

## **St. Johann Baptist Church in Neu-Ulm, from Renovation to Reconstruction. Dominikus Böhm's experience**

Giovanni Carbonara

*Innovation and Heritage, Consortium Argonauti: RomaTre University (DARC) and Polytechnic of Bari  
(DICAR), Italy*

### **ABSTRACT**

The project which stands on a previous building is always a complex task that requires the appropriate technical and cultural knowledge. The architectural survey is the action to reach the full knowledge of a building, to comprehend the history, the composition and the structure.

The architect Dominikus Böhm's experience (1880-1955) is related to the ability to combine different knowledge for the artifact realization.

In 1921 the architect is called by the Neu-Ulm Catholic community to draft a Renovation (*Umbau*) of the *Garnisonkirche*, built in 1857. The project (1922-1926) is to give the building a hall, holding the growing demand for believers. Overcome the need to keep the old style of the previous building, he realizes a new building characterized by the use of reinforced concrete.

The layout plan shows a central nave and two aisles. The outer walls and the tower are built with recycled materials from demolished Ulmer fortifications (Jura limestone, brick and roof tiles). Inside, the contrast between the hollow brick floor, the white walls and the weird vaults, forms a striking spatial creation, especially in the baptistery and the Resurrection chapel. Technology applied in the vault is *Rabitz*: reinforced concrete made without construction formwork. The pillars diagonally separate the aisles. This arrangement emphasizes the expressionist space, focusing the light toward the altar.

Following the 1945 bombing, Dominikus Böhm is called to draw up a reconstruction project (*Wiederaufbau*). Basically he stays true to his previous project, maintaining the appearance and character of the original one; however, he proceeds to replace the collapsed vaults with one's with simplified geometry, also for economic hardship. Moreover, he decided to redefine the side walls in order to capture more light possible.

According to specialists, St. Johann Baptist Church is one of world's most important expressionist churches of the 20th century.

**Keywords:** *Germany, Church, Expressionist space, Concrete, Rabitz*

## INTRODUCTION

Sacred buildings are the field where an architect can explain his personal aspirations and apply his technical knowledge. Roman Catholic doctrines did continue to evolve in the early 19th century, but the liturgical impact of these further changes was relatively bordering in comparison with those of the post-Second Vatican Council period (1962-1965). Finally, Liturgical Movement (1918) made some thoughts on implications of this discussion for the issue of liturgical change. The basic assumption of the inquiry is that in Roman Catholicism, the liturgy represents a primary locus for theological expression. Whatever the belief system or its liturgy, the architect's fundamental mission is to plan a space so as to arrange a sacred ritual right. The space must offer a really gradual transition from the entrance to the altar, usually in a constant sequenced of arrival, orientation and spatial experience. And since, during this process, it is natural to look up in aspiration, the design of roof or ceiling is very important.

One admirable case to this is Dominikus Böhm [1]'s transformation of previous church at Neu-Ulm, Germany (1921), where first darkness, not brightness, is understood as the appropriate metaphor for mystery and religious experience. Daylight, or the lack of it, is one theme that connect many Architects' projects.

A first major commitment to Dominikus Böhm is at the beginning, how to intervene on a building built by another architect in neo-Romanesque style, which requires a transformation that is adequate to the times. Despite the overlap on existing plant, Böhm makes his personal contribution. His previous experiments and preliminary designs show that engages a dominant idea in the transformation. Through the oblique arrangement of the walls Böhm develops his vaults to the ground of the side aisles that unifies the spaces. With a strong sensitivity to a light-mystical guide Böhm realizes a perfect atmosphere inside, according to Christ-centered conceptions of the Liturgical Movement; he always tries to give architectural emphasis to the altar as the physical center of the liturgy and reached along the direction of light.

### Previous building (1857-1923)

Since Neu-Ulm foundation, in 1852 urban planning the city was equipped of religious buildings, two churches, separated by a block, a Catholic (*Johannkirche*) and a Protestant (*Petruskirche*). Both sides were aligned on Augsburgger Straße.

The Catholic St. Johann Baptist church history, also known as the Garrison Church, the Parish Church and the Warrior Memorial Church, begins in 1857. The Imperial Civil Inspector Georg Freiherr von Stengel was the planner who built a hallenkirche in neo-Romanesque style. The churchyard stood until 1926 a monument erected in 1875 to commemorate the soldiers of the 12th Infantry Regiment, in the French-German war.

