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## The Umberto Di Segni's Synagogue in the Medina of Tripoli: Virtual Reconstruction and Restoration

Umberto Di Segni, born in Tripoli in 1894 to an Italian Jewish family, and died in Natania near Tel Aviv in 1958, was one of the leading architects of the architectural renewal of Libya, especially of its capital during the colonial period.

The Umberto Di Segni's Dar Bishi synagogue is part of a series of interventions in the Medina that began in 1911, immediately after the Italian occupation of the city, and continued through the 1930s.

The new synagogue served the aim of giving an Italian and European character to a cultural, religious and anthropological component of the ghettos (*hara*), such as the Jewish one, whose image was generally associated to the Arab-Islamic component of the Mediterranean Medinas. Hence, the stylistic choices of Umberto Di Segni for the new building, which recalls the pavilion dome of the Synagogue in Rome, and adopts a surprising language, between Eclecticism and Art

Nouveau, especially in the decoration of the interior space.

Damaged during the 1941 British air-naval bombing, the synagogue remained abandoned for several years until the so-called Libyan "restoration", which, in the 1980s, gave rise to an unlikely reinforced concrete hemispherical dome above the rectangular prismatic body of the building.

The present contribution will highlight that the virtual reconstruction of the image of the Umberto Di Segni's synagogue involves the demolition of the hemispherical dome, and the reconstruction of the original pavilion vault on the square basis. The paper will also document the restoration of the original decorations and colors, as well as the external façades, which are also heavily degraded.

**Keywords:**  
virtual reconstruction; synagogue; Umberto Di Segni; Tripoli's Medina.

Looking out from one of the windows of the big hotel that flanks the old city of Tripoli and dominates the Medina, it is possible to get a panoramic view of its very degraded urban fabric, with the port and the open sea in the background. From this privileged observation point one can clearly see the precarious conditions of the buildings and the vast voids and demolitions that interrupt the compact building fabric. This highlights the deep decay that is transforming one of the most notable medinas of the southern Mediterranean coasts into a slum. Actually, at least until the beginning of the last century (the Italian occupation of Libya dates back to 1911), Tripoli admirably represented most of the characteristics of the Mediterranean cities in the Maghreb, that is, a successful synthesis between typical aspects of Arab-Islamic cities and some characters extraneous to that tradition, deriving from the intense activity of commercial, demographic, religious and diplomatic exchanges with the countries bordering the Mediterranean Sea. Therefore, next to the mosques and the tall and pointed minarets that highlight the cultural and religious identity of the city, the dense and compact fabric of courtyard houses and the narrow alleys, or *cul-de-sac*, show an unusual opening of the houses towards the street, with balconies and windows. There are also evident elements extraneous to the local urban tradition, such as the walls and the castle with the sixteenth-century bastions, created by Charles the fifth's Spanish domination. Other elements also highlight the multiethnic and multireligious dimension of the Medina; such as the unusual regularity of some streets, revealing the traces of the *cardo* and the two *decumani* of the Roman Oea, progenitor of the actual Tripoli (the three cities, together with Sabratha and Lepcis Magna); but also the breadth and airiness of the Tripoli's court house, especially near the sea, that evokes the size of the Roman *domus*, together with the presence of the church S. Maria degli Angeli with its bell tower, and the many synagogues. In addition, the fundamental orientation of the fabric and the streets, that overlook the port and the sea, unequivocally determined the Mediterranean character of the town.

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Today, only through the study of cartographic, photographic and literary documents, can we reconstruct that prestigious image. This is also one of the reasons why the aforementioned new hotel, on the edge of the Medina, from which we dominate the urban fabric of the old city, preferred to orient its views mainly on the contemporary Tripoli rather than the medina, thus transformed and degraded. If we observe the urban fabric more in detail, the prismatic volume of a building larger than the others, and very deteriorated, can be noticed in the foreground. On the roof of this building a low circular drum and a hemispherical dome in reinforced

concrete can be evidently identified. It is the Dar Bishi Synagogue, the most important one in the Medina, designed by the Italian architect Umberto Di Segni, and built from 1922 to 1923, during the Italian colonial rule (fig. 1).

Umberto Di Segni, born in Tripoli in 1894 to an Italian Jewish family, and died in Natania near Tel Aviv in 1958, was one of the leading architects of the architectural renewal of Libya, especially of its capital city, during the colonial period [1]. The Dar Bishi Synagogue, among the first works by Umberto Di Segni in Tripoli, is part of a series of interventions in the Medina that began in 1911

Fig. 1 - Overall view of the urban fabric of the medina. On the lower right the Dar Bishi Synagogue. (Author's photo, 2004).



