

Building an Architecture of True
Orthodox Vision
◆————◆
Past, Present and Future

By Christ John Kamages, AIA

Originally printed in:
The Christian Activist: A Journal of Orthodox Opinion
Volume 10, Winter/ Spring 1997

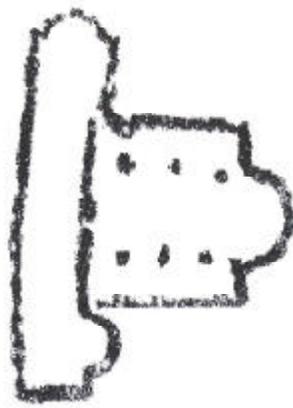
© Christ John Kamages 2002



INTRODUCTION

Winston Churchill once said “We shape our buildings and thereafter our buildings shape us.” From the earliest times of humanity, the role of a crafted environment, often referred to as “architecture”, has had profound impacts upon the shaping of our civilization in symbolic, inspirational and practical terms. The role of architecture in man’s relationship with his God is illustrated in the countless volumes of drawings and images in architectural history books that speak to successes, frustrations, and the search for solutions, defining the spiritual attributes of faith with bricks and mortar.

The Orthodox Faith has its roots in the great faith traditions of the East, crystallized in the refined expression of

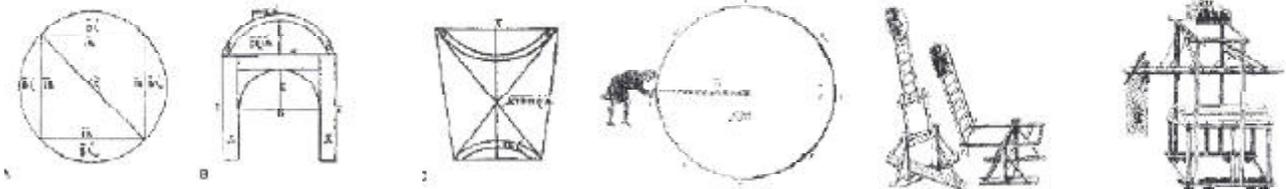


Byzantium. Within this Orthodox tradition, sacred space is employed to demonstrate the relationship between the true Faith and its liturgical expression, i.e. the way in which the People of God encounter God and each other in the course of the Divine Liturgy. The development of this sacred space was to become an achievement of monumental significance. It is precisely this legacy and its continuity in faith-generated architecture that both inspires and concerns me, and causes me to seek an authentic archi-

tectural development within the Holy Orthodox Church today.

The design and building of facilities dedicated to the glory of God is a sacred task. It is also a task that should be accompanied by an overwhelming sense of responsibility. This responsibility has many dimensions, including a never-ceasing sensitivity to the demands of past, present and future. It is a sacred task rooted in the foundation of the Holy Orthodox Faith, seeking to reflect that eternal flame which is both ever-burning and yet never consumed.

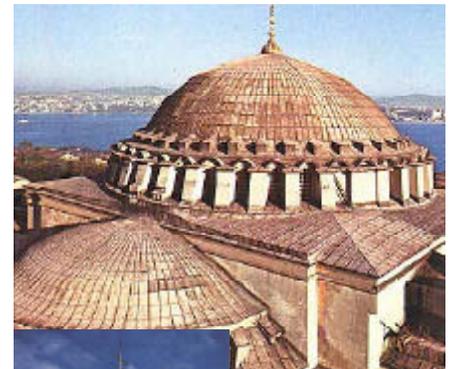
Our stewardship in providing sacred Orthodox Architecture to support the mission of the Church in our earthly setting has two components: Product and Process.



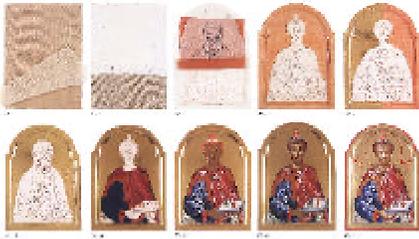
Product: The Physical,
Tangible Elements Defin-
ing the Intangible

The creation of products is comprised of physical elements, whether they be complexes of buildings, individual buildings, building components, details, sacred iconography, decoration, or artifacts. These elements combine with tradition and creativity to create an environment of Heaven on Earth. There are numerous ingredients that combine to provide a successful, supportive ecclesiastical environment:

- Holy tradition and liturgical action.
- Functional and operational activities of the worshipping community.
- The integral and integrated presence of iconography.
- Acoustical performance Environmental systems.
- Durability and maintenance of structures.
- Natural lighting
- Interplay of space, structure and lighting
- Technical performance



Process: The Method, Conduct, Approach for Formulating Actions



Bringing together the planned activities of the worshipping community, together with the components of the physical building within that special sacred place, involves a dynamic process which guides the required creative synthesis to produce successful results. The building is successful when it expresses the end product or memorialization of the aspirations and needs of the Church. However, I maintain that without a process not only strongly-rooted within the traditions of Orthodoxy, but also one which allows for inclusion and vision, the end result will fail to reach its full potential, or to be truly responsive to the total range of needs and demands, whether they be spiritual, operational or technical.

The process of creating sacred architecture must be the work of the people involved in the tasks of needs assessment, dialogue, education, goal setting,

options development, discovery, evaluation and selection of micro and macro options. The process must be pursued within the spirit of the sacred task, with respect, humility, love and enlightenment, and with a representative group reflective of the Church who establish the essential components.

Successful results, in my opinion, are greatly enhanced when the activities of product and process are intertwined in the search for the most responsive and appropriate solution to meet the needs of the Church. Product without process is akin to receiving Holy Communion without proper preparation or without participation in the Divine Liturgy. Today, too many parishes approach planning, design, and building facilities without proper preparation, without the work of the people guided by the Holy Spirit in developing the specific vision for their community. It has been written that “a people without vision shall perish”. On the other hand, our Theology is rooted in light which illuminates our vision.

The “black box” or “seat of the pants” or “I know it all” approaches for planning and design are not appropriate or effective and their products bear regrettable legacies for the generations to come, not to mention the memorialization on our landscapes of visual and functional monstrosities.



CHALLENGE

My deep concern is that the Orthodox Church indeed is the true Church, which indeed maintains the Apostolic continuity and tradition, and represents a very special treasure-chest of sacred richness. However, in recent years, the architectural results, together with their limited process, have produced in the New World hit or miss results, at best. These legacies will remain for many, many years to provide witness to the Holy Orthodox Church: “a doctor can bury his patients but an Architect cannot”. It is imperative that clergy, laity, and yes, even Architects, face up to their responsibility to the heritage of the past to our people of today and for the generations to come so that our facilities can fulfill the promise and potential of the Holy Orthodox traditions and legacy.

Beyond the product / process issue, it is amazing that, over time, an incremental, permis-



sive and passive attitude has allowed a number of issues to be considered which, I believe, erode and thin the full richness of our liturgical practices. These issues need to be carefully reviewed, evaluated, and if warranted, appropriate action taken. I feel it is important to carefully create a baseline that defines a desired level of performance or attributes required at a basic level, as well as desirable and optional expectations for architectural / environmental elements supporting our Orthodox ecclesiastical activities.

The very nature of Protestant-

tions on a theme) and the search and groping of Vatican II Catholics constitute examples of unconstrained change without a frame of reference and without a solid (true) foundation and structure resulting in the creation of Meeting Houses or Public Auditoria of serendipitous quality and presence. My grandfather often told me as a child, “Christos, if you tell the truth you never have to remember what you’ve said.” I loved my grandfather because of his wisdom, compassion, and “street smarts”, but more importantly, because of his strength and dedication to his true faith and principles. My grandfather’s admonition bears strong meaning in these matters, because we must understand the truth or core meaning in any matter . . . even the architecture and environment of the true faith.

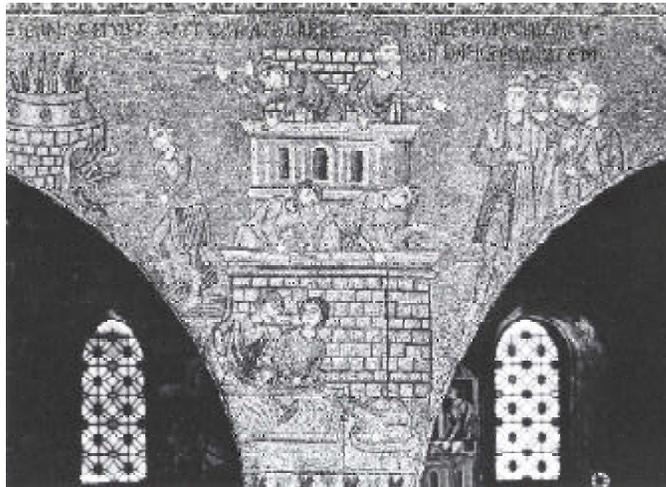
Our Orthodox Church is not void in its traditions and practices. Certainly, even with the recognition that we are an “apophatic church” in that we



know what we do not know and allow a context for the holy mysteries, our Church has numerous rich traditions and purposes that are definable and that are key in defining that special place, presence, and heaven on earth. The power of the influence and example of the Justinian Church of Hagia Sophia (536 AD) has been immense in not only converting the nation of Vladimir to the Orthodox faith, but in creating an inspiration for Christian and Islamic architecture to come 500 and 1,000 years after its completion. This manifestation is extremely powerful and created the first major proclamation of an architectural form responding to liturgical needs of the true faith. This church broke the mold for Christianity which was using the borrowed form of the secular Roman Basilicas. Often times in our practice I hear people proclaim that “I really want to build this church for God” and then I politely respond “My friend, God does not need this church, we are those in need.” The nature of our Orthodox ecclesiastical and iconographic traditions was developed by the Fathers to transform our earthly presence to that “heavenly environment”, in the spirit of “linkage” and

“connection”, on a timeless continuum.