The Neu-Ulm community grew in number, so von Stengel presented several proposals for the expansion of the church, and in 1904 an association to support the building up of churches (*Kirchenbauverein*) began to raise funds for the construction of a new church on an open area at the Augsburgger Gate.

In 1915, the association held a contest and on that occasion Dominikus Böhm presented two proposals. The outbreak of World War I led a precarious financial situation and then the city of Neu-Ulm could no longer make a new building.

So Böhm frustrated not to see his work, he decided to change the project and was awarded the task of extending the existing church.

## **PRELIMINARY Projects (1915-18)**

In 1915 Böhm realized projects “Horizontal and Vertical” for the competition organized by the city of Neu-Ulm. The projects remembered the early Christian architecture and the Romanesque architecture in Italy that the architect was able to visit during his honeymoon; Böhm’s drawings illustrate a direct confrontation with the early Christian building tradition, on a true construction plan and appreciates the effort to bring the most preserved building of the body mass of the building in horizontal and vertical balance, sticking pleasantly well. The facades of both projects instead show a decline, barely articulated according to the configuration of the architectural decoration.

Around 1917 Böhm, however, modified the project II to build the new church adjacent to an area liberated from Augsburg Gate on Augsburg Straße. Reflections to demolish the city gate came together in two related projects. The construction of the subsidiary church could not be realized, however, for reasons of cost. The Böhm project was praised by the community as it responds to the call for provide the city with a main building in contrast with the Ulm Cathedral, placed in a dominant position, the nearby town of Ulm:

“The nearby town Ulm in Württemberg has the famous cathedral as a monument of the first millennium. What if the Bavarian Danube builds a place of worship as the indelible mark of the second millennium?”

## **Renovation (1921-23)**

November 19, 1921, the Catholic association for the construction of new churches decided to expand the existing parish church. Earlier this year Böhm presented a project for a three-aisled basilica with aisles to flat roofs. The transformation of the church began April 4, 1922, but 19 April 1923 it had to stop work because of economic hardship. On that date it was completed until the entrance transept (*Querriegel*) with its figures on the façade. Since the church is not exactly oriented to the east, but it depends on the predetermined route of the road network, its facade faces north-west.

The extension included not only the construction of the compact vestibule before an enlargement of three naves of the single aisle but also an increase in the annex to the southeast space to accommodate 2,000 people in the future. From the shape of the plant, it is clear that only the semicircular apse fell outside the perimeter wall. For the outer coating, Böhm reused the stylistic the draft made by the Church in memory of the fallen soldiers of the St. Elisabeth in Ulm in 1918, giving up only central gable, heritage evident reference model (classical architecture with Romanesque style). Already provided for by Böhm St. Elisabeth and here even more clearly drawn reason that juts out slightly, the divided atrium (no doubt an abstract quotation of the Ulm Cathedral portal) through three slender acute sixth arches should characterize persistently buildings holy Catholic twenties. The main entrances of which the central is two doors are treated in their height with side entrances and still appear emerging from the high arches very stocky. The horizontal crowning the central part also hides the gabled roof of the building before and makes the church as a strictly cubic building. In fact, it is hidden the bell tower of the previous building located on the corner south of the church by encouraging this impression [2]. Böhm gave to crown the bell tower with spire originally scheduled to tip, opting instead for a pyramidal crown dish.

The entrance is made entirely of concrete and is covered with horizontal bands of local materials, limestone blocks in clear and red brick, evoking the own style of northern Italy, particularly the Romanesque Verona, thus giving a superficial facade duotone. These building materials for the extension works were recovered from core walls of the ancient walls of the church, from the demolition of the local fortress, but also the remains of by beaver tiles as well

as the limestone of the area. The end walls of the entrance transept retain high rectangular windows, concealed from once to cells (*Zellengewölbe*) in reinforced concrete. The façade is crowned by a crucifixion [3] (*Kreuzigungsgruppe*) larger than real [4]. The three statues of the saints on three main inputs are placed in the niches (*Schott*) of pointed arches.