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immediately after the Italian occupation of the city, and continued throughout the 1930s.

The day after the Italian landing in Libya, the first 1912 Tripoli's Master Plan mainly addressed the construction of the new city. In addition to the accurate surveys of the mosques, the church, the synagogues and the cemeteries, one of the main interventions concerned the expansion and regularization of the road that crosses the entire Medina from west to east, connecting Bab el-Jedid, the Porta Nuova, near which the industrial area was located, to the port and customs. At the same time, the only important Roman monument still existing, the Tetravylon dedicated to Marcus Aurelius and Lucius Verus, erected in 163 AD., at the intersection between the *cardo* and *decumanus maximus* of the ancient Tripolis-Oea, was freed from the neighbouring buildings, and from the ground to the archaeological level.

The 1914 Master Plan (fig. 2) substantially confirmed the choices, regarding the Medina, of the 1912 Master Plan, with the only important variant of the demolition of two sections of the city walls: the eastern one, with its ramparts towards the sea, and the western one, with the redesign of the two contiguous gates, Bab el-Jedid and Bab Zenata.



Fig. 2 - The 1914 Master Plan of the Medina (Talamona, 1993).  
Fig. 3 - The actual urban situation of the Dar Bishi Synagogue. In the background the hotel mentioned at the beginning of this text. (Author's photo, 2009).



Fig. 4 - A recent view of the Dar Bishi Synagogue. (Author's photo, 2009).  
Fig. 5 - A detail of the Synagogue façade. (Author's photo, 2009).



The Medina's Master Plan highlighted the synagogues by their initial letter, an S. These were mainly concentrated in the North-West sector, where the *hara*, the ghettos, small ghetto (*hara es-sghira*) and big ghetto (*hara el-kbir*), where located. These ghettos where inhabited by a large Sephardi Jewish community which, after various vicissitudes, related to the expulsion of the Jews from Spain in 1492, emigrated to Libya.

Destroyed with the arrival of the Spaniards in Tripoli in 1510, the Jewish community reconstituted itself in the second half of the 16th century, and further developed under the Ottoman rule. In 1783, according to a contemporary testimony [2], the community would amount to 3.000 souls

out of a population of 14.000, while, according to a 1300 Almanac of the Hegira (1882-83) [3], the capital of the *vilayet* ("province" according to the new administrative divisions of the Ottoman state) of Western Tripoli "had 25.000 inhabitants of which 4.000 were Israelites and 3.000 were foreigners". The Almanac also lists a series of buildings within the circle of walls including "the Castle, seat of the governorate ...; the clock tower; ten mosques" and also seven synagogues and four churches.

It is interesting to compare the data about Tripoli resulting from the 19th century Almanac with those reported by the census of 1911, July the 3rd, on the eve of the Italian occupation. "The city of Tripoli had 29.869 inhabitants, of whom 19.409

were Muslims, 6.460 Jews, and about 4.000 Europeans, including the Maltese." [4]. Regarding the buildings, in addition to the 33 mosques, a Catholic church and an Orthodox church, there were 22 synagogues.

In 1921, Giovanni Volpi was appointed as Governor of Libya. In his program, urban planning and construction activities, aimed at transforming Tripoli into the capital city and seat of the government of the new Italian colony, took on great importance [5]. The decision to build a new synagogue in the Medina certainly fell within Volpi's program, which aimed at redeveloping the two ghettos, the *hara*, that were in poor social and building conditions [6], and establishing new and

