



The disenchanting mountain's Heritage. Protection and reuse of sanatoriums in the Alps

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Sanatorium architecture is a *glocal* issue just like the disease which created it, *modern* because of the role it played in the transition from historicism to functionalism¹, *environmental* because of the therapies which were carried out there, based on the trust in “healthy places” and *social* because the pursuit of those places, often idealised, rested on criticism towards the industrial and alienating development model.

This text proposes a survey on the current condition and use of the former sanatoriums in the Alps, now on the edge between their heritage status and abandonment. I will compare some recent international reuse and protection experiences, focusing on the elements useful to enhance this legacy that the twentieth century has left in the Alps and assessing the chances it may contribute to local development.

Climate and sanatoriums: from the myth of the cave to the magic mountain

In 1839, Dr John Croghan from Louisville bought the Mammoth Cave in the heart of the U.S.A. The Cave is the largest natural cavity of the Planet, still largely unexplored. Croghan set up a primitive sanatorium to cure *consumptives* thanks to the cave's pure and stable air. He tested the treatment

1 M. CAMPBELL, *Strange bedfellows: modernism and tuberculosis*, in G. BORASI, M. ZARDINI (eds.) *Imperfect health. The medicalization of architecture*, Canadian Centre for Architecture, Lars Muller Publishers, 2012, pp. 133-151.

on several patients until 1845, but, despite his best efforts, they all died².

The idea of exposing the consumptives to a climate which encouraged healing was already widespread in the mid-eighteen century, although which climate was best remained uncertain for a long time, as is shown by the ambiguous American prologue. The cool and stable climate of underground locations had always been used to slow down the decay of food and organic items³. During the Second World War, it also proved to be an excellent choice for works of art, which when hidden in air-raid shelters for a long time were preserved better than in museums, so much so that the climate conservation standards still in use today were established in the aftermath of that experience⁴. During the mid-eighteen century, the focus was extended from hygroscopic materials to bodies, from underground to high altitude, where dry, stable air could be found, with that purity we now define as with a low concentration of contaminants and that since then, we have associated with a primitive environment far away from modern fumes.

Colonising the mountain in order to exploit these air properties for therapeutic purposes is known to the history of medicine as well as to the history of architecture, which has finally identified sanatoriums as a laboratory for design experimentation, in the transition between historicism and modernity. In 1992, the exhibition “Le sanatorium: architecture d’un isolement sublime. Exemples des Grisons”⁵ began the discovery of sanatorium architecture, both from a historical point of view and from the point of view of conservation. This was followed by monographs devoted to European countries⁶ and synthesis attempts to outline an international network⁷ or

- 2 P. WEST, *Trying the Dark: Mammoth Cave and the Racial Imagination, 1839-1869*, in «Southern Spaces», February 9th, 2010.
- 3 G. C. LEUCH, *Del modo di conservare le sostanze ossia regole e processi basati sull’esperienza e sui principii più incontrastabili onde prevenire la corruzione e ritardare la distruzione di qualunque sostanza animale e vegetabile ecc.*, Italian version with additions and footnote by Dr. Ercole Terzaghi, and an *appendice sui mezzi di conservare la salute e prolungare la vita*, Placido Maria Visaj, Milano, 1835, in particular book III – *Luoghi di deposito atti alla conservazione delle sostanze*, pp. 313-329.
- 4 A. LUCIANI, *Towards a history of conservation environments. Historical perspectives on climate control strategies within museums and heritage buildings*, PoliMI Springer Briefs, Milano 2016 (in print).
- 5 Q. MILLER, *Le sanatorium: architecture d’un isolement sublime*, EPFL - Département d’Architecture, 1992.
- 6 A. TAVARES, *Arquitetura Antituberculose. Trocas e tráficos na construção terapêutica entre Portugal e Suíça*, Faup-publicações, Porto, 2005; J.-B. CREMNITZER, *Architecture et santé. Le temps du sanatorium en France et en Europe*, Ed. Picard, Paris, 2005, D. DEL CURTO, *Il sanatorio alpino. Architetture per la cura della tubercolosi dall’Europa alla Valtellina*, Aracne, Roma, 2010; P. GRANDVOINNET, *Architecture thérapeutique, histoire des sanatoriums en France (1900-1945)*, Metispresse, Genève 2014.
- 7 *Les «Quinze glorieuses de l’architecture sanatoriale»*. Programme phare du mouvement moderne, acts du Rencontres d’Assy du 15.6 au 30.9 2006, édition dirigée par le

focusing on buildings which were icons within the history of architecture and on their restoration issues⁸. Sanatoriums had already been involved in international research projects concerning alpine sceneries or medicine⁹. There is though a void from an architectural point of view, which pieces together the experiences already carried out in Europe and which is capable of joining the creation of an inventory with the monitoring of the already restored and transformed sanatoriums, focusing on the issues posed to designers when treating this difficult legacy.

The buildings created in that short period are mostly still misunderstood, neglected or abandoned and the time is ripe to assess their condition. From the cult of the sanatorium memory¹⁰, to the disheartening demolition of the Sanatorium Argentina at Arco in Trento, from the operational difficulties of the Pra Catinat cooperative, to the controversial transformation into an “anti-ageing resort” of the sanatorium of Agra¹¹, up to the experiments of valorisation currently underway in Valtellina, it is hard to promote former sanatoriums to the rank of Alpine heritage, i.e. to that part of the XXth century heritage which deserves being protected and is susceptible to enhancement. However, in recent years, a certain number of recoveries/restorations/regenerations, although performed with heterogeneous ways and purposes, has had the merit of breaking this impasse. Before analysing some examples in the Alps, summarising the situation of this heritage is advisable. Scholars have already put forward proposals to classify the buildings built to treat tuberculosis, of which sanatoriums are only a part. Most of these, either undergoing restoration or waiting for protection, urban or alpine, can be classified within three types: sanatoriums as icons of modern architecture, standard sanatoriums¹² and sanatorium cities¹³.

Centre de Recherche et d'Etude sur l'Historire d'Assy (C.R.E.H.A), Passy 2006.

- 8 J.-B. CREMNITZER, B. TOULIER (eds), *Histoire et Réhabilitation des Sanatoriums en Europe*, Docomomo Handbooks 2008; P. MEURS, M.-T. VAN THOOR (eds), *Sanatorium Zonnestraal. History and restoration of a modern monument*, NAI Publishers, Rotterdam 2010.
- 9 *Le bon air des Alpes*, themed issue of the «Revue de géographie alpine», t. 93, n. 1, 2005, in particular D. LUTHI, *L'influence du bon air sur l'architecture. Une 'guérison formelle'? Apparition du sanatorium alpin en Suisse 1880-1914*, pp. 43-52.
- 10 B. CARMELLINI (with the collaboration of S. MAINO), *Il tempo dei sanatori ad Arco (1945-1975)*, Museo storico in Trento, Trento 2005.
- 11 E. FUSELLI, L. BUCHER, P. COSTANTINI, *Agra 1914-1918. Il respiro del sanatorio*, «I Quaderni della Collina d'Oro», n. 1, Edizioni Fondazione culturale Collina d'Oro, in collaboration with Giampiero Casagrande editore, Collina d'Oro, 2009.
- 12 F. COGLIATI, *Architetture per la cura della tubercolosi in Italia (1900-1940). Censimento, catalogazione, tutela*, Politecnico di Milano, degree thesis in architecture discussed on 2nd October 2013, supervisor D. Del Curto.
- 13 D. VAJ, *Respirare l'aria pura delle Alpi. Dalla Svizzera all'Italia: lo sviluppo delle stazioni di cura montane*, in L. BONESIO, D. DEL CURTO (edited by), *Il Villaggio Morelli*.

