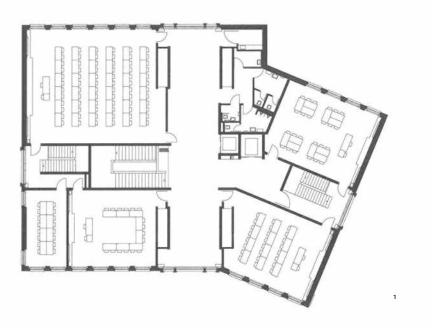
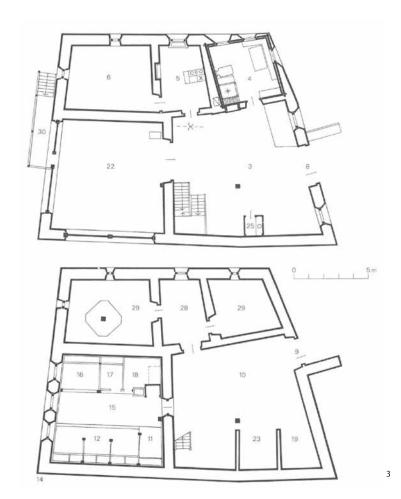
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doi:10.1017/S1359135522000045







- 1 Belvoirpark Hotel School in Zürich, 2014, P. Märkli. Plan of the second floor. © Studio Märkli.
- 2 Im Gut housing in Zürich, 2017, P. Märkli. Plan of fourth to seventh floor. © Studio Märkli.
- 3 Engadin house with lateral farm complex in Zuoz, Grisons. Plans of ground and upper level. Sulèr No. 3.



Surveying projects of Swiss architect Peter Märkli, examining relationships between new and old, heritage and contemporary design, architectural grammar and invention.

New architecture, inherited legacy: heritage, memory, grammar, and invention in the work of Peter Märkli

Silvia Alonso de los Ríos

Every architectural intervention joins a constellation of pre-existing conditions, which often constitute a fragile but valuable situation: the physical support of collective memory. The objective of this article is to explore contemporary ways of intervening in architectural heritage from the perspective of collective memory, through what is imagined to be a timeless grammar, towards design innovation. Works produced according to this strategy not only try to maintain the character of an architectural legacy but also to generate new models based on received precedents. The following article explores intervention projects from the last two decades of work by Swiss architect Peter Märkli, identifying key themes and strategies employed. The synthesis of these works allows us to identify a way of approaching heritage based on the continuity of architecture as a key to innovation.

The eighteenth- and nineteenth-century writer and scientist Johann Wolfgang von Goethe claimed that what you inherit from your fathers must first be earned before it is yours. This is an important reflection for architecture, because architects today are mostly required to intervene in existing contexts,² and contemporary urban development frequently works with fragmented pieces of the past. There is, therefore, regularly a need to design in relation to architectural precedents. This article examines the link between historicism and innovation in the idea of continuity, where the transmission of knowledge arguably remains at the core of culture. The idea of cultural continuity, understood following George Kubler's book *The Shape of Time*, ³ points to a whole that considers our anthropic environment as a dynamic combination of past layers that simultaneously persist in the physical fabric of objects.

I will explore the idea of continuity here by surveying Peter Märkli's recent works. I will illustrate the idea of continuity through three projects that deploy strategies of completion, building on disparate antecedents to create a satisfying ensemble. First, I will examine a housing project in Pontresina, in the Swiss canton of Graubünden, which healed a rift in the centre of an Engadin Village. Second, I explore a headquarters building for Synthes on the

periphery of the town of Solothurn, which structures a new public node around the historic Arsenal there, extending the urban core. Third, the extension of a 1970s-built school in Wörgl depicts a transition between cultural models, as a process of evolution through innovation. To conclude, I will frame the fundamental concepts of these projects, and others from Märkli's body of work, concerning heritage, memory, grammar, and invention.

Chantun Sur, Pontresina, 2011

Pontresina is an Engadin village, a distinctive community in the high eastern Swiss Alps, whose economy has relied on mountain tourism over the past two centuries. The village's eclectic urban landscape grew radially from a main plaza following the contours of the topography. At the base of the slope, a range of new hotels were built during the nineteenth century, facing southwest with the best views over the valley. While regionalist, bourgeois, and fashionable architectures like these characterise the dense heterogeneity of the place, the key traditional typology is the rural Engadin house. This consists of a massive main volume with clever little windows that open to public space beyond, as well as two large gates on opposing façades on the ground floor; a characteristic feature that allowed carts to pass through to lay down hay.

Similar schemes to that at Chantun Sur in Pontresina can be found in Märkli's work, such those of Belvoirpark [1] and the Im Gut housing in Zurich [2, 3], where the plan develops out of a hallway, which is called a *sulèr* in the Graubünden. The hallway extends across the whole plan of the building, allowing cross views from the public space. The plan is thus characterised as *enfilade*, without corridors, in the classical sense. As Florian Beigel put it: a depth plan, fluid and open, but with a sense of enclosure and presence.⁴

The site in Pontresina has a pronounced slope [4]. It contained a historic bourgeois house, which had a similar layout to the traditional Engadin house ground floor, and an independent shelter. The approved local urban plan required maintaining only these two structures, while others deemed less

meaningful could be removed. In 2008, the young architect Marchet Saratz - the son of Nouet Saratz, one of the four landowners - suggested hiring Märkli for developing this delicate ensemble. It was the beginning of a growing team. Märkli understood from first encounter that any attempt by a single architect to reproduce the natural growth of the village would fail, because it is the heterogeneity of the place that lends a picturesque identity to its public space. Being coherent with the existing structures meant letting things grow on their own. A group of architects was thus assembled to develop the site. Ingrid Burgdorf, Alex Herter, and Christof Ansorge received housing assignments, according to a raffle that was held between them, and, Märkli and Saratz became responsible for renovating the shelter, projecting the underground car park, and adjusting the urban design [5]. The aim was not to reproduce past processes but rather to respond to the particular programme in that place. The key decision, though, was to let different educated architects, as Märkli called them, to work independently.





