# MASSMANN STUDIOS

**Project: 2014 WELS Worship Conference** 

Carthage College, Kenosha, WI - July 22-25, 2014

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Presenter: Richard A. Skendzel

## **Designing Places for Christian Worship**

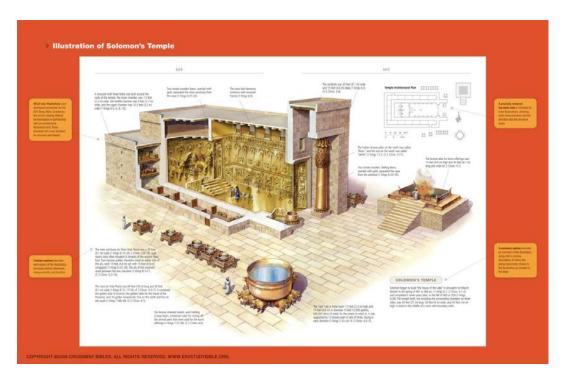
(An Architect's Perspective)

The subject of this presentation is the early development of Christian church buildings and how building function and form from the early church continue to influence church building design today.

It addresses the question: "What where the building types that constituted the architectural precedents for the earliest buildings built for Christian worship?"

A first response might well be to focus on the temple in Jerusalem. This is logical for a couple of reasons:

- 1. Christianity is an outgrowth of Judaism. Christ in his incarnate life on earth was a practicing Jew. And the temple in Jerusalem was the principle house of worship for the Jewish people (until its destruction in 70 A.D.)
- 2. The bible itself contains references to the architecture of the temple. The temple is described in considerable detail in Old Testament scriptures (I Kings 6:1-35, II Chronicles 3:1-17, Ezekiel 40-45). So, although archeological evidence is generally lacking, we have considerable information on the form and function of both the first and the second temples from literary sources (most important of which is Holy Scripture).



Reconstruction: Solomon's Temple (First Temple), Jerusalem (  $10^{\text{th}}$  century B.C. – 586 B.C.)



Reconstruction: Herod's Temple (Second Temple), Jerusalem (516 B.C.-70 A.D.)

The temple itself, although the earliest permanent structure built for Jewish worship (dating from the time of King Solomon,  $10^{th}$  c. B.C.), could ultimately not function as a place of assembly for the entire Jewish population. Rather, the temple was a centralized seat of ritual worship (located only in Jerusalem) which functioned as the actual dwelling place of God on earth and the place for the performance of ritual sacrifices. The temple building itself was a place of exclusivity, as only priests were allowed to enter and carry out its sacred functions.

The architecture of the temple certainly influenced early church building design and we will discuss some of ways in which it did below. But there is another type of building about which most early Christians were intimately familiar, which provides a more compelling precedent for early church buildings, and that is the synagogue.

Ancient synagogues, while also being places of Jewish worship, functioned as places of assembly for the faithful at large, where prayer and study of the scriptures predominated. Since the first century B.C (and probably before) there have been synagogues in nearly every human settlement where Jews have resided. The synagogue is an institution (and a building type) which, in contradistinction to the temple, was decentralized, and inclusive. And, although synagogue administration and worship was lead by a teacher or rabbi, the common Jewish faithful actively participated in the life and worship conducted there. Synagogues in ancient times fulfilled other functions in addition to those of scripture reading and prayer. There is much literary evidence suggesting that prior to the destruction of the second (Herod's) temple in 70 A.D., synagogues functioned more as community centers than as houses of worship. They were used for education, discussion of legal and political issues, common meals, distribution of charity, and even hostels for accommodation of pilgrims and other travelers.

Ancient synagogues developed much later than the temple. Scholars are not unanimous as to when the first synagogues appeared, but many support the theory that synagogue worship developed during and immediately following the Babylonian exile (6<sup>th</sup> c. B.C.), when Jews relegated to the Diaspora were prevented from conducting ritual sacrifices at the (destroyed) temple. Although literary references to synagogues are extant from the second half of the first millennium B.C., the earliest archeological building remains which have been identified as ancient synagogues date from about the third through the first centuries before Christ (e.g., an ancient synagogue in Jericho has been excavated which dates from between 50 and 70 BC).

It should also be noted that explicit references to the synagogue are found in New Testament scripture, where Jesus himself teaches and heals in the synagogues in Capernaum (Mark 1:21), Nazareth (Luke 4:16, Matthew 13:54), and throughout Galilee (Matthew 4:23, Mark 1:39). We also know from scripture that in the earliest days of Christianity after Jesus' ascension, St. Paul himself brought the message of Christ's Gospel to the Jews in their synagogues (e.g., at Thessalonica in Acts 17:1, Damascus in Acts 9:20, Salamis (Cyprus) in Acts 13:5, and in Antioch in Pisidia in Acts 13: 16-41).

Unlike the prescriptive design embodied in the temple (based on scriptural formula), synagogues were varied and diverse in their design, probably reflecting the diversity of influences from their geographic locations and various local cultural and societal factors. They were buildings whose formal design followed their functions.

