






## Structures on the Albula and Bernina line

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### Sources:

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## 2.a.5 Structures on the Albula and Bernina line

The buildings on the Albula and the Bernina railway lines are of special architectural and historic significance as examples of different concepts of traditionalism. The largely standardised buildings along the Albula line were built during the period of the Swiss timber style of architecture. However, during the 1920s the mountain pass area the Bernina line runs through saw the development of an individualised ensemble under the influence of Regionalism and Neoclassicism.

### The buildings on the Albula line

The person in charge of the buildings on the Albula section was an architect called Ludwig; nothing more is known about him at this juncture. The buildings along the north side were of timber construction, whilst the reception buildings in the Engadin – apart from the one in Spinaz – were in plastered quarry stone. According to the builder, the reason for this difference was not due to architectural considerations but “partly due to the climate and partly to the high price of wood”.

### Reception buildings

In its reception buildings the Rhaetian Railway distinguished between larger structures – mostly individually designed for the main stations – and smaller, standardised designs for the intermediate stations. In terms of arrangement and style, the design of the buildings on the intermediate stations on the Albula line was based on the existing structures along the railway line from Landquart to Davos, which was opened between 1889/90. The design and construction were realised by Kuoni & Cie. in Chur who were involved in the construction of chalets all over Switzerland. Their presentation brochure even included a timber-style villa called ‘Tokugawa’, in Japan. Two types of intermediate station had been developed for the section Landquart–Davos, but only one model was used for the Albula line. A long, two-storey square-sawn timber

block structure was developed, with a goods room with timber plank walls, available in the two options ‘goods room to right’ and ‘goods room to left’. The construction work was now contracted out to a number of local construction companies.

The intermediate reception building has a floor area of 6 x 15 meters and a roof ridge height of 7.35 meters. It is divided lengthwise into three rooms of equal area, the waiting room, station office/stairwell and the goods room. The station office is the heart of the building; it opens onto the neighbouring rooms, and is connected with the waiting room by the ticket counter. The station office and stairwell are built over cellars, and the waiting room is furnished with a cylindrical wood-burning stove. The upper storey contains a three-room apartment for the station master and his family. To save space the design has three rooms adjoining each other, without a corridor. The living room has a wood-burning stove, and the kitchen a wood-burning cooking stove. A toilet and an attic storage room extend into the space above the luggage area. The exterior of the building is influenced by efforts to combine the different functions as far as possible into a regular whole. The block structure is mounted on a low, walled plinth. On the longitudinal sides the projections reflect the interior sub-division of the building. The large overhang of the ridged roof functions in part as a platform roof, but has the disadvantage that the apartment’s windows in the eaves of the



Albula line > St. Moritz station. Reception building built 1927.  
L. Dosch



Albula line > Bever station. Iron platform roof built by Versell & Cie., Chur.  
L. Dosch



Albula line > Spinas reception building, from the trackside.  
L. Dosch

roof are in the shade. Windows and doors are surrounded by profiled wood frames. Carved decorative beams emphasise the horizontal, and on the narrow side of the waiting room they frame the station sign. The ridge of the roof is higher than that of the buildings on the intermediate stations on the line to Davos, allowing the buildings to appear less like sheds. Window shutters now appear for the first time in an intermediate station type on the Rhaetian Railway. These give the structure the character of a residential house. With its two symmetrically-arranged high windows and its straight window roofs the narrow side of the waiting room remains true to the ideal of late-classic stone buildings. In an extension of this concept the station in Tiefencastel was given a goods room which was three times as long and a veranda which served as a summer waiting room for the mail service. The intermediate reception building in Celerina with a massive main section and a wooden freight shed extension, and the buildings on the two junction stations at Stugl/Stuls and Muot are special examples. There was no passenger traffic in Muot.