Another important decision concerning the common space among the buildings was to divide the space into two clearly distinct areas. The lower part of the plot would be a shared platform, while the upper part of the slope was to be imagined as natural topography and vegetation, becoming a private garden. The common space - named Märkli's Plaza at Nouet Saratz's suggestion - constitutes the heart of the ensemble. The strategy was to think of figure and ground, designing a gestalt not only composing a form, while creating relations to make a whole - an idea also favoured by Florian Beigel. 5 The four resulting buildings have two opposite entrances, one close to the public space and the other opening to the plaza. Each of the entrances has a distinctive specificity.

The Ches' Immez house was designed by Burgdorf as a contemporary reinterpretation of the Engadin house, specifically in relation to its spatial structure, imagined as being as close to the shelter as possible, thinking of the layout of the original house on the site. The hallway joins, and arranges, different cells on each side, which are flooded with light. The project takes advantage of the traditional house type, mixing a past understanding of enclosure with the present need for expansion.

Chesa Melna was assigned to Herter for refurbishment and enlargement. The displacement of its main entrance to the connection between the original house and its new extension changed the pattern of movement inside the building. This 'acupuncture' intervention made by Herter was so subtle that, at first glance, it is not easy to distinguish from the previous state, particularly when it comes to the former rooms. The original chromatic range is kept for the new additions, but the impression of massiveness dissolves with the lightness of the red railing or, in the extension, with the loggia.

The outdoor lower level included Ches' Immez and Chesa Melna, as well as the shelter, called Talvo. At this level the buildings can be imagined to take root organically, reminiscent of Rudolf Olgiati's work.⁶ The upper level, meanwhile, houses the Chesa Sur, expressed as freestanding similarly to the adjacent hotels aligned with it. Chesa Sur was assigned to Ansorge with the aim of becoming a palazzo. The main façade becomes the background for the ensemble from the plaza. The regular rhythm of its concrete columns establishes a first order, while a second is established by means of slightly recessed horizontal timber bands. The exquisite shaping of these vertical elements relates both to classical and regionalist architectural language, bringing them together meaningfully in a new building element [6].

Finally, the shelter, called Talvo, constitutes a fundamental counterpoint, which mediates between

- 4 Chantun Sur before construction.
- 5 Pontresina Chantun Sur Urban Plan, 2011 (1 Chesa Sur. 2 Ches' Immez 3 Talvo, 4 Chesa Melna).



6 Pontresina Chantun Sur, 2011. Chesa Melna, Ches' Immez and Chesa Sur from left to right.

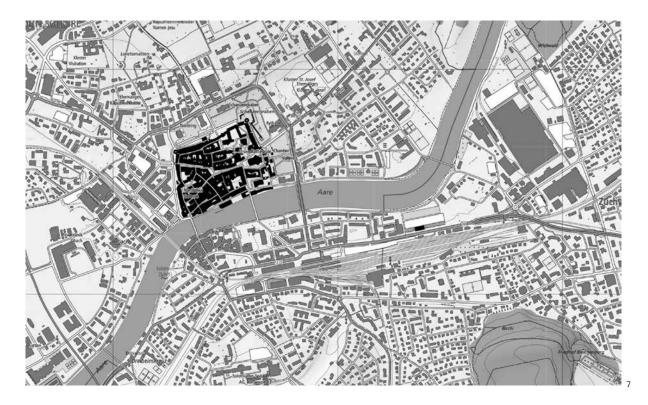
public and private space. Compressing the main access to the ensemble, and filtering gradually the vertical section across the urban fabric, it becomes a silent but insistent supporting actor. Märkli and Saratz proposed turning this little rustic building into a structure with a new indoor skin. Walls and roof were separated with a cavity adjacent to the new envelope, dressing the former undifferentiated space in warm and human-like clothes. Light is still admitted to this shelter as previously, with a central sculptural iron piece arranging the surrounding space and resolving the chimney. Every working piece was maintained in the renovation of the shelter in Pontresina, while some materials salvaged among the neighbouring structures, such as the former wood flooring from Chesa Melna, were recycled and transferred from one building to another. This renovation exudes the same respect for functional historic fabric, which Märkli previously expressed in his apartment renovation in Walenstadberg.

Headquarters for Synthes, Zuchwil, Solothurn, 2011

The town of Solothurn is characterised by a dense historic baroque centre, located close to the Aare river, which has subsequently been surrounded, incrementally, by disordered urban sprawl. The basic urban structure of Solothurn is characterised by the river, the Jura mountains, railway tracks, and a main road. Taken together, they comprise a broad axial layout, which unites nature and urban fabric [7]. A neoclassical church dominates the city centre, in conjunction with other prominent public buildings,

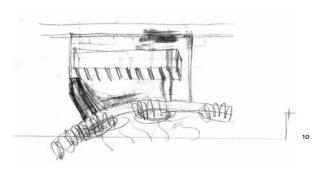
particularly when viewed from the opposite bank of the river. A protected eleventh-century Arsenal stands here, on a public plot, which the community agreed could be turned into a site for the private company Synthes who wanted to locate its headquarters there.

