# Architecture of the Past versus Contemporary Design: Postwar Reconstruction as a Reflection on Construction

#### Maria Irene Lattarulo

DICAR - Department of Civil Engineering and Architecture, Politecnico di Bari Via E. Orabona 4, Bari, Italy 1.mariairene@libero.it

#### **ABSTRACT**

Reconstruction or re-construction? Post-war reconstruction in the 20th century in Europe was the chance to reflect on the relationship between architecture of the past and contemporary projects, and to bring into the building practice all the theoretical speculations conducted up to that point around the themes past/present, tradition/modernity. The debate was particularly intense in Germany, where the magnitude of the devastation put technicians and intellectuals in front of the problem of the recovery of urban life. At first, the early post-war years were exclusively dedicated to the urgency - among huge financial difficulties - to provide citizens with a roof and minimum standards, as well as to save and rebuild those buildings which, if left in ruins and exposed to the weather, would become inexorably lost. Afterwards the architects, both modernists and traditionalists, were called upon to take a position on the architectural heritage of the past; they had to reflect on techniques, language, traditional forms of the building, considering them according to the altered sensitivity (modern Kunstwollen) of the 20th century. From this point on, different positions developed in Germany around the theme of reconstruction, with two extremes: on the one hand the "retrospective reconstructions" (reproposal of the image of ancient buildings), on the other hand the socalled "interpretative reconstructions" (in this case, the reading and understanding of the ruin becomes the starting point for the new architectural design, also paying attention to the relationship with the urban fabric). Hans Döllgast's and Joseph Wiedemann's works in Munich belong to this latter position. In their reconstructions, the ruin is distilled down to its architectural substance and the decoration is reformulated in rigorously simplified shapes. This attitude allows them to bring out the constructive rationality of the building, where tectonic logic becomes architectural language.

**KEYWORDS:** Wiederaufbau, Döllgast, Wiedemann, architecture, construction, reconstruction, tectonic.

#### 1 INTRODUCTION

"Je dis que la beauté qui naît des mesures et des proportions, bien loin d'avoir besoin de l'accompagnement de la matière et de la delicatesse du travail et de l'execution pour se faire admirer: Elle éclarte au contraire et se fait sentir dans l'ordre, pour ainsi dire, et dans la confusion de la même matière et du travail." (Blondel, 1675)

"In the bombed cities, planners and citizens shared a consciousness that the bombing had created a unique situation. Some viewed it as an opportunity to introduce needed changes; others viewed it as a proof that change had to be resisted in favor of recapturing the special spirit of the vanished towns" (Diefendorf, 1993).

With these words, Jeoffrey Diefendorf perfectly describes the situation that many European cities heavily damaged by bombing during the Second World War have in common. On the one hand there was the desire to faithfully reproduce the pre-war image of the city, on the other hand the desire to take advantage of the gaps left by the destruction to put in practice the theories of architecture (about city and building) developed in the early decades of XX century to respond to the needs of the modern city.

In particular, reconstruction in Germany was interpreted as a fast and efficient tool to look to the future and erase some of the saddest pages of its history linked to the Nazi period. In the matter of the theme of the intervention on damaged buildings, therefore, different schools of thought emerged, questioning the very idea of reconstruction: "Right after the war some planners rejected the term Wiederaufbau, or reconstruction, as misleading, and by the mid-1950s nearly all avoided talking of Wiederaufbau and spoke instead of Aufbau or Neubau, that is, building expansion or new building" (Diefendorf, 1993).

Munich was among the most heavily damaged cities during the war: in May 1945, about 60 percent of the Old Town was either damaged or completely destroyed. In Munich the debate between traditionalists and modernists for the reconstruction of the most important buildings of the city was intense. However, between the two extreme positions - retrospective reconstruction and ex-novo design - the position of those who manifested a "critical" attitude towards the ruins emerged.



Figure 1: Munich after the Second World War. Ruins of the Alte Pinakothek (Web-1)

They were guided by the desire to stand in continuity with the architectures of the past without however denying or forgetting the last decades reflections about language, techniques, architectural forms. Hans Döllgast and Josef Wiedemann were among the leading exponents of this current, and authors of some of the most important reconstructions in the city of Munich. Their attitude towards the architecture of the past primarily comes from their education, based on the study of the ancient Roman ruins as a tool for investigating and understanding the most general themes of architecture: language, form and ornament.

