

## EARLY CHRISTIAN ARCHITECTURE IN THE IRAQI SOUTH-WESTERN DESERT

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<要 旨>

### イラク西南沙漠の初期キリスト教建築

イラク西南沙漠のアイン・シャー・イア修道院遺跡から発掘されたイスラーム初期の建築遺構から導きうる、バビロニア地方の教会建築の特色を明らかにする。イラク両河地帯には早くにキリスト教が普及したが、それを証する遺跡は、北部の数例とクテシフォンを別にすれば西南沙漠域に集中して知られる程度である。北部の事例がシリア様式の直写に近いのに対し、西南沙漠の教会建築には、日干煉瓦の軀体、主内陣の扱いなどにバビロニアないしはサーサーン朝建築特有の要素を認める。身廊部の隔壁もシリアでは見られない。これらからバビロニア独自の教会様式を類型化することも可能とみる。

### Introduction

The Kokushikan University Expedition to Iraq, headed by Professor H. Fujii, has discovered through the recent excavations ruins of a Christian monastery in the time of the early Muslim era, situated in an arid region expanding south to the Lake Milh and bounded eastward to the Karbala-Najaf route, which we call the Iraqi South-western Desert. The said monastic site, called Ain Sha'ia, is located some 15 km west to the city of Najaf. The general report of the excavations and a further supplemental study on the ecclesiastical finds have already been published in the latest issues of *al-Rāfidān* [Fujii et al. 1989; Okada 1990]. In addition the Syriac inscriptions brought from the site have been catalogued and commented favorably by Dr. E. Hunter [Hunter 1989].

The site is delimited on the west by a cluster of rock-cut caves in the cliff, called Dukakin, some of which are modified into inhabitable rooms. Nearly 1 km east from the caves there is a small spring at the foot of the cliff, said by local people to be the spring of Sha'ia, from which what the site is called derives. The gentle slope between Dukakin and the spring is dotted with variety of structural remains such as monks' sells and a water reservoir, around which the place is designated Site B in the previous report. Apart from these smaller ruins, near the spring, there is a fortified complex at Site F, some 148×58 m in plan, where a church building was, though not completely, uncovered in the center.

The constitution of the Ain Sha'ia monastery has, however, not satisfactorily been given yet. Although the possibility cannot be excluded that the fortification might have been provided against a possible persecution by the Muslim or any other foreign invasions, it does not enough interpret the coexistence of the fortification with a church in the east and a dwelling quarter for monks in the middle of the whole. Within the former there are a lot of rooms or cells, though excavated only partially, no doubt arranged along the enclosure wall leaving an open courtyard inside, whereas the latter seems to have been accompanied by another church or chapel standing at the nearer spot of a deep recess in the cliff, denominated Site C, of

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which the vestige is evidenced with sturdiness of remaining walls and with plaster fragments of colourful mural paintings<sup>1)</sup>. We have, therefore, to assume a somewhat different function for the Site F fortification, such as a facility for a pilgrimage or commercial caravan, other than solely an ascetic practice or ritual. We can hardly advanced, however, such a discussion about the monastic constitution at Ain Sha'ia, since reliable evidence would be no more expected without further excavations.

As well as such a constitutional interpretation as a whole, an architectural study of the church in the fortification may give a clue to another question of the development of Christianity in Mesopotamia, otherwise of interrelation of Christian sites known to us so far. Early-Christian archaeology in Mesopotamia has scarcely been disputed from the architectural point of view for a long time, though evidence has steadily increased, for example, from Qusair in the south and Qasr Serij in the north, ever since O. Reuther discussed the Christian church in the Sasanian context [Reuther 1938: 560–6]. According to literary sources the Persian Christianity was diffused in Adiabene, the district of present Erbil, as early as the second century; subsequently its supremacy was established at Ctesiphon [Asmussen 1983: 924ff]. Within the district of Hira in the pre-Islamic time, most relevant to the present discussion, more or less forty ecclesiastical names are known to us [Fiey 1968: 203–243], none of which have been identified with a practical site yet. The scarcity of known examples, therefore, by no means implies that the early missionary activity established very few institutions of Christianity from the outset compared with peripheral regions. Henceforth, it is probable that archaeological evidence will still more increase as the church buildings at Ctesiphon, Hira and at Ain Sha'ia had not been discovered until the excavations were carried out. It may, therefore, be allowed to regard this sort of architecture in Mesopotamia as a significant category in the time of the Persian reign through the early Muslim era, which have been likely to escape our notice<sup>2)</sup>.

It is such a subject that the present article will deal with, searching the architectural relation of the church uncovered at Ain Sha'ia with the same sort of monuments from the vicinity and, when necessary, even from the neighbouring countries to Mesopotamia, so as to grasp a concept of the early Babylonian, not Sasanian, church as an early regional style.