Synthes had more than seven hundred employees, many of whom would commute to the new building in Solothurn. Consequently, the company needed a big plot close to the rail station, and car parking also became critical. This became decisive in the appointment of an architect. Märkli firmly believed that the parking should be located on the ground level, contrary to other proposals, which all followed current urban planning guidance preferring to place parking underground. This decision offered the opportunity to create a plaza that could articulate old and new buildings around it [8]. Outside working hours, the car park becomes an open plaza for the city where concerts, festivals, or street markets can take place. It establishes a public node on the opposite bank from the town core, where there was previously no other such space generating social dynamics or structuring the urban sprawl. This plaza integrates the proposal into a network of public spaces around Solothurn, relating to the prominence of the key buildings in the old town such as the church or Landhaus.





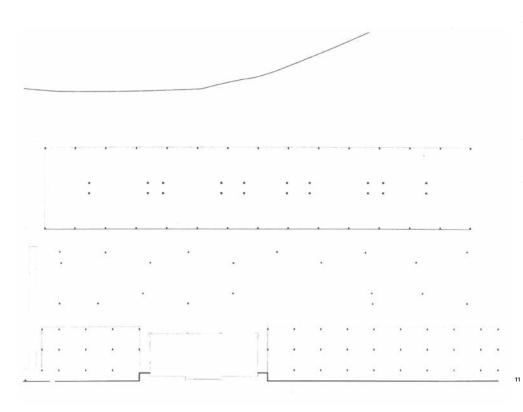




- Solothurn Urban Plan, Switzerland. Relation of the new building to the old town of Solothurn.
- 8 Synthes Headquarters in Solothurn, 2012. Parking-Plaza between the new and the old building.
- Synthes Headquarters in Solothurn, 2012, P. Märkli. View across the river Aare.
- 10 Synthes Headquarters in Solothurn, 2012, P. Märkli. Relation of the new building to the river. © Studio Märkli.

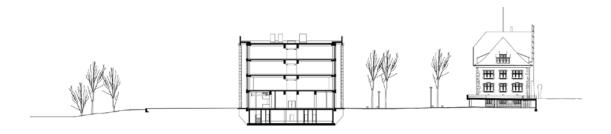
Both the plaza and the building were given a flattened spatial hierarchy intended to boost contact among people and encourage collective work. The key requests from the client were for flexibility, expressed in an open brief, and honest and industrial architectural expression, bringing various functions together under the same roof. The request for honest expression was achieved by means of horizontality and monumental scale, while that for industrial language was settled by structural components handled like ornaments. The new building thus emerges opposite the town core, seen from the centre as a structuring urban element, while the river strengthens urban integrity for both sides [9]. The intervention anticipates a larger adjacent urban ensemble still to be constructed, including a future park close to the river. The proposal follows the logic of the historic structure on the site, incorporating a set of elements arranged longitudinally along the river.

The new building was first imagined in the middle of the plot [10]. Little by little however, as the design progressed, it became displaced adjacent to the bank's pedestrian promenade. The plaza became organised between old and new buildings, becoming the project's leitmotiv, strengthening the bond between the buildings, as well as among their inhabitants. The landscape of the plaza was sensitively handled, for

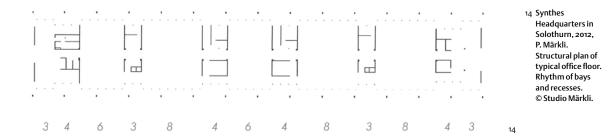


- 11 Synthes Headquarters in Solothurn, 2012, P. Märkli. Structural plan showing headquarters building, extensions to the arsenal and placing of the trees in the forecourt. © Studio Märkli.
- 12 Synthes Headquarters in Solothurn, 2012, P. Märkli.
- 13 Synthes Headquarters in Solothurn, 2012, P. Märkli. Cross section of the ensemble. © Studio Märkli.





13



15 Model School in Weiz, 1964, V. Hufnagl.

16 Model School in Wörgl, 2003, P. Märkli. Central hall from the ground floor.



example organising the trees according to the same structural order as the building [11]. The south front of the plot turns both sides of the Arsenal into a plinth, reaching the whole length of the site like the new building. This elevation sets the new building as a discreet secondary element, while from the other bank it appears light and elegant. The references chosen for the chromatic range of the building extend to the bank of vegetation and the pavement of the plaza, reaching even the Jura mountains. This results in a kind of visual dilution, which highlights the Arsenal [12]. Both buildings share a similar scale, mainly as seen from the plaza, where the two new wings enlarge the Arsenal visually, like a Palladian villa. Consequently, the plaza turns into an enclosed space for receiving everyday activities in urban scenery. The new building allows the eye to travel seamlessly from the public space of the plaza to the river Aare, bestowing a transversal yet omnipresent visibility. The main difference has to do with the decrease in mass, which gives the new building an earthiness.