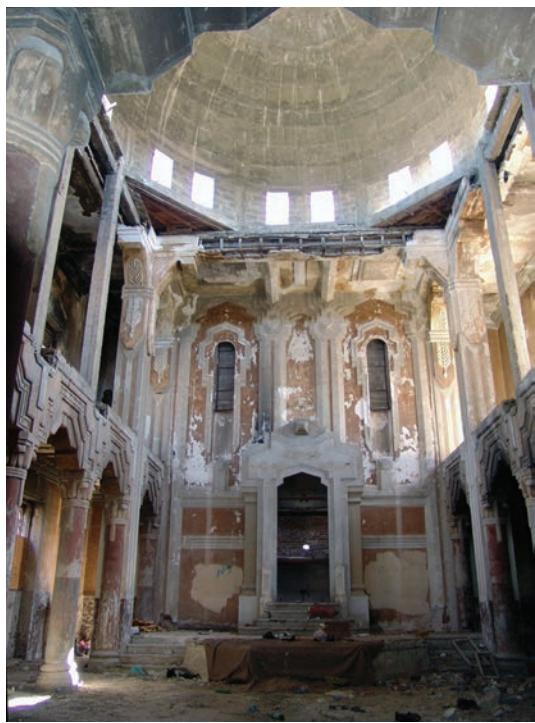


Fig. 6 - View of the interior space of the Synagogue. (Author's photo, 2008).  
Fig. 7 - View of the interior space of the Synagogue. The triangular corners of the new octagonal slab, supporting the hemispherical dome, and the new plain pillars, different from the original ones, are very evident. (Author's photo, 2009).

Fig. 8 - Details of the architectural decorations of the Synagogue with the recent interventions. (Author's photo, 2009).

Fig. 9 - Detail of the architectural order of the Synagogue. (Author's photo, 2009).

more favorable relationships between the Jewish community and the Italian administration (fig. 3). The new synagogue, in the center of the *hara*, also fulfilled the aim of giving an Italian and European character to a cultural, religious and anthropological component of the ghettos, such as the Jewish one, whose image was generally associated to the Arab-Islamic architecture of the Mediterranean Medinas. Hence, the stylistic choices by Umberto Di Segni for the new building, which recalls the pavilion dome of the Synagogue in Rome, and adopts a surprising language, between Eclecticism and Art Nouveau, especially in the decoration of the interior space.

Damaged during the 1941 British air-naval bombing, the synagogue remained abandoned for several years until the so-called Libyan "restoration", which, in the 1980s, gave rise to an unlikely reinforced concrete hemispherical dome above the rectangular prismatic body of the building.

If one has the opportunity to enter the interior space, which has been photographically documented in 2004 and 2008-2009, it is possible to perceive the distortion produced by the circular plan solution of the dome.

However, despite the advanced decay, it is still possible to appreciate the great quality of the interior space, enhanced by the light reflected by the warm and golden shades of the still remaining colors in the architectural forms.

The reconstruction of the probable image of the Synagogue began with the photographic and cartographic documentation collected during the numerous missions, carried out in Tripoli as "Italian Mission for the study of the architectural and

