TECHNICAL UNIVERSITY OF BUDAPEST

ENGINEERING PROGRAMS IN ENGLISH
FACULTY OF ARCHITECTURE

DEPARTMENT OF HISTORY OF ARCHITECTURE AND OF MONUMENTS

III.RD YEAR COURSE

Lecture Notes
(extract)
upon

MEDIEVAL ARCHITECTURE

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Contents

Introduction

Present extract has been prepared for the students of architecture in the Technical University of Budapest Engineering Programs in English. As the leaders of the faculty wish to provide the same circumstances in studying the different disciplines for the students both in the Hungarian and the English speaking courses, together with the professors in the Department of History of Architecture and of Monuments I decided to write an extract of the lectures that will help to orientate the students in the very complex fabric of different tendencies in the European Medieval architecture that is woven in a complicated way both in time and space. Nevertheless, I would like to underline that it is just a guideline and does not substitute the material of the lectures and even does not intend to do so.

The very complicated system of development of the economic and social background always has an undoubted effect on the architecture of an age. Not just on the technological but the artistic aspects are involved in this influence. In the case of the Medieval Age, when the background changed so dramatically, not even the experts are of the same opinion at all concerning what the real character of the causes could be. I based this work largely on the lecture notes of Professor Dr. Tamás Guzsik as I entirely accept the classification of the items and the revealed correspondences and relationships of his didactic system. So keep an eye carefully on the s y s t e m unfolding, and it will help to learn intelligently the pieces of this colourful mosaic.

I.   THEME - The Rise of the Early Christian Architecture

I/1. – The Roots of the Early Christian Architecture

*The Early Christian architecture is the direct descendant of the Late Roman. Though the medieval historic period starts with the fall of the Western Roman Empire in 476, the monumental Christian architecture starts with the profound change of governed by Constantine the Great issuing the Edict of Mediolanum in 313, which provided the possibility for the people living on the territory of the empire practice their religion freely. As we bound the medieval architecture to Christianity it starts before the previous era finishes and drives its roots even deeper. These roots will lead us to the colourful Hellenistic palette of the empire to those traditions of the different folks of the empire which prevailed the centuries under the surface of the Greek-roman culture. As the matter of fact the Hellenic culture was propagated towards the east by Alexander the Great on his war of conquest to the Oriental for the first time, but the exchange between the Mediterranean and Oriental cultures was continuous ever after. So we have an official Hellenic-roman culture on one side and many hidden Hellenistic traditions on the other side which provide **double face** to the empire. Inevitably the roman line could expose itself in a monumental form, but behind the sceneries there were a small-scale architecture representing the oriental traditions.*

The phenomenon of the „double culture":

The official Roman culture in Italy and in the provinces was focusing on the cult of the God-emperor. As the expansion of the empire stopped The palace of the emperor displayed as the sanctuary of the ruler, Palacium Sacrum in Trier and in Spatato. The imperial basilicas also provided the sufficient frame for the ruler to appear in front of his dependants. The greatest achievements of building technology were condensed in these buildings: the vaulted basilicas (Basilica of Maxentius). It is squealing to recognise the

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same structures in the case of the central part of the large thermas: the "cella media" which functionally was the "frigidarium" (with cold water basins). These great ensembles (Thermas of emperors Caracal and Diocletian) of the second half of the 3rd century played an important role in the everyday life of the cities: as a kind of "cultural centres" provided special life-standards, but at the same time they helped the people to neglect the cumulating external and internal problems of the empire that caused uneasiness and fears in the hearts of the citizens. These thermas are good examples to represent the a d d i t i v e character of space-organisation of the antiquity.

Dicletian's Therma, (cella medea) , end of the 3rd Century	**Basilica of Maxentius,** end of the 3rd Century
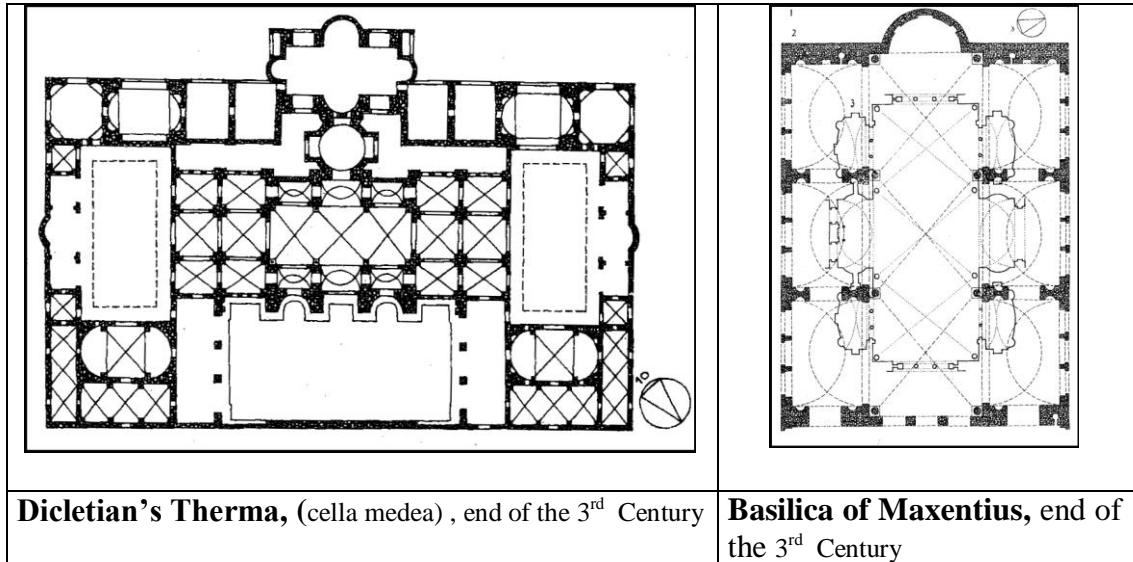
The illegal social movements in the provinces were bound to the appearance of the so called mystery religions and their transformations through „popular religiosity"(the cult of Mithras, Isis, Saraphis,Magna Mater etc.). These are Hellenistic influences reshaping oriental philosophy, Gnosticism and phylonism. Christianity appears in Palestine as a new school of Judaism upon the bases of Aramaic traditions and Gallilean popular religiousness. Due to its Hellenistic reform carried out by St.Paul and the four evangelists it was rapidly spreading throughout the entire empire. Its architectural need of space:

- Eucharist - the fellowship of the table   (space of the altar),
- initiation - christening   (baptistery),
- reception in to the community   (consignatorium).

Illegal Early Christian architecture :

House-church, *the functional transformation of the typical dwelling house of the Near East with the central courtyard. (**Dura-Europos - Domus Ecclesiae -3rd century** 1. entrance, 2.courtyard, 3.porch, 4.coenaculum, 5. altar, 6.cathedra, 7.deans door, 8.prothesis, 9.baptistry, 10.basin, 11. consignatorium, 12.stairs to the dwelling level, 13.emporium, women's place (?).)*

Oratorio *(house of pray), the transformation of the ancient synagogue. (Quirk-Biza)*

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Dura-Europosz, synagogue, 3rd Century

Qirqbiza, houstemple 3rd-4th Century

Dura-Europosz, houstemple, 3rd-4th Century.)
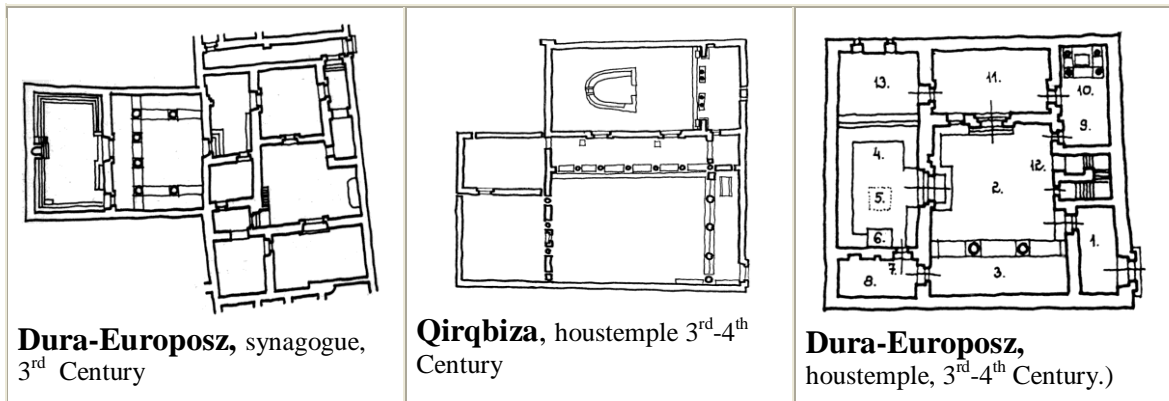
Catacomb, Roman subterranean burial tunnels (carved into the soft tufa rock under the town of Rome or Naples), and used for congregational purposes (in case of burial rites for the charity feast - agape), or during the persecution. Attendant art : Wall paintings and rarely, plastical works of art (Arcosolium, tomb) full of symbolism, reassessing antic or testamental meanings.

Rome: Cubiculs in catacombs under **Via Latina** (2nd-3rd Centuries)

Rome: "Good Sephard" fresco in Callixtus catacomb (AD. 200)
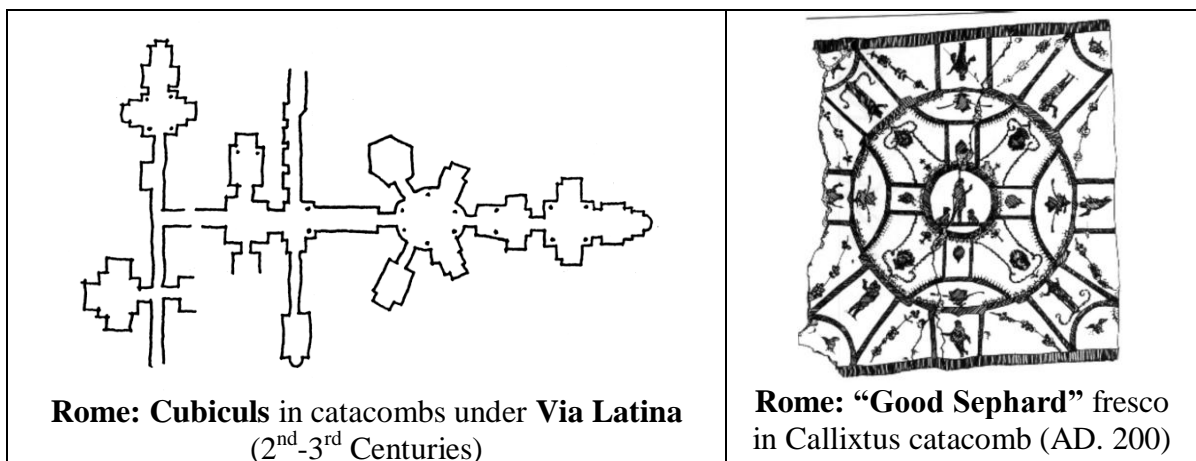
I/2. –   Early Christian Architecture in Rome

In AD. 313 Constantine the Great ensures for the Christians the freedom of public worship of their religion by his decree from Milan. In AD 325 the Council of Nice is the first official manifestation of the institutional church that represents that the hierarchy of the church is in a close connection with the state administration. From that time on these Councils were to investigate the heresies, and settle down the disputes upon the faith. In 380 Theodosius the Great declares Christianity as State-religion.
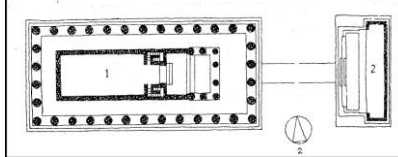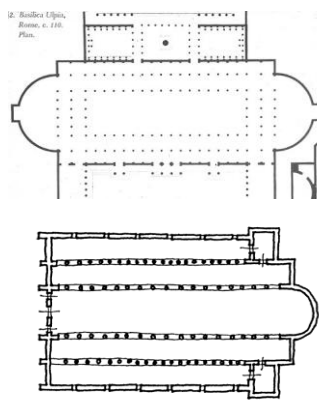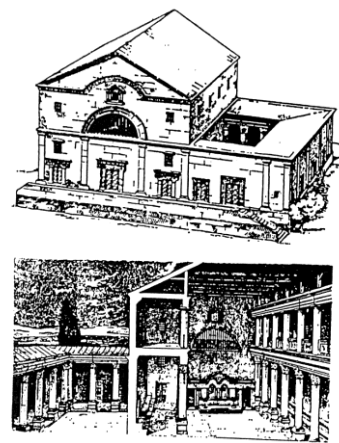
Representative church building: Early Christian basilicas.

Its emergence:

- The a n t i q u e t e m p l e is **not** suitable for receiving great masses as its interior envelopes just to sanctuarate the sculpture of God whereas the worshipping community takes it's place outside the building. This type of building cannot be used by an introverted mystery- religion, which intends to create a transcendental world within the building, providing the believers the opportunity to sense it.
- The a n t i q u e b a s i l i c a, (several aisled profane space), the structure of its space is suitable for receiving greater masses and let it move within. It provide the sufficient internal space, that can create an Other World separate from the Real World. In this mysterious place the Christians can practice their "secret" rites feeling and sensing the

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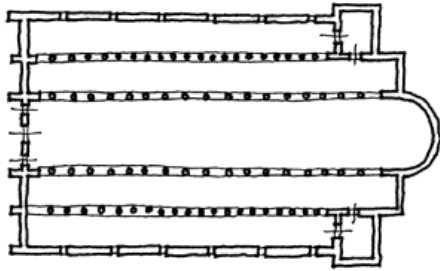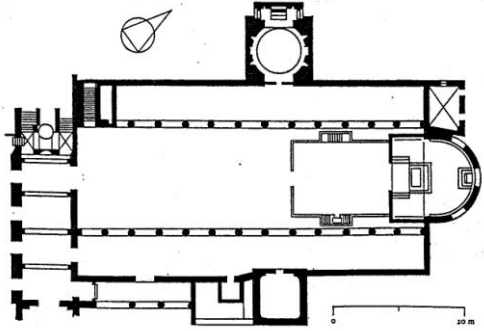
transcendental presence of God. There is an important and relevant change in the orientation of the interior space: the lateral unfolding of the space which was a widely spread solution of the antiquity now becomes longitudinal.

- The antique synagogue its main axes is directed to the East, owns a nartex, its space bears oriented character. Direct functional prototype. Some of its elements were preserved in Christian architecture as well: the preceeding courtyard, a well for ritual washing around the entering, the ambo –the place for reading the sacred texts.

Poseidonia: Temple of Demetria (530 BC.) *1. Cella for the statue of the godess, 2. altar where the prayers take their places around.*	**Rome:** the antic Basilica Ulpia (113. AD.) and the Early Christian basilica of Lateran district.	The synagogue of **Capernaum** in the life of Jesus Christ. (1. Century AD.)

Early Christian types of church-space regarding their function :

- congregational basilica - oriented, longitudinal space for great masses gathering to take part in church services. (**San Salvatore (312-319),** San Clemente, Santa Sabina (422-432) e.t.c.) This longitudinal character hides subtle symbolic meanings: the body of the church represents the small world of our life, and its longitudinal axes represents our way within: from birth to death, from paganism to Christian belief, and from mortal life to eternal life. This is often quoted as "via sacra – via vitae" e. i.: sacred way - way of life.

Rome: San Salvatore (312.)	Rome: Sta Sabina (422-432)

- central basilica - octagonal or circular in plan, basilican type in section. Its space can receive smaller community of Christians worshipping an item or place of a cult (burial, martyrial, baptisterial). (**Santa Constanca (middle of the IVth century)**, Lateranien Baptisterium (315,432-440), Santo Stephano Rotondo (468-483), e.t.c.)

Rome: Early Christian basilica of Santa Constanza - mausoleum (325-)	**Rome:** Early Christian basilica - Baptistry in Laterano (315)
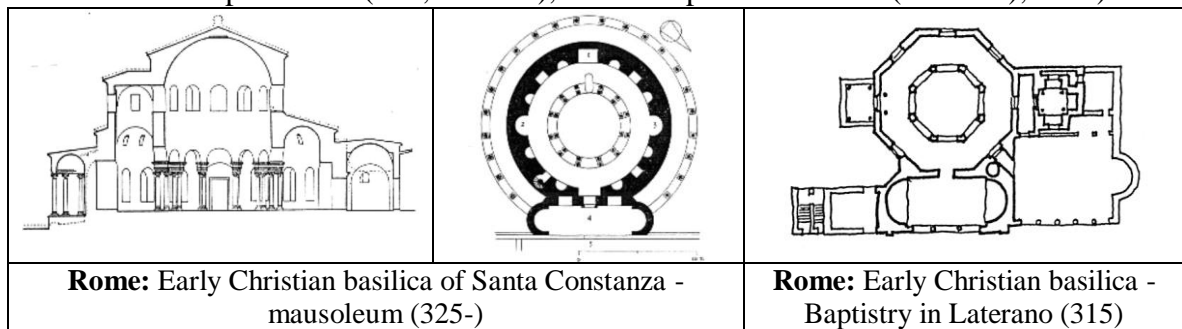
It is characteristic that in case of baptisteries the parameter form of the walls is octagonal, in the case of mausoleums it is circular. In the case of the mausoleums we can sense a certain shift in the composition of space: in antiquity the interior spaces were "monolithic", like solid objects, and their connection with each other was additive; in case of early Christian mausoleums the space elements have more connections with each other, and their connection is conjuctive.

Thessaloniki: Antic Mausoleum of Galerius (3th C.)	**Róma:** Antic Temple of Minerva Medica (4th C.)
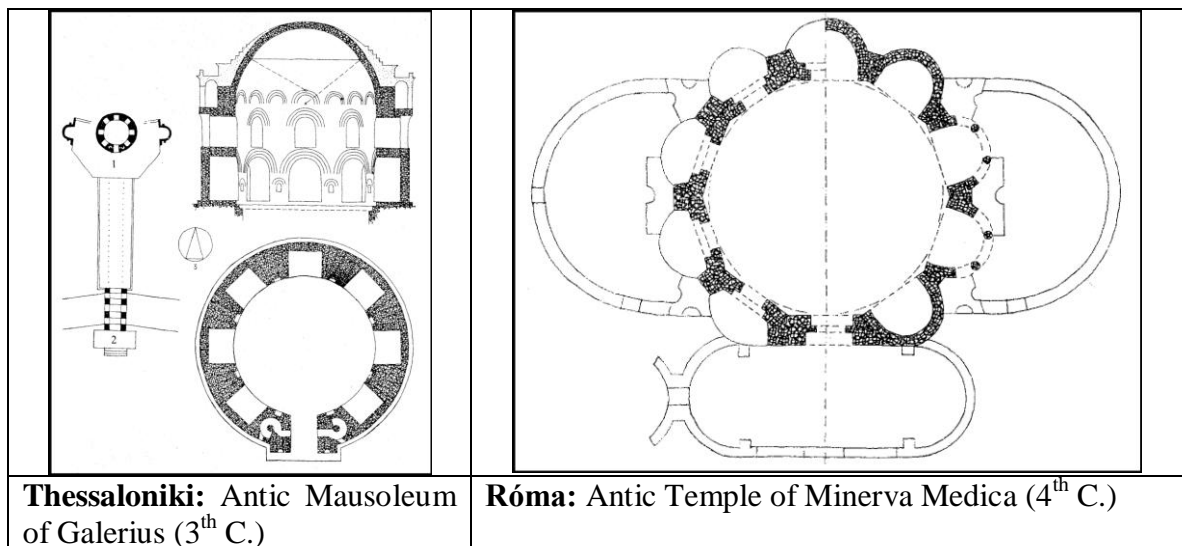
- memorial basilica - the mixture of the two, built for big mass on a burial place of a saint or over a sacred object. The church service and worshipping function existing with each other. We can distinguish two types : basilica with a transept (**San Pietro Vecchio (324-350)**, San Paolo fuori la Mura-around 385), and basilica with western apse and ambulatory (San Agnese, San Lorenzo f.la Mura, San Sebastiano at Catacumbas...). In case of the "transept-type" basilicas we can be sure, that the gesture of space (marking a spot with the intersection of two perpendicular pieces of axis) is not unknown in antiquity. In case of the so called "toscan atrium", though in smaller scale, we can observe a very similar gesture of a space.
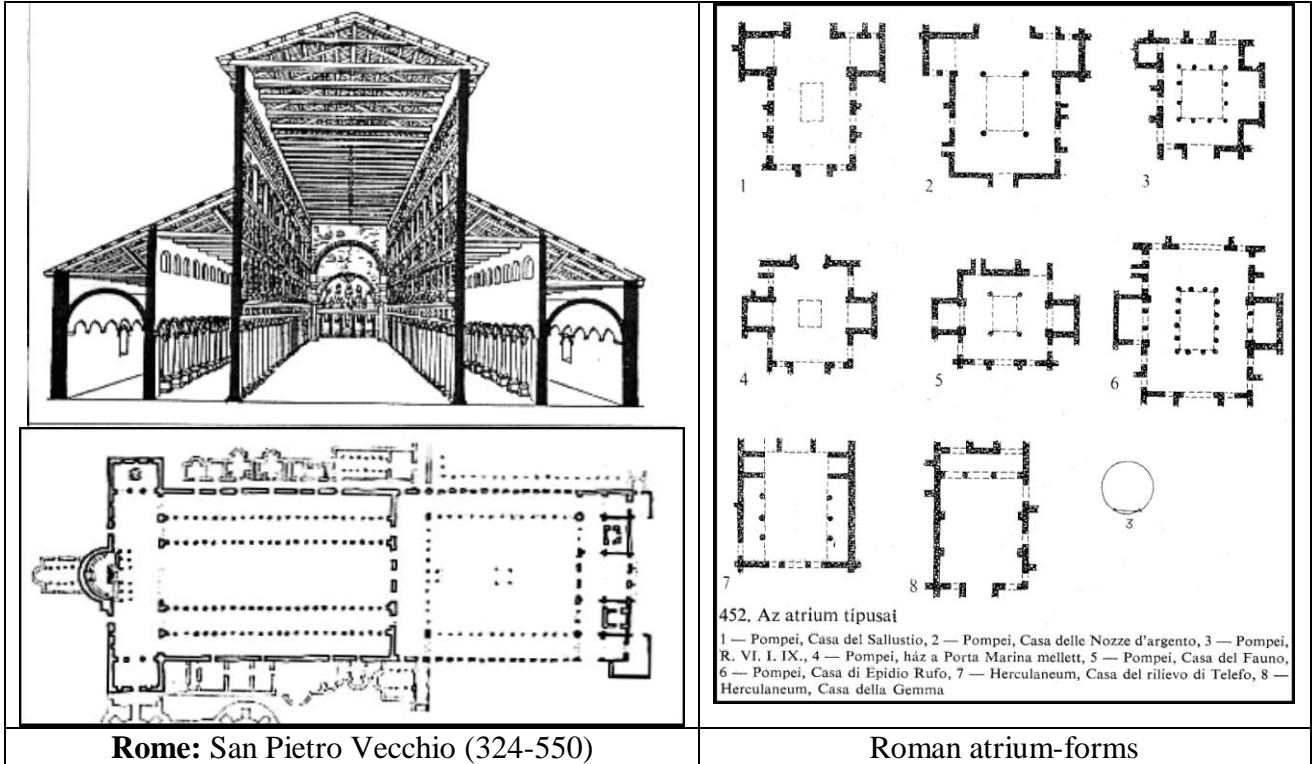
| **Rome:** San Pietro Vecchio (324-550) | Roman atrium-forms |

It is worth calling the attention for the fact, that the apse, which contains the memorial place, is directed to the west in the case of the memorial basilicas. The reason for that is rather symbolic.

The memorial basilica with western apse shows clearly the fusion of the longitudinal and central space forms. The only condition necessary for this mergence is the coordination of the dimensions.
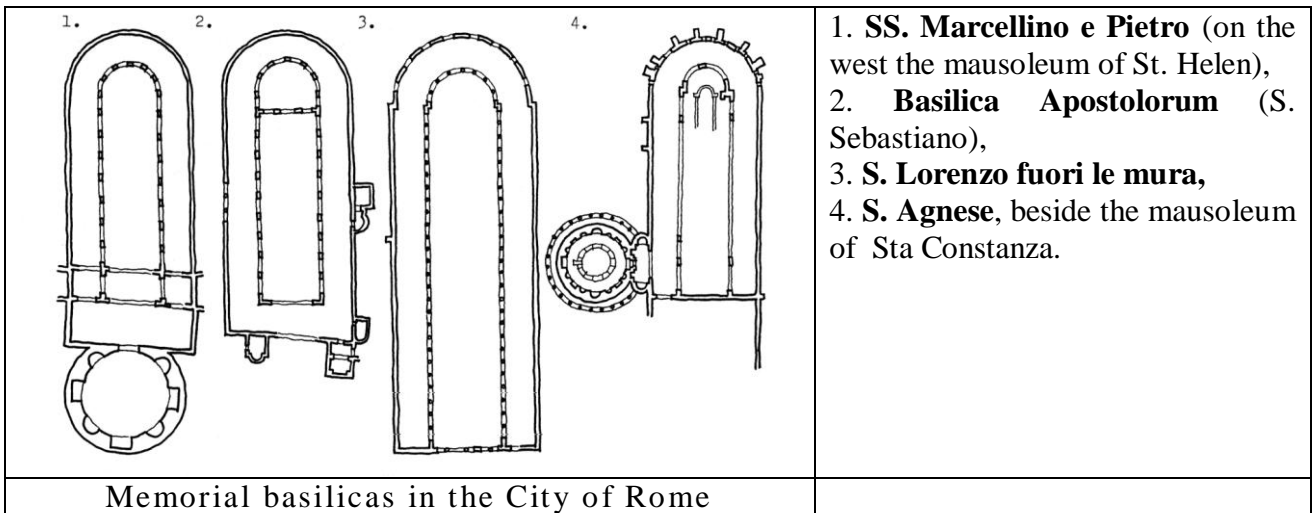
| Memorial basilicas in the City of Rome | 1. **SS. Marcellino e Pietro** (on the west the mausoleum of St. Helen), 2. **Basilica Apostolorum** (S. Sebastiano), 3. **S. Lorenzo fuori le mura,** 4. **S. Agnese**, beside the mausoleum of Sta Constanza. |

By means of the schematic plan of San Pietro Vecchio we can show the functional scheme of an early Christian basilica.

1. gateway 2.peristylium (atrium) courtyard, 3. well-house, 4. outer entrance-hall (exonarthex), 5. inner entrance-hall (endonarthex),6. nave, 7. side aisles, 8.triumphal arch, 9. altar with canopy, 10. transept, 11. storage, 12. baptistery, 13. apse, 14. presbytery, 15. cathedra (bishop's seat)
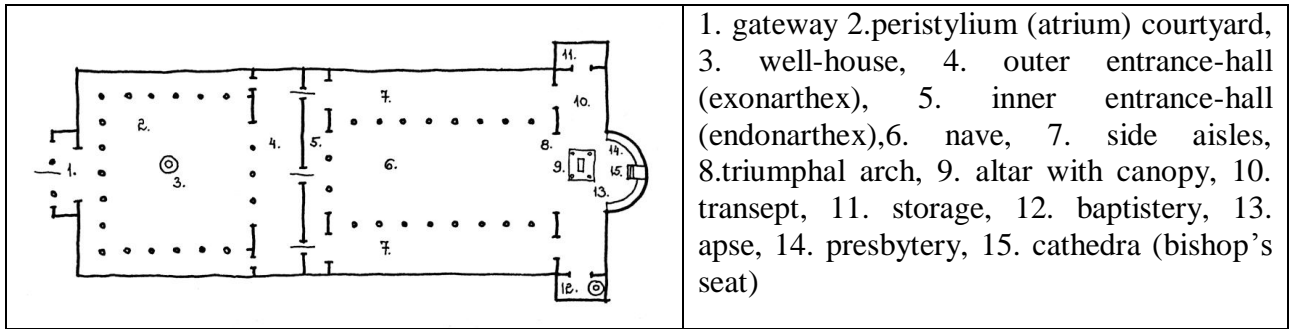
I/3. -   Early Christian Architecture in the Provinces

(IV-VIth centuries)

I/3.a., Palestine - The Holy Land

The type of basilicas of the period of Constantine the Great was alloyed with the special traditions of this area. As the basilicas were founded by the emperor's mother herself, their plan and architectural articulation followed the model of the capital city - Rome. But we can observe new characteristics in the cross-section coming from Easter tradition. That is the division of sexes within the building, providing separate spaces for them. The so called e m p o r i u m is a longitudinal gallery on the first floor over the side aisles serving the separation of women during services.

They are monumental m e m o r i a l b a s i l i c a s as they were built over consecrated places worth remembering. In the form of these basilicas we recognise the archetypes of spiritual spaces serving for pilgrimage purposes.

| **Betlehem:** Nativity Church | **Jerusalem:** Holy Sepulchre Church |
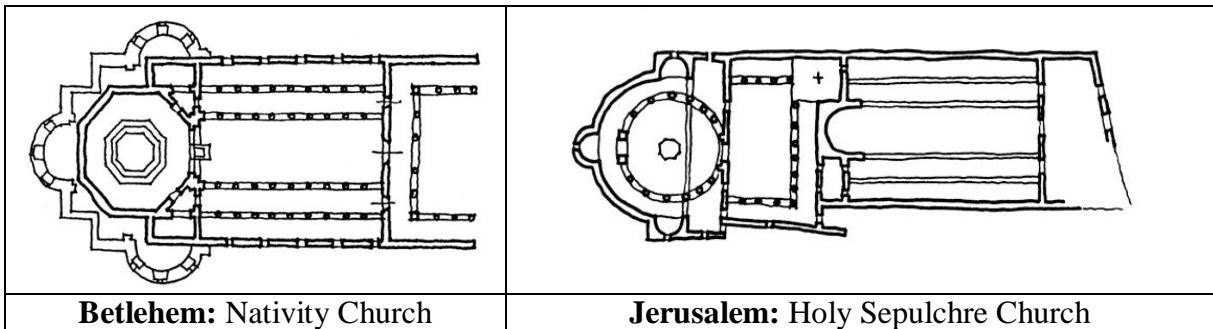
- The **Nativity Church** (325-333 AD, modified at the end of the Vth century)was raised above the cave that gave place for the birth of Jesus Christ. It embodied the so called g r o t t a t y p e architectural space, as the octagonal cultic space serving liturgical purposes and the place for pilgrims to worship Nativity was separated on different floors, securing the independent use of the spaces. The connection of the basilica and the octagonal sanctuary was rather incidental.
- The **Holy Sepulchre Church** (326-335 AD, rebuilt in 1048) marking the place of the grave of Jesus Christ is an additive type of ensemble. The regular congregational type of basilica (with emporiums) was linked to the memorial space by means of an additional atrium courtyard set along the longitudinal axes of the ensemble. The space for the worship of the Holy Sepulchre is a rotondo, called a n a s t a s y s, a central type basilica with an ambulatory corridor. This ambulatory space gives the pilgrims the possibility to move around the place continuously.

I / 3 . b . , E g y p t - t h e C o p t i c a r c h i t e c t u r e

The forming of hermitage (St. Antonio and St. Paul) and later the early monasticism : Pachomius organised the so called coenobite movement (323 AD) on the island of Thabennis in the river Nile. Basilios the Great (330-379 AD) developed it by writing the first constitution -regula- and establishing the order of the basilitans in Cesarea.

The basilica of the time of Constantine the Great is modified because of the integration of a new function :

- the great number of the community of monks and their needs for special spaces for liturgical purposes lead to the enlarged transept with several aisles (Abu Menas the double basilica), or the form of the so called triconcha type sanctuary (Deir-el-Abiad desert monastery),
- the places for pilgrimage purposes are under the management of monks.

  Main types of space forms:

- **Abu Menas** :   built in the 4-5th century, two basilicas placed one after the other along their longitudinal axis. This additive composition might derives back to the ancient Egyptian religious traditions in architecture. As this concept for the disposition prevents the peristylium courtyard to be placed to the western side of the church, it was situated to the south. A several aisled, large transept for the monks, and the memorial place for the tomb of St. Menas. Worth mentioning, that the transept plays different role here then in the City of Rome, where the axis of the transept pointed on the tomb of a saint by intersecting the longitudinal axis. In Saint Menas Basilica the tomb is placed in a separate, additional building, so the function of the large transept is rather for providing enough space for the monks.

| **Abu Menas:** Pilgrimage basilica | **Karnak:** Amon temple |
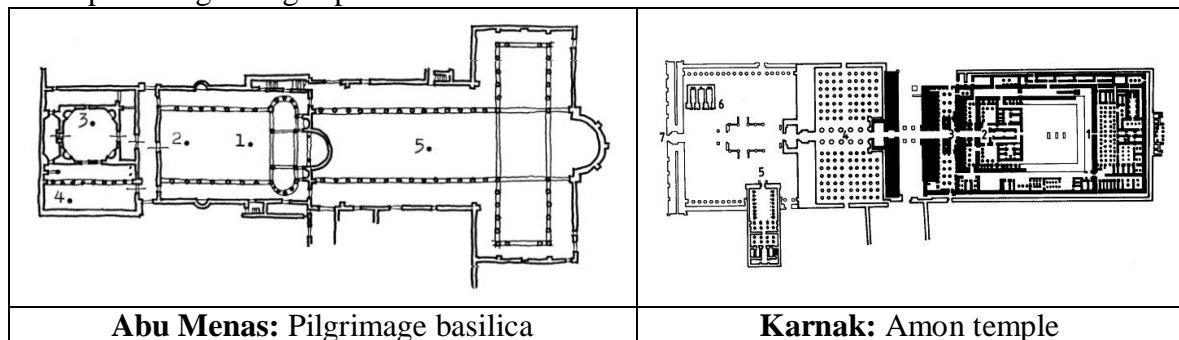
- **Dei el Abiad** : a monastery ensemble in a desert oasis was built near the town of Sohag in the 5th century. It has three foiled sanctuary solution (tricocha) derives from the Ancient Roman form of 'cella trichora'. The numerous appearances of antic space forms in Early Christian architecture is characteristic in the eastern provinces which shows that the architecture in the periphery of the empire insisted more on applying traditional -i.e. antic- forms than the centre, which hold the grip on the changes.

| Deir el Abiad | Leptis Magna: Forum of Septimus Severus |
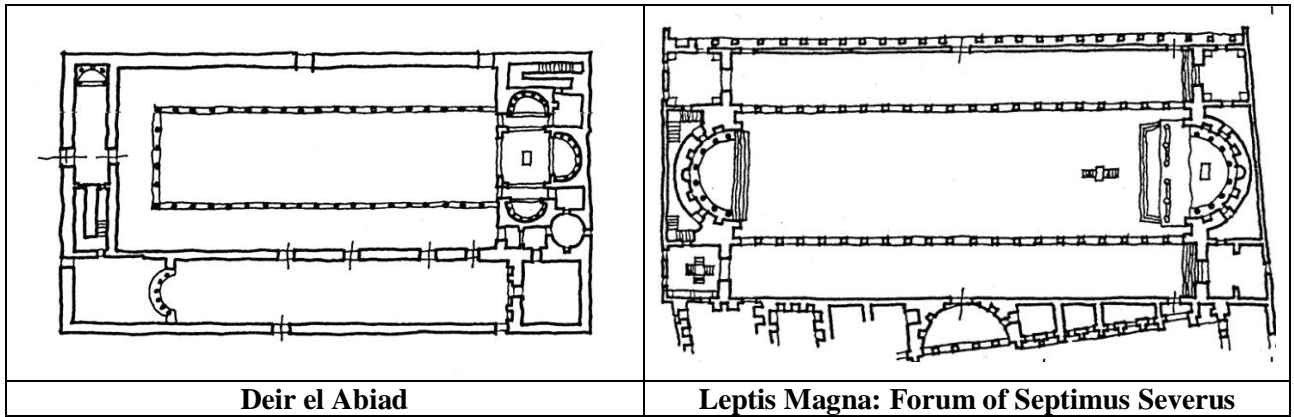
The Alexandrian monophisitic theological school became independent and gave birth to the so called 'Coptic' culture. The monastery of St. Simeon at Assuan is a nice example of this.

I/3.c., Syrian Early Christian Architecture

The IVth century early period was characterised by the reduced form of the congregational basilica type of the City of Rome. The simplification produced a three-aisled but due to different liturgical traditions three-apsed (Syrian sanctuary head - 'haikhal') usually 'false' basilica (with the lack of clerestory windows), with side galleries along the aisles (ancient eastern tradition for separating women and men).

The 'haikhal' consists of three separate spaces : the main apse in the middle, the prothesis on its northern side, and the diaconicon in the southern side. They have no direct communication with each other. The prothesis gives place for the preparatory altar (proscomedia). The diaconicon is a preparatory place and a storage as well (sacristy).

| Bin-bir-Kilise | Kalb Luzeh | Turmanin |
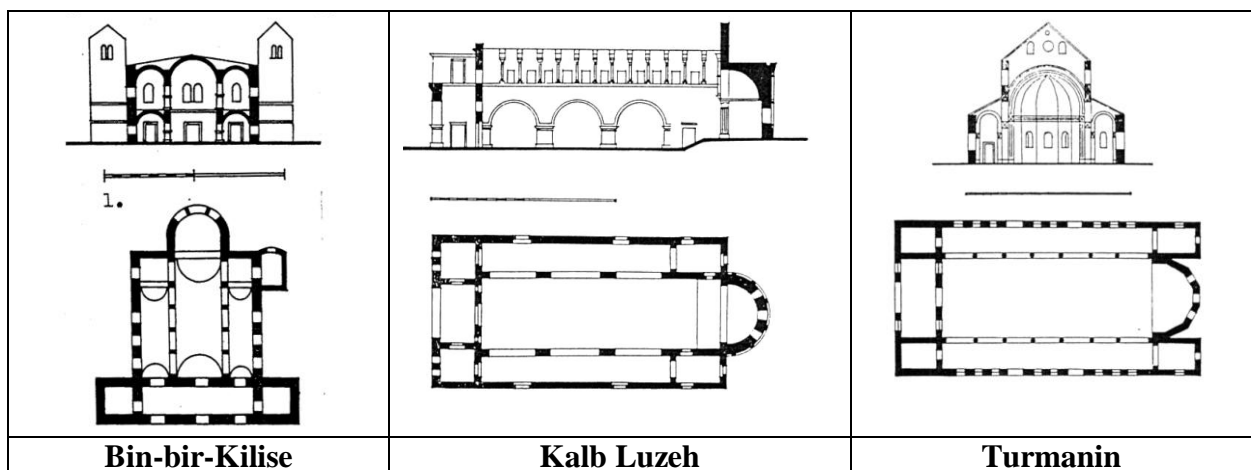
It had two towers on the western end engulfing a large span arcaded gateway called 'livan' or 'eivan'. This motive reminds us of the Ancient gateways of Hittite city walls. The articulation of the entrance gives us the image of the Heavenly Jerusalem, the Holy City of God, e.i.: Paradise. The mass composition is very compact. In most cases they try to envelope the articulated interior spaces into one compact geometrical form: prismatic compositions, circular inside and polygonal outside perimeter-forms of the apse.

Kalb Luzeh	Turmanin	Bosra
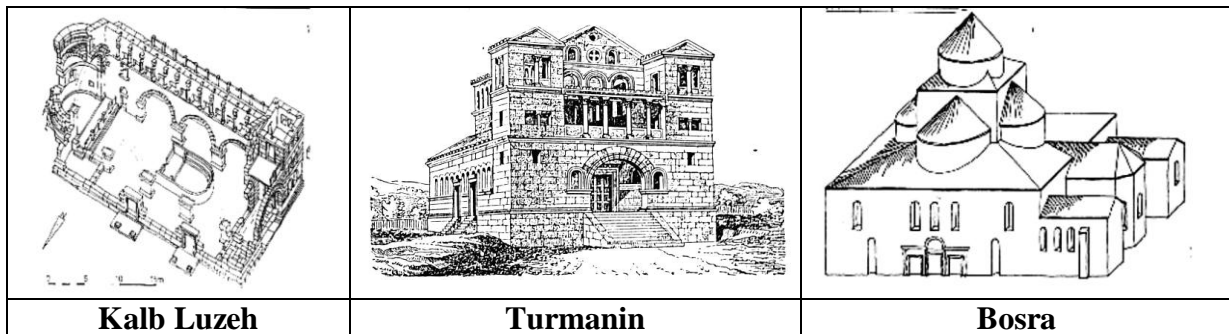
The flourishing period (V-VIth century) shows us the total sequence of different
functions:

- congregational (bishopic) churches (**Kalb Luzeh 460**, Turmanin 480, Ruszafah, Bin-bir-Kilise)
- centralised mausoleums (**St. Gorge in Ezra 515**, **St. Sergios and Bacchos in Bosra** (they are the archetypes of the later octagonal spaces which were diagonally extended with niches).
- the memorial church of Kalat Siman forms a Greek cross in plan providing spaces both for the liturgy and the resting pilgrims.

Ezra: St. Georg church	**Bosra:** St. Sergios and Bacchos	**Kalat Siman:** pilgrimage basilica
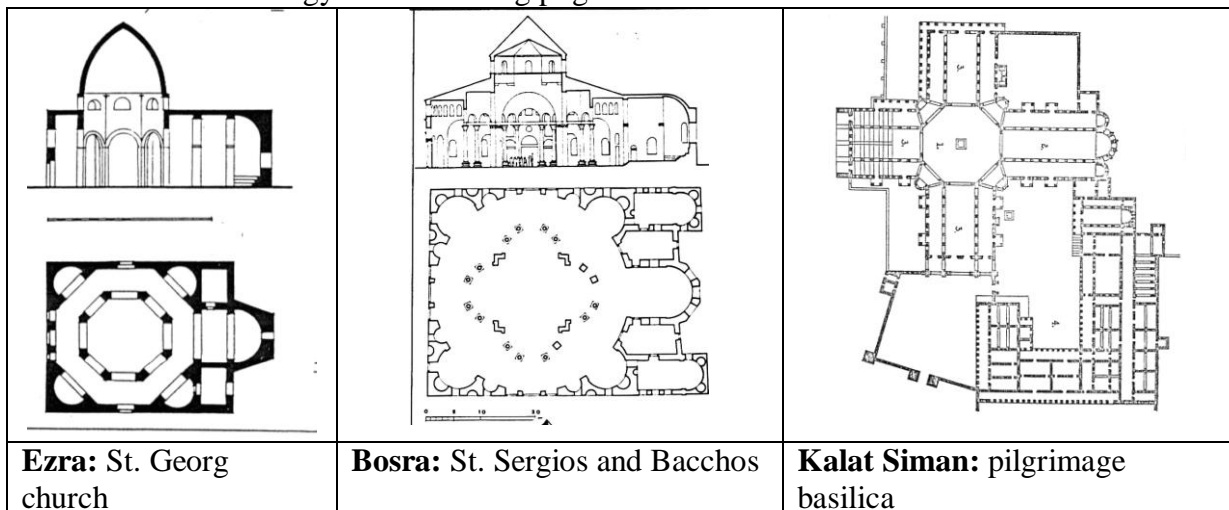
Syrian architecture insisted on following the forms of Ancient Rome much more, than the city of Rome itself. The finely carved stone facades show architectonic pattern of the finest Hellenistic architecture. The use of different types of vaults, the plastically articulated mass and detailing play an important role in the propagative function of the architecture of the peripheral territories while the progressive tendencies of the city of Rome invented theoretically sophisticated introverted mysticism in space creation.

Syria had an essential effect on Byzantine architecture, on Armenian architecture, and even on the European Romanesque architecture (ambrosian liturgy under Armenian influence).

I/3.d.,   The Architecture of the Western Provinces
(See it at the architecture of the Preromanesque and migration period...)