For this reason, their reconstructions are real re-constructions, or reflections on the building itself, starting from the legacy of the past.

## 2 AFTER-WAR EXPERIENCES: HANS DÖLLGAST AND JOSEF WIEDEMANN

Hans Döllgast (1891, Bergheim - 1974, Munich) was an important architect and professor at the Technische Hochschule in Munich, although his "name appears neither in encyclopedias of world

architecture nor of modern architecture" (Nerdinger, 1996). Far from the retrospective reconstruction and the radical modernization of the building, his approach was that of "interpretative reconstruction" (*interpretierenden Wideraufbau*). This attitude linked his reconstructions to Rudolf Schwarz'ones. About Schwarz's reconstruction of Paulskirche in Frankfurt, Döllgast wrote: "I find the preservation of the ruins, as well as their accurate restoration, possible, but I think both should be the exception, and the rule should be the interpretation. You should look at the old building not as something dead, but as something alive, and start with it a dialogue, listening carefully to what it has to say [...], setting it as something live into a new organism"(Peter, Wimmer, 1998).

Hans Döllgast was the author of the reconstruction of the Alte Pinakothek, one of Munich's architectural masterpieces in Maxvorstadt district. The Neo-Renaissance edifice, built by architect Leo

von Klenze between 1826 and 1836, was severely damaged in bombing raids in 1943-44. Alte

Pinakothek, as we know it today, is the last of a series of proposals drawn up by Hans Döllgast to restore

the unity of the building by conserving its historical character and leaving the image of postwar ruin intact.

Yet it would be an understatement to refer Döllgast's name to this single intervention, which was strongly criticized by his peers, by the contractor authorities, and by a great part of the architectural

German overview, up to consign to oblivion its author for decades after his death.

Among Döllgast's less known works, however, there are also some reconstructions in the historic cemeteries of Munich. In particular, Döllgast rebuilt the chapel of the Ostfriedhof, planned in the late XIX

century by Hans Grässel (1860, Rehau - 1939, Munich) in Neoclassical style and damaged by the air raids of 1944.

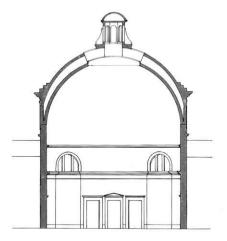
Grässel's chapel consisted of a cylindrical volume, with four smaller diagonal chapels, having a diameter of 20 meters and a total height of 30 meters, and was inspired by the Pantheon. Bows of the smaller chapels were screened by thermal windows. A lantern was placed at the top of the dome, with a

glass ring at the base. The chapel was built in brick in the lower part, while the dome consisted of a suspended shell of Rabitz structure (system constituted by a wire mesh skeleton and plaster), supported

by curved trusses radially placed. Internally, there was no solution of continuity between the cylinder and the inner shell. Moreover, the entire inner surface was completely painted with figured frescoes on the dome, and imitations of stone on the cylinder.

Döllgast's intervention does not appear on the outside of the chapel, which remained almost unchanged compared to Grässel's version, but rather in the configuration of the interior space. The first

noticeable difference concerns the inner proportions. In Grässel's chapel, the ratio between the height of the cylinder and height of the dome was about 1:1, in Döllgast's this ratio is 2:1. As in the pre-war building, the new dome consisted in a double shell.



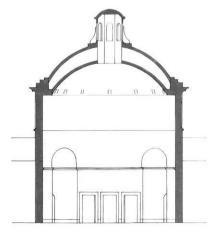


Figure 2: comparison between Grässel's chapel (on the left), and one of the first hypothesis of Döllgast's chapel (on the right). (Peter, Wimmer, 1998)

However, while in Grässel's version it is possible to see the whole outline of the shell, in the reconstruction plan the lower part of the inner shell is missing. The gap between the cylindrical wall and the shell is absorbed by a projecting cornice; its depth shows the thin thickness of the Rabitz construction kept suspended by a metal frame. Through this solution, Döllgast emphasizes the set point of the dome, which creates a discontinuity with the cylinder below. At the top of the shell Döllgast places a new lantern, responsible for the overhead lighting.

