THE "IRON HOUSE" IN GRAZ

Peter Breitling

Preliminary remarks

Events such as this ICOMOS colloquium generally have a long pre-historical background, and the first discussions at which the project begins to take shape were held in the majority of cases some years previously. At the ICOMOS Warsaw, Professor Bornehau had announced that it would be prepared and in a position to participate at the second colloquium on historic iron architecture with an appropriate paper. I agreed at that time, because shortly beforehand in Graz I had experienced the intensive debates about the fate of the so-called Iron House, and I was of the opinion that I had a suitable example for our colloquium with this house.

I recently learnt that our topic was to be restricted to the second half of the nineteenth century, hence the only event of interest for which there was no appropriate documentation of the iron architecture of that period as far as its size and its richness of ornament are concerned, nevertheless it does appear interesting enough to be mentioned here. This is a good reason, I think, to describe its builder as a protagonist of the iron architecture of the latter half of the nineteenth century, and on the other hand, from the history of the construction of the iron houses it is possible to see all the possibilities and chances for pioneering architectural deeds as also the limits which building practice placed on the will for architectural innovation. The Iron House in Graz is also a good demonstration object for the gradual changes which a building, regarded as being remarkable, can undergo and also for the role which respect for tradition can play in such a case; in short, a typical example for the problems in design, construction and preservation with "iron" buildings.

The background

Before we turn to the building itself and the conflict between the construction will and construction reality, I should first like to give you some idea of the historical and local setting in which our object was constructed.

Styria has been an iron-producing country for centuries. Although the tourist advertisements describe it, quite justifiably, as Austria's greenest province, in the narrow valleys and gorges between the green mountain ranges you will find foundries and steel mills, hammer mills, wire-drawing mills and chain factories - the heirs, so to speak, of the small water-driven mills and forges along the rivers Mur, Mürz and Enns, and their tributaries. About 40 km to the north of Graz is the town of Eiseners (lit. 'Iron Ore') with its famous Erzberg - Ore Mountain.

To digress for one moment, in Vordernberg, near Leoben, whose erstwhile flourishing steel industry shut down at the turn of the century, it is possible to visit one of the most interesting industrial monuments in our region, namely a foundry from the eighteenth century whose water-driven works maintained itself preserved so faithfully that it is just as though the guildsmen and miners had only stopped working yesterday.

Another instance in the state capital of Styria iron and steel would have become commonplace construction materials at an early date, however, that was only the case in a very small area. Iron came into general use for courtyard galleries, balconies and staircase rails - as the ironwork on the historic will often bear witness to - only with an enormous variety of design, the project for the Iron House in Graz was drawn up already prior to the 1848 revolution, and it is probably among the earliest examples of its kind in central Europe, as opposed to the rich inheritance of iron and steel structures of the late nineteenth century which are the concern of this colloquium.

Thus, although you are now to be presented with a sort of small "trip card" from the early nineteenth century, and although the Iron House in Graz is not a particularly spectacular document of the iron architecture of that period as far as its size and its richness of ornament are concerned, nevertheless it does appear interesting enough to be mentioned here. This is a good reason, I think, to describe its builder as a protagonist of the iron architecture of the latter half of the nineteenth century, and on the other hand, from the history of the construction of the iron House it is possible to see all the possibilities and chances for pioneering architectural deeds as also the limits which building practice placed on the will for architectural innovation. The Iron House in Graz is also a good demonstration object for the gradual changes which a building, regarded as being remarkable, can undergo and also for the role which respect for tradition can play in such a case; in short, a typical example for the problems in design, construction and preservation with "iron" buildings.

Fortunately enough, for my account I was able to draw upon good records as far as the external circumstances of the planning, construction and reconstruction process are concerned. The facts about the history of the construction of the iron House were only played by Friedrich Bouvier in an article for the "Historisches Jahrbuch der Stadt Graz. However, there has as yet been no research into the background of the slight importance of iron architecture in Graz, so that at this colloquium, only able to offer you a certain amount of speculation on the basis of limited knowledge.

Until the First World War, Graz was the "Pensionopolis" of the Habsburg Empire, a centre of settling in Graz to spend their well-earned retirement there. In contrast to the provincial capital's central role in commerce, administration and culture, industry only played a subordinate role. The entrepreneurial element was, it is true, present, but not dominant, something which has, by the way, not changed right down to the present day.

