An Architecture of Light

FROM the ancient Greeks came an architecture of outdoor monuments. From the Romans came an architecture of interior spaces. In the late Middle Ages in western Europe there appeared the first new style in a thousand years. Its special element would be light. Those who first saw it in the early twelfth century at St.-Denis, outside Paris, simply called it modern architecture (opus modernum). Then Vasari and other architects of the Renaissance in Italy who were disciples of Vitruvius christened it Gothic after the local workmen who were not Romans and to denote modern in the worst sense. "Gothic" had become a term of contempt for the barbarians who, centuries before, had invaded western Europe and destroyed the great monuments of the Roman Empire. In the great age of Gothic art no one thought of himself as Gothic.

Still the name has stuck indelibly for the arts of western and northern Europe from the twelfth to the sixteenth century. And now it paradoxically reminds us of a creative liberating spirit. But it obscures the dramatic uses that the new style made of its special element, light. "Gothic" conjures up images of gloomy darkness that would make it the name for a literature of forbidding mystery. To understand the uniqueness of the architecture that broke the European mold and opened a new era in Western architecture we must see what its creators thought and made of light. And why and how they chose this elusive unsubstantial element for their architecture.

What could be more obvious than that light is the source of all visual beauty? Dionysius the Areopagite, whom Saint Paul himself had converted, and who was the founder of the church of St.-Denis, had elaborated this obvious fact into a principle of theology. In his Celestial Hierarchy Dionysius had described God as absolute light and light as the creative force in the universe. And Dante would put him at the summit of his "Paradiso" because in that book Dionysius had shown the way of rising to God. Theologians called this the anagogic (upward-leading) approach. The beauties of a church, then, should be mere aids "from the material to the immaterial," transparencies between us and God the "Father of the lights" and Christ "the first radiance" revealing the Father to the world.

The Gothic architecture of light would leave its mark on modern public architecture of the West-on our palaces and parliaments and universities. We can trace the first great work in the architecture of light to the shaping imagination of the French statesman-architect Suger (1081?-1151), abbot of St.-Denis. He would embody the "upward-leading" theology of Dionysius in a building. And he would reveal the opportunities in the Church for men of splendid talents to rise from humble station to shine across Western Christendom.

Born to a peasant family near Paris, at the age of ten Suger was deposited by his parents as an oblate, to be dedicated to the monastic life, in the nearby monastery of St.-Denis. In due course he became a monk, then was elected the abbot in 1122. The abbey remained his home until he died in 1151. He seems to have thought of the king of France as his father and he frequently called the abbey of St.-Denis his mother. He gloried in his lowly origins, "I, the beggar, whom the strong hand of the Lord has lifted up from the dunghill." The adopted child of St.-Denis, he felt that as he belonged to the Church, so the Church belonged to him. This helps explain, too, his unabashed taste for the gorgeous and the ornate in his church in an age of militant ascetics. His noticeably short stature, like that of Erasmus, Mozart, and Napoleon, was said to reinforce his ambition. As a friend noted in Suger's epitaph:

Small of body and family, constrained by twofold smallness,
He refused, in his smallness, to be a small man.
Luckily, his classmate at the school of St.-Denis was Louis Capet, who became King Louis VI. Suger remained this king's confidant, and his patriotic devotion to the French monarchy was warmed by personal affection. Saint Denis had brought Christianity to France in the third century and become the first bishop of Paris. Reputedly martyred, he was buried in the place that later became the suburb of Paris named after him. Charlemagne attended the dedication of a new church there in 775, and as Saint Denis became recognized as the patron saint of the French monarchy, the abbey acquired the profitable privilege of holding fairs under the saint's protecting name. On a legendary journey to the Holy Land, Charlemagne had acquired the sacred relics that were finally deposited at St.-Denis. By the eleventh century the Benedictine monastery there was preeminent in France and perhaps in all Europe.