Icons of modern architecture

Paimio and Zonnestraal are among the few carefully preserved and restored former sanatoriums, destined to a form of adaptive reuse. The process that led to the valorisation of these buildings was based on their architectural quality and on an early recognition among the icons of modern architecture, together with their ability to bear witness to a key period of recent European history, when the cure of tuberculosis in sanatoriums supported the creation of the welfare state.

Much has already been written concerning Zonnestraal's restoration-manifesto, while it is worth mentioning a few aspects concerning Paimio's conservation, carried out with technological and architectural cutting-edge improvements initially designed by Aalto, such as the glazing of the wing once used as a solarium. The chronology of these changes is philologically documented in the UNESCO¹⁴ application file, where it is suggested that the organic architecture at base of the original design, has shaped also subsequent transformations of this famous building. Paimio's sanatorium enjoyed an extraordinary critical fortune from the moment of its construction and this is why, when it no longer had the function of a sanatorium, its conservation was already sitting on the table where the change was being planned. A sanatorium room with its famous furniture has been preserved as a museum, while the spatial and sensory qualities of Aalto's design have been enhanced in the new hospital layout, with architectural quality "philological" solutions¹⁵. The success of this building, moreover, is not only given by the modernist composition and attention to detail, but also by its design skilfully inserting it in the heart of the pine forest which interprets the Scandinavian desire for contact with the magic of the forest and with the great spaces of northern landscapes. The fact that this construction is considered a national monument and has been preserved and used, is due to its ability to transfer this collective feeling into the healthcare building.

Identità Paesaggistica e patrimonio monumentale, Diabasis, Reggio Emilia 2011, pp. 149-170.

- 14 M. EHRSTRÖM, S. JETSONEN, T. LINDH, M. SCHALIN, M. SCHALIN, *Nomination of Paimio Hospital for inclusion in the World Heritage List*, National Board of Antiquities, Helsinki 2005, pp. 28, 44.
- 15 J. MALMBERG, *Obsolescence and Future of Paimio Sanatorium (1929-1933) by Alvar Aalto*, A. TOSTÕES, Z. FERREIRA (eds.), *Adaptive Reuse. The Modern Movement Towards the Future*, Proceedings of the 14th International docomomo conference 6-9 September 2016 - Lisbon, docomomo International - Casa da Arquitectura, Lisboa 2016, pp. 509-515.

The twentieth century standard heritage

Next to famous historical architecture textbook buildings restored with the support of specific research and funding, there is a vast wealth of common sanatoriums, built at the same time as their most famous counterparts, often with a high level of design and construction quality. In Italy, they were mainly built by the Italian Agency for National Insurance (I.N.P.S.) in each regional capital, beginning in 1928 and thanks to the compulsory insurance revenue. Where not abandoned or underutilised, these buildings offer an initial catalogue of transformations and reuses, from healthcare improvements to assisted or tourist accommodation, from education to other administrative functions:

- renovated healthcare use towards leading specialisations, such as the former sanatorium of Montecatone d'Imola in Italy which has been transformed into a rehabilitation centre for seriously traumatised patients or, the Barner sanatorium in Hartz which has been converted to a clinic for treating *burn out* syndromes;
- long-term nursing homes (L.N.H.) in the sanatoriums "Abetina" in Sondalo or "P. Grocco" in Perugia;
- houses, as in the former sanatorium "A. Sclavo" in Siena;
- accommodation facilities, as in the sanatorium "Guebriant" at Plateau d'Assy in France or hotels, as in Venice, where the sanatorium on the Sacca Sessola island houses a five-stars hotel;
- accommodation facilities integrated by a training proposal such as the sanatorium Agnelli at Prà Catinat;
- training, as the venue for colleges such as the one in Clermont-Ferrand, where the Sabourin hospital-sanatorium hosts l'École Nationale Supérieure, the "Mesiano" sanatorium in Trento, home to the Faculty of Engineering or in Trieste, where the former "Santorio" sanatorium has housed the International School for Advanced Studies since 2010;
- tertiary functions in the public sector such as the law court in Arezzo or the administrative wing of a medical centre such as in Sondrio and Taranto.

This short itinerary shows that sanatoriums have stood up well to the demand for change, both from an architectural and a construction point of view, when this was undertaken. Their non-restoration does not appear to be caused so much by the buildings' inherent difficulties in supporting renovations, but to political-administrative reasons connected, for example, to the way of leaving from the restrictions of the former healthcare use.

It should also be remembered that the gardens which once served to isolate contagious patients, today represent a specific item of value for these buildings. In fact, they still contain a great variety of trees which were

originally chosen to support the therapy¹⁶. Moreover, these gardens have preserved both the value of the architectural heritage both the public green area from the grip of speculation over the years, particularly in denser urban environments such as in Lecce, Ragusa, Verona. Another major issue is that of sanatorium cities, i.e. those large complexes of more than half a million cubic metres each, where the typical pavilion with treatment rooms and verandas is repeated in different architectural compositions: in order to isolate contagious patients near big cities like Rome's Centro Forlani and Milan's Vittorio Emanuele III sanatorium in Garbagnate Milanese¹⁷ or for high-altitude long-term care such as the Sanatorium Village of Sondalo.

Sanatorium cities in the Alps: the dis-enchanted mountain

On the plain, sanatoriums were built close to major population centres, on the basis of a public health logic and of territorial defence against infection. In the mountains instead, they were built as therapeutic resorts where to offer climate benefits to sick people who lived in cities and on the plains. The choice of the location was preceded by lengthy observations to identify those slopes with the best weather conditions for the therapy¹⁸ and the local communities most prone to welcome the sick. Thus, valleys with a dry, sunny and moderately ventilated climate were chosen, where the population was quickly persuaded to overcome its instinctive fear of contagion, sensing that the tuberculosis industry would represent a development opportunity¹⁹ for remote or inland areas, which in Italy still receive specific support from the State.

Thus, "sanatorium cities" in the Alps were born as concentrations of buildings for healthcare. They produced a sudden and irreversible transformation of the contexts and of the communities where they were created, anticipating what happened to the alpine recreational and ski towns²⁰ by half a century. This process occurred by integrating the new

16 *Du jardin au paysage, le végétal dans l'architecture du XX^e siècle*, exposition à la Cité de l'Architecture et du Patrimoine, Palais de Chaillot, Paris 23.3.-24.6.2011.

17 S. MAZZA, S. RESTELLI, *RI-GENERARE. Grandi complessi sanatoriali a Milano e Roma*, Politecnico di Milano, degree thesis in architecture discussed on 26th April 2016, supervisor D. Del Curto.

18 F. EREDIA, *Le condizioni meteorologiche di alcune località montuose della penisola e delle regioni prealpine a fini sanatoriali (Villaggio sanitoriale di Sondalo dell'I.N.F.P.S. Osservatorio meteorologico)*, Tipografia Panetto & Petrelli, Spoleto 1942.

