working on a contemporary reinterpretation of regional architecture, drawing on local materials, traditions and building cultures. Examples include Glenn Murcutt (Australia), RCR Arquitectes (Spain), Kengo Kuma (Japan), Anna Heringer (Germany), Diébédo Francis Kéré (Burkina Faso) and Smiljan Radic (Chile). These architects share the conviction that architecture can respect the cultural, historical and natural aspects of a place while offering modern, innovative solutions. Their works represent a global movement of “critical regionalism” (Frampton 1983) that critically embraces modern architecture for its universal, progressive qualities, strengthens local identities through a modern transformation, emphasises the geographical context of the building and focuses on environmental and social sustainability. According to Frampton’s argument, which follows phenomenological aspects, the focus of the architecture should be on the topography, the regional climate, the use of light and the synaesthetic experience, rather than on a staged architectural spectacle. The aim is to create an identity that is firmly rooted in the region, but also fulfils the requirements of modern architecture. Continuity and a sense of place are also expressed through a strong connection with the location and the landscape. Buildings are therefore often positioned in such a way that they interact harmoniously with the natural surroundings and existing buildings. They preserve and emphasise the typical features of the region instead of transforming them. In order to achieve continuity, many projects emphasise sustainable construction, both in terms of materials and the lifespan of the buildings. This partly experimental approach implies that buildings are designed to last for generations and to age naturally.

Architectural interventions by humans in a landscape that are based on such motivations, orientated towards the



Fig. 3. Peter Zumthor, Luzi House, Jenaz (Switzerland), 1997–2002, east façade (photo by H. Schiefer)

Il. 3. Peter Zumthor, Luzi House, Jenaz (Szwajcaria), 1997–2002, elewacja wschodnia (fot. H. Schiefer)

existing but at the same time creative, could also be linked to some of Martin Heidegger’s thoughts. In depicting an old farmhouse, Heidegger describes the ability to incorporate earth and sky, the divine and the mortal into things as that which built the house. The craft, which itself has emerged from the living and still needs its tools and frames as things, is significantly involved in this creation (Heidegger 1954, 161). With the knowledge of such houses and farms and in the awareness that the mountain farmers had passed on their knowledge of microgeography, winds and climate and thus learnt to build with landscape, to use and respect the elements of nature, the people of Graubünden and thus also the builders of the Zumthor house in Jenaz seem to be particularly interested in the constant search for the right balance, for new ways to create ecologically justifiable buildings (Thun 2014, 8).

As far as the actual design of the house was concerned, the Luzi-Brunner couple envisioned a large house for themselves and their six children, which would be spacious, bright and built from solid wood in a log construction (Durisch 2014a, 133). They also gave Zumthor the wish for a room programme which, in addition to sufficient space for the children, also included a spacious entrance area and a granny flat on the ground floor as important basic points. Looking back, Luzi remembers having a lot of discussions with Zumthor during the eight years they spent planning the house together. The client’s wishes had to be



Fig. 4. Peter Zumthor, Klangkörper Schweiz, Expo 2000 Hanover, 1997–2000 (source: © Giovanni Chiamonte, Milan, from: Durisch 2014a, 108)

Il. 4. Peter Zumthor, Klangkörper Schweiz, Expo 2000 Hanover, 1997–2000 (źródło: © Giovanni Chiamonte, Milan, za: Durisch 2014a, 108)

well-founded in order to be taken on board by Zumthor. Ultimately, however, this led to mutually satisfactory results. For Zumthor, the considerations that followed the wishes and ideas of the clients set in motion a process that, as in his usual approach, was based on a constant interplay of feeling and reason, in which, on the one hand, feelings told him whether abstract considerations were coherent and, on the other, emerging feelings, preferences, longings and desires were always subjected to a critical examination by the mind (Zumthor 1999c, 20). The premise of a house made of wood seems to have inspired Zumthor in this phase to build this dialogue between emotion and intellect primarily around the connotations associated with wood as a material.

