The Year 1300 and the Creation of a New European Architecture

Architectura Medii Aevi

Vol. I

The Year 1300 and the Creation of a New European Architecture

Edited by
Alexandra Gajewski & Zoë Opačić

BREPOLS

LIST OF AUTHORS

Tim Ayers, University of York

Klára Benešovská, Ústav dejin umění, Akademie věd České republiky, Prague

Robert Bork, University of Iowa

Christoph Brachmann, Technische Universität, Berlin

Caroline Bruzelius, Duke University

Thomas Coomans, Vrije Universiteit Brussel

Paul Crossley, Courtauld Institute of Art, London

Michael T. Davis, Mount Holyoke College

Christian Freigang, Johann Wolfgang Goethe-Universität, Frankfurt am Main

Alexandra Gajewski, University of Michigan, Ann Arbor

Yves Gallet, Université de Bretagne Occidentale

Norbert Nussbaum, Universität zu Köln

Zoë Opačić, Birkbeck College, University of London

Marc Carel Schurr, Université de Fribourg Suisse

Achim Timmermann, University of Michigan, Ann Arbor

Tomasz Węcławowicz, Papieska Akademia Teologiczna, Kraków

Christopher Wilson, University College London

Cover photograph: York Minster, chapter house (Christopher Wilson, 2006).

