

## Surveys and explorations by the Italian Archaeological Mission in Yemen in 1983 -1989. Résumé of the past activity and new research project: archive and publication of the results

Since 1983, the Italian Archaeological Mission in Yemen (MAIRY) has also included research on the archaeological, architectural and fine arts heritage of the Islamic period in its activities. The focus of the Islamic mission was study of Yemeni traditional mosques in order to draw up a precise typology of these unique monuments. In the course of several expeditions, the mission surveyed over 400 monuments. Carrying out photographic and graphic documentation and drawing up plans the team drafted a first preliminary typology of the religious architecture in 1984. Nevertheless, for various reasons, the conclusion of the work and its outcome were never published. After thirty years, the Islamic branch of the Italian archaeological mission has resumed the research. The Italian team, in collaboration with Yemenite experts, is about to arrange, classify and digitalize the huge amount of documents. This documentation will constitute

a major contribution to research on and the safeguarding of religious architecture and the Yemeni cultural heritage.



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Yemen; Islamic architecture; mosques; Italian archaeological mission; Paolo Cuneo

*Per Paolo e Lella con gratitudine e affetto*

Since 1983, the *Italian Archaeological Mission in Yemen* (MAIRY) [1] has included in its activities, among other assignments, research on the archaeological, architectural and fine arts heritage of the Islamic period. Paolo Cuneo was also actively involved in this field of research (fig. 1), bringing his substantial contribution to bear at both the scientific and human level. His main interest in the mission was study of the – then – still relatively well-preserved traditional towns of North Yemen, which conserved their original architectural, spatial and social organization, back then largely unspoiled by levelling urbanistic modernization.

The focus of the Islamic mission [2], however, was study of Yemeni traditional mosques. The *General Organization of Antiquities and Libraries* asked MAIRY for a comprehensive survey of Islamic religious architecture (mosques, madrasas and mausoleums), in order to draw up a precise typology of these unique monuments. In the course of several expeditions, the mission surveyed over 400 monuments in the northern, central and southern highlands and in the Tihāma. Carrying out photographic and graphic documentation, drawing up plans and conducting interviews with



Fig. 1 - Paolo Cuneo during a relax moment in the Tihāma.

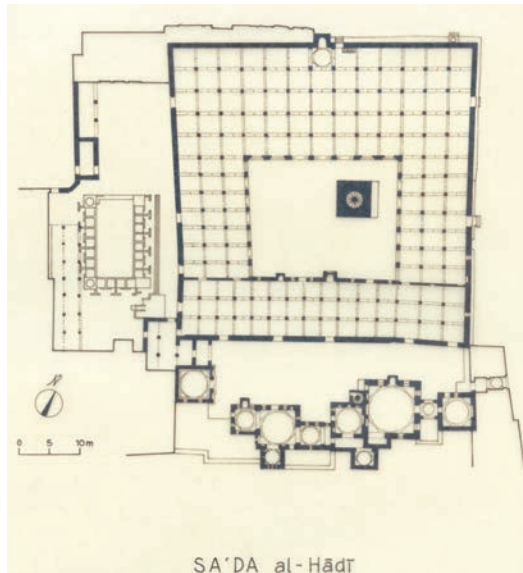


Fig. 2-4 - The al-Ġāmi' al-Hādī, Ṣa'da.

the local authorities, keepers of the mosques and resident faithful, the team drafted a preliminary typology of religious architecture in 1984. The typology divided the monuments into two broad categories: mosques with organic court (I) and mosques with unrelated court (II), then further differentiated in flat-roofed (IA-IIA) and domed mosques (IB-IIB) with numerous subdivisions. Subsequently this typology was defined more precisely, further developed during the following missions and published in a few short preliminary contributions [3]. Nevertheless, for various reasons the conclusion of the work and results were never published. After thirty years, the Islamic branch of the Italian archaeological mission has resumed the research. With this paper we wish to present a summary of the past field work of the Mission, and an overview of the archive of the MAIRY/Islamic branch and of its re-arrangement in progress. An updated



preliminary typology of the historical mosques of Northern Yemen will be presented at the end. The research concerning typological classification had been made in all the areas of Northern Yemen that could then be reached, from the highlands to the desert and the plains of the Tihāma. Most important, especially in view of the recent destructions due to the current civil war, was the survey of the mosques of Ṣa'da. A major topic was research on the magnificent al-Ġāmi' al-Hādī (figg. 2-4).

This great mosque presents an extremely complex construction history, dating back according to the tradition to its foundation by al-Hādī between the end of the 9th and the beginning of the 10th century, with numerous later modifications and restorations. It reached