19 *L'air et l'argent: une combinaison fructueuse a l'origine de la station medicale d'Arcacon*, in «Bulletin de la Société Historique et Archéologique d'Arcachon et du Pays de Buch», n. 91, 1er trimestre 1997, pp. 5-7.

20 See the contribution of Y. DELEMONTHY and C. FRANCO in this volume.

tuberculosis industry with the existing tissue, as in Davos, or by placing a new settlement for the treatment and isolation of consumptives which integrated with the existing built-up area only after a long time or which never integrated at all, as in Sondalo. Other locations, such as St. Moritz, began a development as care resorts, but quickly strove to erase the image of that early period in order not to harm the new-born perspective of elite mountain tourism²¹.

The long sanatorium timespan in Davos was not removed to make way for its new tourist identity. It has already been remarked upon how this bonding contributed to intersecting modernity and tradition in construction, where the architectural sanatorium elements contaminated the mountain buildings, producing interesting episodes of proto-modernisation of the *Alpen stijl*, as in the *chalets* rented to chronic patients who left the sanatorium, whilst continuing to stay at high altitude. Iron and cast iron verandas, large windows with shutters, deck chairs and furniture were added to traditional buildings, following the eighteenth century fashion for the industrial *chalet*²², with specifically designed versions for consumptives such as the *Maison-type* designed around 1900 by architect Marcel Ormières in Arcachon²³.

In Davos, the memory of tuberculosis and its care is entrusted to the medical-historical museum, and moreover to the presence of former sanatoriums transformed into hotels, where the alpine culture of hospitality and the daily administration of sun and fresh air is once again renewed. An overview of the former sanatoriums in Davos may be found in the INSA²⁴ inventory and on this basis, the Medizinmuseum has compiled an interesting synopsis which compares the condition of sanatoriums in 1946-1960-1975-2000-2005²⁵. The famous Schatzalp reopened as a hotel in 1954, just one year after the sanatorium closed, presenting itself as renewed whilst ensuring continuity. The Waldhotel was also transformed into a comfortable hotel and connected to the Schatzalp by a trail named to Thomas Mann. The memory of these treatments has not been removed from these

21 D. LUTHI, *Le Bon Air des Alpes. Des stations climatiques au tourisme de bien-être*, actes du colloque de Sierre, 7-8.10.2004, Sierre, Valais 2007.

22 M. CAMPBELL, *What tuberculosis did for modernism. The influence of a curative environment on modernist design and architecture*, in «Medical History» 49, 2005, pp. 463-488.

23 J.-B. CREMNITZER, *Le «home-sanatorium», esquisse ou modele du confort moderne*, in *Les «Quinze glorieuses de l'architecture sanatoriale»*, op. cit., pp. 12-15.

24 G. GERMANN, H. REBSAMEN, J. GUBLER, W. STUTZ, *Inventar der neueren Schweizer Architektur 1850 – 1920, INSA 3: Biel, La Chaux-de-Fonds, Chur, Davos*, Gesellschaft für Schweizerische Kunstgeschichte, Bern 1982.

25 *hicksal der sanatorien*, in P. FLURY, *Tuberkulose. Verlauf, Diagnostik und Therapie*, p. 17, see www.medizinmuseum-davos.ch.

facilities, but is exhibited in the name of the refined atmospheres and cosmopolitan society of the early twentieth century. Such an environment has recently been appreciated by the film industry also, so much so that director Paolo Sorrentino used Schatzalp as the set for the movie *Youth – La Giovinezza*. The movie was presented at the Cannes Film Festival in 2015, thus contributing, via the evocative power of images, to promote the image of the sanatorium, not only to the field of cultural heritage, but also to the category of seductive places. Where this memory is a new small piece for the Swiss *Heimatschutz*, it testifies how that experience led to the development and early internationalisation of those valleys. Similarly, the encounter between the polytechnic education of the designers and the Alpine landscape has given a crucial contribution to Swiss architectural history, between nationalism and internationalism²⁶.

The preservation and transformation of the buildings is only one aspect of Davos' regeneration as a sports and mountain tourism location, where the experience gained in therapy and assistance was treasured. The Zürcher Rehasentrum Wald results of enlarging the Clavadel sanatorium designed by Rudolf Gaberel in 1932 and the Hochgebirgsklinik derives from the former German sanatorium in Davos Wolfgang. They both have been turned into clinics specialising in the treatment of respiratory diseases and allergies. This way, Davos has opened up to mountain tourism and has retained its climatic identity, which is offered in the former sanatoriums converted into hotels or in appropriately specialised clinics, thanks to the renewed reception capacity by the community which has worked there for three generations²⁷.

During the 1930s, two alpine resorts grew to the size of a sanatorium city: on the Monte di Sortenna of Sondalo in Valtellina, and on the Plateau d'Assy in Haute-Savoie. We are talking of prematurely dis-enchanted²⁸ mountains here, because they were conceived with the purpose of extending the benefits of high-altitude care to National Insurance patients and not just to the wealthy of the *belle époque*. The events concerning the buildings which were constructed here are examples of the on-going regeneration processes of the former sanatoriums positioned in the Alps.

- 26 J. GUBLER, *Nazionalismo e internazionalismo nell'architettura moderna in Svizzera*, Italian transl. by F. DE PIERI, Mendrisio Academy Press/Silvana Editoriale, Milano 2012.
- 27 P. OLTERMANN, *Davos clinic may take its last breath as haven for allergy sufferers*, «The Guardian», 25 December 2013.
- 28 W. SCHIVELBUSCH, *Disenchanted Night. The Industrialization of Light in the 19th Century*, English version by A. DAVIES, University of California Press, Berkeley and Los Angeles 1995. First published as *Lichtblicke: Zur Geschichte der künstlichen Helligkeit im 19. Jahrhundert*, Carl Hanser Verlag, München-Wien 1983.

They are proving adaptable to this new function no less than the other types, although designed with a specific therapeutic purpose. A culture of historical and architectural value has been created around some of these and this recognition has been crucial in order to support their preservation and regeneration.

Martel de Janville: heritage for the development of the Alps

The former Martel de Janville sanatorium is a masterpiece of modern architecture which enjoys a magnificent location between the coniferous forest and the high rock wall of the Plateau d'Assy, offering superb views of the Mont Blanc massif. It is well worth summarising this building's long journey from a manifesto of therapeutic modernism to a recently transformed residential complex.

The sanatorium was built between 1932 and 1937 by the Association des Villages Sanatoriums de Haute Altitude (AVSHA), on the initiative of the French Ministry of War and thanks to a donation by Sybille Righetti, Countess Martel de Janville. Pol Abraham and Henry Jacques Le Môme's project presented innovative compositional and constructive choices, the result of the experience gained during previous assignments for the neighbouring sanatoriums of Plaine-Joux (1928, unimplemented), Roc des Fiz (1929) and Guébriant (1931) and it enjoyed a widespread critical success in France and abroad since it was under construction²⁹. It was a military sanatorium, where the usual separation of patients by gender was replaced by that of rank, with petty officers and officers housed in two wings of the building and the latter given a slightly larger room. A pair of single rooms formed the typical unit which, in turn, determined the layout of the standard floor. The two rooms shared the veranda for air therapy and the sequence of large windows and metal railings determined the modern texture of its façade which stands out against the dark backdrop of the fir trees in the black and white vintage photographs.