Böhm had foreseen other annexes to the vestibule at the design stage: in the west wing a cross-denominational chapel with baptismal niche. The choir has been extended to include a new sacristy to the east and an apartment for the sacristan south. The architect wanted to consciously sum "simply the actual small annex of the sacristy, the pulpit stairs, tower, etc. [...]" Through the harmonious arrangement of the new building elements and then realize the old nave full balance of the masses ". A drawing of the southwestern facade of the Church of the February 21, 1921 reveals that the original plan of Böhm covered the aisles with a pitched roof. Consequently, the raised basilical would have been marked with both the offset of the facade that with the side walls. The nave would have had the windows of the clerestory to all sixth, while the aisles would have just had high rectangular windows. Böhm once again reworked his plans shortly before the decision of the Association for the construction of the Church. The cross section (as amended October 23, 1921) shows that from now on he was planning the gabled roof above the aisles.

Her stage of the presbytery configuration already established in Offenbach and Dettingen built it only partially through emphasize altar apse to the nave. He decided to place a memorial chapel in the apse of the war and the pulpit inside the classroom. These are all progressive ideas according to the liturgical movement. In addition, the widening of the classroom floor liturgical confirms the approach to new ideals unlike the churches of Offenbach and Dettingen. Böhm planned in the spacious aisles, the walls of which have accrued side altars, separated by a series of six bays lancet from the nave [5]. Realizing an extension of a three-nave parish church after 1918 was contrary to well-established achievements of the liturgical movement.

How to consider the community the nave as an expansion in harmony with the idea of unified space and not as an additional place? This unsolved problem brought Böhm to concentrate on his concepts of expansion of the place as a place of sacrifice culmination architecture Christocentric. He mailed keeping the floor plan so that it was appropriately defined as coinciding with the place of sacrifice. Neu-Ulm is therefore a clear example of how to judge the reorganization of a typical church in the 19th century to suit the interests of the liturgical movement of the 20th century.

Realizing a progressive plan but little revolutionary, Böhm, as St. Joseph Offenbach and St. Peter and Paul in Dettingen, completely broke with the historicist internal architecture tradition. Certainly he likened the traditional building techniques but it took the typical forms, which followed a prerequisite for the acceptance of contemporary sacred buildings within the church circles. In the second phase Böhm used the horizontal stripes on the entire structure of Dettingen parish, which were not present in the first storey of Neu-Ulm, to integrate the new building elements in their appearance with old recovered items, especially the chorus and tower.

### **Reconstruction (1945)**

The church was badly damaged by bombing in Neu-Ulm on 1 and 4 March 1945. All the windows were victims of detonations and the transept was almost completely bombed. The central part survived the attack, but was damaged figure of Christ from the Crucifixion. Even the walls of the aisle were affected, so it was inevitable a complete reconstruction.

The January 20, 1946 Dominikus Böhm was in charge of reconstruction, but the appointment was preceded by lengthy discussions on the costs and structural defects have been highlighted in the historic building. The parish community believed the place of worship too dark from the beginning, so the new plant the partition walls of the side walls were redefined;

He realized larger glass surfaces. Böhm for his own statement, not rebuilt the complicated shape of the vaulted aisles for cost reasons, he restored the once but in its basic form (a barrel vault pointed arch in cross section). The reinforced concrete vault of the transverse space was replaced by a simple vault (ridge) in reconstruction. In order to create more sources of light to the nave, the apse walls between the ribs were replaced by narrow windows. The interior is in fact be uniformly illuminated, but with the expansion is being lost the variation of light-rail from the bright main room for the choir dramatically lit because of the light sources often now directly visible as well as the loss of the previously stained glass.

Böhm in those years he supervised a large number of reconstruction projects and probably for lack of time, development of new liturgical requirements, seconded the wishes of the diocese and the community.

## **CONCLUSION**

After the end of the century, they are distinguished in the Church the end of historicism and the beginning of the secularization of contemporary architecture. Especially the internal focus on this aspect. Under the influence of the old liturgical movement follows at that time the aesthetic desire of the artistic space, harmony of shapes, lights and colors.

Freedom and artistic audacity were the vanguard privilege! The development was somewhat more linear, overlapping eras, movements appeared and disappeared, blended, clashed and prospered as a result of individual initiative and the political and economic relations. Characteristic of this period are the stylistic uncertainty and determination to produce “their own style”.

According to specialists, St. Johann Baptist Church is one of world's most important expressionist churches of the 20th century.

## **Observation**

This paper is part of a wider research on Dominikus Böhm, German architect lived in the 20<sup>th</sup> century, and deepens the structural morphology and constructive innovation. The working hypothesis focuses on the integration between materials and technologies.