Our Orthodox House of God is the heart and focus of our faithful worship. Whether it be individual prayer, liturgical worship, weddings, baptisms, funerals for our family and friends, the physical environ-



ment of the Church provides the setting and context for those eternal and indelible memories. . . memories that reinforce the spirit of the never-ceasing continuum of the Church going on for the ages of ages.

We need to establish the critical Orthodox baseline and identify those special attributes of the physical realities of the true Church that are key in maintaining that precious continuity. We need to establish how today, we can use process, intellect, creativity and even technology to reinforce and solidify the worship and liturgical experiences rather than dis-

count or trivialize them.

The conceptualization and construction of buildings constitute a complex set of interrelated tasks. The process involves an equation that is comprised of demand and response. The demand side is comprised of human and symbolic needs, goals, aspirations, operational activities, requirements and economic resources, while the response side or solution set contains site and land, traditions, materials, systems, technologies, economic attributes and creativity.

Orthodox Church facilities (worship and related support facilities) are among the most complex building types due to the special nature of the goals and program requirements, as well as the nature of the client/user group involved in the process.

Today, as Orthodoxy emerges in our country from its position as a hidden, exclusive faith and tradition, we will see an increase in the renovation and refurbishment of existing facilities and a new wave of construction of new facilities to meet an increased demand of the faithful seeking the true faith.



ISSUES

In working with Orthodox Parishes throughout the country, and on our own journey in that everyday reaching for fuller, clearer understanding and appreciation of our Orthodox faith, there are a number of issues and questions that arise on a variety of levels. These issues require articulation, discussion, research and prayerful action regarding the product and process of building churches of the Orthodox faith. While these questions are not all inclusive and exhaustive, I seek to initiate thinking and dialogue reflecting frequently discussed topics as a first step, and indeed, a journey begins by taking a first step:

I. What is the orientation of the church and why?

II. Why are Orthodox churches special and unique buildings?

III. What is the Orthodox style



or expression of the Orthodox church?

IV. Can an Orthodox church be contemporary or modern?

V. What about seating in an Orthodox church: are pews part of the tradition?

VI. What is the tradition of the Soleas? I see such variation from church to church, what is the Orthodox approach?

VII. What is the best location for the choir and what about choir lofts?

VIII. Are stained glass windows part of the Orthodox tradition and what about natural light?

IX. What forms of artificial lighting are appropriate for the Orthodox church?

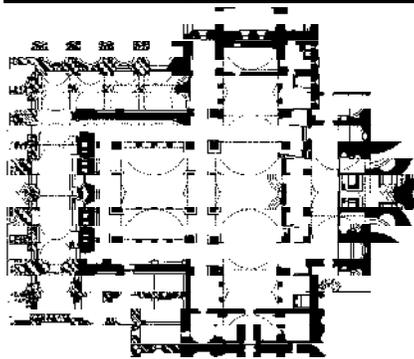
X. I see a variety of expressions of Iconscreens. What is the tradition of and appropriate approach to the Iconscreen? . . . Will the Real Orthodox Iconscreen Please Stand Up?

XI. Should mosaic icons be used for Iconscreens?

XII. Infant baptisms have constituted a majority of the baptismal sacraments in the Church to date. What about adult converts and adult baptisteries?



I. What is the Orientation of the Church and Why?



Beyond the dogmatic requirement of facing east, understanding the spiritual, symbolic, and practical implication provides meaningful insight into our church site planning:

- Judaic roots provided that the synagogue facing towards Jerusalem, establishing a tradition.
- The rising sun is the source of light, life, warmth, hope and wipes away the darkness of the night.
- Our Savior is the Sun of Righteousness.
- Christ is the true light of the world.
- Paradise biblically is referenced in an easterly direction.
- New Zion, Jerusalem, is east, for Christ's coming.
- More practically, with the

sun rising in easterly positions (summer solstice, winter solstice, spring and fall equinoxes), daylight was a much needed resource.

Considering these symbolic and practical factors, our Orthodox Churches should be required to face in an easterly direction, a directional range of both true east (not magnetic), and of 44° north and south, still maintaining the easterly geography but considering site conditions, functional, visual, and actual latitude. New York City and Constantinople are of the same latitude, as are Florida and Jerusalem. This easterly principle will provide meaningful direction in gaining access to sunlight, the true light, that powerful gift of God.

II. Why Are Orthodox Churches Special and Unique Building Types?

The Orthodox faith, unlike a majority of religious denominations, represents the living continuity of Christ-centered faith and apostolic lineage that is rich in theological tradition and specialized architectonic responses. The interrelationship of liturgies, worship and the physical forms create the House of God, the place of special presence, that is not an auditorium or meeting house or mere physical shelter, but Heaven on

Earth. That holy environment as a crucible of prayer, iconography, sounds and spiritual fragrance creates the unique connection from a momentous worldly position to the unworldly. As the Orthodox Church stands as a rock of unchanged continuity, there are related principles or precepts that create that craft, the physical environment. Merely creating an Orthodox church as a caricature is not enough. There is a myriad of complex technical, functional and aesthetic performance issues that must be resolved harmoniously to create that special, sacred environment. A landmark example of this synthesis is Hagia Sophia of Constantinople, a facility whose innovations have influenced Gothic and Renaissance Architecture and was recruited by the Holy Spirit in the conversion of millions of Russians under Vladimir to the Orthodox Church. The following collection of quotes from the work of Constantine Cavarnos defines the special nature of the Church Environment:

- • “Liturgy consists of various means whereby the Church makes it possible for the faithful to experience through their senses the mysteries of religion, that is, the sweetness of the kingdom of



God... These means are material: the Church buildings, the vessels, the hymnody, psalmody, iconography, the vestments and so on."

• • "Not works of chance of human preference but of mystical activity"

• • "Those wanting innovation and seeking secular delight are wrong in thinking that the sacred object... have only non-essential significance."

• • "Change cannot occur according to preference or conceptions of Church-goers who take as a standard for them the secular spirit."

• • "Heaven with many lights"

• • "This dome, this soaring architectural device, was made on the pattern of the heavens that stand before us."

• • "The Living one, the Lord Almighty, the Great Architect, he who set up the firmament like a vault"

• • "... You shall feel that it is indeed a temple (naos), a house of God, full of mystery and spirit."

• • "Below the dome of Hagia Sophia, I felt the Byzantine

idea has a world-wide mission... Never in the evolution of human art, have paintings succeeded in spreading heaven before us so superbly, so truly, so profoundly; at no other time did the feeling of rhythm and artistic knowledge find such a mature expression; at no other time was art so living and real."

• • "Tradition preserved from generations to generations"

• • "Sacred and divine inspiration, full of truth and spirituality"

• • "Speaking not to the senses, but to the spirit and elevates us to lofty heights"

• • "In an Orthodox Church everything architectural, iconography, psalmology, etc. must remind one of a world different from the material one."

The Church is our home away from home. It is the setting of timeless liturgical continuity and that treasure house of special memory: eternal, past, present, future. Our forebearers have entrusted to us the stewardship of the living Orthodox Faith.



III. What is the Orthodox Style or Expression of the Orthodox Church?

While we are a Byzantine-rooted Orthodox Church, that incredible crucible of spiritual and technical ingenuity, Constantinople, was the place where liturgy and architecture developed together. Today, because of the past contemporization and "Neo" Byzantine interpretations of church architecture, 100% of our clients currently demand traditional Byzantine Orthodox architecture.