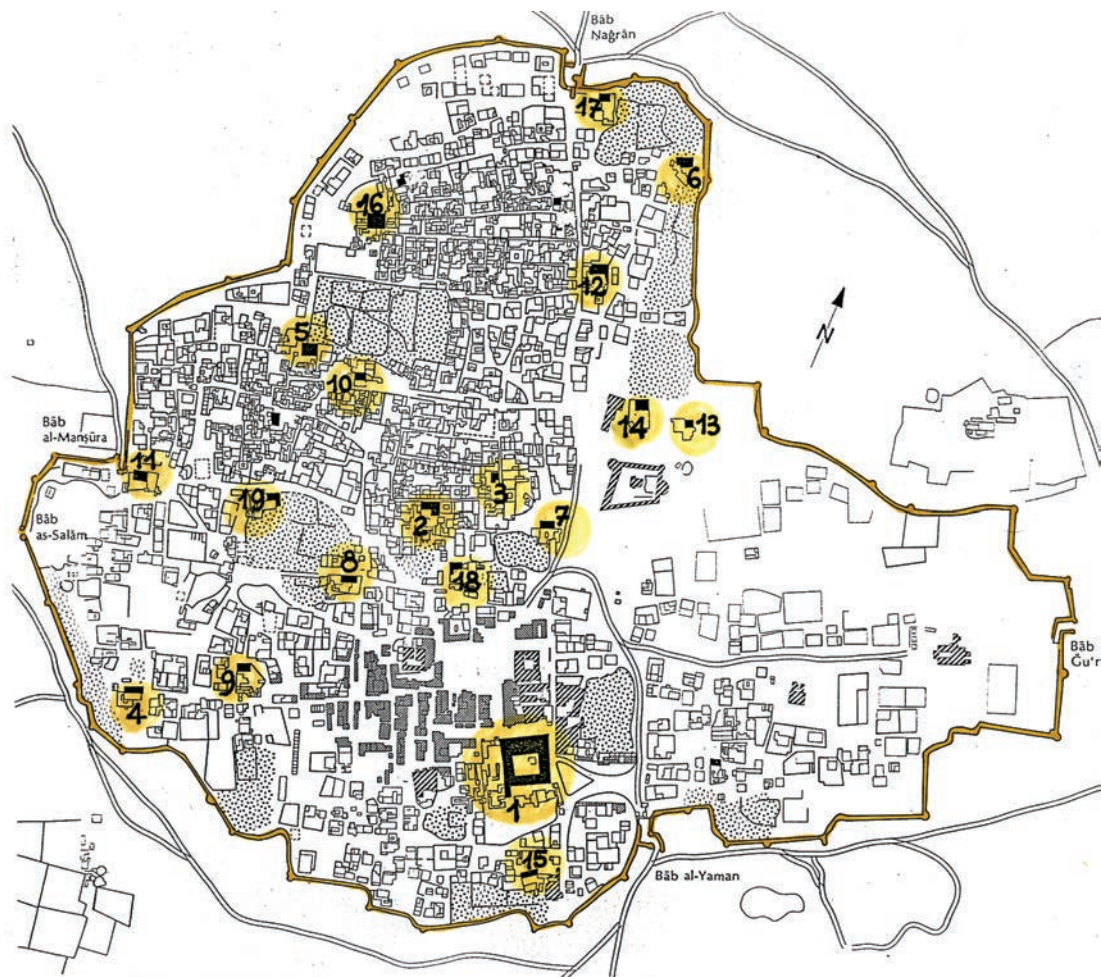


Fig. 5 - Plan of the old town of Sa'da with indication of the historical mosques:

1. al-Ġāmi' al-Hādī, 2. Maṣḡid al-'Ariz, 3. M. al-Da'fān, 4. M. al-Ḍahab, 5. M. al-Dawīd, 6. M. al-Hiḡār, 7. M. al-Hirī, 8. M. al-Naḡḡār, 9. M. al-Nizārī, 10. M. al-Nūr, 11. M. al-Qaṣr, 12. M. al-Šaibān, 13. M. al-Šamrī, 14. M. al-Subaiḥ, 15. M. al-Ṭayī, 16. M. al-Tūt, 17. M. al-'Ulayyān, 18. M. al-Yābis, 19. M. al-Zaidān, after Paolo Cuneo's sketch book.

its present form in the first half of the 16th century thanks to the Imām Šaraf al-Dīn.

Our photographic documentation of its epigraphic and geometric decoration in stucco is particularly valuable, since today much of it has unfortunately been lost.

Eighteen smaller mosques of Sa'da were examined, too (figg. 5-6). They all belong to category II A1, flat-roofed mosques without organic court, with prayer halls, extending in width rather than in length. The aisles of these mosques run mostly parallel to the *qiblit* wall. Covered oratories are situated in the forecourts, as in the Maṣḡid al-'Ariz. Although we do not have very much information

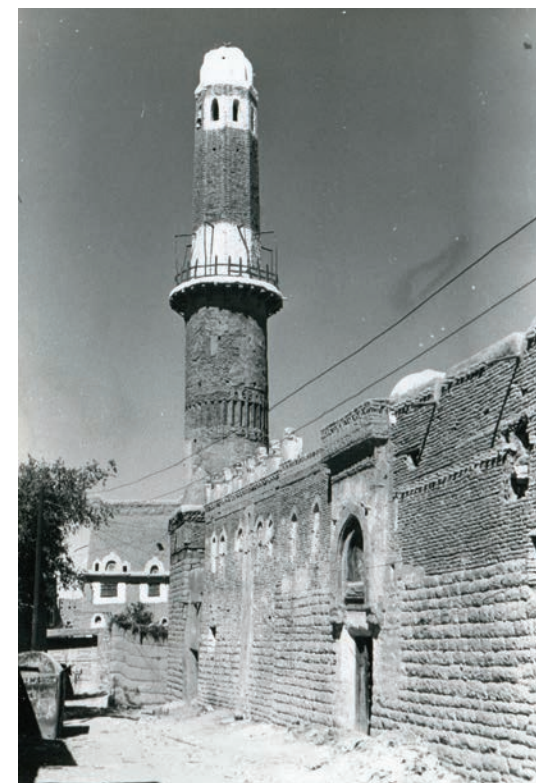


Fig. 6 - Sa'da, al-Nizārī mosque.

about the construction history of these small mosques, they may be attributed to the 14th and 15th century.