In the seventies, the sanatorium was transformed into the "Centre médical Martel de Janville" for elderly and long-term care which operated until 2006. Since 2008 it has been registered in the inventory of the French *Monuments historiques*.

The restoration of the building was completed in 2015, and it was transformed into a residence of 98 flats. The rooms have been united to obtain two, three and four-rooms flats lined up along the façade towards the valley. The economic sustainability of this 10,000 square metre and 14 million

29 available on www.archi.fr/DOCOMOMO-FR/fiche-sanatorium-martel.htm.

euro³⁰ intervention rests on the tax advantage enjoyed by the operator - and consequently by those who buy the flats - as the building is a *Monument historique* and the expenses for its preservation and restoration are subject to substantial tax benefits. This is why the Residence Martel de Janville is offered as a form of privileged estate investment, like historic buildings, castles and former monasteries, all recovered by benefiting from the tax exemption.

From an architectural point of view, Marc Rolinet's project leans more towards renewal rather than conservation: internal layout, materials, finishes and fixtures are newly designed, also because Abraham and Le Môme's building was compromised after seventy years of healthcare use. Some of the original elements, such as the panoramic garden in front of the building, the entrance hallways and the staircases together with the doors and windows, floors and walls have been preserved and integrated into the new functional layout. This is clearly a choice agreed with the Office of Protection which not only sees a historical and cultural value in the design and finishes of the 1930s, but also a valuable element, rather than an obstacle, useful to promote the commercial *appeal* of the new residential building. In fact, the watercolour perspectives of these interiors are prominently displayed in the real estate agents' advertisements, right next to the plans of the flats for sale. The chapel decorated by Angel Zarraga has also been restored and proposed as a monumental facility for the new residence, while the beautiful space of the dining room, with reinforced concrete arches on view was unfortunately divided to obtain medium-large and duplex flats. The interior refurbishment has only partly preserved the spatial qualities of the original project (after the furniture designed by Jean Prouvé had already been lost) while the original orange colour of the façade was restored. This follows the settlement concept at the basis of the modern sanatorium project, i.e., the possibility of living the mountain and of enjoying its treasures, not necessarily inside a *chalet* of dubious authenticity, but in a large collective building. Its very modern and non-camouflaged shape stands out among the foliage of the fir trees with its tall chimney, the sequence of gleaming balconies and, of course, the beautiful orange colour which, as landscape painters know, completes the alpine palette along with the dark green of the conifers, the grey-brown of the rock, the blue-white shades of the glaciers and the turquoise sky.

Martel de Janville demonstrates that even for former sanatoriums, the

30 available on www.rolinet.fr/projets/habitat/reconversion-du-sanatorium-martel-de-janville.

recognition of their cultural value³¹ and the protection system is not at odds with a real estate development program, as this would limit the possibilities for transformation and expansion. This idea belongs to a logic which does not take into account the contemporary scenario dominated by *sprawling* and *shrinking cities*, where simply building is no longer of any use, but building well and redeveloping what has already been built is required. The flats obtained in the former protected sanatorium have been sold even though the housing market is not very lively, thanks to the panoramic position, the innovative typologies and furnishings, the purchase tax system, the economic management of a collective building, and maybe even because of the pleasure of living in a twentieth century masterpiece.

The valorisation of this building was accomplished after passionate studies investigated the architectural, landscape and aesthetic qualities. First the specialists, then the general public substituted the image of a difficult problem, such as an abandoned sanatorium, with an opportunity to be seized, i.e. a fine example of modern architecture “on hold”. This shared perception of the cultural value was followed by the protection status and the tax exemption of the restoration, which would otherwise not have been feasible as a business, as demonstrated by the failure of a previous attempt in 2007, when the building was not yet protected.

In Martel’s case, the heritage status has therefore provided the concrete conditions for the re – settlement of the now disenchanted mountain which, without this monument, would have been abandoned by health-care institutions, hotel industries or any other speculative attempt for that matter. Even in the Alps there is no development without the awareness of the value of what has been inherited and a strong partnership between the various operators involved is required to give substance to the couplet “conservation and development”.

Sondalo: missed opportunities and an uncertain future, which hinges on culture

The path which leads a building from abandoned to heritage status and to the regeneration process, generally begins with its rediscovery by a group of intellectuals and enthusiasts which studies and highlights its qualities and which initiates a first reuse for cultural, educational, promotional purposes. Thus, a former factory, barracks, psychiatric hospital, sanatorium,

31 P. GRANDVOINNET, *Sanatorium Martel de Janville*, Mémoire de DEA, Institut d’Architecture de l’Université de Genève, 3e cycle sauvegarde du patrimoine bâti et contemporaine, nov. 2004.

emerges a little at a time from its state of abandonment, once the activity for which it was conceived ends. A motion of interest, even commercial, arises as occurred in urban regeneration processes in the aftermath of de-industrialisation, like in the Docks of London or of political stabilisation such as in the emergent neighbourhoods in the capitals of Eastern Europe. Thanks to reactivation projects based on variously understood cultural activities, even post-production or post-healthcare marginal areas see a rekindling of interest which leads to their assets and areas appreciating. It is the so-called policy of *cultural quarters*³², according to which the activities related to culture may play a pioneering role in the redemption process of derelict or abandoned areas, so much so as to be supported by the third sector economy as engines of local development. In these projects, culture contributes to updating the point of view concerning places and buildings and demonstrates how suited they are to beginning a new life. Among the sanatoriums, it is worth remembering the Czechoslovak case of Machnáč, built according to a project by Jaromír Krejcar between 1930 and 1932 and recently discovered by the *opustená (re)kreátia* [abandoned (re)creation] group and placed in the Czechoslovak register of modern architecture³³. In the Alps, there is no shortage of positive experiences such as that of the Dolomiti Contemporanee³⁴. This is the same path which was undertaken on the basis of studies which described the social and landscape qualities of the small enchanted mountain of Sondalo in the early 2000s and which highlighted its role in the history of medicine and architecture³⁵. The journey continued with cultural activities involving the local community which have been taking place since 2010 within the Village and with the restoration of the central reception building, turned into a museum dedicated to the treatment of tuberculosis and to the history of its therapies³⁶.

The sunny valley of Sondalo shows an exemplary concentration of sanatoriums that through the architectural evolution, from regionalist art nouveau to State rationalism, recounts the social history of the disease, from “consumption” to welfare. The sanatorium season lasted less than a

32 M. LEGNÉR, D. PONZINI, *Cultural Quarters and Urban Transformation: International Perspectives*, Högskolan på Gotland/Gotlandica förlag, Visby och Klintehamn 2009.

33 K. TEIGE, *Prace Jaromira Krejcara: monographie staveb a projektu*, Nakladatel Vaclav Petr, Praha 1933.

34 see GIANLUCA D’INCA LEVIS’ contribution in this book.

35 For a complete bibliography concerning the Sondalo complex, please refer to D. DEL CURTO, *Conservare l’architettura del XX secolo. Esperienze di tutela e riuso al Villaggio di Sondalo*, in L. BONESIO, D. DEL CURTO, G. MENINI (edited by) *Una questione di paesaggio. Il Villaggio Morelli e la Valtellina*, Mimesis Edizioni, Milano – Udine 2014, pp. 85-111.