The structural environment in Graz was particularly characterised by Renaissance and Baroque architecture, a feature of the city's overall appearance which has also survived until the present. Although Joseph II. sought to reduce the flesh of tradition at least he left the architectural scene in Graz almost untouched. The artistic movements around the middle of the last century and the Vienna Secession also had hardly any influence in Graz. A very characteristic
example of the cautious and tradition-bound basic approach by the people of Graz to building matters is the commission awarded by the city to the Viennese archtects Helmer and Fellenl in 1898 in which it was expressly stipulated that the opera house was to be constructed in accordance with Fischer von Erlach's design form. In Graz it would seem that as far as architecture was concerned, Schopenhauer was the guiding spirit with his remark that there was nothing left for the architect to invent. This was inherited from the contemporaries in that art, as also in sculpture, the striving towards an ideal is linked to copying the ancient.

The Project

However, let us now return to the Iron House. The bridgehead square through which the Hinterstadtplatz, now the Stadthausplatz, which Konrad Kreuzer shows in the rebuilding stage in his tempera painting from 1847, had been an important and busy bridgehead from the earliest history of the city of Graz and had become even more important with the construction of the chain suspension bridge in 1845 as a central point outside the old city proper. A young Graz architect by the name of Johann Benedikt Witsam, who had already made a name for himself a few years before with his unorthodoxly designed, so-called "Witaflash Coliseum", immediately recognised the interesting potentials from the city planning point of view with this square at the point of intersection of the most important bridge crossing and the newly constructed embankment road. In the period prior to the 1848 revolution this new roadway along the embankment of the Mur did not fulfil any particular but to and it only really made an enormous difference in the second half of the nineteenth century. Witham apparently foresaw that this would happen. At all events, he extended a narrow piece of land which he already owned at Hurnvorstadtplatz by the purchase of a piece of land which had been left over after the water regulation works along the river and the construction of the bridgehead, and planned a noble coffee house at this spot. Witham had acquainted himself with the new construction material iron and with the new construction methods which he had to know on journeys to Italy and Germany. If you examine his design from 1846, parallels become apparent with the monolithic stone beam system of the ancient world. It was something, by the way, which did not prevent his recommending architects that in view of the threat of a "gigantic vacuum" they should keep to tradition.

In 1932, Wolfgang Horrass wrote, in my opinion, completely correctly, that it was only possible to do justice to the architects of the nineteenth century if the simultaneity of both these tendencies is not essentially an anxious clutches complicated by the immediate vicinity of a firm desire for something new and one's own.

In Witham's case, the firm desire for something new and of his own was apparently particularly pronounced. His first project was surely the attempt to design a modern building without concessions to local tradition or style. His iron house was intended to radiate the lust of a new age. Admittedly, before the plans of Witham's plans were revised on several occasions, and in the course of this they lost much of the reckless fervor of the original design. The crowning sacrifice that nobody was hurting by the coffee house store was given the cast-iron skeleton which it had originally intended the whole house should have. A balcony running around the facade emphasised the joint between the lower floors and the delicate, pavilion-like iron structure of the upper storey with its flat roof terrace. The highest point of the structure was a garret-like small structure, also with a flat roof.

A view painted by the Graz artist Johann Vincenz Rein from August 20th 1848 shows the Iron House as a two-storey, cast-iron skeleton structure, which gave rise to the wrong impression that the Iron House had originally looked as Rein had portrayed it and that it had only been rebuilt at a later date. The date of the illustration proves, however, that Rein did not keep to the project which was almost complete at that time, but instead used the original plan as drawn by Witham, which had not been used, as his basis. In the centre of the building, a spiral staircase rose leading up from the cellar to the roof terrace. The whole upper storey served as a coffee house. It was only divided up into rooms of differing sizes by thin partitions, and through the transparent glass-cast-iron construction there was a clear view of the Murvorstadtplatz, the city centre and the castle mount. In fine weather it was possible to serve coffee on the roof terrace.

The novelty of the new building must have exercised a great fascination on the population, at all events, the Café Meran in the Iron House became one of the most popular Graz coffee houses.

Construction Problems

The constructive boldness in the design of the roof which Witham had employed, in contrast to his caution in the ground floor area, soon proved his undoing. The top covering of the house was the asphalted covering of a single sheet of metal which was painted. As a result of weathering, cracks appeared in the asphalt surface, and the water poured continuously in rainy weather, so that during a storm at Whiteneu 1550 the ceiling collapsed. A later chronicler wrote that it must be regarded as a real miracle to have survived as a result of this. To quote from the newspaper article concerned: "... the then lessee of the coffee house would seem to have had an enviable degree of comparsion. For, right in the middle of the catastrophe, he managed to write a comprehensive report about it for the city authorities, beginning with the words 'For the past half hour, the ceiling of the terrace of the Iron Coffee House, of which I am at present the lessee, is beginning to collapse, and in such a way that the staircase is now covered with stones, lumps of cast iron and bits of wood'..."