### Architecture of the church at Ain Sha'ia

At the beginning an attempt is made to present the structural features and noticeable details of the church building excavated at Ain Sha'ia (Fig. 1), preparing the further comparative discussion<sup>3)</sup>. The church itself does not stand independent, as mentioned above, but is constructed within a fortification. All the sketal walls are made of mud-bricks and coated with gypsum plaster. Likewise the floors are plastered except those of a few rooms as might be taken for a corridor. The thickness of a wall, measuring 1.10 to 1.15 m, is normally fulfilled with three bricks, otherwise two bricks and two halves. Bricks used for the foundation, a little wider than a wall thereon, are relatively stiff and have a format of 37×37×10 cm. Butler has once referred to a unit of linear measurement in early-Christian Syria as follows; the old royal cubit of Babylonia of 555 mm was changed to the foot of 370 mm about the year 500 [Butler 1929: 182f.]. According to these units, the wall thickness of our church coincides with 2 cubits or 3 feet, and a format of foundation bricks with 1 foot. Whether it occurred by chance or intentionally is uncertain since such a fact is hardly proved by any other contemporary architecture in the vicinity. In places are found bricks of 32×32×11 cm in the wall body, but whether these are of the original construction or of the later repair is hardly distinguished.

The church proper is reconstructible in plan, leaving out the southern-most room, to an external rectangle of 22.4×13.8 m, the proportion of which is nearly 8:5<sup>4)</sup>. It consists of a rectangular sanctuary

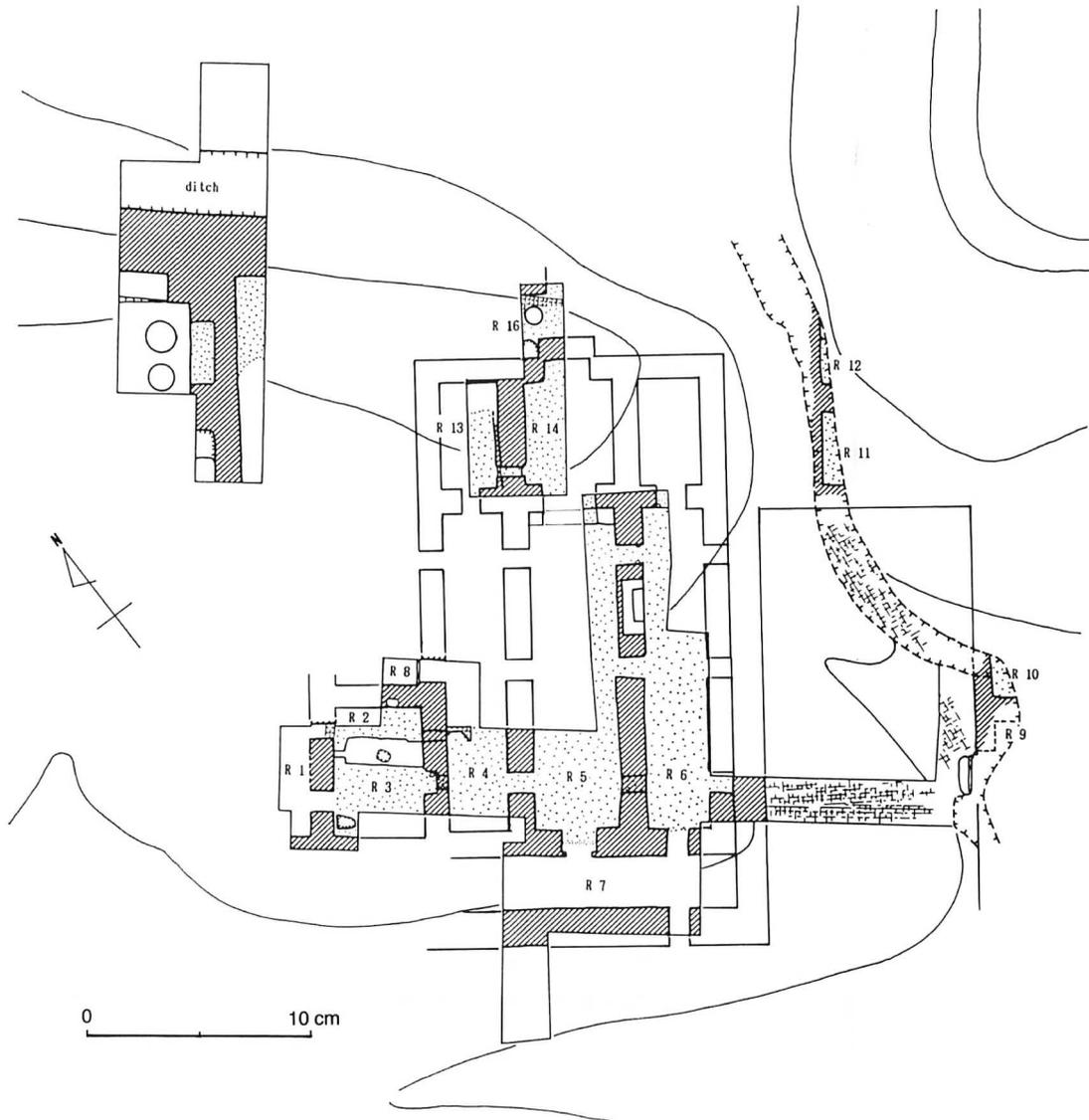


Fig. 1 Church at Ain Sha'ia.

flanked by a little smaller chambers on either side and of a three-aisled nave. The sanctuary is not oriented toward the due east, but deflected as much as 60 degrees to the north. In the present description the direction of this side is regarded as the north for brevity.

