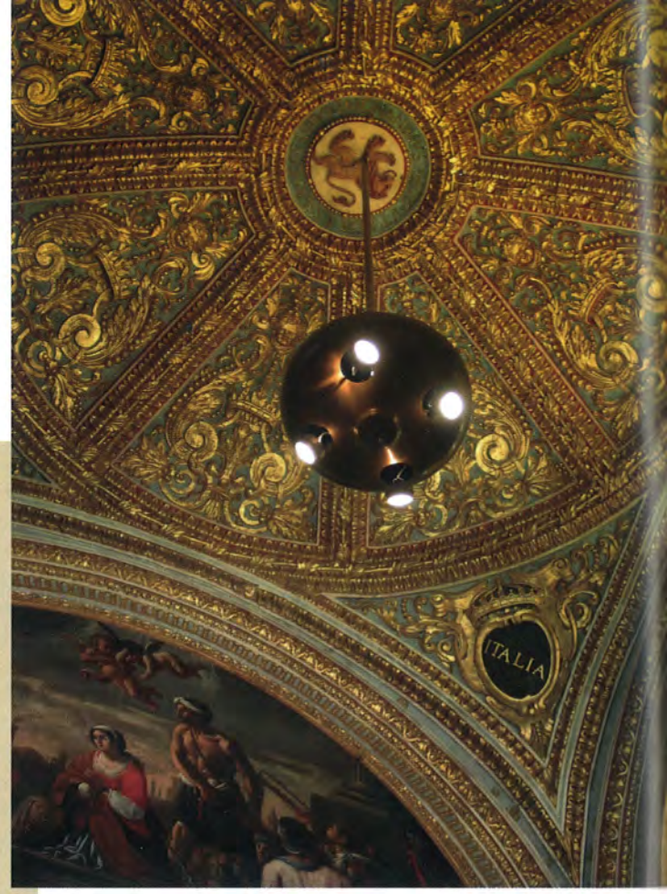
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A New Highlight for St. John's Church in Valletta

By Marco Rotunno



St. John's is the most important church in Malta. Better known as the Co-Cathedral of St. John, it represents Religion, History and Art, at the same time. One cannot leave Valletta without visiting it.

The history of St. John's is strictly linked to the Order of the Knights Hospitallers of St. John of Jerusalem, who ruled the Maltese Islands from 1530 until Napoleon's invasion, in 1798.

After the Great Siege by the Turks on Borgo-Sanglea was driven back in 1565, the Knights decided to build a new, fortified town: Valletta.

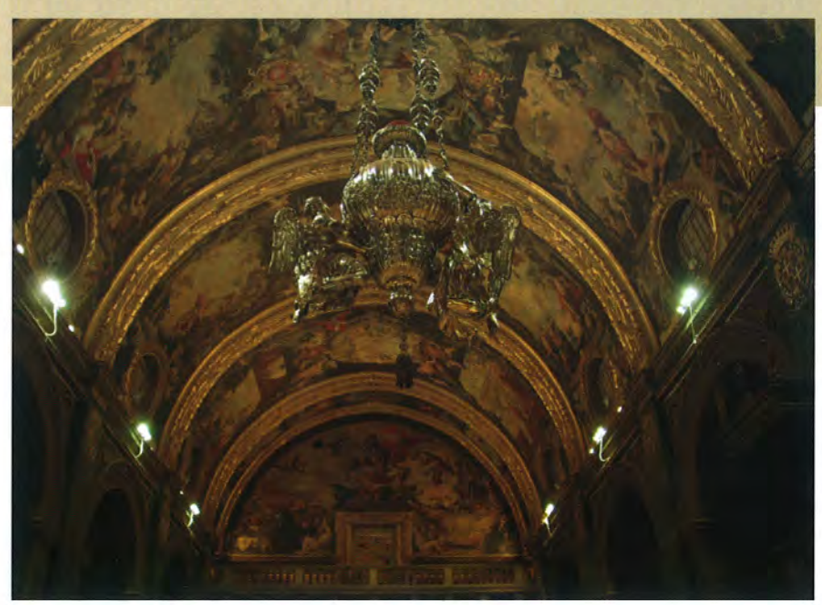
The council of the Order gave the architect and military engineer Girolamo Cassar the task of the project for a convent church, which actually became the headquarters and a symbol of the Order itself.

