Architectural expression of liturgy and doctrine in the Eastern churches of the fourth to sixth centuries: towards a theologically contextual typology.

Susan Balderstone

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Abstract: Many scholars of Byzantine architecture have theorised about the reasons for church form and structure, with most relating them to sources in pagan architecture or local traditional construction methods (Krautheimer, Crowfoot, Ward-Perkins, Mango and Hill); to aspects of provincialism, regional independence or location peripheral to empire (Megaw, Delvoye, Wharton), or to environmental constraints such as frequent earthquakes (Curcic). But just as the wording of the various creeds and ecumenical statements responded to aspects of contemporary non-orthodox beliefs or “heresies”, so did the theological debate inform the liturgical practices and consequently church planning. It could be expected that these responses would also be reflected in the architectural approach to form and symbolism. Thus a contextual typological framework is proposed, based on the association of different architectural approaches to church planning and form in the 4th to the 6th centuries with the contemporary doctrinal disputes over the true nature of Christ.

Introduction

Analysis of the archaeological evidence of a number of churches in the eastern Mediterranean region in relation to the theological debates of the fourth and fifth centuries suggests a link between certain church builder bishops and their architects and the particular architectural forms of the churches they founded. It is possible that the particular architectural forms used were chosen because they were considered to provide a symbolic expression of the theological position of the relevant bishop in relation to the ongoing Trinitarian and Christological debates of the period. It would follow that specific architectural forms then came to be accepted as the formulaic expression of the doctrinal positions adopted by the various Christian communities.

The objective of the analysis is to contribute to the establishment of a typological framework based on the theological context for the large number of archaeological remains of early Christian churches found in the countries bordering the Eastern Mediterranean. These range from small, seemingly isolated chapels to large complexes including monastic establishments, parish churches, commemorative churches at centres of pilgrimage, cathedral churches at major settlements and palace churches at the major administrative capitals of the Byzantine world.

For the cultural heritage site manager trying to decide protection, conservation and presentation priorities in the face of scarce funding and resources, these sites need interpretation by archaeologists and historians. Which are the most significant sites and why? How does a particular site demonstrate its place in the history of Christianity in its region, or indeed internationally? How important is it to the local, regional and/or world community now, as a place of pilgrimage or as a tourist site? The extensive survey of early Christian and Byzantine architecture undertaken by Krautheimer in the 1960s and subsequently updated to 1979 (Krautheimer 1979) is a good starting point, with a large number of plans and descriptions. However it does not deal with the theological context including the Trinitarian and Christological debates in relation to evolving liturgical practices. More evidence of these is now available through translations of early sources, and recent excavations have revealed new information.

This analysis is based primarily on the circumstantial evidence provided by excavated remains and their associations. There is little documentary evidence of the thought behind church design in the 4th to the 6th centuries. The “one short document” on how to build a church found in a Syriac version of the Testamentum Domini nostri Jesu Christi and discussed by Crowfoot in relation to the Jerash churches (Crowfoot 1938:175-184) prescribes the location of the various elements of the church (diakonikon, baptistery, throne, altar etc.) but gives no direction on the architectural expression of Christian theology. The various ekphraseis discussed by Ruth Webb (Webb 1999:59-74) are
not helpful as they put the authors’ interpretations rather than the founder church builders’ intentions, and do not necessarily reflect those.

However in respect of the church founders’ architectural intentions a few clues can be gleaned from the writings of some key bishops, in particular Epiphanius, Bishop of Salamis/Constantia in Cyprus from 367 to his death in 402, and Gregory of Nyssa who began his episcopate in Asia Minor c. 371 and died c.395.

**Epiphanius**

Epiphanius was a key participant in the great theological debate of the fourth century (Englezakis 1995:39). He was recognised along with Athanasius of Alexandria and Paulinus of Antioch as a father of orthodoxy who refused to compromise his essential understanding of Christianity by bending to any influences from Graeco-Roman antiquity. His writings are valued for the information they provide on the religious history of the fourth century, both through his own observations and from the documents transcribed by him that are no longer extant (Saltet 1999). He travelled widely through the region - to Egypt, Asia Minor, Syria, Mesopotamia, and Palestine. He visited Alexandria, Antioch, Jerusalem, Constantinople and Rome, some several times (Englezakis 1995:33). His writings were widely read in the Christian world (Young 1983:141), and include the Ancoratus (‘The Well-anchored’) of 374, which sets out his own position of strong opposition to the Arian and Origenist heresies. In terms of Trinitarian theology he “speaks of three hypostases in the Trinity, whereas the Latins and Paulicians of Antioch speak of one hypostasis in three persons” and “clearly teaches that the Holy Ghost proceeds from the Father and the Son” (Saltet 1999). In his second, much larger work, the Panarion (‘Medicine Chest’ - a stock of remedies against the poison of heresy) completed in 377, he collected eighty heresies. His categorisation of these and numbered ordering reflects a preoccupation with numbers further demonstrated in his De Mensuribus et Ponderibus (‘Of Weights and Measures’) c.390, where amongst other matters he meditates on particular numbers including the number three (Epiphanius, trans. Esbroeck).