IInd Theme : Byzantine Architecture

Constantinople - founded by Constantine the Great- started to develop rapidly after the division of the Empire as the capital of the eastern parts. It was Theodosius the Great who recovered the Late Roman Empire at last, but after his death (395) it was cut into two, and after the invasion of the eastern Goths (476) Byzantinium remained the only carrier of the heritage of Ancient Rome.

The architecture is determined by two factors :

- the traditions of the early Christian architecture of the City of Rome,
- the synthesis of the regional influences of the Eastern Provinces.

II/1.   Early Byzantine Architecture

At the beginnings the Byzantine architecture was influenced both by eastern and central Early Christian architectural tendencies. That's why we can find a Syrian basilica right after a peristylium (atrium) courtyard. During the 5th century this longitudinal gesture of the space shifts slowly towards the centralised compositions. The two cornerstones of this progress is the katholikon (main church) of the Studion monastery (Joannes Protodromos temple, 455-463), and the Hagia Eirene church in Constantinople (532, 564, 740). The latter is a real transitional space form.

| **Studion monastery:** Joannes Protodromos temple | **Constantinople:** Hagia Eirene church |
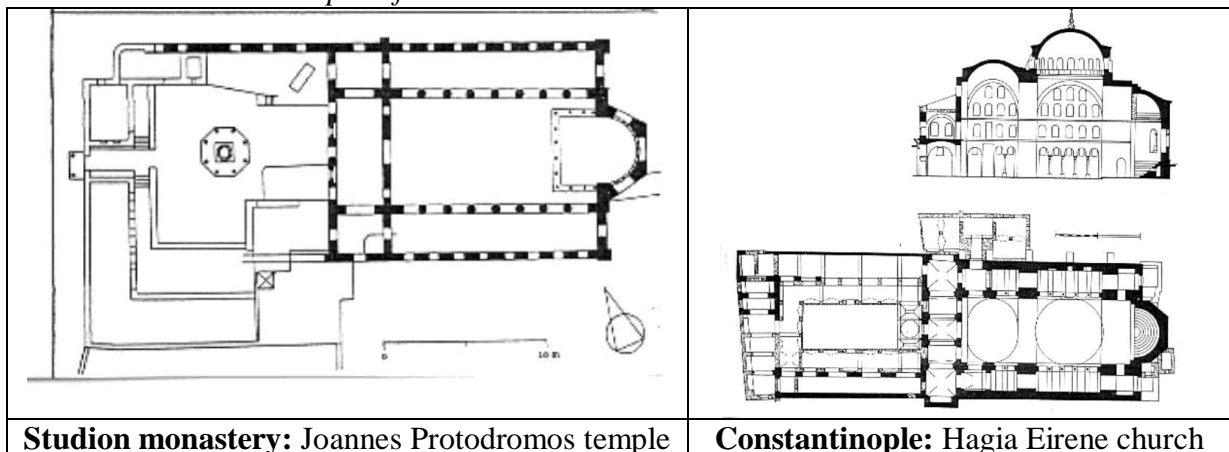
As architecture is a very expensive activity, the personality of the commissioner is the trivial base for the classification. Their headquarters are the architectural centres where forms are invented and originated from :

- the architectural activity of the Emperor in Constantinople and in Ravenna in the VIth century.
- the monastic architecture flourishing in Thessalonica.

a., The imperial architecture in Constantinople created several different original space types:

- Octagonal space with an ambulatory originated from Syria (Bosra), **Hagios Sergios and Bacchos** (527-536).
- Five domed building over a plan forming a Greek cross, **Hagioi Apostoloi** (528-565).
- Nine partite centrally domed building, **Hagia Sophia** (532-537) the piece of work of Anthemios from Tralles, and Isidoros from Milethos.

Constantinople: Hagios Sergios and Bacchos

Constantinople: Hagioi Apostoloi

Constantinople: Hagia Sophia
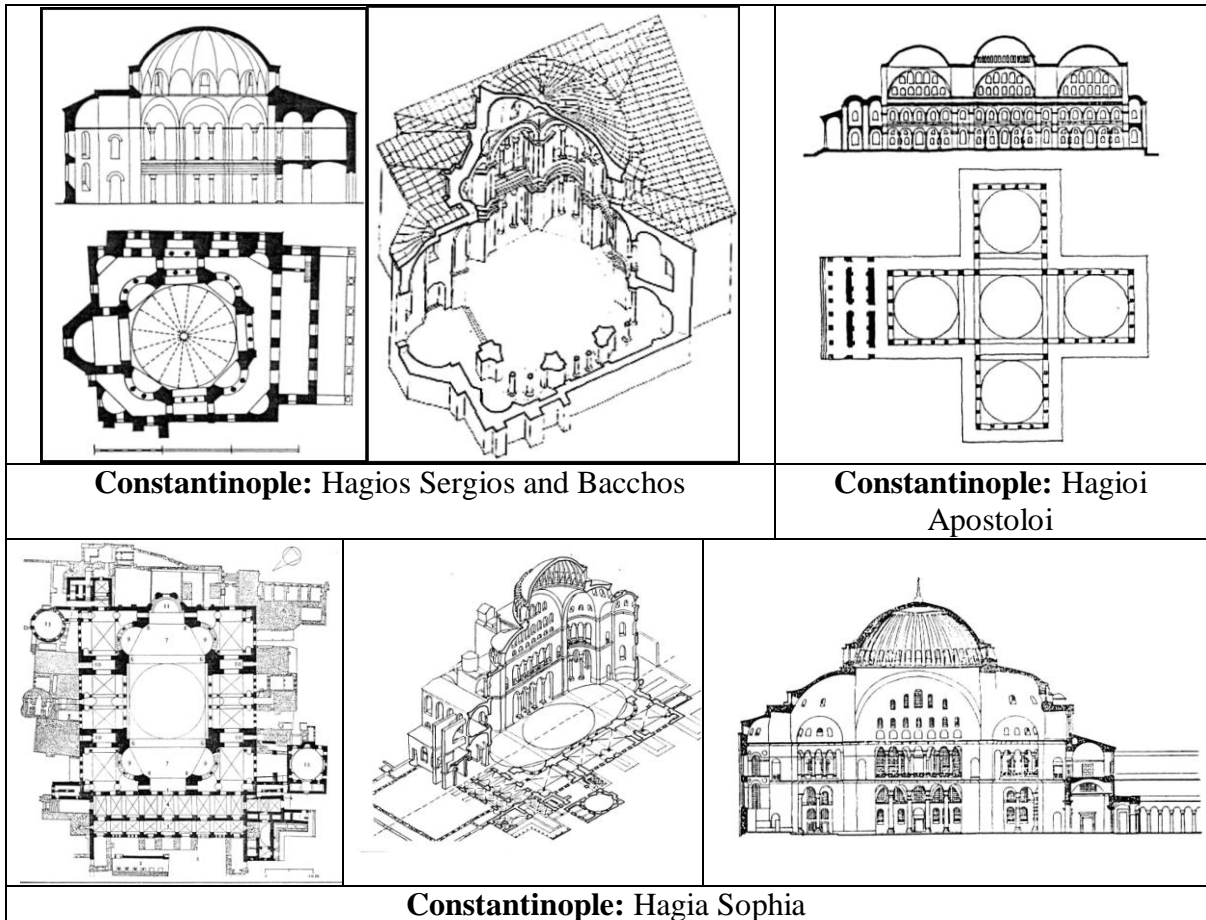
The main characters of the architecture are profoundly influenced by the theological aspects. In Byzantine Christianity the Hellenistic mysticism dominated the spiritual culture. Ancient oriental ideas rose again with new sophistication, the phenomenon of the God Emperor appears again, but his power is supported not only by the faith in the Omnipotent but by philosophic idealism, and scientific politics as well. The church is the idealistic image of the Heavenly Jerusalem. Architecture tries to have a firm grip on our senses, holding them in the illusion of lack of every aspects of our known universe bringing our soul up to Heaven. The sophisticated load bearing structure seems to be hanging from Heaven then to stand on solid ground. The light that is reflected thousand times by the golden glass mosaic pictures blinds our eyes to observe real spans and distances. The deeply screwed column heads and architraves are enveloped by oriental organic ornaments hiding the material solidness of these important load bearing elements.

The preference of centralised architectural spaces emphasises the static, still and very mystical character of Eastern Christianity.

b., Monastic architecture in Thessalonica reveals political correspondences, and oppositions. The characteristic space types :

- **Hagios Demetrios** (412), five aisled early Christian basilica following the model of the City of Rome, showing influences from the monastic architecture of the Alexandrian Patriarchate revealed in its large three- aisled transept.
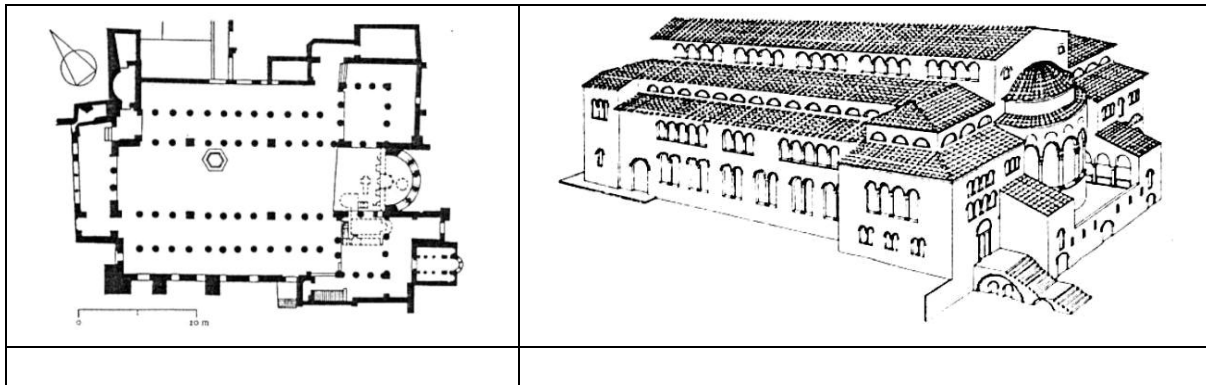
- **Hosios David** (V[th] century), the main church of Latmos Monastery, nine-partite five-domed building (following Persian-Sassanids model). It became the prototype for Byzantine catholicon and providing the term for this special space structure at the same time.
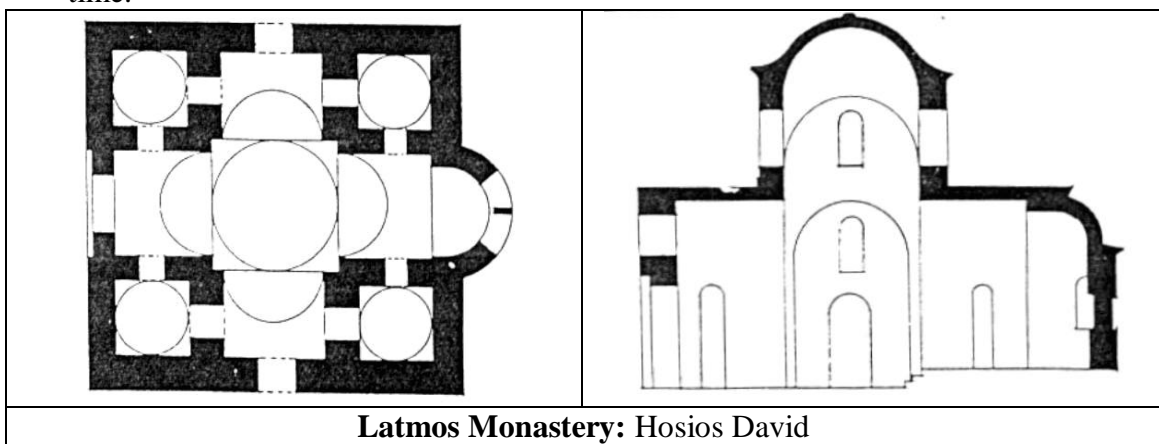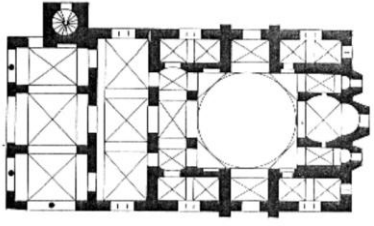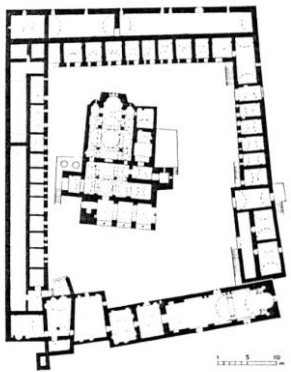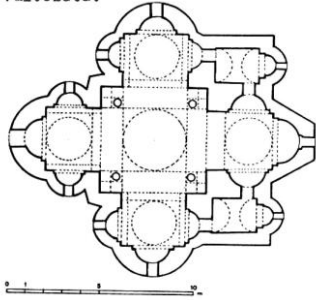
Latmos Monastery: Hosios David

The arising economic power of the monasteries (that was based upon the pilgrimage towards the miraculous icons owned by the monasteries) gained jealous feelings within the imperial court. The monks tried to seek fellowship at further patriarchates instead of accepting the superiority of the Patriarch of Constantinople cherishing intimate relationships with the emperor himself. That is why the model for the basilica of Hagios Demetrios can be found in Abu Menas. Meanwhile, in the monasteries where no laymen were allowed inside, there was no reason to provide the longitudinal nave and aisles situating them. So the place in the vicinity of the transept was remaining for the men consecrated -the monks.
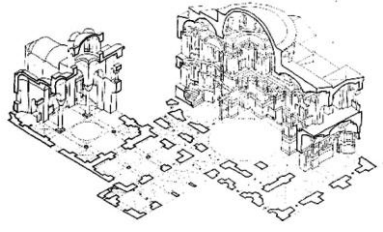
II/2.   Middle Byzantine Architecture (VIII-XIth century)

The imperial power found itself in the middle of an anarchy both in internal and foreign affairs. That situation pushes the empire towards military character. The opposition between the imperial power and the ever rising influence of the monks leads to an open confrontation. The emperor (Leo the IIIrd 717-740) intended to eliminate the source of economic power of the monasteries. That source was the pilgrimage movement as the faithful pilgrims mounted the wealth of the monasteries by their donations. The most attractive items for the pilgrims were the miraculous icons. The more powerful icons the monastery had the more donations from the pilgrims they gained. So, the emperor prohibited the worshipping of the icons in his decree in 726. The period of the „iconoclasmos" (726-843) -the destruction of the icons- began. The symbolism that has always been an important way of expression in Christian art had to choose an abstract manner at that time. The form of the cross represented the idea of salvation in architectural form. The widespread of the „catholicon space form" signs this tendency
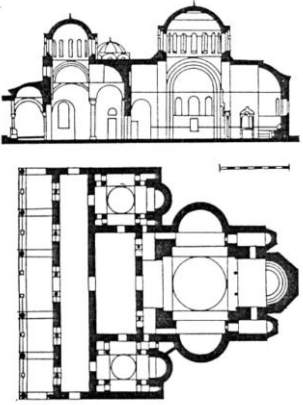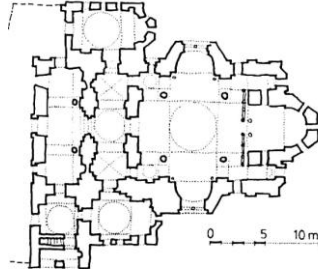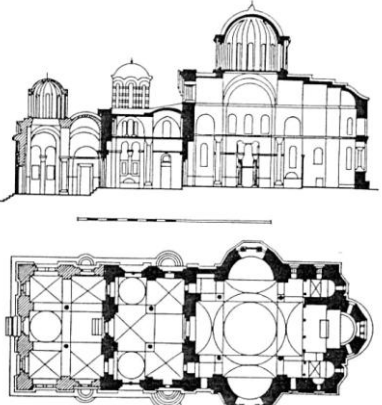
(Nicea : church of Koimesis -Falling Asleep of Mary, and later the Hagia Sophia in Thessaloniki).

Dafni: monastery (6th century, 1080)	**Megara:** monastery (9[th]century)	**Peristeria:** St. Andrew (870)

*After the iconoklasmos, the rehabilitation of the monastic movements took place. That starts an acceleration of building activity in monastic architecture (Skripu: Koimesis thes Theotoku 873-874, **Stiris: Hosios Lukas** X-XIth century, Daphni monastery XIth century). The cross-in-square (catholicon) space form became the most widely spread type (Peristeria as an exception follows the Church of the Apostles), but it suffered alterations: the composition became simplified, the hierarchy between the elements became more and more revealed. They neglect the corner-domes, the central space under the lonely dome became larger than the side spaces, and the separation is more articulated between them. This separation was induced by the monastic usage, which caused other additions: to create room for the evening prayers and chants they added a further entrance hall, enough large to provide the sufficient space. It is called 'litae'.*
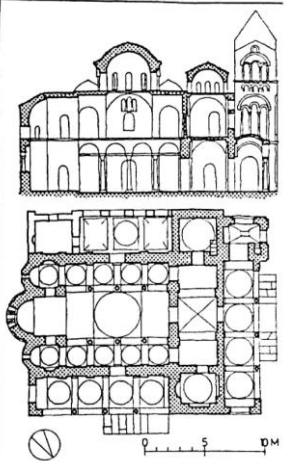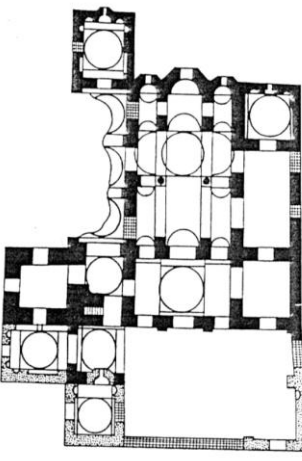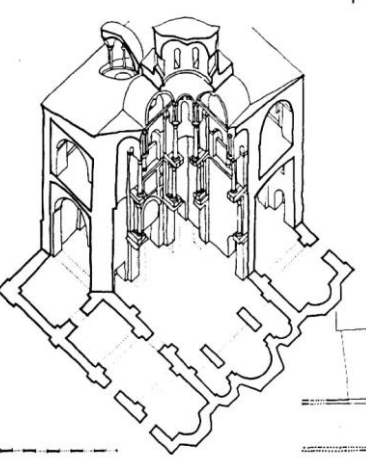
Stiris: Hosios Lucas monastery, Burial temple of II. Romanos , Temple of Theotokos (9th cent.-1030)

*In certain areas the chain of monasteries formed an independent state within a state. The congregation of the **monasteries of Athos** created its special type of church with the so called triconced space form (space with three semicircular apses directed to three directions). Almost all of the eastern countries around Byzantium established their own monasteries in Athos, forming together their own independent sacred state within a state and giving an unmistakable atmosphere to the peninsula. Among the founders and the citizens of the monasteries we can find personalities who had been kings, or were former rulers –kings and even emperors-, or came directly from royal courts. These connections secured the spreading of 'athonite' space forms throughout the eastern Christian territories. This special space-form might have been initiated by the symbolic meanings of the Holy Cross.*

| **Athos:** Megalae Lavra monastery Church (963-1060) | **Athos:** Iviron (Georgian) monastery (11th century) | **Athos:** Hilindari (Serbian) monastery (1197-1299) |

2/3.   Late Byzantine Architecture (XIII-XVth century)

- The Empire of Nicea was a remarkable effort to reunify the Byzantine Empire.
- The Latin Empire (1204-1259) brought the centre of the Empire under the supervision of western feudal power. The architectural witness of the age is the fortress of Guillome de Villehardouin from France in Mistra.
- The Regency of Mistra and later its despotic governate (1259-1460) gave the social background to architecture. The Regents Palace and the Hagia Sophia represent this age.
- Thessaloniki is worth mentioning as the vassal of the Latin Empire (1204-1246) and later the capital of the Late Byzantine Empire.
- Constantinople became part of the Byzantine Empire again from 1261, though its importance faded after the end of the XIIIth century when the Islamic conquerors reached the territory. The fall of the city made the end of the Empire formally as well. This period shows the strength of Byzantine architectural forms how they could preserve their integrity through the centuries.

| **Mistra:** Pantanassa monastery Church (1428) | **Mistra:** Hagia Sophia (1350) | **Arta:** Panagia Parigoritissa monastery (1282-1289) |

2/4.   National Architectures in the range of influence of the Byzantine Empire

2/4.a., The region of Caucasus

Armenia

In the territory of Armenia Christianity became the religion of the state for the first time in history in 305. It was at the time of King Trdat the IIIrd and the Patriarchate of Gregorius the Enlighter when the so called Gregorian Armenian Church was founded. Until 451 the church was under the influence of the Eastern Syrian Church (centred in Cappadokia), when they accepted the authority of the monophisitic Western Syrian (Jacobite) Church. 506 was the date of birth of the independent (autocephaly) Armenian Church. Politically, the region was the bumping point between the great powers of that age: the Persian-Sassanide, the Byzantinian, and later the Islamic Arab conquerors. The Armenian Kingdom struggled in continuous wars of independence. In 628 a new Armenian kingdom was established under Byzantinian authority. The capital was Dvin, and Vagharshapat (Surp Echmiadzin) became the ecclesiastical centre. The kingdom won its independence in 886, named afterwards as Sirak.

Architectural influences:

- Until 628 the Eastern Syrian building-types were dominating the region (Karnut, Tanajat, Artik 4th-5th c.) single nave temples with side porch; the Early Christian architecture of the City of Rome was mirrored in the cathedral of Ani and the cathedral of Dvin mixed with Western Syrian elements guided by liturgical needs.

Karnut, Tanajat	Dvin II.: cathedral (6th c.)	Ereruk: basilica (5th c)
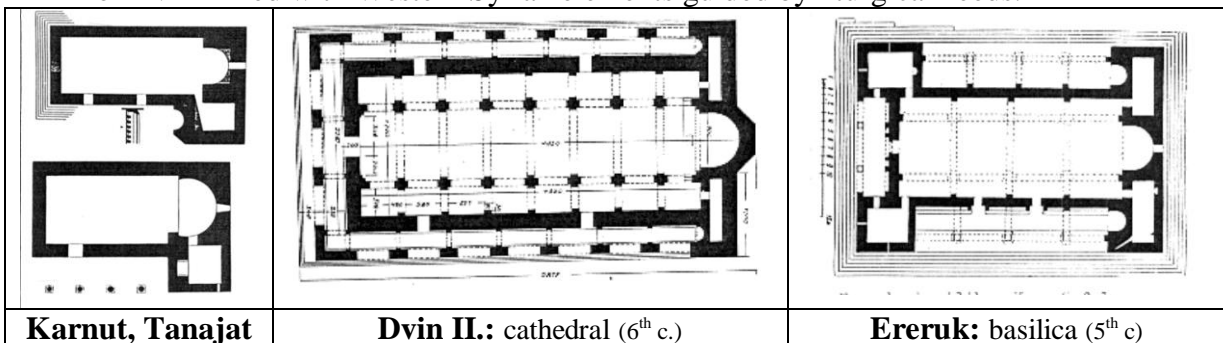
- From 628 –in the 'Golden Age'- the Byzantine architecture had a growing effect on the temples of **Echmiadzin**. The **cathedral** is a nine-partite building in plan with a single dome at the centre and four attaching apses at the four sides. This space is originating from the middle of the 5th century – the 1st period of the cathedral shows these signs yet. The Hripsime temple is the reduced version of this space type, when the four apsidal wings are 'pushed into' the enveloping mass of the building achieving a -very Syrian- compact but –at the same time- more articulated view of the building. The 'personal' bishopric church of Zvartnoc is a good example of further Syrian influence as we can recognise the original central space with the four apsidial extensions.

Etsmiadzin II.: cathedral (625)	**Vagharshapat:** Surp Hripsime(614-618)	**Zvartnoc:** cathedral (641-652)
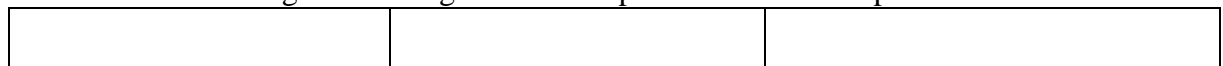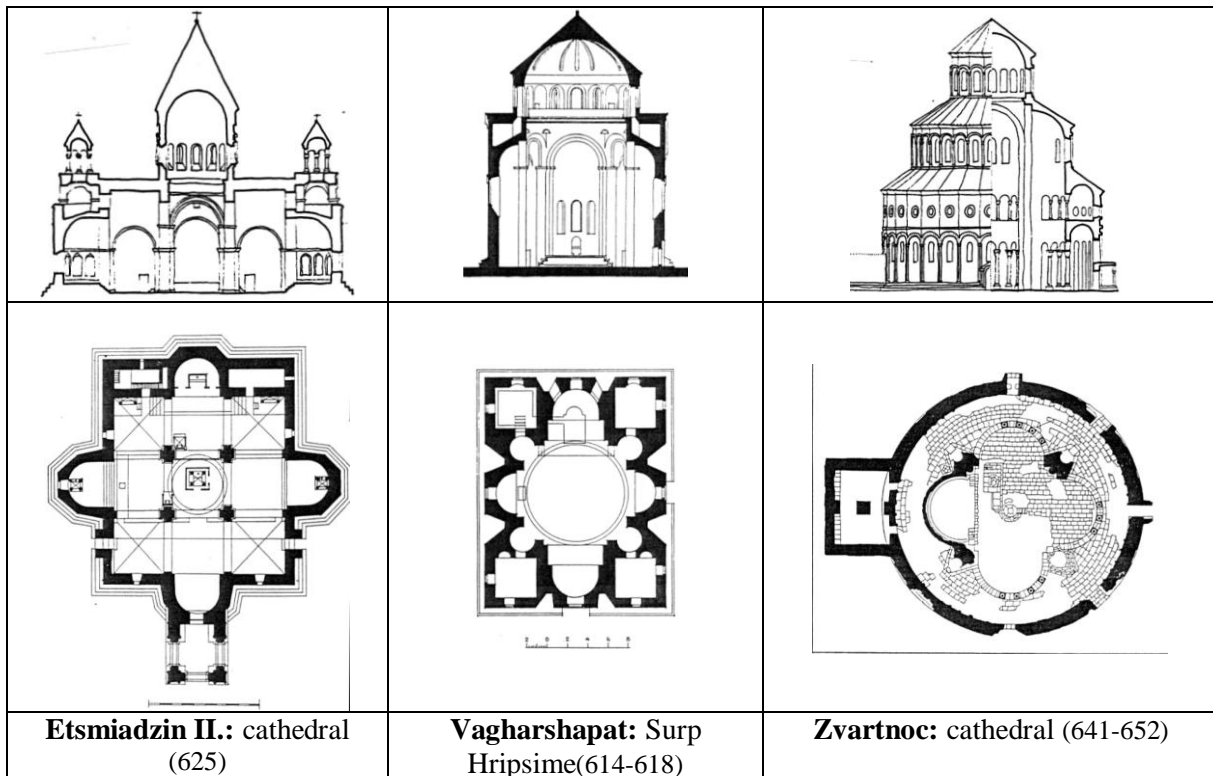
- After the Arabic invasion the Armenian kingdom became independent once more, as the Bagratida Dynasty (885-1045) liberated the country, which brought the 'Silver Age'. Further Syrian influence can be recognised in the centralised spaces that are extended by niches in the case of the church of St. Sion in Ahtamar. We can observe further reduction of the Hripsime-type temple which can be explained the symbolic gesture of the building: it was built for the worship of the Holy Cross. The plastical decoration of the façade ('flat relief') appears later even en Europe (Lombardy).

Achtamar: Church of the Holy Cross (915-921)
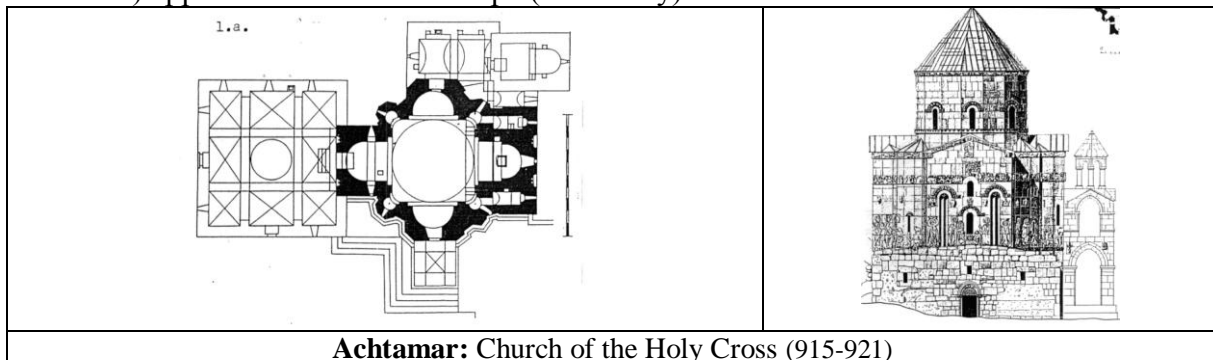
The architecture of the new capital, Ani was a kind of revival of the old times especially the Golden Age. Almost all of the different familiar building types were revitalised: the rather longitudinal space type of the cathedral of Dvin recovered in the building of the cathedral of Ani; the circular space type of Zvartnoc was built as the 'Gagik' Temple; the Etsmiadzin-Hripsime type was transformed to be more Byzantian as the Tample of Apostols.

| **Ani:** cathedral (989-1001) | **Ani:** cathedral (1001-1013) | **Ani:** cathedral (1020-) |
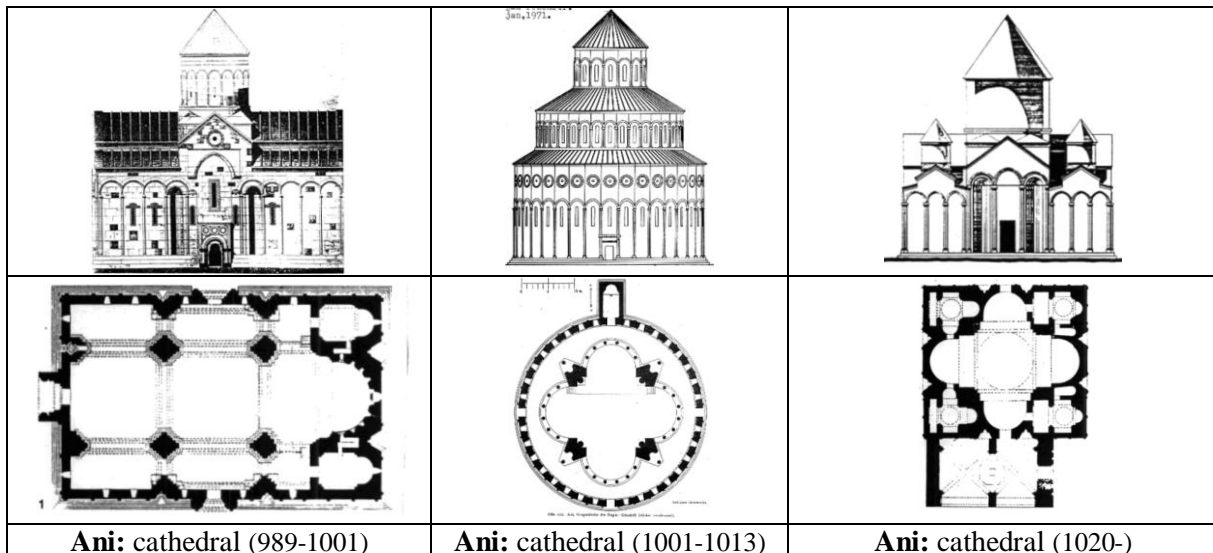
The Armenian rites are composed out of Western Syrian liturgy that belonged to the "monophisitic" branch of Christianity. That fact resulted special space forms such as the Syrian sanctuary (haikal) developed to be side apses, and the spaces with side conches appropriate for the situating of double choruses.

The special functions in a monastery called special large spaces for existence, like the need to carry the evening prayers and chants on. This building part (gavit) which is as large (or even larger than) as the church itself attaching to the church's western side, and has centralised character is the so called gavit (Church of the Holy Mother of God in Sanajin monastery).

| **Sanajin:** monastery (928-1221) | **Haghbat:** monastery (972-11th c.) |
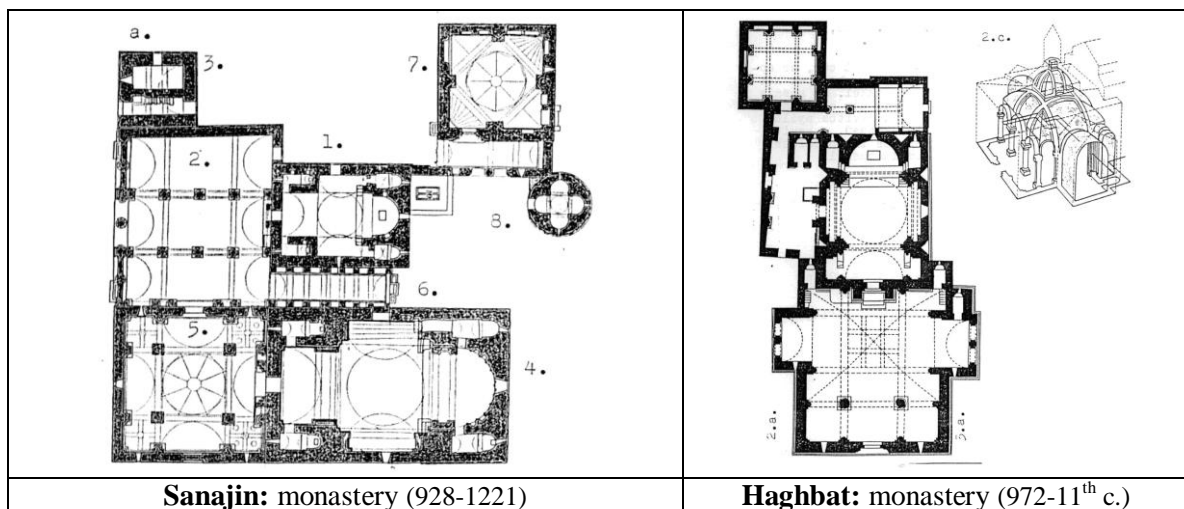
The Armenian architecture followed the Syrian traditions in the mass creation and the articulation of the facades. The symbolic and propagative function of the outside gained more importance. The detailing reflects the Armenian traditional forms.

Georgia

The history of the Georgian kingdom is very much similar to that of Armenia. Its religion is monophisitic from 472, then diophisitic orthodox from 607 influenced by Byzantium.

Architectural development:

- Prefeudal period (V-VIIth century):
- Early Christian influence from Rome by means of Syrian mediation (Bolnisi),

- Syrian influence formed the centralised building types interrelation with Armenian architecture (Djvari near Mcheta),
- Original Georgian architecture in the times of the wars of

| **Bolnisi**: cathedral (478-487) | **Mcheta**: Djvari temple (595-607) |
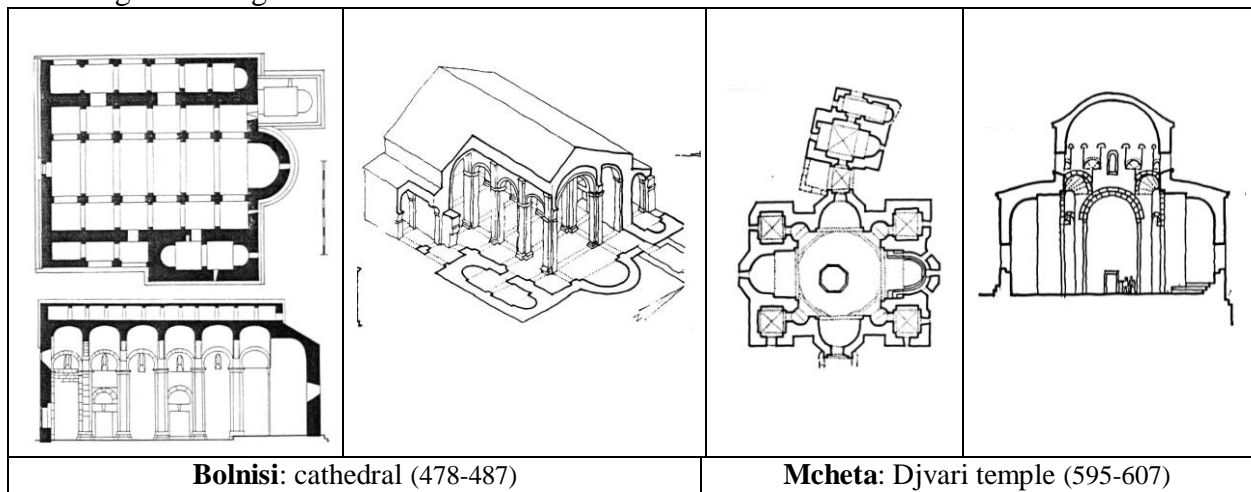
- **independence (8ᵗʰ-9ᵗʰ century):**
- The special version of Roman-Syrian architecture : the „three-church" type (Gurjaani),
- The spreading of Middle Byzantine centralised space types (Mokvi),
- Syrian influence in longitudinal churches (Kutaisi), and centralised spaces with extentional niches in a building with the combination of hexagonal and Greek cross space forms in plan (Nikorcminda), the latter might show former Jewish influence.
- Cave-settlements and -monasteries (Vardja).

The articulation of the architecture is characterised by the cult of the cross, the geometric symbolism. In this double feature we can recognise the propagative function of architecture, and the strengthening Islamic influence in building decoration.

| **Gurdzsaani** (7ᵗʰ-8ᵗʰ c.), | **Oski, Kutaisi** (around 1000 BC) | **Nikorcminda** (1010-1014) |
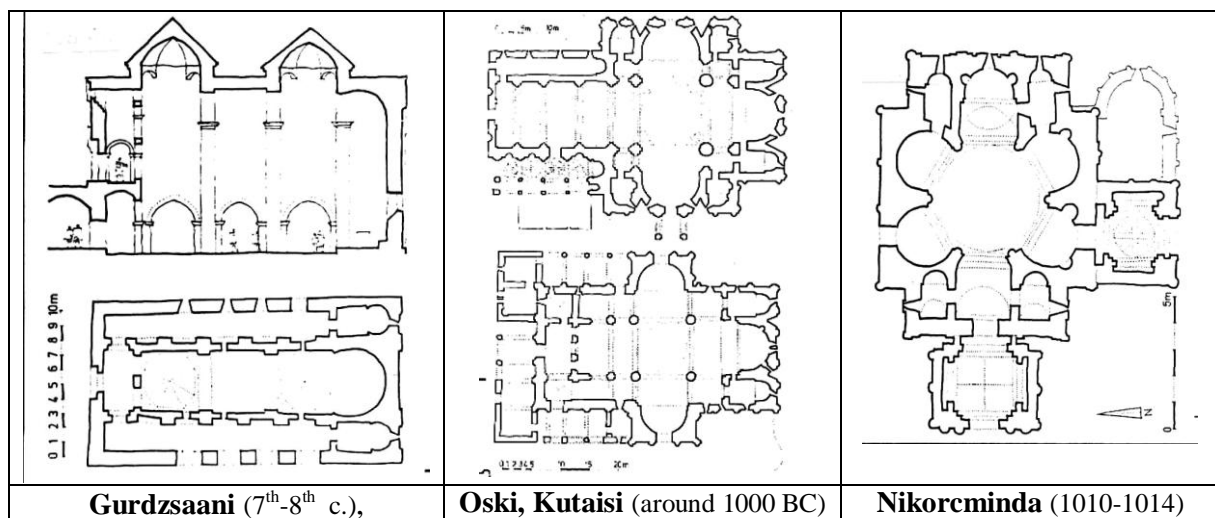
II/4.b.,   Architecture in the Balkan Peninsula

Bulgarian Empire

The capital of the Iˢᵗ Bulgarian Empire (8ᵗʰ-10ᵗʰ century) was Pliska. Architecturally important centres are Preslav and Ohrid where palaces, fortresses and churches can be found. We can find Christian architecture from the IXᵗʰ century: the palace-temple in Preslav as an imperial foundation, and the monastery ensemble in Ohrid. We can distinguish different architectural influences in the Bulgarian architecture:

- Eastern Syrian Basilicas with side galleries on the first floor (emporium),
- Byzantinian centrally domed spaces.