Photios Kontoglou was a major pioneer in the creation of the renaissance of true Byzantine iconography and its principles. I believe our mission today in the spirit of Kontoglou regarding the architecture of our faith is to focus, educate and communicate the qualities and attributes of Byzantine Orthodox Church architecture, including an understanding of basic elements and basic prototypes, such as central, cross-in-square and cruciform. I do not believe that the basilicas should be included in this grouping because it was a "borrowed" church form (Constantine's Roman Basilica / "Building of the King", bor-



rowed in another incarnation from the Greeks) and does not relate or adequately support the Orthodox worship activity, being linear, sequential, hierarchical, and more exclusive. The central, cross-in-square, and cruciform prototypes have powerful, meaningful and appropriate characteristics and also offer a rich architectural palette from which to work.

CHURCH FORM PROTOTYPES

Prototype 1: Basilica

HISTORICAL ROOTS:

A “borrowed form” loaned to the Christian faith by Emperor Constantine upon acceptance of the faith where the faithful moved from the “closets,” catacombs, and homes to public buildings or building of the Kings (From the Geek Vasilefs, actually used as King’s throne rooms) this building type was a “loaner” and a transitional environment for worship. The basilica is a derived progression of the classical Greek buildings to Roman public buildings (Greek with steroids.)

S P A C I A L CHARECTERISTICS:

Long, processional, gallery/corridor like space moving towards a focal point (king, emperor, and altar). Space is usually divided into a three or five aisle

plan arrangement.

HISTORICAL EXAMPLES:

- St. Demetrios, Thessaloniki
- St. John Studius, Constantinople
- Katholikon of St. Katherine, Sinai
- St. Peters, Rome (Early Church)
- St. John, lantern Rome
- St. Appollinare Nuovo, Classe
- St. Appollinare, Ravenna

CONTEMPORARY EXAMPLES:

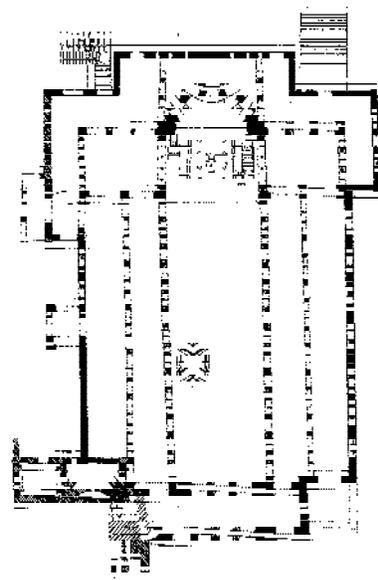
- California Mission Churches
- Roman Catholic churches in use from the late 19th Century, in the USA.
- St. George, Norwalk, Connecticut
- St. Nicholas Shrine, Babylon, New York
- St. Koimissis Tis Theotokou, Homdel, New Jersey

COMMENT:

- Historically a “transitional building” that was promulgated prior to the innovations of the Byzantine and Gothic period, a Roman Catholic favorite.
- An UN-Orthodox building form because of its “hierarchical stratification: and the distortion of the “Body of Christ”.
- Repetitive, often boring visual format, although in the right

“dose” (proportional), could be elegant, has a utilitarian external massing.

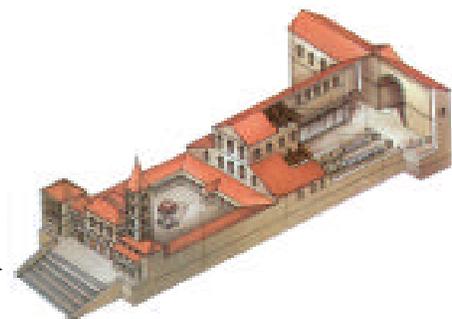
- Elongated form emphasizes a Hierarchical spatial arrangement.



St. Demetrios, Thessaloniki, late fifth century, plan.



St. Appollinare in Classe, Ravenna, c. 490. Interior of nave and apse.



St. Peter's, Rome (Early Church), as in c. 400, isometric reconstruction.



Prototype 2: Central Plan

HISTORICAL ROOTS:

Rooted in the tradition of the Rotunda, Martyrium to the development of the central plan in Constantinople, most notably glorified by Justinian and his architects in the building of the Great and revolutionary architectural landmarks / turning points such as Hagia Sophia, S. Irini, S.S. Sergius and Bacchus and S. Vitale in Ravenna. A building prototype created in the “crucible” of our faith, with Orthodox faithfulness in focus.

S P A C I A L
CHARACTERISTICS:

Central, unified space; light filled dome major feature. Exterior- the dome as apex; gentle build-up of massing toward dome.

HISTORICAL EXAMPLES:

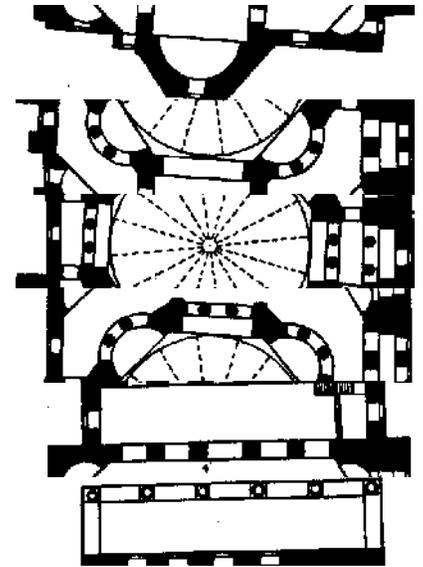
- Hagia Sophia, Constantinople
- S.S. Sergius and Bacchus, Constantinople
- S. Irini, Constantinople
- S. Euphemia, Constantinople
- S. Polyuktus, Constantinople
- S. Vitale, Ravenna
- S. Georgios, Thessaloniki

CONTEMPORARY
EXAMPLES:

- S. Nectarios, Aegina Annunciation, Columbus, Ohio
- Holy Trinity, San Francisco
- S. John’s, Las Vegas
- S. Demetrios, Concord
- Annunciation, Sacramento
- Assumption Port Jefferson, NY
- S. Katherine, Naples, FL
- Cathedral of the Panagia, Toronto, Ontario Canada
- St. Basil, Houston, Texas
- St. Athanasios, Goleta, California

COMMENT:

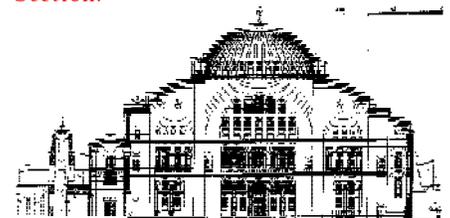
- Most Orthodox (“Work of the people”...oneness in Christ)
- Very Flexible
- Grand and Intimate at the same time
- Both orthogonal and polygonal plan and space potential
- Greatest potential to “feel” the power of the dome
- Promotes community and the “Body of Christ”
- Most ancient in liturgical response
- Opportunity for great luminosity



S. S. Sergius and Bacchus, Constantinople, 536. Plan.



Hagia Sophia, Constantinople, 532-7. Section.



Prototype 3: Cross In Square

HISTORICAL ROOTS:

Evolved from the Justinian pe-riod Byzantine style, creating a central open space with four col-umns with the orchestration of domes, volumes, inscribed within a Greek cross, in the 8th Century.

S P A C I A L
CHARECTERISTICS:

A derivative of the central fam-ily with “humbler”, less daring spatial/ structural attributes, the dome is still central with four or more supporting col-umns exposed with vaults, gal-leries, side aisles, processions added or layered around the heavenly canopy of the dome. The spatial progression moves as the hierarchical assembly of volumes move towards the apex of the dome.

HISTORICAL EXAMPLES:

- Hosios Loukas, Church of the Theotokos, Amphisa Koimissis, Nicaea
- S. Mary Pammakaristos, Constantinople
- Church of Myrelaion, Constantinople
- Holy Apostles, Athens
- S. Panteleimon, Thessaloniki
- Holy Apostles, Thessaloniki
- Panagia, Halkeon, Thessaloniki

- S. Katherine, Thessaloniki
- S. Saviour Pantepoptes, Constantinople
- S. Saviour Pantocrator, Constantinople
- S. Theodore, Constantinople

CONTEMPORARY
EXAMPLES:

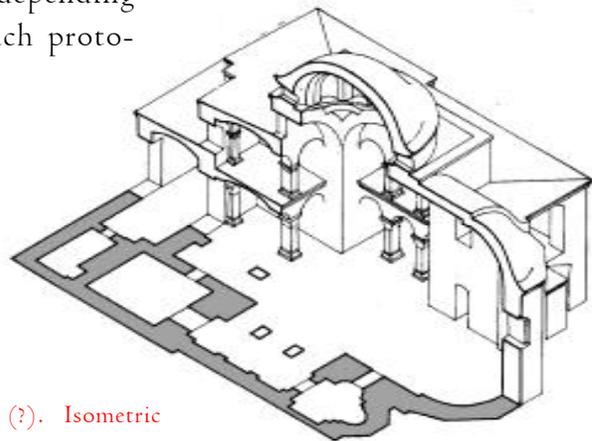
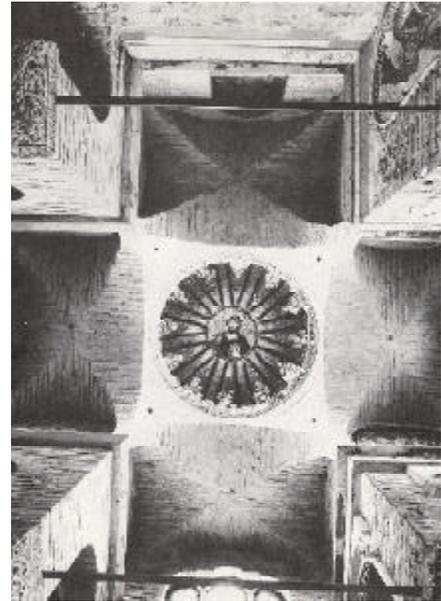
- St. Katherine, Elk Grove, CA
- St. Nectarios, Covina, CA
- St. Demetrios, Saco, ME
- Kimissis, Dracut, Massachusetts
- St. Catherine, Quincy Massachusetts

COMMENT:

Central focus, dome over domi-nate areas, more intimate by virtue of the surrounding lay-ers, galleries, vaults, etc., ar-ranged in a progression culmi-nating within the dome. This allows flexibility in exterior ex-pression. Central concept is a more humble, slightly more eco-nomical (5 – 10%) depending on the design approach proto-type.



Byzantine Church Cross in Square examples.



St. Climent, Ankara, 9th c. (?). Isometric reconstruction.



Prototype 4: Cruciform

HISTORICAL ROOTS:

The combination of the secular basilica and the central dome form created by with the intersection of basic elements right angle at creating an intersection and a position for the dome / creating the special place.

S P A C I A L
CHARACTERISTICS:

The 3-aisle Basilican progression/procession marked with the dome as the punctuation market at the transeptual intersection. The size and proportions of this prototype are key elements in the success of the space. The dome most often highlights the Soleas of the church. Excellent monastic churches because of hierarchical form and punctuated/well defined Soleas or “performing” area.

HISTORICAL EXAMPLES:

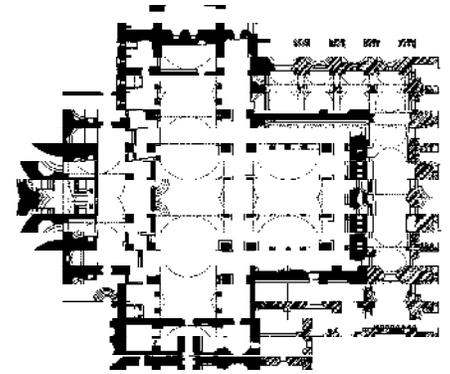
- St. John the Theologian Ephesus
- Holy Apostle, Constantinople
- Church of Katapilini, Paros
- S. Savior of the Chora, Constantinople
- Prophet Elias, Thessaloniki
- San Marcos, Venice

CONTEMPORARY
EXAMPLES:

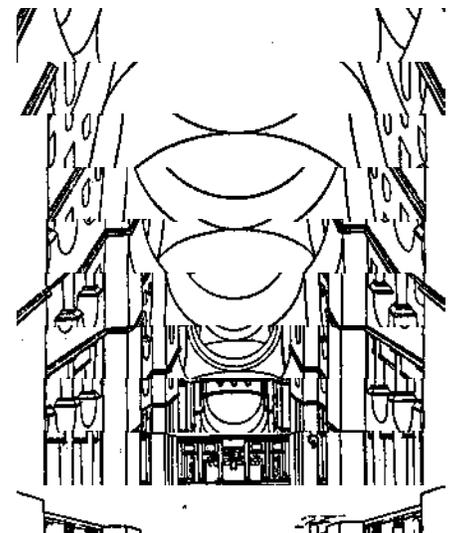
- Koismisis of the Theotokos, Chicago, IL
- Metropoli Cathedral, Athens
- Holy Trinity Cathedral, New York
- St. Sophia Cathedral, Miami, FL
- St. Spyridon Cathedral, Worcester, MA
- St. Paul Cathedral, Hempsted, NY
- Katholikon of the Theotokos, The Living Spring, Dunlap, CA

COMMENT:

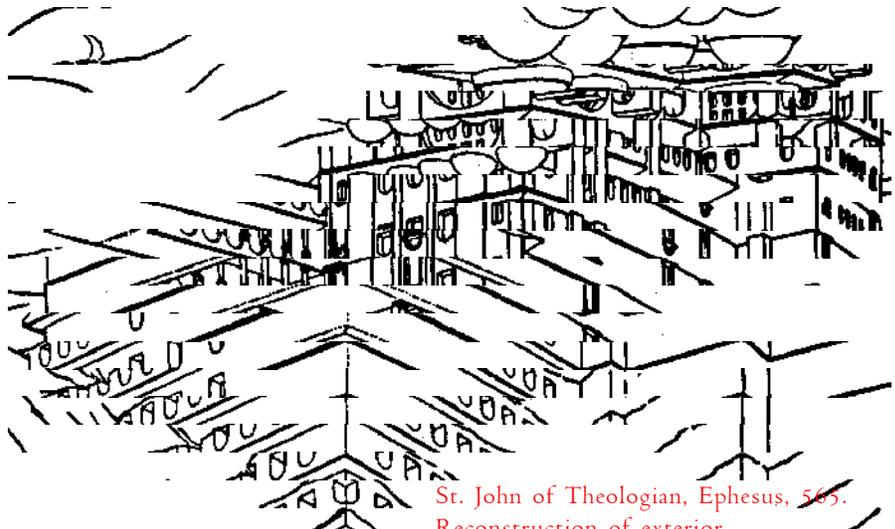
When correctly executed, with appropriate proportions and length of nave to Soleas, a beautiful worship environment can be created. Caution in terms of playing “peak-a-boo” vista with the view to the Pantocrator in the dome in terms of visibility. Most effective as a monastic Kathoukon.



St. Marco, Venice, begun 1063 (?).



St. John of Theologian, Ephesus, 565. Reconstruction of interior.



St. John of Theologian, Ephesus, 565. Reconstruction of exterior.



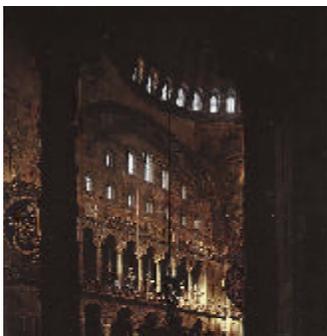
Beyond these prototypes there are a series of key characteristics that define appropriate Orthodox architecture:

1. A contained environment of Heaven on Earth, without regard to “earthly cares”.



2. Dome or dome surrogate symbolic of Heaven, eternity, the dwelling place of Christ Almighty, the Giver of Light and Life.

3. Solid and stable while pierced with light.



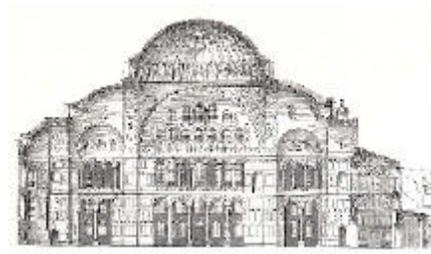
4. A place representing the theology of light.

5. Layers of space, darker contrasting with light.



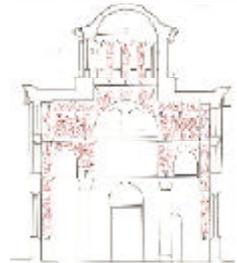
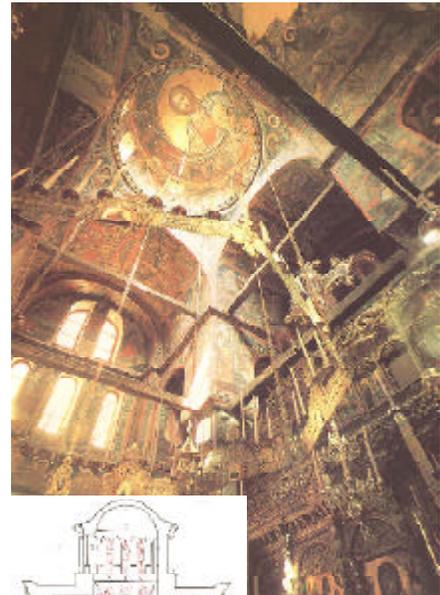
6. Spacious internal proportions.

7. Apex / hierarchical proportions and massing (progression of three dimensional interior spaces and exterior appearance).