## **REFERENCES**

- [1] Dominikus Böhm (1880-1955) was a German architect who gave German architectures a very distinctive, imaginative personality and was one of courageous pioneers of the new Catholic Church. He came from an old Swabian Baumeister family. In Augsburg he attended the building school (Bauschule) and then went to the Technical University (Technischen Hochschule) of Stuttgart. He always revered Theodor Fischer like his stimulating teacher. At the age of 27 years Böhm was a teacher at the Building School in Bingen. Hugo Eberhardt appointed him in 1908 to the School of Building and Applied Arts in Offenbach. In 1926 the Mayor (Oberbürgermeister) Dr. Konrad Adenauer appointed him head of the Department of Religious Art and gave him architecture class at the Cologne School of Applied Art (Werkschule). His contributions to the Catholic Church were honored by Knight Grand Cross of the Order of St. Sylvester (1952). On leaving the teaching profession, he was awarded the Grand Cross of Order of Merit of the Federal Republic of Germany (1950). In 1954 he was awarded the Grand Prix for architecture of North Rhine-Westphalia. The National Academy of Arts Dusseldorf made him an honorary member. Being a practicing Catholic, Böhm considered all churches as the embodiment of his faith.

- [2] This conjecture is demonstrated by Böhm design and photography of Schmölz, expression desired by the architect already in the design phase.
- [3] The crucifixion was invented by Paul Seiler (1873-1934), who created in Dettingen an altar and two statues of the Apostles at the entrance. The figures of St. Otto, St. John and St. Elizabeth on Neu-Ulm portals are to be attributed in all likelihood to Seiler.
- [4] "They tend to edifying free the three arches with enthusiasm even above and have the symbol of Christianity, the crucifixion, which crowns the facade. The wings of the transverse seals superficially make an important contrast. "
- [5] This not only contradicts the writings of van Acken, but also the persistent tendency of the turn of the century for the unified space in the Catholic church. Already before 1900, there are numerous examples that will significantly reduce the aisles in height and width. The spatial structure of the media tends to hurl with higher forms and to reduce the amount of structurally necessary mass.
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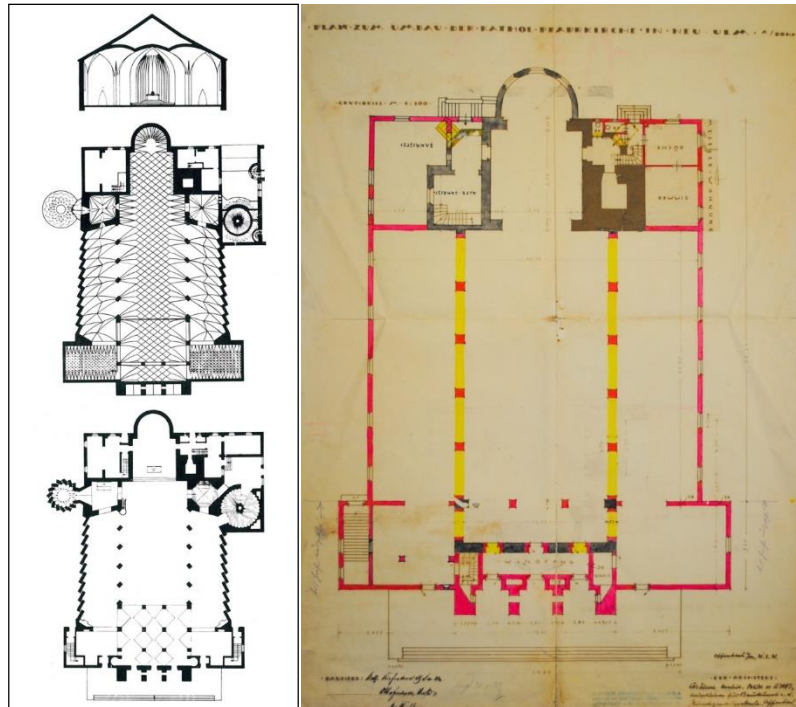