D/2007/0095/133
ISBN 978-2-503-52286-9

Printed in the E.U. on acid-free paper

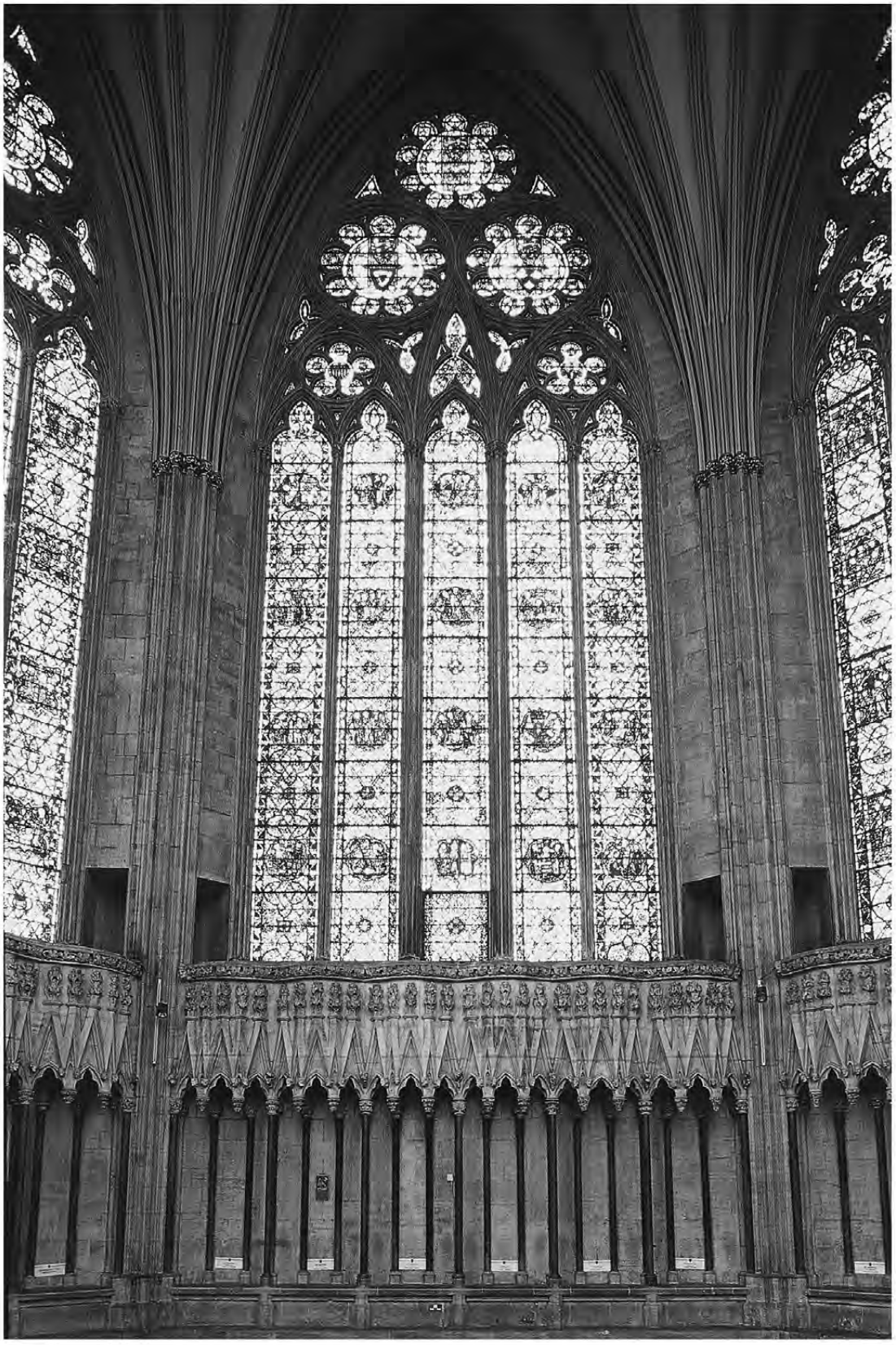
CONTENTS

Foreword and Acknowledgements

The concept for this book has germinated at the international architectural conference held at the Courtauld Institute of Art in London in May 2005, under the title *The Year 1300 and the Creation of a New European Style*. The aim of the conference – and of the book – was to convene an international cast of scholars with a focus on diverse architectural issues affecting the decades around the year 1300, often seen in traditional classifications as an "in-between" period of European Gothic. The illuminating quality of papers delivered on that occasion and the relative lack of scholarly publications in this area, have convinced the conference convenors (now the book's editors) of the need to commemorate that event with a dedicated volume which also marks the beginning of a new venture: a much-needed series on medieval architecture, published by Brepols. Alongside the editors, Professor Paul Crossley was the prime mover of the conference, which coincided with his sixtieth birthday. Although not conceived as a Festschrift, the present publication, by a consensus of all its authors, is warmly dedicated to Paul Crossley in honour of that memorable occasion and of his scholarship. Having been one of the first to draw attention to the importance and complexities of architecture around 1300, many of the papers pay tribute to his ideas. It is therefore fitting that Crossley's introductory essay should inaugurate the volume, just as his opening remarks set the scene for the conference, thereby placing him among colleagues, friends, and former students, who, over the years, have shared and often benefited from his phenomenal scholarly expertise, infectious enthusiasm, and his inexhaustible kindness and good will.

We would also like to record our deep thanks to Professor Thomas Coomans, the series editor who was instrumental in bringing this volume to fruition, and whose help and advice were essential. Professor Christopher Wilson kindly provided the cover photograph. Dr Kathleen Doyle, Professor Megan Holmes, Christopher Masters, Dr Agnieszka Rożnowska-Sadraei, and Dr Nick Lambert, offered valuable editorial and technical assistance. We are also grateful to Chris Van den Borre and Brepols Publishers, to the British Academy, whose grant helped the funding of the conference, and to the Courtauld Institute, the conference's generous host.

The Editors
London and Jonquières, 19th July, 2007



York Minster, chapter house (Christopher Wilson, 2006).

Introduction

Paul Crossley

In 1948, amid the ruins of German intellectual and political life, Werner Gross published his groundbreaking study of Gothic architecture in Europe around the year 1300, *Die Abendländische Architektur um 1300*.[1] This grand synthetic account grew out of his 1933 investigation into the essential characteristics of German church architecture, particularly its mendicant variant, in the century between 1250 and 1350 – an architecture he called *Hochgotik*, but we would now describe as Rayonnant.[2] Gross' new study went far beyond the exclusive focus on *Hochgotik* and its conventional divisions into building type ("hall church", "basilica", "high choir"). Taking as its widest context the whole of medieval architecture, from the Early Christian basilica to the dome of Florence cathedral, *Die Abendländische Architektur* was the first concerted attempt to explain what happened to Gothic building across both northern and southern Europe in the critical decades either side of the year 1300, a period written out of most histories of the style as one of sterility and decline. Beside the heroic age of Gothic experiment, in the twelfth and thirteenth centuries (the so-called Early and High Gothic), and the Gothic "autumn" of the fifteenth century (the so-called Late Gothic), the architecture of the early fourteenth century had occupied a limbo world in the art historical syllabus, as a doctrinaire and reductive version of High Gothic (*Doktrinärgotik*, *Reduktionsgotik*). Gross was among the first to reject this anachronistic biological paradigm. He recognized that the year 1300 saw profound and creative changes in the style, geography, patronage and typology of Gothic architecture, changes, he argued, which amounted to a blueprint for Late Gothic architecture across much of central and western Europe.