8. Functional liturgical arrangements and potential.

9. Gracious, well planned iconographic surfaces.



10. Structural ingenuity.

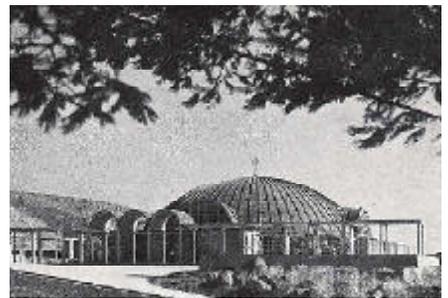
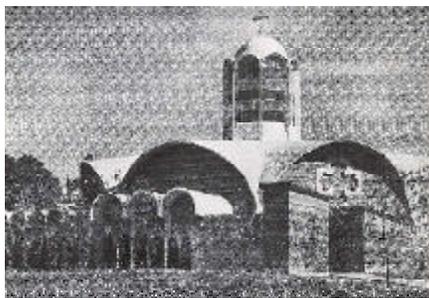
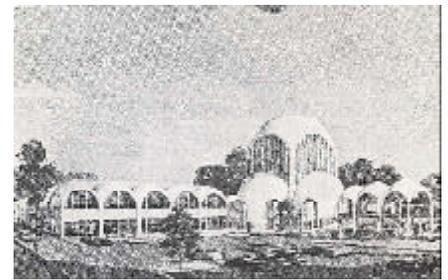
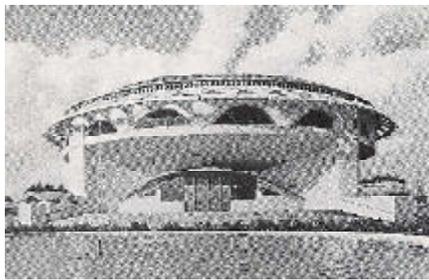
As the language of nations differ amongst various Orthodox Churches, its architectural language based upon time and place has also varied whether it be Asia Minor, the Middle East, Russia, Bulgaria, the Greek Island versus the mainland or countless examples of regional and ethnic expression. Orthodoxy accommodates while not changing the basic architecture of the true faith.



IV. Can an Orthodox Church Be Contemporary or Modern?

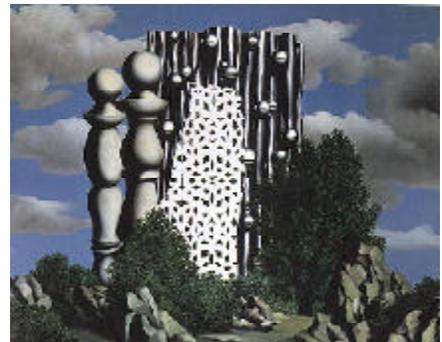
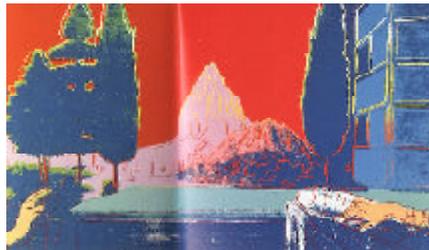
Beyond the traditional prototypes, I do feel that we have a responsibility to at least explore and conceptualize contemporary architectural solutions; however these solutions should be based upon ancient principles and precepts possessing Byzantine characteristics without creating “half-baked”, “Neo-Byzantine” concoctions that are neither fish nor fowl. This is a search, without preconception but guided by basic Byzantine characteristics defined above in Topic II.

Based on these principles and with an absence of prototypes or obvious solutions we should explore the possibilities of creating concepts of excellence. Again, under a hypothesis I would urge that we have a responsibility to search, however, not to build unless we are convinced of the merit and excellence of a solution. Otherwise we would add just one more disfigured “Neo-Byzantine” attempt to the landscape, and unfortunately there are already too many.



Various church buildings constructed in the United States during the 1950's and 60's.





Various artists' examples of the Annunciation, starting with a 12th c. icon on the left to modern artistic interpretations on the right.

V What About Seating in an Orthodox Church: Are Pews Part of the Tradition?

Pews, in North America, have been the adapted standard and preference for seating in a majority of Orthodox Parishes (there are some limited exceptions).

Pews have gained such stature and popularity to the point at which they have become high priority acquisitions in the same groups of purchase as the Iconostasion, Holy Altar, and Iconography. The Holy Cross Theological School in Brookline, the crucible for the development of Greek Orthodox priests, has a Byzantine

chapel with a beautiful exterior design, but with a dominant interior component of fixed pews. What is the message that we are sending to our priests: “Well, I grew up with pews in my parish church and then when I went to theological school I continued to sit in the pew”? Thus, pews are accepted and considered “standard equipment” for a church.

The central critical issue here in my opinion is how we define the problem. A pew is a form of seating. Seating does not have to be in the form of the Protestant prototype called the pew (I don't even like the sound of the word) that we are so quick to adapt. Someone might ask “What's the big deal, what's wrong with pews?” Be-

yond providing the basic seating function pews have the following limitations:

- They restrict true worship.
- They are fixed and rigid.
- They limit utilization of space.
- They limit one's connection and relationship to the spatial environment and order of “Heaven on Earth”.
- They limit capacity of the space.

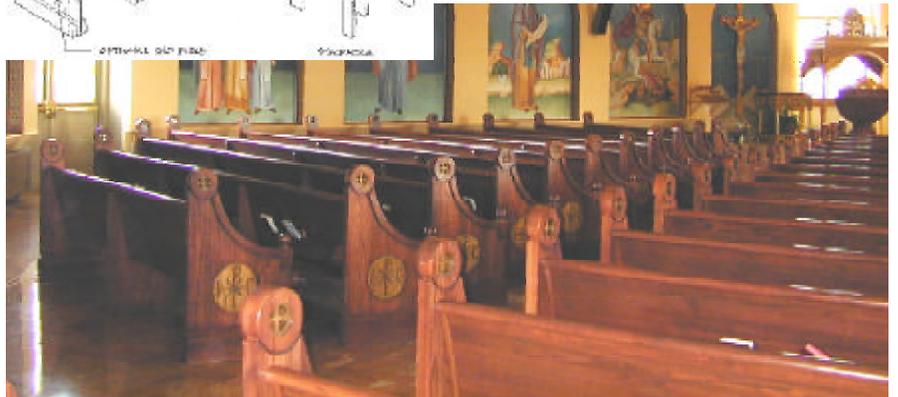
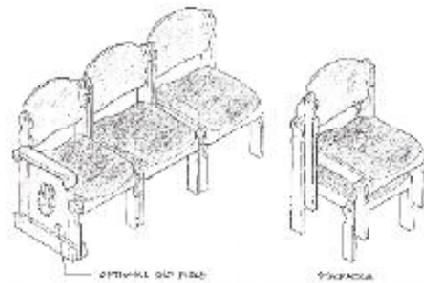
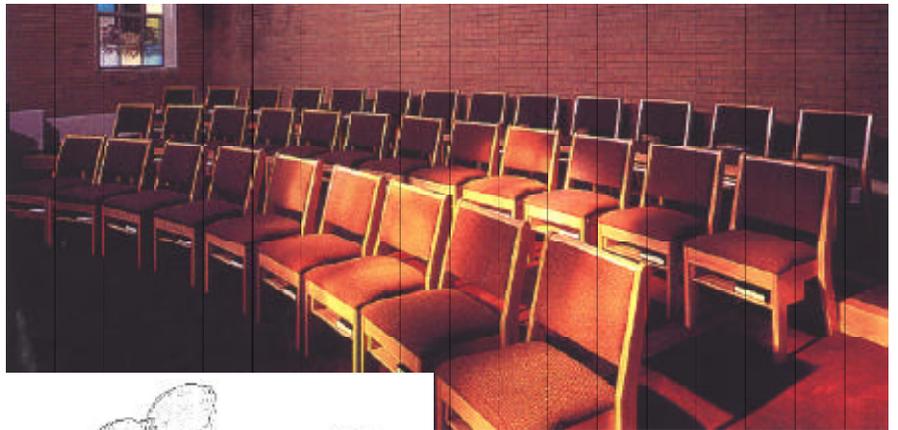
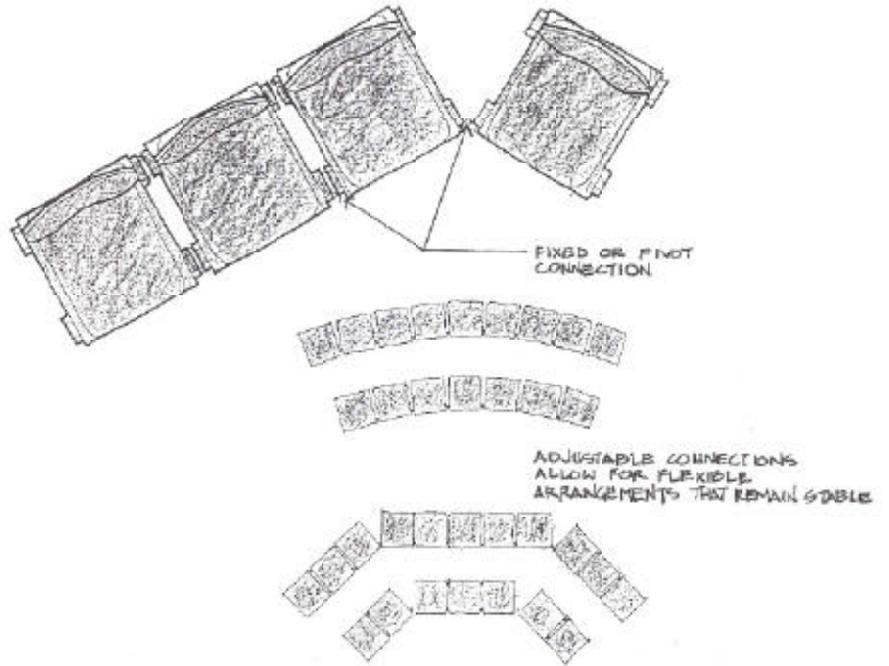
A very strong alternative to consider that I feel could create the best of both worlds, is to use a combination of stasithia (perimeter fixed seating with high arm rests and flip down seating used by monasteries and chantors common in the old