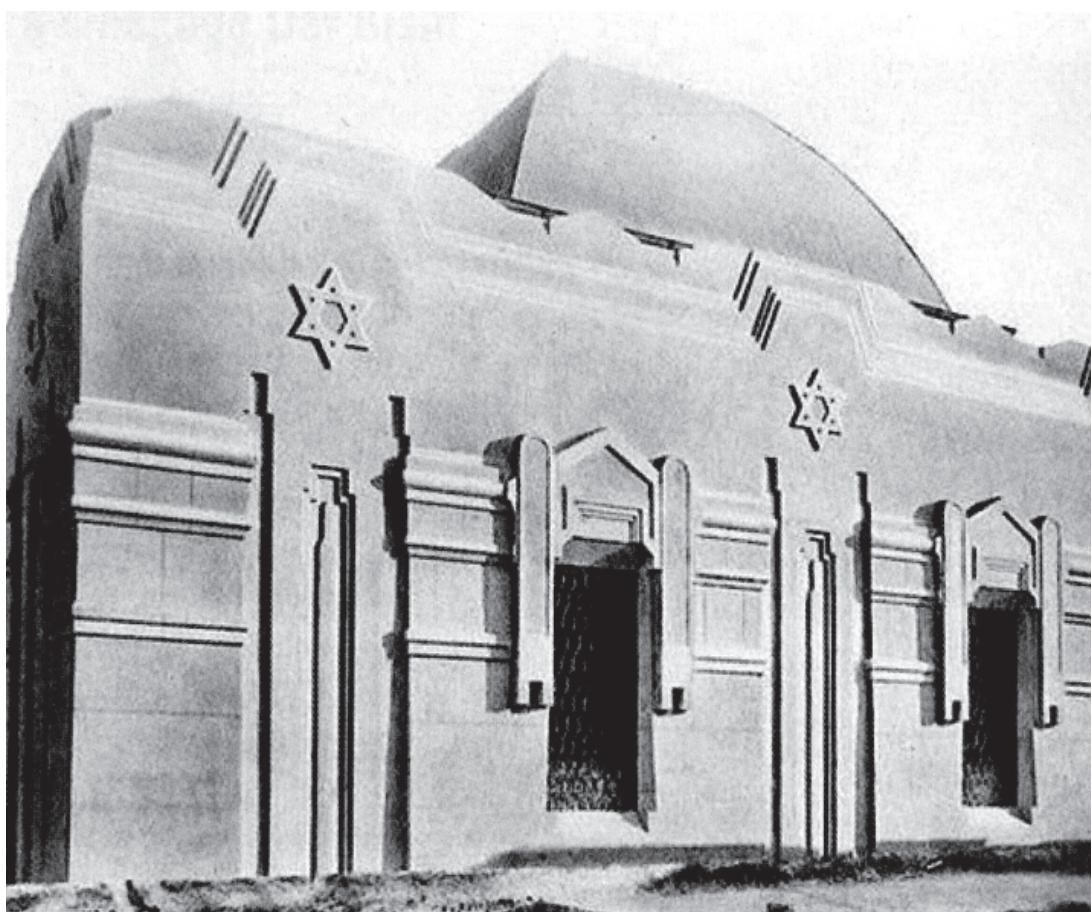
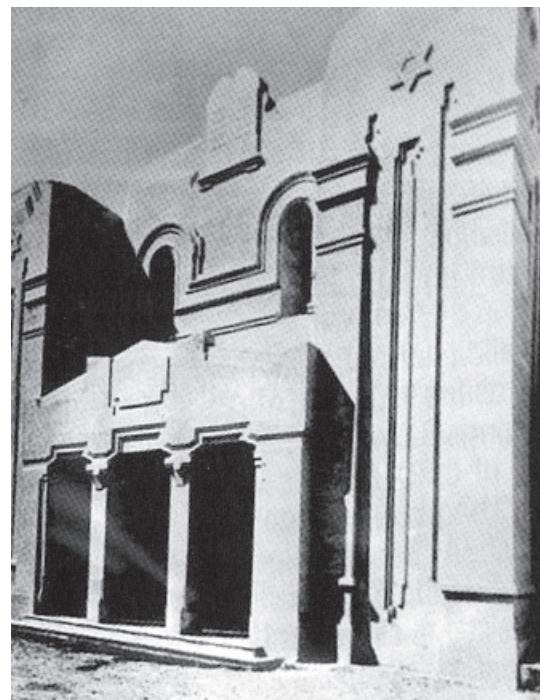


Fig. 10 - The 1923 view of the Synagogue just realized by Umberto Di Segni. (Arbib J. 2010, p. 22, fig. 18).

urban heritage of the Islamic period of Libya" [7], particularly devoted to analyze the transformations of the urban fabric of the Medina. The Synagogue was actually located in one of the most critical areas, that of the former Jewish ghettos, where the formation of voids and the demand for solutions for their recovery was the most relevant. This study resulted in the reconstruction of

the degradation process of the area, and the identification of rehabilitation project proposals, aimed at reconstructing the compactness and labyrinthine character of the urban fabric of the Medina. Regarding the Synagogue, after the initial disappointment due to the conditions of abandonment and ruin of the building, the solution of the hemispherical dome in reinforced concrete,

Fig. 10 and 11 - View of the original façade of the Umberto Di Segni's Building. (Arbib J. 2010, p. 22, fig. 19).  
Fig. 12 - The interior space of the original Synagogue in a vintage postcard.



TRIPOLI - Interno della "Sala da-Bissi", ricostruita dall'arch. Umberto Di Segni

Fig. 13 - Virtual reconstruction of the Di Segni's Synagogue, with a square basis of the pavilion dome with curved segments. (Author's drawing).  
Fig. 14 - Virtual reconstruction of the interior space (Author's rendering).