Young suggests that his straightforward Greek and appeal to the classic Trinitarian proofs, such as the threefold Sanctus, was the basis of his popularity (Young 1983:134). It is therefore not surprising that the sanctuary of the large basilica he founded at Salamis-Constantia (where he was buried in 403) comprises three apses (see figure 1). It is an obvious and easily read architectural expression of Epiphanius’ position on the Trinity - three entities expressed by three apses in a line across the east end of the sanctuary. This is also the form of the church at Soli (also within the see of Epiphanius) of similar date, and later in the fifth century at Carpasia (Megaw 1974: figures A, B & C). But clearly the triple-apsed form was not universally acceptable as an expression of orthodoxy. It could be argued that in fact the triple-apsed form denied the ‘God in three persons’ position in that it emphasised the three rather than the one in three. The Alexandrian theological position as argued by Athanasius at Nicaea (Atiya 1991:300) - one hypostasis, but with coequality between Father, Son and Holy Spirit - perhaps explains the development of the triconch version of basilica sanctuary in Egypt, such as that of the monastery church founded by Shenute dating from the first half of the fifth century - the White Monastery. The triconch sanctuary, where the three apses are arranged at right angles to each other around three sides of a domed central square can more easily be read as one in three (see figure 2). Similarly in Jerusalem in the same period, the sanctuary of the church of St. John the Baptist sponsored
by Athenais/Eudocia (wife of Emperor Theodosius II), which survives still as a crypt has the triconch form, as did that of the church of St. Stephen, which she founded (and where she was buried) near the northern gate of the city (Join-Lambert, trans. Haldane 1958:134-6).

Support for the idea that the triple-apsed sanctuary was an attempt to express symbolically the theological understanding of the consubstantiality of Christ can be drawn from the fact that the different architectural forms associated with the various positions in the theological debate are chronologically paralleled by the different versions of the Creed. Just as there was debate over the wording used to express orthodox belief, it can be expected that similar debate would have occurred about what architectural form best expressed and symbolised that belief. It has been argued that the Apostles’ Creed dating from the first or second century focused on the true humanity, including the material body of Jesus, since the contemporary Gnostic, Marcionite and Manichean heretics denied that Jesus was truly Man. On the other hand, the Nicene Creed of 325 strongly affirmed the deity of Christ through an emphasis on the consubstantiality of the Trinity because it was directed against the Arians, who denied that Christ was fully God (Kiefer: Christia online resources accessed 19/04/2002).

Two creeds were appended to the end of Epiphanius’ Ancoratus. One was the baptismal creed of the Church of Constantia, and the other is supposed to have been his own personal expression of belief. The former was adopted at the Council of Constantinople in 381. It is considered to be a reworking of the Baptismal creed of the Church of Jerusalem, which itself was a reworking of the Nicene Creed. It essentially represents a version of the Nicene Creed expanded by the addition of the Filioque clause stating that the Holy Spirit proceeds from the Father and the Son, an assertion of their coequality as a response to Arianism (Fortescue 1907:381).