countries) at the perimeter and a special Orthodox chair (currently in the prototype stage in the central area) that is flexible. The key to the Orthodox chair is that it is flexible, gangable, removeable, and can support the variety of liturgical settings as required by our Church. The chair is wood and can be simple or ornate and can also be stacked for storage. Currently, three Orthodox Churches that we are working with have adapted this idea, and there are some Orthodox Churches who have adapted the flexible seating approach for their Church needs, utilizing other forms of seating.

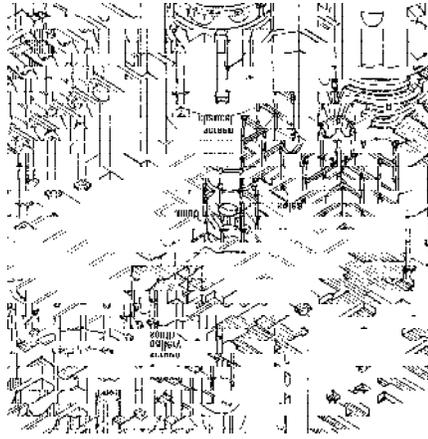
Again, fixed seating cannot be moved or re-arranged to meet the needs of the many different liturgical and worship needs, creating a physical statement that:

- a. seating is a dominant priority of the Church.
- b. seating is key, prime and fixed, all other needs adjust to respond to the seating
- c. Orthodoxy is not upright but well seated.



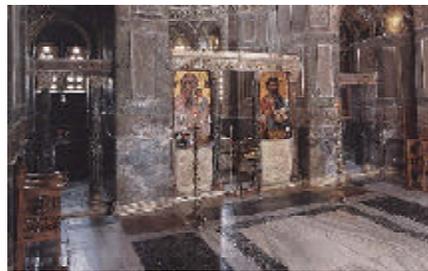
VI. What is the Tradition of the Soleas? I See Such Variation from Church to Church, What is the Orthodox Approach?

In order to have a common definition, the Soleas area I speak of is the area directly adjacent to the Iconscreen between the Iero or Holy Bema and the Nave. For this discussion I do not refer to the enlarged raised stepped zone often found in some Russian and Antiochian Churches, but rather to the trend for many Orthodox Churches in America of raised “Liturgical Stages”. Anywhere from one to seven steps, the proclaimed advantage to a large raised Soleas promotes “better” sightlines. But this is a self fulfilling prophecy, because by having a defined Soleas and fixed seating (pews), we have created a situation of performer and spectator, not worship and participation. For example if the wedding table moved to the center of the church under the dome with family and friends around the priest and party, sight lines wouldn’t be an issue. Historically and traditionally many monasteries didn’t even raise the Iero (Sanctuary or Holy Bema); whether the Patriarchal Church, the Metropolis Cathedral, or early



Churches in this country, they don’t have a raised Soleas. The problems with a raised Soleas are:

- Creates a stage with a situation of actors and spectators.
- Limits the worship dynamic.
- Takes more space.
- Has very limited flexibility.



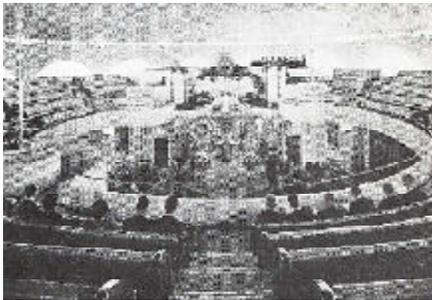
- Is best suited to fixed seating.
- Has code issues such as accessibility for older and handicapped parishioners and related “hardware” (rails, step designations, etc.).

Please note that the viewing distance of intimacy in theatre design is 60 to 70 feet (audience to actors, also the distance from the pitching mound to homeplate). Even in larger Churches of 800 - 1,000 people, the sense of intimacy can be created by having supplemental seating areas such as the traditional gallery spaces for worship (not choir lofts).

The raised Soleas is a western feature with its roots in the Roman Basilica. The original Orthodox Soleas was a raised walkway (one step high) connecting the Beautiful Gate and the Ambo (pulpit) which was in the center of the early Church.



VII. What is the Best Location for the Choir and What About Choir Lofts?



Choir lofts, I feel, are another unfortunate borrowed element from the Protestant and Catholic liturgical practices. In our Orthodox Church's development, lofts or galleries were reserved for a series of uses for the royalty, the women of the congregation, or the catechumens

In America the loft has been institutionalized into a place for the choir, breaking from the Orthodox tradition of north and south with choirs located on the main floor of the Nave, on either side of the Soleas area. This also reinforces, again, the notion of performers and spectators. Our liturgical text does not differentiate people from choir. The responses are from the people but in most cases assumed by the choir. We are now witnessing in the Orthodox Church in many regions of the country the concept (however novel) of congregational singing: the

people taking back their role in liturgical worship and participation. The role of the choir loft makes this phenomenon difficult because there are mixed messages sent:

- Those in the loft are performing and doing the work of the people (the surrogate proxy voices).
- We in the body of the church, the people, are made to feel that we should listen or inaudibly respond or be quiet.

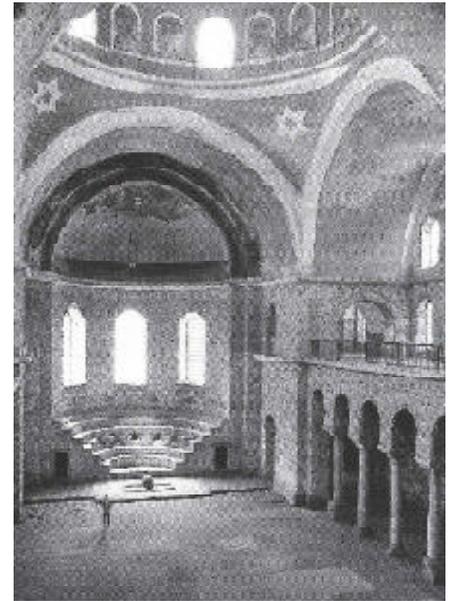
If the position of the choir were returned to the main floor of the church, the potential becomes possible for the choir (organized, well trained musicians) not to fill a role as performers, but to act as leaders, role models, and almost "super chargers" to encourage participation in the work of the people, versus discouraging participation and filling a lofty position of elite virtuosos performing for the group.

I have witnessed the power of the choir location both in this country and abroad. It is indeed powerful to feel the full participation and worship through the response of the entire Church.

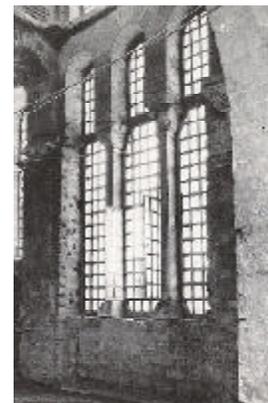
In addition, regarding cost, most codes would require an

elevator if a loft or gallery is designated for the choir, but would not if the same space were used for additional worship, saving \$50-60,000.

Issues of a related nature for future discussion are the use of instrumentation, such as the organ, and the acoustical environment.



VIII. Are Stained Glass Windows Part of the Orthodox Tradition and What About Natural Light?



Our faith is one of illumination, one of light, where life is only possible with the presence of light:



- Light of the World
- We have seen the True Light
- Sun of Righteousness
- Father of Lights.

There are innumerable references in our Orthodox tradition of worship that indicate that we are a theology of light. We must return to our roots of an architecture of light, not darkness (not to forget that light is only present by contrast to darkness). This is accomplished through the planning and design of apertures, fenestration, or simply put: windows, properly positioned (to accommodate iconography and maintain internal focus) and designed to allow the penetration of light, and God's painting of the interior of the church with his divine light. Our ancient tradition used a combination of clear, onyx and alabaster to provide a softened heavenly light.