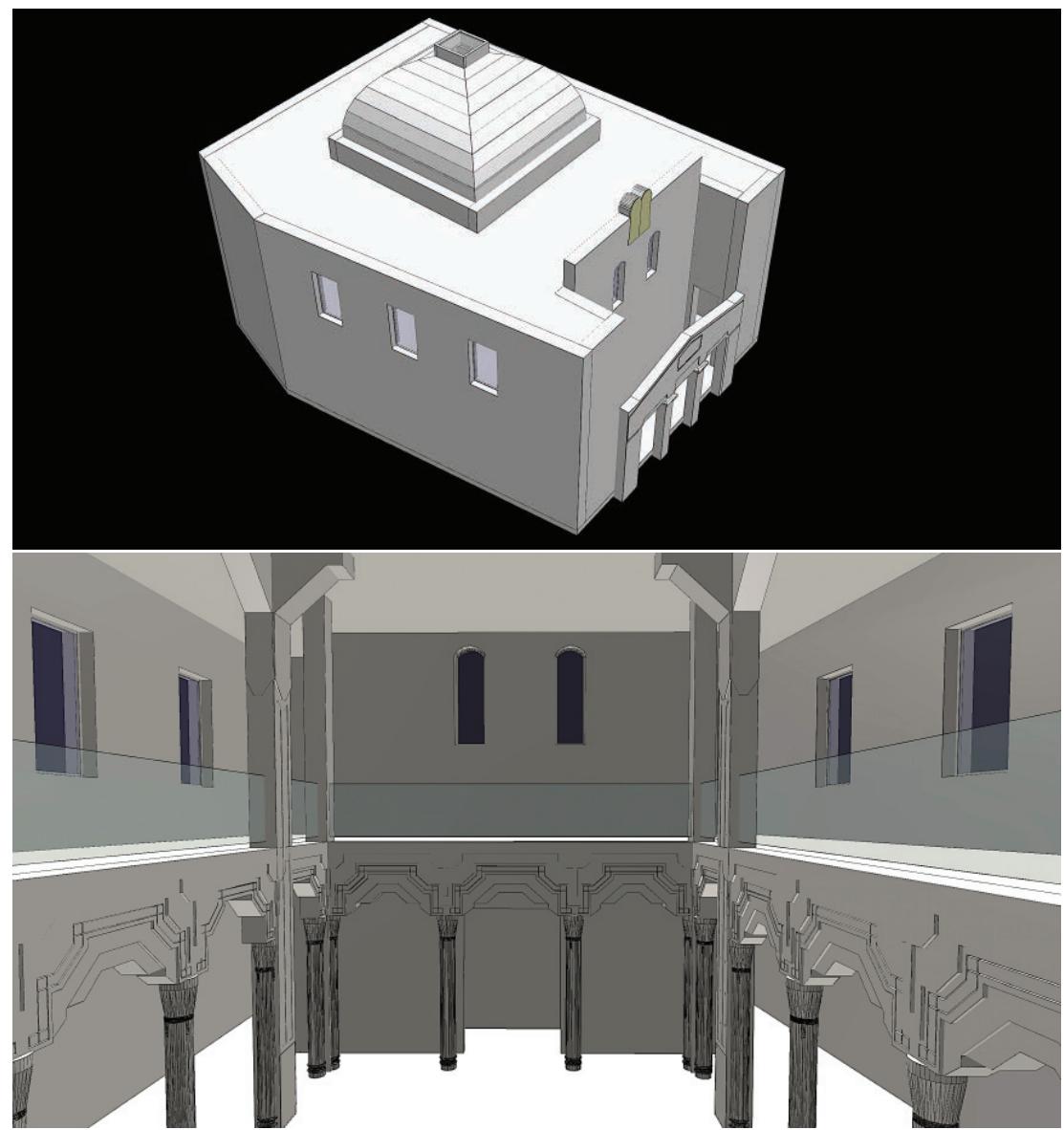




Fig. 15 - Virtual image of the interior space. (Author's and C. Nardini's rendering).

so distant from the architectural language of the monument, was immediately called into question. This solution is clearly different from the original one, as documented by the photos of the just completed building by Umberto Di Segni, taken in 1923 (figures 10 - 11).

The dome that can be seen above the building is clearly a dome-pavilion on a square basis with curved segments, very different from a hemispherical dome, like the one created by the so-called Libyan "restoration". If we then analyze the images of the interior space, it is possible to see the structural consequences of the latter choice. Actually, it was necessary to create a new octagonal basis in reinforced concrete to support the hemispherical dome. Since this basis could no longer rest on the original columns that supported the square-based pavilion, new columns were needed at the corners of the octagonal slab, again in reinforced concrete, which openly conflict with the authentic image, as can be seen in a vintage postcard of that period (fig. 12).

Therefore, if we were to proceed with the restoration of the original version by Umberto Di Segni, it would be necessary to demolish this slab as well as the hemispherical dome, and then reconstruct the original pavilion roof (fig. 13) and restore the decorations, colors and furnishings.