The debate over the relationship of the Holy Spirit to the Father and the Son informed the change in liturgical practices and its reflection in architectural form. This is demonstrated by the fact that by the end of the fourth century the eastern orthodox liturgy required a tripartite sanctuary for the Eucharistic liturgy. As Baldwin Smith pointed out, the layout derived from the description in the Testamentum does not preclude the location of the chamber for receiving the offerings being adjacent to the central apse (Baldwin Smith 1950:151, note 57). The deacons conveyed the Eucharistic offerings from there to the altar table in front of the central apse. As Dix has described, the historical differences in the understanding of the consecration of the Eucharist, and the need for the traditional Syrian liturgies to accommodate consecration by the Holy Spirit in addition to their traditional concept of consecration by the Son, determined the eastern orthodox liturgy (Dix 1964:268-302). He suggested that the Trinitarian doctrine articulated at Nicaea was superimposed on the traditional liturgical action, so that the consecration had to be understood as a metaphorical representation of the resurrection, the Eucharistic offering having already become the body and blood of Christ at the offertory. Hence the development of an elaborate procession of the offering to the altar: the deacons were in fact bearing the body and blood of Christ, and their progress needed to be accompanied by appropriate awe and adoration. Dix quotes Theodore’s (of Mopsuestia) early fifth century exposition of the liturgical action in Catecheses v and vi, describing the spreading of linens on the altar by the deacons, and their agitation of the air with fans (Dix 1964:282-284).

For the church builder/architect commissioned to accommodate this liturgy and at the same time to interpret the theological position of those who followed the teaching of Epiphanius, the basilica with triapsidal sanctuary as

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Figure 2: Plan of the church at Dayr Anba Shinudah by Peter Grossmann (from Aziz 1991:768).
constructed in the late fourth century at Salamis, Soli, Baalbek and Gethsemane was the solution. The form followed the traditional layout of Paulinus’ Tyre basilica archetype, but modified the sanctuary to accommodate the new development in the liturgy and express the Trinity. In the period before the development of the great and little entry processions, a small passage between the central and side apses as demonstrated by the remains of the triple-apsed sanctuaries excavated in Cyprus at Salamis, Soli and Carpasia, would have facilitated the liturgical action.

Long basilica churches with triple-apsed or triconch sanctuary forms were quite different from the great domed church on an octagonal plan at Antioch, in which the traditional martyrium ‘dome of heaven’ used over Christ’s tomb in the Anastasis at Jerusalem was adopted as an appropriate form for Constantine’s palace church. This was begun in 337 under Constantine and completed by his son Constantius in 362. Downey (1961:414) notes that since the exile of the orthodox bishop Eustathius c. 330, the Christians of Antioch had been under the control of a series of bishops with Arian tendencies. The building of the Golden Dome was delegated to the Arian Count Gorgonius (Baldwin Smith 1950:26). The use of an all-encompassing dome in this church and at S. Lorenzo in Milan, founded by the Arian Emperor Auctentius c.378 (Krautheimer 1979:86), can be explained as a means of expressing architecturally the Arian focus on the absolute nature of God. The triple-apsed sanctuary can then be seen to respond to this by emphasising the Trinity and thus the consubstantiality of the Father, Son and Holy Spirit in the same way that the Nicene Creed responded to Arianism by emphasising their consubstantiality. The use of this form at places strategically important to the Church under Theodosius I would have emphasised the imperially-sanctioned theological position. At Baalbek the triple-apsed basilica inserted in the destroyed Jupiter temple temenos represented the triumph of the Church over paganism; at Gethsemane the triple-apsed basilica commemorated an important place of Christian pilgrimage.

This is not to say that Arians would have worshipped only in circular/octagonal, domed churches as it is clear from the letter from S.Ambrose to his sister in 386 that the Arians in Milan wanted to take over his new, (cruciform) (Krautheimer 1979:86) basilica inside the walls (Ambrose, trans. Beyenka:60). And it is clear that not all bishops conceptualised their theology in a way that enabled them to give direction as to church form. Mark the Deacon relates that Porphyry, Bishop of Gaza was at a loss as to what form his new church to be built on the site of the former pagan temple to Marmas, should take. The discussion that took place c. 403 is illuminating: “Some then counselled that it should be built after the fashion of the temple of the idol; for the shape of it was round, being set about with two porticoes (colonnades), one within the other; but in the midst of it was a dome spread out and stretching high” (Mark the Deacon, trans. Hill 1913:75). However Porphyry had doubts about this and prayed for divine instruction. He was greatly relieved when Eudocia, wife of the Emperor Arcadius who had been persuaded to fund the construction, sent Porphyry a plan to follow. He then obtained the services of “a certain Rufinus, an architect of Antioch, a believer and well skilled, by whom the whole building was accomplished” (Mark the Deacon, trans. Hill 1913:78). The plan was cruciform and the church was dedicated in 407. It was known initially as the Eudoxiana. It is likely that the plan was similar to that of S.Babylas at Antioch begun c. 379 (Baldwin Smith 1950:110). This story illustrates a number of points: not only did the bishop find the idea of copying the form of the pagan temple unacceptable, the form of an important church did not depend on available local building skills - these could be brought in from elsewhere when necessary.