The nave is divided into three-aisles by ordinary walls, neither by columns nor piers, most probably each with three narrow passages opening symmetrically. Both in the outer side walls three doorways may have been provided as well, so that four openings could be laid transversely in a line at the outset. The east aisle faces to a courtyard paved with baked bricks, while the west one connects directly to some subsidiary rooms, one of which, furnished with a tripartite niche, has once had another opening onto the aisle in addition to the three mentioned above. On the south, across the nave, lies an earthen-floor room with three openings connecting it to three aisles respectively. This room may be taken to be part of a corridor, though analogous at a glance to a narthex as often seen in Syrian or North Mesopotamian churches, since there is no sign of a front porch in the outer wall, the side wall of the east aisle not extending to form a narrower end of the room. Accordingly the church is thought to be accessible mainly from the paved-courtyard in the east. The internal length of the nave is 14.5 m; the widths of the central aisle and each of side ones, 3.9 m and 2.5 m respectively. The internal width of the nave measures 11.5 m

altogether.

On the north the nave is terminated by three chambers, each 4.6 m deep and with the same width as the corresponding aisle. They apparently form a tripartite sanctuary<sup>5)</sup>, not completely excavated though, judged by the following aspects. The central one, that is the true sanctuary, has a plastered floor made some 0.3 m higher than the floors of the side chambers, or *pastophoria*, and of the nave; it broadly opens to the central aisle bounded with two steps; in its end wall is furnished a rectangular niche, 1.05 m deep, instead of a usual semicircular apse; lastly it is evidenced by a large quantity of plaster fragments with colourful paints reserved that only this apartment was ornamented with mural paintings.

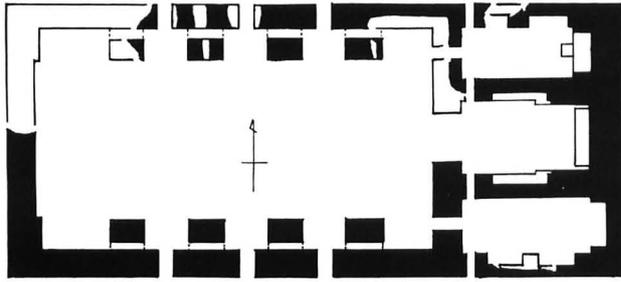
Both the side chambers have not been proved to be actually included within the conjectured rectangle, and in any case, appear to be adjacent to some other rooms. They are surely linked with the aisles perhaps by usual doors; a baked-brick socket was found in the doorway to the eastern one. The western is connected with the sanctuary by a passable slit of about 0.3 m wide. Whether so is the eastern or not is unknown since the spot of the partition between the central and eastern chambers is left unexcavated<sup>6)</sup>. The back of the sanctuary is not exposed to the outer world, but there is a room along the enclosure, with a baking oven and with a door break in the outside wall on the same line as the longitudinal axis of the church.

It is most probably during the ninth century that the church became out of use as such, judging by various finds [Fujii et al. 1989: 42ff]. The description of later alterations in places, which would evidence the process to abandonment of the building, is to be left out here, since it scarcely does with the present comparative discussion.

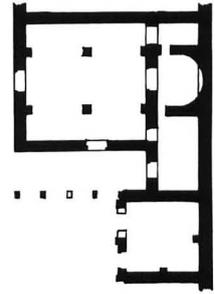
### Review of early churches in Iraq

The early Christian sites as far as we know in Iraq are indeed not so many as in Syria or southern Turkey. Even in the north where not a few old churches or monasteries still survive, there may be not more examples than half a dozen having been surveyed archaeologically. In the south, ecclesiastical monuments can be seen, apart from the church found from the mound of Qasr Bint al-Qadi at Ctesiphon, intensively in the South-western Desert region. The archaeological data necessary for comparison are concisely catalogued below. From northern Iraq two church buildings, at Qasr Serij [Oates 1962] and Tell Museifneh [Abbu 1987], are to be taken up, while from the south the examples at Ctesiphon [Reuther 1929], Hira [Talbot Rice 1932; idem 1934], Qusair and at Rahaliya [Finster & Schmidt 1968]. The descriptions will be mentioned individually in the order of<sup>7)</sup>:

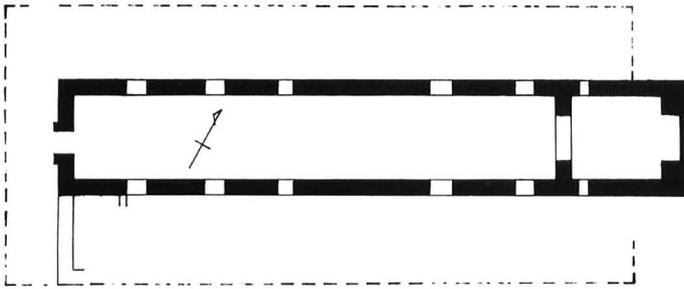
- 1) measurements of external rectangle (L. × W.) and approximate value of its proportion,
- 2) orientation of the sanctuary,
- 3) skeltal masonry and material,
- 4) main access,
- 5) nave system and roofing,
- 6) nave measurements (L. × W.) and proportion,
- 7) sanctuary plan and construction,
- 8) furniture and decoration of a sanctuary,
- 9) date of construction,
- 10) other features to note and special remarks.