The 2008-2009 photos of the interior spaces of the Synagogue document in detail the decorative apparatus of the original columns, capitals and arches, probably built with an iron structure, on which the thick and complex architectural stucco decoration has been applied (figures 6, 7, 8 and 9). These photos are also a guide for the virtual restoration of the interior spaces and decorations and for the external elevations, heavily degraded (figures 14, 15, 16 and 17). Regarding the restoration of the pavilion vault, an alternative proposal was developed, sketched freehand (fig. 18) in addition to the original solution. This alternative involved a particular treatment of the four curve segments of the pavilion roof, perforated with small triangular glazed openings, according to the geometry of the vault, to produce a particular lighting effect inside the interior sacred space.



Fig. 16 - Virtual view of the interior space. (Author's and C. Nardini's rendering).

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Fig. 17 - Virtual view of the square pavilion dome from below. (Author's and C. Nardini's rendering).



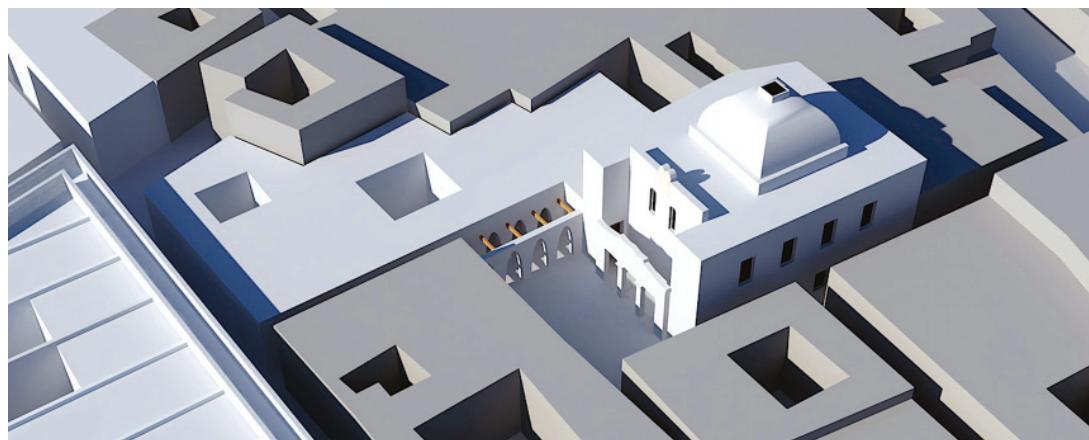
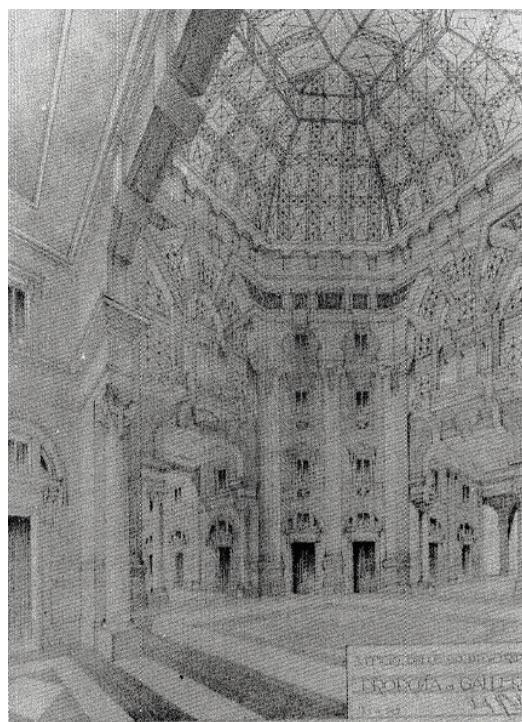
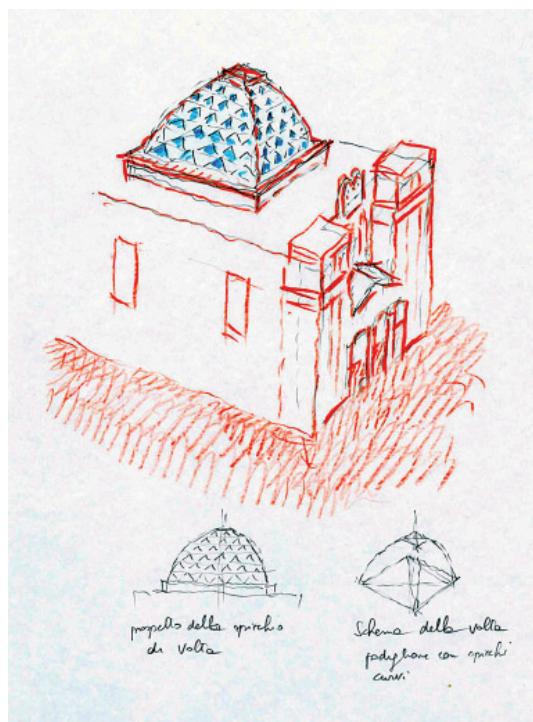