**Gregory of Nyssa**

The use of the cruciform plan for churches in regular use needs some explanation as it was not intrinsically functional for the Eucharistic liturgy. Krautheimer saw the choice of the cruciform plan for churches in regular liturgical use, like the choice of the dome for the Great Church at Antioch, as a translation of a traditional martyrium form (Krautheimer 1979:86) in the context of preoccupation with holy relics as the basis for founding a church. However the cross form could be read in many ways. Gregory of Nyssa (c.335-395), unlike Epiphanius was an admirer of Origen (Leclerq 1999). He saw the cross as an appropriate symbol for the Godhead in that its four spatial directions represented the whole universe, and expressed the idea that the One who died on the Cross harmonised the whole universe through the form of His death (Ladner 1955:88-89). Ladner

![Figure 3: Plan of the church at Nyssa, from S.Gregory's description (from Lethaby 1912:85, figure 45).](image-url)
referred to the background of fascination with the mystery of numbers that informed Gregory’s interpretation (Ladner 1955:94). He proposed that for Gregory the role of Christ as unifier had to be demonstrated through the visible shape of the Cross. Gregory’s description in his late 4th C letter to Amphilochius of his proposed martyrium at Nyssa is translated by Lethaby to indicate a colonnaded octagon developed from the cross-in-square plan, with four exedrae diagonally opposite each other (Lethaby 1912:85). Thus the cross had generated the plan, but could not now be easily read in the form so created see (figure 3). It was a mystery to be contemplated. On the other hand the cross contained in the transept basilica form such as the fifth century cathedral at Al Ashmunayn, one of the largest and richest churches in Egypt at a once strong pagan centre (Hermopolis Magna) could be easily read and understood as a symbol of the crucified Christ, while the semi-circular ends of the transept plus the elongated sanctuary apse retain the Trinitarian symbolism (see figure 4). The use of the transept form at this important location can be seen as an expression of imperial-sanctioned orthodoxy in the face of the revival of the dispute about the nature of God.

**The Emperor Zeno**

The variety of architectural forms used for churches in the latter half of the fifth century follows the condemnation of Nestorius by the Council of Ephesus in 431, the reassertion of orthodox doctrine at Chalcedon in 451 and subsequent attempts by the Emperor Zeno (474-91) to conciliate the Monophysites. The various church forms can be explained as architectural expressions of the different theological positions, but some require more analysis due to the fact that they contain various forms representing different stages of construction. For example at St Simeon Stylites in northern Syria c. 480-90 (Krautheimer 1979:156-157) the triple-apsed form was used for the eastern arm of the cruciform-plan church (see figure 5), but the dates of the various parts of this complex are not clear. The cross-in-square plan of the Church of the Prophets, Apostles and Martyrs at Jerash of 464-465 had three conched niches in the wall of the apse according to Schumacher, although these are not indicated in the plan reproduced by Crowfoot (Crowfoot 1941:87 and figure 8). The use of the cruciform plan in this later period appears to coincide with the addition by Apollinarian sympathisers of the reference to the crucifixion in the liturgical acclamation known as the Trisagion, which according to Henry Chadwick was passed into use under a Monophysite patriarch in Antioch c. 460 (Chadwick 1967:208). This was not accepted by those following the imperial orthodox line asserted at Chalcedon, who interpreted the Trisagion as referring to the Trinity rather than to Christ. Perhaps this explains the combination of the cruciform plan with three apses or niches.

By the middle of the fifth century the bulk of the people in Egypt and Syria rejected Chalcedon and favoured the Monophysite position (Fortescue 1999), although this may have had more to do with nationalism and reaction against rule from Constantinople than with an involvement in the theological argument. The Emperor Zeno, although obliged to follow the Chalcedonian or Melkite line sympathised personally with the Monophysites. He founded the octagonal Theotokos Church at Garizim (see figure 6), which can be seen as a revival of the form of Constantine’s Great Church at Antioch, and as such an architectural expression of the absolute nature of God as distinct from the cruciform, triconch and triple-apsed forms that expressed the consubstantial Trinity. It can be seen to reflect the Ariotic and Origenist aspects of Monophysism.