The Northern cemetery of Ṣa'da was thoroughly examined, too, including an epigraphic survey and study of the gravestones [4]. In this cemetery, a group of magnificent tetrapyla mausoleums probably formed the nucleus around which the cemetery developed. These monuments are quite unique in Yemen. They are covered with a webbed and lobed dome. Similar domes are to be seen on some mausoleums built to the south of the al-ġami' al-Hādī (cf. fig. 4). While webbed or lobed domes are to be also found in the Rasūlid or Ṭahirid architecture in the south, the combination of webbed and lobed seems to be distinctive for Ṣa'da. Besides the main goal of drafting a typology of the North Yemeni mosques, the Mission pursued further objectives, too. First of all, thorough documentation of the historical town complexes of the country. Obviously, Paolo Cuneo [5] was at the forefront of this research, which intended to document the urbanistic development of the main urban structures of ancient and medieval origin and to classify them. In the 1980s, their layout was in fact still exceptionally well preserved from modern modifications and stratifications common in most Islamic countries. The old Yemeni towns therefore evidenced a kind of *original Islamic town planning*. The research concerned a number of urban centres in the Tihāma and in the plateau area such as al-Ḥudayda, Bayt al-Faqīh, Ṣa'da, Umm Layla, 'Amran, Ḥaġġa and Ġibla [6].

Analysis of the historical development of the city of Ṣan'ā' was undertaken, and of its evolution during the second Ottoman occupation. Paolo Cuneo dedicated a comprehensive study to the Garden city, a low-density settlement – similar to many extensions of Ottoman cities in Anatolia - formed by two minor districts and a central quarter, Bir al-'Azab, where many Turkish mansions were built [7]. Another field of our research was the Islamic pottery of the country with regard to its production, circulation and chronological classification [8]. Giovanna Ventrone Vassallo undertook research in this field from the very beginning of the Mission,

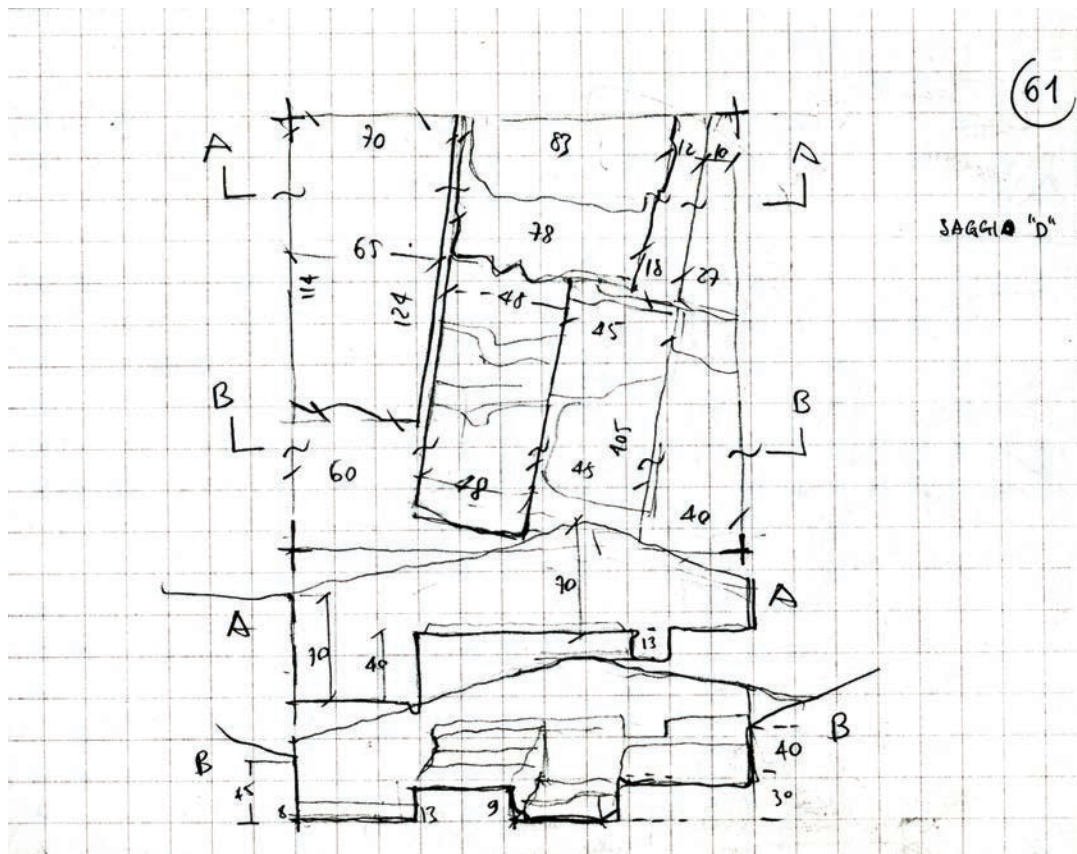


Fig. 7 - Excavation at al-Mahġam, trench IV, sketch from of Paolo Cuneo's diary.