The area became under Byzantinian authority in 1018. (The Ist Bulgarian Empire is in close connection with the Hungarian Preromanesqe architecture - the church of Tarnaszentmária).
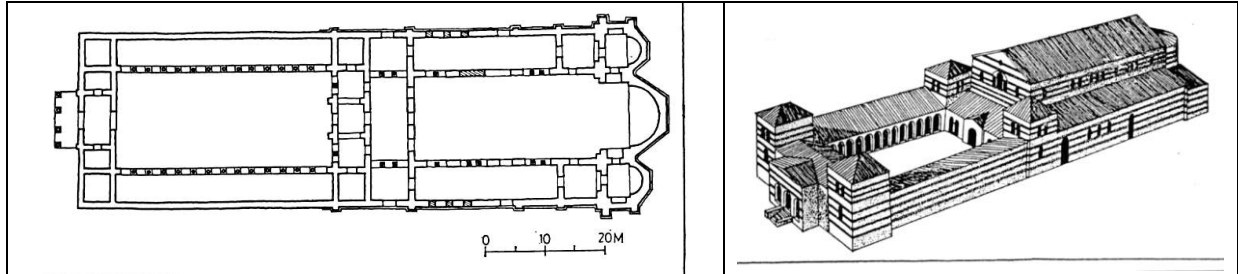
Plisca: the 'Great Basilica' – palace temple (9th c.)	
Preslav: 'Golden Temple' (end of 9th c.)	
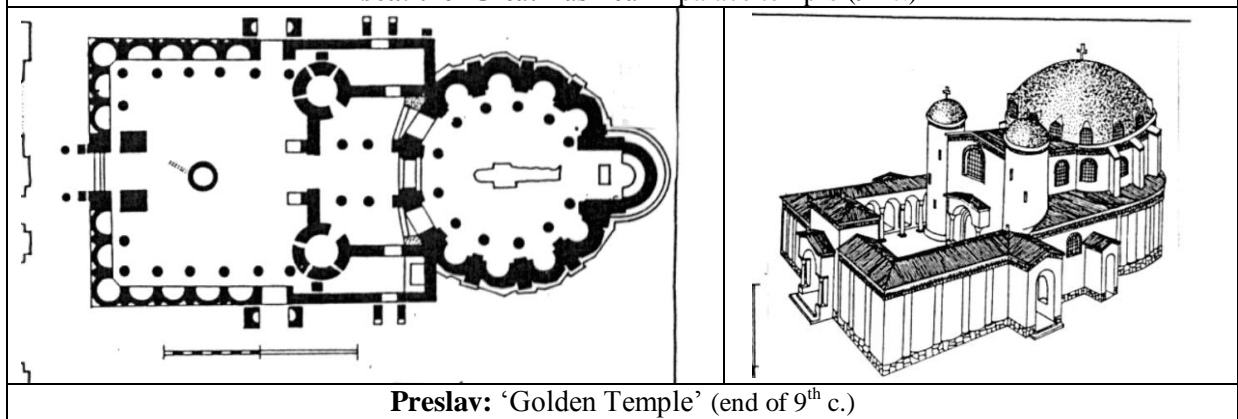
The capital of the IInd Bulgarian Empire was Tirnovo, and the architectural centres were Nesebar, Rila, Bojana. The monks, and the feudal aristocrats (bojars) were active as commissioners at that time. The remarkable architectural influences :

- Middle and Late Byzantinian architecture, the Katholikon space form (Rila monastery),
- the eastern influences from the area of Caucasus (Georgia) recognisable in the formation of building mass,
- the Dalmatian influence can be observed in the articulation of the elevation.
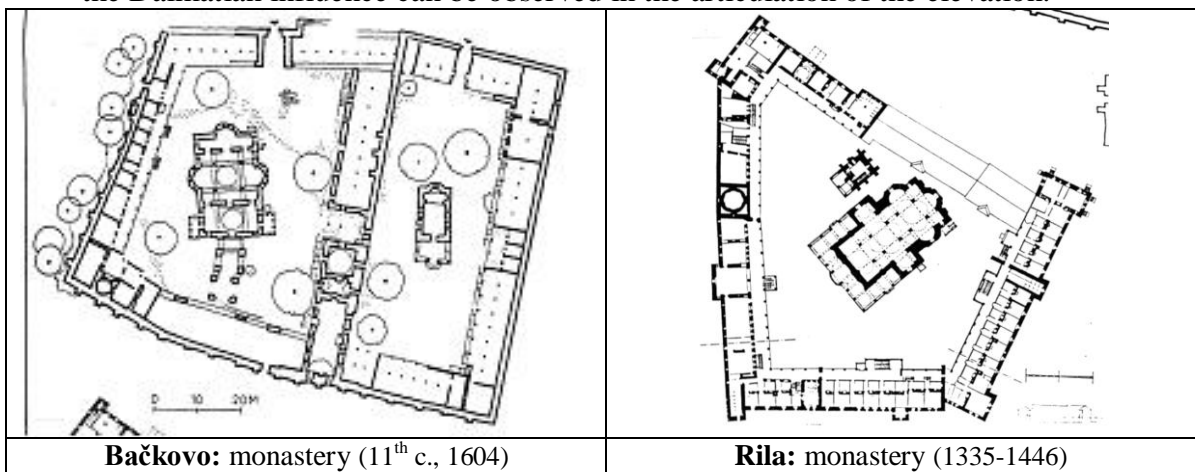
Bačkovo: monastery (11th c., 1604)	**Rila:** monastery (1335-1446)

Serbia (11th century- 1456)

The first part of its history is a continuous freedom fight, the independent establishment of the state took place in the middle of the 12th century. The sources of cultural influences :
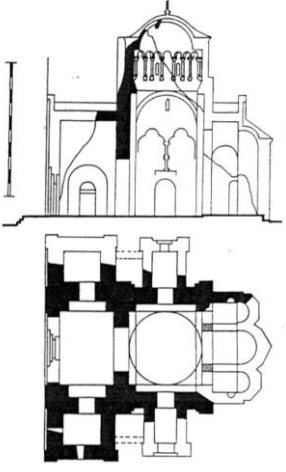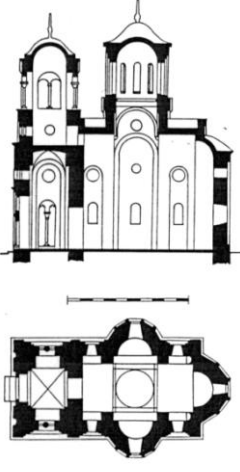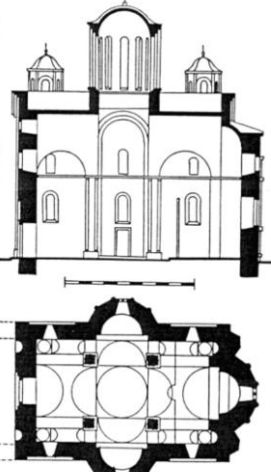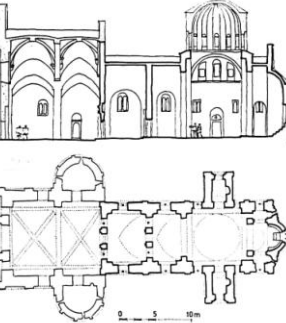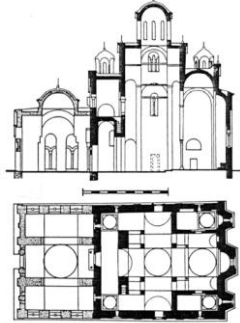
- The Italian influence was always strong, but it arrived through Dalmatian mediation,
- the Byzantine character had come through religious routes.
  The architectural influences :

- Byzantine space types combined with longitudinal structures,
- mass formations came from the Caucasus,
- elevations are characterised by Dalmatian forms,
- detailing influenced by Longobard decorative plastic work.
  Architectural workshops:
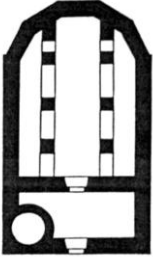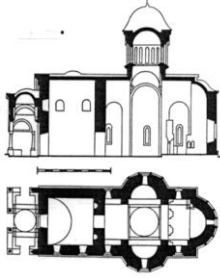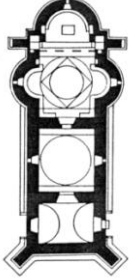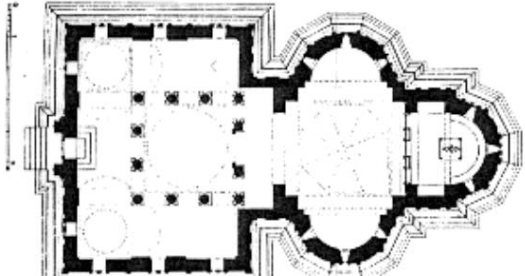
- the school of Rashka /Raška/ (12-13th century) famed by Studenica,
- the workshop in Koshovo-Metohia (13-14th century) represented by the monasteries of Grachanica /Gracanica/ or Hilindari in the mountain of Athos,
- the school of Morava (14-15th century) building in Krushevac /Kruševac/.

Djurdjevi-Stubovi (1170)	**Krusevac:** Lazarica monastery catholicon (1380)	**Ravańica:** monastery (1375-1381)
Studeńica: monastery, catholicon (1183-tól)	**Graćańic:** monastery (1318-1321)	

Romanian (Wallachian) principalities (XIV-XVIth century)

Wallachia (Tara Românesca) was an independent voivodeship from the biginning of the XIVth century. Its capital was Chippulung (Cîmpulung). Moldavia became a principality from 1359 with the centre of Baia. Architectural influences :

- Byzantine space structures ('Athonita') with longitudinal additive character (Curtea d'Arges)
- Transylvanien (West-European) gothic architecture (Cîmpulung),
- Islamic detailing.

Cîmpulung: basilica (13th-14th c.)	**Cozia:** monastery (1386)	**Voroneţ:** monastery church

Curtea d' Arges: bishopric cathedral (1512-1521)
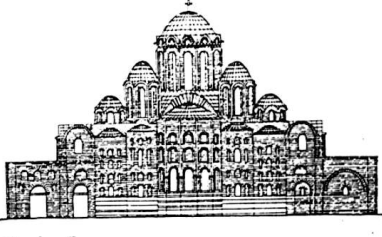
II/4.c., Russian Principalities
Rus of Kiev (11th-13th century)
Chritianised pagan principality from 988. Kept its leading political power of the region untill the Tartarean Invasion.

The chatedral of Sophia :   The core of the space structure is the catholicon but with several aisles domes and apses. The symbolism of numbers is remarkable in the use of domes (12+1). The prototype is the Panachrentos temple in Constantinople.

Kiev: St. Sofia (1037-1067)

Vadimir-Suzhdal (1125-1238)

The church of St. Demeter :   Founded in 1195, a ninepartite five-domed space form. In mass formation and the decoration of plastical forms are following the prototypes of the Caucasus (Ani-Achtamar).
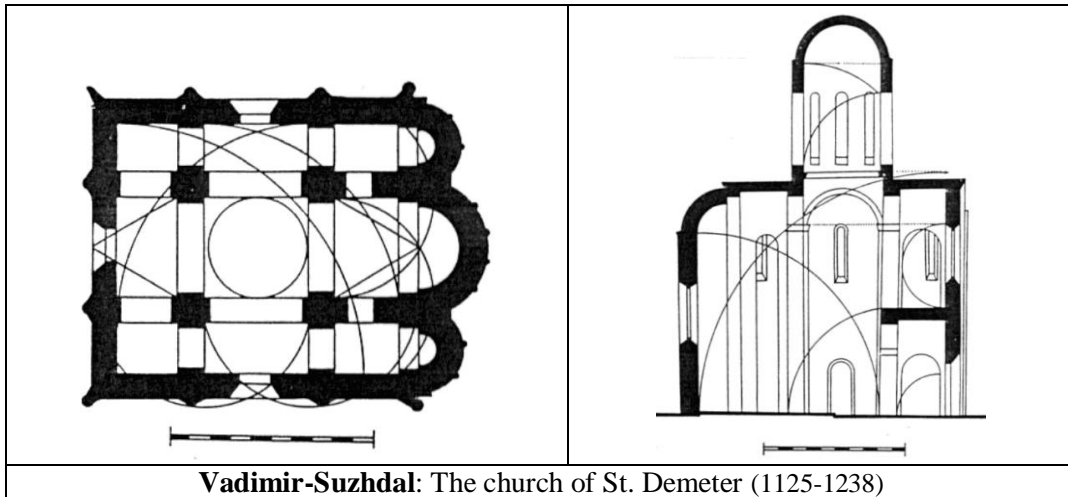
Vadimir-Suzhdal: The church of St. Demeter (1125-1238)

Novgorod (10th-15th century) :   *The local woodden architecture is very strong.*
The cathedral of St. Sophia :   *The form follows the Kiev type : several aisled, several domed and apsed space form.*
Monastic architecture :   *Applying the Byzabtine space forms but it is independent in the articulation (Jurjev monastery).*

Novgorod: The cathedral of St. Sophia(10th-15th century)

Novgorod: Jurjev monastery St. Georgij catholicon (1119)
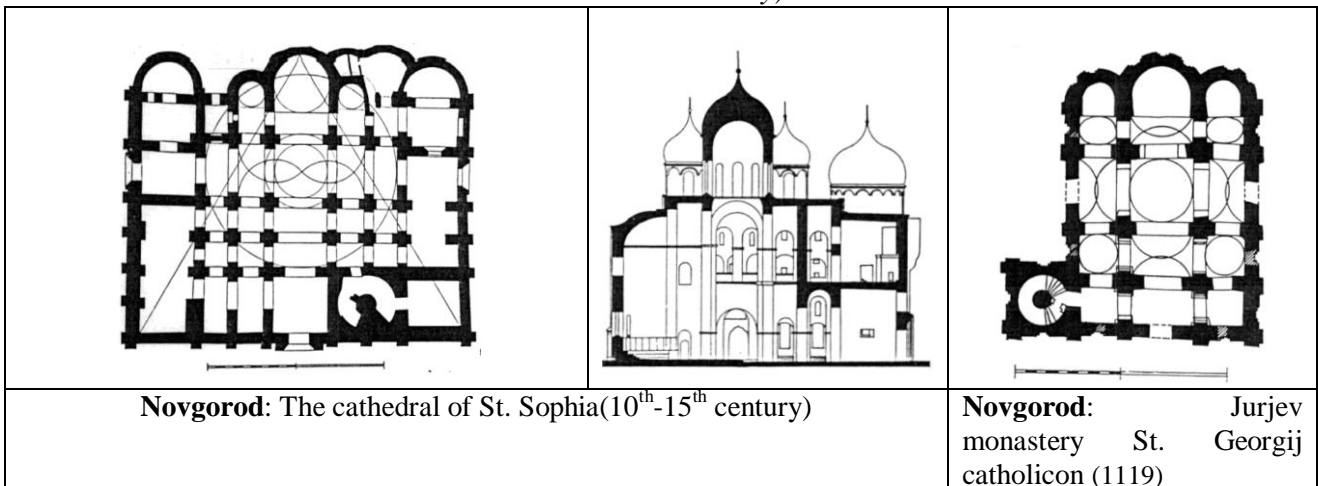
Moscow (14th-16th century):   *The Kreml ansamble as the regal centre worth mentioning.*

The Uspenskij cathedral :

- strong local traditions,
- the Italian reneissance influence (Aristotele Fioravanti),
- ninepartite, five-domed Byzantine space form (claiming the heritage as the remaining centre of eastern Christianity),
- the facades are articulated, following Caucasian forms (lesene divisions).
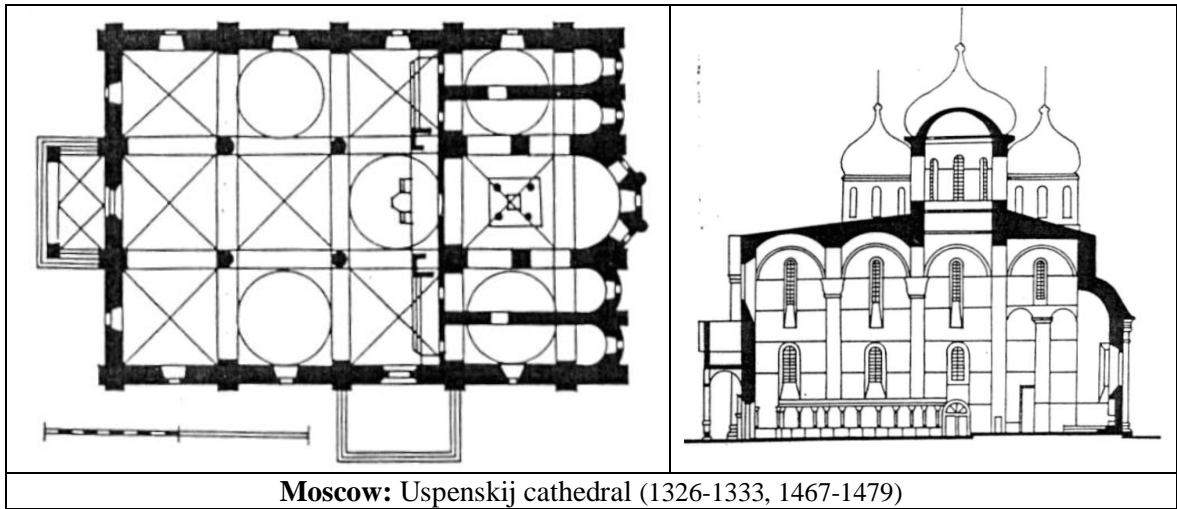
Moscow: Uspenskij cathedral (1326-1333, 1467-1479)

Kiev, Novgorod, Vladimir were founded before the Tartarean Invasion.It was only Novgorod that survived the destruction. The political power travelled to Moscow founded afterwords.

IIIrd Theme :   Early Medieval Architecture in Ravenna (IV-VIth century)

Geologically and historically Ravenna meant an important bridge between Eastern Early Christian architecture influenced by the City of Rome, the architecture of Byzantium, and the western PreRomanesque architecture at the centuries of the great migration in Europe. The historical and architectural periods:

III/1.   The architecture of the disintegrating Western Roman Empire (395-476)

In order to hide from the continuous barbarian intrusions, the imperial headquarters moved behind the marshy lands easy to defend in Ravenna, the location of which provided certain possibility for an escape towards its port in Classis at the same time. Its architecture is characterised by the Late Roman culture and the Early Christian influence.

Galla Placidia   *the building was founded as the chapel of St. Lorenzo around 450. It is a centrally domed (pendentive dome!) mausoleum forming a Greek cross in plan. The facade is articulated by means of false arcades, which is a slight shift in the Early Christian concept. The symbolic figural mosaic pictures in the interior shows the Christian version of Hellenistic motives (Good Shepard). The antique Roman manner in use of colours (naturalistic figures in front of blue background,) represent, the continuity of the culture.*
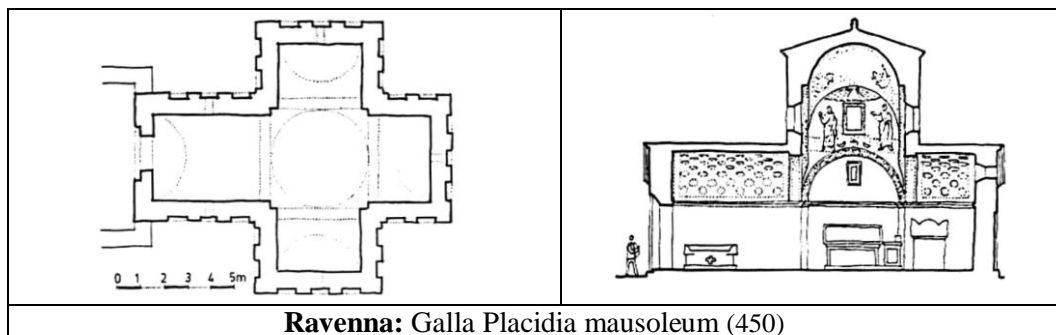
Ravenna: Galla Placidia mausoleum (450)

Orthodox Baptistery   the quadratic plan possesses niches at the corners showing Syrian influences of mausoleum architecture. The characteristic octagonal space crowned with a rare octagonal pendentive dome, resting on eight columns in the corners and archivolts between them. The building is known as San Giovanni in Fonte and was built around 450. The load bearing structure shows highly sophisticated skills in technology. The dome is a light weight construction, the use of the hollow core clay tubes derives from North African models. (Remember the similar construction of the Santo Stephano Rotondo in Rome!) The mosaic picture is full of architectural details, showing antique architectonic structures.
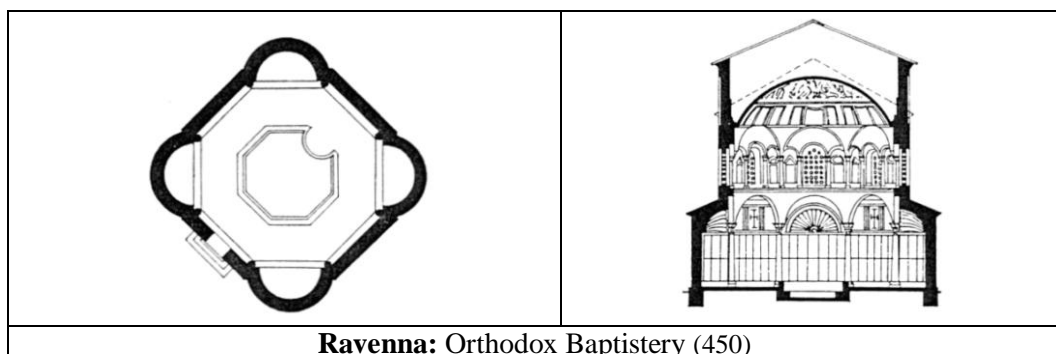
Ravenna: Orthodox Baptistery (450)

III/2. Ravenna the capital of the Eastern Gothic Kingdom (476-526)

Romulus Augustus was pushed off his throne in 476, which meant the elimination of the Western Roman Empire formally as well. The regime of Odovaker (476-493) principal of the Heruls was ended by Theoderic the Great (493-526), leader of the Eastern Goths. In spite of the fact that the kingdom officially was under the authority of Byzantium, it existed as an independent state.

Architectural influences:

- survival of Early Christian architecture,
- strengthening role of Byzantine models,
- Barbarian gothic motives.

The royal centre consisted of the Arian palace-temple, the Arian Baptistery and the residential buildings formed an ensemble of a single concept. The completion went on after the death of Theoderic.

> **The palace-temple** *or San Appollinare Nuovo -as it is known from the 9th century- shows the characteristics of the Arian version of Christianity. Though the traditions of the Early Christian architecture of the City of Rome are undoubtedly recognisable (congregational basilica type), the proportions of the interior, the increased natural in-lighting substitutes the mystical sophisticated atmosphere by the simpler elementary powers of barbarian naturalism. Even the mosaic pictures lose their several sensed symbolism, for the direct propagative function and actual political and social meanings. The single apse semicircular in the interior and polygonal at the outside remind us of Syrian models as the liturgy had certain eastern elements.*
>
> *Arian Baptistery very similar to the orthodox Baptistery in plan: octagonal space with apsidial extensions. But as one of the apses is enlarged to be a sanctuary, it gives a certain orientation to the place. The structure is simpler and rather bare. The symbolism of the mosaics is more abstract with golden background, but natural motives.*
>
> *Tomb of Theoderic represents the first piece of preRomanesque architecture. The two-storey-high mausoleum possesses a centralised space of a Greek cross at the lower floor, and a circular at the upper floor. From the outside it is a polygonal building. The dome at the top is a single stone element propagating the elementary power of their culture. It derives from the barbarian tomb architecture but in a Christianised articulation.*

Ravenna: Palace Temple (519)	**Ravenna:** Arian Baptistery (519)	**Ravenna:** Theoderic's Mausoleum (520)
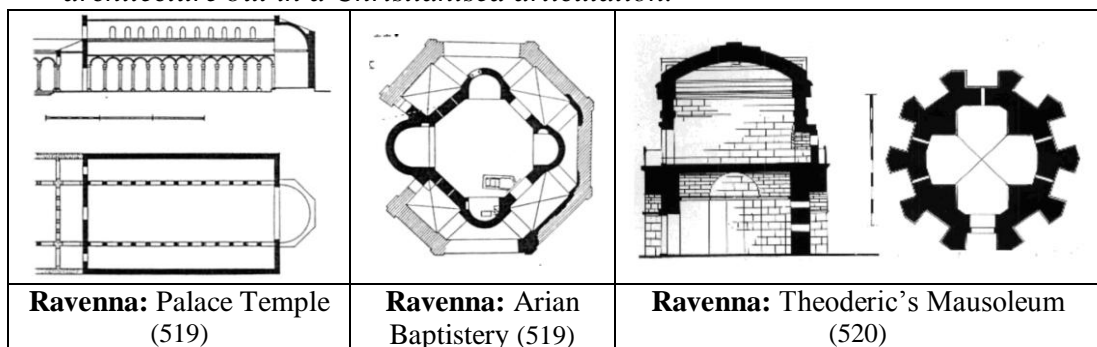
III/3. Ravenna - The Byzantine Exarchate (539-751)

> *Emperor Justinian -with the help of his military commander, Belizar, extended his power over Ravenna. He organised a regency -an exarchate- there so as to make Ravenna part of the empire formally as well. This gesture made it obvious that the*

existing inheritor of the antique Roman Empire -Byzantium- lays claim to the territory of the western parts as well. The architectural influence of Byzantine culture of the early imperial period is essential.

***San Vitale (around 526**) is the main church of the exarchate. It is an octagonal central space with an octagonal ambulatory. All the sides of the internal octagon are extended by apses. The quarter-domes of the apses are supported by archivolts resting on slender columns. This brilliant load bearing structure that supports the side forces of the central dome hiding meanwhile the real masses is not unknown to us. The direct model of the building is the St. Sergios and Bachos in Constantinople, but the routs derive from Bosra and Ezra in Syria. It will have an obvious effect on the architecture on Western European Pre-Romanesque central type architecture (Aachen). The mosaics are showing the flourishing period of the unique art of mosaic of Ravenna. The use of golden background creates the illusionistic atmosphere, but the iconographical rules made the representation ceremonially rigid.*

San Appollinare in Classe is a congregational basilica originally had been founded under the reign of the Goths between 532-536, later it was adapted to Byzantine liturgy in 549 by adding the side spaces to the main apse. Its nave reminds us of a thrown hall that brings profane aftermath.

Ravenna: San Vitale (526-547)	**Ravenna:** San Appollinare in Classe (535-549)
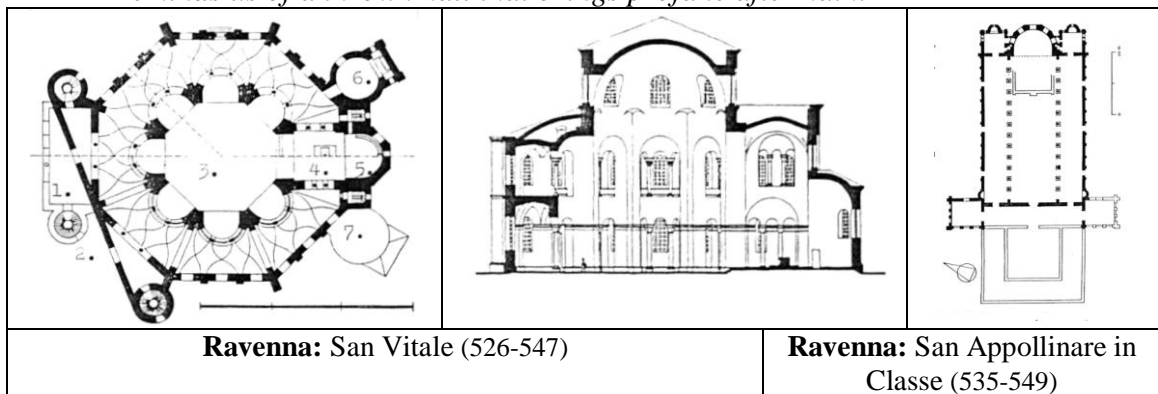
The recapitulation of eastern Christian architecture

The antique heritage of Rome survived in the representatively articulated Early Christian architecture in an organic way. As a sacral Christian architecture, it radiated its forms and spirituality towards the eastern provinces (Palestine, Egypt, Syria), and the newly rising Byzantine culture. This effect in Byzantium created its own development both in imperial and monastic architecture absorbing the influences of the provinces -first and foremost of Syria. This double faced architectural culture influenced the nacional architectures in its radius of effect. In the meantime, Rome existed as a spiritual centre, and as the headquarters of the priesthood radiated the Early Christian culture towards the Pre-Romanesque architecture of the barbarian nations which settled down in the territory of the former western provinces.

The provinces of the Western Roman Empire was owned by the nations migrating from east to west (4-10th century) after 476. After the departure of the Romans their cultural and technical heritage -as standing or ruinous buildings- remained. The use of them was obvious for the „Romanised" natives, but on the course of time their original function became forgotten together with the knowledge of the technology of building. On the ever homogeneous ruins of the Roman Empire different national cultures emerged depending upon their individual traditions and grades of development. The Romanesque architecture -as the first European entity- was formed out of this colourful diversity. The unity was created along the longing for the great idol -the former Roman imperial culture-, imitating and trying to reach its wealth.

IV/1.   The factors influencing the development

IV/1.a.,   Roman influence
1.)   The continuity of the former settlements in the West Roman Empire makes its headway in two different ways:

- the historical continuity means that the natural sources of a certain region that had been known for the Romans became obvious for the invaders, and they continued to use them (they settled on the Roman towns). The „Romanised" natives supported this process.
- the architectural continuity refers to the standing or ruinous Roman buildings that were rehabilitated with a new function, going on using them for their own purposes, or certain parts of Roman buildings (cornice, column-head...) were integrated into their own buildings.

2.)   At the time of the rise of the pre-feudal states the influence of the so called „Second Rome" is detectable. Rome is not an imperial centre any more, but it is the centre of the Christian church that is organising missionary movements. The monks have fled from Rome propagating their faith creating their first sacral buildings, naturally following the models well-known to them: Early Christian churches of the City of Rome. Even the different pieces of the antique culture (i.e.: literature) arrive to the barbaricum „digested" by Christian minds. In this missionary work the activity of the Benedictine order is determinant.

3.)   The third channel of Roman influence is the „Living Rome" - Byzantium, which is the one and only existing descendant and inheritor of the great antique Rome after the fall of the Western parts. That makes it possible to be a living model for the present emerging European culture. Parallel to this the Byzantine culture is not unknown for the tribes of the Great Migration, as on the course of their wandering (peregrination) almost all of them got into a close connection with it. Its very spectacular wealth became a model for them. That makes understandable the fact that the liturgical tradition formed by means of the missionary monks seem not to follow the simpler liturgy of the City of Rome, but elaborated with Armenian and Byzantine elements (Frank-Roman rite, Ambrosian liturgy...).

IV/1.b.,   The survival of the ancient, traditional forms
The migrating tribes had not possessed remarkable „monumental" stone architecture. But the art of decoration was very developed: textile, metalwork, and woodcarving. The different tribes added different collection of forms to the artistic character of Romanesque art:

- the Irish-Celtic tradition is characterised by endless matting in spreading pattern with animal figures woven inside.
- the Langobard pattern is characterised by a special matting made of two or three ribs (probably deriving from rope-laying), and symbolic monster figures.
- the Norman forms are geometric decorations (zigzag, broken rod, sow-teeth...) deriving from the ancient woodcarving culture.
- Hungarian motives are full of symbolism; the ornamental or figural elements are hiding different meanings (matting, tree of life, palmetto -life sprout...).

In all of the nations we can find totemistic representations. That kind of forms will survive in the Romanesque art as monsters and symbolic figures articulated in a Christian way. As a direct contact is very probable with Byzantium, the collection of the forms contains lot of oriental (Byzantine, Armenian, Persian-Sasanide) elements.

> IV/2.   Scattered Monuments from the period of the Great Migration in Europe
>
> *IV/2.a.,   Early Sacral Architecture*
> *The tribes partly on the course of the missionary activities, partly from the „Romanised" natives being Christian there, met the Early Christian architecture. In the case of the first sacral buildings we can recognise the well-known models of this architecture (longitudinal space, sometimes basilica forms, centralised cultic space...).*

- Gothic architecture in Ravenna (See it in Chapter III.)
  - Würtzburg, Marienkirche (around 706) centralised space, the internal part is extended by apses showing Armenian influences.
  - **Zadar, St. Donato (9th century)** centralised space with -a two-storey high(!)- ambulatory. Its three apses shows the knowledge of the „Gallic" liturgy the character of the space derives from the Early Christian architecture of the City of Rome. We can sense both Byzantine (Baptistery) and Late Roman (Cella Trichora, Tetrachora… Septichora…) forms initiating this building.

Zara: San Donato	**Zara:** Baptistery	**Sophiane (Pécs):** Cella Septichora (2nd Century)
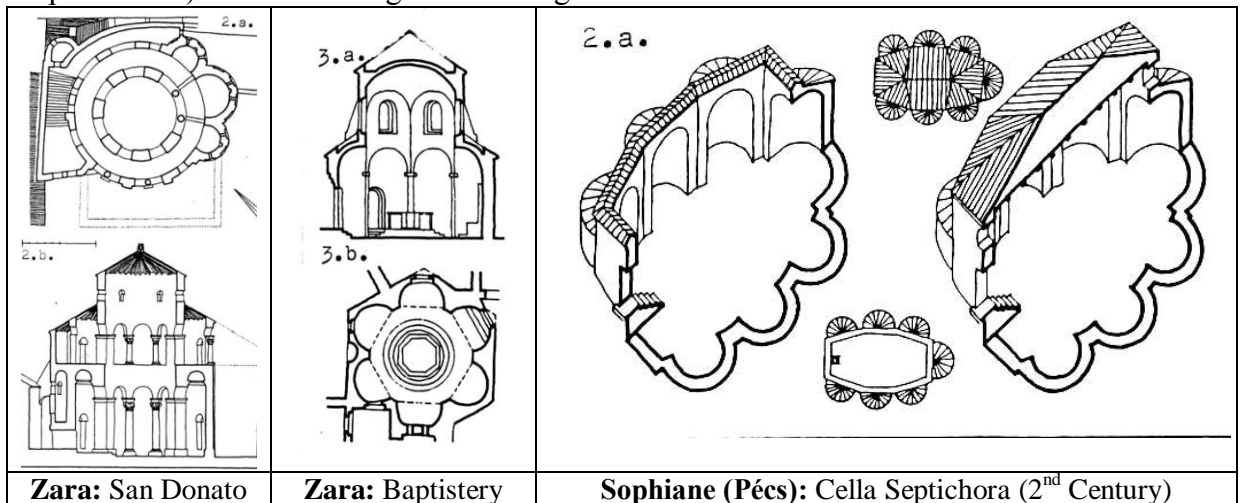
- Oratories (houses of Pray) in Ireland : The mission of St. Columban reached the island for the first time originating from North Africa and Near East. These first necessity buildings were very simple. Their space structure consisted of only one aisle and a sanctuary with a flat (sleight) ending. (Gallarus Oratorio near Dingile. Even the larger scale architecture inherited the simpler forms (straight ending, walls, simple structures…). That is why we can see very similar plans far away from each other. Similarity is not

necessarily means direct connections. The architecture of the Visigoths and the Saxons in the British Isles shows this kind of correspondences: the plan of St. Lawrence temple in Bradford-on-Avon and of Santa Combe in Bande. Despite of their similarities their actual constructions are very different.

| Bande, S.Comba templom | Badford-on-Avon, templom |
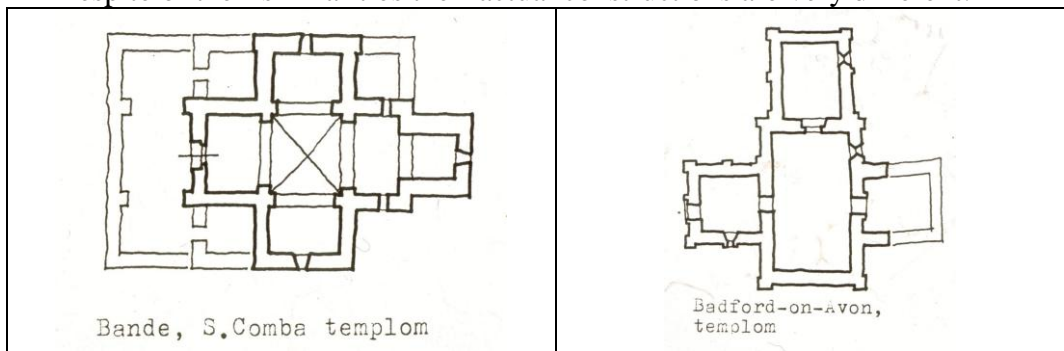
During this period the local traditions are dominating the architectural forms. In the church of Baňos de Cerrato the eastern and Italian influences are still embodied in the sanctuary form (Gallic liturgies: Mozarab in Spain and Ambrosian in Italy – three-partite sanctuary). Whereas new liturgical tendencies develop new architectural forms: the temple of San Miguel de Lillo has an articulated western part, that provides the base for the later westwerk.

| Banos de Cerrato (669) | Cividale:Sta Maria della Valle (cc.774) | Santa Christina de Lena (9th C.) | San Miguel de Lillo (9th C.) |
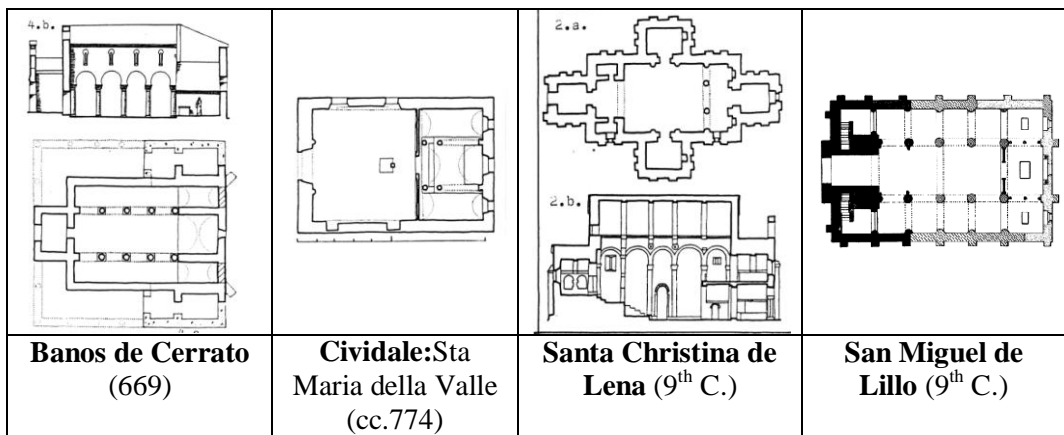
IV/2.b., The Architecture of the first Missionary Monastic (Benedictine) Movements

The architectural frame of the lifestyles stated in the constitution of the Benedictine Order was formed on the course of the mission, in situ. The former way of life followed the constitution of St. Augustine who coordinated the rules within the community of priests (Canonicals). It had been changed to the idea of praying and working („ora et labora"). In the meaning of this, the monasteries created their self supporting economies and the very strict organisation of spaces. The first forms followed the simplest congregational types adding en extension to the nave to provide separated space for the monastic community (Brixworth).

- **Lorsch, gateway of the Abbey** : the gateway and the sanctuary -with gothic transformation- remained from the 8th century. It reminds us of antique triumphal arches but it served as defence fortification too. It has three openings with antique architectonic incrustations on the facade.
- **St. Germiny-des-Pres**, former abbey (about 806) an eastern space structured building of Armenian origin. Its liturgic space is velid for processing the so called Franc-Roman liturgy. (Ninepartite, centrally domed -and tamboured- building with four

apsidial extentions.) This form might have been taken to Europe by sporadic Syrian, Armenian merchant communities.

Brixworth (675/750)	**Saint-Germigny-des-Pres** (806)	
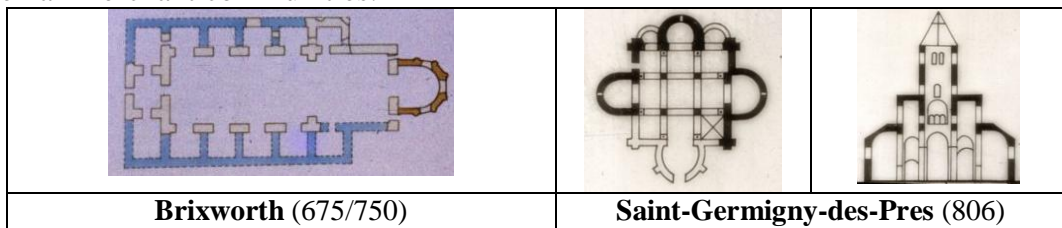
- Regensburg St. Emeram church -in its first appearance- was a one aisled building with one semicircular apse. On the course of the German mission of St. Wyfrid the simpler need for space of the liturgic tradition of the City of Rome manifested itself.

IV/2.c., Principal and Royal Building Activity.

- Ravenna palace ansamble of Theoderic the Great (See it in chapter III).
- **Sta Maria del Naranco, Principal's Hall (8th century)** two storey high one aisled building with ribbed barrel vault. Later it was transformed to be a temple. The laterally enfolding space has antique Roman covering and facade construction, but the detailing is reffering to pagan traditional forms deriving from woodcarving, textile and metal works.

Naranco (Asturias): Principal hall
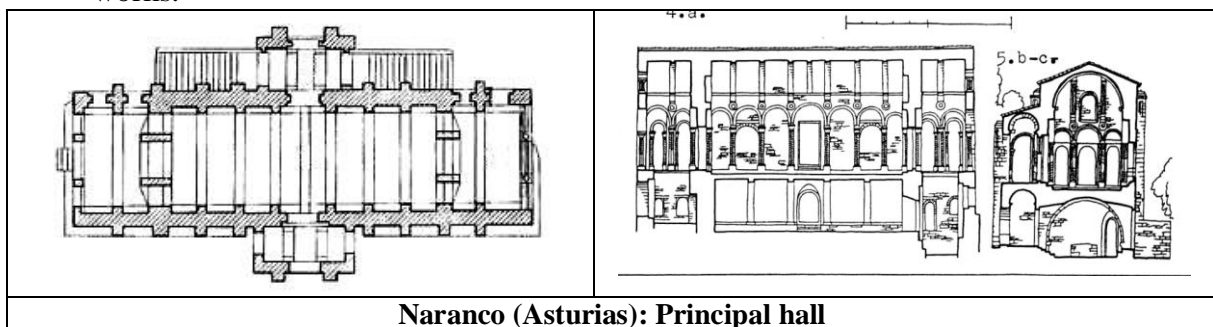
Vth Theme : The Romanesque Architecture

The traditional way of teaching Romanesque architecture keeps the characteristics of the different architectural ensembles belonging to particular geographical regions as the most important items, and emphasises the differences between them. This extremely regional picture hides the danger of missing the very core of the Romanesque architecture: despite the regional differences it has a unified style, a high similarity in attitudes so the interregional currents in European architecture and the workshop connections played an important role throughout the centuries. The traditional way of presentation with the particular regions and its main characters:

1. France: a., Burgundy: -in the architecture of the Benedictine Order the need for representation became important, multi-aisled, multi-towered large churches were formed. Its characteristic form of space was the „French sanctuary" -the space with an ambulatory and attaching ring of chapels.
   - at the end of the 9th century the Cistercian architecture brought a puritan taste, with no towers, flat apse-ending, geometric decorations. On the other hand it can be characterised by highly developed structural sophistication.
                   b., Provance   - a region showing strong antique influence. In most cases we find basilicas with emporiums (side

galleries) or „false-basilicas” without clerestory windows. In the architectonic way of creating facades we can recognize the antique „arcus triumphalis”, the Triumphal Arch in the case of the gateways to churches, and the antique orders of columns regarding the cloisters of monasteries.

      c., Auvergne — *the French-chapel solution got a characteristic stair-like mass(tower above the intersection - transept - nave - ambulatory- ring of chapels).*

      d., Aquitaine — *strong Byzantine influence embodied in spaces with domes over space constructions, forming Greek cross in plan.*

      e., Normandy — *strong constructional character with geometric decorations, preparing the entry to the gothic architecture.*

      2.,England — *the early Romanesque architecture is determined by the scattered monastic traditions that can be seen in their art of decoration. In 1066 the region was conquered by the Normans. From that time on, its development had been determined by the early gothic art of the Normans.*

      3.,Hispany — *the local traditions were alloyed with strong Arabesque and South-French influence. The churches with French sanctuary were built along the routes of the pilgrimage.*

      4.,Italy :   -Lombardy : *the characteristic space form -called : Lombard basilica- derived from the strong antique influence and the ethnical traditions of the period of the Great Migration in Europe. The articulation of the entrance facades shows a peculiar local concept that hides the cross-section of the building behind a scene elevation. The special architectonic solution of the gateway crystallised a new type of entrances: the Lombard gateway.*

- Tuscany   its Romanesque period is mainly determined by antique influences. Constructing the elevations, two different schools can be distinguished (the plain-like stone incrustational, and the plastic, sculpturesque school operating with dwarf galleries).
- Vicinity of Rome   the Early Christian architecture influenced by the antique still prevails. New monastery extensions to the existing buildings were established. Their detailing is characterised by the so called „cosmata” stone incrustation.
- Sicily   according to its historic fundamentals in its architecture the Early Christian, the Byzantine, the Norman and the Islamic influence from Asia Minor have been alloyed.

   5.,Germany   its development was bound to imperial dynasties :

- Saxon Dynasty the first large synthesis in Romanesque period when the church-type with double sanctuary appeared.

- Frank Dynasty the imperial domes of the Rhenish building-workshop represents the flourishing period of the German Romanesque (Four towered, three aisled basilicas with double sanctuary, decorated with geometric patterns).
- Hohenstauf Dynasty: the late Romanesque, the so called „transitory" style. The space constructions remained unchanged, but the decoration and load bearing structures developed.

6., Other States...

Knowing the classification shown above, we try to summarise the development of Romanesque architecture in a way that expresses the interregional influences of that time. This „Guzsik-classification" provides better understanding for the real character of Romanesque architecture and gives an easier didactical way to learn this theme -to put the particular elements into an intelligent order.

V/1. Imperial Attempts in Western-Europe – The Main Stream of Romanesque architecture

V/1.a., „Carolingian Renaissance" Pre-Romanesque architecture

The first ruling family of the franks settling down, the Meroving Dynasty embraced Christianity in 496 (King Chlodvig 481-511). From 751 the former Major-domos family the Carolling seized the power (Pippin the Small 751-768). Charles the Great (768-814) unified the Frank Empire and took the title of „ The Defender of the Church" upon himself. At the Christmas of 800 he was crowned as an emperor by the Pope. In the name of himself the West Roman Empire was reborn. The art of the imperial court tried consciously to be worthy of the Late Roman Empire by awakening the antique culture. Their effort did not prove to be successful entirely.

The artists of the imperial court consciously copied the antique Roman architecture. They turned directly to the „living Rome", to Byzantium seeking for models. That is why San Vitale, the main church of the former Byzantine Exarchate, Ravenna became the mediate model for the Aachen palace-chapel.