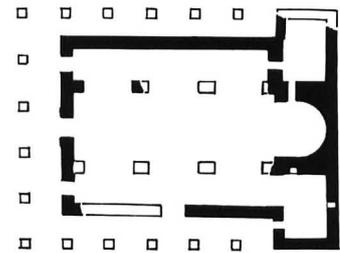
Ctesiphon [Reuther 1938]



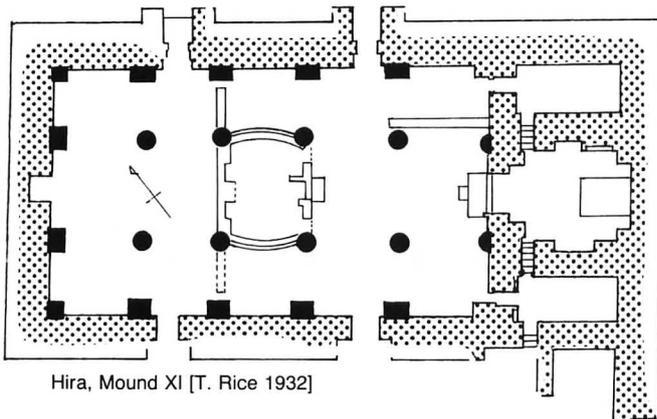
Museifneh [Abbu 1987]



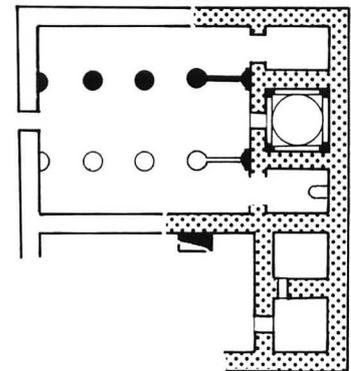
Qusair, Church A [Finster & Schmidt 1968]



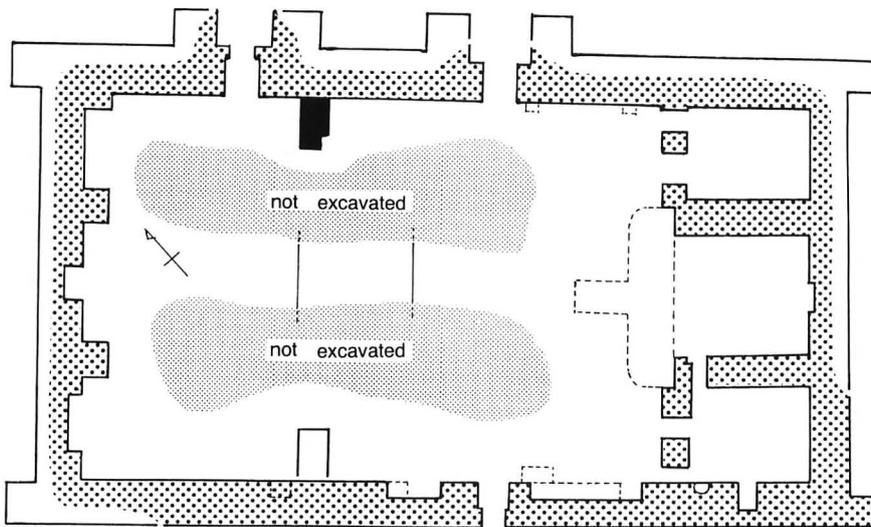
Qasr Serij [Oates 1962]



Hira, Mound XI [T. Rice 1932]



Rahaliya [Finster & Schmidt 1968]



Hira, Mound V [T. Rice 1932]



Fig. 2 Early churches in Iraq.

**a. Ctesiphon, church building from the upper level of Qasr Bint al-Qadi**

- 1)  $42 \times 19$  m (c. 11:5).
- 2) due east.
- 3) baked bricks.
- 4) from one of the long sides, both of which have three doorways symmetrically.
- 5) brick-vaulted single aisle with a series of alcoves on either side.
- 6)  $27.18 \times 15.06$  m (c. 7:4), according to the entry in the published drawings.
- 7) deep rectangle with a straight end wall, possibly vaulted, flanked by pastophoria within the external rectangle; each of the pastophoria connected with the nave, sanctuary and also with the exterior by three narrow passages respectively.
- 8) a step against the end wall and wide niches on either side; in the floor, trace of a ciborium remaining.
- 9) middle or late 6th century, judged mainly from the style of a male figure made of painted stucco.
- 10) No opening is in the western end wall. An older construction lies beneath, of which round columns take the place of square pillars erected at alcoves.

**b. Hira, Mound XI church**

- 1)  $35.7 \times 18.6$  m (c. 23:12).
- 2) deflected  $41^\circ$  south from the due east.
- 3) mud walls<sup>8)</sup>, coated with white plaster, and baked bricks for round and engaged columns as well as for the flooring.
- 4) from the northern long side with two doorways.
- 5) columned nave of three aisles, possibly roofed each by vault; the middle bay occupied by a raised platform of mud brick with arc-shaped benches on either side and with a screen behind.
- 6)  $24 \times 17.1$  m (c. 10:7).
- 7) nearly square, possibly domed, flanked by pastophoria within the external rectangle; both the pastophoria connected with the nave and sanctuary by narrow passages.
- 8) wide rectangular niche in the end wall and narrower niches on either side; ornamented with wall paintings.
- 9) 6th century<sup>9)</sup>.
- 10) In the western end wall of the nave is no opening but a small rectangular niche in the center. Doorways symmetrically arranged in the southern wall perhaps lead to another room complex.