Fig. 1 - Plan, Section Churches. © Hoff, A. (1962) Dominikus Böhm

Fig. 2 - Plan Umbau (1921) © Stadtarchiv Neu-Ulm

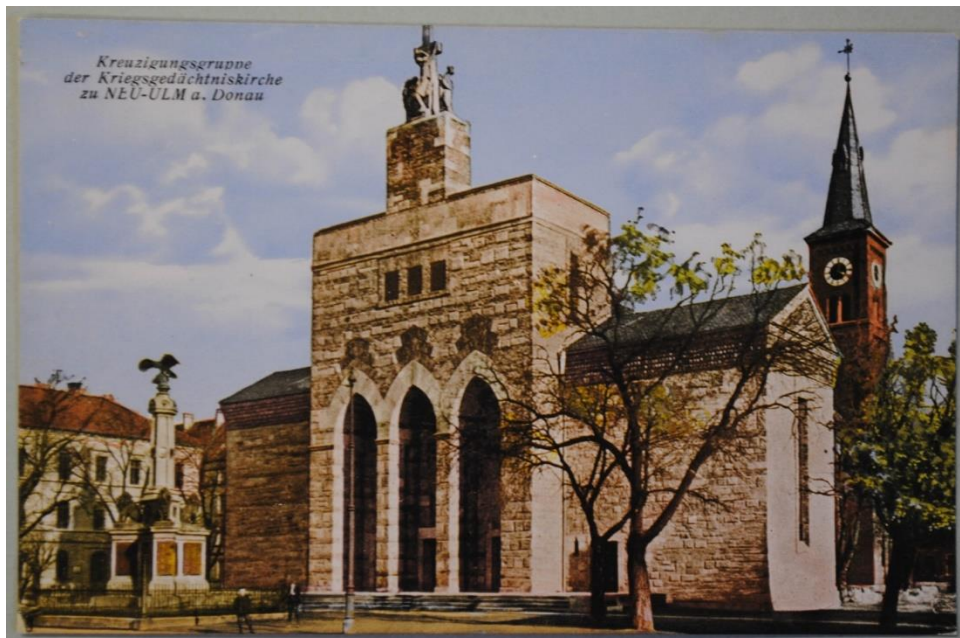


Fig. 3 - External view © Stadtarchiv Neu-Ulm (1921)





Fig. 4 - External view © Giovanni Carbonara (2015)



Fig. 5 - Internal view © Giovanni Carbonara (2015)