It is also interesting to note that the synagogue as a building type, although having its beginnings prior to the advent of Christianity, in many ways developed in parallel to the church (also as a building type). Archaeological evidence indicates that synagogue building construction (in both Palestine and the Diaspora) flourished in the third through the sixth centuries after Christ (also referred to as the early Byzantine period) – a time period when Christian church building also underwent its early evolution and development as a unique building type. And like the Jews with their synagogues, since Christians were not bound by scriptural or legal prescriptions (or by the literal teachings of Christ, for that matter) for the

<sup>&</sup>lt;sup>1</sup> Levine, "The Ancient Synagogue," (Introduction)

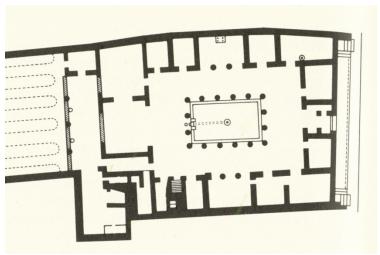
design of their local places of worship, they were free to adopt and adapt existing building models as they deemed functionally expedient and appropriate.

We can identify several ancient building types which appear to have influenced the design of both churches and synagogues.

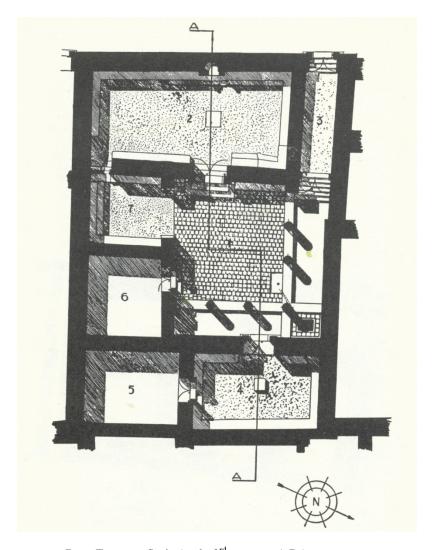
#### House

That some elements of the typical houses of the wealthy would find their way into early church and synagogue design is logical. We know that larger houses were themselves used as places of gathering and worship in the early church (particularly during the persecutions of the first three centuries of Christianity). It is also apparent that synagogues took design elements from residential models, and, like churches, probably used private residences as meetings places during their early development (last few centuries before Christ), when undergoing persecution, and when construction of dedicated synagogue buildings was not economically feasible.

- 1. A fresh water source was an indispensable feature of homes of the well-to-do in the ancient Greek and Roman worlds. Used for cooking, bathing, and cleaning in the residential context, wells, fountains, and other water sources find their way into early synagogue buildings as places for ablution. In the Christian setting, water is also a symbol of ritual cleansing, blessing, and baptism, and water basins and fountains are conspicuous features of many early churches.
- 2. The enclosed courtyard is another feature of residential architecture that was adapted for use in both synagogue and church buildings. Here, the idea of an exterior space as an entrance into the church, a place of preparation, or a place for the uninitiated was borrowed from residential design where atria are a common feature of larger houses.
- 3. A large room for reception of important guests and the conducting of family business, called the *tablinum*, is frequently found on axis with the atrium, setting up a hierarchy of interior spaces.
- 4. Dining is the function which is perhaps most associated with houses. The dining rooms (or *triclinia* in Greek) of larger ancient houses are also major rooms, as they speak to the importance of nourishment, health, and hospitality in the ancient world. In Judaism, the celebration of Passover finds its climax in the Seder meal, a ritual service that combines historical remembrance (of Israel's preservation and deliverance out of Egypt), prayer, blessing, and invocation of God's protection, with the sharing of a meal in the home. The sharing of a meal in the celebration of the Christian Eucharist is in some ways a parallel phenomenon. Some early synagogue buildings included rooms which are believed to have functioned as dining rooms. The idea of gathering around a central table appears also to have been adopted in early Christian worship settings.



Floor plan: Casa di Epidio Rufo, Pompeii (1<sup>st</sup> century B.C) (from Richardson, "Pompeii: An Architectural History")



Floor plan: Synagogue at Dura Europos, Syria (early 3<sup>rd</sup> century, A.D.)

(from "The Synagogue: Studies in Origins, Archaeology, and Architecture") <u>Legend:</u>

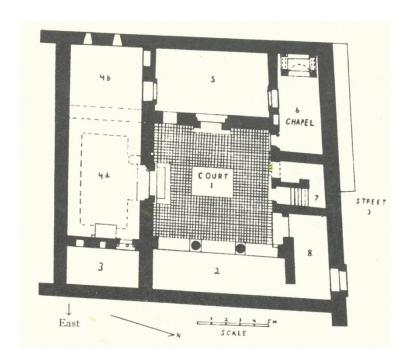
1-courtyard

2-place of assembly with Torah shrine

3-entrance passageway

4,5,6-residence (?)

7-?