Over the course of time, most of the ten intermediate reception buildings along the Albula line have been substantially modified or extended. The building in Spinis is the one which has most closely retained its original form. The buildings in Sils i. D., Solis, Surava and Alvaneu were given smaller extensions. Thanks to their remote location the buildings on the junction stations of Stugl/Stuls and Muot managed to escape any large-scale alterations.

From the architectural point of view, the reception buildings in Bever, Samedan and St. Moritz can be considered as main railway reception buildings. A primary criterion in this respect is the siting of the goods room as a separate freight shed. The main reception building on the north, or Thusis side, had been constructed as the terminal for the railway line from Landquart as early as 1896; but was

obliged to give way to a new building in 1991/92. The reception buildings in Bever and Samedan were designed as two-storey structures with a false hip-roof and an enlarged attic storey. This type of reception building, which was also used for Ilanz on the upper Rhine, varied only in size. The widely varying ornamentation played a large role, covering the building with features such as corner edgings, cornices and window frames. Another striking feature were the openings on the tympani, with a central palladio motive between two lateral oculi. In functional terms, there was little change to the scheme which had been developed for the two main stations in Davos. On the ground floor the vestibule, cashier's and luggage office are located between the 1st/2nd class waiting room and the 3rd class waiting room. The upper storeys contain residential quarters for station staff. The waiting rooms have wood panelling and are actually designed for visual impact.

The size and greater number of the waiting rooms and the comparatively wide platform roof indicate that a higher passenger volume was expected at these stations than at the intermediate stations. The roof has an iron framework with cast iron columns supplied by Versell & Cie., a company based in Chur, adding a distinct technical tone to the building. The stout form of the roof with its framing of picturesque wood ornamentation provides a contrast, while the building itself is structured in line with the conventions of late classicism.

The general form of the reception building in Bever is still well preserved, but the ornamentation was removed during improvement work. In 1983 the building in Samedan was obliged to give way to a new structure.

The first reception building in St. Moritz was designed to a larger and richer scale than the reception buildings in Bever and Samedan. The arrangement of the ground floor and the use of the





Albula line > Stugl/Stuls station. A unique, complex of historic buildings with linesman's hut, station fountain, lavatories and reception building.  
L. Dosch



Albula line > Stugl/Stuls station. Passenger lavatory.  
L. Dosch

upper floors for residential purposes was in line with the established scheme but from the outside the building appeared as a grand structure in three parts. Two cross-tracts with false hip-roofs flanked a flat-roofed connecting element. The facility was enlarged in 1909 and 1912. With a view to the Winter Olympics of 1928, in 1927 the important Swiss regionalist Nicolaus Hartmann the younger carried out an extensive conversion which gave the reception building a new architecture. Since then a symbol of the St. Moritz railway station has been the asymmetrically situated clock tower – probably in homage to the Badischen Bahnhof in Basel (1913) designed by Karl Moser and the main railway station in Helsinki (1912/13) designed by Eliel Saarinen. A spectacular feature from the very beginning was the electrically illuminated clock faces with their diameter of 3.4 meters. The reception building was converted and extended in 1986 and 2002.

#### **Small buildings, workers' houses, workshops and sheds**

On the smaller stations a separate timber-built lavatory for the passengers was constructed at some distance from the main reception building. Type A included a urinal, one toilet for men and one for women. Type B included a urinal, one toilet for men and two toilets for women. The entrances are hidden by a wooden wall. The passenger lavatories in Stugl/Stuls and in Spinass, Bever (2 buildings) and Celerina. The stalls (also built by the Rhaetian Railway at isolated stations) and the kitchen gardens in front of the houses provided the inhabitants with the necessary infrastructure to allow a certain degree of self-sufficiency.

The small buildings category also includes the linesman's huts which were erected at a number of different locations. These are timber buildings with a pitch roof on a base area of 2.5 x 3.2 meters. These temporary quarters were provided with a stove, a table, a bed and a cupboard. Examples which present a well-preserved overall appearance can still be found at the railway stations in

Sils i. D., Tiefencastel, Filisur, Bergün/Bravuogn and Samedan, and at the stations between Celerina and St. Moritz. A double-unit linesman's hut is located between Muot and Preda.