As wood is increasingly connected with diversity, durability and, above all, ecology due to the growing interest in sustainable construction (Schober 2010, 1), its use is also increasing in more southerly latitudes. In addition to the clients' desire to build with wood, which is partly due to these generally recognized advantages, the choice of this material as the main building material could also be linked to Zumthor's concept of *genius loci* oriented building, as Graubünden not only has a special tradition in the architectural use of wood, but Switzerland is also generally a pioneer in the development of new techniques for building with wood (Durisch 2014c, 58). The client's concerns regarding the aesthetics of the rooms led to a rethinking of building with wood in terms of material and construction during the further considerations for the Jenaz timber house (Durisch 2014c, 123). Zumthor seemed to have developed the vision for the design of such a house several years before the planning began. He had already come into

contact with wooden farmhouses in Graubünden in the 1970s and had studied their construction and typological development over the centuries during his time as an architect at the Graubünden monument preservation office (Durisch 2014c, 123). After realizing that they were a type of building that was being phased out and whose history had to be continued in a modern form, in 1996 he thought of a house-sized block of solid wood, a dense volume made of the biological mass of wood that was layered horizontally, hollowed out and provided with room-high grooves and precise cavities to become a building (Zumthor 1999b, 50). Although this description is to be found in the context of Zumthor's comments on one of his favoured methods, according to which he imagines the structure as a mass to be hollowed out at the beginning of the design process, it also illustrates the desire to let the material speak for itself in a wooden house and to use both traditional and innovative new techniques in dealing with it. As with his later *Klangkörper*, the Swiss pavilion at Expo 2000 in Hanover (Fig. 4), his considerations were based primarily on the inherent movements that characterize wood as a living building material. Instead of counteracting wood's inherent properties of shrinking and swelling by using special building materials such as chipboard, plywood and multi-layer panels (Zumthor, Bachmann 2000, 221), Zumthor deliberately wanted to dispense with such building materials for Luzi House and work with the natural movement of the wood. Rather than using wood-based materials, he primarily utilized the special constructions and shapes developed in furniture making and solid wood construction from time immemorial, which allow the wood to move without causing any damage to the furniture or building (Zumthor, Bachmann 2000, 221). The fact that the body of the house constructed in this way, caused by the swelling and shrinking of the wood, would change its expansion and move was consciously understood as a quality that had to be thematized accordingly in the design (Zumthor 1999b, 50). Fundamental to the effect of this living building material was Zumthor's idea of constructing with wall panels, juxtaposing surfaces and thus creating spaces like playing with houses of cards (Durisch 2014c, 123). Not without reason, he also pointed out the similarity to the house constructions of the De Stijl architects from the 1920s in the Netherlands, who had worked with similar principles of space formation (Durisch 2014c, 123). Zumthor's additively conceived construction became visible during the manufacturing process, but receded into the background once the building was completed. Although individual parts appear isolated, it is not the variability of the detail that is emphasized, but the combination of similar elements into a whole, so that they function as fixed components of a superordinate whole.

Above all, the desire for a similarity to the log construction made of solid beams required employees who were not unfamiliar with the traditional techniques of this type of construction, which is also known as the oldest in Alpine timber and housing construction. The aim of this project was to emphasize the natural movement of the wood through a solid timber construction, which presented those involved with the challenge of ensuring that the walls did

not start to lean, as is often the case with old buildings, despite the loss of height caused by drying out. A further difficulty was the combination of the log construction method with the desire for ever larger windows, which became more and more common over time (Durisch 2014a, 133). In contrast to other types of timber construction such as skeleton or timber frame construction, the stacked beam layers that make up the walls in traditional log construction have two functions, as they close off the room on the one hand and form the supporting framework for the ceilings, walls and roofs above on the other, so that the construction element is both a supporting structure and wall cladding, which characterizes the log construction method as a solid timber construction method (Kress 1991, 41). As the structural system of a log building is in principle based on four tree-length walls that are joined together to form a rectangular spatial unit, a rigid “wooden box”, according to Zumthor, the cut beams would have lost support if the openings were too large and would have had to be held in place in the area of the cuts in an unsightly way (Durisch 2014a, 133). Due to this block construction principle, which traditionally requires small windows, the house could not be designed like a typical block construction, even in its basic construction.