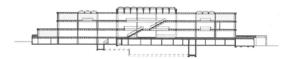


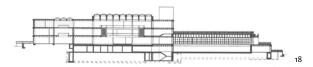


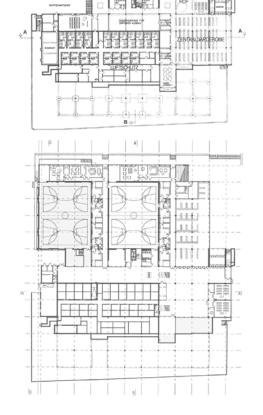
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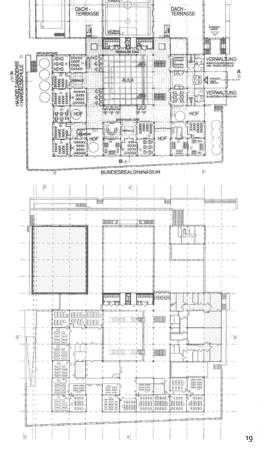
FAHRRAD-RAUM

- 17 Model School in Wörgl, 2003, P. Märkli. Central hall from a cluster of the second floor.
- 18 Model School in Wörgl, 2003, P. Märkli. Sections with volumetric additions marked in grey.
- 19 Model School in Wörgl, 2003, P. Märkli. V. Hufnagl project and renovation. Plans of basement and ground floor, original building above, revised plans below, with volumetric additions marked in grey.







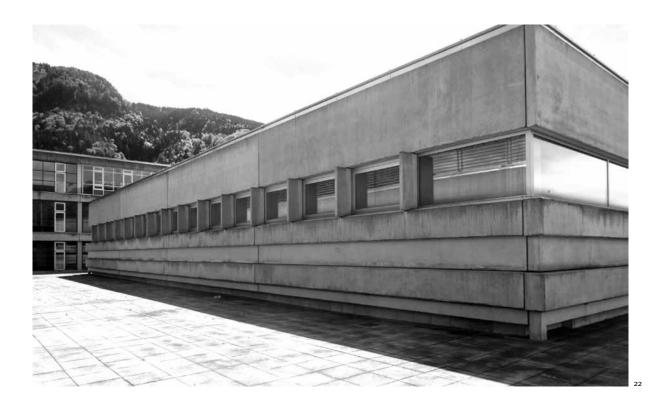


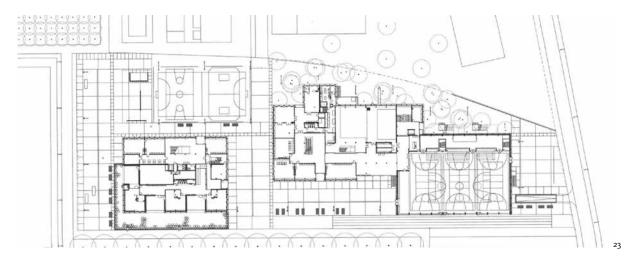




20 Model School in Wörgl, 2003, P. Märkli. V. Hufnagl project and renovation. Plans of first and second floor, original building above, revised plans below, with volumetric additions marked in grey.

21 Model School in Wörgl, 2003, P. Märkli.





The building has two principal façades ordered at two different scales. One is scaled to distant elements, including the city centre and the mountains, while the other is human-scaled in relation to the plaza and riverside promenade. Together, they give the impression of a threedimensional weave, acquiring spatial depth in relation to its monumental size (of 168 m in length, 22 m in height and 33 m in width) [13]. The rhythm for the large-scale façade is based on 12 m bays that alternate recess and projection, expressing both the service cores and the curtain wall system employed [14]. The structural grid articulates a free plan where ceiling heights between four and five metres offer good natural lighting and generous views from every workplace. Märkli proportioned the whole building using eights, derived from the depth of 32 m, imagined in relation to harmonious classical proportions.8 He divides the octave, like 11/16 for the whole height of 22 m, between 1/8, 3/8, 5/8, 7/8, and

22 Model School in Wöral, 2003, P. Märkli. New gymnasium.

23 New School in Zurich Oerlikon, 2004, P. Märkli. Plan of ground floor.

so on. Märkli thinks that complexity should derive from human perception.

Although various critics interpret the expression of this building in relation to classical precedents, I find it more interesting how the building differs from them. The colonnade appears in various historical types, such as the classical temple, the stoa or, as so-valued by Palladio, Sansovino's Library, which we could relate to Synthes main building.9 Even though the colonnade in Solothurn shares this timeless language, the synthesis that Märkli proposes, which adjusts the typology to the specific contemporary scenographic elements of the site, nevertheless allows the memory of the historical type to live on and underlines its continuing validity.



24 New School in Zurich Oerlikon, 2004, P. Märkli. View from east of the primary school, each part of

the school has its own outdoor space.

Extension and renovation of a school designed by Viktor Hufnagl, Wörgl, 2003

The third project I will examine concerns issues of change and continuity within a particular building type - the school - developing pedagogical ideas arising from educational reforms after the Second World War into what is now the contemporary cluster-based model of the school. An Austrian desire for postwar educational reform led to an increase in the scale and number of schools across that country. Prefabrication methods made the construction of schools economically viable again. A 1962 law increased the age for compulsory education to nine years and decreased the ratio of children per classroom, and then in 1964 every district in Austria was required to have a school.