Houses located along the whole line were used as permanent accommodation for the section linesmen and their families, and these had to meet higher, if still very modest, standards. Known as linesman's houses, these were built as block structures with a stall for small animals built on; examples can still be found in Stugl/Stuls, Bergün/Bravuogn, Preda, Spinass, Bever (2 buildings) and Celerina. The stalls (also built by the Rhaetian Railway at isolated stations) and the kitchen gardens in front of the houses provided the inhabitants with the necessary infrastructure to allow a certain degree of self-sufficiency.

The station in Stugl/Stuls presents a special situation; here a group of buildings has been preserved which is of some importance in terms of railway history. The reception building here is modelled on the lines of an enlarged linesman's house; with the actual linesman's house located to the northwest. The group also includes an accommodation building for workers with a front garden, a wash-house, a lavatory for passengers and a more recent station well, made in artificial stone. The preserved accommodation building bears witness to the temporary architecture of the pioneering days, similar to those which existed in larger numbers in Preda and Spinass on both sides of the Albula tunnel. When this tunnel was being built the huts in Stuls were used as accommodation for workers; later, two-thirds of the building was relocated here. From 1910 the simple structure served for some years as a schoolhouse for the few children of the station in Stuls, whilst during the construction of the power station (cf. 2.b.7) it was used as a canteen.

Besides linesman's houses and other timber accommodation buildings for workers, the Rhaetian





Bernina line > Alp Grüm reception building and guest house, 1923.  
L. Dosch



Albula line > Linesman's hut and water crane at Filisur station.  
L. Dosch



Albula line > Five apartment house built by the Rhaetian Railway in Filisur, 1913.  
L. Dosch



Railway also arranged for the construction of larger and more robust staff houses. In this context, some years after the construction of the railway, the Albula section saw the building of some important examples of regionalism – in Samedan the section engineer's house (1907) designed by Nicolaus Hartmann, in Filisur the five-family residential building by Ulrich Lys and the section engineer's house by Meinrad Lorenz (both 1913). Two staff houses above the St. Moritz railway station date from the period around 1904. The four 6-family buildings and two 12-family buildings in the Samedan railway station district built between 1904 and 1914 and the houses in the railway settlement of Ariefa (1913/1914) in the same town have now been replaced by new buildings. The Rhaetian Railway's main workshops are located in Landquart. A depot with ancillary workshops was constructed in Samedan as part of the construction of the Albula line. The initial facility was substantially extended in view of the construction of the railway line between Bever and Scuol, opened in 1913, and was replaced by new buildings in 1982/83. A wagon and engine shed was built in Samedan around 1903. There were sheds at all the medium-sized and larger stations; those in Filisur and Bergün/Bravuogn have been preserved. The Filisur station depot yard also has a water crane to supply the steam locomotives. Other water cranes are found in Tiefencastel, Bergün/Bravuogn, Muot and Samedan.

## The buildings on the Bernina line

### Reception buildings

The line from St. Moritz to Tirano was the only section on Graubünden's narrow gauge network that did not have any intermediate station types. The reception buildings were constructed in two main phases. When the line was opened in 1910

the buildings available were very modest. At that time Bernina Hospiz, Poschiavo, Brusio and Campocologno (with post and customs) had reception buildings with office, goods room and apartment. The stations in Celerina-Staz, Surovas, Morteratsch, Bernina Suot (Berninahäuser), Alp Grüm, Cavaglia, Cadera and Campascio only had waiting rooms, in some cases with ticket counters and luggage rooms. In St. Moritz and Pontresina the Bernina line was allowed to share use of the reception buildings belonging to the Rhaetian Railway, whilst in Tirano they contributed to the construction of the reception building for the Alta-Valtellina railway (1909).