The result of this mishap was designs for a roof for the house with a classical roof frame. In 1851 a project was first discussed in which the large terrace was to be roofed over, as the small terrace on the coffee house store would have been in its place. In 1852 then came a plan for the complete roofing over of the building, including the garret. Witham was so despondent about the loss of the
roof terrace that he sold the house in 1852. In the mid-eighteen-
ties some minor alterations were made inside, after that the house
remained unaltered until the turn of the century.

Reconstruction and Alterations

A new era began in 1906 when the Lechner brothers took over the house
in order to convert it into a department store. The Kaufhaus Brüder
Lechner, which still retains its name even today, although it now
belongs to a different company, was obviously a very dynamic insti-
tution, because already by 1910 considerable reconstruction and extension
work had to be carried out in the Iron House. The Lechner brothers
bought the existing house to the north. Lechner remodelled it to adapt its character to that of the Iron House by a change in
the façade. According to the minutes of the negotiations of August 5th
1910, this adaptation was to be attained by the following means:

- Putting the eaves all at one height,
- The same cornice finish in profiled cast iron,
- Enlargement of the window openings in the second story and
adaption to those in the Iron House.

The façade plan by the architect Führer, which was as required by the
minutes of the negotiations, was not then carried out. All that was
done was to raise the eaves to one height, whereas the enlargement
of the windows was not carried out. In keeping with the spirit of the
time, the façade on the wing along Lendkai was given a palace-like
character, something which was further emphasised by a balcony above
the entrance to the building.

In the years leading up to the First World War, the Lechner brothers'
completely designed further neighbouring buildings and, in the end, also
the Iron House itself which they had originally only leased from the
owners for twenty years. The alterations which were carried out between
1910 and 1914 are a good example for the willingness on the part
of wealthy owners to provide room for aspects of modification and
adaptation, and they show the skill which the architects and builders
of that period had in dealing with existing buildings. On the ground
floor, a delicately framed wooden shop-window frontage, matching the
elegant cast-iron façade of the upper storey, was constructed in front
of the solid walls. If you bear in mind the fact that the form of the
house attained after the changes just described remained unchanged for
several decades, then it is hardly surprising what position the Iron House
occupies in the consciousness of the people of Graz. The house is viewed as
an attempt to raise the building to a higher level, and it has a symbolic and
political function. In the years after the war, the Iron House played a
leading role in the development of the Graz architectural scene. It is not
only an example for a building developed with some degree of conse-
quence from the new construction possibilities of iron. In reply to
the question of why technology itself was still in its infancy. The projec-
tion which first enabled the mass production of steel was patented in 1856,
could thus begin to have an effect in the eighteen-sixties at the

Iron House was left in peace. The only structural alteration was the
construction of a passenger lift. In 1951, the Kastner & Öhler company
took over the store, but have continued to run the business of Lechner Brothers right down to the present. The new owners had all the
bearing interior walls removed and replaced by reinforced concrete
pillars so as to also to provide space for the second storey and
the basement.

Admittedly, as a result of the continuous reconstruction and extension
works, in the end only the outer shell was left of the original building
structure of the Iron House. The remaining iron columns and the last remnants of the outer shell were removed at the end of the nineteen-thirties. Work began on the
western façade, and it was reconstructed to the plans of the architect
Bruno Fiedler in such a way that nothing was changed in the Lechner architecture in this section. Because of the economic difficulties in the
thirties, no alterations were made to the remaining façades, but
although a complete rearrangement did not come about among other
things because the building was classified as a historical monument at
a fairly early date - through the large number of 'small improvement
works', the façade gradually changed its appearance. Conceived originally
as a transparent and delicate glass and iron construction, with
this aspect even further heightened by the reconstruction carried out before
the First World War, with the structural alterations of the inter-war and post-war years the building gradually instead became an
impenetrable and repelling structure.

The lack of understanding for the qualities of this unique structure
is shown by the extension project the Kastner & Öhler company had for
their Lechner brothers' branch in the early nineteen-seventies, which
admittedly had just as little success as the Palai project from 1916. In
order to achieve their aim of an external change as well as
as possible, the Kastner & Öhler company had demolished a handsome old
burgesse's house in the Mariahilferstrasse without permission and had
just as much success with this, and the乔治 actions that resulted from this had
been dangerous. However, this only incensed the authorities and public
opinion against them, and their action had the indirect result of a
spectacular change in Graz building policy.
The 'Lechner Brothers' extension project and the demolition without
permission of the house in the Mariahilferstrasse, together with some
other ruthless projects and measures, gave the impulse for a giant
'Save Graz Old Town' collection of signatures, which finally resulted in
the passing of legislation for preserving Graz Old Town in 1974.