starting with analysis of the pottery in the National Museum at Ṣan'ā', collected in the Tihāma and the inland. The Mission gathered pottery sherds as surface material in various sites (North of Raydah, at the Ḥuṣn Dū Marmār plateau, al-Ġanad, Ḥays, Muḡā etc.). Besides the local productions, which comprise different classes of unglazed pottery and the known glazed pottery made at Ḥays (like the *Medium Ḥays Ware*, the *Blue Tihāma* and the *Tihāma Blue and White*) found in all Tihāma and

assignable to the Rasūlid period (1229 to 1454), the Mission found at Muḡā many shards of blue- and white Chinese porcelain datable within a long timespan (from the 15th to the 18th century). A considerable amount of pottery was found during research at al-Mahġam, where the Mission had started the first - though limited - archaeological excavation of an Islamic site in North Yemen in 1986. Four small trial trenches were dug near the famous minaret of the Friday mosque built by the

second sultan of the Rasūlid dynasty, al-Muẓaffar Yūsuf [1249-95] [9]. As foreseen, only a few traces of the mosque itself came to light (aside from the still standing majestic brick minaret), as the mosque had long been used as a quarry for building materials for the neighbouring village of al-Munīra, of al-Zaidiyya as well as construction of the fortress of al-Ḍahī. The excavations revealed the remains of a pottery district where a kiln was found (trench I), with a fair quantity of ceramics. Two pavements unearthed may have been situated within the interior space of the mosque (trench II). A number of small channels found on different levels were part of the distribution system for the seasonal water from the nearby *wādī* (trench III) and, finally, a system of floors was excavated, one with a small channel and a sort of basin (trench IV) (fig. 7). It was not possible to determine whether this installation belonged to the ablution area of the mosque.

A distinctive feature of Yemeni architectural decoration is the use of small cups in glazed ceramic, mostly turquoise, forming an element of stucco ornamentation around doors, windows and arches of mosques (fig. 8) [10].

This embellishment is quite common in Ṣa'da, but we also found examples in Zafār Ḍibīn, Dayr Akad and Rawḍa. The epigraphical research of the Mission has so far produced one comprehensive study, publication of the inscriptions of the Madrasa al-Aṣṛafiyya and the al-Muẓaffariyya at Ta'izz [11].



Fig. 8 - Friday Mosque of al-Rawḍa, stucco decoration with glazed pottery cups.

During the surveys, special attention was dedicated to a great amount of pre-Islamic building components like columns, pillars, capitals, but also epigraphs re-used in the mosques (fig. 9). The re-cycling was not only dictated by economic reasons, i.e. to save the cost of manufacture, but often had religious and symbolic connotations as well. Their insertion into and often prominent place within the structure of a mosque [12] may be understood in manifold ways. They may be seen as symbolising supersedence of the *ḡāhiliyya* (= the "time of ignorance", i.e. the pre-Islamic period) or, on the contrary, to underline the continuity between the glorious southern Arabian past and the new era after the advent of Islam. But, quite simply, their purpose could also have been to beautify a mosque with precious materials that were already available [13].

Unfortunately, the activity of the Islamic Mission ended after 1990. A long text with the results of the 1987 campaign, nearly finished and partly already translated into English, was unfortunately never handed over to a publisher to be printed. After this short review of the past activities of the Mission, where Paolo Cuneo played a central part, not only as architect and accomplished scholar, but above all, for his human qualities as friend and ever-helpful colleague, we may now take a brief look at the present activities.

The Italian team, in collaboration with Yemenite experts of the *General Organization for Antiquities and Museums of Yemen* (GOAM) [14], is about to arrange, classify and digitalize the vast quantity of documents left by various experts involved in the surveys. The documentation now conserved in the *Museo delle Civiltà/Museo d'Arte Orientale/Rome* is of great importance for study, documentation and conservation of the Yemeni cultural heritage. A number of monuments surveyed by the Mission have in fact already been lost due to modernization and the devastating civil war. We believe that, once digitalized and accessible on-line [15], our archive together with publication of the mosques studied will constitute a major contribution to research and to the safeguarding of the religious architecture and Yemeni cultural heritage.

Fig. 9 - Masḡid al-Ḥawayā at Na'at, pre-Islamic building materials re-used.



The archive of the Islamic Mission was originally kept in the Centro Scavi of the IsMEO/then IsIAO in Palazzo Brancaccio in Rome. Unfortunately, the archive has had to be relocated three times in the last 25 years. This was necessary in 1995 when IsIAO moved to its new premises in Via Aldrovandi, where the prestigious institute was closed in 2011 to be finally transferred, in 2017, to the Museo d'Arte Orientale. The Oriental Museum has now been combined with the Museo delle Civiltà in the EUR district of Rome, and currently the archive is kept there. The archive comprises photographs, plans and drawings, the diaries of each participant and of

each survey, countless manuscripts, sketches and notes, unpublished reports, a small but precious library, and a collection of photocopies concerning Islamic Yemen, Oman and Saudi Arabia, including unpublished and/or rare reports by other archaeological missions working in Yemen [16]. One of the priorities in our current work is arrangement of the photographic documentation and scanning the numerous photos and slides. Beginning with the documentation of religious monuments, we have already digitalized over 7500 pictures, which account for about 80% of the material. In our estimate, the photographs of civil architecture (settlements, castles, palaces, houses, *samsara* [caravansary/ warehouse]) and landscapes will probably amount to a similar figure [17]. At the same time the ground plans drawn in Ṣan'ā' in the 1980s or at a later stage in Rome are being scanned. They were designed in scale based on the sketches and drafts made on the spot by the members of the Mission [18]. About 300 drawings of the 420 monuments had already been finished by 1990 [19], but the remaining mosques still have to be drawn. There are no traces of sketches or plans of about 40 of the mosques visited. On some occasions the Mission were refused permission by the local authority or faithful to survey the internal space thoroughly and take the necessary measurements. Nevertheless, on the evidence of photographs taken in these sites and the observations written in the diaries it is, in any case, to some extent possible to classify and describe the mosques.