The works lasted six years, and were completed in 1578, with the consecration by the Archbishop Ludovico Torres of Monreale. Like most churches built at that time in Malta, it has a rectangular plan with an apse at the East end. It also includes a series of 12 side-chapels between the reinforcing buttresses, a solution already adopted for the convent church of the Dominicans in Rabat. Also, the vaulting over the nave appears to be innovative for Malta. The combination of all these features on a single, large scale project, together with a rigorous use of the golden rule proportion (after Leon Battista Alberti), typical of Italian Renaissance, make St. John's a peculiar, significant work.

A second phase in the history of St. John's concerns its baroque re-decoration by the Italian artist Mattia Preti, from 1661 to 1666. Guiding a team of stone carver masters and gilders, and himself painting several pictures and a cycle of frescoes depicting the Baptist's life on the vault, he turned the already beautiful church into a stunning baroque masterpiece.

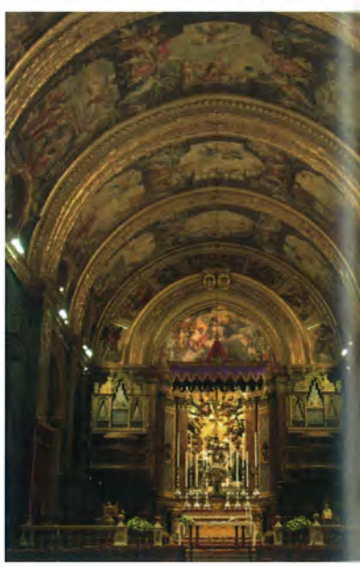
The church is also a sanctuary and hosts numerous works of painters like Caravaggio, sculptures, cult objects and tapestries that make it a unique museum, a shrine of European and Mediterranean History and worship.

There were eight official languages of the Order, and there is a side-chapel devoted to each one of them individually. The four other chapels have a passage way leading to the sacristy, oratory, bookshop and to a side entrance.

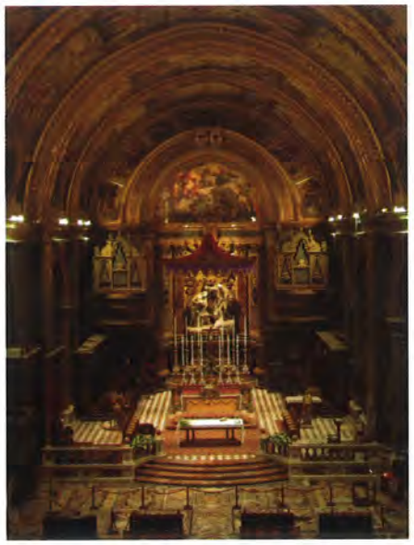


NEW LIGHTING

The project for a new lighting installation in the church is now under way. When the Studio Dall'Osso was commissioned (following an international competition) for a project to provide a new lighting system for the Co-Cathedral by the Foundation Council, the task appeared to be a great responsibility, due to the importance of the monument for Malta itself and for Christianity as a whole. The first step for the project leader, Stefano Dall'Osso, was to learn more about the history of the church, its original architecture and the changes that took place through the centuries. It was important to know how natural lighting was originally intended for the church. A series of measurements and a tedious task of data collection (including photographic records) led to the creation of a digitalised model of the church. This phase allowed Dall'Osso and his team to carry out an accurate analysis of every single detail, and to perform a long sequence of computer simulations.



The site has multiple functions and purposes. A place of worship, a shrine, and a cathedral in which to celebrate special events, but it is also a real and important museum, visited by numerous tourists every year. The new project had to fit all functions, according to the state of the art for lighting design, without distorting the original concept of lighting the interior with sunlight. A full respect of the worshiping practices, as well as the safety of the paintings from a variety of radiations, meant also taking into account the specific norms issued by competent authorities, which the team has done.



Due to the on site complexities, as explained above, there were no specific light fittings available on the market, so the project has included the design of new, custom-made devices. These are intended not to interfere with the existing architecture. Therefore, their shapes are very linear, discreet and simple looking, whereas they have a highly technological content and performance. To guarantee a perfect preservation of all art works, all fittings are equipped with filters which fade ultraviolet and infrared radiations. The light intensity on the art work has been tested and verified by means of specific software. The color of every single fitting is different according to its location, for the best camouflage effect. All light fittings for this project have been made by the Italian company Quattrobi S.P.A., based in Colnago (Milan).