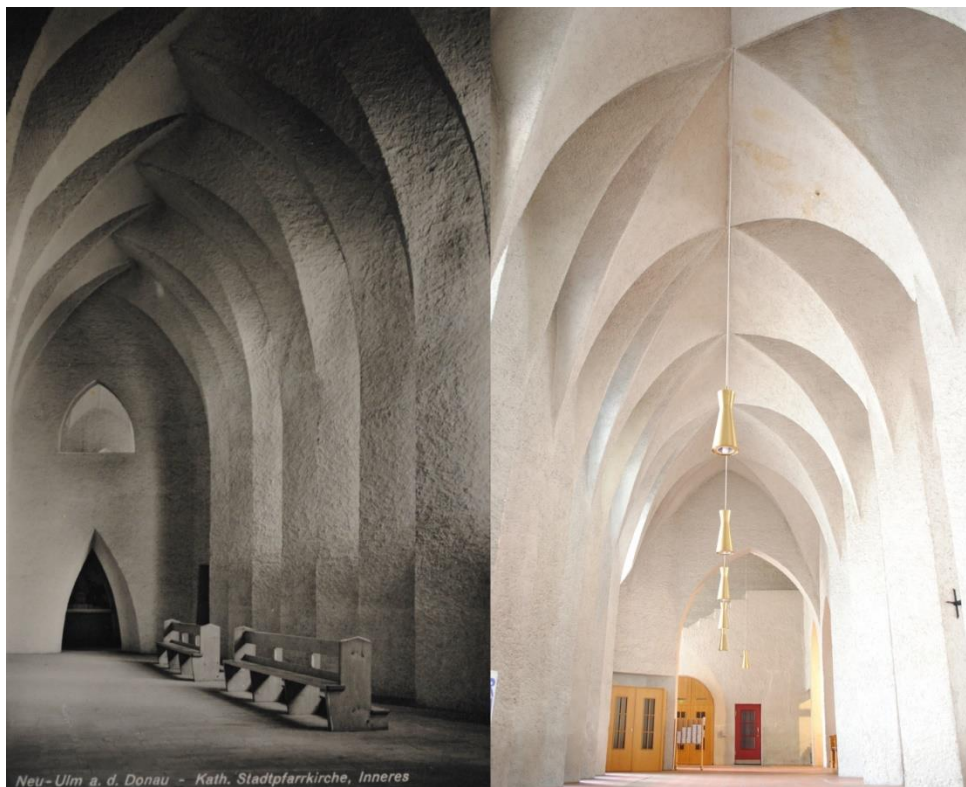


Fig. 6 - Aisles (1927 - 2015) © Stadtarchiv Neu-Ulm

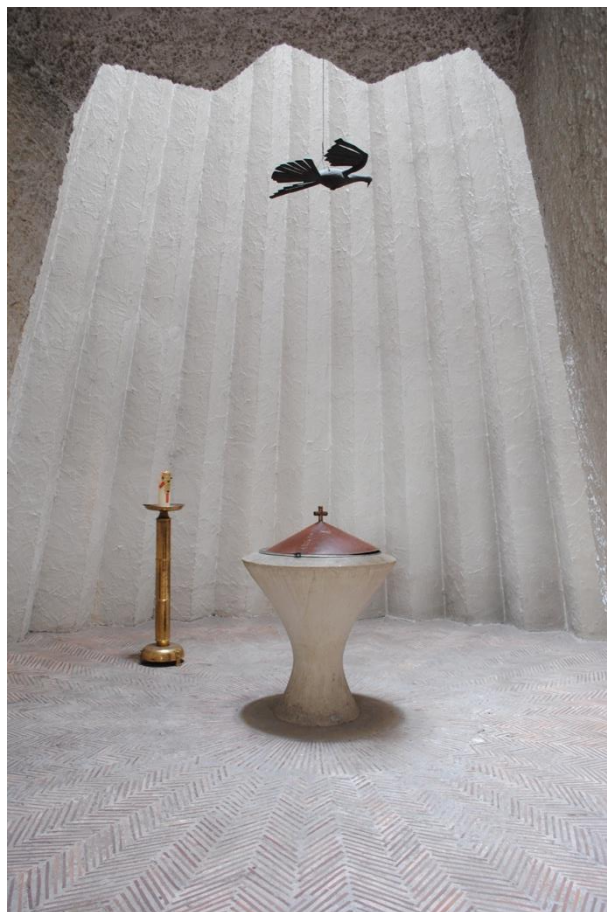
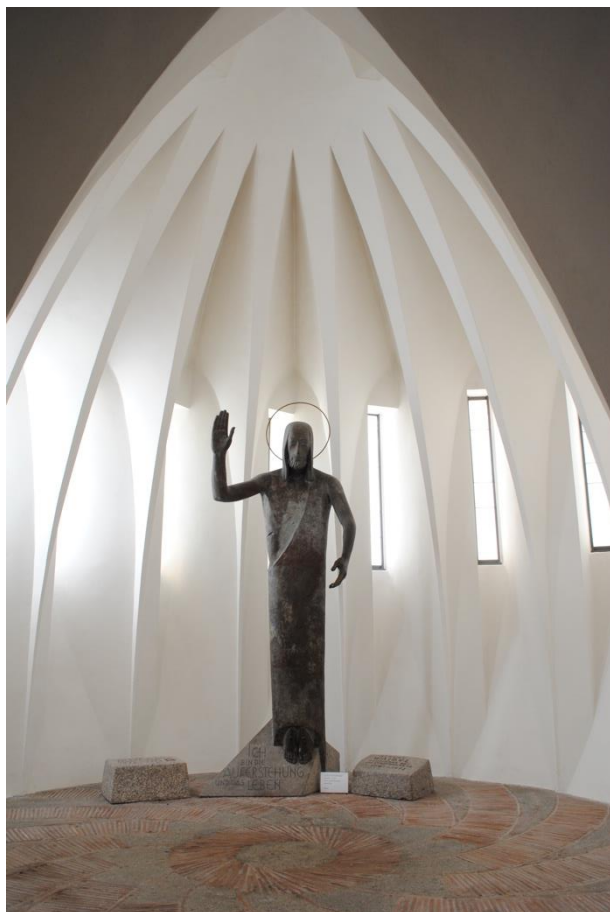


Fig. 7 - Baptistry Chapel © Giovanni Carbonara (2015)

Fig. 8 - Resurrection Chapel © Giovanni Carbonara (2015)



Fig. 9 - Internal view, detail Main Nave © Giovanni Carbonara (2015)

Fig. 10 - Internal view, detail © Giovanni Carbonara (2015)