Floor plan: Church at Dura Europos, Syria (early 3<sup>rd</sup> century, A.D.) (from "The Synagogue: Studies in Origins, Archaeology, and Architecture") <u>Legend:</u>

1-courtyard

2-covered porch

3-9

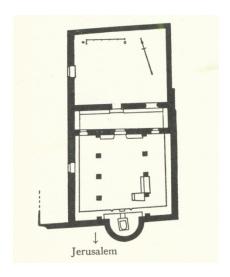
4-place of assembly (sanctuary)

5-classroom

6-baptistry

7-stairs to upper level

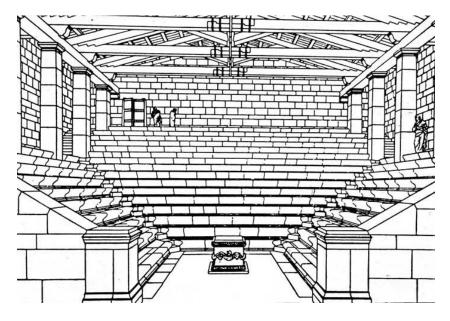
8 - entrance



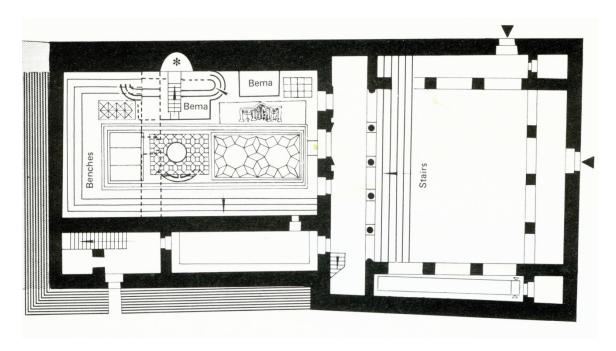
Floor plan: Beth Alpha Synagogue, Palestine (early 6<sup>th</sup> century A.D.) (from "The Synagogue: Studies in Origins, Archaeology, and Architecture")

#### **Bouleterion (Ekklesiasterion)**

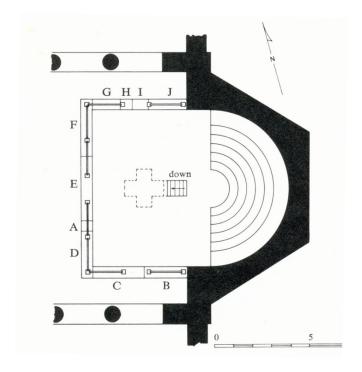
Shifting our attention to public buildings, the bouleterion (or ekklesiasterion) is a building of Greek origin which functioned as a meeting hall where a council of citizens met to confer and decide about public affairs. What is striking about this building type is its arrangement of terraced seating around the perimeter, focused on a central altar or dais. Early synagogues commonly included similar perimeter bench seating where it is believed that elders, teachers, or other dignitaries sat during services. Likewise in early Christian churches, built-in bench seating around the apse in what was known as the *synthronon* were reserved for clergy. Also, the idea of a central platform for speaking or proclamation finds early adherence in both the synagogue and the church in the form of the bema (a raised platform designed to elevate a speaker) or the ambo (or pulpit).



Bouleuterion of Priene (from: Scranton, "Greek Architecture")



Floor plan: Horvat Susiya Synagogue, Palestine  $(4^{th}$  - $5^{th}$  century A.D.) (from: Levine "Ancient Synagogues Revealed")

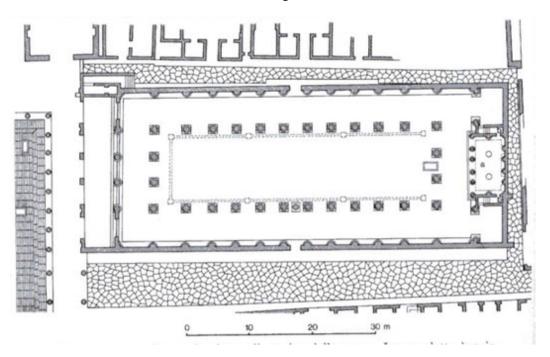


Chancel plan: Studios Basilica, Constantinople (5<sup>th</sup> century A.D.) (from: Matthews "The Early Churches of Constantinople")

#### **Basilica**

There is a close resemblance between many of the early synagogue building plans and what we now refer to as the ancient "basilica." The basilica originated as a type of secular building that dates back to at least the second century B.C., and functioned primarily as a place for the dispensing of law or the conducting of business (although the word basilica deriving from the Greek *basileus*—meaning king or monarch—probably originally referred to a royal palace). Roman republican and empire-era basilicas were buildings designed to accommodate large numbers of people gathering in public. In essence, a basilica is a large central space with rows of columns supporting both the higher (and longer span) central space and the lower, flanking side aisles. An apse or niche was a frequent focal point at one or both ends of the building (and sometimes in the center of the long wall). Basilica design and construction was advanced to a high level of technical sophistication by Roman engineers, who applied their understanding of masonry, concrete, and vaulting to achieve large, open, natural-light-filled interior spaces that answered the needs for public assembly in urban areas.