- **Aachen Palace-chapel (796-805**, Odo von Metz) an octagonal space with a sixteen sided ambulatory built after the model of the San Vitale in Ravenna. In its western part on the first floor a gallery was built for the exclusive use of the emperor himself. This multi-storey centralised space became the model for the so called **„Westwerk"** which is served as a liturgical space in Frank-Roman liturgy during services at Eastern period (Dijon, S.Benigne, Essen, Münster). We cannot exclude the idea that these westwerkes served as gallery for the patron as well. From symbolic point of view it played as a monumental lock against evil forces approaching from the West. This idea remained in the name of a later derivation of this form: „westriegl". Later at the several aisled ground floor level of the westwerk the custom of burial spread widely adding an other function to this particular part.

| **Aachen:** Palace Chapel (796-805) | **Ravenna:** San Vitale (526-547) |
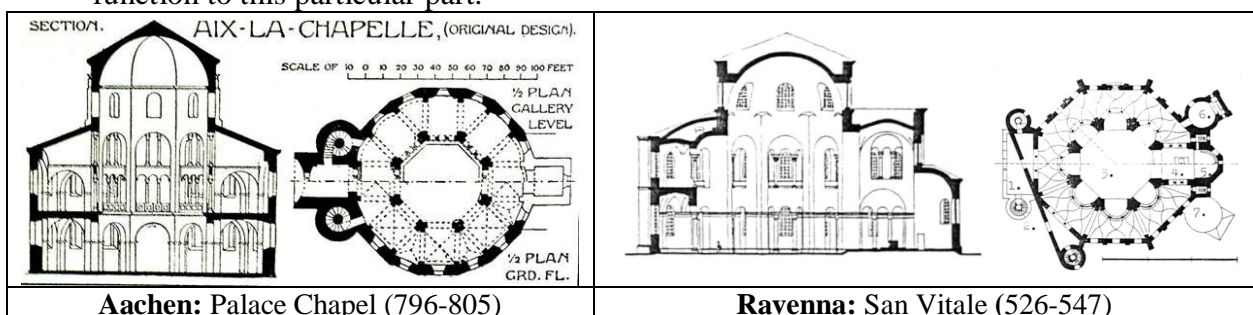
*Charles the Great supported the Latin Church represented by the Benedictine Order that has of Italian origin. The monks brought all the known Early Christian temple-forms with them: as the large, one aisled transept of the City of Rome was useable for them, they applied the memorial basilica as a monastic church (Fulda); the other memorial type also appears with the ambulatory (Corvey). The real 'novum' in this Benedictine Missionary Architecture is brought by the church of **Centula**: the load-bearing structure is coordinated according to both horizontal directions. The plan is coordinated according to a quadratic grid system. The basic element is square. This grid appears for the first time in the design of a monastery from St. Gallen, originating from Rechenau. They all applied the westwerk with all of its functional elements.*

- Fulda Abbey Church (744, 790-819, peristylium: 937-948) was totally rebuilt, its Pre-Romanesque form is known from archaeological excavation.
- Corvey Abbey Church (822-848) in spite of its transformation at baroque times its westwerk survived.

| Fulda | Corvey and its westwerk |
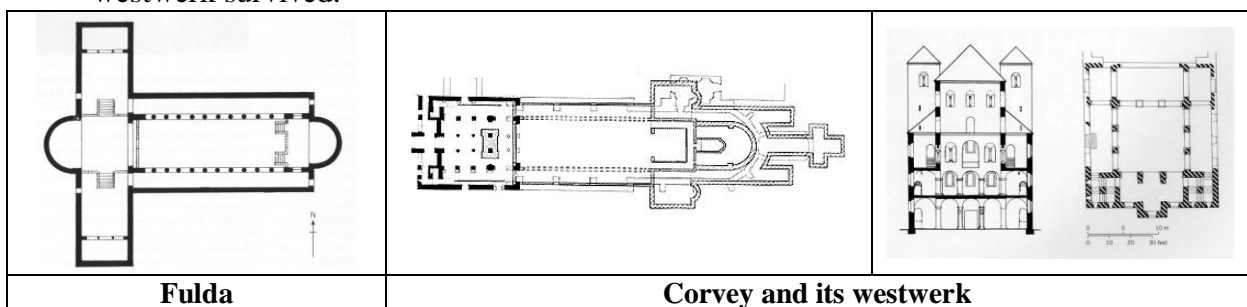
- **Centula S. Riquier Abbey (790-799)** the church of the monastery has a plan forming a Latin-cross, following the models of the Early Christian basilicas of the City of Rome, but at the western parts after the atrium courtyard a four story high westwerk appears with a tower over the quadrate between two slender stair towers.

| Centula | Design of a monastery (St. Gallen) |
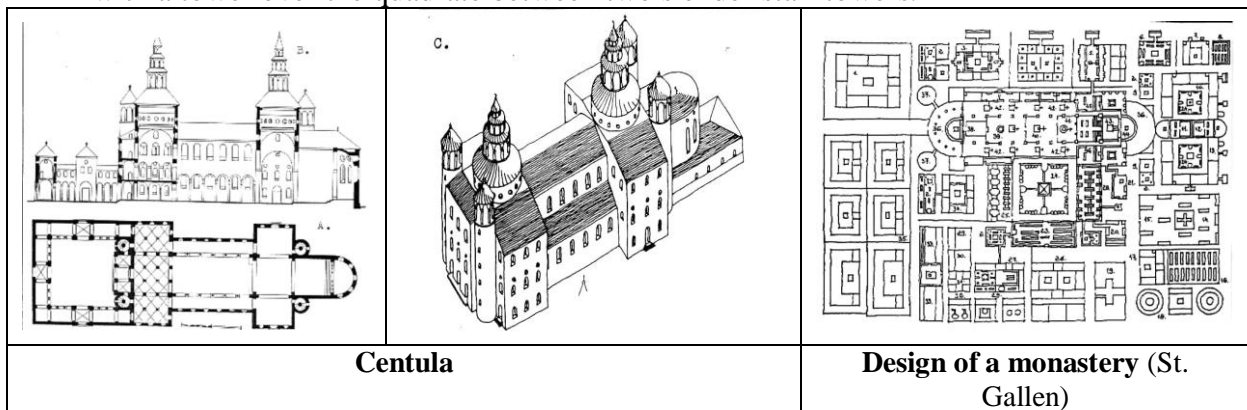
The functional and structural model of the westwerk and the raised crypts with ambulatory of similar function had been the Anastazis space of the former Holly Sepulchre Church.

V/1.b., The Architecture of the German-Roman Empire
After the Treaty of Verdun (843) the Carolingian Empire was subdivided into parts for the sons of Charles the Great, whereas the territory of the German Principalities became the property of Louis the German. These principalities were reunified by Henry 1st.

- The Dynasty of the Saxons (919-1024): after the reunification of the principalities the new empire annexed and conquered further territories (Lombardy, Slavic nations, Denmark). Otto 1st had him crowned in 962. His imperial architecture

was an attempt to revive the traditions of Charles the Great („renaissance of the age of Otto"). In architecture the Carolingianchurch type has changed: instead of the westwerk two different form has come to life. The profane functions of the westwerk (royal representation, barrier against evil) was inherited to the new-born <u>west-gallery</u>; the sacral functions were taken to the <u>west-sanctuary.</u> The latter can be represented by the abbey church of Hildesheim, the former with the Sankt Servatius church of Quedlinburg.

- **Hildesheim** was the heart of this artistic tendency. The **church of St. Michael (1010-1052)** was built by Benedictine monks conducted by bishop Bernwald. Its model is known from a drawing prepared to be a prototype named the „design of a monastery from St. Gallen" (9th century). It has three aisles and two sanctuaries -opposite to each other, with two transepts and four stair-towers. Over the Quadrates there are simple rectangular heavy towers. Below the western apse there is a raised crypt with an ambulatory. (This western part can be derived from the westwerk.) The ceiling is flat and made of wood painted in an ornamental manner. The arcades along the nave are resting on alternating vertical supports: two columns follow a pillar („Saxon-rhythm"). The pillars are signing the intersection point of the constructional grid. Though its clear symmetric composition it can be characterised by its additive mass connections, structural uncertainty. The detailing shows partly antique influence, partly geometric character. Its liturgical space (three apsed sanctuary) makes possible several different liturgies to serve within (Frank-Roman, Ambrosian). The imperial representation was an obvious intention creating this building. The western counterpart of the normal apse formed in an apsidal curve in plan provide an unmistakable sign of that.

Hildesheim: Sankt Michael (1010-1052)	**Quedlinburg:** Sankt Servatius (1070-1129) **Gernrode:** Sankt Cyriakus (961-975, 1051)
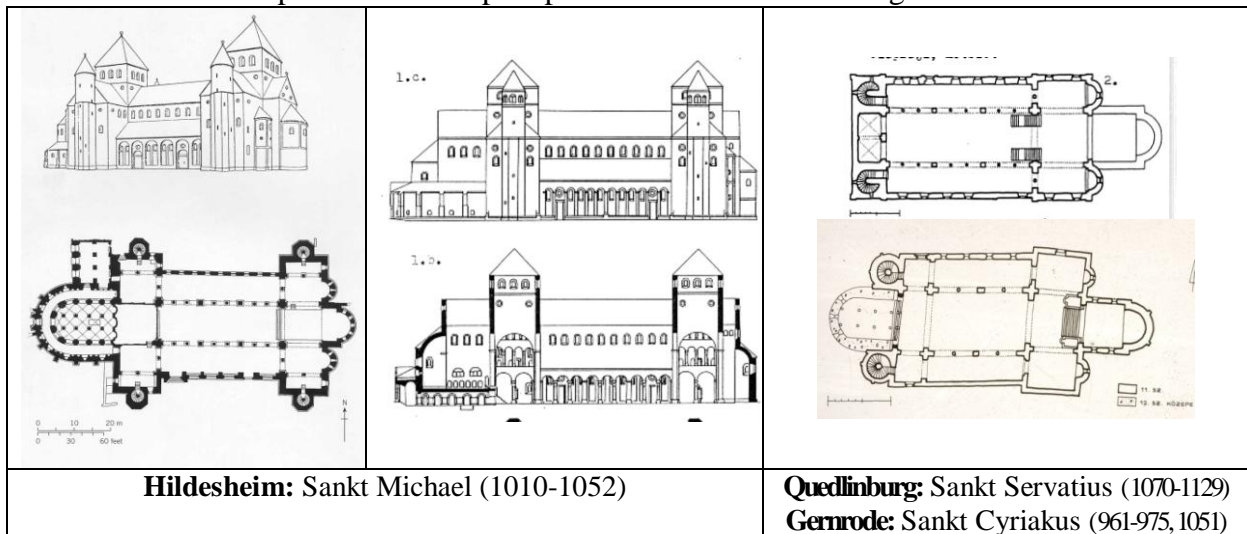
- Reichenau, Obercell former monastery of St. Georg famous for its wall-paintings originating from the age of the Ottos. Its importance is in the fact that it is unique. The walls of the churches at that age were plane, monochrome (white), the characteristic coloration of the architraves is the red-white stripping that gives architectural stress in these architectonic elements.
- Regensburg, St. Emeram church (1010-1052), three-aisled three-apsed Lombard type basilica. with a westwerk-like transverse space at the western end.
- Regensburg, St. Jacob church (Schottenkirche around 1180), the clue that the Lombard influence shown in the case of St. Emeram survived later on.

| **Regensburg:** Sankt Emeram (1010-1052) | **Regensburg:** Sankt Jakob (1180) |
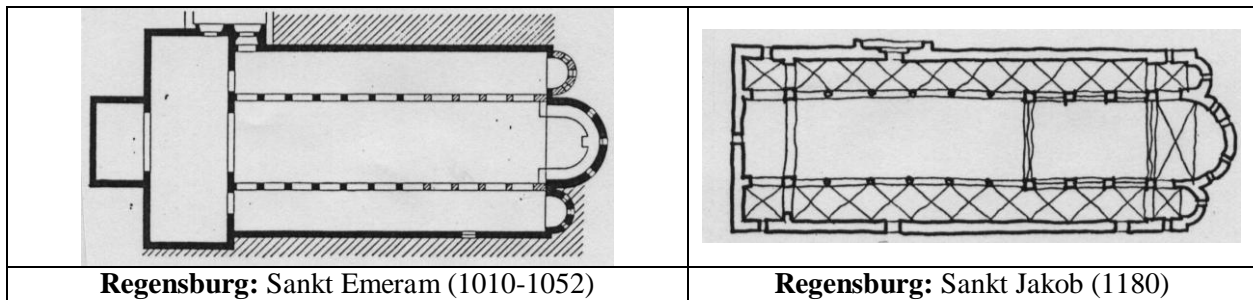
- The Dynasty of the Franks (1024-1117): the struggle for the independent German (imperial) church (investiture) raged but went on with changing success. From the viewpoint of the German architecture it was the golden age of the German Romanesque. The activity of the Workshop of Rhineland was essential; its greatest achievements were the imperial cathedrals -the domes.

- **Speyer, Dom (1025-1106, 1159)**, its present form differs from the usual dom-type (with the double sanctuary) because of the restoration works of the recent centuries executed at the western parts. We suspect it had followed the trends of its own age. In its first building period the ceiling was a barrel vault made of wood. (The investigation of the walls shows that originally it was intended to build a barrel with architraves masonry structure -following the model of the basilica in Tournus- but the span proved to be too large.) Later a new type of vaulting was applied Romanesque cross-vault with edges at the intersection lines of the bays. As the walls had to withstand larger forces from the heavier space covering, we can easily recognise the different periods on the reinforced walls and arcades of the nave. The doorway opening from the nave leading to the so called westriegl formed with orders of arches. This can be the first appearance of this type of gateways. Other parts show Lombard influence: its crypt is situated under the eastern sanctuary; the outside wall-surfaces are articulated by architectonic elements. The dwarf-galleries under the main cornice is a widely spread motive in the northern parts of Italy, otherwise the architectonic character of the elevation, the use of the blind arcades and galleries are typical antique way of decoration originate from the territories preserving these traditions.

| **Speyer:** Dóm (1025-,1065-, 1085-1106, 1159) |
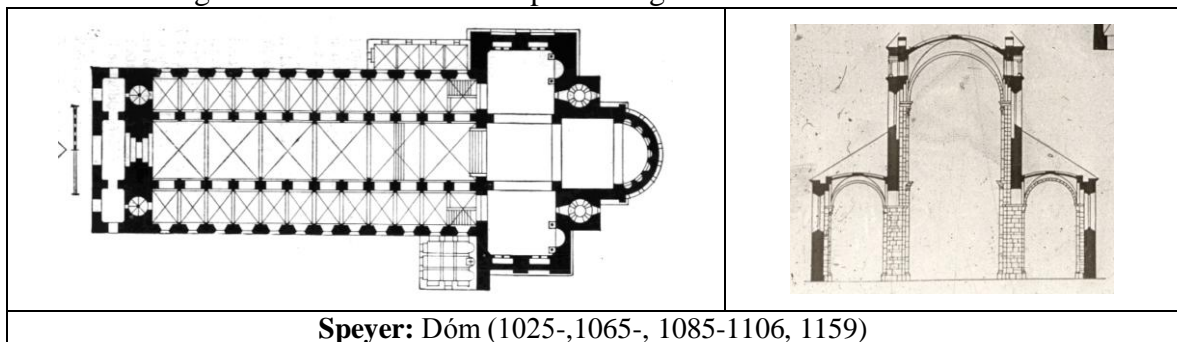
- Mainz, Dom (978-1085, 1239), preserving the authentic type of imperial doms in Rhineland: three aisled basilica with double sanctuary, one real and one false transept and heavy towers at the quadrates and four stair-towers. Its western end was finished later (the polygonal apse with three bays and the transept), the developed cross-vault made of pointed arches originate from the same period. Even in the Frank period we suppose that it had had Romanesque cross-vault. The walls and arcades of the nave are much more plain-like than in the case of Speyer.
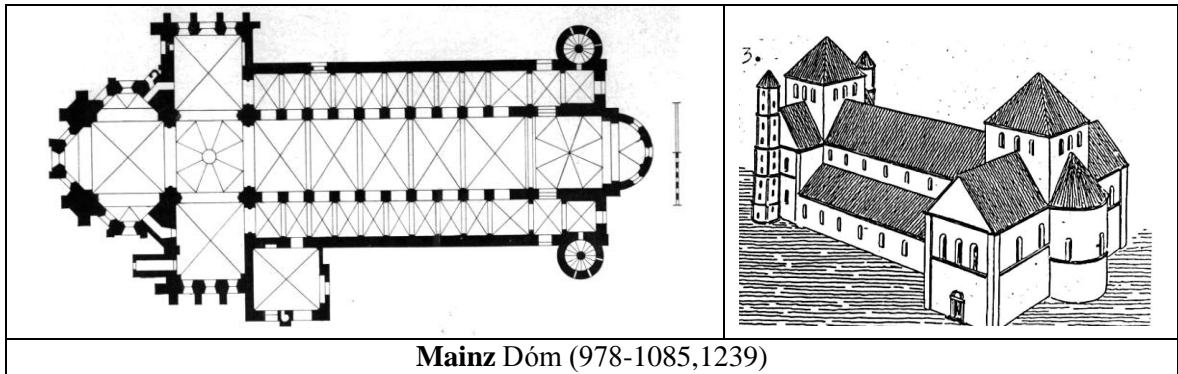
Mainz Dóm (978-1085,1239)

- Worms Dom (beginning of the 11th century-1234), the latest but the clearest imperial dom regarding its structure. The simplification of the eastern apse shows that the liturgy is not demand this space-form any more. The plan of the building survives just as a formal tradition. So it remained double apsed but with one transept (at the eastern end), with four stair-towers and two heavy crossing towers over the quadrate and the bay before the western apse. The eastern ending of the church is a straight ending (rectangular apse) which is usual at the case of Benedictine churches belonging to the building school of Hirsau. This form could be an authentic motive resulted by an immanent development that happened in the second half of the 11th century at the Upper-Rhineland. At the western end of the dom appears a polygonal sanctuary which is a new gothic character together with other gothic detailing such as large rose-windows. But despite of the gothic elements on the facade the architectonic articulation of the whole facade expresses the heaviness of the walls, and the wall-like character of the load bearing structure is stressed whereas the gothic influence should have shifted the structure towards skeleton character. The aisles are vaulted by means of ribbed Romanesque cross-vaults which was the last large invention of the late Romanesque architecture in Northern France (Normandy).
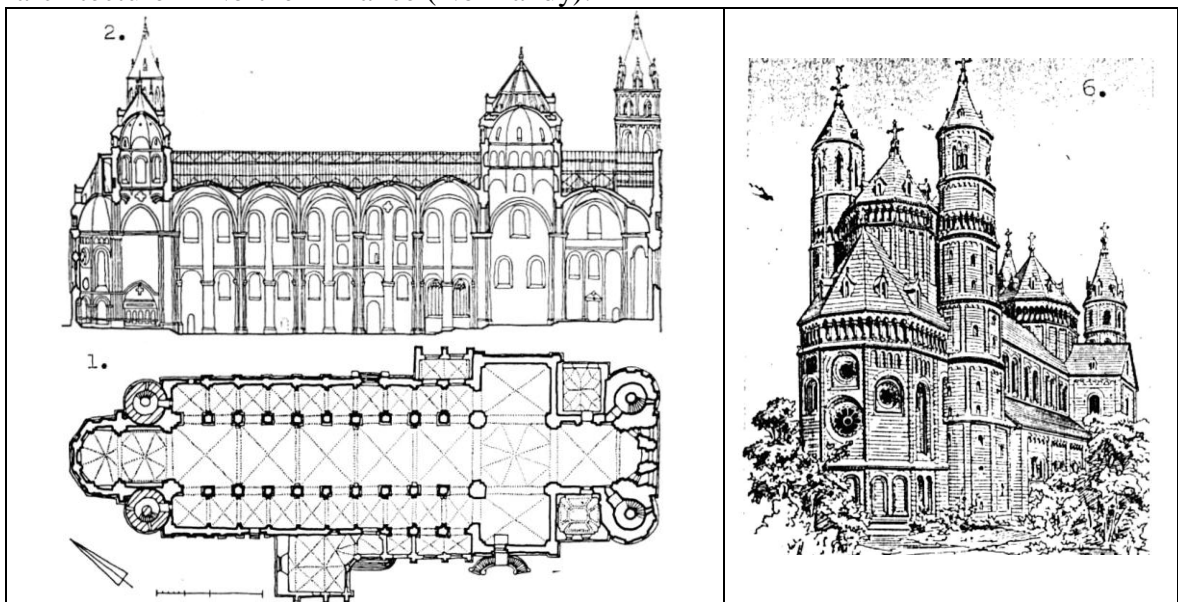
Worms: Dóm (11th C-1234)

- Dynasty of the Hohenstauf Lane (1138-1208, 1212-1254), the imperial power was slowly fading what led to the end and the disunity of the empire. In architecture the influence of the French gothic and the monastic Cistercians' architecture was strengthening. The sculptural decoration getting richer, moreover at some places new type of statues appeared disintegrating from the walls and architectonic elements with the intention to be seen from all sides.
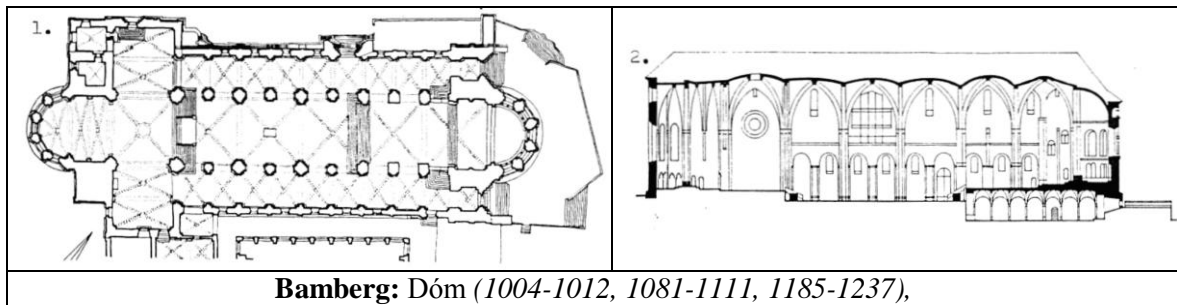
Bamberg: Dóm *(1004-1012, 1081-1111, 1185-1237),*

- Bamberg Dom (1220-around 1250), follows the space structure of the imperial cathedrals of Rhineland. It is a double sanctuaried four stair-towered building with one transept at the eastern parts. There is no cross-tower which can be the gothic influence of the „unification of spaces" concept. The pointed arches used at the arcades and cross-vaults of the building express strong gothic influences in structure creating. Though the overall character of the building remained Romanesque as the walls kept their heaviness the geometric decorations followed the Romanesque German traditions. The detailing of the doorways represents high artistic values on its own standards. The „Bamberg Rider" is among the first statues independently appearing from building structures.
- Naumburg Dom (11th centuty-1280), in its double sanctuaried space a lettner wall appeares to devide the choir from the nave instead of raising the floor. The statues of the donators are remarkable (Eckehard and Uta).

V/I.c., Imperial Architecture of Lombardy

Northern Italy became the part of the German-Roman Empire on the course of the imperial conquer after 919. Earlier Lombardy had been an independent kingdom. Its architecture was determined by three factors: the antique traditions, the Byzantine influence (by means of Venice and Ravenna) and the ancient Langobard resource of forms. From the very early times Lombardy was in an active interaction with Southern German territories. (Regensburg). From the first times the Langobard troops arrived in Northern Italy it is observable that they wanted to pick up the local architectural traditions of the Great Roman Empire. That was encouraged by the royal power (the privileges for the masons and stone carvers secured by king Rotharis and king Liutprand). The space construction of its churches was determined by the liturgy established by St. Ambrose in the vicinity of Milan. The so called Ambrosian liturgy is based mainly on the rites of the City of Rome, but it was alloyed with Armenian and Byzantine elements. Characteristic space form was the so called Langobard basilica type, a three aisled plan with three apsed sanctuary, with emporiums usually without transept. The western elevation is formed by scene (coulisse) facade covering and hiding the real cross-section of the building. The ruling element of the elevation is the cascading dwarf galleries and the Lombard gateway: a canopy in front of the facade resting on columns placed on to two lion figures (Verona San Zeno). This can be a multi-storey construction as in Ferrara and the cathedral of Verona.

- **Milan: San Ambrogio**, a typical Lombard basilica (**11-12th century**) opening from an atrium courtyard (Early Christian tradition). The coordinated (defined) type of cross-vaulting originates from 1128 showing the forms of the German basilicas from the same age. The decoration follows the ancient Langobard traditions: monster figures in the building plastics and the ornamental motives (three veined plait work).
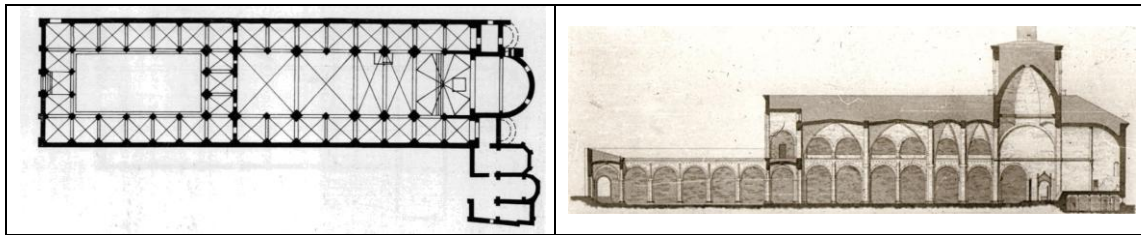
Milan: Sant' Ambrogio *(386, 789-849, 1018-1050, **1128-1144**, end of 12th C.)*

- Modena: Cathedral (11th century-1184), similar to the basilica of Milan it is formed with an emporium (side gallery). Under the sanctuaries there is a raised crypt.
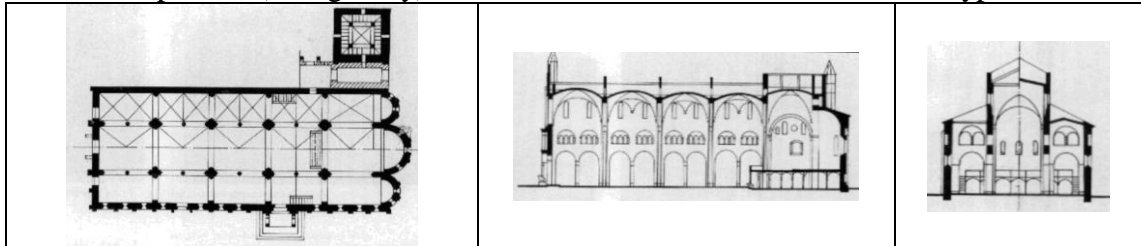
Modena: Duomo *(1099-1130, 1170-1178, 1196-1216.)*

- Verona: San Zeno Maggiore (around 1138), partly independent from the Ambrosian liturgy the Lombard basilica type is applied with a single apse. It was intended to be a vaulted basilica but it was never built so according to Early Christian traditions its roof construction is exposed. In the composition of the masses the campanile (bell-tower)standing alone plays an important role. The western facade is decorated with a **Lombard gateway.**
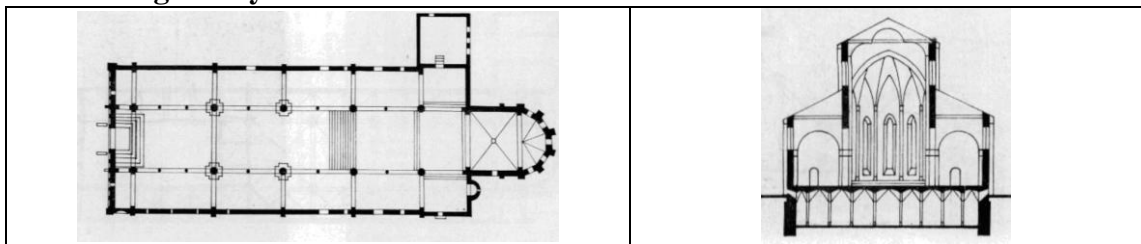
Verona: San Zeno Maggiore *(1123-1135)*

- **Workshops in the vicinity of the cities of Pavia and Como** are forming a special group of Lombard architecture. Their space form differs from the traditional Lombard solution.
- Como: Sant' Abbondio shows special German Benedictine monastic (after the liturgical reform of Cluny and than Hirsau 1082) influences as it is five aisled, five apsed basilica without a crypt but with two slender stair towers at the <u>eastern</u> end of the building.
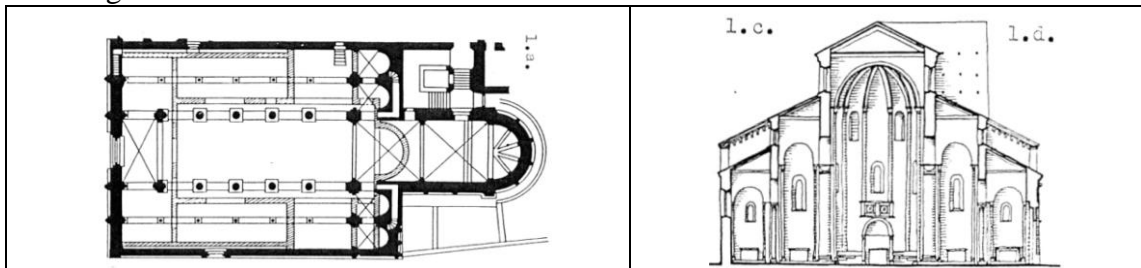
Como: Sant'Abbondio *(1027-1095)*

- Pavia: San Michele follows the space forms of the German imperial architecture: it has a transept and a heavy cross-tower. This basilica was built with an emporium and with Romanesque cross-vaults. The plastic detailing shows firm connections with the

workshops of the Caucasus (Ani, Achtamar). The „flat" relieves and the spreading organic motives originate from the Armenian architecture. This influence can be explained the Armenian bounds of the Ambrosian liturgy, and the presence of Armenian monks in Byzantium, at the Balkan peninsula and in Dalmatia.
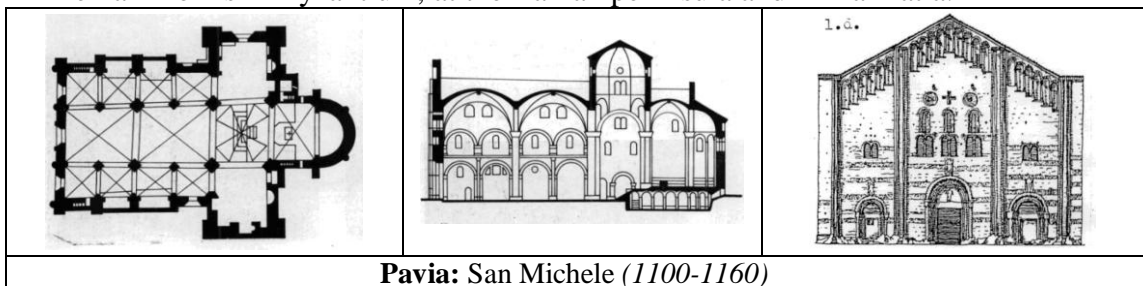
Pavia: San Michele *(1100-1160)*

V/II.   Interregional Tendencies in Romanesque Architecture

V/II.a.. Antique (Latin) Traditions in Romanesque Architecture

The traditions of the Antique Roman Empire still observable in the architecture of Europe. The keepers of these traditions are the descendants of the Roman civilians: but not just the native people had been taken over the Roman culture but the barbarian invaders as well. In a derivated and reduced form this culture was still alive at the age of the 10-12th centuries. Within the territory of the late Roman Empire there were an enormous amount of built antique structure represented the wealth of the antique Romans. These buildings were still in use or existed as ruins. They provided models for the architecture of that age and even more: provided „prefabricated" building material for particular buildings as the people of the medieval times used these remnants of the past as stone mines.

In the birth and shaping of European Christian culture major role was played by the monastic (Benedictine, from Monte Casino) movements propagating the faith. These movements originated from the City of Rome after the middle of the 6th century. These movements naturally brought the architectural traditions of their birthplace with them all across Europe. Though in some regions they had to make sacral architecture digesting the local traditions as well, the common model of them was the Early Christian Basilica of the City of Rome.

So out of the antique traditions integrated in local culture and the travelling antique traditions integrated in Early Christian forms a new character was unfolding spread all over Europe. But this character revealed itself in different ways in different territories.

a1.,   Italy

*<u>The vicinity and the **City of Rome**</u>: the large Early Christian basilicas were still standing and playing their role. There were a little need to build new churches. The development and strengthening of monastic movements made it necessary to extend the churches by monastery wings. The strict monastic model valid for a community of consecrated individuals was applied in the case of secular priestly communities (canonry, chapter of the cathedral) just as in the case of **monastery wing of the papal basilica of San Paolo fuori la Mura** or San Giovanni in Laterano. Their architecture –as far as the disposition concerned- followed the Benedictine model of Monte Casino. The beloved way of decorating the cloisters (ambulatories), was the mosaic like „cosmata" polychrome incrustation. The small stone pieces placed in geometric pattern were applied not only on the frieze as antefixes but on shaft of columns and on paving as well. Otherwise the architectonic articulation of the structures is following the antique models: Corinthian column-heads three-partite cornices, acanthus carvings, Arcus Triumpfalis motives. The basilica of **San Clemente** (and Santa Cecilia in Trastevere) was reconstructed at this time leaving the Early Christian spaces accessible in the cellar. Nice pieces of the cosmata decorations can be seen in the interior on the pavement and on the templon-wall. The later signs the small changes in liturgy but not so radical to change the church forms.*

| **Monte Casino** *(1100-1160)* | **Rome:** San Clemente() | **Rome:** Sta Maria in Trastevere |
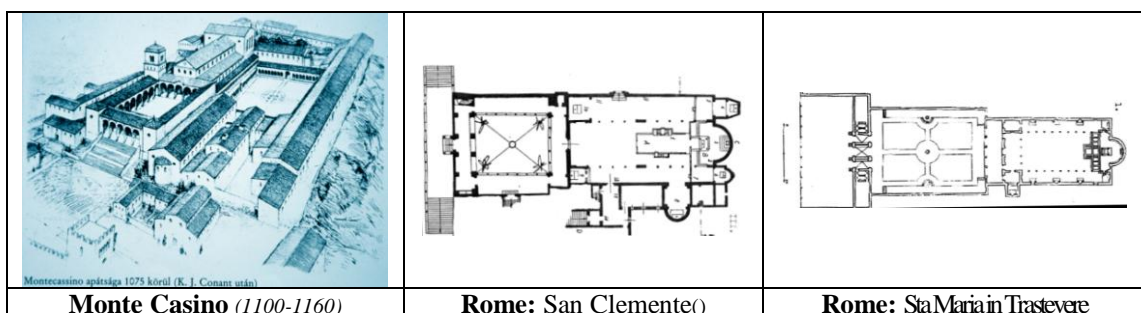
Liguria: the architecture of the area in the 11-12th century was essentially determined by the antique Roman heritage. In its development the close Tuscany and Provance in Southern France played important roles.

- Genova, San Stefano abbey church (12th century, largely renovated), originally a three aisled Early Christian basilica with a crypt under the sanctuary. In case of other churches of the town (Sanctissima Annunciata, San Donato) it was usual that antique column-heads were used secondarily.

Romagna: the relative closeness of Venice and Ravenna largely determined the development of the region: that meant strong Byzantine influence. The space structure of the churches elaborated and enriched as the liturgy of the City of Rome was alloyed with others, in certain times it has got oriental taste.

- Bologna. monastery and church of the Oliveti Benedictine monks (11-12th century), the composition of three different churches: San Stefano or Crucifissimo, San Sepolcro, San Vitale. Between the one aisled hall-church with an undrcruft (San Stefano) and the three aisled basilica (San Vitale) there is a centralised Sapulchere chapel with an ambulatory (San Sepolcro). This last one could serve as the space for the function of Westwerk valid for the Frank-Roman liturgy. The model for the composition is the Holy Sepulchre Church in Jerusalem. The peculiarity of the ensemble is the colourful, patterned bare brick walls.

Tuscany: the architecture of the city-states formed early was mainly determined by the antique influence. The religious reform initiated by monks from Florence became important not only in social but artistic aspects as well. In Romanesque times from the 11th century there were two different artistic schools came to life: one in Florence and one in Pisa and Lucca.

*The **Florentine school** is represented by the church of the Olivetti Benedictine monks: **San Miniato al Monte.** The Early Christian tradition was represented by the formerly built cathedral of Santa Reparata and the Baptistery of San Giovanni. The antique influence was transmitted by this tradition. The church is a three aisled, single apsed basilica with an eastern crypt. The space cover is a visible wooden roof. The capitulate practice modified the normal liturgy that followed the type of the City of Rome. This is obvious while observing the raised sanctuary and the „people's altar". The most characteristic feature of the school is the articulation of the elevation. The interior articulation –which had been used since the Early Christian times- was out-projected onto the outer elevation. Beside the 'spoliums' used in the interior also antique forms and profiles are applied outside, but as a flat plane-like decoration. The very picturesque effect is reached by the polychrome marble incrustation applied in a geometric pattern.*
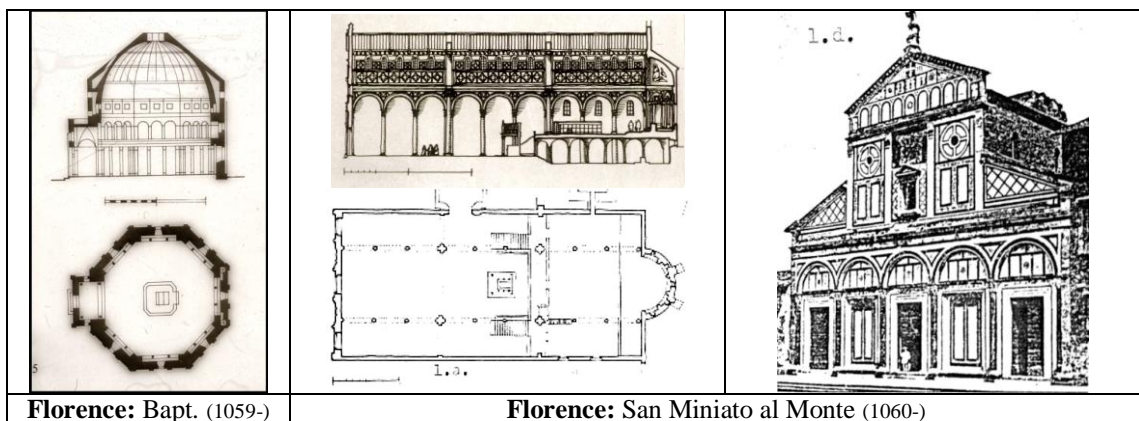
| **Florence:** Bapt. (1059-) | **Florence:** San Miniato al Monte (1060-) |

*The **cathedral in Pisa** (by Busketos and Rainaldo, 1063-1118, 1261-1270) is a five-aisled, Early Christian basilica with a large three-aisled transept reminding us to Syrian pilgrimage churches. The space covering used in this church was exposed wooden roof-construction. The elevation is very picturesque by using plastic architectonic decoration: the marble wall covering alloyed the polychrome incrustation, the partial mosaic details and the dwarf-galleries as architectonic motive together. This latter column-archivolt structure represents the antique influence the most obviously both with its concept and detailing. Some of its architectural solutions -as the elevation of the sanctuary refer to German Romanesque. Both in Pisa (San Michele, San Paolo, and San Francesco) and in Lucca (cathedral, San Michele, San Pietro etc.) there are numerous building represents this school. This school of Pisa and Lucca bears the deep influence of the neighbouring Langobard Romanesque architecture, which is embodied in the details (ornaments and beasts) and the larger scale architectonic systems (dwarf-galleries). We can be suspicious about the origin of the false-arcades dominating both schools of Tuscany.*

| **Pisa:** Duomo (1063-1118,1261-1270) | **Lucca:** San Michele (11-12th c.) |
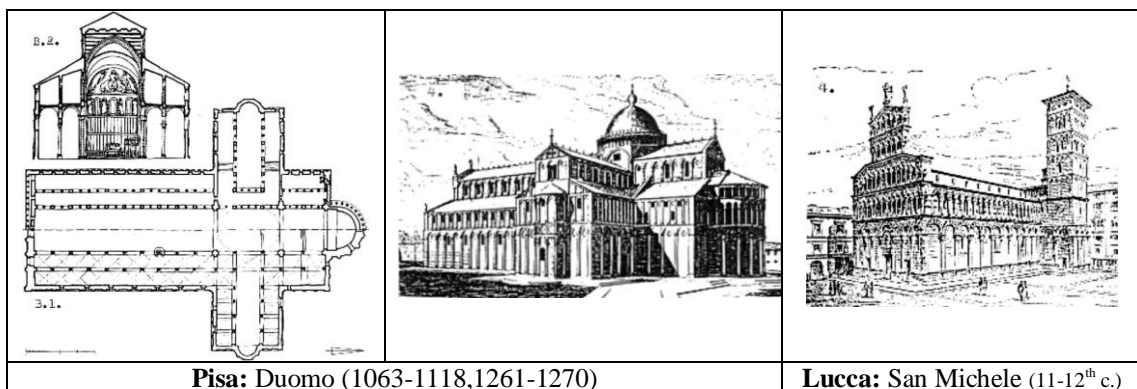
a2.,   **Provance, France**

The domain kept its character of Roman province not only in its name. The French Romanesque architecture developing on several different paths saved this „Latin" character the most. As a very important area of the overseas treading and later the shipping point of the pilgrims and crusaders to the Holy Land this region was always open for Italian and other Eastern influences. The basilicas on this land are three-aisled, rarely with transept. The characteristic space covering is the barrel vault with architrave. There is a very progressive structural invention applied in these churches: the covering half-barrel vault of the emporiums is supporting the side forces of the volt of the nave. This is an intermediate step towards the gothic flying-buttresses. The sanctuaries with an ambulatory were the result of later reconstructions originated from Benedictine pilgrimage architecture. The influence of the antique Roman triumphal arch is essential in the articulation of the main elevation. Both type of this model was applied (with three or one opening). But not only the construction of the elevation preserves the antique tradition: the detailing, the figural friezes are all state their origin.