Meanwhile the Capetian dynasty, founded in 987 by the ambitious Hugh Capet (940-996), laid the basis of the modern French monarchy with institutions that lasted until 1789. Hugh the Great was buried in the abbey church and it remained the burial place of French monarchs, the sanctuary of the monarchy. Only three French kings—Philip I, Louis VII, and Louis XI—would be buried elsewhere. The abbey church became a symbol of divine sanction for French kings, and of continuing royal support for the Church. After it became a "royal" abbey, it was exempt from feudal dues and subject only to the king.

But grand traditions of crown and scepter could not themselves create a new style in architecture. This required an inspired builder. Fortunately for the arts in the West the talented Abbot Suger was such a person and the church to which he was called needed to be rebuilt and expanded. Lucky for us too that, in an age of bitter theological controversy, Suger steered a prudent middle course between the mystic and the rationalist. These diverging paths remain vividly defined for us by his two famous contemporaries Saint Bernard of Clairvaux (1090-1153) and Peter Abelard (1079-1142). For Saint Bernard, fervent mystic and "purifier" of monasteries, known as the Thaumaturgus of the West, a church bedizened by gold and silver and stained glass was a Synagogue of Satan. The clergy, he said, should be models of charity and simplicity, avoiding the path of "scandalous curiosity." Which was the very direction of Bernard's archenemy, Abelard, prophet of rationalism and a founder of scholastic theology. Yet Abelard's path would also lead him to St.-Denis, where he attracted scores of students, among them Heloise. The love affair of Abelard and Heloise produced a son, after whose arrival they secretly married. Her outraged protector wreaked revenge by hiring ruffians to castrate Abelard. After this public humiliation, Abelard retired to the Benedictine monastery of St.-Denis, where he compiled his book entitled Yes and No (Sic et Non). Following his risky maxim "By doubting we come to questioning, and by questioning we learn truth," he answered the 158 key questions in Christian theology.

Abelard's next work, Theologia, on the doctrine of the Trinity, was burned as heretical, for he rashly debunked the most sacred tradition of the abbey. He sought to prove that, contrary to common belief, the patron saint of the abbey and of all France was not the biblical Denis of Athens (or Dionysius the Areopagite) who had been converted by Saint Paul. The monks of St.-Denis were so outraged that Suger, newly elected abbot of St.-Denis, gave Abelard the unusual permission to leave the abbey--on condition that he not become a monk of any other house.

Even as a young man in his twenties Suger had impressed his superiors at St.-Denis with his practical talents. His abbot and his friend King Louis VI sent him on sensitive diplomatic missions. Then in 1122 he was elected to succeed the abbot, whose lax administration was under attack. Suger boasted that he had reformed the life of the abbey "peacefully, without scandal and disorder among the brothers, although they were not accustomed to it." He set the example of moderation by eating meat only when he was ill, by drinking wine always diluted with water, and by choosing food that was "neither too coarse nor too refined."

But when Suger turned his thoughts to the disintegrating building of the abbey church he was anything but moderate. Must not the House of God, he asked, be an "image of heaven"? He demanded that "golden vessels, precious stones, and whatever is most valued among all created things, be laid out, with continual reverence and full devotion, for the reception of the blood of Christ." The Great Cross in St.-Denis could never have enough gems and pearls. Suger then rose from the beauty of beauty to the beauty of light, without which there was no beauty. He was captivated by the aspiring theology of Dionysius, the reputed founder of St.-Denis, who described God as absolute light, and light as the creative force in the...
We must see what Suger created not from the perspective of our late-twentieth-century glass-walled, light-drenched architecture, but from Suger's twelfth-century solid-walled, heavy-columned, barrel-vaulted Romanesque. While Suger's Gothic did not flood church interiors with daylight, it produced unique and melodramatic new lighting effects.