The importance and urgency of our work are due to various factors. The increase in population and progressive modernization of the country led to the building of a number of new mosques [20], with the consequent abandonment or complete demolition of old buildings in need of restoration. A number of ancient mosques were further modernized. Unfortunately, this sometimes happened without attending to conservation of their valuable ancient architectural elements and decoration. Priority had to be given to solutions designed to enhance the function of monuments as places of prayer and congregation, improving the lightening or the

acoustics, the capacity, or quite simply to save a building as such but avoiding the more expensive and time-consuming restoration. Another and more dramatic issue today is the damage to or loss of historical monuments caused by the armed conflict that is still underway. The targets of the air strikes by the Saudi Arabia-led coalition are often not only military installations, but also civil populations and cultural heritages. Bombing did not spare the Old City of Ṣan'ā', a UNESCO World Heritage Site, the temples of Barāqīš, the famous –even cited in the Qur'ān [Sūra Saba' (34:15-19)]–dam of Mārib, and not even mosques like the famous al-Ġāmi' al-Hādī at Ṣa'da, the oldest seat of Shi'ite learning in the Arabian Peninsula. A certain number of mosques surveyed by the MAIRY were

damaged or razed to the ground, like the Masġid of al-Fāzza [fig. 10] so beautifully set on the shore of the Red Sea [21]. Our project is in fact manifold. It also comprises the objective to save memory of the already lost or still menaced cultural heritage of the country for the future. In some case, it may also help for reconstruction or restoration, though we would like to emphasise that our actual documentation for many monuments is rather limited. All in all, the Islamic Mission worked in Yemen for five seasons, i.e. for only about six months of actual working time on the spot. In this time, the mission visited about 420 mosques in 140 different sites.

The main goal of the Islamic mission in Yemen was, and still is, compilation of a typology of the Yemeni mosques.



Fig. 10 - Masġid of al-Fāzza, photograph of 1985, now razed to the ground.

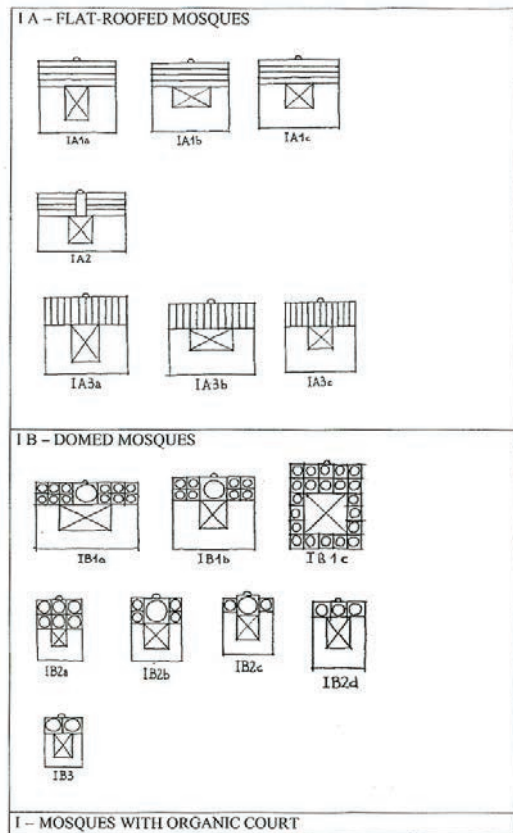


Table 1.

The preliminary typology presented below is based on the short published texts in the *IsMEO Activities* [22], but with additions gleaned from unpublished texts [23] and records found in the archive, and may be further refined with our new studies.

The typology proposed divides the monuments first into broad categories and classes in terms of the arrangement of their courts and of roofing (cf. tables 1-2). The first category includes mosques with an organic courtyard, in which the prayer room and courtyard are the result of a single

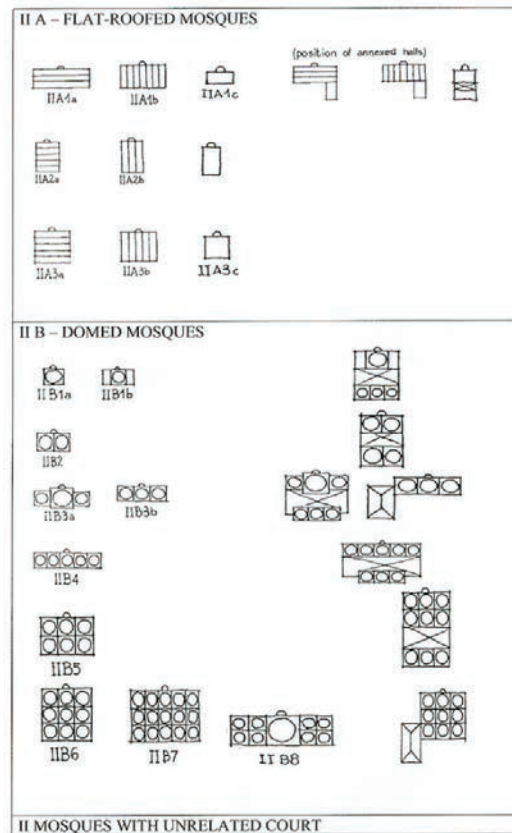


Table 2.

organic architectural project (figg. 11-12). The second category, instead, includes mosques with a non-organic courtyard, i.e. structures in which the courtyard is not integrated within the prayer room. Often this kind of courtyard simply affords circulation for the ablution area; sometimes it is connected with covered spaces that serve as oratories, for the accommodation of pilgrims or as madrasa. Each of these large categories are further divided into two classes: one class with flat-roofed mosques, a second with domes. We find flat-



Fig. 11 – The Great Mosque of al-Rawḍa.