Another difference between Grässel's and Döllgast's solution lies in the treatment of the interior surfaces (figure 3, 4): decorations, that covered all surfaces in the old version, are replaced by a uniform

surface; homogeneity is both in the material and in the color . The ornament in Döllgast's chapel is limited just to a black and white checkerboard pattern covering the lower part of the cornices. In the new

proposal, the cylindrical wall shows its dense brick texture, while the interior surface of the dome is completed plastered, also to better reflect the light coming from above. Döllgast eliminates all the paintings in imitation of stone placed on the cylindrical walls; the only stone elements are the door

frames, which give great prominence, by contrast, to the wall structure. Natural stone is also used in the original floor with a radial geometric scheme, preserved intact under the rubble of the collapse.

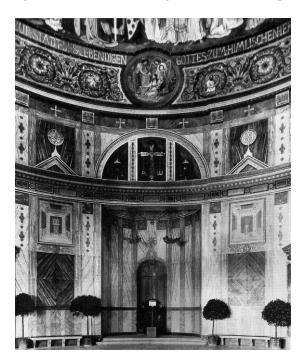




Figure 3, 4: inner space in Grässel's chapel (on the left), and Döllgast's chapel (on the right). (Peter, Wimmer, 1998)

Through the comparison with Grässel's chapel, we understand how Döllgast wanted to propose a new and more essential perception of the interior space of the building, also through the simplification of forms and the intentionally performed bareness of material. First of all, the alteration of the proportions shows that the predominant element of the building is not the dome, no longer complete in its outline, rather the cylindrical surface. Moreover, omitted the rich decorations of the original structure, the only thing now conforming and qualifying the space is the overhead light. Light, passing through the central lantern, is reflected on the uniform and clear surface of the dome, and then - muffled - on the brick walls. The consequence is a state of semi-darkness in the low part of the chapel, which accentuates the contemplative character of this space. In addition, the completely bare surfaces, except for the white and black patterns, make the architectural volumes evident: the cylinder, the dome, the smaller chapels on the diagonals, the projecting cornices. It is an essential space; each decoration would be superfluous. The spatiality of this chapel is reminiscent of that of the ancient Roman buildings.

Josef Wiedemann (1910, Munich - 2001 Munich) was a Döllgast's pupil at the Munich Technische Hochschule. In 1956 he started working as a professor at the Technischen Universität in Munich. Even while teaching, and after his retirement in 1976, Wiedemann continued to work as an architect. In this way, he had the opportunity to work on some of the symbols of the city damaged by the war.

Among these, the Glyptothek, which encloses Königsplatz together with the Antiques Collection and the Propylaeum. The building was erected under King Ludwig I from 1816 to 1830 to house his collection of Greek and Roman sculptures, and it was designed by Leo von Klenze as a temple in a Greek-Ionic style. While the front appears like a Greek temple facade, the interior, with its vaulted ceilings, is reminiscent of Roman baths.

Klenze's final plan shows a one level building, measuring 66x66 m, closed toward Königsplatz, with a Ionic portico, and consisting of a series of vaulted rooms placed around a square courtyard of

27x27 m laying 1,40 m under the level of the halls.

Originally, the rooms had coloured marble floors, walls and arches decorated with coloured stucco (Figure 4) and were lit by dim daylight from half-rounded windows (lunettes) in the upper part of the courtyard walls. The building was badly damaged by bombs in 1944; in this occasion, the stucco work and frescoes in the rooms were destroyed. Without a provisional roof, the stucco decoration fell into disrepair over the course of the following years.

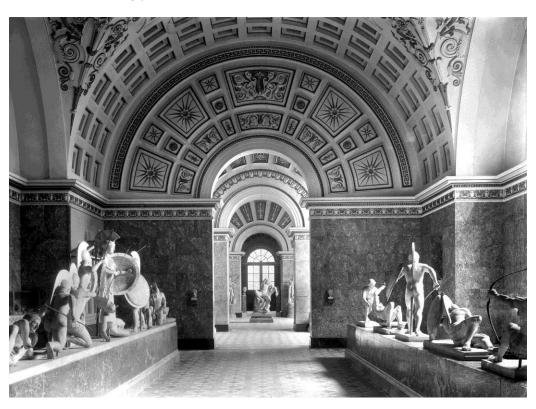


Figure 5: inner space in Klenze's Glyptothek. (Web-1)