So in relation to the desire of Late Roman/Early Byzantine archaeologists to be able to distinguish between the archaeological remains of the churches of the various religious groups (Tsafir 1999), it seems that architectural form is the key at least to the identity of the founding

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*Figure 4: Plan of the church at Al Ashmunayn by Peter Grossman (from Aziz 1991:286).*
faction, if not to the faction of subsequent users. The proposed contextual typological framework is a work in progress by this author, but at this stage can be defined by certain particular examples as outlined below.

Outline of typological framework

The triple-apsed basilica developed in Cyprus at the end of the fourth century and was strongly associated with the orthodoxy of Epiphanius. The cruciform plan came to be associated with the theology of Gregory of Nyssa and perhaps too closely with Origenism for some. The basilica with triconch sanctuary appears to derive from Athanasius’ version of orthodoxy, and was favoured by certain bishops and other influential church founders such as Athenais/Eudocia in the first half of the fifth century. The domed octagon/circular/tetraconch plan was associated with the influence of Arianism in the fourth century and with the Monophysites in the fifth century. In the early sixth century the Church of St. Polyeuktos enlarged and rebuilt by Princess Ancina Juliana during the reign of Justin I following the healing of the schism with Rome (519) seems to have taken the form of a transept basilica (Mango and Sevcenko 1961:243-246). The sculptural decoration of the surviving column capitals has been recognised as similar to Egyptian examples, in particular at the White Monastery and at Al Ashmunayn (McKenzie 1996:140-142). This example can be seen to represent a revival of the transept form as emphasising the reunification of the Church. However during the reign of Justinian, the influence of Monophysism resurfaced. The domed church of SS.Sergius and Bacchus built for a community of Monophysite refugees by Justinian and Theodora at Constantinople (Bardill, 1999:9-10 and see note 65) develops the Gregory of Nyssa plan with the addition of an apse to accommodate the Eucharistic liturgy. The use of an elongated version of this form for the great dome of S. Sophia in Constantinople may have been due to the influence of the Monophysites with the Empress Theodora.

Figure 5: The triple-apsed sanctuary of the eastern arm of St Simeon Stylites (Photo: the author, 1980).

Figure 6: Plan of the Theotokos Church at Garizim (Wilkinson 1981:165).
In contrast with and perhaps in response to this Monophysite influence, the orthodox bishops/church builders at Jerash and throughout Jordan in the sixth century revived the triple-apsed basilica as the form appropriate for the architectural expression of eastern catholic doctrine (Balderstone 2000). In Cyprus the triple-apsed form continued to be used in the fifth and sixth centuries. Examples include the Basilica de la Campanopetra at Salamis (Delvoye 1978:327, figure 18), and churches at Carpasia (Megaw 1974: figure C), Ayia Trias and Peyia (Megaw 1974: figures D and E).

On the other hand, it is recorded that at Edessa in the sixth century the Melkite cathedral was described as vaulted, with a “lofty cupola” supported on broad arches, all constructed entirely of stone (Segal 1970:189). The hymn from which this description was taken is believed to have been composed at the time of the dedication of the church after its Justinian reconstruction 543-554, and is one of the few pieces of literary evidence of architectural expression in church building (McVey 1993:183), albeit as interpreted by the hymn’s author. McVey’s analysis of the hymn suggests that the church may have taken the form of a cubic triconch with central dome (McVey 1993:194-Str. 12). If that is the case it would indicate a reversion to the early fifth century Egyptian formula for orthodox expression used at the sanctuary of the White Monastery. The use of this triconch sanctuary form was continued in Egypt in the sixth century at Dandarah, Dayr Abu Matta, Dayr Anbar Dakhum, and Dayr Anbar Bishoi (Suhaj) (Grossmann 1991:691, 706, 731, 740).

The implication of this contextual typological framework can be demonstrated by application to the church sites at Pella, east of the Jordan River, known in Graeco-Roman times as one of the cities of the Decapolis.

### Application to Pella

Located opposite the junction of the route of the ancient armies from the coast through the vale of Esdraelon with the Jordan Valley, Pella presents a scene of pastoral tranquillity (see figure 7). The perennial streamlets from the ancient spring which feeds the Wadi Jirm al-Moz flow through a green delta, sporadically populated by herds of goats or sheep and their accompanying shepherds and donkeys. The presence of this eternal spring is the reason for the long period of occupation of the site, going back several thousand years. The ruins that punctuate this scene have excited pilgrims and other travellers to the Holy Land since at least the time of the Crusades, particularly those who accepted the identification of the site as the place to which the persecuted Christians fled from Jerusalem during the first Jewish Revolt (66-70 AD). The story of the first Christians at Pella derives from the *Ecclesiastical History* of Eusebius, written in the first half of the fourth century, and was later recorded by Epiphanius (Epiphanius, trans. Esbroeck 1984: xv).