Fig.-12 – The Great mosque of Bayt al-Faqih.



roofed mosques mostly in the central area of the plateau, while domed mosques are preferred in the southern areas and the coastal strip, in the Tihāma. With respect to the published typology, the unpublished *Materials for a Typology of Yemen Religious Architecture...* complemented and enriched the former with eight new defined types. These *new entries* are shown in italics in the list below and will be briefly presented. In detail, the new typology is organised thus:

## I MOSQUES WITH ORGANIC COURT

### IA – Flat roofed mosques

IA 1 – with aisles parallel to the *qiblī*wall

IA 1 a – with longitudinal court

IA 1 b – with latitudinal court

IA 1 c – with square court

IA 2 – with transept

IA 3 – with aisles perpendicular to the *qiblī*wall

IA 3 a – with longitudinal court

IA 3 b – with latitudinal court

IA 3 c – with square court

### IB – Domed mosques

*IB 1 a – with the prayer hall divided into more than 5 spans and a large dome before the mihrāb*

*IB 1 b – with the prayer hall divided into 5 spans and a large dome before the mihrāb*

*IB 1 c – with the prayer hall divided into 5 spans of equal size*

IB 2 – with tripartite prayer hall, covered with

IB 2 a – six domes of equal dimensions, arranged in two groups of three

IB 2 b – a dome before the *mihrāb* between two pairs of smaller domes on both sides

IB 2 c – a central dome between two smaller domes

*IB 2 d – three domes of equal size*

IB 3 – with prayer hall covered by two domes of equal size

## II MOSQUES WITH UNRELATED COURT

### II A – Flat roofed mosques

II A 1 – with latitudinal prayer hall

II A 1 a – with aisles parallel to the *qiblī*wall (from a minimum of two to a maximum of seven aisles

II A 1 b – with aisles perpendicular to the *qiblī*wall, *basilical mosque*

*II A 1 c – without supports*

II A 2 – with long rectangular prayer hall, *templar mosque*

II A 2 a – with aisles parallel to the *qiblī*wall

II A 2 b – with aisles perpendicular to the *qiblī*wall

II A 3 – with square prayer hall

II A 3 a – with aisles parallel to the *qiblī*wall, from two to seven aisles

II A 3 b – with aisles perpendicular to the *qiblī*wall

*II A 3 c – without supports*

### II B – Domed mosques

II B 1 – with prayer hall covered with one single dome

II B 1 a – without side rooms

II B 1 b – with two vaulted rooms at the sides

II B 2 – with prayer hall covered with two domes

II B 3 – with three domes

II B 3 a – with a larger central dome

II B 3 b – with domes of equal size

II B 4 – with five domes set side by side

II B 5 – with six domes of equal size in two parallel rows

II B 6 – with nine domes covering a square prayer hall

*II B 7 – with fifteen domes of equal size arranged in three rows*

*II B 8 – with tripartite prayer hall with central dome flanked by smaller domes on either side*



Fig.13 - al-Zaydiyya Mosque. The central part of the building is modern, filling the space of the former courtyard.





Fig.14 - Ġaymān, mašjid al-Ġu'aydan.



Fig. 15 - Qadān, mašjid Bani al-Tayyār.