- **Arles, St. Trophime Abbey church (around 1152)**: three-aisled false-basilica with emporiums. The space covering is a barrel vault with architraves over the nave following the hundred year old Benedictine tradition, and half-barrel vaults over the emporiums supporting the shoulder of the main vault. The proportion of the nave is expanded vertically providing a certain stress for the dark interior. There is a Triumphal Arch with a tympanum covering a single opening built as the main Western gateway representing the Antique influence. The tower is a lone-standing, campanile type separate building beside the church following Italian models.
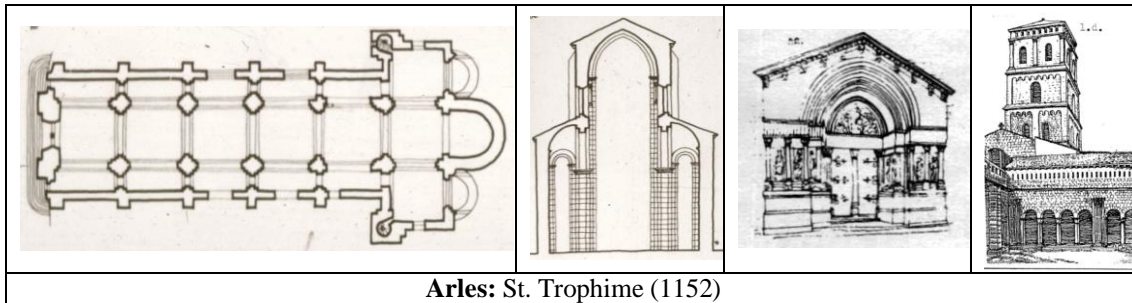
Arles: St. Trophime (1152)

- St. Gilles, Abbey church (1116-1150): a similar space structure with a Gothic French sanctuary. The antique influence can be seen on the Western facade also in the case of the Gateway. It is a Triumphal Arch with three openings ruling the elevation. The short Western towers are connected to the gateway quite loose. On the gateway and on the monastery wing there are nice figural decorations of antique origin. Similar architectural solutions can be found on other churches of Provance - in Montmajour, Viene and Lyon - but as a reduced version. In the case of the latter two there is an expressed Western tower in a central position.
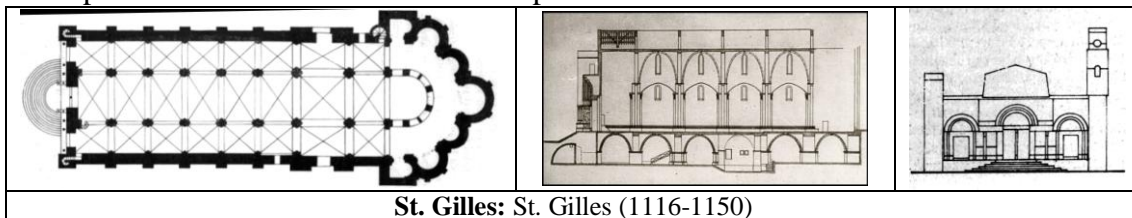
St. Gilles: St. Gilles (1116-1150)

a3., Germany

Among several towns founded by the Romans it was Köln -Colonia- that kept the most from its antique traditions. The churches are the true representatives of the High German Romanesque but there are some aspects showing antique influence. In many cases not definite antique elements are keeping this tradition, but the l a c k of German Romanesque elements calls the attention to search for reason. But this architection influenced the Imperial Workshop of Rheinland, that the effect of this had an imprint on the Langobard architecture as well (Como: San Fedele).

- **Sta Maria im Capitol (1040-1049, 1065)**, in its present form the church exists after the total reconstruction of the 20th century, but it can be regarded authentic. It was built in the former Capitolium hill and follows the form of an antique „cella trichora" in plan. The three apses are projected into three directions and there are ambulatories around them. The side extensions substitute the transept meanwhile providing the space an expressed central character. This form resembles the sanctuary solution of the 6th century reconstruction of the Holy Nativity church in Bethlehem. To this composition of the sanctuary a three-aisled basilica is connected. The aisles and the ambulatories are covered with cross-vaults, the wings with barrel-vaults. The nave was originally covered with a flat wooden ceiling, but later it was vaulted. Except the plan of the building there is nearly nothing where antique tradition prevailed: maybe the proportion of the interior possesses certain Italian atmosphere, or its centralised character, or the consequent use of the „column-archivolt" motive. From the other hand all other parts of the building represents Romanesque architecture. Just the lack of the several stair-towers and the cross-tower makes us alert observing the exterior to find reasons. The articulation of the facade shows us the unfolding high Romanesque. The appearing new elements like the architectonic proportioning (wall-pilasters, wall-

columns, arcading cornice) signs us the initiation of the so called „Rhine workshop".
This is the source where the large Imperial Doms proceeded.

Köln: Sta Maria im Kapitol	**Como:** San Fedele ()	**Köln:** St. Martin(690, 11th c.)
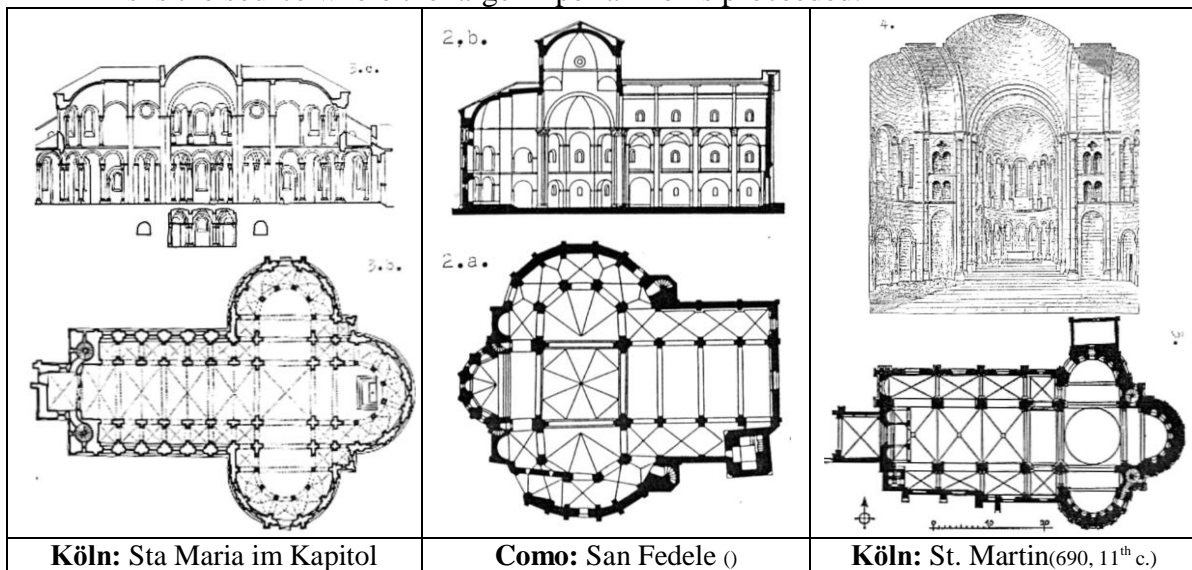
- Sankt Aposteln (first half of the 11th century, Eastern end: after 1192), the church of the Apostles followed the model of the Sankta Maria im Capitol in plan.. But it shows a developed form of the mass composition with its stair-towers and cross-tower that provides much „familiar atmosphere" in a German context. The proportioning of the facades is representing the architecture of the Frank and the Hohenstauf Dynasty. The form of the Western tower unusually shows some gothic gestures.

Köln: St Gereon (4th c., 1067-1069) **Köln:** St. Aposteln (872, 1172-1220)	**Köln:** St. Aposteln (872, 1172-1220)
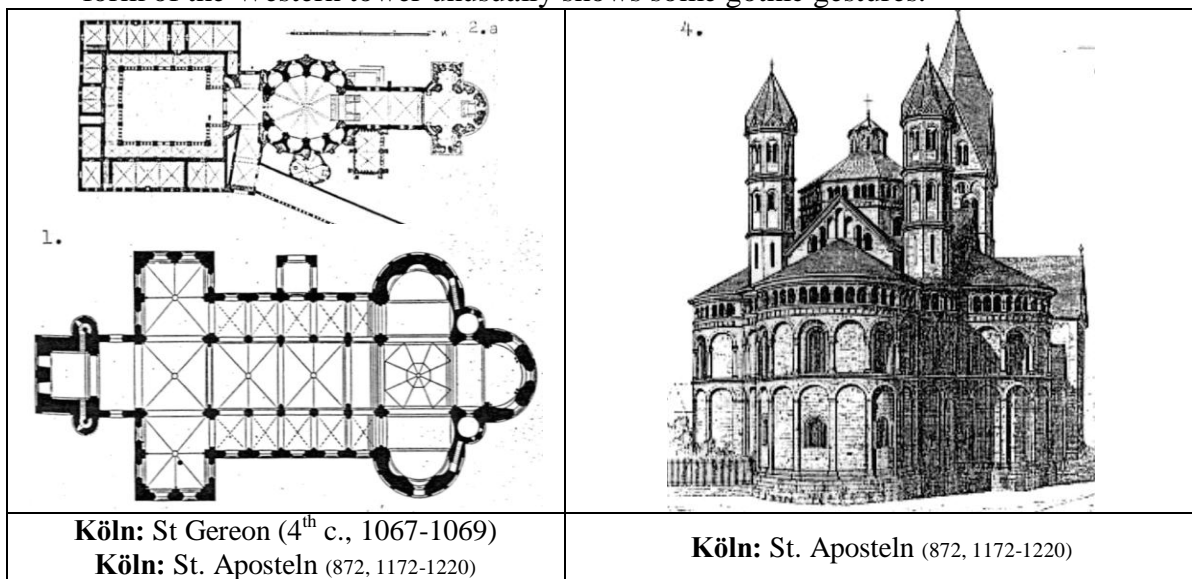
Other churches in Köln can hold obvious antique traditions worth mentioning like St. Martin, St. Gereon, and Sta. Cäcilia.

b.1.,   Venice and the vicinity

The intensive peopling after the Hun attack in 452 was followed by an economic rise of the territory. The Romanised Venets of former Etruscan origin settled on the isles of the lagoons. The second larger destruction of the dry lands during the Langobard invasion in 568 the population of the marshy lands multiplied. In Justinian times this region was under Byzantine authority - centred in Ravenna. The first Byzantine influence of the architecture arrived through Ravenna. The first Episcopal centre was established (moved from Altino) on the Isle of Torcello. As the Byzantine authority faded and the Frank attacks got more frequent the political power of the lagoons moved towards the centre Venice began to rise as the Queen of the Sea from around 811. Long distance sea trade formed the base of its strength, and made Venice one of the world's leading powers by the turn of the millennium. This „overseas" shipping provided a colourful variety to its own culture that was mostly inspired by the still existing and close empire: Byzantium.

- **Venice, San Marco cathedral (836, 976-1094, 13thcentury)**, eight years after the arrival of the body of St. Mark the Evangelist that had been stolen from Alexandria under Muslim authority, the first cathedral has been standing already. Scientists are debating about the actual plan of that building. Some states it followed the model of Sanctissime Annuntiata basilica on Torcello: with three aisles, one apse and a narthex that has been familiar in Ravenna for centuries. On the bases of recent excavations others say that even the first cathedral followed the model of the church of Hagioi Apostoloi in Constantinople. However the first building was burnt in 976. The rebuilding process took its time just when Venice arrived at the peak of its political power in 1063. Not just the space construction but the detailing and the internal decoration show authentic Byzantine origin. Despite of the true glass-mosaic pictures covering almost the whole internal surfaces, the illusionist effect of the light is missing. Though the domes were raised in the 13th century the interior of the building is almost dark -as in case of Early Christian churches. Though the heavy pillars are pierced through by intersecting openings, they remained visible skeletons of the structure. The detailing is a nice collection of masterpieces of Byzantine forms. Most of the column-heads on the western gateways are brought (stolen) directly from Constantinople - none of them is similar to each other. The colourful mosaic-like stone (very likely to „Cosmata") paving placed in various geometrical pattern can be regarded unique in its own field. Almost every tool of Byzantine architecture is used on this building but the Byzantine spirit and sophistication is missing.

Venice: San Marco (1063-1073,)	**Torcello:** Sta Fosca (639-1008)
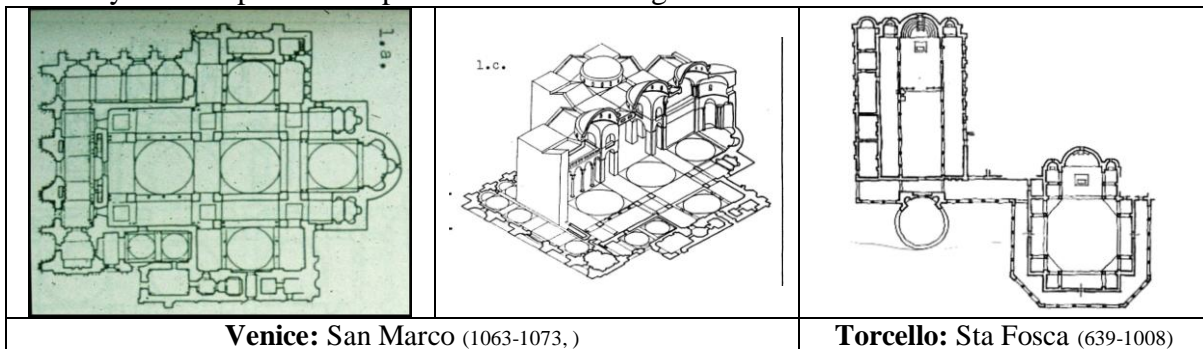
- Torcello, Santa Fosca (12th century), crosswise church with angle trumptes and a polygonal ambulatory, following the model of Byzantine forms from Morea to Macedonia. The church has double character: it is centralised, octagonal on the outside,

crosswise as its mass concerned, but directed, longitudinal in the interior forming a three aisled basilica. A good representative of the mixture of different influences but still coherent in style.

b.2., Southern France

The appearance of Byzantine forms in Northern Italy brought the mysterious Eastern culture closer to Western Europe. By means of continental trade the Oriental forms travelled westwards. Not only commercial connections provided source for this transportation of cultural achievements. The crusades organised by Western European kings led to the Holly Land touched areas of Byzantium. The crusaders were brillianced by the sophistication and wealth of its culture and tried to bring the forms (sometimes the materials itself as well). That made possible that space constructions of ranged domes appeared in Southern France in the 12th century.

- Fontevrault, Sainte Marie Abbey church (1110-1119-), To the usual 12th century abbey church East ending there is a Byzantine range of domes attached forming a lone nave. The domes are resting on pendentives and the whole skeleton of the building is exposed by showing the broad-stone texture of the masonry.
- Anguléme, Saint Pierre cathedral (1120 -'30 -), range of domes along the longitudinal axes, following the model of the Fontevrault abbey church though the East ending is simpler and the transept is modified. It has the same interior, the same skeleton with the same surface texture.

| **Perigeaux:** St. Front (1120-) | **Angouléme:** St. Pierre (1120-1130-) |
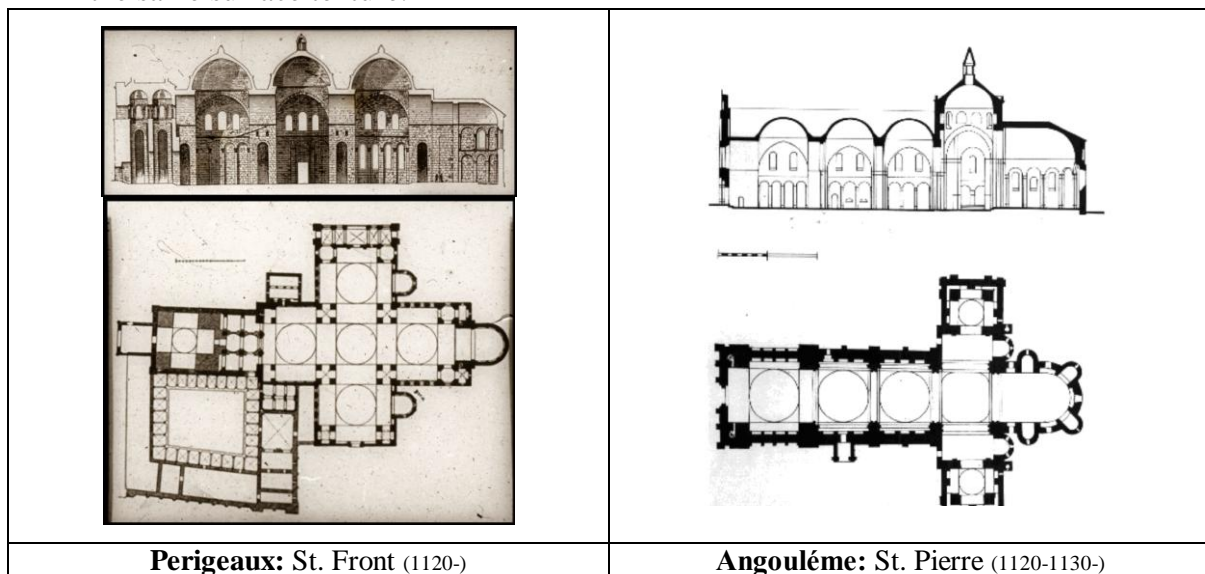
- **Perigeux, St. Front church (1120-),** crosswise (Greek cross) church with five domes following the archetype of Hagioi Apostoloi in Constantinople. The plan is so similar to the San Marco cathedral in Venice that the direct influence is obvious. The detailing is restrained, almost just the architectonic elements provide any kind of decoration. Only the structure of the space was taken over from Byzantine architecture. The lack of the decoration expresses its bare, skeleton-like character.
- Poitiers, Sainte Hilaire (1130-), the plan of the building is unique in its own field: the three aisled basilica with the usual 12th century French East ending became five aisled by creating a new pair of support line in the original nave shortening the span of it. The narrowed nave is covered with dome-like cross-tower-vaults as the fading reminiscence of the Byzantine sophistication of building space structures.

V/2.c., Monastic and „Pilgrimage" Architecture - Benedictine Romanesque
The short summary of Early Medieval Christian monasticism:

After the turn point of Constantine the Great regarding the handling of Christianity in 313, and the decree of Theodosius the Great in which Christianity became the official religion of the empire, lot of the ancient Christians were afraid of the fading of progressive social role of the faith as Christianity became the part of the official mechanism of the state. They turned from the newly emerging circumstances protesting by spontaneous eremitism - actual walking out of the society. The first organised form of hermitism was the coenobitic community of Pachomius on the Isle of Tabennis in the River Nile in 323. Shortly then it was St. Bazileos the Great (330-379) worked out the first constitution -the collected rules of daily life- for the monks of Eastern Christianity. In the 5th century Augustinus Aurelius (St. Augustine, 354-430) coordinated (canon) the dwelling of priests together („joint chapters" lifestyle). St. Benedict from Nursia (480-547) established the Benedictine Order in Italy on the hill of Montecassino in 529. In the propagation of Faith in the British Isles the mission of St. Columbian played an important role. Their Eastern origin provided strong oriental influence (Syrian) in Western Europe. They spread their activity towards the continent from 575, but their customs were solved in Benedictine practice.

The preliminaries of pilgrimage:

Travelling to cultic places (in the Holy Land), visiting secret relics was usual right after the turn point in 313. The first Palestinian Basilicas (in Bethlehem, Jerusalem) were built to serve the pilgrimage function as well. The Nativity cave and the so called „grotta-type" arrangement in Bethlehem became the model for the later crypt-type solutions, and the so called „anastasis-space" in Jerusalem in the Holy Sepulchre Church became the model for the later form of ambulatory corridor around a sanctuary. There were pilgrimage churches built in Egypt and Syria over the tomb of saints and ascetics (Abu Menas, Kalat Siman). The idea of pi1gramage centres under monastic management was born in North Africa.

Having started the activity of Mohamed (571-632) and the start of Muslim movement (622) the pilgrimage towards the Holy Land almost ended as Jerusalem and its vicinity became under Islamic authority (As a matter of fact not the invasion, but the unstable circumstances (Vandal then Norwegian and Arabic pirates could cause the dramatic reduction of pilgrimages from time to time.). But the need for such way of atonement remained. The turn of the millennium -the awaiting of the End of the World- raged this lust higher. The strengthening of the Byzantine Empire and its dominating control over the Eastern basin of the Mediterranean Sea, secured the routes towards the Holy Land during the 10th century. The growing financial power of the West-European ruling class made them capable to take several year long 'excursions'. The congregation of Cluny realised the interest concentrated on pilgrimages, so they organised these routs. But the ever raising life standards opened the possibility (and even the need) for this phenomenon. Instead of expensive overseas travelling only available for the rich new pilgrimage centres emerged all over Europe reachable for great masses. There were Holy Sepulchre chapels built following the model of the Anastasis space in Jerusalem (as in Cambridge, Bologna, Pisa, Brescia,..). In other cases the tomb of some significant saints provided the possibility to develop there a pilgrimage centre. (One of the first centres were the memorial place of St. Martin -of Pannonian origin, from the City of Savaria- in Tours from 6-7th centuries.) Then Moorish army of Geb el Tarik was fighting in Hispany in 711, that is why this area was the crashing piont of the spreading danger of Islamic intervention. The unfolding „Moor-killing" cult of St. Jacob the Evangelist represented the

*consequences within the Christian Church of the anti-Arabic „reconquist"
movements. Not only a pilgrimage centre was formed over the tomb of the saint
in Saint Jago da Compostella but a whole range of pilgrimage routs came alive.
In the 11th century from all over Europe there were organised pilgrimage routs
heading to North of Spain. Along the routs a characteristic pilgrimage-church
type had been developed mostly under the management of Benedictine
monasteries.*

Pilgrimage-church type:

*a three or five aisled basilica with a transept that has three aisles. The Eastern
ending is forming the so called „French-sanctuary" -there is an ambulatory
around the sanctuary and there are radiating chapels, apses cornicing it
projected outwards. With correspondence to it the mass composition is cascading
as the following steps show: chapels, ambulatory, sanctuary, nave, cross-tower.
(The first architectural composition of walking around the object of the cult
originates from Jerusalem.) This type was spread mainly in Spain and in France.
Later it became the model for the sanctuary solution of the Gothic cathedrals.*

- **Sant'Jago da Compostella** Benedictine abbey and pilgrimage church **(1075-1125),**
three aisled basilica with a heavy three aisled transept. There is a pair of Western
towers at the main facade (not reaching the height of the cross-tower) with a so called
„pilgrimage gateway" (masterpiece of Master Matteo) that has become the model for
such entrances: it was formed of orders of arches and jambs and decorated with jamb-
figures, there is a mullion dividing the opening into two making the divided traffic
possible. The internal space is rather dark as there is an emporium but no clerestory
windows in-lighting the church. Most of the light is coming from the cross-tower. The
space is covered by architraved barrel vault. The Eastern end was formed as a French-
sanctuary.

| **Sant'Jago de Compostella:** Pilgrimage basilica (1075-1125, 1168-1188) | **Toulouse:** Saint-Serenin (1080-) |
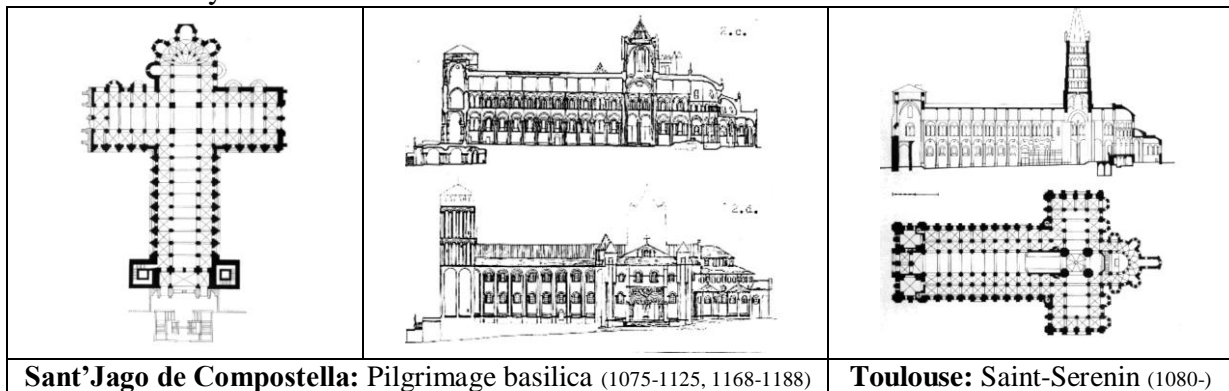
- Toulouse, Saint Sernin Augustine Provostship (1080-12th century), its space structure
follows the Sant'Jago solutions but in a more elaborate way: the body of the church has
five aisles, the breathtaking cross-tower more decorated and higher.
- Such kind of Benedictine pilgrimage churches were built in other territories of France
as well : in Auvegne -Clermont-Ferrand: Notre-Dame-du-Port (11-12th century), in
Aquitany -Poitiers: Notre-Dame-la Grande (1100-13th century). The most important
area of its spreading was Burgundy.

The Burgundian Benedictine Architecture

*The Romanesque architecture of the principality was essential regarding European Late
Romanesque, and had an important effect on the emerging Gothic. The architectural
character of the territory was determined by the building activity of the monasteries
belonging to the Congregation of Cluny. This movement within the Benedictine Order*

aimed at reform ideas. As a matter of fact there is always a reform movement from time to time in monasticism and all of them want to return to the original constitutional ideas. During the 10th century the movement that had been emerged for seizing domination got additional meanings. The order was so busy with profane activities that the secularization process started. The reform of Cluny (909-910) wanted to return to the original Benedictine ideas: „Ora et labora" -Pray and work. But they emphasized the order of praying to turn their faces towards The Heavenly Father. Under the shadow of the terrifying mood of awaiting for the End of the World at the turn of the Millennium it was the Benedictine Order who helped the prosperity of the survival. So they accepted the wealth of the prosperity (the production of secularization), but urged to direct it towards consecrated activity. The Congregation of Cluny achieved significant political prevalence during the 11th century. (By the turn of the century more than 2000 monasteries had been joined to the movement.) Their architectural aim was the propagation of the thought of the „Triumphal Church" manifesting even in profane representation. Most of their buildings were built in the style of pilgrimage architecture but as its structural development concerned they were more progressive not hesitating to use new inventions and more adequate forms. Few of its elements (pointed arch, ribbed cross-vault, use of buttresses) projects the structural way of thinking of the Gothic period.

- **Cluny, Arch-abbey (1088-13th century)**, the building of the so called 2nd church (948-998) became the model for European Benedictine churches (Caen, Hirsau…); and it was the pioneer of the large spanning vaulting. The building of the so called 3rd church began in 1088 and continued till 1131. It was the largest church of its own age. Its space organisation is following the pilgrimage type: but with five aisles, two transepts and numerous towers. The cascading mass formation still prevails. Numerous chapels appeared not only around the sanctuary, but at the Eastern side of the transepts. The space cover was pointed arch barrel vault. The emporiums were substituted by false-triphories. The Benedictine architecture at that time could solve the problem of side support at great height as well. The height of the keystone in the nave in Cluny was 29,50 m.) The very high shoulder of the vault in the nave was supported by semi-barrel vaults over the emporiums. Nevertheless the only reason for the existance of these side galleries was this structural function.

| Cluny II. (948-) | Cluny III. (1088-1130, 1335-1370) |
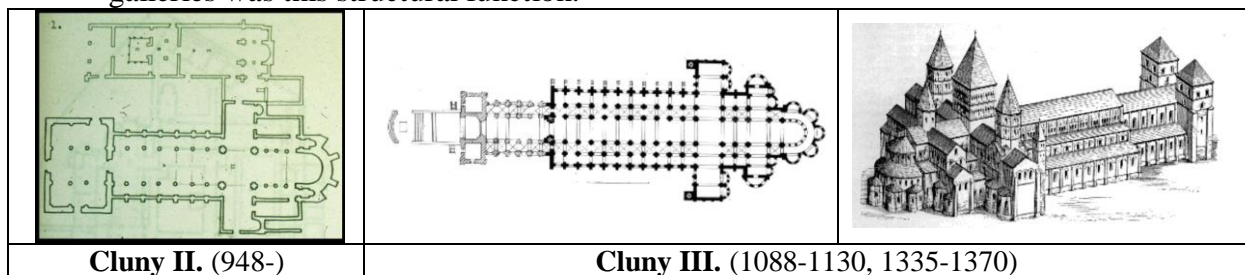
- **Vézelay, Sainte Madeleine (1104-1140),** a real pilgrimage centre, following the prototype in architecture. Because of the rebuilding of the sanctuary in the Gothic period its plan is modified: the transept has shortened, the choir has five aisles and the cornice of the radiating chapels has melted together. The well developed structural solutions direct towards Gothic period. The nave has been vaulted by means of Romanesque cross-vaults for the first time in history. The nave is very much in-lighted unusually. The emporiums are missing and giving their place for the clerestory windows. The shoulder of the vault of the nave is supported by series of flying buttresses appearing for the first time in history. The pilgrimage gateway is a nice example of this type. The architectonic decoration of the interior is worth mentioning.
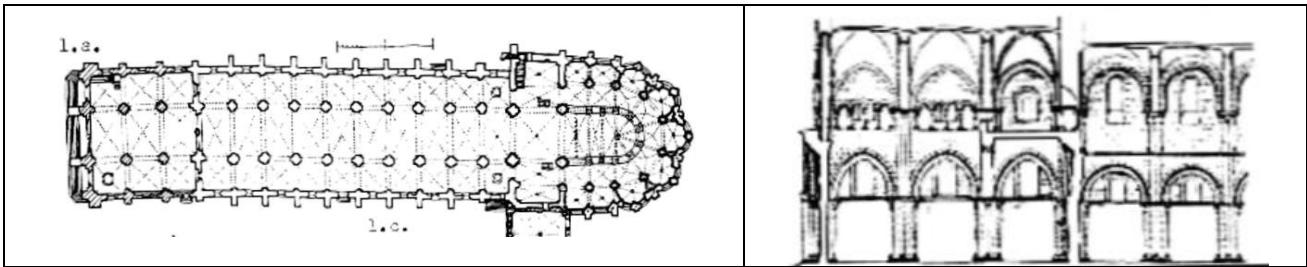
Vézelay: Saint-Madelaine (1104-1140)
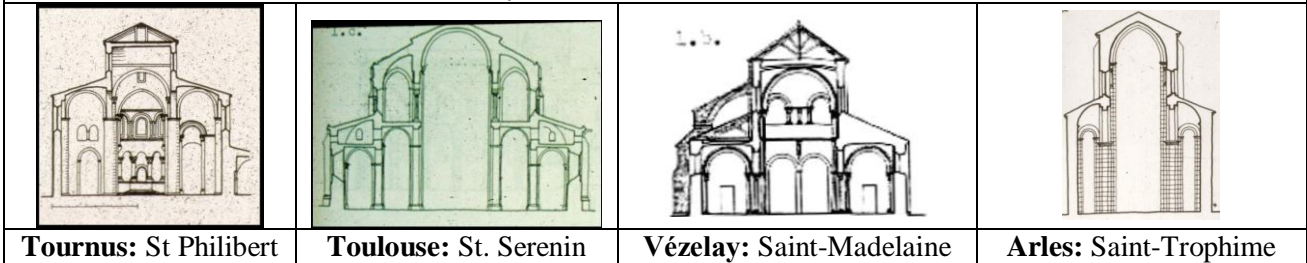
| **Tournus:** St Philibert | **Toulouse:** St. Serenin | **Vézelay:** Saint-Madelaine | **Arles:** Saint-Trophime |

The development of vaulting over large spans (nave) generated different solutions. The main problem was to support the lateral-forces emerging high above at the shoulder of the vaulting of the nave. The application of transversal barrels resting on archivolt over the nave (Tournus) was good from load-bearing viewpoint, as the barrels can support each other longitudinally, but they spoil the interior. The widely spread solution was the application of the semi-barrel vault above the side-galleries (Toulouse). But it was a disadvantage that the galleries prevented the light get inside. For this problem there were two solutions: to collect the forces upon points by means of the appropriate vaulting – Romanesque cross-vault (Vézelay), or to reduce the horizontal component of the support forces by means of the appropriate form of the vaulting – pointed arch (Arles, Cluny, Paray-le Moniale).

- Paray-le Monial, Notre-Dame Abbey (XIth century, 1090-XIIth century), its builder was Abbot Hugo in Cluny, and the construction was started right at the same time with the „big brother". Lot of its solutions can be regarded as the prototypes for the Cluny building (pointed arch, false-triphorium, Pilasters with cannelures).
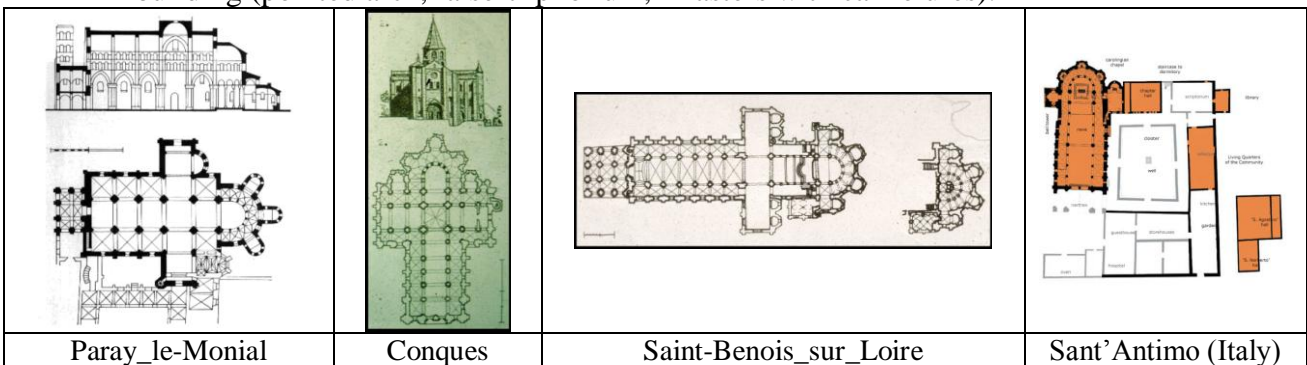
| Paray_le-Monial | Conques | Saint-Benois_sur_Loire | Sant'Antimo (Italy) |

- Saint-Benoît-sur-Loire, Saint-Benoît Abbey church (1070-12th century), with the monastery churches of La Charité-sur-Loire and the Saint Philiber in Tournus they are the direct precedents of Cluny III. It is interesting, that it has a crypt despite of its French sanctuary.

V/2.d., Cistercian Romanesque Architecture

This order came to life as the reform movement of the Benedictine Order in 1098, when the monks led by Abbot Robert withdrew from Molesmé, a Burgundian monastery. They named themselves after their first settlement at Cistercium - Citeaux. Their aim was to return to the original meaning of the Benedictine "regula": „Ora et labora." In their lifestyle they realised the withdrawal from the worldly life, and emphasized the importance of self-supporting physical work (deforestation, farming). They blew the dust from those well-known monastic

ideas as poorness, humility which seemed to fade in Western monasticism. Their theology reflected the Gothic ideas of the world of chivalry in a sacral meaning (asceticism, cult of the Holy Cross, cult of Virgin Mary). Their architecture is very strict and uniform: the churches are not decorated, missing towers (they might have built slender cross-tower), the sanctuary has a straight ending. The decoration is ornamental (as sprout type column-heads) and geometric; partly originate from the structure itself. Their rules of building were summarised by St. Bernard from Clairvaux. The strict, military-like organisation of the order (fatherly abbeys, filial building up, capitular meetings in every four years) insured the rapid spreading of Cistercian style. The process was so fast that in 1142 a Cistercian monastery was founded in Hungary (Cikádor) which territory was regarded as the farthest Eastern place of Western Christian influence. For the vast majority of Europe the Cistercians presented the Gothic forms. The first period of Cistercian architecture belongs to the age of the Romanesque. The development of later times is detailed in the Gothic chapter.

d.1., Cistercian Architecture in Burgundy

The strict Bernardian architecture of the territory can gain its explanation as the counterpart of the Cluny movement. The five „mother monasteries" had been built between 1098 and 1115: Citeaux (1098), La Ferté (Firmitas, 1113), Pontigny (Pontiacum, 1114), Morimond (Morimondus, 1115), Clairvaux (Clara Vallis, 1115). They were rebuilt from in the course of time, partly has been destroyed (La Ferté, Morimond).

- **Fontenay, Abbey (1133-1147)**, the clearest Bernardian building, the only one remained in its original form. Its three aisled plan forms a Latin-cross with a sanctuary of straight ending and four similar chapels attaching to the Eastern side of the transept. The space inside is a false-basilica with pointed arch barrel vaults articulated by means of architraves of the same type over the nave and transversely positioned small pointed arch barrel vaults over the aisles. The decoration is very simple mostly geometric. As the Christian meanings could not been emphasized by means of Iconography (figural carvings), Cistercians had to choose more sophisticated ways to express symbolic meanings. Their symbolism is rather abstract manifested either within the form of the load-bearing structure (pointed arch, crosswise plan), or inter-positioned by the Holy Light itself. In the dark interior either the form of the windows, or their number holds secret meanings. The rose-window represents eternity and the Holy Virgin at the same time (the Creative Power could get into the small world of the church through this opening). Not only the church but the whole monastery was arranged in a strict order. The functional rooms were arranged around an inner courtyard that was corniced by an ambulatory arcaded towards the courtyard. The church was situated on the Northern side, the library, the chapterhouse, the guestroom, the side entrance formed the East wing with the common sleeping room -dormitory- in the attic or on the first floor. The workshop of the monks was placed in the corner. The only place that had heating was placed in the Southern wing with the kitchen, the belonging store rooms and the dinning room -the refectorium. Opposite the door of the refectorium there was the well-house as an extension of the ambulatory. There were non educated persons in the monastery, the so called lay-brothers, who could not be priests but by joining to this order they could get rid of serfdom. They worked together with the priestly brothers giving a special democratic character to the order. The lay brothers used the West wing of the monastery with their own refectorium, workshop, dormitory and passages as they were not allowed to enter the enclosure.

Mother monasteries: Citeaux, Clairvaux, La Ferté	Fontenay (1133-1144)	Functional scheme of a Cistercian monastery

d.2., Cistercian Architecture in Provance

Even the very strict Cistercian rules were dissolved in a certain extent in the local traditions of Provance. Beside the Benedictine centres of workshops following antique traditions (Montmajuor) there were Cistercian monasteries following their model. The normal straight ending of the apses changed here, as these are semicircular in plan. By means of their building activity the Provancal Cistercians created their own school. Their influence had its imprint later in Eastern Europe as well (Szentgotthárd in Hungary).

- **Le Thoronet, Abbey (1160-1175),** a false-basilica with three aisles and transept forming a Latin cross. Its main apse -directed to the North(!)- is semicircular in plan the side apses attaching to the eastern side of the transept are semicircular from inside and straight walled from the outside. The architraved barrel vault over the nave is continuous even at the crossing, only the arcade leading to the transept wings are higher, so the transept seems to be rather side extension than coequal. The mass has a cross-tower with a slender spire. Its monastery wing is a close relative of Montmajuor, but the decoration is cooler, simpler.

Le Thoronet (1160-1175)	**Senanque** (1150-1180)	**Flaran** (1151-1180)

- Senanque, Abbey (1150-1180), has similar solutions as the latter example. Though it is a real basilica the clerestory windows are too small to break the usual Cistercian atmosphere. Its transept is lower than the nave and there is a cross-tower over the domed (!) crossing.
- Silvacane, Abbey (1160-1192,-1230), affiliated monastery of Morimond. Owing to the direct Burgundian connection the plan of the building is quadratic. Its special features

are the ribbed cross vault over the crossing and the asymmetric pointed arch barrel vault over the aisles.

- Frontefroide, Abbey (1157-13th century), in spite of the fact that the original monastery built in the 11th century had belonged to the Benedictine order they became Cistercians in 1142. Because of the strong Benedictine traditions it is the most irregular Cistercian building in Provance. The Latin-cross plan has a high quadratic Choir in front of the polygonal main apse. The side apses are also polygonal ones. The building is a Cistercian false-basilica. The nave and the transept has pointed arch barrel vault, the crossing have been vaulted with ribbed cross vault, and there are Benedictine semi-barrel vaults over the aisles.

d.3., Cistercian Architecture in Italy and Germany – (the rise of Cistercian "half-gothic")

The spread of the fixed vaulting system caused two different line of development in Italy. From one hand the great monasteries of the vicinity of Rome (Fossanova - 1187-1208, Casamari - 1203-1217) has been built of stone following exactly the Burgundian model. The only difference is the rich in-lighting that has been provided by the ribbed cross-vaults. On the other hand the characteristic Italian version of Cistercian architecture emerged as a brick architecture (Chiaravalle Milanese - 1135,1150-1160, Rome-Tre Fontane - 1221, San Galgano - 1218-1300). They are wider lower spaces, the spans of the arcades are larger providing a human-scaled character to the churches.

| **Fossanova** (1178-1208) | **Casamari** (1203-1217) | **Maulbronn** (1210-1230) | **Eberbach** (1170-1186) |
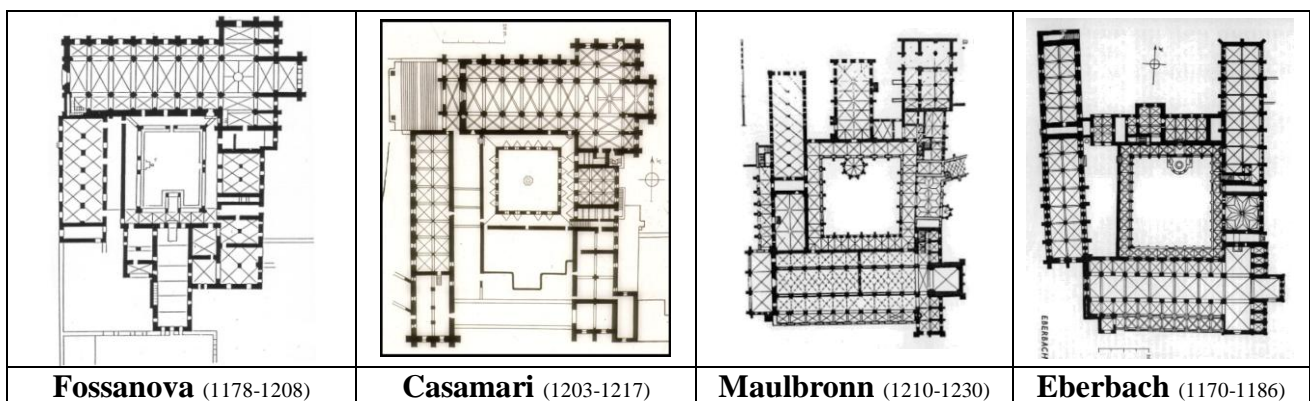
As far as the German development concerned the strict Cistercian rules were dominating the forms. Both regions have got this discipline, together with the first gothic elements transformed according to the Cistercian taste (vaulting, skeleton constructions). The German development was determined by strong Romanesque traditions. The best examples for that are Eberbach and Maulbronn.

V/2.e., Norman (Imperial) Romanesque Architecture
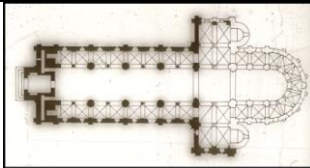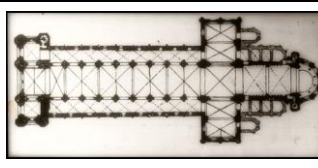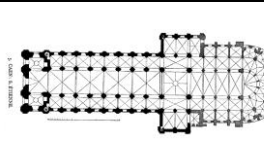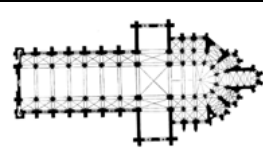
Normandy was the strongest principality in France and had a relatively free political status. The ancient traditions of the Norman people (wooden architecture, shipbuilding, overseas travelling, and colonization) essentially determined both the political and architectural character of the area. To give the „imperial" title for this is not without any bases at all. After conquering North French territories in 911 led by William the Long Arm, they had been trying to conquer the British Isles from the 8th century. It was William the Conqueror who succeeded in cramming under his authority the Anglo-Saxon area in 1066. From 1072 they invaded Sicily and Southern Italy which had been controlled by the Byzantine Empire before. Later they organized an independent principality there. During the 1st Crusade they established a Principality centred in Antioch and played an important role in the policy of the Latin Kingdom of Jerusalem. They

had widely spread commercial connections toward the Eastern territories, they had interests in the Rus of Kiev.