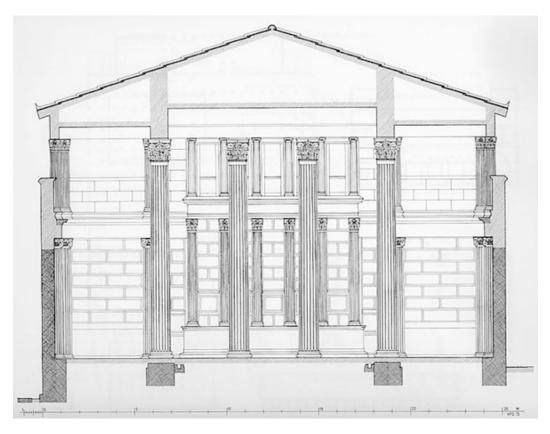
The design of both church and synagogue buildings owes much to the ancient basilica building type, first and foremost in its overall form – a columned rectangular hall with an apse or similar feature as a focal point. Synagogues borrowed the concept of the king or judge's chair in their "chair of Moses," while Christians similarly honored their bishops with a ceremonial chair (throne or *cathedra*) usually located in the center of the apse (or *synthronon*). It is also interesting to note how the inherent linearity of the basilica form lent itself to the idea of a symmetrical, axial approach to the altar in the Christian church, supporting processional movement from the entrance of the building to the chancel.



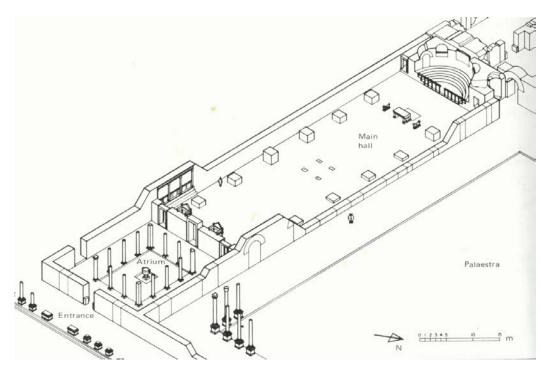
Basilica of Pompeii (late 2nd c. B.C.)



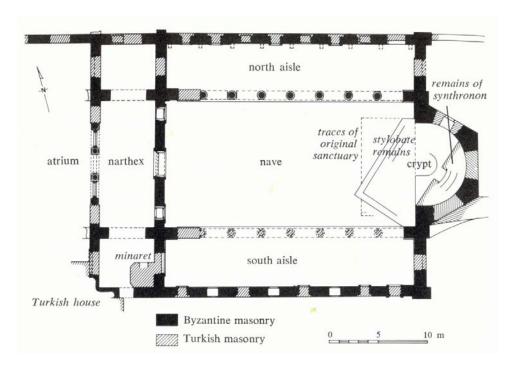
Basilica of Pompeii (late 2nd c. B.C.)



Basilica of Pompeii (late 2nd c. B.C.)



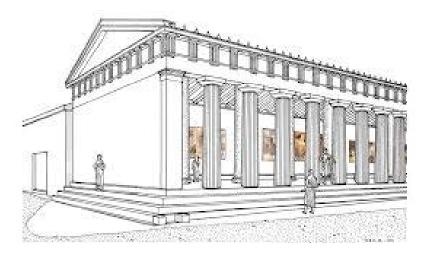
Ancient synagogue at Sardis (modern day Turkey) (3<sup>rd</sup> or 4<sup>th</sup> c. A.D.) (from Levine, "Ancient Synagogues Revealed")



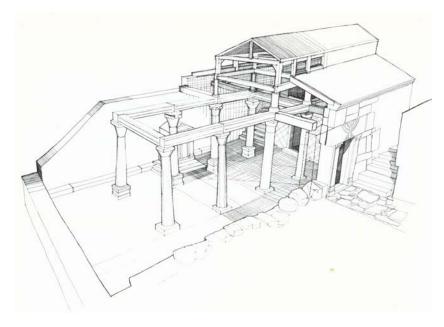
Floor plan: Studios Basilica, Constantinople ( $5^{th}$  century A.D.) (from: Matthews "The Early Churches of Constantinople")

### Stoa

An ancient Greek precedent for the basilica type may be seen in the stoa. A stoa generally consisted of a roofed enclosure with a row of columns along one side, usually facing an open courtyard or public square. The columned atria observed in the remains of some early synagogues and churches find precedent in the ancient stoa. The basilica is, in essence, a "double stoa<sup>2</sup>" with a covered central aisle.



Ancient Greek stoa Poikile (painted porch) from the Anthenian Agora (5<sup>th</sup> c. B.C.)



Isometric: Horvat Shema Synagogue, Galilee  $(3^{rd} - 5^{th}$  centuries, A.D.) (from: Levine, "Ancient Synagogues Revealed")

<sup>&</sup>lt;sup>2</sup> Levine, "The Ancient Synagogue" (pp 84-88)



Nave: Church of the Nativity, Bethlehem (4<sup>th</sup> and 6<sup>th</sup> century A.D.)