36 D. DEL CURTO, G. MENINI, *Museo dei sanatori. Restauro dell’ex portineria centrale del Villaggio Sanatoriale di Sondalo* in «Paesaggio Urbano» 2/2016, pp. 28-31.

century and, however controversial, it determined the development of this part of Valtellina, which, at the beginning of the twentieth century was just a cluster of houses clinging around the large church, and which now offers a new, panoramic view of the attempted transformations on former sanatoriums in the Alps.

The “1st Italian sanatorium”, Pineta Sortenna (1903), has now been renovated after twenty years of restoration conducted by the religious order which owns it and which has turned it into an accommodation complex and a spiritual centre. The structure, however, is unused and its possible sale is currently being evaluated.

The “Abetina” (1927) sanatorium was subject to a plant and regulatory modernisation during the mid-1990s and used as a Nursing Home up to 2001. Its conservation status is reasonable as the building has been unused for fifteen years, with well-preserved rooms and historical furnishings and technical installations to be reviewed. The Municipality of Milan who owns it, however, has placed the “Abetina” in a real estate fund in liquidation.

The Vallesana sanatorium (1929) was converted into a school and renovated between 2001 and 2005. Despite the low number of students, the construction of a large new building is in progress, funded by an agreement between local authorities, whose use is still uncertain, while the construction site has invaded what remained of the historic garden.

The former Sanatorium Village (construction: 1932-46; operation: 1946-1969) survives tenaciously as a hospital. For a time, it invested in non-local specialisations (knee surgery, lung diseases...) and, more recently, it tried to obtain an unlikely primary position among the hospitals of the valley. This structure, which is now dated from a construction point of view and too large to be a local hospital, has now given up on investing in attractive specialisations and its rationalisation is currently under way. The architectural and landscape heritage of the Village has long been ignored and its asset has been the subject of sporadic speculation. In addition, the local community has sometimes interpreted the efforts made to protect its historical and architectural features as an obstacle to reviving the healthcare function, rather than as a possible complementary activity, giving the idea of a paradoxical conflict between heritage protection and the defence of jobs in the hospital. On the contrary, the museum is the first case in which a part of the Sanatorium Village was removed from an abandoned status and re-used for a non-healthcare and largely self-financed activity. Intervention techniques on the buildings were experimented in this bridgehead for recovering the entire complex, not so much through drafting guidelines or method indications, but with a pilot-yard which demonstrated the feasibility, including from an economic point of view, of the restoration. In light of this successful result, it is necessary to overcome the dimension of a

sample and of the only cultural function, and to verify whether the village still constitutes a development opportunity for this mountain.

Before trying to imagine the transformation, it is better to further reflect on the effects of modernity in this part of Valtellina and attempt a comparison between the two ways in which it was urbanised during the twentieth century. The historic settlement appeared almost unchanged on the threshold of the twentieth century and has grown in accordance with the regulations which have on various occasions promoted or harnessed the building pressure and the revenue. After being hit by the great urban episode given by the Sanatorium Village, Sondalo has more than tripled its size, in accordance with agreed planning regulations and a territorial government given over to land-use plans. The legal paucity of the planning tools, however, sooner or later enabled anyone to exercise the private right to build on an own plot of land, to the extent envisaged by the Civil Code on the basis of the distance from the boundary, which, after all, can be considered the main settlement logic of urban expansion in the twentieth century. Nothing different than what occurred in the rest of Italy, but in Sondalo the comparison between the colonisation of the 1930s and the democratic expansion of the 1960s and 1970s is made obvious by their proximity and by the looming presence of the mountains, in relation to which it is reasonable to wonder which was capable of building a better relationship, both from the point of view of form and of duration.

It is however necessary to reflect, even provocatively, on the recent past, especially when it has left us such a controversial legacy³⁷. Should we have immediately understood in the 1960s that the Village would have ceased to be used as a sanatorium, could we have reused the abandoned pavilions for other purposes, exploiting its still intact use value³⁸? And if before that, during the 1950s, we had given up on starting up the entire Village, following the advice of the more prudent technicians³⁹? We could have assigned that part of the sanatorium which was actually used for not much time and for which a healthcare reuse never actually took place, to Sondalo's demographic expansion, saving the best lands of the valley floor and creating

37 S. LUZZI, *Salute e sanità nell'Italia repubblicana*, Donzelli, Roma 2004, pp. 12-13.

38 E. SAGLIANI, *Il centro sanatoriale di Sondalo nell'impeto di vita di Vittorio Baroni*, in «Notiziario della Banca Popolare di Sondrio» no 61/April 1993, pp. 33-40.

39 V. BARONI, *Il Villaggio Sanatoriale di Sondalo. Storia, organizzazione, sviluppo futuro*, in «Notiziario dell'Amministrazione Sanitaria» F. II (May–August), ACISP, Rome, 1946. The text is based on the homonymous report signed by Vittorio Baroni and Luigi Ferrari for the High Commissioner for Hygiene and Public Health, and on a number of projects and feasibility studies for the partial activation of the Village processed by Ferrari between 1940 and 1944 when he was technical manager of the INPS based in Sondalo.

an unprecedented settlement in the Alps, with panoramic and efficient flats within walking distance of the old Town and the nearest hospital, by using its terraced base as an infrastructural support.

Today that vision can still run counter to the idea that this complex is slowly dying, even from heterodox viewpoints, such as the image of the terraced base and of its infrastructure of roads, technical facilities and park. Its stable nature was rightly compared to the concept of mega-structure, as opposed to the “temporary” architecture of the pavilions which occupied it following such a specific contingent demand for therapeutic use⁴⁰. If one considers a slightly wider time span than the contingency of the healthcare needs, the mega structure of the base, like the “Project A” for Fort l’Empereur by Le Corbusier (1931)⁴¹, suggests the ability to accept new forms of architecture and the possibility of inhabiting the mountains.

Villaggio Morelli’s base and park facilities is a rare example of a therapeutic garden in the Alps, equipped with underground technological networks, roads, squares. It is a laboratory where to regenerate this archaeological healthcare scenario, following the example of what has been done for industrial archaeology⁴². The two sides constituting it offer many new design issues. To the east there is a hospital which should be upgraded to contemporary forms of health care, in line with foreign and Italian examples. To the west, there is the opportunity of the abandoned pavilions which, after being studied and valued as landscape architecture, may create unexpected scenarios also from a real estate point of view, in respect of the early obsolescence of what was built on the valley floor, as Martel de Janville’s example demonstrates. Finally, the vision whose feasibility should be tested is that of a neighbourhood with residential and working spaces appropriately related to the nearby hospital, within a well furnished public park which is upgraded to a mix between health garden and mountain wilderness. No longer a gated town to isolate consumptives or weekend skiers, but a city where to live, work, meet, i.e., one where to live today in the Alps.

40 D. PRETI, *La lotta antitubercolare nell’Italia fascista*, in *Storia d’Italia, Annali 7, Storia e medicina*, Einaudi, Torino 1984, pp. 955-1015 which suggests the hypothesis that tuberculosis in Italy could have been treated by investing more in clinical research and prevention, rather than in building so many sanatoriums.

41 R. BAHNAM, *Le tentazioni dell’architettura. Megastrutture*, Laterza, Roma-Bari 1980, p. 4.

42 V. FERRARI, *Il parco del villaggio sanatoriale di Sondalo. Studio e rilievo di un paesaggio terapeutico*, Politecnico di Milano e L. CANESI, S. GRASSO, *Piazza, città e salute nell’Italia fascista. Un progetto per il villaggio sanatoriale di Sondalo*, Politecnico di Milano, degree thesis in architecture discussed 1st October 2014, and M. GONZALES, S. VALLESE, *Dopo la cura. Un progetto per il più grande sanatorio d’Europa*, Politecnico di Milano, degree thesis in architecture discussed on 26th July 2016, supervisor D. Del Curto.