*The Norman architecture was an intermediate phase between late Romanesque and early French Gothic architecture. Its emblematic characteristic feature is the Western elevation with a spire-less, strong pair of towers and three gateways. At the section of the towers (at the former place of the Westwerk) a new Western gallery was developed. Their buildings represent highly developed structural knowledge, I dare to say they initiated the application of skeleton masonry structures in Medieval architecture for the first time. Their developed wooden architecture -deriving from shipbuilding- provided the strong base for this. Wooden barrel vaults with semi-circular rafters are used even in churches at the first half of the 11th century (as in Bernay /1015/, and in Mont-Saint-Michel /1035/). This idea of skeleton vaulting appeared in masonry structures in the form of **ribbed vaulting** both in four- and sexpartite version. They used the skeleton structures within vertical load-bearing walls: flying and normal buttresses (counter fort). These profound changes were signed by the transformation of the inner wall-surfaces; its architectural articulation (triforium) appeared in the case of the walls of the nave at the height of the attic over the aisles. Their decoration is geometric.*

e.1., Norman architecture in North of France

- Jumiéges, Benedictine Abbey (1040-1067), the characteristic Norman version of Burgundian Benedictine traditions: it has a French sanctuary and heavy pair of Western towers with gallery between them. Its nave was originally covered by flat wooden structure. The plan is coordinated according to quadratic construction: there are two bays in the aisles in the section of one bay in the nave. In the articulation of the nave's walls there is an alternating support system applied: there are pillars with semi-circular extensions (half-columns) and single columns between them. Now it is ruinous.

- **Caen, Sainte Trinité Abbey** church for nuns **(1059-1066),** together with its „brother" church, the Saint Étienne they developed Norman architecture contesting with each other. The basilica has three aisles and a transept but its sanctuary is only imitating the pilgrimage type: the ambulatory is just signed by means of columns placed beside the semi-circular wall of the apse. (The plan otherwise follows the model of Cluny II.) There is a strong cross-tower crowning the mass. There is ribbed sexpartite vaulting over the nave but the infillings are not supported by the transversal ribs, because these ribs are just holding partitions dividing normal cross vaults. The walls of the nave are articulated by triforiums (a corridor and an arcade within the width of the wall sickness) and the emporiums are missing.

Jumiéges	**Caen:** Saint-Trinité	**Caen:** Saint-Étienne	**Mont-Saint-Michel**

| Jumiéges | Caen: Saint-Étienne I. | Caen: Saint-Trinité II. | Caen: Saint-Étienne II. |
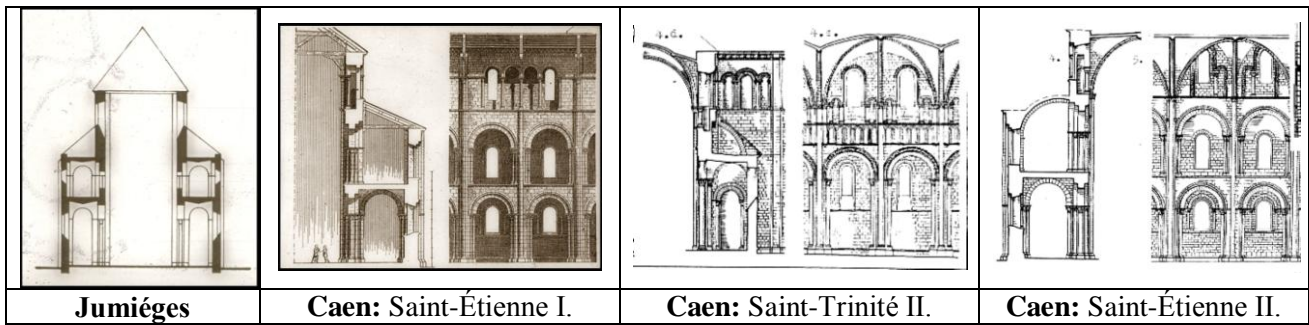
- **Caen, Saint Étienne (1064-1077),** its solutions are the closest relatives of the early Gothic Cathedrals. Its sanctuary is the result of the Gothic reconstruction; the massive Western towers have Gothic spires with pinnacles. The original Eastern ending could have been a typical Cluny II. Type sanctuary (its eastern view must have looked like the still standing building of Saint-Vigor in Cerisy-la-Foret). The vaults over the nave are now real sexpartite ribbed ones, and the arcades of the emporiums are spanning the distances of the vertical supports with a single gesture. Though the clerestory windows are simple lancet windows, the wall around them is formed as in the case of triforiums: the blind wall-surfaces are disappeared.

e.2., Norman architecture in England

The early medieval architecture was determined by the Irish-Celtic traditions. In the territory of England the fusion of the Celtic and Saxon tribes happened in 829. The first Christian missions in the British Isles originated from Oriental regions: Syria, Noth Africa, Armenia. In sacral architecture the traditions of decorative art (manifested in woodcarving and textile) was alloyed with this Oriental influence. (Kilpeck, gateway -ornamental and figural detailing.) The missionary Benedictine architecture has taken over the main role later. The English Romanesque architecture can be subdevided into four parts:

- precedents - scattered monuments, 5-9th century, (See it in chapter IV/2.a..),
- Anglo-Saxon (Pre-Norman) architecture, 829-1066,
- Norman Romanesque architecture, 1066-13th centuries,
- English Cistercian architecture.
- The architecture of the **Pre-Norman** period shows three further parts: the architecture of the independent times (829-1013), the period of the Danish authority (1013-1042), and the Reign of Edward the Confessor architecturally influenced by the Normans (1042-1066).

The first period does not differs from the scattered monuments: small-scale simple buildings with quadratic plan (Bradford-on-Avon). Larger ensembles are composed by addition of these simple elements. This additive character of this Anglo-Saxon tradition remains a special character of the Romanesque period.

The Danish invasion and the confusion following it did not allowed this area to join the European Romanesque trends. The only significant building was St. Edmund's church in Suffolk (1016-1032).

*Under the rule of Edward a kind of „boom" can be observed in building activity. As the king had been educated in Normandy, he brought the smell of well-developed Romanesque architecture to England. Appointing William from Normandy as his heir to the throne he prepared the determined the direction of development. The Octagon in Canterbury (1049), or the church in Sherborn, and the Abbey in Stow show the presence of Saxon traditions in these times. **The rebuilding of the Westminster Abbey** (St. Peter Abbey, founded in 730-740, has been rebuilt by **1065**) was commissioned by an archbishop from Jumiéges,*

providing the correspondence of the two buildings. Though it was rebuilt in Gothic times by means of the descriptions of the Bayeaux Carpet this building can be reconstructed in mind. The Norman strong Western pair of towers appeared with the alternating rhythm of the arcades along the nave. The plan is characterised by an interesting Eastern ending: the five apses are placed in a stepping forward order (with straight outer ending of the apses at the end of the aisles) as a compact version of the church of Cluny II. It was the model for numerous late Romanesque churches in the British Isles.

- In order to enforce privilege for the throne William had to invade England in 1066. Not only the changes but the continuity characterised this **Norman Period** - only the persons changed in influential state and Church positions. The Norman nobles have taken over the ownership of the lands, and almost all of the bishops were changed. The administrative centres of the Church were moved to new places which developed rapidly: Canterbury, York, Rouen as royal properties, Exeter, Norwich, Chester, Chichester, Salisbury and Lincoln as bishoprics. To control the Church that owned one fourth of the country Archbishop Lanfranc -former Abbot in Saint Étienne- reorganised the whole structure: he changed the abbots of all the Benedictine monasteries within six years, and forced the monastic lifestyle for the priestly communities. The so called „old foundations" (Chichester, Exeter, Hereford, Lichfield, Lincoln, London, Salisbury, Wells, York) were under direct archbishopric control, and their activities were extended towards the tasks of military defence of the country. Parallel with these profound changes the English Romanesque architecture reached its most uniform and richest flourishing period.

*The first group of the Norman buildings was built in the **11th century**. The first building - following the model of a Burgundian Benedictine monastery- was Battle Abbey consecrated for the respect of the victory at Hastings in 1066. This was the first appearance of the French chapel in England. **Canterbury** had two churches at this time: the **Christ Church** -the cathedral-, and St. Peter and St. Paul Abbey. Both of them were rebuilt from 1070, and the former was consecrated in 1089. The plan of the Christ Church followed the model of the Westminster Abbey with its stepping apses, the „brother" church realised the type of Battle Abbey. The **Lincoln cathedral of Virgin Mary** (1073-1092) shows direct connections with the Saint-Étienne in Caen, and it had a two aisled transept. Its decoration worth mentioning as the interwoven false-arcades are appeared what has become a characteristic motive of Norman architecture. All the three buildings had **wooden barrel vault** over the nave and the transept, while the sanctuary had masonry structure: barrel vault with architraves. The use of wooden barrel vault was so usual, that even in the middle Romanesque period examples were built (Southwell, 1114-). The only remaining representative of this period (almost all of them were rebuilt in the Gothic period) is the St. Albans in Hertfordshire. Though the original wooden barrel vault has been substituted by a flat wooden ceiling, we can feel the original character of the interior. No sign of the alternating vertical supports, which are loaded by heavy arcades of the aisles and the emporium. The detailing is rather poor, no sign of plastic, tectonic articulation of the walls. The secular architecture has a nice example belonging to this period. The Royal residence of London, the **White Tower** became the model for dwelling towers for centuries. Lot of such towers was built at that time in England as the defence tasks were of great importance for the Normans. To fulfil these requirements there were built more than 700 Norman earth-and-timber-castles and 190 motte-and-bailey-castles.*

*In spite of the fact that almost all of the great cathedrals of England were founded (or rebuilt) in the 11th century because of their longer building period that extended to the **12th century**, they show more sophistication in structural and decoration aspects. In the*

*development the Cistercian architecture made its imprints sensible. During the 12-13th century there were more than 70 monasteries were in use. The characteristic Cistercian solutions: the lack of Western towers, the straight ending of the sanctuary, the articulation of the transept, or the simple geometric decoration and the horizontal character of space-organisations had a deep effect on the English Romanesque. Meanwhile the parallel traditions of the Norman and Celtic (Anglo-Saxon) culture were still prevailing. Nice example for this the small chapels of Iffly and Barfreston. Both the geometric and the ornamental-figural motives were used at the end of the 12th century. The **gateway of Kilpeck (1150)** with its wonderful Celtic decorations is one of the nicest representative of late Romanesque detailing.*

- **Ely, Cathedral (1081-1106, 1133-1174)**, the first appearance of the alternating supports along the nave. The three aisled basilica has an emporium, and the strip of the clerestory windows were articulated as a triforium(there is a narrow corridor within the width of the wall-sickness). This sophisticated articulation appears in the churches of Winchester (after 1079) Norwhich (after 1079) and Peterborrow (after 1118). The profile of the pillars is composed as orders of arches and jambs. The original space covering was a barrel vault with wooden architraves. The mass of the church is ruled by the heavy single entrance tower that is massively articulated by false-arcades. The unusual mass composition projects the character full of inventions of English Medieval architecture that has flourished in the Gothic times.

- Gloucester, Abbey (1089-1120-), the church has a French sanctuary with vaulted (semi-barrel vault) emporiums. The vertical supports are columns (with three half-columns in the choir). The nave has false-emporiums and the original masonry barrel vault may have been substituted by ribbed cross vault, or sexpartite vault. Now the nave is covered by 13th century ribbed vaults.

- **Durham, Cathedral (1093-1143)**, the most homogeneous still standing Norman Romanesque basilica with three aisles, with emporium, with a straight ending of the sanctuary which has three apses, a transept with two aisles, two heavy Norman pair of Western towers, and heavy cross-tower. The alternating vertical support along the nave is formed of columns and pillars. The arcades are formed as orders of arches and jambs, the ribbed cross-vaults over the nave are among the first ones (together with Worcester and Glocester). Originally there was a wooden barrel vault by the time of the consecration in 1128. The ribbed vault was constructed between 1133 and 1160 right after it was „invented" in the case of the Saint-Étienne in Caen (1120-1130). This reconstruction transformed the wall of the nave. That gives the proof, that originally the masonry vaulting was not intended. The decoration represents the Norman geometric taste.

| **Durham:** Cathedral (1093-1143) | **Peterborough:** Cathedral (1118-) |
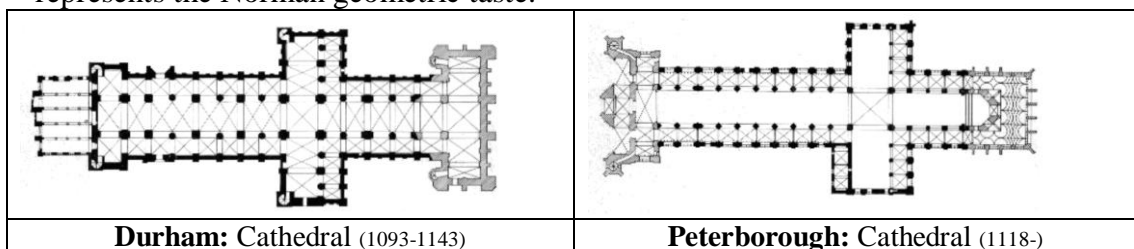
- The Cistercian monasteries appeared soon in the British Isles, and brought a different taste from a different territory of France. The strict Bernardian architecture from Burgundy arrived here but in a simpler form. The plan followed the rules, but the masonry vaulting is missing as far as the false-basilican dark space structure. The wooden space-cover could have been flat or barrel vaulted as well. The arcades had pointed arches, the supports were unusually columns. The first was founded in Waverly

(1128), and by the time of 1160 there were 51 monasteries serving in England. Nowadays they are picturesque ruins (Fountains, Rievaulx...). Later, in the second half of the 12th century the strict rules has dissolved and French-sanctuaries appeared (Byland), transepts with three aisles, and they are the media of the early Gothic influence (Roche).

e.3., Norman architecture in Sicily

Before the Norman invasion Sicily had been a territory of Byzantine interest, but even the pontificate of Rome and the German-Roman Empire demanded on the region. Owing to its geographic situation there was Arabic-Moorish influence demonstrable. Its architecture characterised by the mixture of the different styles but was dominated by the Norman influence:

- Early Christian architecture of the City of Rome (manifest in plan, Cosmata-type decoration),
- Byzantine architecture (centrally domed spaces, glass-mosaic decoration),
- Islamic culture (decorative art),
- Norman architecture (heavy towers, geometric decoration).

The Normans reached the Island in 1061 led by Roger the IInd. Slowly they spread their authority over the whole island during the next three decades. Because of their patience toward the ethnic and cultural diversity -and owing to the fact, that they had some parts of North Africa under their authority-, the Islamic, Byzantine, and Roman influence was continuous during their reign. Later the Hohenstauf Dynasty seized the power bringing an other additional German taste to this alloy.

- Palermo, Capella Palatina (1123-1143), the palace chapel of Roger the IInd. It is a basilica with a false-transept, with three aisles, three apses crowning the crossing with a raised dome. The high Islamic pointed arches of the arcades dividing the nave are supported by Antique, composite columns. The interior is decorated by Byzantine mosaics. (The choice of the building type reminds us to the Carolingian attitude of policy.)
- Palermo, Cathedral (1069-1190), the largest building in the capital. Its Eastern ending remained in its Medieval form. The elevations are decorated with intersecting false-arches of Islamic origin, the two slender towers at the end of the transept was built under the Hohenstauf period. The interior remained Norman in spite of the reconstruction in 1781.
- Cefalu, Cathedral (1131-1240), the funeral place of Norman kings in Sicily. The sanctuary and the transept is from the Norman period showing fortress-like high walls from outside articulated by the accustomed intersecting false-arches. The arch over the clerestory windows has special Byzantine (Syrian) character as they are emphasized by a profile that is continued as a horizontal cornice at shoulder height. The body of the church was finished between 1180 and 1240 by the Hohenstaufen. Both in the interior and on the exterior the simpler articulation of the structures are observable: The body is covered by exposed wooden roof-construction resting on bare simple walls while the Eastern end has its usual Byzantine atmosphere.
- **Monreale, Cathedral (1173-1182)** the Early Christian basilica has a Norman Western construction, with a single-aisled transept. There is a dome over the crossing. The sanctuary has three apses reminding us to the German-Roman imperial churches. Similar to the Norman principality in the nearby Apulea; Tuscan masters worked on the building as well. The trace of their hand is recognisable on the Western gateway and in the monastery wing. The exposed wooden roof, the walls are richly decorated on

an Islamic way, the vicinity of the sanctuary decorated with Byzantine mosaics. By the year 1200 the monastery wing has been finished. King William had the church built to counterbalance the raising political power of the bishop of Palermo. The endevour proved to be successful as Monreale got the title of Bishopric in 1183.
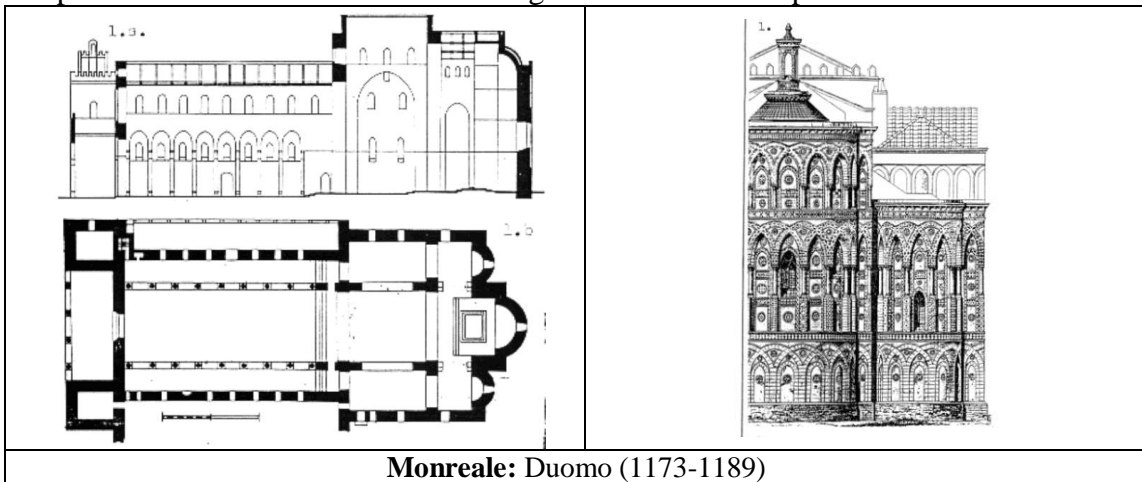
Monreale: Duomo (1173-1189)

e.4., Scandinavian Medieval architecture

The tradition of wooden architecture was very strong (Hedared, Borgund in Laerdal). The stone architecture (Sigtuna, Lund) beside the Norman and the North-German influences there were significant cultural interchanges between the Russian Principalities of Byzantine origin.
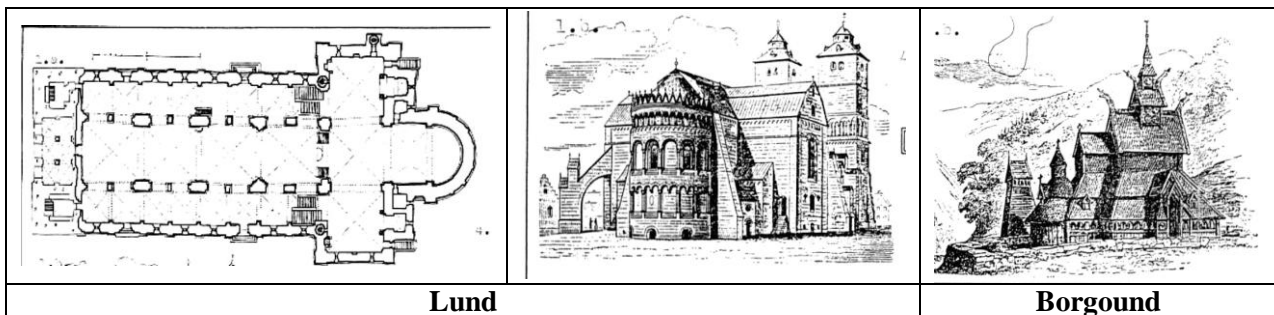
| Lund | Borgound |

VI. THEME - The Gothic Architecture

„Gothic is the first classical art which originated entirely from Europe." - Géza Entz says (The Art of the Gothic, Bp. 1973.7.p.). As some of the tendencies of the Romanesque hold the sprout of the Gothic, so the emerging Gothic keeps its Romanesque (or Antique) traditions at some territories for a long time. That is why the two artistic formations cannot be divided strictly from each other neither in space nor in time. In many cases even the stylistic characters do not provide firm base for such a division. But the difference between the two economic and social backgrounds is essential. The Romanesque was developed on the bases of feudalistic natural economy, while the Gothic was resting on good-production and money economy. Studying the differences between the developments of the particular territories on the bases of these aspects we can easily follow the emerging of Gothic art.

During the 11th century the economy changed slowly but profoundly. The feudal domestic and self-sustaining economy shifted toward the production for exchanging. The process of specialisation went on causing distinction between the society. New classes of the society appeared: the craftsmen and the salesmen. The undisturbed circumstances for this (roads, money circulation, public security) could be insured by a strong centralised monarchy. This was the common platform for the centraliser feudalistic French kingdom and the developing artisan-merchant social class of the towns. As there has been a new phenomenon appeared in the Medieval Europe: new form of settlements emerged to provide secure dwelling-place for the new social classes not disturbed by either robber troops or the landlords of the vicinity. This is the time of the birth of medieval towns. A kind of fellowship was contracted between the civilians of the towns and the kingdom. The towns got privileges and defence from the royal court, meanwhile the king gained economic support. This „contract" was approved by the Church. But this Church was not the same what we had gotten acquainted with before. The spiritual life of Europe had changed. New ideas of Antique wisdom saturated into the theological way of thinking. At the meeting point of the Christian theology and the Antique natural sciences a new tendency had risen: scholasticism established by Albertus Magnus and St. Thomas from Aquino. It was the strangeness of faith that it was the Moorish-Arab philosophers (Avicenna, Averroës) who transmitted these ideas toward Western Europe. The circumstances for the rise of Gothic have matured in the strengthening centre of the French kingdom: Il de France and Champagne. The architectural preliminaries of the territory had been rather poor so the strong late Romanesque tendencies could easily get across: Burgundian Benedictine structural and space creating knowledge, the structural and elevation creating methods of Norman architecture, and the spiritual atmosphere, the abstract symbolism of the Burgundian Cistercians.

VI/1. – The Northern-French (Cathedral) Gothic Architecture (1140-1350)

*The one-time burial-place of the French kings, the **Saint-Denis Abbey** near Paris in Il de France was rebuilt by Abbot Suger. The Western elevation was built between 1137 and 1140 following Norman models. The sanctuary was constructed afterwards **1140-1144** building a French sanctuary, a pilgrimage type, with ambulatory and radiating chapels. But with an essential difference: the chapels were attached to each other; moreover the wall between them was substituted by an arcade. With this gesture the space of the chapels was unified with the space of the ambulatory creating a second of this kind. It can be regarded as the first important step toward the **unification of interior spaces**. This was the first time in history when the Gothic structures were used according to a <u>coherent design</u>, and this was the first attempt to create a representative Western **cathedral elevation**.*

Nearly at the same time the construction of the first cathedrals began in the jet developed towns.
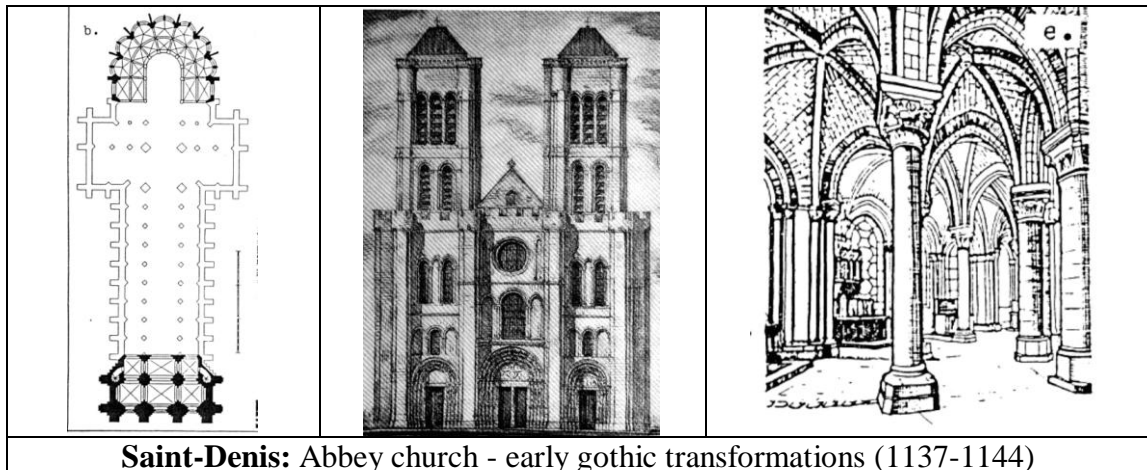
Saint-Denis: Abbey church - early gothic transformations (1137-1144)

The Gothic cathedral: as far as its function concerned, this is the parish-church of a town. Most of the towns were Episcopal centres. This fact gave political weight for the towns in the hierarchy of the feudal monarchy. So the cathedral (cathedra - chair of bishop) became the symbol of the status of the town, expressing the wealth of the towns at the same time. The worldly priests served the bishoprics (just the opposite in England!) so there were no monasteries attached to the cathedrals. Only the palace of the bishop or the buildings of the chapter's corporation might have linked to it. The creation of interior spaces were determined by the fact, that there no monastic liturgy took place within the church. The lack of complicated side-spaces, chapels, and crypt made it possible to unify the space of the cathedral step by step. The usual place of the cathedral was in the centre of the town at one end of the main square. There were narrow streets surrounding it. Only the main elevation was exposed. So the most important element of the exterior happened to be the Western facade with its double towers.

The characters of the Early Gothic cathedrals:

- space-creation: In order to unify the space the role of the transept and the subordinate spaces lessened, their connection to the three- or five-aisled longitudinal body of the church became more organic. At the eastern side the crypt is missing, but the French-sanctuary became usual. Neither Westwerk, nor Western apse can be found (with very few exceptions: Nevers), there is a gallery between the Western pair of towers. In most cases the emporium has remained (in load bearing function) but the new Norman element: the triforium has been applied.
- structure-creation: The skeleton structure has been emerging. The application of the pointed arch they can dissolve the fixed vaulting system, the bays getting to be rectangle in plan. The most usual vaulting of the early cathedrals was the sexpartite (sometimes combined with the pointed arch). The side-forces are supported by the emporiums, buttresses, flying buttresses or by means of reaction tie (or with the combination of them). The vaults are ribbed.
- mass-creation: The Norman-type (spire less) massive pair of Western towers were generally used. There is only a ridge turret instead of the strong cross-tower. The cascading mass of the French-sanctuary has been covered by the system of flying buttresses. The buttresses were usually loaded by pinnacles.
- elevation-creation: The leading role is for the Western facade. In its developed form it is subdivided both vertically and horizontally. While seeking solutions the emphasising of vertical, load bearing elements were general (Noyon, Laon), later a

kind of equilibrium has come to life by the horizontal subdivision (Paris). Vertically there are three main elements the two towers and the tympanum (gable) of the nave. In the lower belt there is a three piece gateway, which is of pilgrimage-type: made of arches and jambs and divided by a mullion. Over the openings there are pierced gables (with creeping-leaf motives). Over the gateways there may be the gallery of kings (attaching niches with statues in them arranged in a horizontal row). The central section is filled with a giant rose-window maybe with a pointed arch engulfing it. The bodies of the towers are articulated by means of narrow, high lancet-windows. The triangular gable of the nave is covered by a traced architectonic gallery. But not the single elements alone, but their system is creating the concept of gothic. The vertical elements are running from basement to peak, but they are changing their form storey by storey. The horizontal elements are not dividing the storeys from each other, just signing the border between the layers of the composition. So we are not standing in front of the collection of gothic forms, but a cosmic system is unfolding for us where the elements are forged together by both spiritual and formal correspondences.

- attendant arts: In decoration the use of vegetal ornaments was general (sprout-type column-heads). The sculptural decoration was rapidly developing (gateways, tympanums). The surfaces braking through the walls are filled by coloured glass-pictures, the importance of wall-painting has lessened

*The periods and monuments of the Cathedral Gothic Architecture:*

V/I.a.,   Early Cathedrals:

- Sens (1130-1163), Noyon (1131-1157), - the first real examples of Cathedral Gothic architecture (as the Saint-Denis was a monastery church). Their architecture is characterised by a kind of indefiniteness. They are seeking the right way to make the load bearing construction even and uniform. Though they are not uniform in vaulting (even within one building both ribbed cross vaulting and sexpartite vaults can be found). The articulation of the clustered pillars does not show a well developed form. The Norman Western elevation gave the model for these cathedrals; only a slight shift can be felt as the vertical elements (buttresses) gained more emphases.

Sens: Cathedral (1130-1163)	**Noyon:** Cathedral (1131-1157)
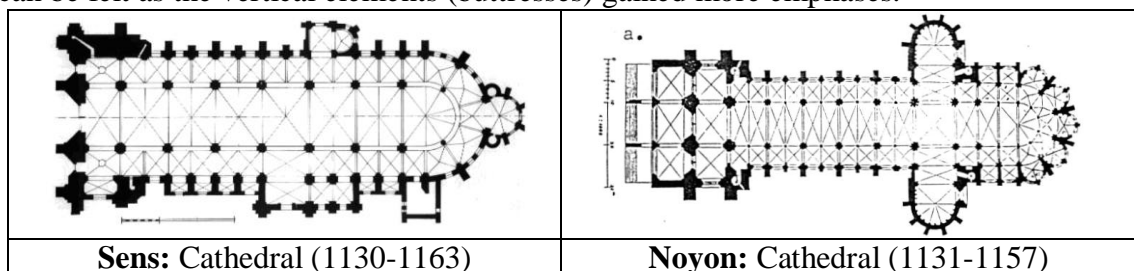
- **Laon, Cathedral (1160-1220),** - the first finally crystallised early cathedral. Its space concept is near to the Cistercian's taste (economical in the articulation of the clustered pillars) the straight ending of the sanctuary just expresses it. The transept has been „pulled" backwards - nearly to the centre related to the body of the church, by this time they are of the same rank. The problem of the vertical support is set in a way: the ground floor arcades are resting on even and identical columns. Horizontal divisions, cornices appeared on the internal elevation. The Western facade has been articulated richly by means of architectonic elements: the buttresses are decorated with spired stone canopies dwarf galleries appearing on the central zone, vimpergas over the gateways. The upper stories of the towers are broken through so much, that the heavy Norman character disappears at once. Villard de Honnecourt, a mason craftsman from the 13th century has written in his book of sketches : „I have travelled across great

number of countries, but at no place did I find towers like the ones in the town of Laon..."
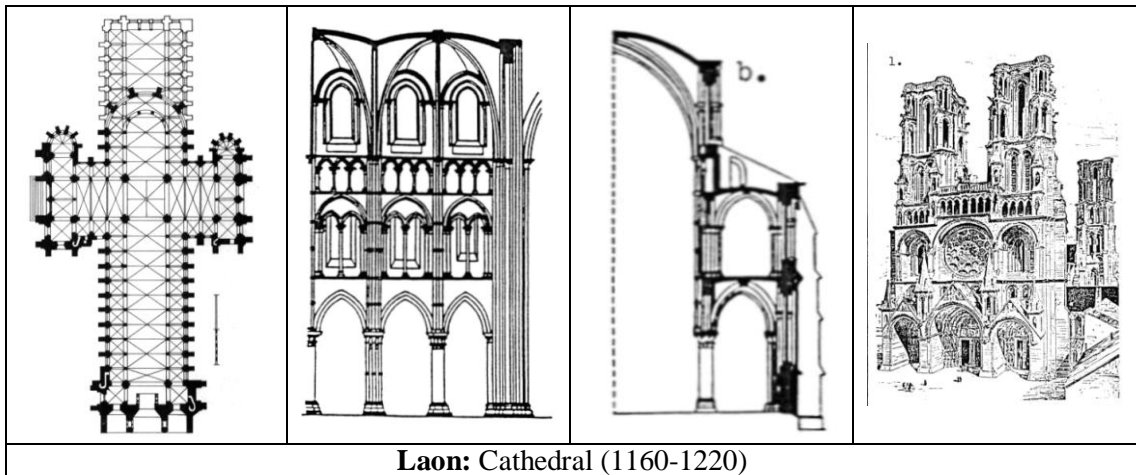
Laon: Cathedral (1160-1220)

- **Paris, Notre-Dame (1063-1249),** founded by bishops Maurice (1160-1197) and Eude de Sully (1196-1228). This became the model for the „great" cathedrals. Representing the synthesis of the early development it followed the same space concept and structural articulation as Laon did. The Eastern end of the church is the Gothic version of the French sanctuary: the double ambulatory has attaching radiating chapels (between the buttresses). The vertical supports are identical, not even the wall cluster of pillars at the upper levels differs from each other. The internal elevation of the nave had also the four levels originally (pointed arch arcades resting on columns, arcades of the emporium with three subdividing mullions, row of rose-windows instead of the triforiums, and the clerestory windows). Owing to a later reconstruction the rose-widows disappeared, and the clerestory windows were extended downward. (After the restoration works of Violet le Duc in the 19th century few sections of the wall near the crossing show the original form.) The Western elevation became the model for centuries. Vertically there are three main elements the two towers and the tympanum (gable) of the nave. In the lower belt there is a three piece gateway, which is of pilgrimage-type: made of arches and jambs and divided by a mullion. Over the openings there are pierced gables (with creeping-leaf motives). Over the gateways there may be the gallery of kings (attaching niches with statues in them arranged in a horizontal row). The central section is filled with a giant rose-window maybe with a pointed arch engulfing it. The bodies of the towers are articulated by means of narrow, high lancet-windows. The triangular gable of the nave is covered by a traced architectonic gallery.

**Paris:** Notre Dame Cathedral (1163-1249)

- **Chartres, Cathedral (1195-1220),** the „very first” matured cathedral. It was built parallel with Paris, but there are profound changes. The plan had been taken over from Paris (only the body of the church lessened - it is three-aisled, and because of the former 12th century church which base walls were used at this time the radiating chapels are keeping distances and are not the same at all). The Western elevation is from the 12th century, it had not been destroyed during the fire in 1194. The transept is punctually at the geometric centre of the body of the church. The emporiums are missing. The triforiums are taking their final place over the arcades formed of pointed arches. The clerestory windows are the transitory examples of tracery (as they look like as if they were sewn out of stone-plates). The real invention awaits us at the space covering: <u>pointed arch cross vaults with even heights</u> have been used, and ever since this time. This secured the even form of the supports and the even form of the bays. Moreover they were corresponding to each other. The sculptural decorations of the gateways and the coloured glass-windows are representing especially high artistic value. (The light-symbolism slightly changed related to the Cistercian architecture, though it originates from there. There is a membrane in the window that let the holly light in getting through itself. This light give birth to the real, transcendent (iconography) meaning of the profane material (the glass), and the holly spirit can be perceived by this transmitting medium at the same time.
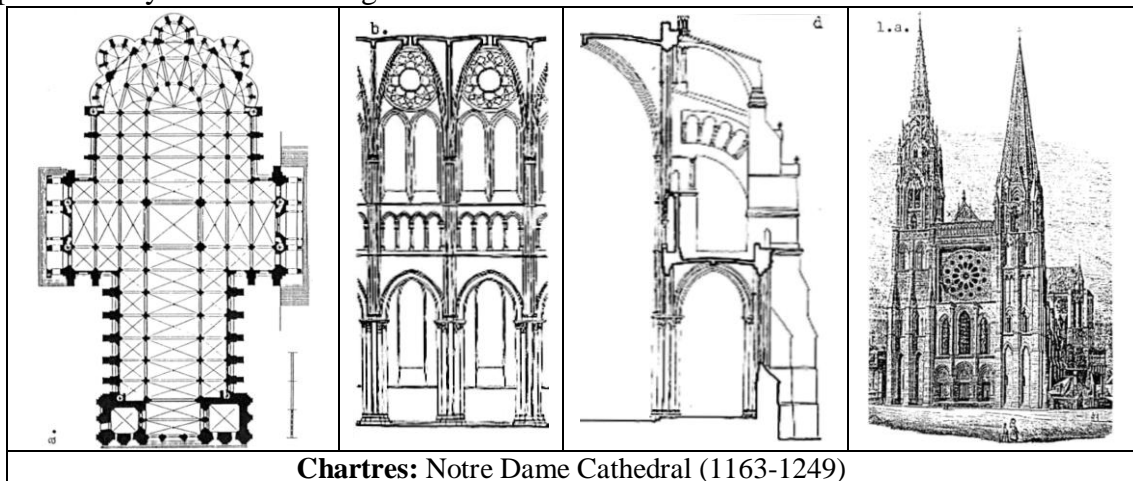
Chartres: Notre Dame Cathedral (1163-1249)

- **Reims, Cathedral (1211-1311)**, the „very splendid” cathedral was built to be the coronation church of French kings by the architect Jean d'Orbais. This can explain the more complex space form: the plan of the French-sanctuary is of the Romanesque type, the transept has been shifted eastward. Otherwise the solutions are taken over from Chartres and Paris. The first appearance of real tracery windows bound to it. The most awesome artistic achievement in Reims is the sculptural decoration of the outside surfaces. Though the statues are hanging from the elevations, they are realistic figures claming the „round statue” status, owning human characters and feelings (the angel of Reims in the annunciation scene). There are more then 1800 statue decorating the church, waste majority has been placed in the wonderful main facade which is the most unified example of its kind.
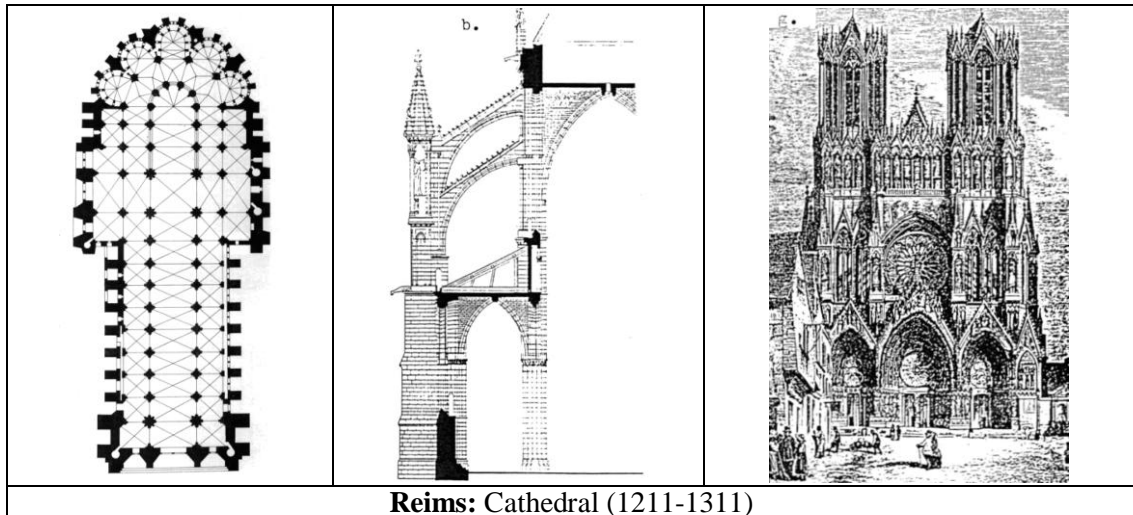
Reims: Cathedral (1211-1311)

- **Amiens, Cathedral (1220-1270),** the „very classical" cathedral. The sculptural decorations are the most even and unified. On the outside the plastic work and the architectonic decoration make the most harmonious composition owing to the charismatic leading of Robert de Luzarches. The demand of correspondence between the elements fulfilled here the most: the central mullion of the clerestory window reaches downward and unify with the arcades of the triforium. This process reaches its peak in the reconstruction of the body of the church of Saint-Denis, where behead the arcades of the triforium there are coloured windows placed dissolving the walls entirely substituting it by an architectonic tracery.
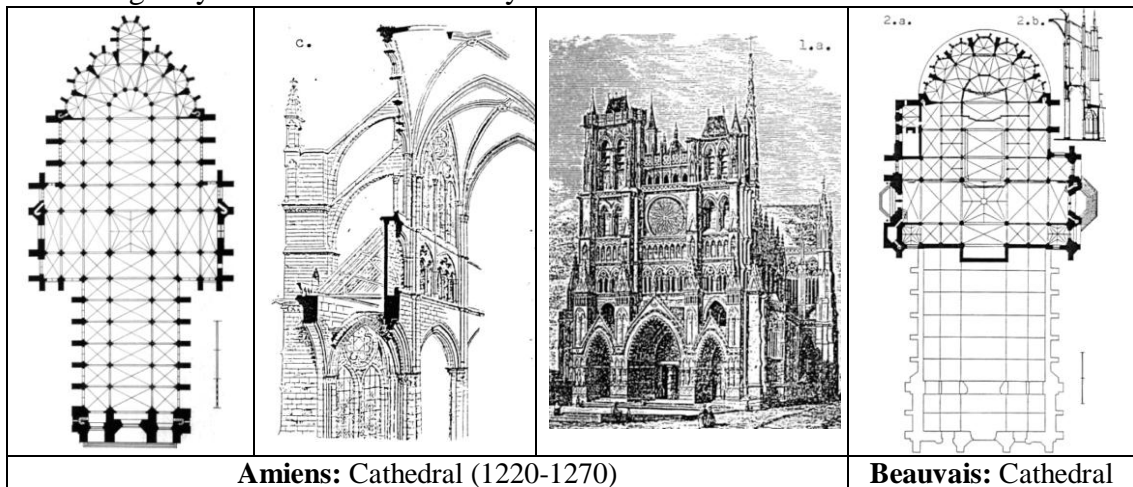
Amiens: Cathedral (1220-1270)	**Beauvais:** Cathedral

- Beauvais, Cathedral (1247-1590), the „very brave" cathedral never was finished. After few catastrophes (collapse of the building because of the loads resting on the base of the pillars crushed the material of the stone!) only the sanctuary and the transept remained. Not just the sanctuary but the choir and the transept is cascading following the model of Bourges (see it later). The space covering is sexpartite vault as they had to divide the original spans of the bays to reduce compressive stresses on the foundation.

   VI/I.c.,   Late Cathedrals (flamboyant style)
   this period is characterised by the transformation of details. Even the place of the triforium was used to enlarge the clerestory windows. The pillars are continued in the ribs of the vaulting without any pillar heads. The vaulting has been getting to be richer, complicated intersections has been produced. The fat (convex) profiles of the ribs are substituted by fluting (concave) profiles which provide more shading effect that emphasises the skeleton tracery of the vaulting. Beside the great cathedrals smaller scale buildings chapels were playing greater role with

their unified spaces. This stream represents the Civilian Gothic (see later) in France. The cathedral of Rouen (13-14th century), the Saint-Maclou (1434-1470), and the Saint-Ouen church (14-15th century) also in Rouen are representing this period.
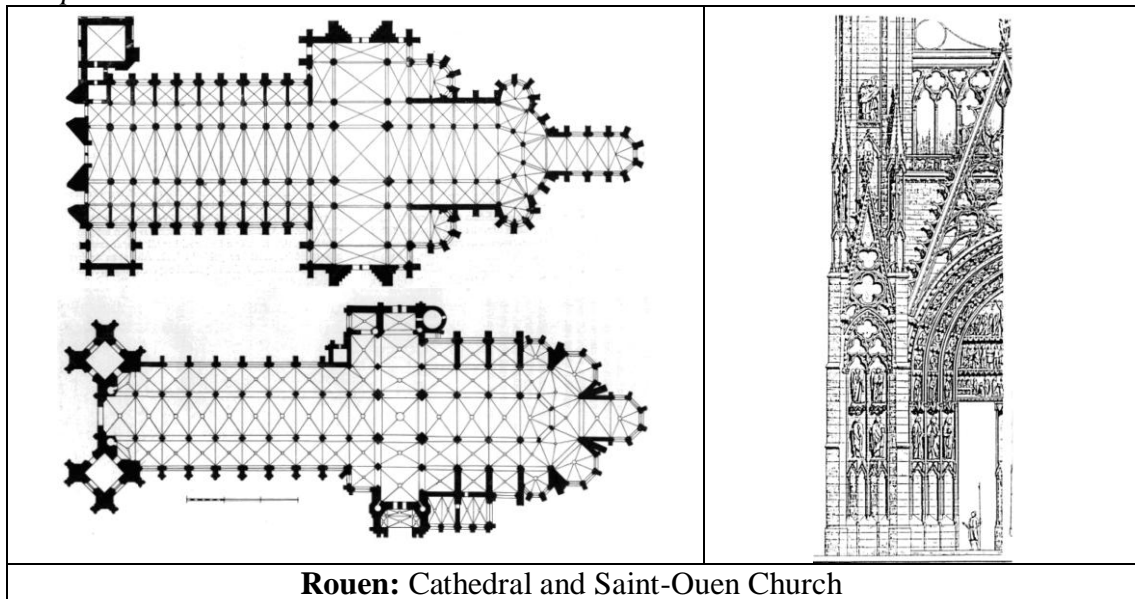
Rouen: Cathedral and Saint-Ouen Church

VI/2. The Spread of Northern French Cathedral Gothic

VI/2.a., The Spread of Cathedral Gothic in North of France

There are cathedrals and chapels following the model of Paris.