DIRECT LIGHTING:

This kind of illumination is necessary to allow the believers to read texts, and the visitors to appreciate the decorated tombstones which constitute the floor. It is obtained by small, adaptable projectors, placed on the nave cornice, equipped with metallic iodides or halogen bulbs.

VAULT LIGHTING:

To give the vault a correct and perfectly uniform, low intensity illumination, which compensates for its round shape, an asymmetric optic has been studied. The fittings, simple and small, have been placed on the cornice, on both sides of the nave.

STRESS LIGHTING:

This illumination is meant to return the image of liturgical space hierarchy, with order and articulation. It also highlights the sculptures present in the nave. Fittings having the same shape and colour as those used for direct lighting are placed on the nave cornice as well.

CHAPEL LIGHTING:

Side chapels needed a more specific illumination. They once had a single lantern hanging from the ceiling. All of the chapels (with the exception of the four used as a passage), have an altar-piece, knights' tombs and lunettes, each one having a painting on canvas. Some chapels have more paintings hanging from the walls. Moreover, these chapels sometimes host temporary art exhibitions, which need their own lighting.

To match all these needs while keeping fittings discreet at the same time, an innovative system has been developed by the Studio Dall'Osso. Taking inspiration from the shape of the original lanterns, a new multi-projector chandelier has been designed. The new fitting has a system of four adjustable pullout projectors in the bottom. On the top part, four light devices having symmetrical optics illuminate the vault. Together with these (always on the top) one can assemble up to twelve adjustable mini-projectors. Such a system allows for a non-invasive electric plant, as power has to be brought to a single point, like before, through existing holes on the chapel vaults.

The so called triumphal arches are the architectonic conjunction elements between chapels and nave. Their rich bas-relief decorations have been highlighted by linear light fittings, mounted on the cornice, and equipped with fluorescent bulbs, themselves linear and irradiating a warm tonality of light that embellishes golden decorations.

ORATORY LIGHTING:

Among the proposed solutions, the purchasers have chosen to illuminate that room and the works there stored by means of the same kind of apparatus used in the chapels, just smaller in size. Pictures on the walls are lit by adjustable projectors, equipped with halogen bulbs mounted on the lower part of the chandelier. Indirect lighting is obtained by a fitting with a metallic iodide bulb.

The famous painting by Caravaggio, Beheading St. John the Baptist, is lit by six projectors and is assembled on a light, self-supporting structure, placed behind the altar to avoid glares.



SACRISTY LIGHTING:

This is achieved by ten fittings placed on the cornice. They illuminate the lacunar barrel vault. The picture on the altar is illuminated by halogen bulb adjustable projectors.

The whole lighting project employs 181 light fittings, 11 chandeliers in the church; 4 chandeliers and 16 projectors in the oratory; 16 fittings in the sacristy, with a total power of about 28 kw.

For the best flexibility, control circuits allow different configurations and intensities, according to the future needs for different kinds of events and celebrations.

The installation will be completed by May, 2006.



STEFANO DALL'OSSO

Stefano Dall'Osso is one of the most famous Italian lighting designers.

Born in Fermo, Marche, in 1963, he started his career as a lighting technician consultant with FAEL Luce, of Agrate Brianza (Milan). He soon became an expert in the field, and has collaborated with leading companies in Italy in the area of the production of light fittings. In 2000, he opened his own studio in Fermo, where he leads a 9 person multi disciplinary team (architects, industrial lighting designers, technicians with different skills). The Studio Dall'Osso carried out numerous projects for the lighting of important public and private sites, particularly those having historical and artistic interest, both in Italy and other countries.

Dall'Osso is also a lecturer at the Centro Sperimentale di Design of Ancona, the Libera Accademia della Luce of Umbertide (Perugia), and reporter to the Accademia della Luce of Florence. He is also a member of APIL Italia (Associazione Professionisti dell'Illuminazione), and works for the promotion of the professional image of the lighting designer in Italy.

In recent years, he has extended his work to include the design of new light fittings, giving a remarkable impulse to design in the field.

A book on his life and work, L'Avventura dell'Uomo di Rame, was published in 2005.

In the completed work for the project of St. John's new lighting installation, an important role was played by a few members of the Studio: Architect Dr. Cecilia Rampini, Industrial Lighting Designer Dr. Mauro Aragona and Cad Designer Annalisa Giommarini.