A group of experts was assembled in 1968 to develop the public school typology in Austria, headed by architect Viktor Hufnagl, who had developed the so-called Hallenschule typology in the 1950s that replaced the previous mono-functional spatial model. The main trait of this incipient model focused on a central hall, whose function went beyond a mere linking role: the hall was to be the very school itself. The aim was to boost communication and enrich teamwork, creating a kind of social microcosm. Hufnagl defined the model in 1973, as a combination of public school and facilities, conceived together in a shared cultural and educational centre seeking to maximise the effectiveness of social contact between children and adults. This central space, Hufnagl suggested, should be a political, social, and educative core for the whole community.10 Rooted in a symbolic central hall, the school could be understood as the main public space for the locality.

The first school that clearly represents this typology was built by Hufnagl in Weiz in 1964, where corridors open to the central hall and a series of folding walls offered great flexibility for teachers [15]. The school in Weiz was articulated in three independent elements, modulated to enable prefabrication, but with each element also recognisable as independent. This model was developed through a series of projects concluding with the school in Wörgl, which was completed in 1973: the most complete building of its series, understood as a model for the Hallenschule typology [16].

The school at Wörgl stands at the periphery of this small Tyrolean village. Hufnagl, Fritz, and Mayr designed an approximately 100 x 100 m plan, developed as a pyramid with a cross-shaped base. A series of clusters were formed around semi-public spaces that agglomerated to form the whole school. A range of grades of conviviality were thus developed across the educational community, suggesting a kind of social organisation approaching that of the city. The architecture thus derived its integrity from the rigour of the plan where every element referred to the central hall. It had an openness expanding access to light on all sides, enabled by a glazed clerestory topping every interior wall. Consequently, the ceiling plane became important to the experience of the school's spaces, its extension visible between rooms as a continuous plane unifying every level [17].

A competition was held for renovating and extending the school in 1998. It was won by Peter Märkli, Roger Kästle, and Gody Kühnis. The proposal addressed its illustrious precedent in a constructive way but without historicising it. Theirs was the only proposal out of the range of submissions that enlarged the programme following the existing open system, imagined as the only way to maintain coherence. Other competition participants instead added new buildings. Märkli, Kästle, and Kühnis's winning proposal, in contrast, expanded the existing building only at strategic points to fulfil the competition requirements [18].

According to Martin Tschanz, the proposal made three main changes.11 The first displaced the entrance from the first to the ground floor. This gesture completely modified the way the hall appeared when ascending a short flight of former service stairs. This stair was reinvigorated to connect the main entrance hall, which opens laterally to a new patio, with the main school hall. The low height of the new entrance hall thus boosts the emotional impact of the triple-height main hall, whose light comes from above in what can be imagined as a kind of spiritual transition. The main hall thus becomes a central element even more, getting closer to the ideal proposed by Hufnagl - which was a non-hierarchical system for a new democratised form, recalling the intensity of the former central typology developed with the guidance of the Catholic Church [19].

The second significant change was to extend administrative accommodation by closing the former first floor access and displacing the symmetrical original volume to the entrance area.

Third, the semi-public spaces were increased by modulating the third floor where the pyramidal

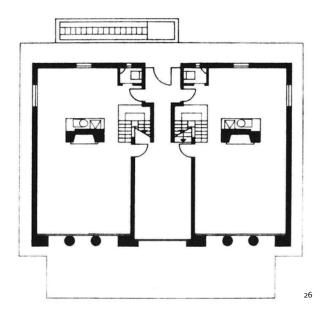
former volumes could be extended without any deviation from their internal coherence. This extension strengthens the horizontality of the architecture outside and balances its figure in relation to flat surroundings and the horizon of the mountains beyond [20, 21]. This volume creates a topography of terraces at different levels outside the building, which are then extended inside. A few steps along the whole width overcome the different levels between platforms. At the core of this topographical is the void of the main hall, which creates a kind of centripetal force, producing an invisible tension that radiates all around.

Although the extension followed the modulation and structural system of the existing building, there are also punctual accents that differ from it. New aluminium frames contrast with the red-and-white steel frames used in Hufnagl's building. This chromatic gesture keeps the former volume alive. New interior walls maintain the glazed clerestory but are finished with natural timber, which warms the atmosphere of the rooms. Both strategies for architectural expression serve to decrease the visual impact of the grid, achieving a more contemporary visual sensibility.

The former swimming pool was the only part of the building to be significantly changed, required by

> 25 Fin Bec Vinery Cave in Valais, 2012, P. Märkli. View from south. The topography is defined by horizontal lavering.





26 House in Mels, 1979, around floor. © Studio Märkli.

the brief to be adapted into a new gymnasium. Märkli expressed a massive, solemn new volume that made contemporary use of prefabrication, resulting in a sculptural and mostly-blind cube [22]. The technical requirements seem to have produced the new gymnasium's envelope, which creates a counterpoint for the materiality of the whole reworked ensemble. Since there are no significant public spaces in Wörgl, the school continues to host community events, such as concerts and lectures.

While work on the Wörgl school was continuing, Märkli won a competition for a new school in the Oerlikon district of Zurich. This project was intended to create a public core for a future residential neighbourhood. Märkli aimed to create a kind of urban intensity, which the surroundings lacked. The proposal articulated three volumes in order to create public space around them, through an interdependency of entrances, as well as the placement of regular pieces along a central axis [23], resulting in a building without a main façade creating instead a variety of bays, passages, and specific open public areas [24]. This building's arrangement, together with Josephson's sculptures and a landscape proposal, produced a lively public space, equivalent to the central hall in Wörgl. It drew from a structure of clusters and the use of prefabrication, sharing, and developing Hufnagl's ideas as further developed by Märkli.