Painted stained glass with icons is not part of our tradition. The stained glass tradition grew from the great Western Gothic Cathedrals whose muscular structure and lack of iconographic traditions utilized stained glass to enhance what would otherwise be a spartan

environment. Again, this tradition has been borrowed from other Christian denominations and today has been almost institutionalized as part of our Orthodox tradition. Beyond tradition, the problem with colored iconographic stained glass is that it:

- Restricts light into the space and limits the illumination of the iconography.
- Creates light of an unnatural hue.
- Creates conflicts and confusion with iconography.
- Becomes false surrogates for iconography.

Glass in our Orthodox Churches should be translucent, luminescent, and obscure, maintaining the internal characteristic and creativity. The quality and quantity of the daylight must be adequate to provide the sense of the divine presence, and to illuminate the iconography.



IX. What Forms of Artificial Lighting are Appropriate for the Orthodox Church?

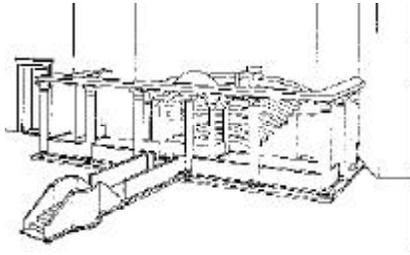
Beyond natural daylighting, the utilization of candles, oil and electrical lighting constitutes another area of consideration:



- Iconscreens:
The utilization of oil lamps or surrogates and their position and placement and also the use of concealed electrical lighting to supplement daylighting to feature or highlight attributes of the iconscreen
- Ambient and task lighting:
Should be invisible, subtle and of the proper color rendition.
- Decorative lighting:
Should be tastefully compatible with the interior and placed, whether wall mounted or hung, to minimize conflicts with iconography and of a quality that does not provide glare but a soft glow. Artificial lighting should be planned, designed, and tested to enhance and not detract from the worship activity. Daylight,



candle, and oil lighting provide the standard of quality that artificial lighting must attain. Special programmable micro-processor control systems provide quick call-up preprogrammed scenes or scenarios.



X I See a Variety of Ex-
 *p r e s s i o n s o f
 Iconscreens. What is the
 Tradition of and Appropriate
 Approach of the
 Iconscreen? Will the Real
 Orthodox Iconscreen Please
 Stand Up?

The design characteristics of Iconscreens (Iconostasion, Templon, Chancel Barrier) is the subject of much discussion and debate: issues of the width of the Beautiful Gate opening, the height and amount of icon tiers (one level, two, three or higher) whether the screen is solid or transparent. These and others are very common in the discussion of “what the iconscreen wants to be in the Orthodox liturgical setting today”. To better understand the dilemma of any singular answer on this topic it would be appropriate to understand the purpose and history of the Iconscreen.

Constantine Cavarnos in volume one of his Guide to Byzantine Iconography delineates the initial historical roots of the iconscreen:

“The origin of the



iconscreen can be traced back to the Old Testament period, for we read in one of its books, the Exodus, that a “curtain” or “veil”, called in the Septuagint version the katapetasma, was used to separate the holy place (to hagion) and the holy of holies (to hagion ton hagion). The curtain had the figures of Cherubim on it and was hung on four wooden pillars (styloi) overlaid with gold. This was done in accordance with the following order that was given by God to Moses: ‘And thou shalt make a veil of dark blue, and purple, and scarlet, and fine twined linen, a woven work, with Cherubim. And thou shalt set it upon four posts of incorruptible wood overlaid with gold. . . And the veil shall make a separation between the holy and holy of holies’ (Exodus 26:31-33).”

While other theories debated the influence of the Greek and Byzantine proscenium or stage colonnades, the reality of the early Church is clearly expanded by Wybrew in The Orthodox Liturgy: the Develop-





ment of the Eucharistic Liturgy in the Byzantine Rite:

“It was only in the fourteenth century that the sanctuary came to be completely shut off from the sight of the congregation by a solid screen. The low chancel barrier, surmounted by columns carrying an architrave, which continued to be the means of distinguishing nave from sanctuary up to the thirteenth century, can still sometimes be seen behind the later fully-fledged screen.

“Images had been associated with the chancel barrier from an early time. Representations of Christ, Mary, angels and saints had been carved on the architrave or placed on top of it. By the ninth century it had become customary to display certain icons on special stands; attached to its doors or columns, or to the upper part of

the ciborium, or on top of the architrave. The latter arrangement can still be seen in the Byzantine-style cathedral of Torcello, near Venice, dating from the late eleventh or twelfth century. Two icons particularly associated with the sanctuary in one or other of these positions were the Christ Pantocrator and the Virgin shown in an attitude of supplication for mankind. Also popular was the deesis: Christ Pantocrator with the Virgin and John the Baptist in supplication on either side. With these or instead of them on the architrave might be apostles, saints and angels, or representations of some of the great festivals. Symeon of Thessalonike in his fifteenth-century commentary on the church and the Liturgy seems to presuppose the deesis with angels, apostles and saints represented on top of the

architrave.

“Most churches still had the typical Byzantine chancel barrier at the beginning of the fifteenth century. But it was in process of being transformed into what is now regarded as the typical Orthodox iconostasis. The icons of Christ and the Mother of God had only a short distance to move in order to occupy their now traditional places in the screen, to south and north respectively, of the holy doors. The Annunciation, often to be found in the spandrels of the arch above the chancel barrier, came down to occupy the upper panels, or the whole, of the doors themselves. The deesis remained above the architrave, and so did the great festivals, expanded to form a complete series and placed above the deesis, to which further saints were added, all turned towards the central figure of Christ in supplication. As the iconostasis, or templon as it was often called, grew, further rows of prophets and patriarchs were placed above the festal icons. At its highest point of development the iconostasis completely filled the nave. It is generally held that this form was developed in Russia and spread thence to Mount Athos, and on to the Greek and other Slavic churches.





“The effect of this development was to complete the process by which the people were cut off both from hearing the central prayers and seeing the central actions of the Liturgy. These became the exclusive preserve of the clergy, who, alone by virtue of their ordination, could hear, see and touch the mysteries which were too holy for the laity to approach, and which they only rarely received in communion. Popular eucharistic devotion was focused on the icons which they could venerate and before which they could pray, and on those parts of the service which they could contemplate the saving life and work of Christ.”

Since there is a clear attitude pattern distinguished at the 14th Century on separation in a physical, permanent sense, I

would venture to add that there is room in our current discussion of the nature of the iconscreen to revisit the issue of the degree and nature of separatism, since the liturgical practices of our Church were well formed prior to the 14th Century and there is little known about the nuances and subtleties that promoted the virtual isolation of the Naos from the Bema. The sharp contrast of the medieval Byzantine approach versus the early Byzantine thinking is illuminated by Thomas Mathews in his volume The Early Churches of Constantinople, Architecture and Liturgy:

“The later sanctuary plans cease to project into the nave, even to the extent of a solea or ambo. The more closed, self contained character

of the medieval liturgy is reflected in the withdrawal of the sanctuary from the nave and its neat division from the latter along a straight line. The barrier, which enjoyed a real transparency in the earlier liturgy, became gradually more and more opaque...”

The iconscreen has a rich historical genealogy and the form of its manifestation needs to be evaluated in the context of the historical perspective, and a prayerful, systematic discussion of what is the nature of separatism and its implications: an excellent topic for ongoing development and creativity. . .



XI. Should Mosaic Icons be Used for Iconscreens?

Iconography occurs through a prescribed prayerful process that is based upon holy traditions and the faithful execution by an Orthodox iconographer. To my knowledge, mosaics have developed historically as a decorative art and were developed to be viewed from a reasonable distance based upon the size and scale of the mosaic tiles. Furthermore, I know of no theological process or tradition tied to the beautiful craft of mosaic decoration. Therefore, mosaic icons should not be used for venerations, and if there are iconscreens with existing mosaic images I would suggest (if not already provided) a hand painted icon be installed of the corresponding image so that venerations would be consistent within the teachings of the Church.



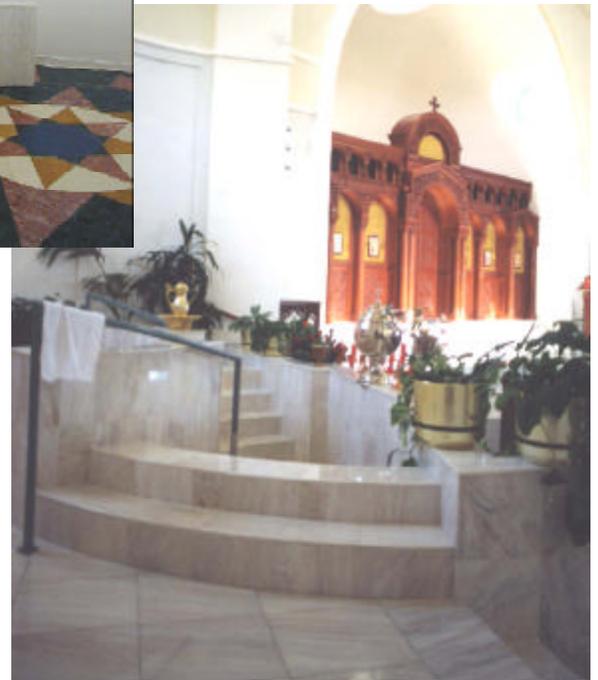
XII. Infant Baptisms Have Constituted a Majority of the Baptismal Sacraments in the Church to Date. What about Adult Converts and Adult Baptisteries?