- **Paris, Sainte Chapelle (1243-1248)**, a „built reliquary" for the crown of thorns of Jesus Christ. It has two stories, the upper level is made as a large room whose outer walls has been dissolved entirely substituting them by coloured glass surfaces.
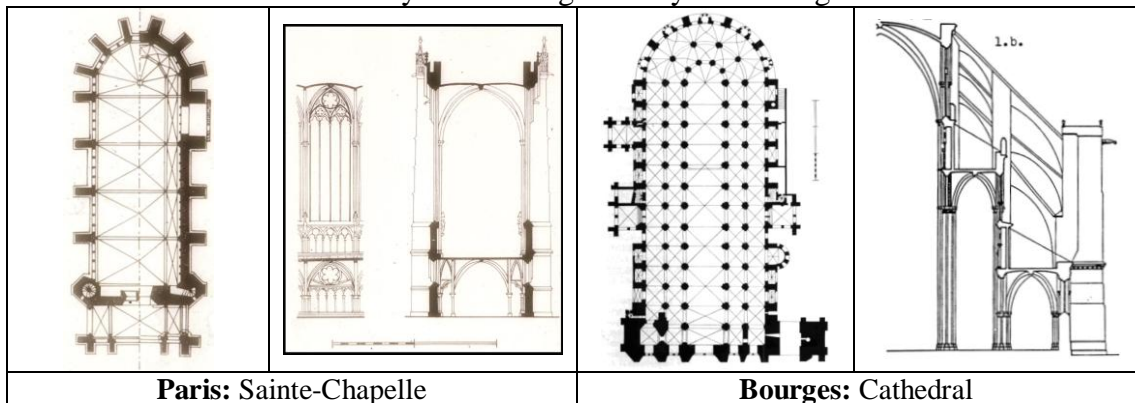
Paris: Sainte-Chapelle	**Bourges:** Cathedral

- **Bourges, Cathedral (1172-1324)**, Archbishop Henry de Sully had it built. Its five aisled space was built to realise the idea of the unified space: the aisles are cascading, there is no transept. All sections of the building are similar to each other. Though it followed the model of the Notre-Dame in Paris the emporium is missing such as the radiating chapels. The large measures makes it possible to place triforium both in the nave and the walls of the inner aisles.

VI/2.b., The Spread of Cathedral Gothic in South of France

Beside the „Latin" Gothic influenced by the Antique traditions the classical cathedral architecture was spread as well.

- Along the River Loire: Tours, Saint-Gatien cathedral (1239-1547), Orléans, Cathedral of the Holy Cross (13th century-1858), Soissons Cathedral and Benedictine monastery.
- Along the River Rhone: Lyon, Saint-Jean Cathedral (1165-14th century), Vienne, Saint-Maurice Cathedral (12-14th century).
- Nevers, Cathedral (12-15th century), represents a double sanctuary type of solution rarely used in France. But opposite to the German examples the two sanctuaries are not the result of a conceptional design: the Romanesque church was rebuilt in Gothic times creating a Western apse, extending the church.
- Poitiers, Cathedral (1162-1300), it has three aisles with a straight Eastern ending. In its cross-section the space form determined as false-basilica. This unusual solution derives to the traditions of the territory, the „Latin" influence, and points forward to the late Civilian Gothic.

| **Angers:** Cathedral | **Poitiers:** Cathedral |
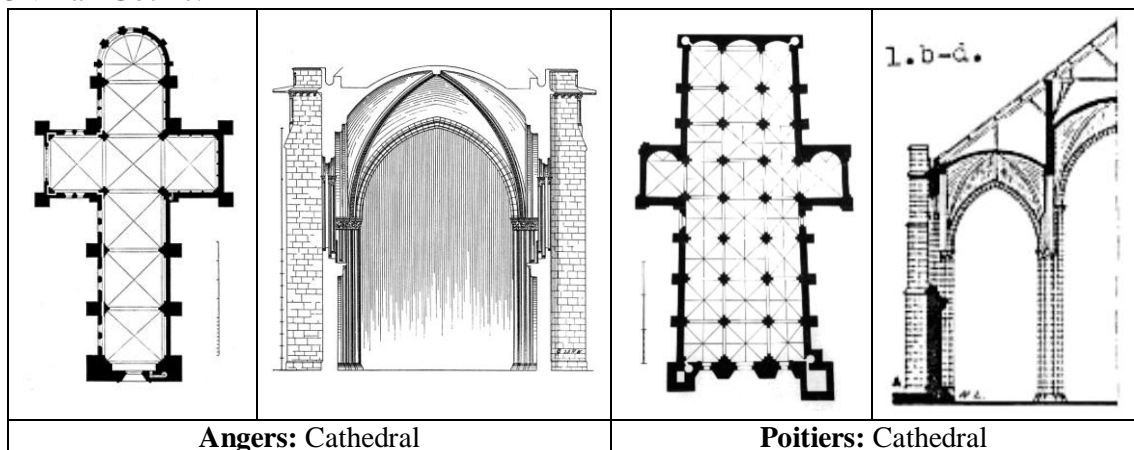
- Angers, Cathedral (1148-1153) and Saint-Serge (1226-), the strong local traditions of Anjou kept a firm grip on architectural forms: the Byzantine space-coverings (pendentive dome) and the interior space created from domes in a straight range appeared in early gothic times as well, but mixed with a few gothic structures. This alloy created the dome-like skeleton vaulting: the pointed arch cross-vault with different heights. This became the usual form for some other churches like Poitiers cathedral and the Saint Serge. The latter is a true hall-type of space with very slender columns.

VI/3. The Interregional Tendencies in Gothic Architecture
VI/3.a., Cistercian Gothic Architecture

The first period of the Cistercian architecture is the foundation of the Mother-monasteries. As they all were rebuilt this is a theoretical period. The second is the Bernardian strict architecture of Burgundy and the lighter form of Provance. The spreading of this art was seriously influenced by the rising gothic, but it adapted only some elements from it for the first time. This "half-gothic" was propagated in Europe, but gothic has loosened the strictness of Cistercian architecture. As a second step more complex forms were adapted: like sanctuary compositions.

a.1., The third period is the influence of the Cathedral Gothic. The change started in Burgundy when the mother-monasteries were reconstructed at the sanctuary after the model of the great cathedrals: all of them got a Gothic type of sanctuary. Two types of this rebuilding can be distinguished: the French sanctuary type (A) and the reduced form (B) of it.

A.) In Burgundy the mother, monastery churches got new sanctuaries with ambulatory and radiating chapels. Two different forms have been realised. The semicircular was

followed by Clairwaux (1174) and **Pontigny (1185)**, *and the identical rectangular form of it with the forcing of Cistercian straight ending in* **Citeaux (1193)** *and Morimond (1200). In Spain and Portugal the solutions with French sanctuary were realised not only by reconstruction (Alcobaça, 1178-1223) but by original design (Poblet, 1160, Gradefes,1177). In Germany both forms -the semicircular and the rectangular- were applied. Ebrach (1220-1282) was built with straight ending and Heisterbach (1202-1237) and Doberan (1291-1368) were built with the rounded form.*

Clairvaux III. (1174-)	**Pomtigny III.** (1185-)
Heisterbach - Doberan	**Heisterbach** (1202-1237)	**Doberan** (1291-1386)
Citeaux III. - Riddagshausen	**Eberbach** (1220-1282)	**Riddagshausen** (1225-1275)
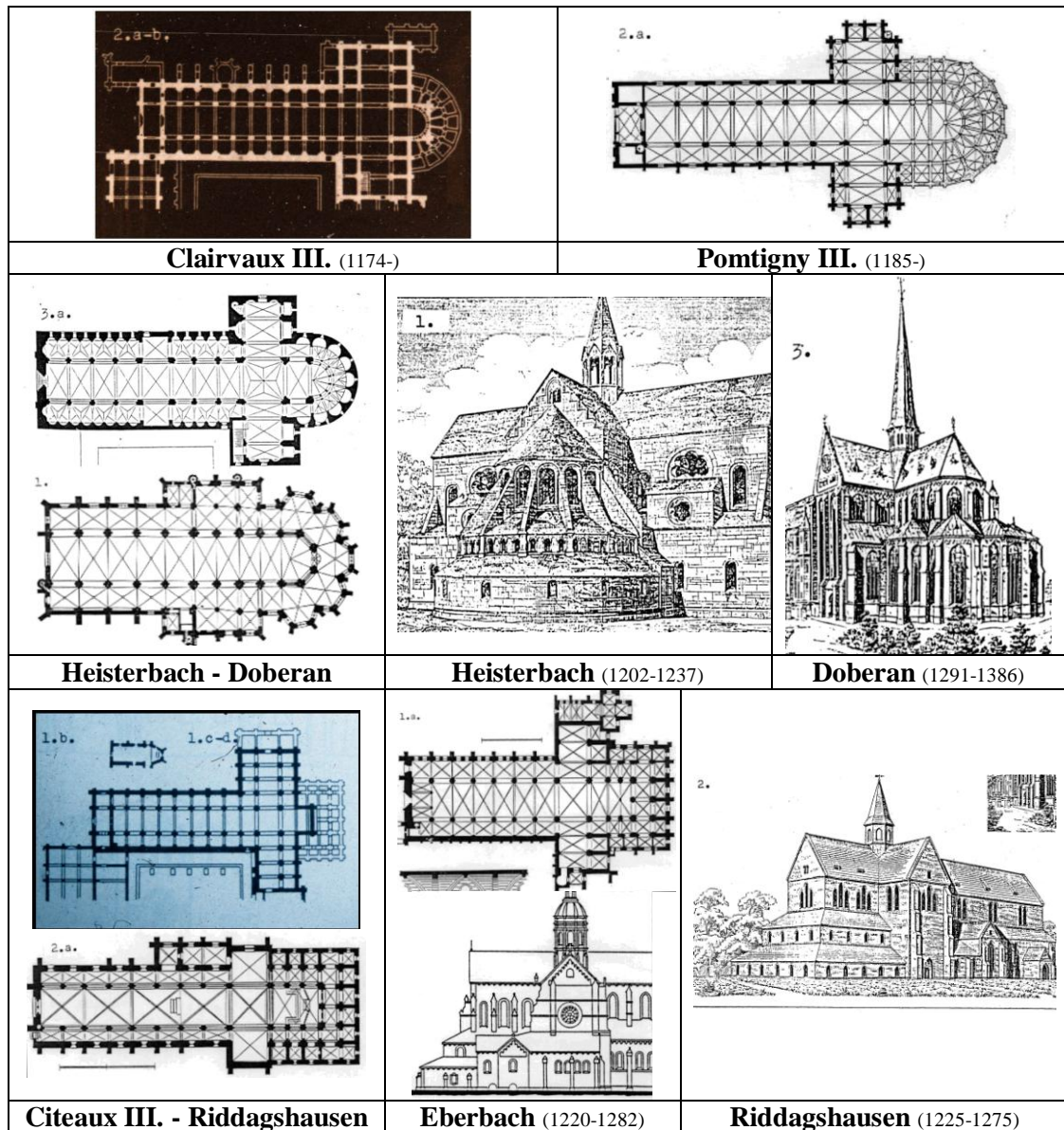
*   *B.) The reduced form of the Gothic sanctuary with polygonal ending was spread in German territories first and foremost influenced by the architecture of the urban monks. The single apse is closed with a polygonal wall and the straight ending chapels are remained at the eastern side of the transept. Monuments remained in Chorin (1273-1324), Lehnin (1190-1195, 1262,- the main apse is semicircular), and in Les Dunes in Belgium (12th century).*
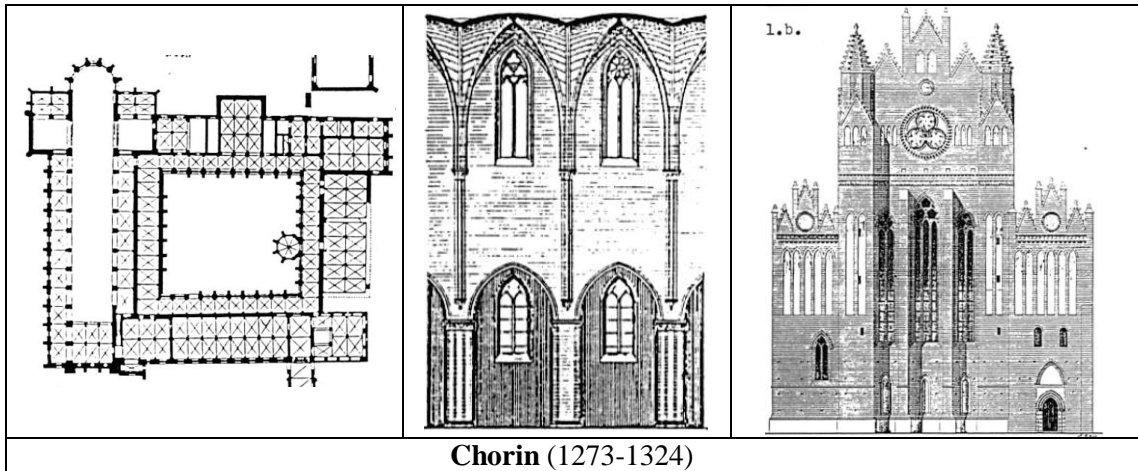
Chorin (1273-1324)

*a.2., The fourth period was influenced by the Civil Gothic architecture. The inner development was parallel with the outer influence: as thesanctuary form of Citeaux III. showed problems in use (corner chapel). On the basis of this effect a new sanctuary form was applied the „sanctuary-hall" (A). The Cistercian order has lost its original character during the 14-15th century; even they have conformed to civil aspects. The order has taken the „hall-sanctuary" (B) solution from the European Late Gothic, and there were used the „hall-churches" © as well. With this step they could grab the real gothic spirit: the unification of space.*

*A.) The sanctuary-hall means that there is a several aisled ambulatory -of hall type space- around the higher apse. This version did not spread in France (at this time the Cistercian order did not committed new constructions). But we can find examples in Germany (Ebrach -reconstruction: 1220-1282, Riddagshausen 1225-1275), and in Austria (**Lilienfeld 1250**).*

*B.) Hall-sanctuary means that the space form of the sanctuary is hall type (the same shoulder-height and keystone-height in the ambulatory and in the apse). It was used in Austria, in **Heiligenkreutz (1260-1295)**, in Zwettl (1342-1348, with semicircular ending).*

*C.) When the whole church has an even hall type of space it is called as hall-church. It was rarely used (Austria, **Neuberg 1327-1344, Salem 14th c.**).*
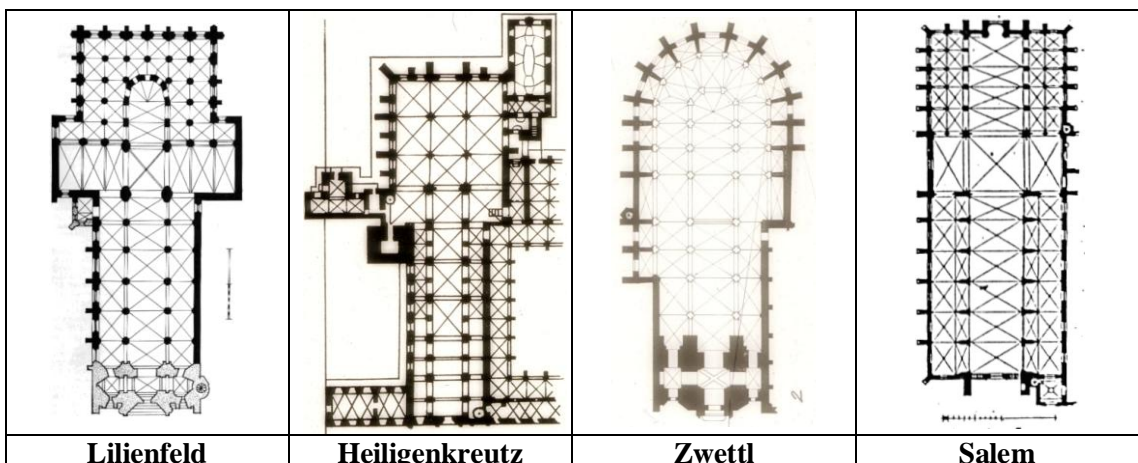
| **Lilienfeld** | **Heiligenkreutz** | **Zwettl** | **Salem** |

VI/3.b., Gothic Architecture of the Urban Monks

b.1., Franciscan Order (Minorites, Observences, Capuchins)

The civilian lifestyle (the emerging of cities, good-production, trading, social polarisation) caused social stresses within the cities. There was a new task for the Christian Church to propagate the idea of poorness. The secularised Benedictine order could not accomplish this mission. The lifestyle of the Cistercians based

upon ascetism and physical work could not have an effect on civilians as they did not make pastoral services, and their exclusive, exemplary community did not meet certain receptive social medium. A new type of order came to life in Assisi in 1209. St. Francis and his companions lived such a life, that partly with their personal example and partly with their preaching activity they accomplished the mission of poorness effectively. Owing to the activity of San Francesco – the "poverello"- the Christian faith has changed profoundly: Christ was not a mystical far away figure – the son of god, but became a suffering person – the son of a man. Several orders (Franciscan family) of beggar friars were formed with a large number of members. Where the civilisation and urbanisation made the circumstances convenient the order spread rapidly. Their cloisters have been built in the poor outskirts of the town in a puritan manner.

Taking the aspects of the Franciscan propaganda (preaching) and lifestyle (wandering, begging) into consideration the Council in Lateran (1215) co-ordinated and transformed the liturgy. Opposite to the earlier Gallic liturgies after 1215 the service took place at the altar situated in the apse and the pulpit in the centre of the nave. The auditorium character of the liturgical space determined the space structure of churches of the urban Friars. Their cloisters partially adapted to the lifestyle of the Order, which are partly following formally the fixed arrangement of the monasteries.

Cloister-monastery: these words are used mainly as synonyms though they cover different functions. The monastery is the dwelling place of monastic orders, a strict ensemble of the church built together with the monastery wings. This complex is to satisfy all the life-functions of the monks (dwelling, eating, pray, self-supporting industry, economy). The cloister is only an Orderly house for lodging attached to a church (not necessarily built together).

b.2., The Dominican Order (preachers' order)

By the 13th century the ecclesiastical culture had touched its bottom. The former chapter and monastic schools hardly were in operation. The large but non-educated community of the beggar friars -getting into a close contacts with the people- though not willingly but became the propagator of heretic ideas. In Spain and in South-France by means of Jewish refugees fled from Islamic invasion the ideas of Arabic, Jewish and last but not least the Antique philosophy and natural sciences has become known. These formed the bases for new heresy (Albigens, Valdent). Dominic Guzmann founded an order in 1214 to accomplish the special task of cultivating and professional propagating of the sciences (Dominican Order - „Ordo Paredicatorum"). On its European universities theological faculties were organised, and the theological system of Medieval Philosophical Scholasticism (st. Thomas from Aquino, Albertus Magnus). The generic term of Beggar's Orders can be doubted classifying both the Dominicans and the Franciscans into this class as their function basically differed from each other. That is why we use the term: „Urban Friars" or „Urban Orders" to identify them.

The Main Characters of the Architecture of the Franciscan and Dominican Architecture:

As the liturgical and preaching functions the Dominican architecture is identical with the Franciscan, so their architecture is very similar to each other. However the arrangement of the Dominican cloister is somehow more fixed, following more monastic traditions. (Originally the Dominicans were intended to follow the constitutions of a monastic order. Their main territories of the spread were South of France and Italy.

There were two main forms spread in Europe one to the South of the Alpine mountains (A) and one to the North of it (B).

A.) At the birthplace of the Franciscan architecture -in Italy- it was determined by the Antique traditions of this territory (large spaces, exposed wooden roof construction) and by the Cistercian church architecture (lack of towers on the elevation, straight ending of the apse, side chapels, simple space forms, lack of decoration). The space has a new character: there was a demand of unified spaces to engulf large number of prayers listening to the preach at the same time- despite of the basilica-cross-section the spans and arcades are so large that their structures do not disturb the attention. So these churches have three spacious aisles or a lone nave, a transept to situate the friars, and side chapels attaching to its Eastern side. The sanctuary has a straight or polygonal ending. The side chapels gained extra function with the introduction of the individual services. The pulpit has been situated in the centre of the nave covered with an exposed wooden roof construction. There is a courtyard beside the church. The chapterhouse and other functional rooms are around it following the Benedictine-Cistercian models. Ringing the bell became the organic part of the messes. To secure the direct connection between the bell tower and the sanctuary (scene of the liturgy) the tower has been situated close to it.

B.) In the German and Central European territories a new space construction has been invented. It had one spacious nave or three airy aisles but no transept followed it, there has been an elongated choir substituted it engulfing the priestly „stallums" with a polygonal ending. The tower has been placed beside the meeting point of the choir and the nave. On its first floor there is a window opening from the oratory into the sanctuary. These churches were mostly vaulted as the local traditions influenced it.

C.)   The architecture of the urban monks is not homogeneous. There are several individual solutions colour the picture. In this group we can deal with the different mixed versions bearing the signs of the High Gothic.

Monuments "A":

A1) Churches that are follow the Cistercian type.

- **Assisi, San Francesco (1228-1253)**, a cross-shaped one naved room- church with a lower church along the whole temple and a sanctuary crypt. It has ribbed cross vault (not characteristic in Italy), all of the internal surfaces are covered with wall painting the masterpieces of Giotto and Cimabue

| **Assisi:** San Francesco(1228-1253) | **Florence:** Santa Croce (1295-1442) |
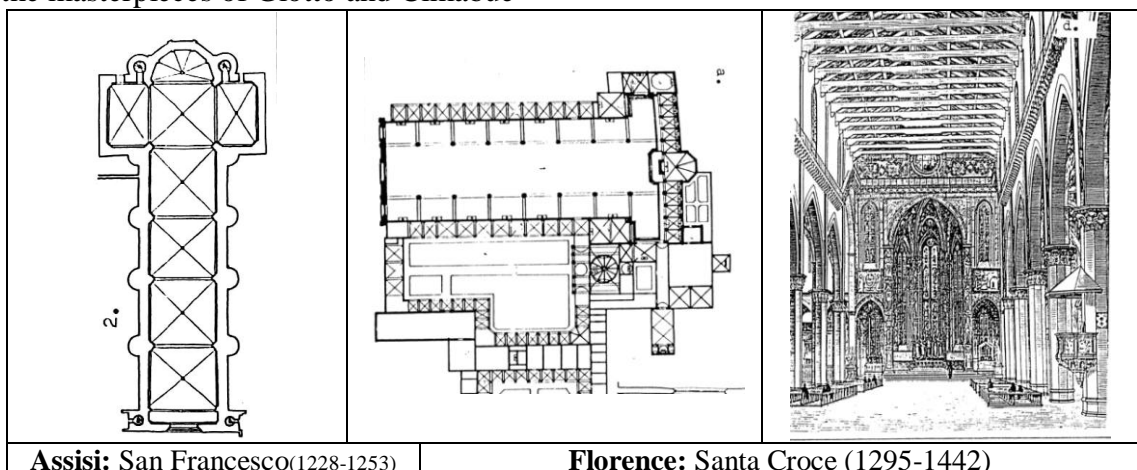
- **Florence, Santa Croce (1295-1442)**, a basilica following the space concept of the Cistercians with three aisles a transept with Eastern row of chapels. The space covering is an exposed wooden roof: it is a simple and traditional Italian solution.
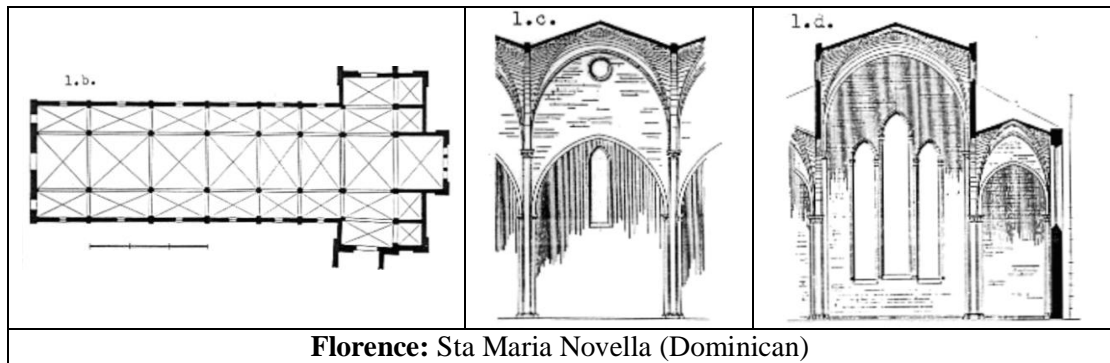
Florence: Sta Maria Novella (Dominican)

- **Florence, Santa Maria Novella (1283-1300),** follows a regular Cistercian plan; the wide supports are spanned by pointed arch cross vaults. Its elevation has been finished by Alberti the great master of Florentine Renaissance.

The original Cistercian model had alterations:

A2)   according to the need for simpler liturgy its space began to be reduced. The first step was the lacking of the side aisles.

- Siena, San Domenico (13-14th c.) Its plan is a Latin-cross, the sanctuary has straight ending, the transept has chapels at its eastern side also with straight endings. The space-covering is the traditional visible roof construction.

A3)   the reduction reached its final status in the case of the Dominican and Franciscan churches of Arezzo. Even the transept is missing here.

- Arezzo, San Domenico (~1250), follows the reduced form of the Cistercian type. There is only one nave with a sanctuary of three apses. The space covering is wooden.
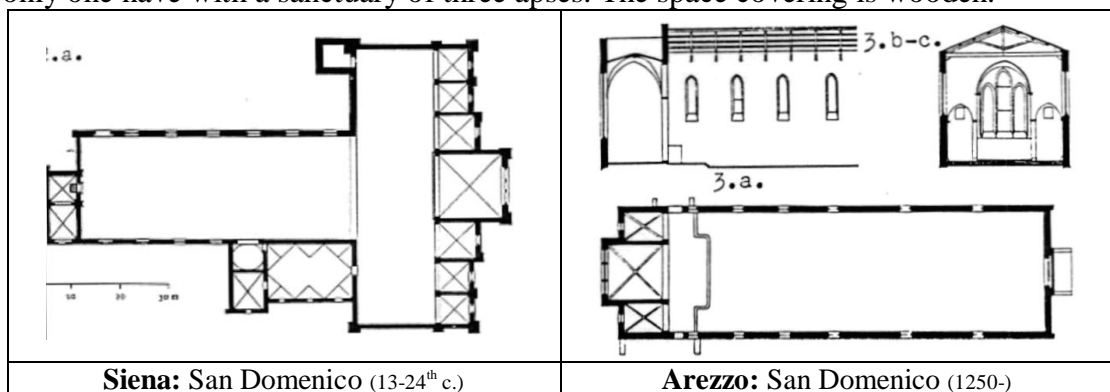
Siena: San Domenico (13-24th c.)	**Arezzo:** San Domenico (1250-)

On the course of its European spreading the Franciscan church-type has accommodated to the local Gothic traditions, but its basic arrangement has been kept. During the late Gothic period, mainly in Germany and Austria it has been adapted to the Civil Gothic architecture; the use of Hall-spaces, hall-sanctuary and vaulting has become general. But first and foremost we have the Northern type of churches (B). It follows the early Christian tradition of the separation of priests from the rest of the Christian community by means of a templon wall. Such separated presbytery is stretched into the nave. In the case of the matured forms this presbytery is "pulled out" from the body of the church. This is the rise of the elongated sanctuary form with polygonal ending.
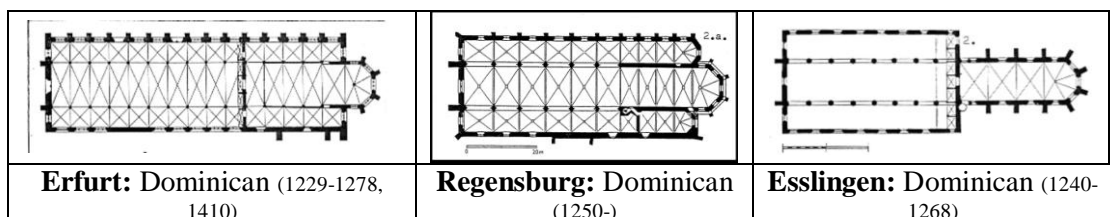
Erfurt: Dominican (1229-1278, 1410)	**Regensburg:** Dominican (1250-)	**Esslingen:** Dominican (1240-1268)

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*B.) **Esslingen, St. Domenic church (1250-1268)**, this is a true representative of the „B" type church (North from The Alps), the matured architecture of the Urban Friars. It has three aisles with en elongated apse. Before the apse according to the former chapterly traditions there is a „lettner", a partition wall to enclose the sanctuary.*

C.) The mixed types generated various forms © following the high gothic or Cistercian or Civilian gothic forms. Sometimes the alloy generates extraordinary forms such as the "mother" church in Toulouse.

| **Bologna:** *Dominican (1236-)* | **Salzburg:** *Franciscan(13-15th c,.)* | **Toulouse:** *Dominican (1206-1304)* |
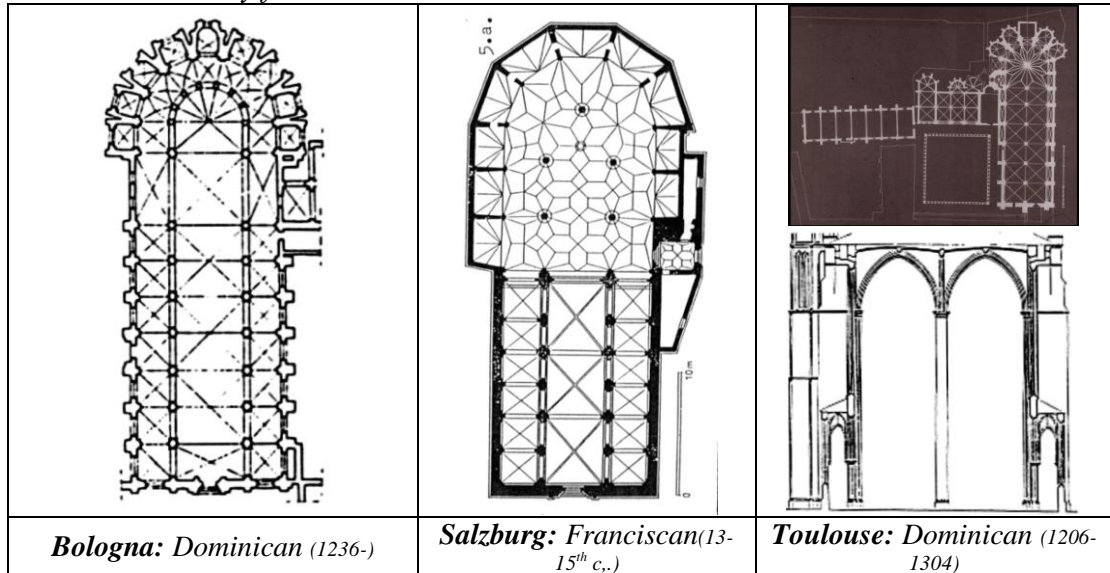
- Salzburg, Franciscan church (body: 13th, sanctuary: 15th century), the reconstruction of the sanctuary was designed by Hans von Burghausen in a very special manner: the ending of the Hall-sanctuary is a five sided polygon while the side aisles are curved to form an ambulatory. Only five Headless intermediate columns are supporting the stellar-vaulting. The fifth column is placed in the longitudinal axes. The church can represent the large difference between the Romanesque and the Gothic atmosphere looking at its body and sanctuary.

  - **Toulouse, Dominican church (1260-1304)**, an extraordinary arrangement: a hall-church with two aisles and an ambulatory with radiating chapels. The closest relative of it is the distracted Saint-Jacob in Paris. These solutions prove the speculative and inventive character of this architecture.

  - Venice, San Giovanni e Paolo (1330-1460), the former Dominican church on this site was founded in the middle of the 13th century. It is very similar to its twin-church of the Frari but it is higher see the details at Santa Maria Gloriosa dei Frari). Otherwise its plan is a nice representative of the Cistercian type.

- Venice, Santa Maria Gloriosa dei Frari (1330-1469), an enormous church following the Santa Croce type with slight changes: the main apse and the side chapels has got polygonal ending attaching to their apse-quadrate, moreover not only the sanctuary but the aisles are vaulted at an enormous height with cross vaults. In the interior the side forces are taken by large wooden pulling beams thrusting through the space. The crossing has been crowned by a dome. The emphasising of the crossing is a general Italian tradition, the use of the dome is the reminiscence of Byzantine influence in the local traditions. (Compare it with its twin-church: SS. Giovanni e Paolo.)

## VI/4. The Gothic Architecture of European Countries

The Cathedral Gothic architecture of Northern France was rapidly spread all over Europe. The medium of the propagation was the Cistercian Order. This innovative company resonated very sensitively to the new ideas and technologies not only in the field of architecture but of agriculture, and of artistic activities. But their rigorous life standards, building regulations and aesthetic norms made them transform the "normal" gothic world into their Cistercian "half-gothic". They picked up –selected- only those forms out of gothic texture which did not oppose their standards. They adopted the load-bearing structures – especially the vaulting- but rejected the decorations: no decorations, no statues, and no tracery they allowed. Only the "skeleton" of gothic was propagated towards the European countries first. Only one state has got gothic art and architecture directly from the "clear spring" – England. The familiar connections between the French and English Norman dynasties which were tied firmer by the Plantagenet marriage, secured gothic forms arrive undisturbed in the British Isles.

VI/4.a., The Spread of Cathedral Gothic in England

a.1., The direct French influence

The early cathedrals has spread in England for the first time. The early cathedrals were built by artisans coming from France. The English cathedral essentially differs from the French ones - from the models. The cathedral originally meaning administrative centre of the Church keeps its function in England as well. But the structure of the English Church was determined by the missionary Benedictines' monastic traditions. So the basic elements of the administration remained the Abbeys. That is why the monastic cathedrals were built outside the settlements and was applied to the monastic way of life. There were characteristic buildings of the Benedictine monastery (ambulatory corridor, chapterhouse) attached to the church. Even the space structure of the church kept the monastic traditions: the complicated composition of spaces remained as the monastic liturgy demanded it. The unification tendencies of the French cathedrals were not fulfilled here. In the case of the early cathedrals even crypts were used, later the axial enlarged chapels -dedicated to the Virgin Mary- at the end of the sanctuary has been developed.

- **Canterbury, Cathedral (1175-1184),** rebuilt by craftsman William from Sens. Though they followed the early models, the Norman Romanesque tradition and the strong Cistercian Gothic weakened it. They applied the strong Western towers with Early Gothic articulation, but kept the strong cross-tower dressed in Gothic forms. The internal supports of the arcades were articulated in a Romanesque way. They applied the sexpartite vaulting of the early gothic, but neglected the emporium in the four storey high internal elevation (they wanted the new building-parts adopt to the existing and remaining nave). The respect for the traditions and the architectural heritage characterised English architecture ever since that time.
- London, Westminster Abbey (1245-1269), this is the direct descendant of the early "French taste". It was intended to be the counter point of the French coronation church – Reims: so it became the "most French" cathedral of England bearing the signs of the high-gothic the "rayonnant". Here appears the tracery for the first time in England, and here is the largest height at the nave (32 m), and here is the largest number of statues inserted into the composition. Despite all this it remained English: only elements were taken over.

| Canterbury: Cathedral (1175-1184) | London: Westminster Abbey (1245) |
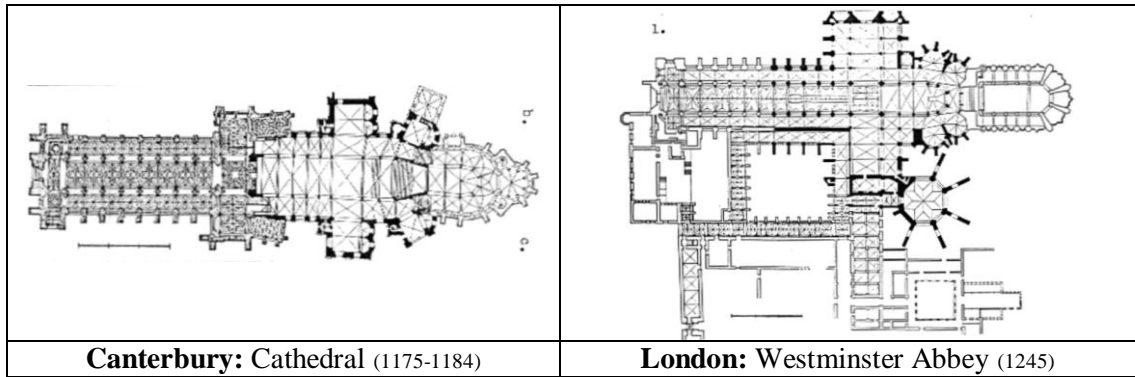
The Identical Development of English Gothic Architecture

a.2., Early English Architecture

The period from 1200 up to 1250 is named this way. By this time from the sources of the Norman traditions, the Cistercian Gothic, and the influence of the Northern-French Cathedral Gothic the English architecture found its own way. As far as the Anglo-Saxon tradition of additive construction prevailed during the Gothic times there are a lot of cathedrals having certain parts from different periods: in case of York the body was built in the Early period (it has nice Western pair of towers), the also the body of Gloucester originates from the 13th century.

- **Salisbury, Cathedral (1220-1270)**, the basilica has three aisles, two transepts, and a sanctuary with a straight ending (Cistercian influence). The Western towers are reduced and pushed away from each other. The Western elevation is static, wider than its French forefathers – that is a camouflage-wall. The mass is ruled by the massive cross-tower. The decorations are following the Norman traditions. The inner and outer elevations are dominated by horizontal elements – the different storeys are separated strictly, there is no correspondence between them. They applied the most developed vaulting: the pointed arch cross-vault with even height.

| Salisbury (1220-1270) | Lincoln (1192-1210, 1220-1240) |
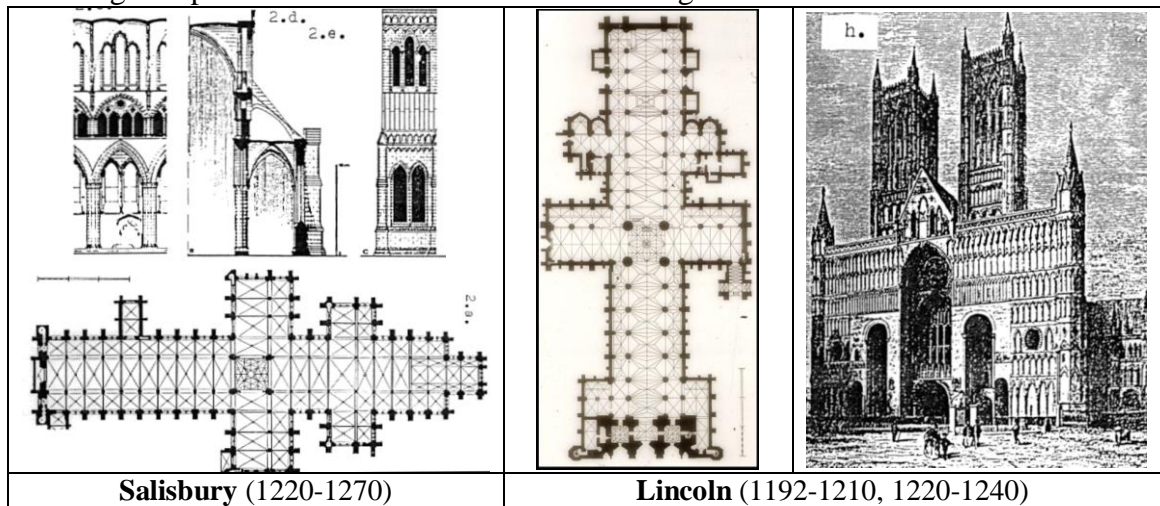
- **Lincoln, Cathedral (1192-),** it was built on Romanesque bases influenced by the Norman architecture. The Northern French elements are reformed in a certain way: the triforium became series of windows hiding a side gallery – so it is an emporium looking like a triforium. Though there are strong Western towers at the main facade, but they are hiding behind a scene tracery wall at the lower levels. At the end of these walls the small stair towers appeared like in Salisbury. Its structural inventions prepare the matured Gothic: new revolution has begun in the vaulting. The ribbed vaulting getting to be richer: secondary ribs appeared (where the surface of the bay does not

change its direction). We have to admit, that the internal elevation of the English cathedrals never loosed their wall-like character - so this revolution was limited to the vaulting only.

a.3., Decorated Style (1250-1350)

With the enriching the structure, and the dissolving of the separating surfaces it has been a new decorative „material-less" space created. By means of the existing elements new combinations and types of space coverings and vertical supporting system has come to life.

- Wells, Cathedral (1320-1368), the good representative of the English architecture which is rich in inventions. The unusual structural ideas, (the bracing of the crossing!) with the geometric decoration make the whole church an exceptional achievement of the Gothic period. The fan vaulting of the oktagonal Chapterhouse is remarkable. Here the secondary ribs are so numerous, that they can produce a new almost organic effect. These ribs are coming to life and they became individuals: they can get into the air; these flying ribs are appearing also in Bristol cathedral.
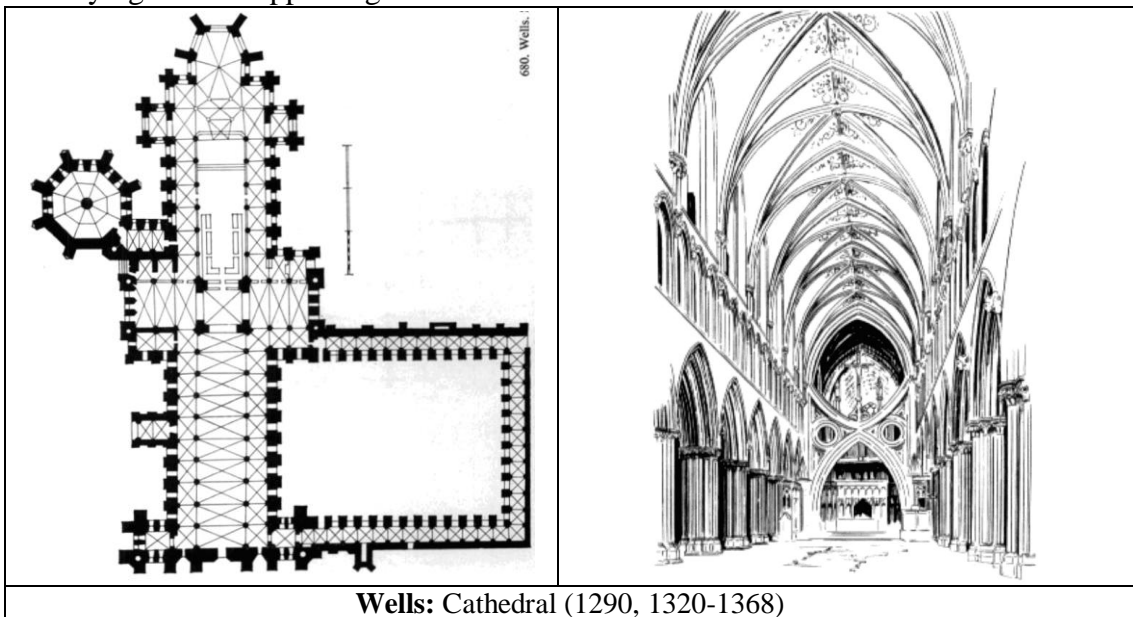

Wells: Cathedral (1290, 1320-1368)

a.3., Perpendicular Style (1350-1550)

At this time England was the model for the late Gothic development. Its structure creating and space creating achievements established a new school. In a different way, partly independent from England the German Civil Gothic arrived to this kind of architecture. The French equivalent of this phenomenon is the „flamboyant" style. This English late Gothic architecture gained its name (perpendicular) from the rationalisation of structures, and the vertical-geometrical determination of the forms (the characteristic mullions of the traceries). The very late period is named „Tudor Style" after the Royal Family of that time. (One of its characteristic features is the so called „Tudor-arch" - a pointed arch straightening at the top.)