Heritage

The three projects that I have presented here introduce a series of themes emerging from Märkli's work, which I will now address further, drawing in additional projects, understood in terms of inherited legacy. Inherited legacy is a wide concept, pertaining to every element existing in the humanmade second nature that we inhabit, whatever its

structure, from urban to natural, overlaid onto sometimes diffuse existing topographical features. As can be seen in the case of Märkli's extension to the Fin Bec Vinery Cave in Valais, 2012 [25], where the identity of the building mostly derives from discreet historical traces present in the landscape, inherited legacy is part of a common cultural heritage. This concept is closely allied with social concerns, since it is common heritage that supports and reinforces ideas of collective memory. It results in the construction of identity, through architecture, which strengthens the bones of a community by promoting the common recognition of shared values.

From the beginning, Märkli's work had a social goal, most likely influenced by his mentor Rudolf Olgiati. Märkli claims that everything he does is for the people, 12 and that anything which has to do with creating atmospheres, no matter the scale of the project, impacts a broader social picture through memory and identity. At a small scale, the garden hall in his early house in Mels [26], 1979, for example, constitutes a shared indoor space bringing together two owners, exemplifying the act of creating social bones through only modest intervention. At a bigger scale, Märkli believes that urban planning and architecture are inseparable and that façades are vital in defining urban space and its social potential. Furthermore, he claims that the task of architecture is to communicate between inside and outside, acting as a filter between two worlds. 13 I would also add that it should create urban landscapes that leave us with comforting memories.

It is not surprising, therefore, that Märkli's project to renovate façades in Zurich was resolved so exquisitely. The commercial building in question, at Bleicherweg 21, was built in 1967 at a historic location in Zurich, and Märkli won a competition for renovating its façade in 2013. The project reused creatively the granite slabs of the façade, which were cleaned, reshaped, and rearranged. Existing continuous horizontal windows were maintained, adding vertical pilasters in a regular rhythm, abstracting the idea of the classical pilaster [27]. The new pilasters are made of black matte artificial stone, while the parapets consist of polished granite slabs. The pilasters between the windows soften the horizontality of the building, while the concrete columns on the ground floor anchor the building down visually. Gestalt is not only the form, wrote Märkli, but the link between how horizontal and vertical elements are joined. The renovation project thus gave the building a renewed massiveness, updating but not overwriting its former appearance, contributing to urban space and the collective memory of the city.

As these projects show - like the houses in Pontresina, the headquarters building in Solothurn and school in Wörgl - architecture can be understood as a kind of substrate, which Gaston Bachelard related to the imagination of matter.14 It constitutes something underlying which, at its best, remains throughout time, accumulating the features of different epochs, always forming and

reforming a new holistic organism, as Kubler argued $in {\it \, The \, Shape \, of \, Time.} \, Architecture, practiced$ knowledgeably, should involve a deep understanding of our heritage through that careful study of antecedents, like that which Märkli consistently develops. Such study enables us to direct our inherited legacy, which becomes the key factor for actualising, retaining, and reintroducing architectural antecedents into contemporary everyday life, working beyond historicism, on one hand, and archaeology, on the other.

Memory

The concept of the historical architectural replica has widely been understood, since the advent of modernism, as obstructive to the evolution of architecture. Kubler offers a concept of replica that sees it instead, as in previous times, as a progressive step towards overcoming established precedents. The so-called new architecture is, in fact, a continuation

> 27 Façade Bleicherweg 21 in Zürich, 2013, P. Märkli.





28 Apartment Building in Walenstadtberg, 1992/1999, P. Märkli.

of ongoing processes of cultural and design evolution, including, for example, the works of Palladio or Le Corbusier.

Looking at the past from the perspective of our present sensibility, it seems appropriate to identify what essences yielded by such precedents remain valid today. Such activity requires time and maturity: two commodities arguably in opposition to the values of our contemporary society of consumption, although necessary for facing appropriately any current architectural issue. This constitutes a kind of resistance shared by few in our discipline whose first goal, I argue, should be to manage our collective memory for future generations. As we have received the legacies of the past, we should similarly grant the legacies of our present time to the next generation. As Märkli once said, he focuses mostly on the past to design for the future, not really knowing how much time he spends in the present.15

When we study the past, it appears to be full of similarities and divergences that suggest the progress of subtle change through continuous mutation, similar to humanity's own evolution. From this point of view, extension and renovation projects yield invaluable opportunities to strengthen the bones of both the past and future. Märkli's work differs from architectural styles of the 1980s in two main ways: he does not erase differences, as suggested by Miroslav Sik in Analog Architecture;16 and neither does he highlight differences between new and old elements. For example, his project for an apartment building in Walenstadtberg from 1999 illustrates an alternative conception of what a

renovation can be [28]. The project observes what works already and allows that to remain, while altering the remainder to improve the original integrity of the work that gives it its identity. According to Märkli, his relationship with memory is constituted in the grammar of architecture. 17 This view imagines the existence of a set of timeless rules, which enable communication and continuity throughout time.