St.-Denis offered Suger his providential opportunity. In 1124, only two years after he became abbot, the abbey attained a new symbolic eminence. King Louis VI, threatened by invasion from the Holy Roman Emperor Henry V and King Henry I of England, had hastened to St.-Denis to invoke his patron saint. There he received the banner of St.-Denis, the "oriflame" in the shape of orange points of flame, which became the royal standard. By feudal custom this made the king the vassal of the abbot, who represented the saint and incidentally made the abbey, in Louis's own words, "the capital of the realm." Louis deposited there the crown of his father, Philip I, which he said had rightfully belonged to the saint. Thenceforth St.-Denis would remain the tomb of French kings, the traditional depository of the crown of France, and the abbot was empowered to consecrate future kings. Incidentally, Louis granted the abbey the right to hold a new fair in honor of Saint Denis, which became one of the most lucrative in the Middle Ages.

Pilgrim hordes flocked to St.-Denis. "The distress of the women," Suger reported, "was so great and so intolerable that you could see the horror how they, squeezed in by the mass of strong men as in a winepress, exhibited bloodless faces as in imagined death; how they cried out horribly as though in labor; how several of them, miserably trodden under foot [but then] lifted by the pious assistance of men above the heads of the crowd, marched forward as though upon a pavement." Suger made his abbey a royal archive and wrote a life of Louis VI. Best of all, he left us his own history of the planning, construction, and consecration of the rebuilt abbey church of St.-Denis, which has earned him a pioneer's place in the history of historical writing.

The royal proclamation making St.-Denis the religious capital announced the auspicious moment for rebuilding and enlarging the church. Suger began a fund-raising campaign in no way inferior to the efforts of our times. Only one quarter of the renovation funds would come from the abbey's regular revenues. The rest Suger gathered from the increased profits of properties he had improved, from the revenues of fairs, and from donors who had been promised the personal intercession of Saint Denis if they made a handsome gift. Incidentally, donors might receive the title *frankus S. Dionysii*, once suggested as the origin of the name France. The campaign went on for thirteen years before the work was begun. When Louis VII succeeded his father in 1137, Suger was no longer close to the royal administration, and so had the leisure for writing history and rebuilding the abbey church.

In Suger's day, luckily for the future of the arts in Europe, the Ile-de-France—a region in north-central France that had long been the political center—had no special architectural style of its own. Planning a grand new church, Suger had to start from scratch. Not being an architect, he had the further advantage of freedom from professional inhibitions or conventional rules. His two imagined "models," Hagia Sophia in Constantinople and the biblical Temple of Solomon in Jerusalem, he had never seen. Happily, with the free vision of the amateur and the miraculous collaboration of God, Suger could embody the upward-leading theology of his patron saint in his new church of St.-Denis. And at the same time he created the hallmarks of the Gothic-ribbed vaults, which supported the vaulted roof without heavy supporting walls, three portals of richly carved decoration and arose window at the west, ambulatories and chapels radiant with the light of stained-glass windows, and the structure of the chevet (ambulatory, chancel, and chapels) supported on points of masonry rather than on solid walls. The worshiper within sensed only a skeletal structure dramatized by stained-glass light.

To accomplish this purpose the church would be rebuilt in three stages by a plan that evolved in Suger's mind gradually, in response to the resources. He first imagined importing columns from Rome "through the Mediterranean, thence through the English Sea and the tortuous windings of the River Seine." But this proved unnecessary. Through a gift of God a
new quarry, yielding very strong stone, was discovered such as in quality and quantity had never been found in these regions. There arrived a skillful crowd of masons, stonecutters, sculptors and other workmen, so that—thus and otherwise—Divinity relieved us of our fears."

The west or entrance end, begun in 1137 and completed in 1140, lengthening the old nave by 40 percent, was built of stone from the miraculous quarry. It was a symbol of royal authority, just as the eastern end announced the authority of the clergy. There a striking new feature, a rose window of stained glass, was placed over the middle of three richly carved stone portals. Crenellations atop the facade emphasized St.-Denis as the embattled protector of the monarchy. The three entrance arches, which for Suger represented the Trinity, also recalled the Arch of Constantine in Rome, through which the triumphant emperor passed in purification on the way to be received as a divinity.