The most important period for the railway reception buildings on the Bernina line was the 1920s. In the North, in Celerina-Staz and Surovas, the company arranged for rustic chalets to be constructed whilst in the South, in Tirano, they constructed a reception building of their own – an urban facility in the Italian Liberty and Art Déco styles (1920). For the mountain pass area the architect Nicolaus Hartmann constructed new buildings and extended existing buildings, creating an ensemble of architecturally important work. In Bernina Suot, a staff house constructed ten years earlier by Hartmann to a design based on the "Engadin farmhouse type" (cf. 2.a.6), was converted into the reception building in 1922. In 1927 the building was given an extension, and was demolished in 1992. Today a linesman's cottage stands in its place. In 1923 Hartmann's reception building and mountain guest house in Alp Grüm was constructed as a monumental new building with a hip roof. It is located at a point which has a magnificent view towards the Palü glacier. An additional balcony which is aligned towards the natural panorama has a thin reinforced concrete slab and an elegantly curved iron railing that hints at the technical possibilities offered by the emerging Modern style. The mountain and station



Bernina line > Bernina Hospiz. Group of buildings built 1925/26: covered turntable, driveway and converter station. On the right, the official's house built in 1912.  
L. Dosch



Bernina line > Bernina Hospiz. Driveway through the group of buildings built 1925/26.  
L. Dosch



Bernina line > Bernina Hospiz reception building, 1925.  
L. Dosch



side on the other hand are completely influenced by the sober appearance of the exposed stone masonry and the large semicircular arches of the ground floor. Natural stone block window ledges increase the oppressive feeling. The preceding polygonal stair tower, the smaller tower on the valley side and the two powerful chimneys enrich the silhouette of the neoclassical building, giving it something of the appearance of a fort. In 1925 Nicolaus Hartmann extended the reception building in Bernina Hospiz and created a severe neoclassical facility with lateral risalits, beam-like cornices and a flat triangular gable. The alignment of the gable on the track side led to an overwide building form. More striking than the neoclassic detail, is the use of quarry stone here for the façades.

The work of the architects Otto Schäfer and Emil Sulser takes a key place in architectural history. The reception building in Pontresina on the Bernina section was constructed in 1906/07, but by the Rhaetian Railway and not by what was then the private Bernina Railway. It is one of the largest reception buildings in Graubünden and at the same time marks the transfer from late classicism to an architecture which is more closely oriented towards giving a picturesque impression. From the viewpoint of railway history more importance is given to the goods room and goods transport than in St. Moritz and Samedan. The rooms were no longer so strictly aligned in terms of symmetry but were rather arranged to meet practical requirements. The exterior shows a certain degree of indecisiveness between schematic symmetry and free rhythm. Two cross gables on the track side represent the old method for sub-dividing a large volume, as applied in St. Moritz. But above this there now appears an extensive and centralising roof landscape with hip roofs which culminates in a small clock tower. Picturesque motives are also provided by the large semicircular arches of the ground floor, the

windows of the upper floors which are arranged in pairs, and the baroque bat-shaped dormers of the roof. The lightly embossed natural stone rusticated masonry of the ground floor is lively and deliberately irregular. The original platform roofing on the track side of the reception building – fine, cast-iron columns with tori and goblet-shaped capitals support an iron framework – has also been preserved.

Two larger reception buildings were constructed following the incorporation of the Bernina line into the Rhaetian Railway in 1914, namely the new reception building in Campocologno in 1948, with rooms for the railway and for the Swiss customs (architect: Arnold Rietmann, St. Moritz) and the reception building in Poschiavo in 1962 (architect: Theodor Hartmann, Chur).

The longitudinal structure erected in Campocologno with its oculi and the slightly projecting hip roof seems inspired by models from the Italian Baroque, such as can be found in nearby Tirano. For the iconography of railway and customs, the mural by Paul Held with its representation of a traveller heading for Rome is of importance.