Although nothing can be proved one way or another about the presence of Christians in the first century, and the identification of the site referred to by Eusebius and Epiphanius with this Pella is disputed (Watson 2000:118), the extant archaeological remains are certain evidence of a later period of Christian occupation of the site. The remains of three churches have been excavated; all are aisled basilicas with atriums in a form that can be related to Eusebius’ description of Paulinus’ church at Tyre. However the sanctuaries differ from that description in that they comprise three apses, although the first phase of the Civic Church had no apse at all. The first phase was dated by Smith on the basis of coins found in a sounding beneath
the church to around 400 or slightly earlier (McNicoll 1992:159). The sounding yielded no evidence of an earlier building beneath this phase. Smith suggested that the second (triple-apsed) phase of the church should be dated to the first half of the sixth century, although he gave no archaeological evidence for that date. The other two triple-apsed churches were dated to the late fifth or early sixth century (McNicoll 1992:159) and the sixth (Smith 1973).

There are some aspects of the remains that raise questions about these dates. At the East Church a reliquary was found sealed into floor of sanctuary. The reliquary casket contained a silver fistula and remains of what microscopic analysis indicated might be calcified bread (McNicoll 1992:159). The casket was dated to the fourth or fifth century. If the relic is indeed bread, it might perhaps be a relic of the custom described by Father Gregory Dix of dispatching the fermentum, a fragment from the Breads consecrated by the bishop of the patriarchal see at the Eucharist of the whole church, to be placed in the chalice at every parish Eucharist (Dix 1964:21). He quotes Ignatius, Epistle to Smyrnaeans, viii, i, on the need for a valid Eucharist to be “under the bishop”. However Dix later noted that the fermentum was abandoned in the East by the fourth century (Dix 1964:285).

A factor that raises questions about the date of the Civic Church is an inscription found in the debris of the Civic Complex, on a stone used as a paver in a later phase. This was identified as possibly referring to Theodosius I, Emperor from 379 to 395 (McNicoll et al 1982:109-110). It may have formed part of the dedication of the first phase of the church, which would put it up to twenty years before 400. Alternatively it could possibly refer to the second phase of construction, when the sanctuary was remodelled into its triple-apsed form, if in fact this occurred earlier than proposed by Smith (see figure 8).

In the light of the contemporary theological debate, the evolving liturgical practices at the time, and the evidence provided by extant archaeological remains in other places that are connected to crucial players in the theological debate in the latter half of the fourth century as outlined above, it seems that the remodelling of this church into a triple-apsed form could well be dated to the time of Theodosius I. If so, the importance of Pella as an early Christian site is considerably enhanced, as it demonstrates early imperial recognition, which in turn indicates that in the fourth century the place was considered to have some importance. This may have been because at that time it was believed that this Pella was the place of refuge for the persecuted Christians of the first century whose flight was recorded by Eusebius and Epiphanius.

Figure 8: Pella: reconstructed plan of the Civic Church in phase 2 (from Smith 1989: 87, figure 25).
Conclusion

Clearly further survey and analysis of a larger number of published church sites of the period is needed to develop and refine the contextual framework. However it can be seen that a theologically contextual typological framework would be a useful tool for interpretative purposes at early Christian church sites and ultimately could contribute to the dating of newly surveyed or excavated sites and their interpretation.

Susan Balderstone
Adjunct Professor in Cultural Heritage
Deakin University, Melbourne, Australia.
baldert@deakin.edu.au

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**Endnotes**

1 The plan by P. Grossmann is included in *The Coptic Encyclopaedia*, Vol. 3, 768.

2 A plan of St. John the Baptist is given by Baldwin Smith, E. 1950, *The Dome*, figure 189.

3 The plans of the church at Farfirtin and the cathedral at Brad (Butler, *Churches of Northern Syria*, 34 – 35) demonstrate this.

4 Now incorporated into S. Nazaro. Its form was based on Constantine’s Apostolion at Constantinople.

5 A plan of S. Babylas is given by Krautheimer, 1979: 79, Fig. 34.

6 Ladner quotes Gregory’s Christi resurrectionem oratio I, Pat. Gr., XLVI, 624B.

7 The plan by P. Grossmann is included in the *Coptic Encyclopaedia*, Vol. 1, 286.