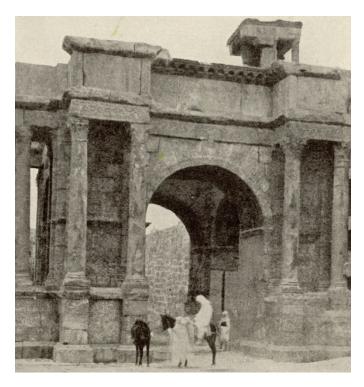
(from: Crowfoot, "Early Churches in Palestine")

## Propylaea (City Gate or Triumphal Arch)

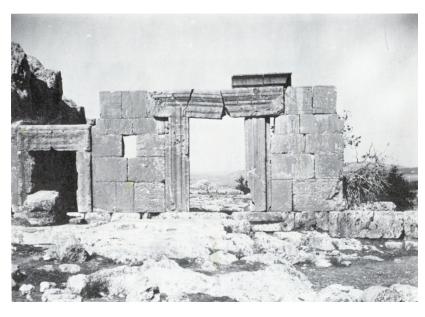
That entrances to both synagogues and churches took on symbolic importance is evident from some of the earliest extant remains. In the Synagogue liturgy the entrance of the Torah scrolls had ritual significance, while even in early Christianity, entrance into the church evoked the rituals of initiation and of leaving the secular world behind to enter that of the Kingdom. Indeed, the architectural importance of grand entrances, and gateways is seen in Greek and Roman propylaea (monumental gateways), city/palace gates, and monumental arches.



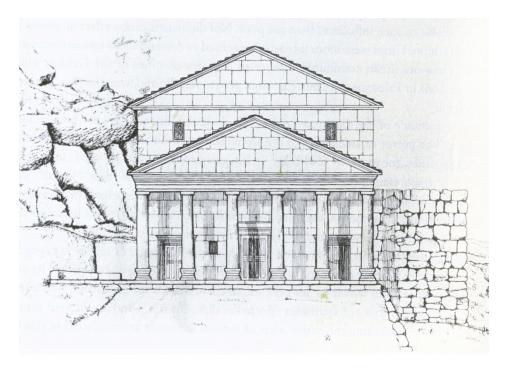
The Propylaea at Athens (5<sup>th</sup> century BC) – monumental gateway to the Acropolis (from Dinsmoor, "The Architecture of Ancient Greece")



Arch of Caracalla, Thebeste, Algeria, early  $3^{\rm rd}$  century A.D. (from Anderson/Spiers/Ashby, "The Architecture of Ancient Rome"



Façade of the synagogue at Meiron, central Galilee,  $3^{rd}$ - $4^{th}$  century A.D. (from Levine "The Synagogue in Late Antiquity")

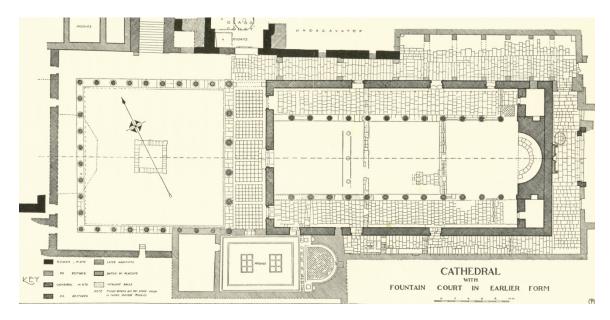


Reconstruction of the façade of the synagogue at Meiron, central Galilee, 3<sup>rd</sup>-4<sup>th</sup> century A.D. (Note the typical three, symmetrical entrances which are also commonly seen in churches.) (from Levine "The Ancient Synagogue")



Entrance façade of the church of St. Simon Stylite (Qalat Siman), near Aleppo, Syria,  $5^{th}$  century A.D. (from Milburn, "Early Christian Art & Architecture")

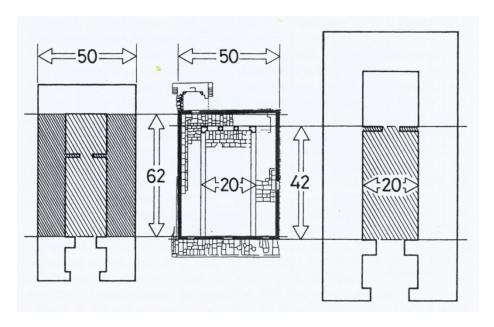
In addition to the emphasis on ceremonial entrances to church buildings, we see early on the development of the narthex as a transitional space between the sacred and secular worlds.