Zumthor worked with external experts to find an alternative solution and to concretize the construction method accordingly. The knowledge he had acquired during his carpentry apprenticeship and the preservation of historical monuments, which provided him with initial access, was enriched above all by the expertise of civil engineers Jürg Conzett and Josef Dora from Conzett Bronzini Gartmann AG, but was also supplemented by the know-how of individual craftsmen specializing in timber construction. While Conzett applied the timber construction expertise acquired during his studies at the École polytechnique fédérale de Lausanne and the Eidgenössischen Technischen Hochschule Zürich in the 1990s through projects such as Zumthor's first studio house or the school in Duvin, designed together with Gion Antoni Caminada in 1994, the trained carpenter and qualified civil engineer Dora was able to draw on both practical craftsmanship and engineering knowledge. This included his engineering journeyman's piece, the prestressed log construction of the school building in St. Peter, which was designed in 1996. Although Zumthor initially developed several designs for Luzi House independently, he involved the engineers right from the start, which, according to them, made a lot of sense, as various structural considerations, such as the decision in favour of double-shell construction for individual walls, also had a significant influence on some design aspects. The fact that Zumthor did not want to be seen as an ingenious visionary, but above all sought to synthesize the various work processes and exemplified the joy of development to all those involved, was an ideal starting point.

The result of this collaboration envisaged a three-storey timber construction made of solid beams, consisting of five small “towers” located in the four corners and the centre of the house (Fig. 5), several large window zones connecting them, ceilings dividing the building vertically and partly projecting over the outer walls, and a final gable

roof (Durisch 2014a, 134). The double-knitted walls on the outer walls of the towers, which were constructed like individual houses, were largely extended outwards in the form of free walls extending beyond the alignment of the wall surfaces connected to them at a 90-degree angle, which both support the cantilevered roof and partially carry or delimit the balconies, which is why these spatial constructions, understood as lying within the building cubature, could also be compared to loggias. The towers, which extend over all three storeys and are referred to as rectangular chambers, divide the floor plan, stiffen the house and are

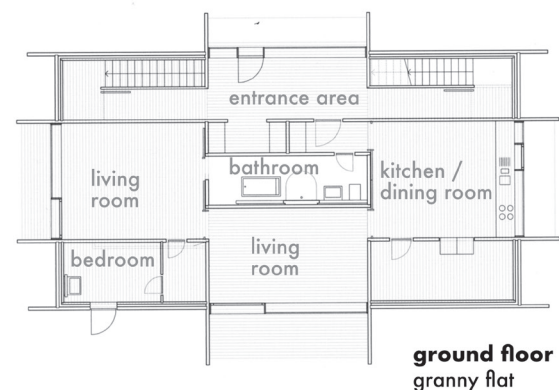
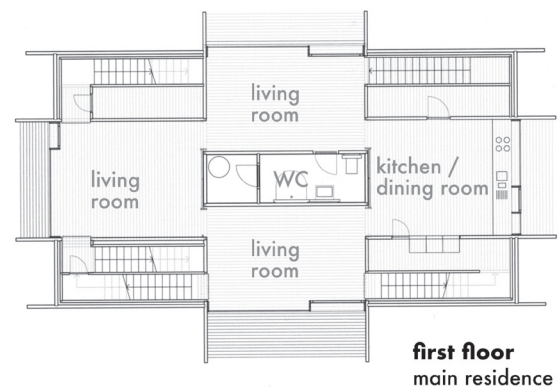
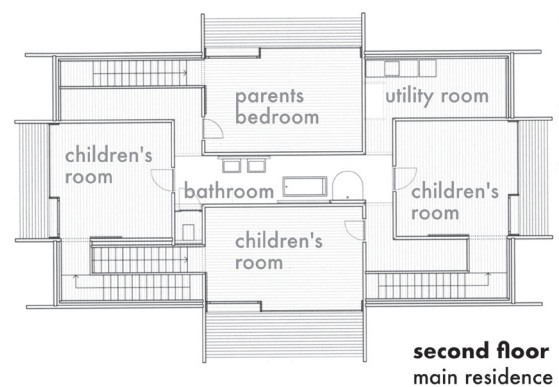