Fig. 2. *Rotunda Room*, Mammoth Cave. Courtesy of the U.S. Geological Survey

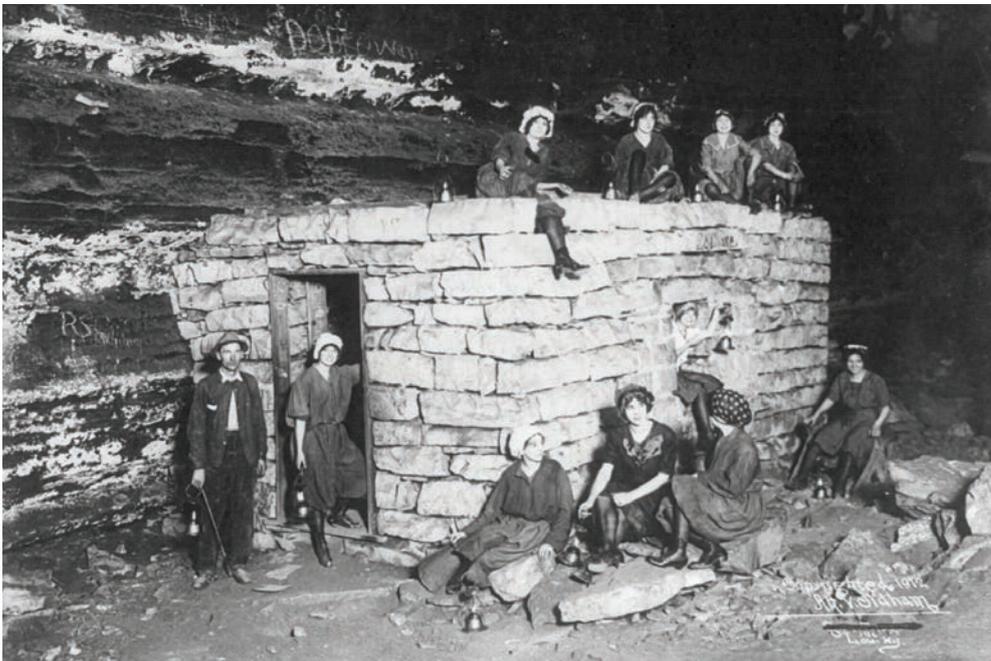


Fig. 3. *Consumptive's Room*, Mammoth Cave, 1912. Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA. A.V. Oldham ©

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Fig. 1. Guests on the terrace at *Sanatorium dr. Barner*, Braunlage/Hartz. Photo by Nelly Rodriguez ©. Courtesy of Krankenhaus&Sanatorium dr. Barner



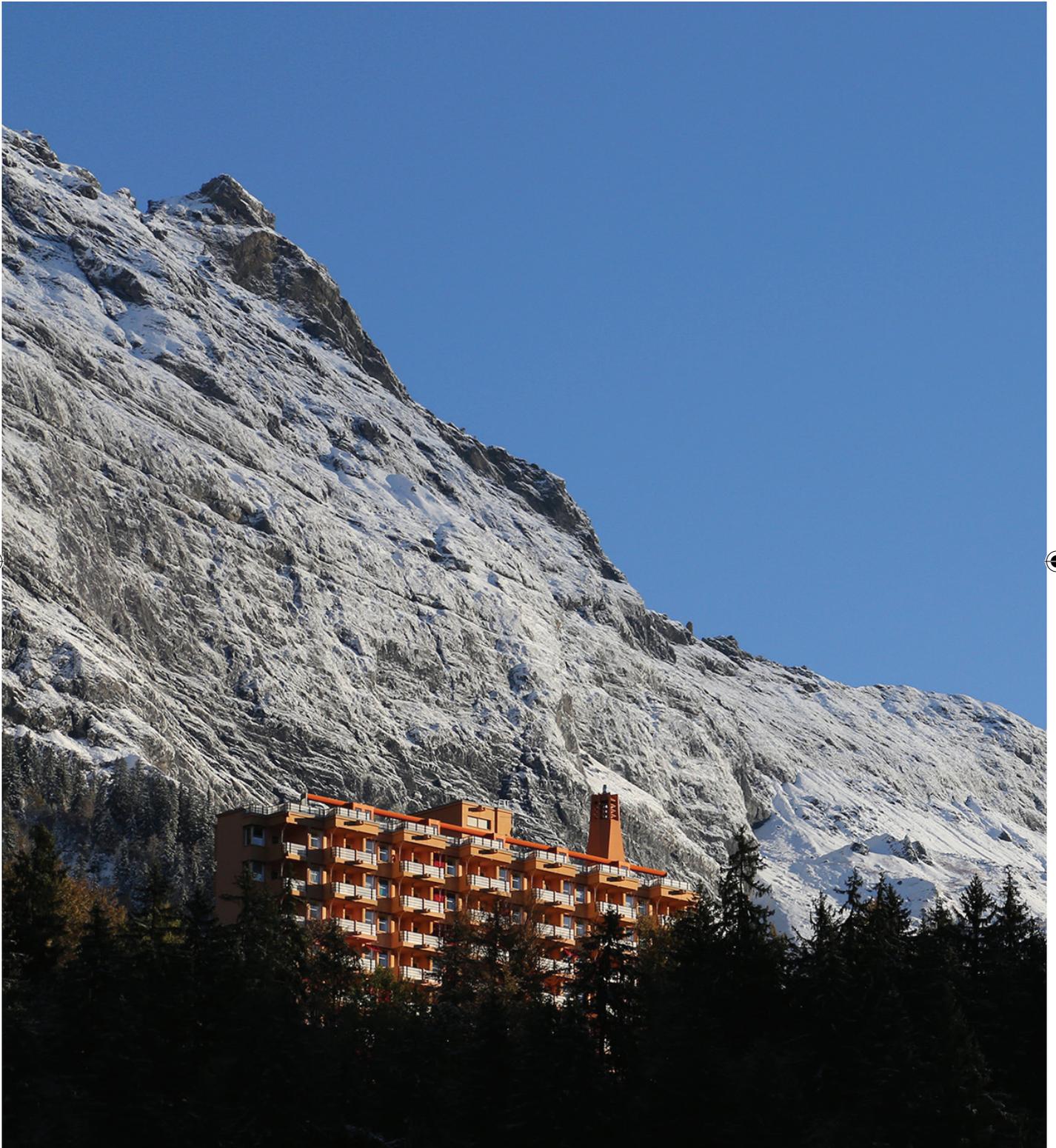
Fig. 4. *Schatzalp* sanatorium reopened as a hotel in 1954