Whether it be as a separate baptistery or chapel or as part of the main church, we have a responsibility to provide a sacred dignified setting for the baptism of adults beyond external natural bodies of water. Cattle feeding troughs, kiddies' swimming pools and the like are not appropriate substitutions as a point of entry for new communicants to our faith. A majority of the new churches that we have built or currently are planning include respectful, appropriate settings for adult baptisms.

As the fullness of witness to the Orthodox faith extends through our country we will see a continued increase in adult baptisms. Our church of St. John the Baptist in Las Vegas, Nevada has an adult baptistery and in forty-eight months there have been forty-four adult baptisms.

Adult baptisteries were standard as separate buildings in the early Church and today, I believe, we will see huge increases of unbaptized adults in need of the sacrament.



CONCLUSION



There are other issues that have major impacts on our ability to progress our understanding and development on issues of Orthodox architecture other than those addressed above:

- The training and education of all Clergy and Laity on all issues of the Church mission, purpose and architectural / interior design responses (and theological interplay).
- General public education and awareness of our theological and architecture / artistic heritage.
- Development of a prudent and fervent stewardship attitude:
 - we must take care of what we have
 - we either pay now or pay later



-we are building facilities dedicated to God and our faith not like any worldly facilities; a church and coffee shop are not the same.

- Holistic, inclusive planning. Development of an attitude, approach and process to develop vision planning of five, ten, fifteen to twenty-five year horizons of

goals, needs, options and a concise roadmap of where a Parish wants to go. An example should be set at the Archdiocesan, Diocesan and Parish levels.

- Development of examples of excellence in new building efforts, whether it be our churches or related facilities or parish projects, we must teach by demonstrating a commitment to excellence at all levels of our Church. Cathedrals, theological schools, Dioceses must set the example of excellence.

Again, these issues and this discussion constitute only a starting point. Without further discussion there cannot be understanding of that baseline of an architectural and environmental design of excellence that truly responds and supports our precious faith.





About the Author

Christ J. Kamages, AIA, OAA, NCARB
Archon Architekton

Mr. Kamages has been in the profession of architecture for over thirty years, as an Architect, a designer, planner, teacher, research analyst, and manager with a particular focus on project conception, development and design.

In December, 2000, during the Millennial Clergy-Laity Conference held in Constantinople, and at Vespers Service for the eve of the feast of St. Andrew, His All Holiness Patriarch Bartholomew through the recommendation of Metropolitan Anthony, inducted Christ J. Kamages, Archon Architekton, as an Archon of the Ecumenical Throne. A befitting title for a person who has been designing churches for almost forty years. In 1964, Mr. Kamages placed second at the MIT/Boston Globe Science Fair for his scientific demonstration of placing a dome on a square base of a Byzantine building. This was the first time that MIT had presented an award for an architectural project. This was a turning point in his life, as up to that time, he had seriously considered entering the priesthood. As an apprentice in the office of Christopher P. Kantianis (1960 to 1964), an architectural practice focusing almost entirely on Orthodox churches, he was exposed to the initial foundations in architecture and specifically Byzantine theories and styles. While attending Boston Architectural Center, he spent his summers working for Leon Pernice & Associates in West Springfield, Massachusetts, where he was able to work on Maronite, Catholic and Methodist

churches. In 1977, he was asked to undertake the design and implementation of a Master Plan for a Cultural Center at the St. George Cathedral in Springfield, his hometown parish. He developed a plan to maintain the historic library building and worked with a team from the parish to obtain grants for the renovation of the building.

In 1984, Mr. Kamages and his family relocated to the West Coast and moved into the position of Principal of the San Francisco office Ehrenkrantz Group. He acquired the firm and changed the name to EKONA Architecture + Planning. It was during this time that he met the V. Rev. Leonidas Contos, of blessed memory, and they collaborated on the writing of *Ecclesia, A Facilities and Artifacts Handbook* which was to assist parishes in the planning and design process. Fr. Leon had wanted to become an architect prior to his entering the priesthood, which was the exact opposite of the path that Mr. Kamages had taken. Fr. Leon and Mr. Kamages worked very closely on the St. John the Baptist Church project in Las Vegas along with Father Ilia Katre and Angelo Stamos. A building that was deemed the title of "Jewel of the Desert" shortly after its completion. A true Byzantine beauty, the first of many that he has designed. To date, Mr. Kamages has provided designs for over 80 faith communities, each one unique and responsive to the needs of its community. In March of 2003, Mr. Kamages broadened his professional outreach and established the architecture and design firm CJK Design Group. In giving this firm its life, this new paradigm permits us to be responsive in our

desire to develop total/holistic, imaginative yet realistic and essential solutions for communities of faith and public trust. CJK Design Group offers the highest level of service, expertise, and leadership...from needs assessment to complex building projects, artifacts and appointments, through its subsidiaries: The Center for Faith + community Vision/Development,...and Sacred + Secular Space.

He is a member of the American Institute of Architects, Ontario Association of Architects; Previous Member Archdiocesan Council, Greek Orthodox Archdiocese of America (1998-2000); Elios Society, Member and previous member of the Board of Directors Foundation; Member Diocesan Council, Diocese of San Francisco (1989-2002); one of the founding members of Polirinia, Cretan Club of Marin County; Chairman of the Board, Patriarch Athenagoras Orthodox Institute (PAOI), at the Graduate Theological University at Berkeley and a member of the California Preservation Foundation.

Mr. Kamages has been published in *Architectural Record*; *Architecture*; *Progressive Architecture*; *Building Design & Construction*; *Nikkei Design (Japan)*; *Historic Preservation Press*; *Christian Activist*; *Diocesan Voice*; *Orthodox Observer*; *Hellenic Chronicle*; *Hellenic Voice*; *Greek Star*; *Hellenic Journal* and numerous Trade Journals (*Masonry*, *Plaster*, etc. publications).

His practice continues with diverse building types: areas of faith, public trust, and enlightenment.



Acknowledgments

The Monastery of Saint Catherine
Edited by Oriana Baddeley and Earleen Brunner, The Saint Catherine Foundation, 1996.

Byzantine Art in Greece
Hosios Loukas, MELISSA Publishing House, 1997, Athens, Greece.

Hagia Sophia
Lord Kinross and the Editors of the Newsweek Book Division; Newsweek, New York, N. Y., 1972.

The Builders: Marvels of Engineering
Edited by Elizabeth L. Newhouse, National Geographic Society, 1992.

Windows for the Soul: Ecclesiastic Art Glass at Bovard Studio
Ron Bovard- owner, Wardell Publications Inc.

The Hagia Sophia: The Chora Church
REHBER Basim Yayin Dagitim, 1999.

Early Christian & Byzantine Architecture
William L. MacDonald, George Braziller, Inc., New York, N.Y

Annunciation
Edited by Julia Hasting, Phaidon Press Limited, Hong Kong, 2000.

The Kariye Djami: Volume 2, The Mosaics
Edited by Paul A. Underwood, Pantheon Books, New York, N. Y., 1966.

Simon and Schuster's Pocket Guide to Architecture
Patrick Nuttgens, Simon and Schuster, New York, N. Y., 1980.

The Glory of Byzantine: Art and Culture of the Middle Byzantine Era
Edited by Helen C. Evans and William D. Wixom, The Metropolitan Museum of Art, New York, N.Y., 1997.

Hagia Sophia: Architecture, Structure, and Liturgy of Justinian's Great Church
Rowland J. Mainstone, Thames and Husdon, New York, N. Y., 1988.

The Byzantine Churches of Istanbul: A Photographic Survey
Thomas F. Mathews, The Pennsylvania State University Press, University Park, PA, 1976.

Architectural Styles
Herbert Pothorn, The Viking Press, New York, N. Y., 1968.

Sinai: Treasures of the Monastery of Saint Catherine
Edited by Konstantinos A. Manafis, Ekdotike Hellados, Greece, 1990.

Master Builders of Byzantium
Robert Ousterhout, Princeton University Press, Princeton, N. J., 1999.

Light, Wind, and Structure: The Mystery of the Master Builders
Robert Mark, The MIT Press, Cambridge, MA, 1990.