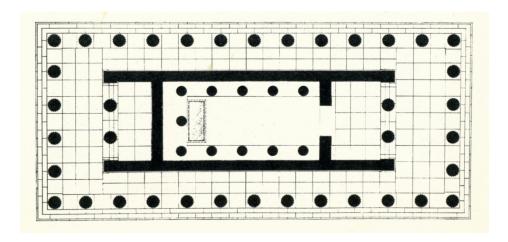
Floor plan of the Cathedra Church at Gerasa (Jerash), Jordan, 4<sup>th</sup> century A.D. (Note the narthex as transition between atrium and sanctuary.) (from Crowfoot, "Early Churches in Palestine")

#### The Temple in Jerusalem and Pagan Temples

The idea of a sacred space is well established in both pagan and Jewish religious buildings from antiquity. Orientation is important often in pagan temples and becomes so in Jewish synagogues by the third century A.D. The Holy of Holies, the place where the ark of the covenant is kept sets the Temple's great precedent for a sacred focus in built form. Interestingly, it is not immediately adopted in either early Jewish synagogues (where the Torah scrolls where apparently brought in from another location) or Christian churches (which began as communal meeting and worship places). But by the third century, we begin to see Torah shrines built within synagogues and churches built around (usually martyrial) shrines (i.e., geographical places of inherent sacrality).

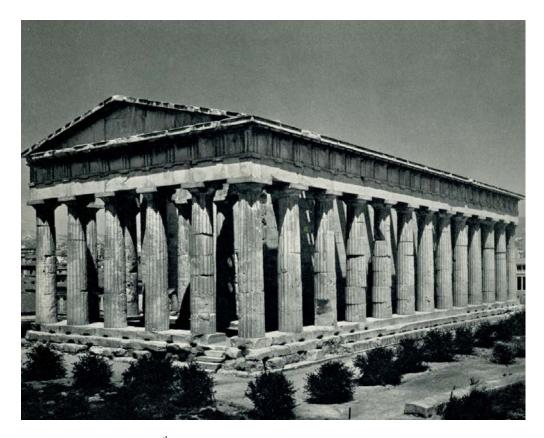


Comparison of plan proportions: Capernaum Synagogue (4<sup>th</sup>-5<sup>th</sup> c. Galillee) and Temple (from Wilkinson, "From Synagogue to Church: The Traditional Design")

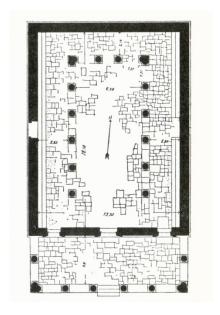


Floor plan: Temple of Hephaestus, Athens (5<sup>th</sup> century, B.C.)

(Note the holy place clearly defined.) (from: Scranton, "Greek Architecture")



Temple of Hephaestus, Athens (5<sup>th</sup> century, B.C.) (Note the external sculptural form) (from: Scranton, "Greek Architecture")



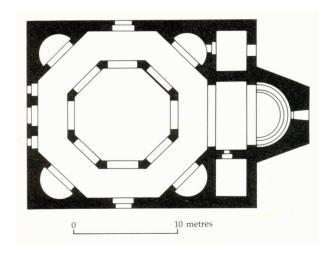
Floor plan: Bar'am Synagogue, Galilee (3<sup>rd</sup> century, A.D.) (Note the inversion of the classical Greek temple form.) (from: Levine, "Ancient Synagogues Revealed")



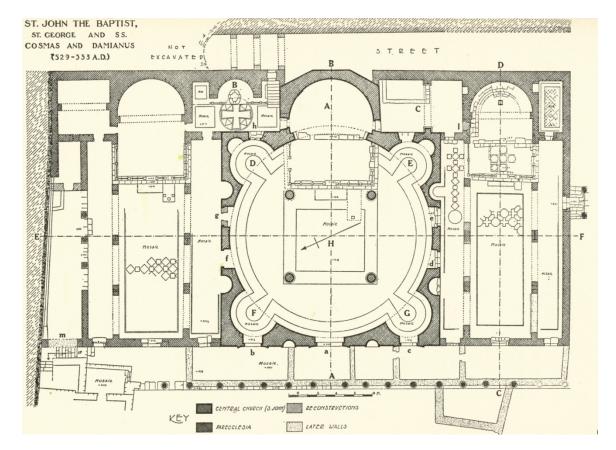
Bar'am Synagogue, Galilee (3<sup>rd</sup> century, A.D.) (Note the emphasis on a sacred entrance rather than overall sculptural form)



Floor plan: Church of the Holy Sepulchre, Jerusalem (4<sup>th</sup> century, A.D.) (Note vignette plans of Solomon's Temple, Jerusalem, and the Holy Land in the corners.) (from: Biddle, "The Church of the Holy Sepulchre")



Plan of the Shrine of St. George, Ezra (Syria), early  $6^{th}$  century A.D.) (from: Milburn, "Early Christian Art & Architecture")



Floor plan of the church of St. John the Baptist at Gerasa (Jerash), Jordan, 6<sup>th</sup> century A.D. (from Crowfoot, "Early Churches in Palestine")

## **Liturgical Function**

We've seen how formal elements from ancient building types influenced early church design, and indeed some of these basic design elements influence the design of church facilities even today. Examples are:

- 1. Columned halls (structural articulation)
- 2. Vestibules, narthexes, gathering spaces
- 3. The importance of distinct entrances
- 4. Raised chancels (focal points for liturgy) / sacred spaces
- 5. Water features, areas for baptism
- 6. Fellowship halls, places for communal dining

We also noted that the specific functions of the early church building, like those of the ancient synagogue, strongly influenced its design. Since many of the architectural elements of early church design have survived, it should not come as a surprise that many of the functional requirements of early churches are also familiar to us today.