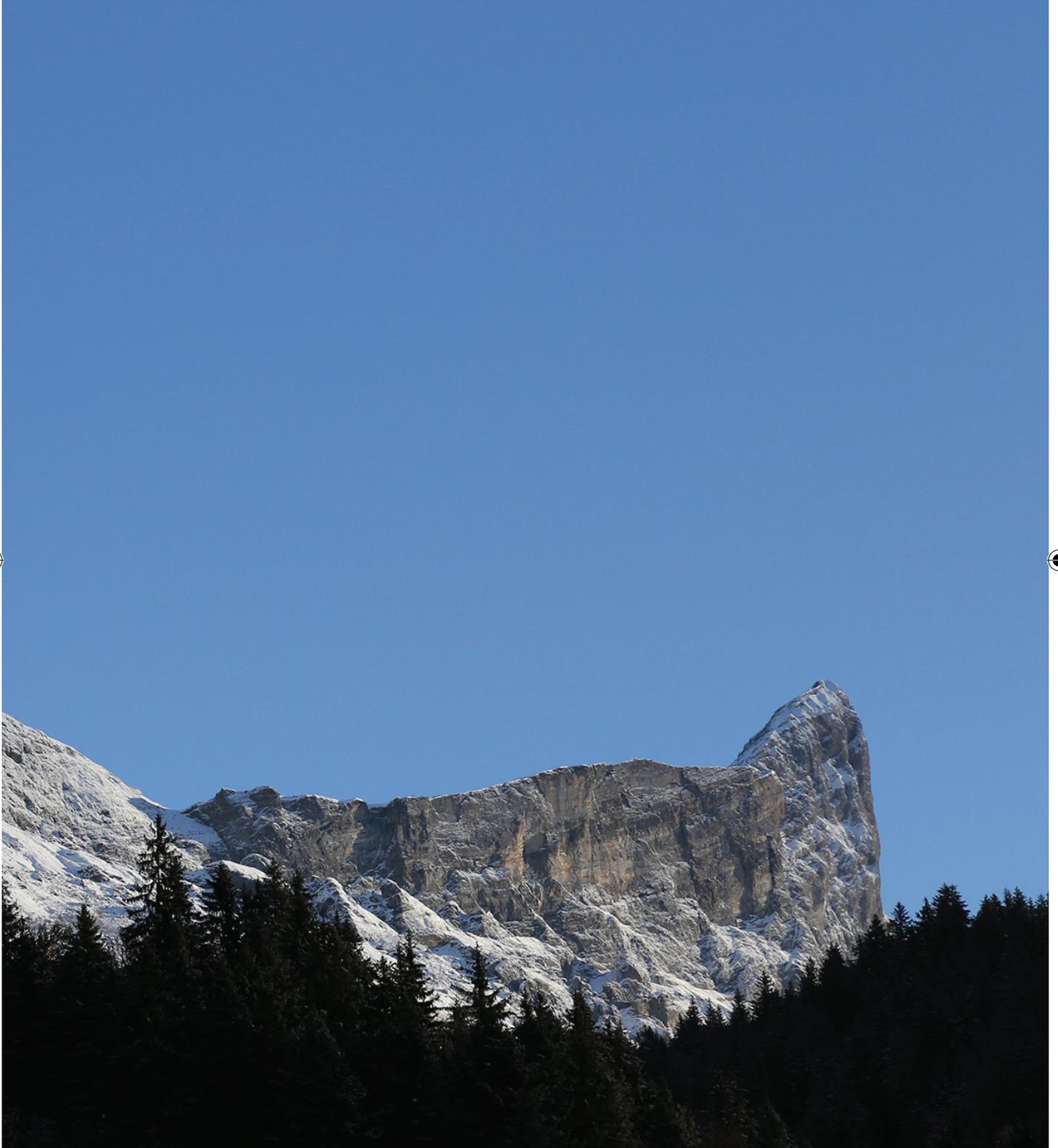


Fig. 5. The *Zürcher Rebazentrum Wald* results of enlarging the former sanatorium in Davos Clavadel

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Fig. 6. *Martel de Janville* former sanatorium





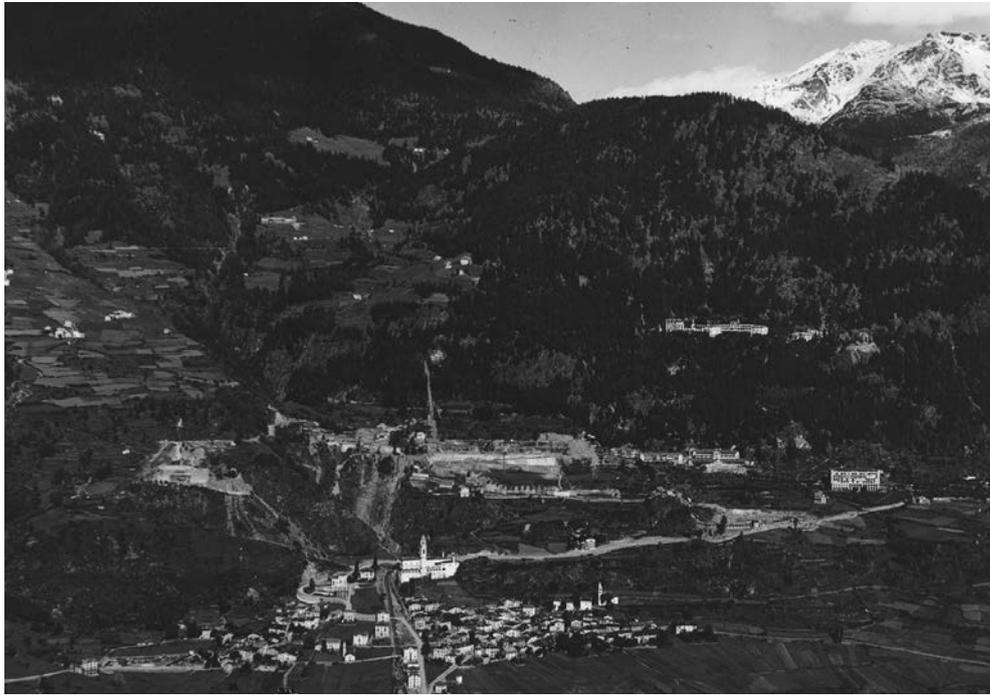


Fig. 7. Start of the construction site of the Sanatorium Village in Sondalo, 1932

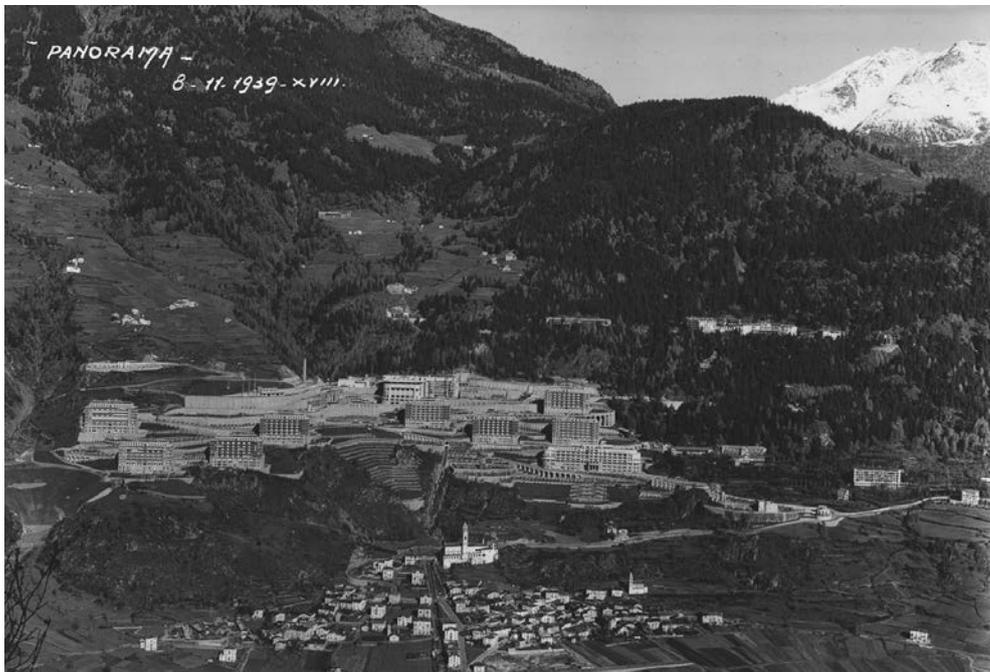


Fig. 8. End of the construction site of the Sanatorium Village in Sondalo, 1940

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Fig. 9. Sondalo and the former Sanatorium Village, now hospital "Morelli", 2016