- Gloucester, Cathedral (1329-1337), the Romanesque nave had been vaulted in Decorated Style, and there was a new choir and sanctuary was built to it. Its walls are entirely dissolved. The vaulting of the ambulatory corridor in the monastery wing has been built of fan-like structures, and the surfaces are covered by plate-tracery motives. Its high artistic value is secured by the organic way of using the architectonic forms. The interior of the buildings is dressed in fantastic ornamental motives of architectonic origin pretending like a living organism..

- Chapels: the English equivalent of the Continental Room-churches (as unified space-form was the Royal, familiar and university chapels. The examples: Cambridge, King's College (1446-1515), London, Westminster -Henry VII. Chapel (1503-1519), Windsor, George Chapel (1481).


| **Cambridge:** Kings' Colledge Chapel | **London:** Westminster – VII. Henry Chapel |
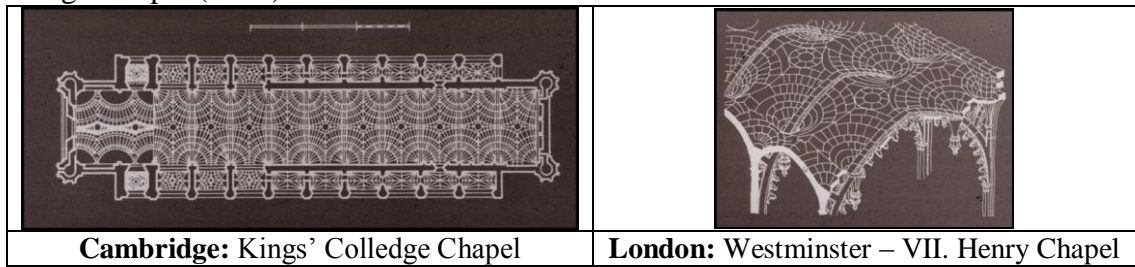
VI/4.b.,   The Identical Development of Spanish and South of France Gothic Architecture

(The Romanesque architecture of the territories showing strong Antique influence saved this character in the further development as well. Researchers regard the Gothic development of Provance, Auvergne, Italy and Hispania as Latin Gothic areas. But they differs from each other so much, that it cannot be regarded as a unified style, so I take this group apart.)

There have new scientific and philosophic ideas get into the European architecture by means of the Islamic influence of the Spanish territories and by the Jewish refugees heading to the North. The Area become the nest of different kinds of heretic tendencies (albigent, katár). The representation of the Church manifested in the cathedrals became the expression of strength and defence. The Antique lightness and gaiety was mixed with serious and fortress-like characters.

- Alby (South France), Cathedral (1282-1330), a church with one aisle born in the spirit of the liturgy of Lateran. Its cylindrical buttresses are formed as fortress-towers, and are extended into the interior of the church engulfing side chapels. The coronation of the walls is formed to contain a machicolated gallery (Fortress of God). The plastic decoration of the church is realistic and alive.

Alby: Cathedral (1282-1330)
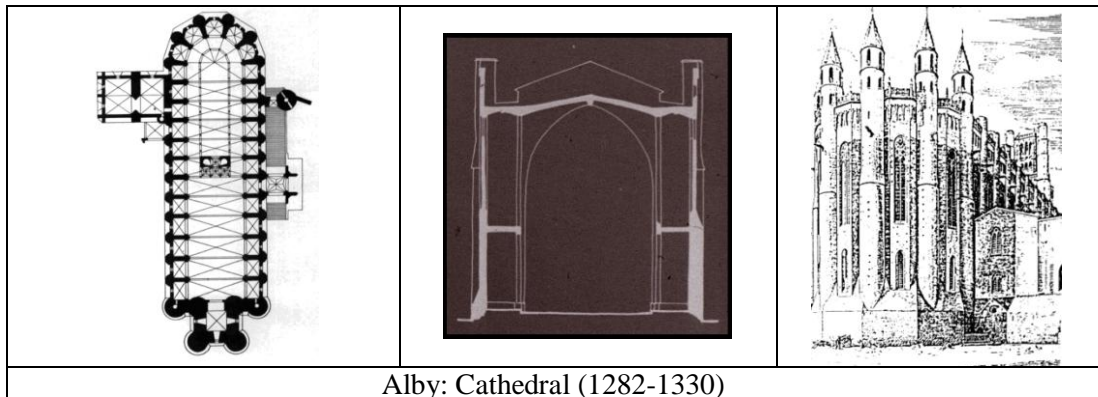
Burgos, Leon, Toledo (Spain), the cathedrals (13th century), were built in the spirit of the French cathedrals (direct influence from Burgos) but in their solutions the former aspects are present. There was a new colour in Gothic the application of Islamic decoration. The double Western towers of Burgos Cathedral followed the model of the tracery spiral roof of Freiburg, Ulm, and Basel.

| **Burgos:** Cathedral(1221-) | **Leon:** Cathedral(1199-1273) | **Toledo:** Cathedral(1227-1418) |
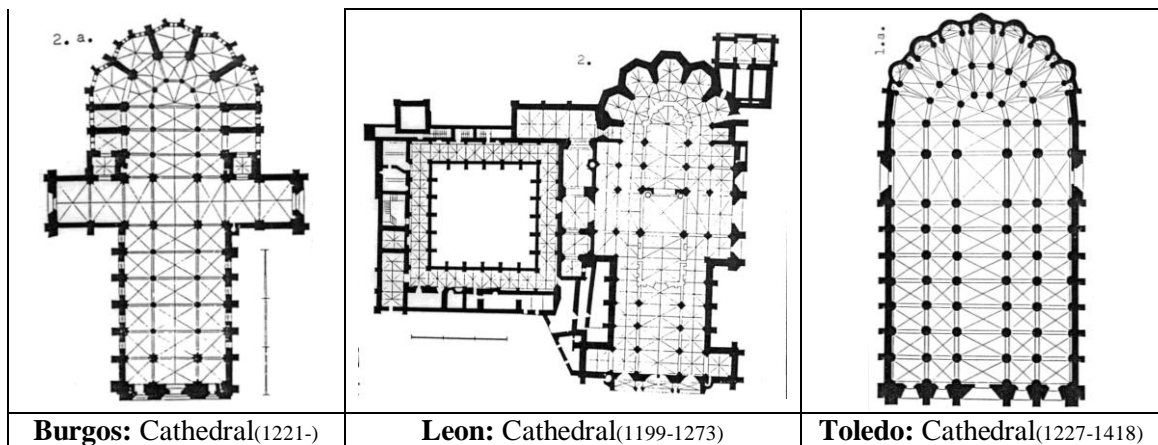
VI/4.c., The Identical Development of Italian Gothic Architecture

There had no unified feudal state developed in Italy opposite to the French example. Italy was a land, where non of the Great Powers could dominate: the German Roman Empire had certain positions in the north, the Papacy dominated the central region, and the Norman Principality the southern parts and Sicily. As the preliminaries of the rise of the middle class the city-states were leading the political life. Among the internal struggles for seizing the power and in the shadow of social stresses the Cathedral Gothic -the art of the centralised feudal monarchy- remained unfamiliar. The strong Antique tradition can be felt even in Gothic art. Sometimes this Italian Gothic is called as „Proto-Renaissance". The style of the representative buildings, the cathedrals were essentially influenced by the French and Italian version of Cistercian architecture. Moreover even the present and here emerging architecture of the Urban Orders (Franciscan and Dominican -or Preaching-Friars) had its imprint on the architecture of these times.

- **Siena, Cathedral (1229-1350),** originally it had been designed to be larger on the course of the reconstruction of the Roman church. The present existing one with three aisles and straight ending at the sanctuary was intended to be the transept of the ever designed building. The arcades of the original nave have been still standing along the public square making the architectonic loggia-like partition of it. Its clustered pillars influenced by Antique forms remind us to the Romanesque traditions of Tuscany with its poly-chrome facings. The plan shows Cistercian influence; there was the workshop of San Galgano monastery close at hand. The higher form of pointed arch cross vault has been used with a raised keystone. The plastic elements (pinnacles, traced gables, dwarf-galleries) are situated in a harmonious way together with the poly-chromic (coloured stone, mosaic). There are no Western towers. The basilica elevation is divided by only four turrets. The verticalism is missing, an evenly co-ordinated composition characterises the outside: the rose-window is situated in the centre of a square, and not in a pointed false-arch. The skeleton structure of the gothic spirit is missing: though the presence of the pinnacles, creeping leafs, and tracery the buttresses of the ground-floor level and the upper level are not placed onto each other. The sculptural elements of the facade seem to be following directly the Antique idealistic traditions.

| **Siena:** Duomo (1229-1348) | **Orvieto:** Duomo (1285-1350) |
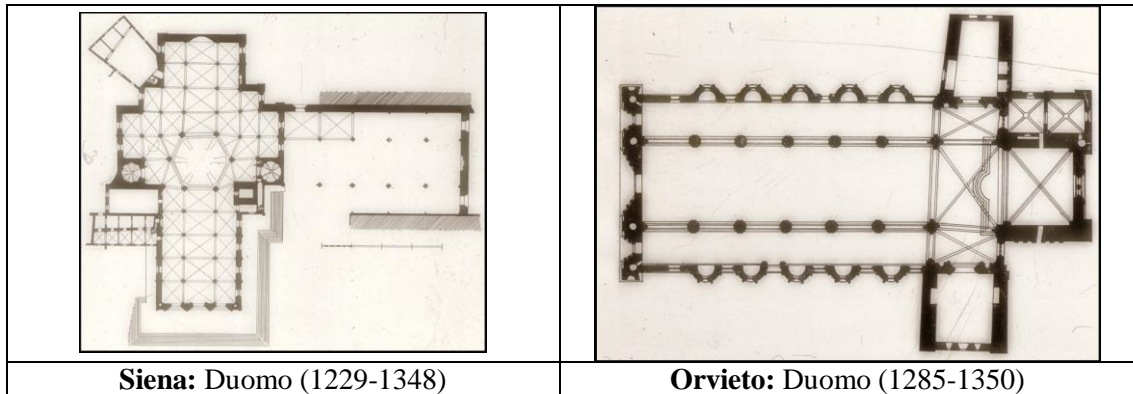
- Orvieto, Cathedral (1285-1350), basilica with a straight ending of the sanctuary. The plan shows Cistercian influence. Its body has been extended sideway by apsedial chapels. The main elevation is the close relative of Siena.
- **Florence, Duomo (1294-1434),** it was Arnolfo di Cambio who began the construction of the building at the former place of the Early Christian basilica of San Reparata. The work was taken over by Giotto after 1301. The composition of the ensemble (duomo, battistero, campanile, cimitero) has Romanesque and Early Christian traditions. To its three-aisled longitudinal body there has been an octagonal, central dome-space connected (Reneissance!:Brunelleschi,1418-1434). Its main apse and the transept remind us to the Antique form of the „cella trichora". The elevation (completed in the XXth century) is the relative of Siena, but it saves the cooler, plain-like Romanesque Florentine traditions of large marble stone-sheet encrustation (San Miniato al Monte).

| **Florence:** Duomo (medieval elevation 1296-) | **Bologna:** Duomo (1390-1525) |
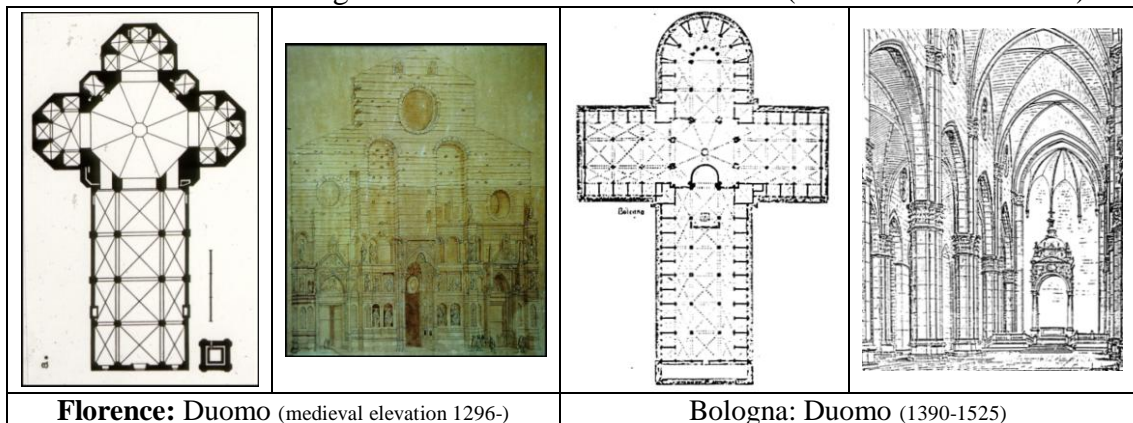
The Spread of Cathedral Gothic in Italy

Even the Romanesque architecture had been determined by strong Antique traditions, that created a special „Latin Gothic" (see it later) in Italy. The Cathedral Gothic spread just as a scattered phenomenon mostly in the North as an Italian version.

- Milan, Duomo (1387-1418) with its five aisles it shows close relations with the German examples. In the detailing the influence of the French cathedrals are obvious. There are no towers on the Western facade, the strong cross-tower ruling the mass represents typical Italian manner.

Milano: Duomo (1384-1418)

- Pisa, Santa Maria della Spina (1323), a small chapel built on the bank of the River Arno. Its reliquary character makes connections with the Sainte-Chapelle. Its interior is Proto-Reneissance.

VI/4.d., The Identical Development of German Gothic Architecture

The Cathedral Gothic met strong local traditions in the "countries of the Germans". The medium of the transmission of Gothic forms was the Cistercian Order so it missed the French sophistication, but owned the strict simpler structural, geometric way of thinking.

- **Magdeburg, Dom (1209-1363),** its construction and detailing is the close relative of the Late Romanesque doms (Bamberg, Naumburg). A Cistercian workshop (Maulbronn) worked on the construction. It has a Romanesque type of French sanctuary as a reduction of Cathedral Gothic. In the interior only the measures of the clerestory windows were enlarged - except this, nothing changed. The pair of Western towers are characteristically German solutions (Limburg an der Lahn). The only sign of the presence of Gothic is the slender tracery on the upper levels of the towers, but even that is a mere application. This is a good example of the influence of the Cistercian "half-gothic"; Only element (mainly load bearing structures are transformed to be gothic, but the composition and the spirit is Romanesque.
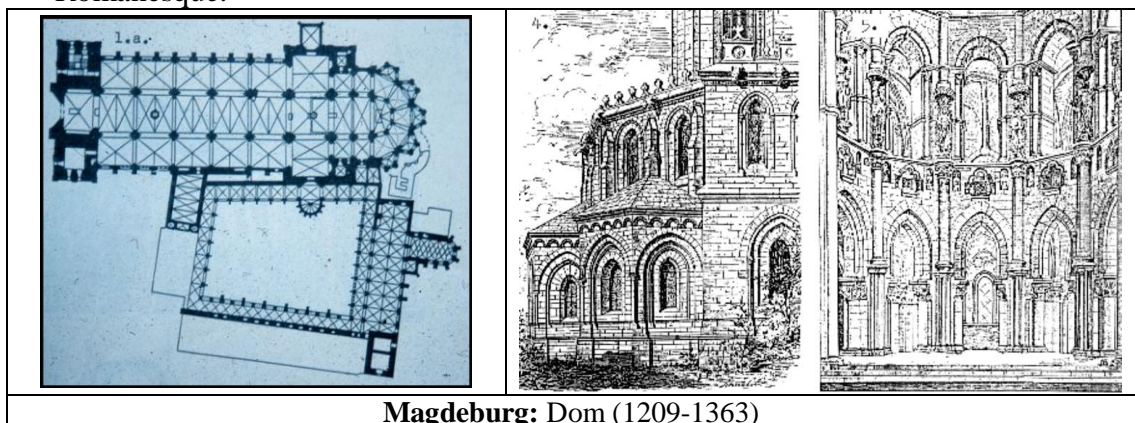

Magdeburg: Dom (1209-1363)

- **Limburg-an-der-Lahn (1200-1235),** the monastic church has taken combined gothic forms: the internal elevation with the four storeys, a true gothic form of the sexpartite vaulting. Otherwise the outside of the building shows German Romanesque face – only the accent - on the Western Towers- is more expressed.
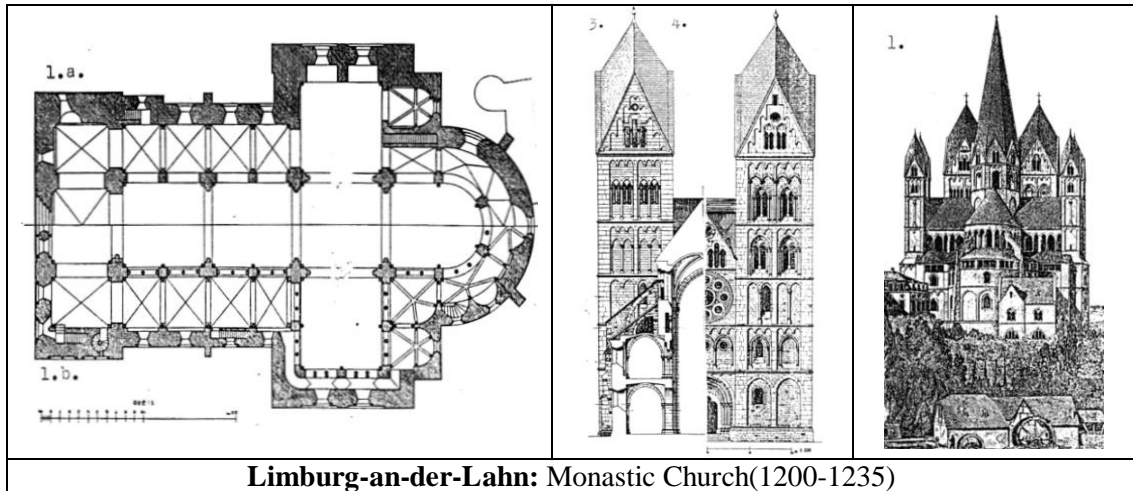
Limburg-an-der-Lahn: Monastic Church(1200-1235)

The early and matured period was mainly determined by the Cathedral Gothic of North France with the typical German transformations. In building activity the cathedrals are substituted by the parish churches of the towns. (The strengthening of the middle class did not make it necessary step by step to have the secular and ecclesiastical rank of the town determined by the feudal hierarchic grade of the bishopric.) This phase would prepare the development of the late Civic Gothic. In architecture instead of imitating particles of the outlander (French) forms German Gothic began to experiment inspired by the spirit of gothic.

- **Marburg, St. Elisabeth church (1235-1283),** a hall-type of church with three aisles and a transept with apsidal endings. As the three apses are projected into three directions they remind us to the Cella Trichora, so the Romanesque traditions prevailed in constructing the space. But as far as its cross-section concerned the hall-church is a progressive step in the development.
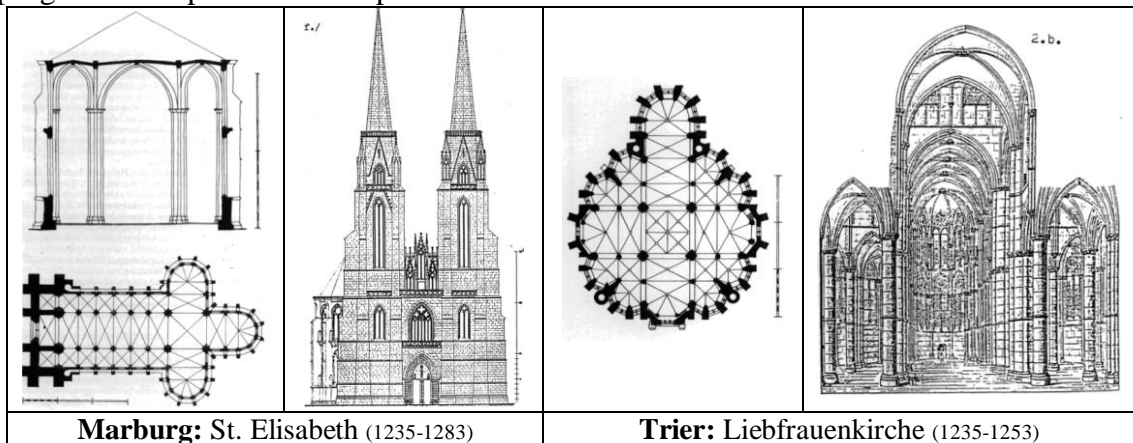

Marburg: St. Elisabeth (1235-1283)   **Trier:** Liebfrauenkirche (1235-1253)

- **Trier, Liebfrauenkirche (1235-1253)**, a centralised space turning around the French sanctuary with a cross-tower. The composition is exceptional and inventive, but the mass-forms are pointing backward to the Romanesque. The simple architectonic decoration tastes as Cistercian Gothic architecture.

VI/II.e., The Spread of Cathedral Gothic in Germany

Finally the representative "imperial" needs brought the "royal" high gothic into Germany. After the Hohenstauf family strengthened the German Roman Empire (II. Frederic has gained Sicily and Southern Italy, and - though formally- even seized the Royalty of Jerusalem) a need emerged to competit with the glittering of the French architecture. Their aim was to be "more Gothic" than the French.

- **Köln, Dom (1248-1322),** under the influence of Amiens. Its five aisled body was only finished in the XIXth century. As a peripheral phenomenon it picked one aspect of the whole, and concentrated on it. It was the verticality. Related to the French architecture this enthusiastic piercing into the highness is loosing the equilibrium: it is irrationally vertical.

| **Köln:** Dom (1248-1322) | **Strassburg:** Dom (1250-1275) |
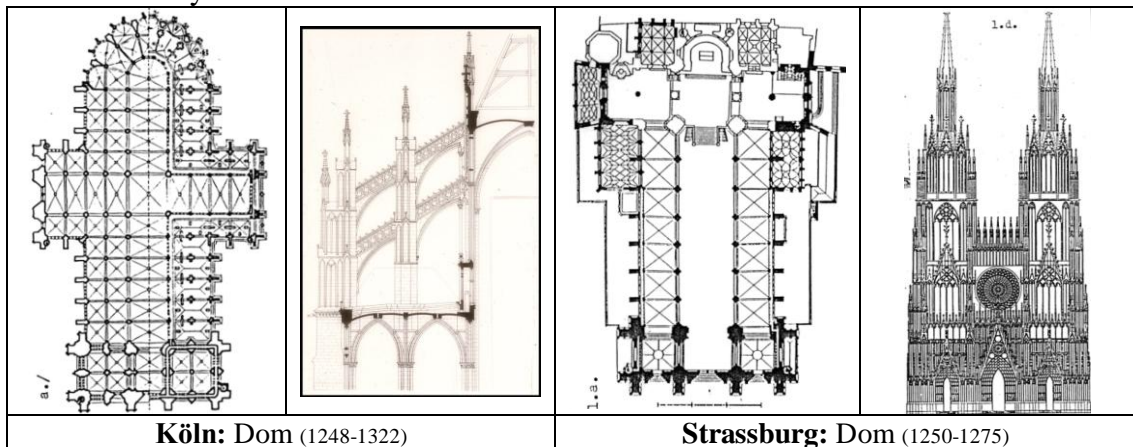
- **Strassburg, Cathedral (1250-1275),** an individual piece of art designed by Erwin Steinbach. The space construction and the detailing has been determined by the French cathedrals, the Cistercian architecture and the Romanesque traditions forming an irrational unity. Both Köln and Strassburg used the most developed form of the wall-construction, where the elements are in a strong correspondence.
- **Lübeck, Virgin Mary church (1280-1350)**, the model example of the Gothic brick-architecture of the Hansa-cities. Its space construction follows the tradition of the cathedrals, but its articulation is simpler and more materialistic.

VI/5. Late Gothic Architecture of the Middle Class (Civil Gothic)
1350-1550

This term has two meanings: from one hand it is used to determine the late period of the German Gothic development, from the other hand it could be an interregional tendency as a new syntheses came to life at that time in Europe representing not the mere fall of a certain period, but it was an identical creator of a new style.

The Preliminaries of Civil Gothic in Germany
The fall of the German-Roman Empire, the dying out of the Hohenstauf Dynasty, this area can be characterised by the feudal decentralisation. The towns and their fellowships are representing the civil development. In architecture the early (Late Romanesque, Early Gothic) dom-architecture was slowly substituted by the independent urban architecture (perish churches, town halls). While in the case of the centralised feudal (French) model the rank of a certain town was determined by feudal (ecclesiastical) hierarchy present in there, the civic towns did not have to seize such a rank. The towns were intended to be independent even from the feudal administrative bounds of the Church as well. The urban perish churches were built by the Middle Class; they were maintaining it, choosing and paying their own priests. The rich families added their own financial support by the building of altars, votive chapels, or by paying for personal services (winged altar, votive and grave chapels, fiscal priests, and rented stallums). Even the Urban Orders applied to the urban life. They have enriched the architecture and have taken over the civil space-forms. The architectural characters:

- strong Late Romanesque traditions,
- the transformation of French Cathedral Gothic (hall-type space-structure),
- the coexistence of mystical and realistic tendencies in plastic decoration,
- two story high internal space division, covering of hinged load bearing connections (rich structural articulation, net- and stellar-vaults),
- use of single tower on the main elevation.

Building Workshops:

The inner social structure of the building activity had changed by this time. The former partly monastic, partly worldly workshops (that had been organised for a single construction) was substituted by a free community gathering around a certain personality. The leading master determined the character of the workshop (this is the process leading the Gothic architecture to individual activity). Certain masters were gathering into organisations (guilds, mason lodges). Important lodges: Wien, Bern-Zürich, Strassburg, Köln...

Architect personalities:

- **Parler Lane** - Heinrich Parler (Schwäbisch-Gmünd) and later his son, Peter Parler (1330-1399) invented a new type of net-vaulting the so called Parler-vault. Piece of arts: Prague, St. Vit cathedral, Kutná Hora, St. Barbara church
- Hans von Burghausen (1355-1432): Landshut, perish church (1387-), Strassburg, St. Jacob church (1400-1440), Salzburg, Franciscan church sanctuary (1408-1452).
- Konrad Roritzer (?-1475): Nürnberg, Lorentzkirche (1439-), Nürnberg, Sebalduskirche, Book about the correct construction of the pinnacle (1485).
- Hans Buchsbaum: Wien, Stephanskirche, Hall-sanctuary (1446-1454).
- Benedict Rejt (1454-1534): Prague, Royal Palace (1477-), Kutná Hora, St. Barbara church (completion, vaulting).

The Revolution of the Vaulting:

The three hinged cross vault system was substituted by the cylindrical net-vaults and spherical stellar vaults. The new invention of these times is the vaults constructed of intersecting three dimensional ribs. The two ways bending of the ribs increase the rigidity and provide a very decorative, organic effect.

| Cylindrical Vaulting	Two-way-bent rib constructions
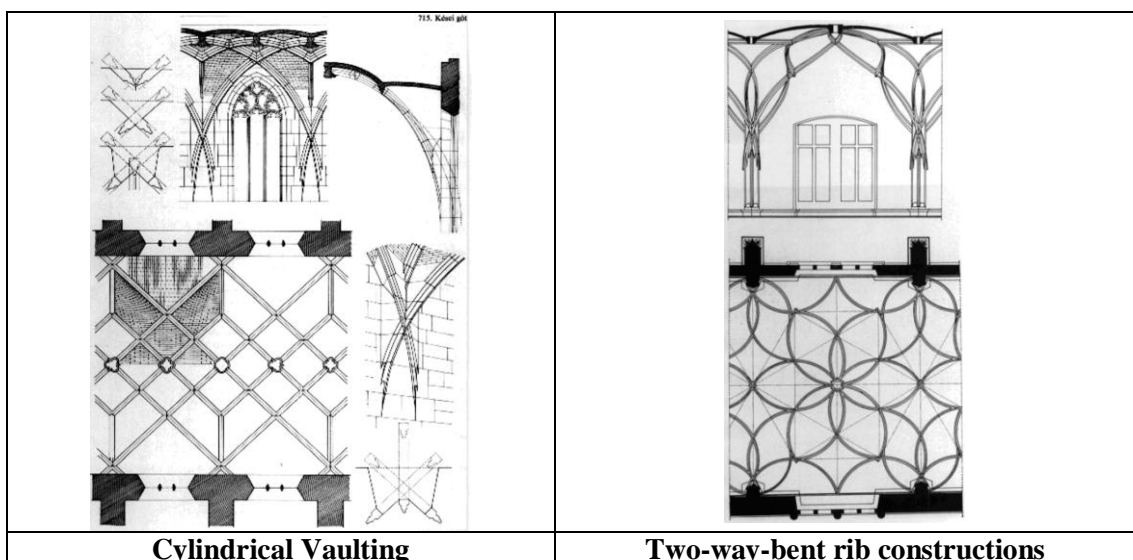
There were one more flourishing period of the Imperial Court; the House of Luxemburg – Charles IV- strengthened the empire centred in Prague. This was the last attempt, when

again they tried to resurrect the French high gothic. (It is interesting to see, that the imperial representation always called for this manner after the 12th century.)

Monuments:

- **Prague: St. Vit Cathedral (1351-1385),** the building was ready only at its Eastern end during the medieval times. It holds renaissance (transept, south tower lover parts) and baroque (south tower upper parts) element. The nave and the Western towers were finished in the 19th century. Its space-construction is a "traditional" French cathedral model. The detailing is rather rough and geometric. The great invention is the vaulting: the famous "Parler-vaulting"; it is a cylindrical net-vaulting, where there is neither an archivolt, nor a rib appears right between the supports.

| **Prague:** St. Vit (1350-1385) | **Freiburg:** Münster (1260-1354) |
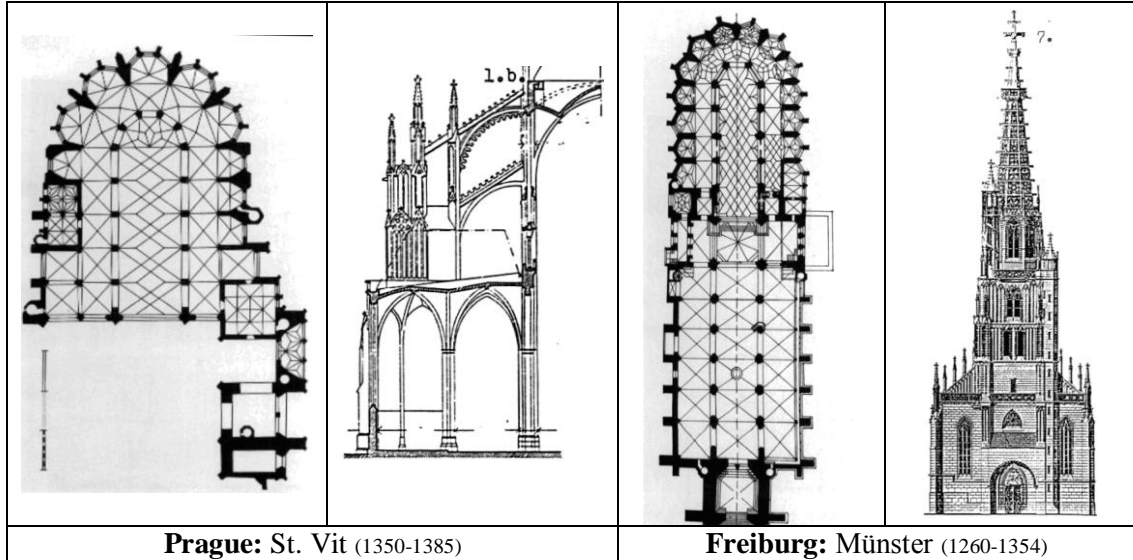
- **Freiburg in Breisgau, Dom (1260-1354)**, aroused from a Romanesque church on the course of sequential reconstruction. Its body and the sanctuary has three aisles, the plan forms a French sanctuary, there is developed net-vaulting above. The transept is a reduced version. The tracery spire of the tower has become the model for later buildings (Ulm, Basel, Burgos).

- Ulm, Münster (1377-), it has five aisles and a single Tracery-spired tower without a transept. Above the side aisles of the hall-spaced church there are net-vaulting.

| **Ulm:** Münster (1377-) | **Swäbish-Gmünd:** Münster (1351-) |
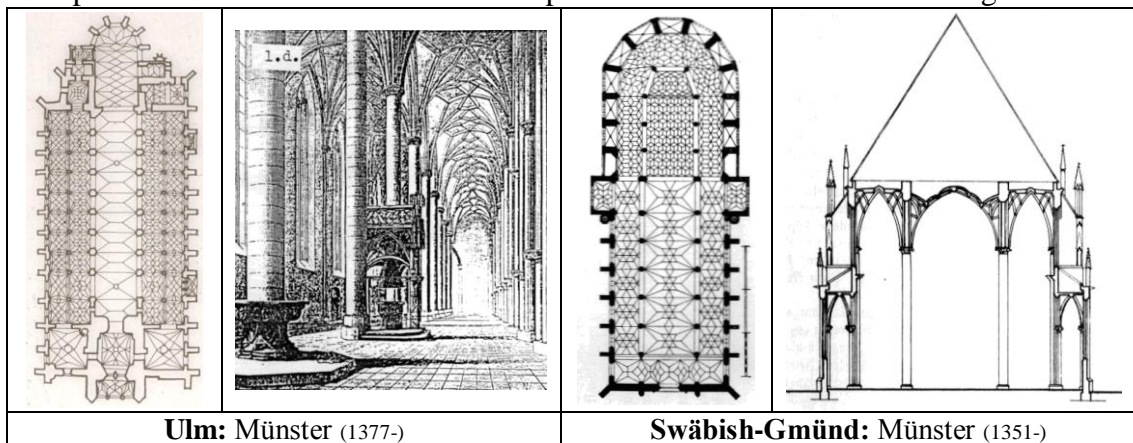
- Schwäbisch-Gmünd, Heiligkreutz-kirche (apse:1351-), piece of art of Heinrich Parler. It is the first appearance of Hall-sanctuary with the elongation of the body by means of ambulatory hall with cornice of chapels. This is the architectural correspondent of the social and economic polarisation within the cities. The larger and more representative

sanctuary is the place of the notabilities both during their life and even afterwards as a burial place.

- **Nürnberg, Sankt Sebaldkirche** (1230-1273, 1309-1350,**1361-1379**),is a perfect example –together with its sister-church: Sankt Lorenz kirche- representing the Gothic tendencies in Germany. The first period of the building shows Late Romanesque and Early Gothic forms from the second half of the 13th century, giving us the proof to see how firmly German architecture insisted on Romanesque traditions. Masters were brought from Bamberg and Ebrach (Cistercian monastery). The traces of their activity are still observable in the arcades and the walls of the nave, and the west choir placed between two towers. Remarkable, that the architectonic articulation of the interior walls can be regarded as the mixture of Cistercian (the cantilever-type support of the bunch of responds), Early Gothic (the heavy triphoriums, the sprout-like capitals. The former side gateways were placed to the western facade, under the towers. They represent true Romanesque articulation in the detailing.

The second period provides the presence of High Gothic elements on the building from the very beginning of the 14th century. In conjunction with the heightening of the vaults, the side aisles were rebuilt to be as wide as the transept. Even the windows were enlarged. The vaults still exist showing heavy pointed arch cross-vaults. The vertical growth of the building caused an additional (fifth) floor level on the western towers in 1345.

The third period is among the first appearance of the Late Gothic. They substituted the traditional Romanesque east sanctuary with a hall choir, which is one of the earliest ones in Germany. A master from the Parler family from Gmünd was active. The speciality of the plan is the shortening longitudinal span of the vaults which connect the narrow spans of the ambulatory evenly to the body of the choir resulting a strange false-perspective view.

Later only minor changes were carried out (1483-83 heightening of the western towers, 1561 and 1657 renovation, 1808 and 1906 neo-gothic renovation) so by the end of the 15th century the building acquired its present appearance.

The historic piece of arts of the church is remarkable. The stone sculptures as the Schlüsselfeld St. Christifer (1442) and the Last judgement portal with Catherine and Peter(1310) are worth remembering. From the beginning of the 16th century the activity of Veit Stoss is manifested in the Crucifixion scenery in the inside and the St. Andrew on the outside.

| **Nürnberg:** St. Sebald | **Nürnberg:** St. Lorentz | **Nürnberg:** Liebfrauenk. (1350-1358) |
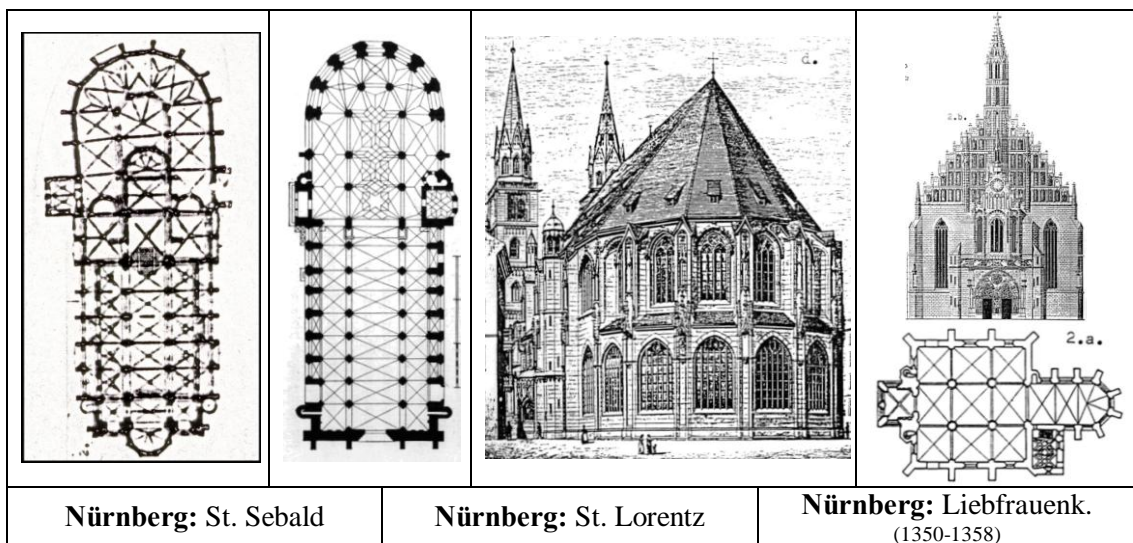
- Nürnberg, Sankt Lorenz kirche (1353-1390, 1439-1477), followed the model of its sister church in Nürnberg: St Sebaldus. The image of the building is simpler, does not contain so many layers of historic forms like the Sebaldus. Upon Romanesque preliminaries the construction of this gothic church began after 1353 as the presence of combined coats of arms on the western facade prove it. The two lofty towers and the basilica with three aisles were completed by 1390. While the articulation of the towers follow the traditions of the heavy Romanesque taste of the German Gothic architecture (which had been determined by the Dom in Magdeburg from the beginning of the 13th century), the tracery work of the high-pitched gable and the rosette, and the richly decorated gateway represent the true high-gothic spirit. In the next 40 years only the side aisles were extended by means of chapels built into the "inter-vallum" of the buttresses to serve the growing needs for representation of the patricians.

The building of the large hall choir at the eastern end began in 1439, and lasted 38 years. The hall with three aisles is a nice flourishing example for the unified Gothic space, as the special "stellar-network" vaulting misses the architraves, so we cannot observe the subdivision of the bays. There is the famous "Parler net vaulting" over the side aisles, but the vault of the nave shows (English) decorated characters by the use of the intermediate ribs known as "tiercerons". Among several masters it is worth remembering name of Kondrad and Matthäus Roritzer.

As far as its sculptural decorations concerned we can find valuable pieces of art even from the beginning of the 13th century (Adoration of the Madonna, 1210) and as the oldest sculpture of Nurenberg, but there are pieces from the end of high German Gothic (The Three Magi, 1285), and there are later pieces like the bronze chandelier of Peter Vicher from 1489. They are placed beside the pillars of the nave. The tabernacle of Adam Kraft (1493-'96) and the Angelic Salutation of Veit Stoss (1517-'18) are placed in the sanctuary.

- **Annaberg, Perish church (1499-1525),** it has three aisles, three apses and a single tower. It is an example of the Hall-church, which neglect the distinction between the body and the sanctuary. The resulting space is airy. The net-vaulting is made of three-dimensional curves.
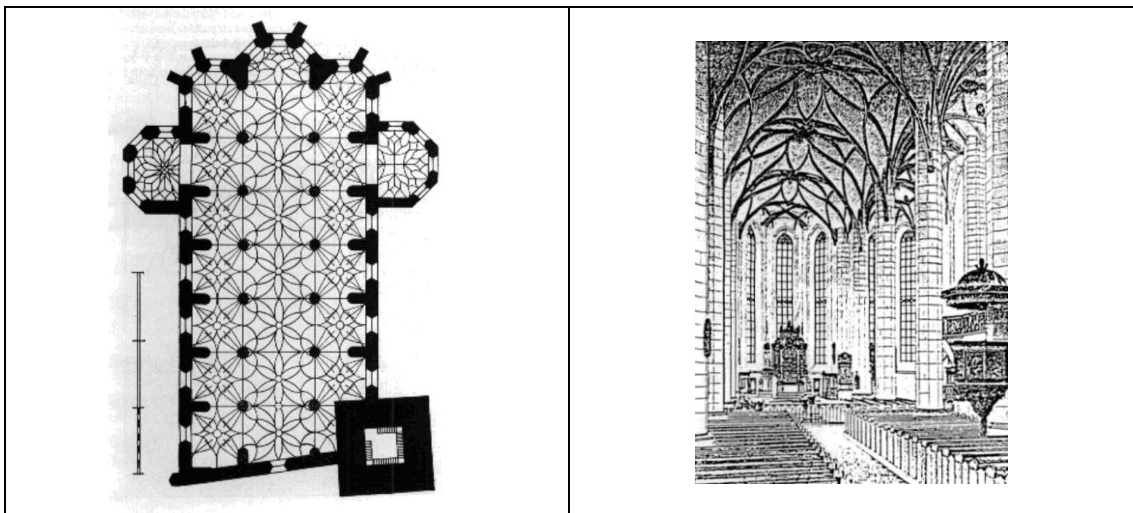
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