**c. Hira, Mound V church**

- 1)  $58 \times 33.5$  m (c. 7:4)<sup>10)</sup>.
- 2) deflected  $43^\circ$  south from the due east.
- 3) mostly mud; baked bricks for pilasters and for the flooring.
- 4) from the northern long side with two doorways.
- 5) single aisle, with a raised platform in the center; no clue to roofing<sup>11)</sup>.
- 6)  $41.5 \times 27.5$  m (c. 3:2)<sup>12)</sup>.
- 7) nearly square fully open to the nave like an iwan flanked by pastophoria, of which only the southern one is connected with the sanctuary; no clue to roofing.
- 8) small rectangular niche in the end wall; ornamented with wall paintings.
- 9) 7th century, from the viewpoint of the mural paintings<sup>13)</sup>.
- 10) Similar to the Mound XI church, a small niche is in the western end wall.

**d. Qusair, Church A**

- 1)  $43 \times 19$  m (c. 7:3), provided that the possible rectangle is drawn as the excavator conjectured, the assumable protrusion of the sanctuary excluded.
- 2) deflected  $29^\circ$  north from the due east.
- 3) mainly rubble, partially semi-dressed, with mortar for the central body of the edifice; for the sides, mud-bricks with stone foundations beneath.
- 4) uncertain, but probably, if anything, from the southern side since there lie ruins of the relevant building complex.
- 5) stone-vaulted central nave flanked by side aisles, separated each other by ordinary stone walls each with five narrow passages arranged symmetrically.
- 6) width of three aisles altogether uncertain, the central nave  $33 \times 5.8$  m.
- 7) nearly square chamber, covered with a stone-built dome supported by four corner squinches, perhaps slightly protruded from the external rectangle and flanked by pastophoria, each of which has a direct access to the sanctuary through a narrow passage.
- 8) in the end wall a rectangular niche with a half-dome shell above.
- 9) 5th or 6th century, judged mainly from structural character of the Late Sasanian context.
- 10) On the western end of the nave is a doorway with pilasters in the front, and there must be an annexed room just like a narthex.

**e. Qusair, Church B**

- 1) more than  $35 \times 8$  m.
- 2)  $18^\circ$  north from the due east.
- 3) mortared rubble.
- 4) unknown.
- 5) 6) single aisle of the almost identical width with the central span of Church A.
- 7) domed square.
- 8) a tomb disclosed below the end wall niche.
- 9) certainly preceding Church A.
- 10) The western end is cut away by a wadi along which an enclosure runs on the opposite bank embracing Church A.

**f. Rahaliya, Qasr al-Ma'i**

- 1)  $23 \times 15.5$  m (c. 3:2).
- 2) due east?
- 3) mud-bricks for walls, and stones, both chopped and dressed, for supporting frames of the arcade and sanctuary dome.
- 4) accessible perhaps only from the western end.
- 5) columned nave of three aisles, separated by three pairs of circular columns and two pairs of engaged columns on both ends of the nave.
- 6)  $14.5 \times 12.6$  m (c. 8:7).
- 7) square chamber, no doubt covered with a stone-built dome supported by four squinches, flanked by oblong pastophoria within the external rectangle.
- 8) no specific furniture.
- 9) possibly Late Sasanian.
- 10) The sanctuary has no passage to pastophoria; even the doorway to the nave exceptionally narrow. The back wall of the sanctuary is extended south to form the east side of annex rooms; west of the edifice are faintly dotted the relevant remains. The whole complex is embraced by an enclosure.

**g. Qasr Serij, basilica**

- 1)  $23 \times 14$  m (c. 5:3), excluding the outer porticoes on three sides and the projection of the pastophoria; otherwise, if including the porticoes,  $26 \times 20$  m (c. 9:7).
- 2) due east.
- 3) dressed limestone blocks.

- 4) either of two entrances on the west and south sides.
- 5) three aisles separated by arcades each with three arches abutting on rectangular piers; roofed by timber trusses.
- 6)  $15.7 \times 12.8$  m (c. 5:4).
- 7) elongated semicircular apse with a half dome and with the back concealed by the rectangular masonry; flanked by a diakonikon on the north and by a martyrion on the south, both projecting from the nave rectangular.
- 8) a moulded chancel arch spanning the front opening; possibly a passage in the north wall communicating with a diakonikon.
- 9) 6th century, probably c. 565<sup>14)</sup>.
- 10) The side entrances in the west wall of the nave are quite conjectural; the porticoes on three sides are assumable on account of certain vestiges marked on the surviving masonry, but neither the form nor position of columns reconstructed is necessarily reliable.

**h. Tell Museifneh, basilica**

- 1)  $13.5 \times 12.6$  m (c. 15:14), including the southern portico.
- 2) due east.
- 3) dressed stone blocks.
- 4) only the entrance from the southern side through a columned porch.
- 5) three aisles separated by arcades each with two arches raised on a square column and pilasters.
- 6)  $8.1 \times 7.8$  m (c. 1:1).
- 7) elongated semicircular apse covered by a half dome, with the back concealed by a straight wall; flanked north by a narrower chamber and south by a wider room projecting from the nave rectangle, both communicating with the sanctuary.
- 8) no specific furniture.
- 9) 7th century or earlier<sup>15)</sup>.
- 10) The edifice stands easterly in the enclosure of some  $50 \times 50$  m, with the east end aligned with the enclosure wall; subsidiary rooms adjoin it both on the north and south.