Fig. 5. Peter Zumthor, Luzi House, Jenaz (Switzerland), 1997–2002, floor plans (source: © Atelier Peter Zumthor & Partner, Haldenstein, from: Durisch 2014a, 139, revised by H. Schiefer)

Il. 5. Peter Zumthor, Luzi House, Jenaz (Szwajcaria), 1997–2002, rzuty kondygnacji (źródło: © Atelier Peter Zumthor & Partner, Haldenstein, za: Durisch 2014a, 139, zmodyfikowane przez H. Schiefer)

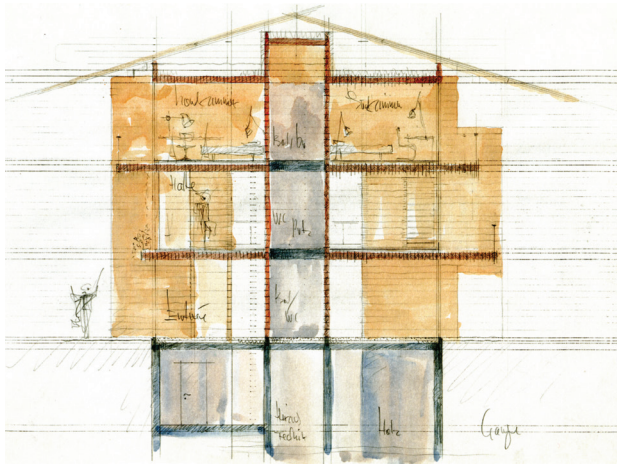


Fig. 6. Peter Zumthor, Luzi House, Jenaz (Switzerland), 1997–2002, sketch
(source: © Atelier Peter Zumthor & Partner, Haldenstein, from: Durisch 2014a, 132)

Il. 6. Peter Zumthor, Luzi House, Jenaz (Szwajcaria), 1997–2002, szkic
(źródło: © Atelier Peter Zumthor & Partner, Haldenstein, za: Durisch 2014a, 132)



Fig. 7. Peter Zumthor, Luzi House, Jenaz (Switzerland), 1997–2002, construction site
(source: archive of H. Schiefer)

Il. 7. Peter Zumthor, Luzi House, Jenaz (Szwajcaria), 1997–2002, budowa
(źródło: archiwum H. Schiefer)

skilfully interwoven with the massive beamed ceilings and the double-shell outer walls. By placing the small knitted towers with their small wall openings freely next to each other as load-bearing wooden pillars and connecting them to each other with ceiling panels, the rooms between the towers could be made large and glazed (Durisch 2014a, 133; Hönig 2004, 24). While the load of the roof is transferred to the outer log towers, the load of the bathrooms located in the centre tower, which are subject to greater stress due to the concrete floors and ceilings, rests on the inner knitted walls. In addition to the possibility for large windows created by the construction of the corner towers, the modified design of the block construction also led to an exciting sequence of cavities (Hönig 2004, 24). While there are stairwells or small adjoining rooms within the towers, which are only pierced by narrow rectangular windows, the hollow spaces between the towers contain living rooms and bedrooms, which are mainly characterized by large, sometimes floor-to-ceiling windows, and each have a direct connection to the outside with a balcony (Durisch 2014a, 134).