After debates about the opportunity to reconstruct the building, and after discussion of plans for interior reconstruction, Wiedemann was commissioned in 1964 to draw up plans for the building: the restored Glyptothek was reopened in 1972. Wiedemann's aim was to reconstruct the neoclassical structure in the most faithful manner possible. The structure was put in order, the floor throughout the building was paved with shell-limestone slabs, the rooms were freed of their original Neoclassical ornaments, the red of the bricks was subdued by a thin mortar whitewash. In this way, all the elements of the structure, executed with the greatest care by Klenze, are directly performed and generate a new

tectonic image of the building. Moreover, the rebuilding after the War provided an opportunity for some improvements. Wiedemann, as well as Döllgast for the Alte Pinakothek and the chapel of Ostfriedhof, altered the plan of the interior spaces to solve some problems of Klenze's building. Wiedemann raised the floor of the Court by 80 cm; the insufficient light of the room was solved by the insertion of large rectangular windows below the lunettes. By these solutions both the Court and the interior of the building have benefited. The exhibition rooms, which were poorly lit before, now receive ample daylight, while the Court no longer looks like an empty and useless spaces. In addition, the two have been brought into a new architectonic and visual relationship.



Figure 6: inner space in Wiedemann's Glyptothek. (Web-1)

### 3 CONCLUSION

Hans Döllgast's and Josef Wiedemann's attitude shows how reconstructions after the Second World War became an opportunity to carry on a reflection on building. Both architects started from the knowledge of the damaged building: reading structures, architectural elements, shapes and details and understanding the architectural logics – like in front of a ruin of antiquity - was the first step towards the reconstruction design. The plan, then, not merely aimed to reproduce the prewar image and shapes, but used the same elements, reinterpreting them.

The formal simplification becomes the tool to show the architectural elements constituting the structure of the building: cornices, columns, lintels, string courses, connections, are themselves syntagmas

of the architectural language of the building. The lack of decoration, one of the more evident data in the

comparison between new and old building, corresponds to a specific desire: to give up the whole apparatus of forms and inflections that would have framed the building in that particular historical period. Döllgast and Wiedemann, instead, deliver their architecture to a sort of a-temporal dimension.

The architects' attitude shows the will to exceed the *Kunstwollen* (will of art) of the era, responding to a broader architectural vocation, where the language of construction, reduced to its essential

components, expresses the real character and substance of the building. In this way, coincidence between *Kunstform* (artistic form) and *Kernform* (core-form) - to quote Karl Bötticher - becomes clear. The comparison between old and new is enriched with new and fruitful reflections on construction, which, without denying the very identity of each building, put it in relation with other architectures distant in time and space, and enrich the reconstruction design of a higher degree of awareness.

#### **REFERENCES**

- Altenhöfer, E., 1996, Hans Döllgast and the Alte Pinakothek Designs, Projects and Reconstructions 1946-73, in 9H, No. 9: on continuity, editors R. Diamond, W. Wang, Cambridge/Oxford.
- Bayerische Akademie der schönen Künste (ed.). 1985. Süddeutsche Bautradition im 20. Jahrhundert, Callwey, München.
- Blondel, F., 1675, Cours d'architecture einseigné dans l'Académie Royale d'Architecture, Paris, P. Auboin et F. Clouzier, pp. 774-778.
- Bötticher, K., 1852, Die Tecktonik Der Hellenen, Riegel, Potsdam.
- Diefendorf, J., 1993, In the wake of war: the reconstruction of German Cities after World War II, Oxford University Press, p. xvii.
- Ehrmann, R., Wiedemann, J., (eds.), 1981, Josef Wiedemann: Bauten und Projekte, exhibition catalog (Munich, Technischen Universität München), Schottenheim KG, Munich.
- Nerdinger, W., 1996, Hans Döllgast, An Outsider of Modern Architecture, in 9H, No. 9: on continuity, editors R. Diamond, W. Wang, Cambridge/Oxford, p.56.
- Peter, F., Wimmer, F., 1998, Von den Spuren. Interpretier Wiederaufbau im Werk von Hans Döllgast, Pustet Ver., München, pp.12, 70-83, (translated from the German by the author of the paper).
- W nsche, R., 2007, Glyptothek, Munich: masterpieces of Greek and Roman sculpture; translated from the German by Rodney Batstone, Beck, Munich.
- Web-1. http://www.bildindex.de/: fmla966\_31, fm621038, fm1753090.