Grammar

The grammar of architecture was crystallised systematically throughout the Ancient period of classicism and then significantly enriched throughout the renaissance. Indeed, it has become part of our current European cultural heritage too. At the École des Beaux-Arts in the nineteenth century, Julien Guadet established a conception that firstly departed from what he called the 'unvarying principles of the art', secondly asserting the primary grammar or 'elements of architecture', and finally identifying primary programme categories, or 'elements of composition', following Jacques Lucan's story regarding an analogy between language and architecture. What they called 'the whole of composition', or comparative architecture, could not be taught, only acquired through apprenticeship.18 Märkli's architecture is

rooted in deep knowledge, from the classical Pythagorean to the modern theory of perception established by Rudolf Arnheim. The study of this grammar gives him freedom, which means asserting designerly skill over elements, programme, and composition.

In his first works, such as the house in Mels, Märkli was only able to establish basic communication with limited knowledge of such grammar [29]. Geometry, proportion, and rhythm were the basics he was aware of handling. As time went by, he acquired enough skill to elevate the message towards what might be called poetry, using again the analogy of language. Ornament, for example, was introduced progressively in his works while he learned knowledge, as a kind of mastery of the use of language. 19 This is illustrated, for example, when comparing the project of La Congiunta of 1992 with the Novartis Campus Visitor Center of 2006, Belvoirpark Hotel School of 2014, or Synthes Headquarters of 2012; the progressive acquiring of abstraction and complexity is evident. One issue, for example, concerns the use of walls and installations as ornamental elements. Märkli refers to the artist Jackson Pollock's concept of All-Over Painting as an explanation for the way that the wall turns into ornament, changing its appearance by means of the depth of colour [30]. Such emotional intelligence is a gift for young architects, in Märkli's view. Poetry acts directly over this emotional intelligence, which does not need to be inculcated to establish a kind of empathy. Consequently, everyone has the possibility to be nourished with architectural education, even in an unconscious way, since it appears as the background for life. That is the transformative power of architecture.

Märkli elaborates three types of sketches: those about real projects; those which explore compositional entities, such as façades; and those with which he researches in an obsessive manner concerning architectural grammar, through the study of basic elements such as columns, knots, and walls. Those in the third category are the most abstract sketches that he produces. Such studies were referred to by Florian Beigel as 'language drawings' or, in a more elaborate definition, 'spatial gestalt thinking drawings'. The sense of depth arises from a few lines aside from any perspective aims, in order to test rhythm and space among fundamental tectonic elements.20

Images leaning against Märkli's studio wall in Zurich, such the Palazzo Thiene-Bonin in Vicenza (designed by Palladio/Scamozzi), the Palazzo Rucellai in Florence (Alberti) and Märkli's proposal for the 'Zurich Re Zurich' competition [31], easily prove that such drawings are not merely a kind of pictorial composition but research into the grammar of architecture. Accordingly, Alberti composes a gridlike façade, while Märkli develops a fusion between the base and capital that he calls the knot. By means of the existence of a grammar of architecture – as Märkli believes, like Goethe - it is possible to take possession of our inherited legacy.

Invention

Julien Guadet related invention to the overcoming of established models, saying that:

[...] if you have to do a sale de justice some day, compose it like Duc's [...] then design an even better version of it. I am telling you, it will be perfectly original!.21

A work that matches a programme with some statement of universal validity can be called a model. The act of invention then has to do with the improvement of this model to a level at which the work constitutes a new model. According to the idea that we do not choose the themes, which depend on current sensibilities, architects always address new questions, and that enables the overcoming of past models. An important example of this was Palladio who, in Märkli's view, had to tackle only the primary order while nowadays we must solve a secondary one, whose vastly different



29 House in Mels, 1979. P. Märkli.

29

scale turns it into one of the biggest problems in architecture today, comprising a wholly new topic of study. Märkli's Apartment Building in Trübbach of 1988 [32] exemplifies this conflict, where the secondary order is attributed a kind of lightness,



even an ephemeral condition. The two houses in Trübbach-Azmoos in 1982 [33] indicate another solution to this issue, giving the secondary order the condition of a corridor. A further example concerns what was called the plan without corridor by Robin Evans, 22 such as the Weissacher Atelierhouse of 2013 [34], a housing model overcome by an open spatial layout²³

If continuity in architecture can be understood as a broad strategy for composing an ensemble, then its completion is the concrete means by which we can identify Märkli's work. This process works similarly to our human imagination. It tends to complete or normalise what is not familiar from our contemporary viewpoint. When we confront discontinuity, as an open system, only a quiet conscious reading of the established phenomenon will enable the discovery of its underlying structure. Only then it is possible to compose a new ensemble that appropriately joins new and old.



- 30 Synthes Headquarters in Solothurn, 2012, P. Märkli. View from top of main staircase.
- 31 Peter Märkli's Studio in Zürich. Leaning against the wall, a relief by Hans Josephsohn; on the wall, from left to right, details of Palazzo Thiene-Bonin in Vicenza (Palladio/ Scamozzi), Palazzo Rucellai in Florence (Alberti), and Märkli's own competition entry for Zurich Re Zurich.

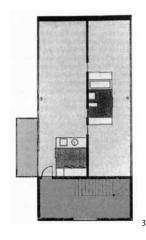
Conclusion

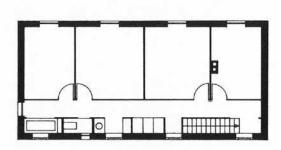
When we consider an architectural ensemble as a combination towards a whole, and we understand every place in today's world as an anthropic territory - constituting human existence - then we can claim that every architecture joins an existing constellation as a context for being read. What constitutes the fundamental weave of architecture is a figurative equilibrium among elements, composed of visual tensions without any dominating relationship. When it comes to working with chaotic arrangements, such an equilibrium commonly relates a dynamic structure to a more static one, like for example a historic centre. Whatever its particular physical nature, a heritage constitutes a fragile good, which can remain in force thanks to careful extension and refurbishment projects.