### **Staff houses, workshops and sheds**

In 1912 a staff house was built in both Bernina Suot and Bernina Hospiz to plans prepared by Nicolaus Hartmann, based on the lines of the “Engadin farmhouse”. As explained, the former was converted to the main reception building whilst the latter, with its connecting stones jutting into space, still shows evidence of a planned but not completed extension. In 1911 Hartmann, working on behalf of the Bernina line, constructed the railway settlement of Cuntschett not far from the railway station in Pontresina. It consists of three, 6-family houses with vegetable gardens. The architecture was designed when regionalism was at its peak and is surprisingly practical. The only picturesque motifs can be



Pontresina > Cuntschett railway settlement, built 1911.  
L. Dosch



Pontresina > Reception building built 1906/07.  
L. Dosch



Bernina line > Reception and customs building Campocologno, 1948. Mural by Paul Held: Rome traveller.  
L. Dosch



seen in the siting of the third house before the alignment of the two others, in the archway between the houses and in the curved windows under the eaves. The workers' houses issue, then much debated in the urban context, appears to have forced the rural connections into the background here.

The railway company had wagon sheds constructed in Pontresina, Poschiavo and Tirano. In Pontresina and Poschiavo these were linked to a repair workshop and storerooms. In the 1920s both Bernina Suot and Bernina Hospiz were given a covered turntable. At the Hospiz station this is linked to a group of buildings which were based on an extension dating from 1925/26, from the mountain to the lake-side transformer station, followed by a through passage for the train and then by the turntable. Maintained using the 'pietra rasa' technique, these structures together with the reception building in exposed stonework and the plastered staff house, form a distinctive ensemble in terms of railway history on the Lago Bianco.

### Appraisal

The buildings on the north side of the Albula line follow the ideal of the 'Swiss Chalet', a concept 'coined' by the English implying the traditional Bernese Oberland farmhouse style. In the 19th century, and in Switzerland itself around 1900, this 'Schweizer Holzstil' ('Swiss timber style') had itself become a trademark for tourist-related and exhibition architecture. However, the fact that the main railway reception buildings were constructed in stone agrees with the general requirements of the time for prestige buildings.

Between the construction of the Albula line and that of the Bernina railway lies the development of a style of construction which is based on picturesque forms and which preferred to find its ideals in the traditional architecture of the farmhouse. This development is an international phenomenon,

one which in northern countries such as Finland is described as 'National Romantic' and in Switzerland as 'Heimatstil' ('Homeland' style) or 'Regionalism'. In contrast to the Swiss Chalet style this regionally varying concept found a great echo, particularly in railway architecture. Important examples of this are the smaller buildings of the Württemberg State Railway constructed shortly before the First World War, the reception buildings of the Bodensee–Toggenburg Railway, the reception buildings on the lines between Ilanz–Disentis (1912) und Bever–Sculol (1913) on the Rhaetian Railway and the reception buildings of the Chur–Arosa Railway (1914).

Constructed in the later part of the early Regionalism period, the buildings of the Bernina railway from the 1920s in Graubünden can be split into the chalets and Engadin houses of the north side and in the stone buildings with their rudimentary appearance in the area of the mountain passes. This difference can certainly be seen as an architectural programme. Nicolaus Hartmann's buildings in the highest reaches of the Bernina railway, with their exposed stone masonry and the plastering in pietra rasa are based on the local alpine buildings and mountain huts. In so doing they also continue the architect's line of creativity established with the Segantini Museum in St. Moritz (1908), a rotunda in raw granite. In general the stone façades in the mountain landscape give the impression that they have grown up out of the ground. Hartmann was able to find analogies in the dry stonework of the domed milk cellars of the Poschiavo valley (cf. 2.b.4). This stone architecture provides an impressive setting for the passage of a railway line from northern into southern Europe. The high alpine ensemble is rounded off by the power stations in Palü and Cavaglia designed by Hartmann (1927; cf. 2.b.7), which are not far from the railway line.