It is hoped that this old town preservation law will also provide a chance for renewal and, may be for restoration for what
still remains of the Iron House and which is still greatly treasured by
all historically interested parties, despite its 'remnant character'.

Concluding Remarks

In conclusion, I should like once again to deal with the question of
why in the capital of the iron-products industry of Styria there was only one example for a building developed with some degree of conse-
quence from the new construction possibilities of iron. In reply to
the question of why technology itself was still in its infancy. The projec-
tion which first enabled the mass production of steel was patented in 1856,
could thus begin to have an effect in the eighteen-sixties at the
earliest. The system of testing material and following that the standardisation only came into being in the eighteen-seventies. Even for the construction of the Frankfurter Operahouse, which took place about 1860, an iron roof frame was rejected as being too expensive. The standardisation in the eighteen-seventies, architecture had no other choice than to build in stone and all attempts at using iron construction were, essentially, more or less just tampering."

If one reads this and bears in mind that the majority of cast-iron structures were only constructed long after the iron house in Graz, that the relevant publications, such as the famous paper by James Bogardus on "Cast Iron Buildings: Their Construction and Advantages" did not appear until the eighteen-fifties, then the magnificent achievement which Johann Benedict Withals's Iron House represents becomes clear. On the other hand, however, the building's very slight practical resonance also becomes clear. Even today, our society still tends to treat concepts which do not lead to immediate success by completely rejecting them, instead of learning from the mistakes and carefully continuing with the development of what has been begun.

THE KURHAUS THEATRE FROM 1886 IN AUGSBURG-GÖGGINGEN

Vincent Mayr

The first impression one gains from a modern picture of the Kurhaus Theatre in Göggingen is of little more than a draped building scaffolding, surrounded by trees – probably a building site. However, a building is hidden behind that scaffolding which had already gained mention in Revers Konservatorienlexikon four years after its construction. One can read there: "Göggingen, small town in the Bavarian administrative region of Swabia, is a little spa in that part of the Landkreis Augsburg, near the point where the Sinkel flows into the Wertach, has a fine theatre building, an orthopaedic centre ..." (1)

The Leipzigier Illustrirte paid tribute to the Kurhaus Theatre already in the year of its construction. There we read, among other things: "The auditorium accommodates about 800 people and is at the same time designed as a palm garden. Built completely of stone, glass and iron, the building is 22 m wide, 26 m long and 16 m high. There is a sunken area on the ground floor of the palm garden for the theatre stalls, surrounded on three sides by a flower bed with exotic plants. The stalls boxes, which are also decorated with palms, are on a higher level around this flower bed. The dress circle is reached from the stalls up two staircases. It is divided up into individual boxes by flower stands. The iron pillars passing through the balustrades bear the stone vaulted ceiling which rises in lanterns up towards the cupola crowning the whole. These lanterns or vaulting are closed off by large round-arch windows at the pillars. Going out from the foot of these arched windows are sky lights, which at the same time form the ceiling of the dress circle, with coloured glazing, which together with the outside windows, also glazed with stained glass, give the whole structure a unique appearance." (2)

So much for the contemporary report. It should be added that the technical equipment was the most modern of the day. It included hydraulically driven stage machinery, electric lighting and a central hot-water heating system. Before going into further details, I should like to briefly present the most important details about the original owner and builder and the architect, Friedrich, Ritter von Hessing (1839-1918) had such a great success as a trained cabinet-maker and organ-builder with the construction of orthopaedic apparatus, that he founded an orthopaedic sanatorium which was also supported by the later Imperial Chancellor, Chlodwig, Prince of Hohenlohe-Schillingsfürst, among others.

Apart from in Göggingen, Hessing also built sanatoria in Reichenhall and in Rothenburg ob der Tauber (with the name Wildbad) which all, apart from having carefully conceived functional efficiency and being impeccably constructed, placed the quality of "magnificence" at the service of the matter and the architect - cure and recreation in the company of people of like convictions. (3)

Hessing's architect in Göggingen was Jean Keller (1844-1921) who had moved from Darmstadt to Augsburg in 1867 where he was granted the right to open a technical office in 1872. In Augsburg, Jean Keller built, among other things, the main building for the district exhibition in 1868 and, in 1894, the extension to the concert hall; he also drew up projects for a Bismarck Hall. (4)

The Kurhaus Theatre was opened on the 8th May 1897. It was one of the first multipurpose buildings of the day. Theatrical performances, lectures and concerts were given here. At the same time, the building served as a pump room and ballroom for the spa establishment of the time. As the building stands completely on its own, the furnishings