Since we know that the function of spaces and ritual furnishings played an important role in the development of church architecture from the beginning of the Christian era (some of which appear to have been appropriated from the synagogue), it is appropriate that we continue to use function – especially

worship function or "liturgical function" -- as a guide in programming and designing church buildings today.

- i. Liturgical function involves the use of buildings and spaces for organized liturgy the communal services of the church, i.e., the communal rituals of the church as a place of public worship.
- ii. The overall structure of the Sunday worship service in "liturgical churches" (RC, Orthodox, Lutheran, Anglican) includes generally<sup>3</sup>:
  - 1. Entrance rite
  - Service of readings interspersed with psalmody (liturgy of the Word)
  - 3. General intercessions
  - 4. Collection and presentation of the gifts (offertory)
  - 5. Prayers of thanksgiving/consecration over the gifts of bread and wine (liturgy of the Eucharist)
  - 6. Communion
  - 7. Dismissal
- iii. Other liturgical functions that require accommodation in the worship space include:
  - 8. Processions / ceremonial movement
  - 9. Music (not new to, but emphasized by Martin Luther)
  - 10. Baptisms, weddings, ordinations, funerals
  - 11. (Private devotions and prayer are not excluded, but they are usually not the primary drivers of the worship space program.)
- iv. All of these ritual activities require specific spatial arrangements (accommodations for movement, orientation, focus of sound/vision, and furnishings) to facilitate performance and participation.

How does the building/space/environment support liturgical functions?

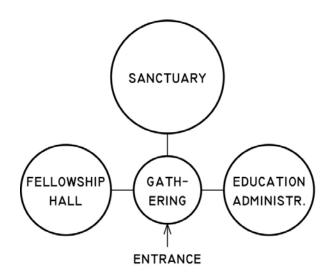
- i. Accommodate in terms of size, lighting, acoustics, etc.;
- ii. A certain hierarchy of space emphasizing movement and focus;
- iii. Symbolism used to educate and remind us of what is represented (early churches were seen as a foretaste of heavenly Jerusalem) (buildings as "sermons in stone");
- iv. Beauty (/Truth/Goodness), aesthetic considerations
- v. Mediation between the physical and the spiritual world (like the light of the sun seen through a stained glass window)
- vi. Sacrality Sacred space is set apart (why do we "consecrate" churches?)
- vii. Historical allusion / typological models

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<sup>&</sup>lt;sup>3</sup> Frank Senn, "Christian Liturgy"

#### **Other Functions**

- a. We also recognize that churches (and church buildings) support other functions as well functions besides those that constitute organized worship and liturgical function as were also seen in early synagogue and church facilities. Such "ancillary" functions include:
  - i. Education (classrooms, libraries, auditoria);
  - ii. Fellowship (lounges, fellowship halls, kitchens,);
  - iii. Administration (offices, work rooms, pastor's study, conference rooms);
  - iv. Utility (storage rooms, mechanical rooms, toilets)
- b. What is the relationship between these ancillary functions and worship functions?
  - i. "Ancillary" means "in support of" (subordinate or subsidiary)
  - ii. The "critical link" that holds them together, acting as an "invitation" to all functions and yet an integral part of the worship function = Gathering Space. (similar to the atrium (courtyard) in ancient and early Christian buildings)

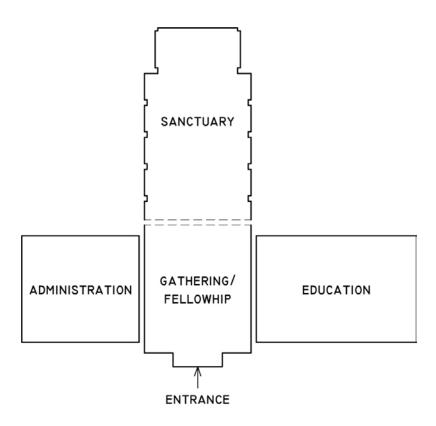


Simplified diagram illustrating spatial relationships of a church program (note gathering space as a programmatic "link")

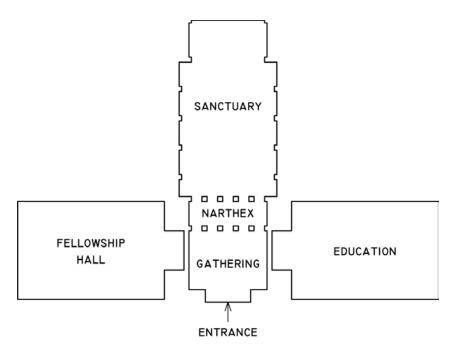
## The dilemma of the Gathering Space as "Multi-Functional" Space

- a. The gathering space (or narthex) can be welcoming, an orientation/vestibule to all ancillary functions, and yet also play a significant role in support of the liturgical function of the church by acting as a place of gathering for the people of God in preparation for celebration of corporate worship.
  - i. The gathering space is symbolic in terms of its role as a transitional space. It can function as a place of transition from the secular world to the sacred, a place of gathering for worship (similar to an atrium).
  - ii. Baptisms can be appropriate in the gathering/narthex area since in the sacrament of baptism, entry into the church, initiation into the body of Christ, becoming cleansed of sin, and becoming one people of God is both symbolized and actualized.