As other design drawings of the floor plan and various sections illustrate quite well (Fig. 6), apart from the concrete basement and the floors and ceilings of the bathrooms in the core of the building, the wood was not only intended to be the material that determined the construction, but also the spatial effect, whereby the aesthetic claim reflecting this could already be surmised in the carcass of the building through the genuine overlapping of construction and surface in the block construction. The design of both the interior spaces and the façades resulted from a combination of construction-related functionality and appealing form and surface structure adapted to the properties of the timber material. In order to offer the wood on the façade a certain degree of protection from external influences, Zumthor and his team also made the protruding roof, for example, a main theme. The large dimensions of the wooden surfaces below, which slope vertically down to the ground, and their surface texture, emphasized by the changing patina, were intended to enhance the external effect, which is geared towards the presence of the material, while the focus inside was primarily intended to be on the structural details of the timber construction. Together with Conzett, Dora and the craftsmen carrying out the work, Zumthor and his colleagues developed a connection system that combined the dovetail and finger-joint connections known primarily from furniture construction (Fig. 7), which, according to Conzett and Dora, required significantly more detailed work than traditional log structures. The type of wood chosen was spruce, which was common in the region and generally regarded as ideal for timber house construction, with around 300 m³ of timber required for the entire building (Hönig 2004, 24). As only wooden beams were to be used for the construction of the walls, with threaded steel rods only being used for the external free walls and individual internal walls for stabilization, the height of the walls was determined almost directly by the height of the individual beams, which initially measured 19 cm high and 11 cm wide. As with the later *Klangkörper*, the stability and instability of the length and thickness of the solid wood

had to be given special consideration (Zumthor, Bachmann 2000, 221). While Zumthor and his colleagues assumed a height loss of around 3 cm per floor for the first few years, a lower height loss was expected for the following years (Durisch 2014a, 133). In order to react to the resulting movements of the wood and also to achieve a certain degree of insulation protection, joints approximately 1 cm wide were provided at the transitions from floor to wall and around the door frames. Similar to the *Gugalun House*, where Zumthor – as Truog emphasized – had deliberately decided against covering up inaccuracies in the processing of the wood with skirting boards and instead paid attention to the exact dimensions of the walls, a satisfactory result only seemed achievable here too through close collaboration between architects, structural engineers and craftsmen as well as precise and conscientious craftsmanship.

Methods

Despite its modern interpretation of a wooden house, the overall appearance of the house appears to blend in well with the topography, the village building structure and the agricultural character of the region, and to connect with the buildings, meadows, gardens, fences and paths of Graubünden (Fig. 8) (Durisch 2014b, 34). Similar to the architect's own house, the form here was also intended to counteract the simple, rustic Alpine style that was widespread in new buildings at the time, and instead function as a sign of clarity and calm. The house thus embodies an architecture that picks up on the basic sound of the landscape and houses that has evolved over centuries (Durisch 2014b, 57). This effect can be attributed not only to the use of a classic structure with a rectangular floor plan and a gabled roof, but above all to the materiality of the wood used. On the one hand, it defends itself against nature, but on the other hand it also reveals itself to be part of nature, as sunlight, rain, splashing water, temperature fluctuations and dirt leave their mark on it. Depending on their position and orientation, the surfaces made of spruce beams have a warm reddish or cold greyish colour and thus reinforce the vitality of the surfaces already achieved by the grain of the wood, which creates a contrast to the overall construction, which is committed to strictly geometric forms, the linear structure of the layering created by the beams and the shape of individual elements such as windows, doors and the vertical and horizontal wall and ceiling panes protruding from the façade, which emphasize the right angles. The prevention of direct weathering on the east façade by the roof and the open walls, combined with the lack of direct exposure to sunlight, has preserved the original colour of the wood in places, whereas more exposed areas, such as the splash water area, are characterized by a greyish colour. If one interprets such appearances as an expression of ageing processes, a connection to the other older farmhouses that characterize the village emerges. The gracefully ageing appearance of the Luzi House leads to it being recognized as having a comparable connection to the earth and a place within the history of the village.

The granny flat on the ground floor consists of three large main rooms that merge into one another, a bathroom in the



Fig. 8. Jenaz (Switzerland) with Peter Zumthor's Luzi House in the background (photo by H. Schiefer)