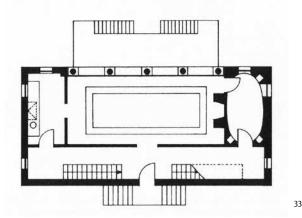
The last two decades in Märkli's architecture have provided a range of mature projects of varying scale in different environments, where the architect made didactic interventions in relation to particular kinds of inherited legacy. Knowledge of the generic grammar of architecture provides the basics to confront any project but, when it comes to heritage, this becomes a vital tool, which Märkli uses with great skill. It is his precise reading of the whole that allows him to enrich his architectural language over time, aiming to expand the antecedent in order to renew its validity in the present.

The soul of the model school designed by Hufnagl in Wörgl remains current because of the precise interventions made by Märkli. Today, it does not seem easy to find architects who are keen to go back, to let what can be imagined as the essence of a historical precedent to stand out while not seeking prominence for themselves. When it comes to renovation and extension projects, this attitude is vital in order to reach continuity.

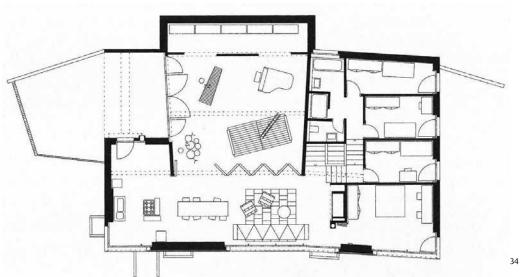
All in all, the work carried out in Wörgl gave room to the school Im Birch, which constituted a new model school for many assignments in Switzerland, boosting continuity and a sense of freedom, happiness, serenity, and security every schoolchild should enjoy. This accords with Märkli's words: 'architecture should translate an idea into a mood, in order to enrich human beings' souls.'







- 32 Apartment Building in Trübbach, 1988, P. Märkli. Typical floor plan.
- 33 House at Trübbach-Azmoos, 1982, P. Märkli, Plans of main and upper level.
- 34 Weissacher Atelierhouse in Rumisberg, 2013, P. Märkli, Plan of around floor.



- 1. Johann Wolfgang von Goethe, Faust I (New York, NY: New Direction Publishing, 1957), p. 18. Peter Märkli refers to this passage in conversation with Laurent Stalder.
- 2. Laurent Stalder, 'Conversation between Laurent Stalder and Peter Märkli', in Peter Märkli, Chair of Architecture at the ETH Zurich, 2002-2015, ed. by Chantal Imoberdorf (Zürich: gta Verlag, 2016), n.p.
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- 4. Florian Beigel and Philip Christou, 'Peter Märkli's Spatial Gestalt', in Peter Märkli, Everything One Invents is True, ed. by Pamela Johnston (Lucerne, Switzerland: Quart, 2017), pp. 228-33 (p. 231).
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- 12. Peter Märkli, personal communication with the author, 22 April 2019.
- 13. Stalder, 'Conversation'.
- 14. Gaston Bachelard, La tierra y los ensueños de la voluntad [Earth and Reveries of Will] (Méjico: Fondo de Cultura Económica, 1991).
- 16. Stalder, 'Conversation'.
- 17. Analogue Old New Architecture, ed. by Miroslav Sik and Eva Willenegger (Lucerne, Switzerland: Quart, 2019).
- 18. Stalder, 'Conversation', 2016.
- 19. Jacques Lucan, Composition Non-Composition: Architecture and Theory in the Nineteenth and Twentieth Centuries (London: Routledge/EPFL Press, 2012), p. 156.
- 20. Peter Märkli, personal communication with the author, 22 April 2019.
- 21. Florian Beigel and Philip Christou, 'Room Non-Room: Peter Märkli Atelierhaus Weissacher', Quaderns, 265 (2014), 36-41.
- 21. Lucan, Composition Non-Composition, p. 161.
- 22. Robin Evans, 'Figuras, puertas y pasillos [Figures, Doors and Passages]', in Robin Evans: Traducciones [Robin Evans: Translations] (Valencia, Spain: Pre-Textos, 2005), pp. 71-108.
- 23. Beigel and Christou, 'Peter Märkli's Spatial Gestalt', p. 231.

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arq gratefully acknowledges: Michel Bovin, 25 Kuster Frey, 27 Josef Konrad, 15 Peter Märkli, © Studio Märkli, 1, 2, $10,\, 11,\, 13,\, 14,\, 18\text{--}20,\, 23,\, 26,\, 28,\, 29,\,$ 32-34

Rasmus Norlander, 6 Steve Roth, 30 Marchet Saratz, 4 Franz Wanner, 31

Acknowledgements

This article is based on a lecture given by Silvia Alonso on 13 May 2019 as part of the Docomomo Switzerland-TSAM cycle at the EPFL University, Lausanne, organised by the Laboratoire des techniques et de la sauvegarde de l'architecture moderne - ENAC-TSAM. The author acknowledges Professor Franz Graf for inviting her to lecture. The author also acknowledges Peter Märkli, Marchet and Nouet Saratz, and Alex Herter for their help during her research.

Competing interests

The author declares none.

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