Before completing the towers of the west facade, Suger abruptly turned to the choir at the east end, leaving the connecting nave till later. In 1140 he began the most original, intricate and audacious part of his plan, the first truly Gothic structure. The choir was completed in only three years and three months. The Norman and Romanesque styles had been marked by massive piers and columns, heavy walls, rounded arches, barrel vaults and a few windows, with sharply defined interior space. That was an architecture of rotundity, solidity, and containment, for the fortress-church, the Church militant. The new luminous skeleton of stone proclaimed a Church no longer on the defensive, but reaching prayerfully up to God and triumphantly to the world in an architecture of light. The simple engineering device that Suger introduced in his choir and that made this possible was the ribbed-vault. With slender ribs of stone to support the vault, the walls could be opened into more and larger windows. Suger used these ribs to separate the nine adjoining chapels lit by sixteen stained-glass windows, beaming many-colored light to be reflected on the polished mosaic floor and on the dazzling altar of gold and gems. "The entire sanctuary," Suger boasted, "is thus pervaded by a wonderful and continuous light entering through the most sacred windows."

It is no wonder that awed pilgrims and worshipers called these French works (opere francigena) the modern architecture (opus modernum). Suger's west entrance—the narthex, with its sharply defined forms—arches of stone sculpture, rose window and crenellations, was only a prologue to the fully Gothic choir where a slender frame of stone invited polychrome light. Suger's choir above contrasted to the solid walls, groined vaults, and enclosed spaces of the Romanesque crypt below.

The two ends of the reconstructed church were to be connected by a nave, which Suger included in his plan but never completed. The legend that Christ had personally hallowed the original walls made Suger reluctant to demolish them for rebuilding. He had first decorated the walls of the nave with murals that found no place in the new Gothic architecture of transparent walls. This third stage of rebuilding, to be finished after Suger's death, would carry the ribbed vaults and luminous walls of the choir into the body of the church. The nave of Notre-Dame in Paris shows what he probably had in mind.

God helped again when the huge wooden beams needed to tie the structure together could not be found. Suger led the search into the woods. "By the ninth hour or sooner we had, through the thickets, the depths of the forests and the dense, thorny tangles, marked down twelve timbers (for so many were necessary) to the astonishment of all, especially those on the spot...to the praise and glory of our Lord Jesus, Who protecting them from the hands of plunderers, had reserved them for Himself and the Holy Martyrs as He wished to do." A terrifying storm during construction destroyed the best houses and stone towers in the neighborhood, but "was unable to damage these isolated and newly made arches tottering in mid-air, because it was repulsed by the power of God." All who worked at the building, Suger explained, would rise above earthly theology and be glorified by
reaching toward a vision of the harmony of God. The builders would themselves be "edified." Dazzled by his success in fulfilling Dionysius' hopes Suger described his feelings when finally he gazed on the main altar.

When out of my delight in the beauty of the house of God—the loveliness of the many-colored stones has called me away from external cares, and worthy meditation has induced me to reflect, transferring that which is material to that which is immaterial, on the diversity of the sacred virtues; then it seems to me that I see myself dwelling, as it were, in some strange region of the universe which neither exists entirely in the slime of the earth nor entirely in the purity of Heaven; and that, by the grace of God, I can be transported from this inferior to that higher world in an anagogical manner. (Translated by Erwin Panofsky)

At the consecration of the church and dedication of the choir on June 14, 1144, King Louis VII led a procession of the relics in the presence of Eleanor of Aquitaine, five archbishops, and the nobles of the realm. So they reenacted the legendary first consecration of the Church when Christ himself had led a celestial hierarchy of saints and angels. The ceremony now sealed the bond between the king and Saint-Denis, and peace between King Louis VII and his feudal vassals.

Over Suger's futile objections, Bernard persuaded Louis as a penance to undertake a Crusade to the Holy Land. Going off on this disastrous Second Crusade the king left his crown and the royal administration in the hands of Suger. During the king's absence the versatile abbot reformed the government and the system of taxation, suppressed civil war, and so became (in Louis VII's phrase) Pere de la Patrie. When the beaten and humiliated king returned, sadly estranged from his wife, Eleanor, Suger resisted temptation and gave back the crown. By the time of his death in 1151 the indefatigable Suger embodied the long and glorious Capetian kingship in St.-Denis, which became the archetype of the French cathedrals brilliantly visible later in Paris, Chartres, Reims, and Amiens.