Fig. 18 - A version of the pavilion dome with small triangular glazed openings. (Author's drawing).

Fig. 19 - The Umberto Di Segni's project for The Galleria De Bono in Tripoli. (Arbib J. 2010, fig.39).

Fig. 20 - A virtual design of the Synagogue, with a small entrance square, within the present urban fabric. (Author's and C. Nardini's rendering).

This last hypothesis refers to the proposal Umberto Di Segni made in 1927 for the De Bono Gallery in Tripoli [8], with a glass roof (fig. 19) similar to that of the galleries in Milan and Naples. The roof of the gallery will later be built according to another project, and then dismantled in 1934 by Italo Balbo upon the advice of Architect Florestano di Fausto. As a last point, it is opportune to suggest a solution able to include the Tripoli Temple in the contemporary urban fabric, which is particularly degraded in the area of the Medina corresponding to the ancient Jewish ghettos. The restoration hypotheses of the district, based on the recovery of the compact character of the urban fabric, propose to adequately redesign, the numerous existing voids produced by previous collapses and demolitions. In the present case of the Di Segni's synagogue, could be possible to implement an entrance square to the Temple (fig. 20), flanked by a new arcaded building, whose aim is to house the museum of the Jewish community of Tripoli. The studies and projects to recover an urban reality today so degraded, although potentially extraordinary, are nevertheless mortified by a political-military situation which is still very distant from its solution. The historical, human, multi-ethnic and multi-religious complexity, as well as the spatial quality of the Medina of the past do not deserve all this. Keeping its image alive despite the present situation, and waiting for better times, is a task available to take on, however difficult [9].

## NOTE

[1] About Umberto Di Segni, whose work has perhaps remained more in the background compared to other protagonists of the colonial architecture in Libya, see the recent study by Arbib J. (2010). This publication, which constitutes the first monograph on Umberto Di Segni, reconstructs a convincing panorama of his activity in the Italian colony, which fills some gaps related to works analyzed by the scholars of that period, including the Dar Bishi Synagogue in the Tripoli's Medina. See also the entry dedicated to Di Segni in Godoli E. & Giacomelli M. (2005).

[2] The *Giornale istorico* of the Venetian merchant Marino Doxerà manuscript in 1784, in Rossi E. (1968), p. 248. See also Corò F. (1930), pp. 1092-1102.

[3] Piazza C. (1996), pp. 139-173.

[4] Corò F. (1937), p. 92.

[5] Talamona M. (1993), pp. 257-277.

[6] In 1931 Rabbi Disegni (Umberto Di Segni in the words of De Felice), returning from Tripoli, would have summarized in the following terms the situation of the Jews to the leaders of the Union of Italian Israelite Communities: "there were one multibillionaire, three-four billionaires, three thousand people 'living at an average level', four thousand people 'who just lived' and eight thousand 'poor ragmen'. This population imposed on the Community budget for less than a third, for an 'insufficient and humiliating almsgiving charity'". De Felice R. (1978), pp. 96-97.

[7] The Mission was founded by Paolo Cuneo in 1989 and directed by Ludovico Micara from 1996 to 2006, thanks to an agreement

between the IDEA Department of the Chieti-Pescara University "G. D'Annunzio", the Italian Ministry of Foreign Affairs, the Department of Libyan Antiquities and the Authority for the Recovery and Administration of the Medina. The research activity of the Mission aimed at studying the buildings, the urban patterns and the transformations of the Tripoli's Medina and the town-oasis of Ghadames, in order to identify suitable strategies for their conservation, rehabilitation and restoration.

[8] Arbib, op. cit., pp. 29-30.

[9] See Micara L. (2013).

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