Other than the above, one more example of a type with a transverse nave, which was recently discovered by the British Museum Expedition at Khirbet Deir Situn in the region of the Eski-Mosul reservoir, should be added<sup>16)</sup>. Meanwhile there are some other churches still surviving, such as the church at Chidr Elias near Mosul [Preusser 1911: 4ff] and that of Mar Tahmazgerd in Kirkuk [Bell 1982:

74–78], but they have been excluded here from the list because not only of their untypical formation but also of uncertainty of archaeological evidence.

### Comparative discussions

Now the discussion aims at searching the possibility of the typology or classification of the early churches specific in Iraq through the general survey based on the architectural data described above. Apart from the comparisons of individual factors it should be noticed that throughout the churches in Iraq is hardly available both the functional classification as has once been made by G. Bell into “parochial” and “monastic” [Bell: 1982: viii]<sup>17)</sup> and the grouping as is provided by Butler in his reviewing the ground plans of Syrian churches [Butler 1929: 187ff]. Both the churches at Ain Sha’ia in the south and at Qasr Serij in the north represent such a basilical plan as may usually be regarded as parochial, though they stand each in a monastic complex. There is no church planned with the centralized scheme, square or octagonal, on the other hand, as far as we know in Iraq so far. The architectural concept of centralized planning itself was no doubt preferred by the Iranian people, as the type of *chahal taq* represented their own cultic building. Not only a typical building of *chahal taq* but also a general construction of centralized plan is scarcely known so far in any category of the monumental architecture in Mesopotamia, though the ancient ziggurat may give an exception, where the Iranian tradition of architecture had certainly become deeply rooted by the Sasanian time. Such a form was by no means employed as a total appearance of any Mesopotamian church. The comparisons of the other individual factors are as follows:

#### *mass and masonry*

There is no example without a rectangular outline in plan. Only in case of the two in the north, either or both of *pastophoria* protrude from the external wall of the nave side, but each of them still forms another larger rectangle when including the columned portico as never seen in the south. The proportions of them quite vary. That at Ain Sha’ia is interestingly very close to the “golden section”, but it must be either of exception or of accident since no identical proportion can be found among the others.

The masonry varies in the south, while in the north the two churches above are built of dressed stones, of which the technology apparently come from the north-Syrian masonry. In southern Mesopotamia, it can be said that the adherents of Christianity did not always persist by far durable but costly masonry of stones. The churches at Hira, said to be built of mud, show a comparable scale with Syrian cathedrals such as St. Sergius at Resafa. It does not seem, however, so likely that those churches positively tended to inherit an aged tradition of the ancient Babylonian temple architecture usually built of mud brick. Not a few ritual monuments illustrate the non-mud architecture in the time of the Partho-Sasanian reign. The construction of mud-brick churches must be resulted fundamentally from the economy and availability of building material. In fact there are some churches of mud-brick walls seen also in north-eastern Syria [Butler 1929: 200].

In churches mainly of mud or mud-brick, different materials were often combined for the construction of arcade or dome. At Hira round columns erected in the nave are of baked brick, and at Rahaliya not only nave columns but piers carrying a sanctuary dome are of cut or chopped stones. Church A at Qusair represents a Sasanian masonry of mortared rubble.

#### *nave and sanctuary*

The nave plans again show the rectangle without exception, of which the proportions vary between nearly 1:1 and about 3:2, of course, excluding the type of a single-aisle. In reviewing the planning systems they may be divided into large two groups: three-aisled and single-aisled. The first group embraces further subdivisions: the columned nave as most frequently seen in Syria, and the nave peculiarly with wall

partitions. The two churches in the north exemplify the former as well as those at Hira XI and Rahaliya in the south, while the churches at Qusair and Ain Sha'ia fall under the latter. The latter type can be seen, other than in these two, solely in the monastic church at Kharg Island which will be referred to later. In case of the church at Ctesiphon, the nave should be regarded as a type of a single aisle despite the rows of pillars on either side of the nave, since the pillars seem to have provided merely to widen the nave span rather than to form three aisles, the way of which is likely to have a close relation with Sasanian palace architecture [Reuther 1938: 561f].

All the naves are terminated on the east by three chambers, a sanctuary and side chambers, except Church B at Qusair. The back walls of them form a straight line on the exterior as a rule, though in case of Church A at Qusair the central sanctuary may have protruded some distance to the east. Both the sanctuaries in the north consist of semicircular apse, whereas those in the south are always rectangular in plan, often with a niche in the end wall. This contrast is the first to distinguish the styles of the north and south each other. The apse at Qasr Serij fully opens with a chancel arch against the nave as if it would have been directly transmitted from Syria, while the narrower opening of that at Museifneh represents somewhat unique locality. The style with a rectangular sanctuary was rapidly spread also in the north-Syrian region for a parish church in the early 6th century [Beyer 1925: 80ff], but it seems precipitate that the contemporary style of churches in south Iraq may have derived from such a Syrian form. The sanctuary rectangles in Iraq considerably differ in proportion from Syrian ones. Sanctuaries not only of deep rectangle but of regular square are quite rare in Syria. This concerns with the upper structure of a sanctuary. The square plan is apparently sought by a domed construction, such as at Qusair and Rahaliya. Likewise it seems likely that a deep rectangle may be influenced by the structure of vaulted iwan which prevailed as a main room or throne hall in the contemporary architecture. It should be avoided in any case that it might be interpreted simply as a tradition of the Babylonian temple [T. Rice 1934: 58].