The light coming through stained-glass windows became a hallmark of the Gothic in later medieval churches. Here, too, Suger was a pioneer. The stained-glass windows for which St.-Denis was to be the prototype preceded by nearly a century the great technical advances of the glassmaker's craft, which would produce thinner flatter sheets and a wider range of colors. But these advances would tempt stained-glass artists to compete with painters, and so lose the primitive vigor seen in the St.-Denis windows. Happily, the glass of the early twelfth century had just the crudities to give it a varying textural interest of its own. Just as in architecture, there was yet no local style of stained glass in the Ile-de-France. Along with the bronze founders, jewelers, and enamel workers from the valleys of the Rhine and the Meuse, the masons and stone carvers from northern and southwestern France, and the mosaicists from Italy, whom he had come to know in his diplomatic travels, Suger collected "many masters" of stained glass from many regions. His international workshop produced lighting effects that outshone the occasional small windows of Carolingian and Romanesque buildings. And for the first time the windows of St.-Denis used a series of medallions to tell a story. These narrative windows illuminated the life of Moses, told allegories from the Epistles of Saint Paul, and depicted the Tree of Jesse (including a figure of Suger prostrate before the Virgin).

"The dull mind rises to truth through that which is material," Suger had inscribed on bronzed doors of the west entrance. And, in seeing this light, is resurrected from its former subversion." In the next century a French bishop, Gulielmus Durandus of Mende (1237?-1296), in his Rationale Divinorum Officiorum, expounded the unique function of stained class in this architecture of light. "The glass windows in a church are Holy Scriptures which expel the wind and the rain, that is all things hurtful, but transmit the light of the true Sun, that is God into the hearts of the faithful."
That light somehow never reached the revolutionary mobs from Paris who arrived at St.-Denis in October 1793. Following their command to "destroy pitilessly" this monument of royal power, they set about pillaging the work of Suger. A French painter, Hubert Robert (1733-1808), romanticized their sabotage in La violation des caveaux de Saint-Denis. After the building had fallen into neglect, desecrated by birds of passage and pouring rain, what glittering stained-glass windows were left became a special target for the "preservers" of antiquities. Now it would be hard to say whether St.-Denis suffered more from the enemies or from the admirers of the Gothic. Windows that had survived the Huguenots and the Revolution were mostly destroyed by the industrious Alexandre Lenoir (1762-1839) in 1799, the self-appointed savior of French art who removed from St.-Denis 140 panels of the original stained glass ostensibly for his Musee des Monuments Français in Paris. Only thirty-one were replaced. The rest were either smashed in oxcart transit to Paris or sold by him to foreign collectors. Ironically, Lenoir's work of "preservation" did much to inspire Chateaubriand's glorification of Christianity in Le Genie du Christianisme (1802) and nourished the Romantic movement, which led to the classic misrepresentation of the Gothic spirit. Just as Piranesi had transformed the fragments of the classic into dark romantic imaginings, so Chateaubriand inverted Suger's Gothic into the opposite of the upward-leading theology of light.

...the shadows of the sanctuary, the dark aisles, the secret passages, the low doors, all of this evokes in a Gothic church the labyrinths of the forests; it all makes us conscious of religious awe, the mysteries, and the divinity. ...The Christian architect, not satisfied with building forests, wanted, as it were, to imitate their murmurs, and by the help of the organ and suspended bronze he has associated with the Gothic temple the noise of the winds and the thunder that rolls through the depths of the forest.

(Translated by Paul Frankl)

Goethe, who called architecture "frozen music," took up Chateaubriand's lead and found his own Gothic tones in the German forests. And the great figures of French literature joined the litany. Victor Hugo (1802-1885), in his Hunchback of Notre-Dame, made the disfigured Gothic church his architectural Quasimodo. And the historian Jules Michelet (1798-1874) saw Nature as the progenitor of the Gothic.