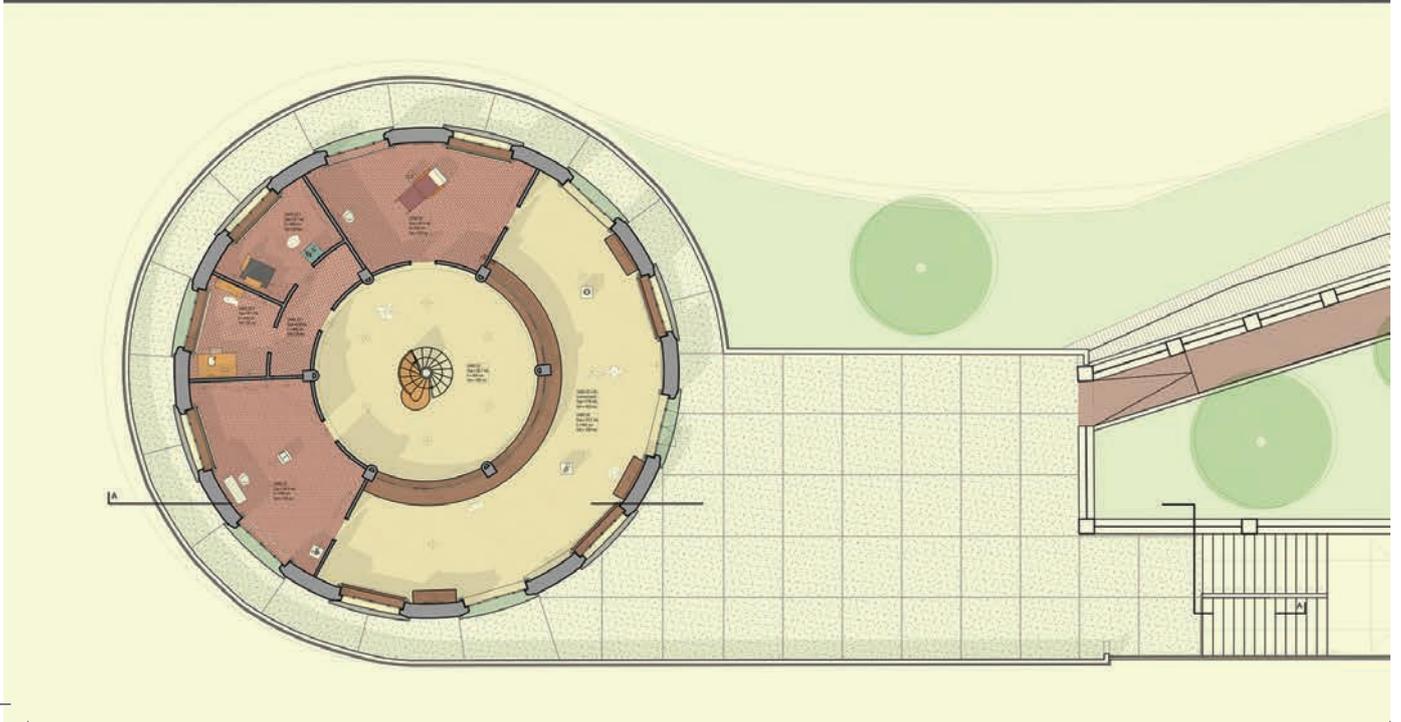




Fig. 11. Boris Georgiev, *Portrait of engineer Tullio Petech*. On the background the rising Sanatorium Village in Sondalo, courtesy of Capitolium Art

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Fig. 10. Davide Del Curto and Giacomo Menini, *Museum of Sanatoriums* in the former reception office of the Sanatorium Village in Sondalo, 2013 (project)



Fig. 12. The reception office of the Sanatorium Village in Sondalo, 1940

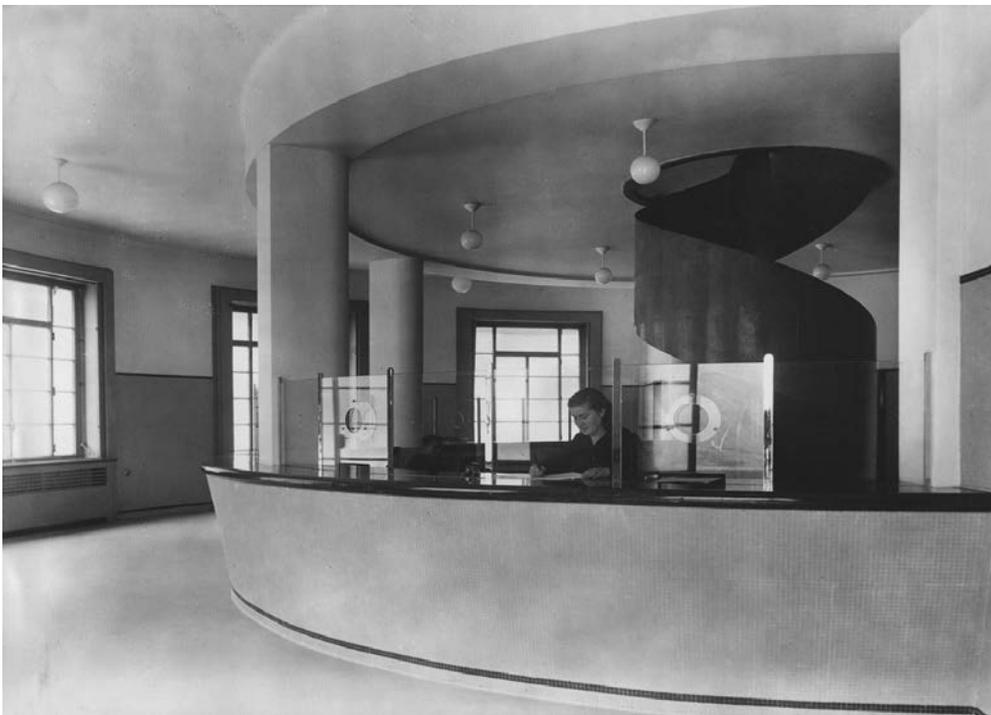


Fig. 13. Interior of the reception office of the Sanatorium Village in Sondalo, 1940



Fig. 14. Interior of the reception office of the former Sanatorium Village in Sondalo before restoration, 2012



Fig. 15. Interior of the *Museum of Sanatoriums*, set up in the Sanatorium Village's former reception office, 2015. Photo by Giacomo Menini