Il. 8. Jenaz (Szwajcaria) z Luzi House Petera Zumthora w tle (fot. H. Schiefer)

centre, as well as one ancillary room in the south-eastern and two in the south-western tower. The arrangement of the interior spaces is fluid. As with most of Zumthor's buildings, the three large windows in the main rooms celebrate the view of the landscape and also create direct access to the garden to the south and west (Durisch 2014a, 134). The bathroom, which can be accessed from the entrance area of the flat and from the western living room, is enclosed on all sides by wall surfaces and is therefore characterised by a lack of brightness. On the south wall are terrazzo front elements that extend the materiality of the floor into the vertical and were designed as a continuous surface, but in three graduated heights, corresponding to the bathroom fittings of bathtub, shower, washbasin and toilet. Like the wooden bathtub, the built-in wardrobes in the living areas, which are customised to the house, also blend into the flowing character of the rooms thanks to their shape, as they are reminiscent of the movable room dividers known as *shōji* in traditional Japanese architecture. The same applies to the flexibility in the use of these rooms, which was planned from the outset. While the flat initially functions as a guest or granny flat, as soon as the children grow up and one of them wants to take over the upper house themselves, it is to be occupied by the parents, for whom it is to serve as a retirement home like a smaller house built on a farmstead, also called a "Stöckli" in the region, where they would neither have to give up their existing ties to their village nor use up more land (Hönig 2004, 26).

The main living area is located in the upper house, which shares an entrance area with the granny flat on the ground floor and can be reached from there via a staircase located in the north-east tower, while the staircase opposite this, which can be accessed on the north-west side, leads to the basement with adjoining garage, which is planned on two levels and contains storage and pantry rooms. Both staircases are designed in such a way that they cannot be seen from the entrance area and can only be accessed after a 180° turn. The transition to a new living area on the upper floor, marked in this way, is further emphasised by the change in materiality of the subfloor from the polished, dark terrazzo to a lighter wooden floor. As the staircase



Fig. 9. Peter Zumthor, Luzi House, Jenaz (Switzerland), 1997–2002, staircase to the 2nd floor (photo by H. Schiefer)

Il. 9. Peter Zumthor, Luzi House, Jenaz (Szwajcaria), 1997–2002, schody prowadzące na drugie piętro (fot. H. Schiefer)

begins in a windowless corner and ends directly next to one of the large panoramic windows, the difference in brightness is not only reflected in the materials, but also in the increase in perceptible daylight (Fig. 9).

Similar to the staircase, where the treads and risers are made of larch wood but are supported by spruce beams embedded in the walls below, the wooden floor on the first and first floors is also made up of both the solid spruce beams that form the structure and a larch wood floor covering that is visible on the surface. Due to the material of the floor surface, which differs from the other wooden elements, the ceiling and wall form a merging unit here, while the floor stands out slightly, which is further emphasised by the shadow gaps at the edge of the floor, without creating a particularly hard transition as with mouldings. Apart from the larch wood of the floor, the wooden surfaces do not function as panelling, but embody both the surface and the construction of the building fabric. The shape, proportions and arrangement of the individual building elements convey a clear, open structure. The box joints in particular fulfil a functional and decorative function.

At the same time, the wood used for the walls, ceilings and floors is omnipresent and conveys a warm atmosphere that could also be described with the adjective “cosy”. In this context, Zumthor himself speaks of a special quality

that one experiences atmospherically and physically when moving around in a house built of solid wooden beams (Durisch 2014a, 133). This seems to be a positive example for his thesis that every building has a certain “temperature” in two respects (Zumthor 2006a, 33). In addition to a psychologically perceptible, well-being-generating effect, the temperature of the wood would also prove to be physically beneficial, which could be perceived primarily through the sense of touch (Zumthor 2006a, 35). The rooms in the Luzi House are therefore pleasantly cool when it is hot, while they feel warm when it is cold (Durisch 2014a, 109). Even more than ten years after moving in, the building owners still describe the indoor climate as very pleasant, as there is a good moisture balance and the sensation of warmth is 2–3° higher in winter, so that they also have to heat less, among other things. If the house had not been built with solid beams, but with wood the thickness of planks, these climatic advantages would have been eliminated (Durisch 2014a, 133). Similar to the sound body, these special conditions of the material have also allowed the house to develop its own sound, which not only makes every step sound different, but can also be experienced in silence through characteristic noises. In addition to the sounds and noises inherent to the house, the architecture also offers ideal acoustic conditions, similar to Zumthor’s *Sogn Benedetg Chapel* (Fig. 10), as the house appears to be able to absorb the sound vibrations without swallowing them up and transmit them in a vibrating manner, so that a certain resonance is achieved without disturbing reverberation.