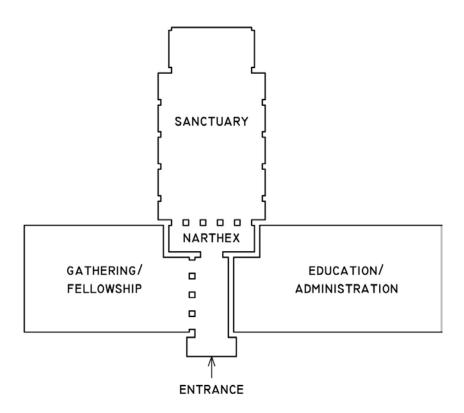
- iii. The gathering space/narthex can serve as a point of departure or arrival for processions, as it represents a vestibule or ante room to the sanctuary itself (as a setting for a gate or ceremonial entranceway).
- iv. Even the hearing of confessions can be symbolically appropriate (as, for example, is sometimes seen in the Eastern Orthodox tradition).



Simplified conceptual church floor plan - 1 (note combined, multi-functional gathering space and fellowship hall, and lack of narthex)



Simplified conceptual church floor plan - 2 (note separate, dedicated gathering space and fellowship hall, and inclusion of narthex)



Simplified conceptual church floor plan - 3 (note insertion of transitional entrance hallway on axis, opening immediately onto separate gathering/fellowship space)

- b. The gathering space as: fellowship hall, education space, administrative space, childcare space, overflow sanctuary seating, lounge, coffee shop, mail room, even storage, tends to be less effective as a place of preparation and transition into the sanctuary.
  - i. Is hierarchy still possible? Is it appropriate? Is it affordable?
  - ii. Can multi-functional gathering and worship spaces still be meaningful from a worship perspective?
  - iii. Are we interested in building "consecrated space" (sacred space) or simply multifunctional/economical space?
  - iv. Is a dedicated gathering space a luxury we can't afford?

## Closing remarks:

b) "Church buildings are simply instruments for ministry, tools for the delivery of ministry. But while this is true, it is also true that buildings and their individual spaces also carry meanings beyond their basic functional purposes."

Richard Carl Kalb (Chicago-based architect)

- c) Understanding something about the history of buildings used for worship is helpful in recognizing the meaning and precedent in the spaces we build today.
- d) Thoughtfully crafted church buildings, while not essential to good worship, can certainly play a significant role in supporting ministry and worship.

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## **Bibliography**

Brown, G. Baldwin. From Schola to Cathedral: Early Christian Architecture and its Relation to the Life of the Church. Edinburgh, David Douglas, 1886

Crippa, M. A.. <u>L'arte Paleochristiana</u>: <u>Visione e Spazio dalle Origini a Bisanzio</u>. Milano: Editoriale Jaca Book Spa, 1998

Crowfoot, J.W. Early Churches in Palestine. London: Humphrey Milford, Oxford University Press, 1941

Dinsmoor, William Bell. <u>The Architecture of Ancient Greece: An Account of its Historic Development.</u>
New York: B.T. Batsford Ltd., 1902

Kohler, Kaufmann. <u>The Origins of the Synagogue and the Church</u>. New York: The Macmillan Company, 1929

Krautheimer, Richard. Early Christian and Byzantine Architecture. Baltimore: Penguin Books, 1965

Krautheimer, Richard. Studies in Early Christian, Medieval, and Renaissance Art. New York: New York University Press, 1969

Levine, Lee I. Ancient Synagogues Revealed. Detroit: Wayne State University Press, 1982

Levine, Lee I. <u>The Ancient Synagogue: The First Thousand Years</u>. New Haven: Yale University Press, 2000

Levine, Lee I. <u>The Synagogue in Late Antiquity</u>. Philadelphia: The American Schools of Oriental Research, 1987

Macdonald, William L. <u>The Architecture of the Roman Empire: Volume 1, An Introductory Study</u>. New Haven: Yale University Press, 1965

Mathews, Thomas F. <u>The Early Churches of Constantinople: Architecture and Liturgy</u>. University Park: The Pennsylvania State University Press, 1971

Milburn, Robert. Early Christian Art & Architecture. Berkeley: University of California Press, 1988

Orlinsky, Harry. <u>The Synagogue: Studies in Origins, Archaeology and Architecture</u>. New York: Ktav Publishing House, Inc., 1975

Senn, Frank. Christian Liturgy: Catholic and Evangelical. Minneapolis: Fortress Press, 1997

Shanks, Hershel. <u>Judaism in Stone: The Archaeology of Ancient Synagogues</u>. Washington, D.C.: Biblical Archaeology Society, 1979

Wilkinson, John. From Synagogue to Church: The Traditional Design, Its Beginning, Its Definition, Its End. London: Routledge, Taylor & Francis Group, 2002

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