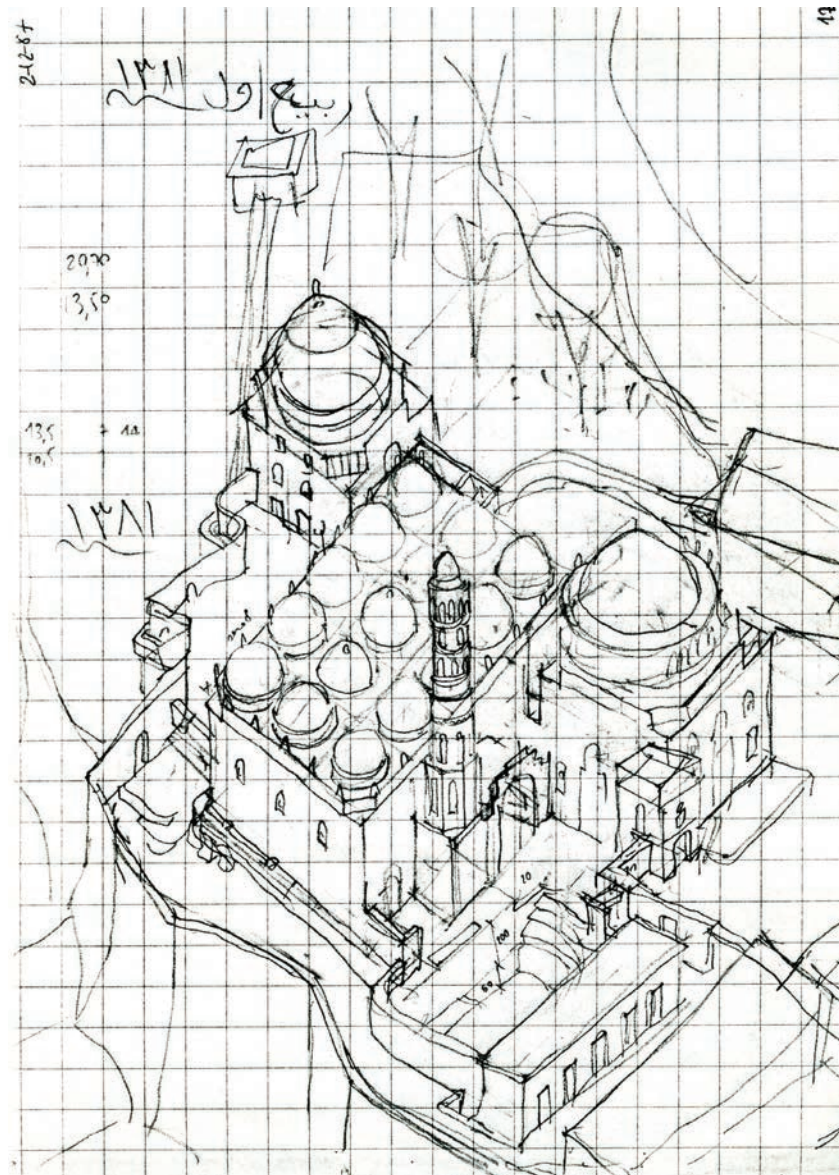


Fig. 16- Ġami' of Nağd al-Ġumār, sketch from Paolo Cuneo's note book.

The first modifications with respect to the former published typology occurred in the type defined as *domed mosques with organic court with the prayer hall divided into 5 or more spans and a large dome before the mihrāb*. This type I B1 was in fact further subdivided into three different categories according to the number and the size of the spans of the mosques/madrasas. The madrasa al-Muzaffariyya at Ta'izz was thus assigned to the type I B 1a, the Madrasa al-Ašrafiyya to I B 1b, and finally, the Friday mosque of al-Zaydiyya (fig. 13), once included in type I B2 [24], now constitutes a new type as mosque with prayer hall divided into 5 spans of equal size (type I B 1c).

The group of domed mosques with tripartite prayer hall (I B2) is now amplified with type I B2d. Here the prayer hall is covered by three domes of equal size, preceded by the court encompassed on two sides with roofed halls. An example of this group is the al-Mu'ayyadiyya, probably built in the Rasūlid period and discovered during the survey among the ruins on the northern slope of the Ġabal Šabir.

Important changes were also made in the typology concerning mosques with unrelated courts (II A and B). *The Materials for a Typology...* distinguishes between the flat-roofed mosques of a "horizontal" and a "vertical"/ or "Ka'bic" sub-type. Thus these mosques are now distinguished by their development in height. Two mosques with similar ground plan may in fact be quite different in their superstructures. The first sub-type (which may have a latitudinal, a longitudinal or a square prayer hall) with its "horizontal" development shows the greatest number of edifices (fig. 14). It is mostly found in the plateau area, but is also present in the Tihāma.

With regard to the plan, type IIA was also expanded with the new group IIA. c, which comprises small prayer halls without any support. With the one exception of the Masġid al-Kadara' (north of Turba), these latter mosques all belong to the "Ka'bic" sub-type (IIA.k). The small "Ka'bic" mosques, square or rectangular in plan with or without supports, recall the famous sanctuary at Mecca (fig. 15). In fact, they show a cubic form

similar to that of the Ka'ba (= the cube), which in turn has its architectural roots in pre-Islamic sanctuaries [25].

The "Ka'bic" mosques are often isolated and suggest the possibility of their circumambulation. A fair number of this "vertical" sub-type are known to us in the highlands, and especially the 'Ibb region, with a concentration in the Ġibla area associated with the Rasūlid rule there in the 13th century. Chronologically they can be attributed to a time span ranging from at least the beginning of the 12th century up to the Ṭahirid era (1454- 1517). Two new types were defined in the group of domed mosques with more than three domes, II B 7 and II B 8. Of the first, we may mention the beautiful Ġāmi' of Naġd al-Ġumā'ī, 25 km east of 'Ibb, with fifteen domes of equal size arranged in three rows, dated 1054H/1644 (fig. 16). Of the second type, we may mention the prayer halls of the building complex of Yufrūs of Ṭahirid period and the Ġāmi' of Dū Sifāl, probably of the 10th H/16th century.

Progress in our new research project will probably confirm this typology, though we cannot rule out further modifications or refinements. Our overall objective is to order all the documents left in an organized archive, to present a part of them in publications and to make the records available to interested Yemeni and western scholars. The goal is ambitious in view of the unfortunately missing members of the Mission, restricted time and limited financial resources. In any case, the work is in progress. We do hope that in this way we can give a new boost to research on Yemeni Islamic architecture and fine arts, a part of which is unfortunately already lost or seriously threatened. Last, but not least, it is also our wish to reap what has been sown by such outstanding scholars as Paolo Cuneo [26].

## NOTE

[1] The Italian archaeological mission (MAIRY) was founded and directed by Alessandro de Maigret from 1980 to 2011. Sabina Antonini de Maigret has been Director of the mission since. The MAIRY worked until 2011 within the framework of the *Italian Institute for Africa and the East* (IsIAO) headed by Gerardo Gnoli, and since 2013 it has belonged to the Association *Monumenta Orientalia*, directed by Roberto Parapetti.

[2] Umberto Scerrato as director of the Islamic project, Giovanna Ventrone, Paolo Cuneo, Mario Mascellani and Michael Jung composed the team. Mario Lolli Ghetti accompanied and supported the team for a short period in 1987. The project was organized and conducted in accordance with the *General Organization for the Antiquities and Libraries* headed by the Qāḍī Ismā'īl al-Akwa'. The work was confined only to the *Yemen Arab Republic* (North Yemen). Only in 1990 was North Yemen merged with South Yemen (formerly the People's Democratic Republic of Yemen), becoming the *Republic of Yemen*.