This is ensured by the use of wood throughout the entire space, which gives the impression that the rooms have been cut directly from the wood. As on the ground floor, the larger rooms on the first floor are also arranged between the corner towers around the bathroom area enclosed in their centre and equipped with panoramic windows, which provide them with great brightness due to their orientation in all four directions and offer four landscapes for four living situations with a view of the valley, village centre, pasture and street (Durisch 2014a, 134; Hönig 2004, 24). In addition to the windows, two of these four rooms each have a balcony accessible via a glass door integrated into the window area, which not only provides a visual opening to the outside, but also extends the living space out into the Prättigau. The walls of the corner towers protrude almost two metres from the house, protecting this outdoor area from wind and weather on the one hand and channelling the view into the landscape on the other.

As on the ground floor, the kitchen is located together with the dining room in the eastern of the large living rooms. The open room structure of the other three living spaces to the south, west and north also allows views into at least two neighbouring rooms, which emphasises their function as communal spaces. Only the interior bathroom with its small adjoining room is closed on all sides here, as on the ground floor, and is characterised by a low level of brightness. All four towers located in the corners house single-flight, straight staircases, of which, in addition to the staircase in the north-east described above, which leads down to the ground floor, one each in the north-west and south-east and two in the south-west tower lead to the next

upper floor. While the north-west and the north of the two staircases in the south-west tower have a landing at the entrance that encourages the user of the staircase to turn 90°, the other two staircases have the landing at the exit. As each staircase leads its user to a different room on the first floor, its use requires knowledge of which staircase leads to which room in order to reach one of the four bedrooms of the children and parents directly via one of the four staircases. According to the clients, Zumthor wanted to use this labyrinthine circuit and its individual entrances to mark the transition zone from communal to private spaces in a special way and to create a sense of intimacy despite the proximity of the bedrooms to the living rooms (Durisch 2014a, 134). He was inspired, according to Luzi, by the image of the intimate staircases in traditional Swiss houses, which lead from the parlour to the private rooms via two 90° bends. As all the staircases are lit by no more than one small window or band of windows and each ends next to a large panoramic window, the ascent is also accompanied by increasing brightness on these stairs. From the large rooms, which in contrast to the lower floors are now closed off and serve as bedrooms, doors lead either directly into the centrally located communal bathroom or to three short, angled corridors that merge into it and lead into small alcove rooms or a utility room within the knitted towers. While the utility room receives its light via a small strip of windows, the relatively large, rectangular windows in the upper part of the bathroom on the front sides, just below the roof ridge, not only allow daylight to enter, but also provide a view of the roof construction and the surrounding area.

Ultimately, both the design of the façades and the interior design combine traditional and modern elements by linking traditional materials and techniques with modern forms and spatial shapes resulting from new living requirements.

After the house was completed in 2002, Zumthor developed the idea of the modern timber house further in his Leiser wood houses, which he designed between 2006 and 2009. The newly acquired knowledge of the advantages of the Jenaz timber construction encouraged him to continue looking for new solutions for solid wood construction, so that in retrospect he described the Luzi House as the beginning of a small research project that continued with the Leiser houses (Durisch 2014a, 133). While the Luzi House still had five similar wooden towers with spaces of a similar format in between, which had determined the structure of the house, the room cells characteristic of this new type of log construction were now stacked on top of each other in different formats in a changing arrangement, so that individual room sections now protruded and formed large bays.

Conclusion

As early as 1988, Zumthor saw himself confronted with an uncontrollable dynamic that gave rise to contradictory facts, mixed everything with everything else and created an artificial world of signs and arbitrariness (Zumthor 1999c, 16). Today, this characterisation of postmodern life does not seem to have lost its validity. Above all, the constantly increasing ambivalence between the image and what it wants to be an image of and the resulting mass



Fig. 10. Peter Zumthor, Sogn Benedetg Chapel, Sumvitg (Switzerland), 1985–1988 (photo by H. Schiefer)