#### ***orientation and access***

In the western world it is quite natural that the church has an apse oriented toward the due east. Although any deflection was unavoidable it varies within 12 degrees as far as Butler surveyed the Syrian churches [Butler 1929: 182]. Nevertheless, of the churches at Hira, Qusair and at Ain Sha'ia, such a basic orientation is almost neglected. Tolerance of the orientation can be pointed out as a remarkable attribute of the church in south Iraq.

Likewise the direction of access varies. The church at Museifneh in the north can be entered not only through the southern side portico but also from the west end facing the courtyard. Qasr Serij has entrances again both on the south and west sides, though porticoes may perhaps be provided on three sides without a break. The style of entrance with a columned porch on the longer side against an inner room had already introduced in the Assyrian time<sup>18)</sup>, but judging from the total appearance the church style itself is assumed to be transmitted as a whole from north Syria in the Christian era.

In the south, on the other hand, it is characteristic to arrange several doorways symmetrically on either side of the nave except in Qasr al-Ma'i at Rahaliya. At least at Hira and Ain Sha'ia, however, some subsidiary rooms communicate with the church proper on one side. At Ctesiphon and Hira there is no doorway in the end wall opposite to the sanctuary. In any case the main entrance to the nave is to be placed on a longer side as a rule.

Apart from the catalogued churches referred to above, another comparable church building has been disclosed, not in Iraq, at the Kharg Island in the Gulf should be noticed<sup>19)</sup>. It stands in the center of a monastery complex, with a rectangular sanctuary oriented exceptionally toward south-west, deflected some 30 degrees south from the due west. Most impressively its nave is divided into three aisles by ordinary walls, analogous to the churches at Qusair and Ain Sha'ia, each with narrow passages. It is noticeable,

however, that the side aisles as well as the *pastophoria* are by no means planed symmetrically. On the eastern end is provided a transverse room like a narthex, with no doorway leading to the central nave but with two openings to the side ones respectively. To take a different viewpoint, it seems likely that this church might be single-aisled, then surrounded by a divided corridor. Such an aspect may give a clue to the interpretation of a specific construction of Church A at Qusair, of which the outer walls of the side aisles are built of mud-bricks, quite different from the stone masonry of the central portion. This suggests that the rooms flanking the central nave on three sides may perhaps serve mainly as a circumambulatory, though literary sources may not give any evidence for such a liturgical performance in the Babylonian church. So must be the case, it is believed, with the church at Ain Sha'ia.

## Conclusions

The present matter of concern is whether it is possible to classify the churches in Iraq appropriately. In reviewing their situations, at first, it can be assumed that three churches at Ctesiphon and Hira may have been located in the urbanized circumstances, and that the others stand either independent or in the monastic site distant from an urban region. The former ones correspond to the largest three of the entries, having enough space for a big congregation to recall metropolitan cathedrals. Most of the others are of middle or smaller class to compare with so far known churches in the neighboring countries, such as Syrian ones [Wilkinson 1984: 116ff]. Among them Church B at Qusair and two basilicas at Qasr Serij and Rahaliya can be thought, as the reported circumstances suggest, to have been erected as martyriums.

Secondly architectural studies, that is the main subject here, come to a conclusion that the churches in the north should be distinguished from those in the south. If the northern two were discovered in north Syria as they were, nobody would never believe it judging from the masonry, nave system and even the apse form. In north Iraq, however, it is noticed that some buildings of the so-called Sasanian stone masonry still remain, such as the churches at Chidr Elias and Kirkuk. Of the southern churches two prominent features should be pointed out; one of the two concerns with the construction of the sanctuary, and another the nave partition. The preference of a rectangular construction to a semicircular shape must be linked with the symbolism of the divinity. The native adherents preferred a deep and raised space surmounted by vault or dome, which was certainly much more familiar in those days than shallow and curved sanctuary in plan<sup>20</sup>).

As for the nave partition questions remain both in the types with columns and with walling partitions. A columned hall with three aisles features not only the western basilica, but also the late Sasanian or early Islamic palace architecture sometimes. Important here is the direction of main access to the church in Iraq, which is always provided on the side, not on the end. In Syrian basilical churches the side entrance seems, at least at the outset, to have been prior to the front one, whereas in such a palace building as has a columned main hall in front of a throne, for example, two Sasanian palaces at Kish and Dar al-Imara at Kufa, no entrance can be found on the side. And it is almost impossible that the tradition of Sumerian temples with the so-called bent-axes still survived. The columned type of church is, therefore, considered to be produced basically following the Syrian examples rather than the Sasanians, though a symmetrical arrangement of doorways must be of local invention. It is corroborated with a raised platform in the nave at Hira apparently of western origin. On the other hand, a type of nave partitioned by usual walls occurs for the first time in the Babylonian desert, apart from the one at Kharg of an obscure date. The motive of alteration from a broadly open columned nave to a walled and closed one can hardly be interpreted merely by easiness or familiarity, since artisans in those days surely excelled in the structure of broad-spanned arches or vaults. As already mentioned above in connection with the monastic church at Kharg Island,

some liturgical demand may have brought such an unique style, but symmetrically arranged entrances and a tripartite constitution with a rectangular or square sanctuary were left as they were. Thus, it may be allowed to set up a new specific style of church.