[3] Cf. Scerrato & Ventrone 1984; Scerrato, Ventrone & Cuneo 1985 and 1986.

[4] Cf. Ventrone Vassallo 1996: 52-55.

[5] Paolo briefly dealt with these aspects in 1978 and again in his *Storia dell'urbanistica...* 1986: 233-45.

[6] Scerrato, Ventrone & Cuneo 1985: 392f.

[7] Cf. Scerrato, Ventrone & Cuneo 1986: 459f.; Cuneo 1987.

[8] Cf. *Activities...* 1983: 344.

[9] Cf. Scerrato, Ventrone & Cuneo 1986: 444-59, figs. 86-97; Jung 2005; on the minaret, see Finster 1986.

[10] Cf. Ventrone Vassallo 1993.

[11] Cf. Ventrone Vassallo 1992.

[12] Cf. the Himyaritic door within the qibli wall between the *mihrāb* and the *minbar* of the Friday mosque of Šan'a', in Garbini 1970: 400f, pls. II-II; Costa 1974: 504f, pl. XXVII and the pre-Islamic inscription inserted in the *mihrāb* of the Masġid al-Hawayā at Na'at, Jung 2012: fig. 6.

[13] Cf. Jung 1992 a, b, and *lecture Southern Arabian Spoils in Yemeni Mosques. A note on continuity between Pre-Islamic and Islamic architecture in Southern Arabia*, held during the 20th *Rencontres Sabéennes* a Perugia in 2016 (unpublished).

[14] Besides the authors, Maria Adelaide Lala Comneno and Maria Luisa Cipolla are collaborating on the project in Italy, as well as Daniele Jung as computer scientist.

[15] For the photographic archive, the bibliography, the projects etc. of the pre-Islamic section of the MAIRY, see <http://www.monumentaorientalia.org/>

[16] The photographic archive was further enriched with ca. 600 slides taken by Paolo during his private travels in Yemen, and kindly bestowed on the Mission by his wife Lella Comparetti.

[17] Enclosed are photographs taken by occasional participants in our surveys, too, including Mario Picchi and Antonio Solazzi.

[18] This work was performed by the architects and draughtsmen Edoardo Gatti, Vincenzo Labianca, and Nicola Olivieri. Paolo Cuneo, too, drew some of the mosques and supervised the works.

[19] Some of these plans had already been included in the computerized files edited by CeSADA- Centro Studi Architectural Data of Novara, covering all the known and published Islamic buildings of the world. Paolo Cuneo participated in the study group directed by Umberto Scerrato.

The project was revolutionary for its time; we are speaking of the 1980s! Unfortunately, it was not finished, though its database already comprised a huge amount of information.

[20] Here we must limit mention to the huge Ġāmi' al-Saleh (now People's mosque) in Ṣan'a' built at a cost of nearly US\$ 60 million, inaugurated in 2008.

[21] We have news of the following damage or losses: at Sa'da, the Ġāmi' al-Hādī, at Ṣan'a', the Maṣġid al-Filayhī and the Qubba al-Mahdī 'Abbās, at Ta'izz, the Madrasa al-Aṣrafiyya [after being restored in 2000], the Maṣġid 'Abd al-Hādī, totally lost, like the Maṣġid al-Niṣa, at al-Muḥa' the Maṣġid al-Šādili and the tomb al-Šādili [totally lost], the Maṣġid al-Fazza, the Maṣġid at Dayr Akad [totally destroyed] at Zabīd, the al-Ġāmi' al-Kabīr. By January 2002 the Madrasa 'Alqama at Du Sifa' had already been completely demolished.

[22] Cf. Scerrato & Ventrone 1984: 440, figs. 20-36; Scerrato, Ventrone & Cuneo 1985; Id., 1986.

[23] Cf. *Draft report on...* 1984-1985, 1986; modifications with respect to the former drafting were proposed by Scerrato, Ventrone & Cuneo in *Materials for a Typology of Yemen Religious Architecture. 1987 Campaign*, which was to be presented in *IsMED Memoirs* but never published.

[24] Cf. Scerrato, Ventrone & Cuneo 1985: 377, 380, figs. 42-3.

[25] Cf. Jung 1988:196f; Finster 1991.

[26] Here, I do not want to leave unmentioned the activities of

other Italian scholars in the field of Islamic architecture, fine arts and restoration in Yemen, which may briefly be supplied here. The late Eugenio Galdieri carried out research and restoration at Ta'izz and Ṣan'a' (Galdieri 1997-1999). A group of scholars of the Istituto Orientale di Napoli headed by Maria Vittoria Fontana and Eugenio Galdieri made surveys at Hudayda, cf. Fontana, Galdieri, Giunta & Caterina 1998. Roberta Giunta published a voluminous monograph on *Rasulid Architectural Patronage in Yemen* (1997). Above all, we must mention Paolo Costa. During his period of intense activity at Ṣan'a' the most amazing unearthing occurred in 1973. During his restoration work on the Great Mosque 40 000 fragments of more than 1000 manuscripts of the early Islamic period were discovered between the roof and the ceiling of the west-riwāq of the mosque, Costa 1974: 505f, pl. XXX a, b. This spectacular find should give enormous momentum to Koranic studies and stimulate lively, albeit occasionally challenging, religious and political discussion and controversy on the issue; for an overview of the issue, see Said Reynolds 2015.

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