Il. 10. Peter Zumthor, kaplica św. Benedykta, Sumvitg (Szwajcaria), 1985–1988 (fot. H. Schiefer)

of false images have strengthened Zumthor's longing for strong bodies, realities and presences (Zumthor 2006b, 74). In order to counteract the adversities of contemporary life, Zumthor also argues in favour of an architecture that starts from what we all still know, understand and can feel, and attempts to incorporate what appears valuable to him in his buildings through a precise observation of the world, to correct what is disturbing and to create anew what we lack (Zumthor 1999c, 23, 24). Instead of creating superficial forms, he pursues the idea of being able to create and inhabit a home with his architecture through peace and quiet and background. His architecture should rest in itself, without imposing statements on people, simply be there and thus also allow human perception to become quiet, unbiased and not possessive, dull and empty in a special way (Zumthor 1999c, 16, 17).

With Luzi House, he has achieved this through the presence of wood as a material, the targeted direction of the light and the clear composition of the forms. Through the techniques used here, which are orientated towards local tradition, the application of local raw materials and the planning and construction process based on collaborative work, it embodies an architecture that satisfies the needs of both the environment and human beings. The design as a future multi-generational house also seems to do justice to an understanding of living that is not only interested in the preservation and regeneration of ecosystems, but also

in concepts that utilise the opportunities and potential of demographic change for society, such as the transfer of everyday and social skills between young and old. As the large glass surfaces and the open-plan room concept, combined with the choice of wood as the main building material, show, the passing on of the existing is often linked to a willingness to develop something innovative, which in this case meant that traditional timber construction techniques were adapted to contemporary living requirements. By combining tradition and innovation, Zumthor succeeded in creating a completely new interpretation of existing wooden houses in the Luzi House, in which the house does not appear alien in its surroundings, but rather blends in well with its environment thanks to the subtle references to traditional buildings. Finally, it can also be cited as an example of a trend that not only associates Swiss archi-

tecture with a rustic building culture, but also sees it characterised by innovative constructions and architectural ideas in rural regions. The architecture of the Luzi House demonstrates this in a special way, as the demands mediating between tradition and modernity could be united with social and ecological endeavours through common values corresponding to the ethos of craftsmanship, reflected and consciously pursued in both the conception and execution. Assuming the agentiality of people, things and entities, the building is representative of an architecture that holistically connects nature and culture in a system in which valid analogies between world and humans, past and present are brought to a reciprocal address.

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Streszczenie

Rezonans architektoniczny. Luzi House Petera Zumthora jako archetyp syntezy tradycji i innowacji na obszarach wiejskich

W związku z tym, że w kwestiach mieszkalnictwa większość naszej energii skupiamy na krajobrazach miejskich, konieczne wydaje się skierowanie dyskursu, który do tej pory koncentrował się na miastach, również na obszary wiejskie. Luzi House w Jenaz w Szwajcarii, zaprojektowany przez Petera Zumthora jako dom wielopokoleniowy w tradycyjnej konstrukcji z bali, może posłużyć jako przykład.

Dzieło Zumthora łączy potrzeby człowieka z troską o środowisko poprzez techniki oparte na lokalnej tradycji, wykorzystanie lokalnych surowców oraz proces planowania i budowy oparty na pracy zespołowej. Koncepcja domu wielopokoleniowego wydaje się również cenna dla mieszkalnictwa, które jest zainteresowane nie tylko zachowaniem i regeneracją ekosystemów, ale także koncepcjami wykorzystującymi możliwości i potencjał zmian demograficznych w społeczeństwie, takimi jak transfer codziennych praktyk i umiejętności społecznych między młodymi a osobami starszymi. Celem autorki artykułu jest omówienie, dlaczego Luzi House stanowi ucieleśnienie związku przeszłości z teraźniejszością, tradycji z innowacją poprzez zakorzenienie w historii wsi i integrację nowoczesnych zasad zrównoważonego rozwoju. Pokazuje ona również, w jaki sposób Zumthorowi udało się nie tylko uczynić go landmarkiem, ale także symbolem zrównoważonego rozwoju i spójności społeczności wiejskich.

Słowa kluczowe: innowacja, tradycja, Peter Zumthor, szwajcarska architektura, konstrukcja drewniana