In addition the entries above seem to exclude the church style of the earliest stage in the period when the Christianity spread over the Babylonian plain for the first time. Unfortunately there is no example known to us showing what is the style of possible churches of such an early date. For Syrian churches there is an hypothetical view that firstly appeared a kind of house church with courtyard, as exemplified by the renown remains disclosed at Dura Europos, and subsequently a primitive single-aisled chapel entered from the portico on the longer side as is seen in the case with Qirk Bizze [Milburn 1988: 125]. These two, however, seem to have developed from different styles of local house from the outset, even though the dates of the two are far apart. In any case the later style of Syrian churches may have hardly established until the contribution of special architects such as Markianos Kyris [Beyer 1925: 38ff]. The similar development from a house church may be presumed about Mesopotamian churches, too, though nothing to evidence at present. The specific church edifice may have emerged on account of necessity of a liturgical congregation. This evolution seem to have begun at the latest in the very early 5th century when six classical provinces with a metropolitan as leader had already been established within the Sasanian territory [Asmussen 1983: 931–2]. All the entries above are thought most probably to be of a later stage afterwards.

Thus, the churches in Iraq, especially in the southern region, though not so many, represents the notable architectural phenomenon in the time around the Muslim conquest, that various factors and elements, both native and alien, skilfully composed not in one way a new category of architecture, neither Sasanian nor Islamic.

### Notes

- 1) Regretfully to say, we were obliged to give up the work at Site C beyond the surface clearance because not only of the danger of unstable rocks but of extreme disturbance of the earth by somebody else probably for the purpose of taking baked-bricks away [Fujii et al. 1989: 78–81].
- 2) Among recent works of the early Christian architecture, Mesopotamian churches are dealt with, for instance, as follows: R. Krautheimer refers to the churches at Ctesiphon, Hira and in the region of the Tur 'Abdin, with almost nothing more than Reuther's view [Krautheimer 1965: 214–7]; R. Milburn nearly neglects evidence from the Mesopotamian plain despite providing a chapter "Church Buildings in Asia" [Milburn 1988: 121–44].
- 3) Unexcavated part, nearly a half of the building, as the illustration shows, has been conjectured to be of a symmetrical construction, and some of measurements to be referred to below are, therefore, estimated based on such a reconstruction.
- 4) By the afore-mentioned cubit these measurements render  $40 \times 25$  with the allowable margin of error, and it is interesting to note that this proportion is equivalent to the "golden section".
- 5) What we call these three chambers follows the term used by Krautheimer here [Krautheimer 1965: 215], whereas Butler designated only a central one as a sanctuary [Butler 1929: 175ff].
- 6) Following the denomination of Syrian churches, the western chamber deserves a *diakonikon* and the eastern does a *prothesis*. The fact is not contradicted with the Syrian case that there is a narrow passage on the west side of the central sanctuary.
- 7) All the data depend upon the report documents insofar as without a proviso; the numerical values, unless documented, have been obtained through the present writer's measuring the original drawings to be cited.
- 8) As far as the excavator describes, wall bodies are built only of mud [T. Rice 1932: 279; idem 1934: 58], but it may be read as mud-brick.
- 9) Although such a date is undeniable as that of foundation, it is noticed that the unearthed small finds seem to suggest rather a later date.
- 10) These values are given based on the attached rough scale in the published report [T. Rice 1932: fig. 2]. Such a size, as is wider than the span of the iwan at Taq-i Kesra, is too large to believe as it is. If the scale were the same as that of Mound XI, each value should be reduced to 60 percent.
- 11) According to the excavator, considerable part of the nave area remains unexcavated. Taking account of such a broad nave,

even if it should be reduced as noted just before, it is probable that some system for the roof support might still be hidden in the earth.

- 12) See note 10.
- 13) The excavator had once roughly estimated the date contemporary with the other church [T. Rice 1932: 279], and revised it in the subsequent report [T. Rice 1934: 57].
- 14) Such a concrete date is based on the identification of the monastic remains as a shrine or house dedicated to renown St. Sergius by Mar Ahudemeh [Oates 1962: 87].
- 15) The date follows the description of "Excavations in Iraq, 1981–82" in *Iraq*, vol. 45, p. 217.
- 16) The type of the structure is personally informed through the courtesy of Dr. John Curtis. According to him this church is assigned to the II Khanid period. Regrettable to say I have not found the report of further details already published by the British Museum yet.
- 17) The recent work by G. Wiessner has reconfirmed such a view of typology with the schematic terms, "Kultbauten mit transversem Schiff" and "Kultbauten mit longitudinale Schiff" [Wiessner 1981; *idem* 1982].
- 18) Such a style of entrance derives probably from the ancient Syrian tradition, that is called the *Hilani* type of house or palace and introduced to north Iraq [Frankfort 1952: 120–131].
- 19) As I have not seen the original report written by R. Ghirshman yet, the present description is made not from it but mainly from the illustration reproduced by D. Whitehouse [Whitehouse & Williamson 1971].
- 20) In north Mesopotamia, not in present Iraq, exists exceptionally a three-aisled church with a deep rectangular sanctuary, though not completely symmetrical. It is a Monophysite church at Jezirat ibn Omar, neighboring the Tur 'Abdin [Preusser 1911]. Whether it concerns with a influence of the south or not is uncertain.

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