While Gross' turn of focus from German to 'western' architecture was wholly consistent with Germany's post-war rejection of militant nationalism in favour of a "new Europe", it also recognized a real historical re-alignment in the development of Gothic architecture.[3] The fourteenth century saw the expansion of Gothic from a largely French into a wholly European phenomenon. The architectural hegemony enjoyed by Paris and northern France in the twelfth and thirteenth centuries came to be disputed by centres of patronage hitherto on the fringes of the Gothic world: Naples, Florence, Cologne, London, Barcelona, and Prague. From a style limited in distribution but relatively consistent in form, Gothic emerged into the new century as an international language of extraordinary formal diversity; as it proliferated to the edges of the Christian world, so it splintered into inventive regional and national dialects. Gross was acutely aware of these ramifications. His subject buildings ranged from north German *Backsteingotik* to Catalan basilicas, from Rayonnant choirs in northern and central France to Tuscan town halls. His sensitivity to the formal nuances of Gothic also alerted him to the profound changes affected by French Rayonnant architecture on the type of the Great Church represented by the "classic" cathedrals of the High Gothic. Rayonnant replaced their plasticity and power with linear and brittle latticeworks of tracery, inscribed systematically across increasingly large windows and extending over thin, apparently weightless, walls.

Gross also alerted us to the simultaneous appearance across the whole of Europe of Rayonnant's apparent opposite: the spacious, austere, and block-like churches of the Cistercians and the friars, and their off-shoots in Catalonia, eastern Europe and the Italian peninsula. Hitherto dismissed as "Reduktionsgotik", Gross was the first to appreciate the colossal creative contribution of these simplified churches to new versions of European Gothic. The architecture of the friars, he recognized, was not a matter of internal reform alone, but a radical change in aesthetic and liturgical thinking having profound repercussions on almost all types of church architecture outside mendicant patronage, including palace chapels, basilicas and especially parish and collegiate churches. To Gross, these two seemingly irreconcilable versions of Gothic – brittle Rayonnant and spacious *Reduktionsgotik* – were not separate phenomena; they borrowed particular ideas from a common repertory of forms, and they even exchanged fundamental formal principles at some deep level of optical affinity.

These essays, the fruits of an international conference held at the Courtauld Institute of Art in May 2005, make no pretence to be a "new Gross", even though many of them touch on the essential insights of *Die Abendländische Architektur.* Mendicant architecture figures in this collection as a radical force in the re-shaping of the notion of the "church" and its urban context (Coomans, Bruzelius, Opačić). We are reminded of Gross's broad geographical reach by papers on Kraków cathedral (Węcławowicz), and on the patronage of the Přemyslids and Luxembourgs in Prague and its environs (Benešovská, Opačić). And we pursue Gross's subtle analyses of the formal systems of Rayonnant with papers on the visual organization of Saint-Urbain at Troyes and Clermont-Ferrand cathedral (Davis), and on the arch-shaft systems of Narbonne and Cologne cathedrals (Freigang). If anything, our geographical range is more ambitious than Gross'. He ignored Lorraine (Brachmann), down-played southern Italy (Bruzelius), and rarely touched on the Low Countries (Coomans). His real blind spot was, however, England. No English buildings figure in Gross' synthesis, though by the time the *Abendländische Architektur* had appeared in print (1948) Nikolaus Pevsner had begun to appreciate the vital importance of the English Decorated style in the formation of continental fourteenth-century architecture,[4] an insight fleshed out later by Pevsner himself and, most fully, by Jean Bony.[5] Christopher Wilson's essay helps to restore this imbalance, though in terms, not of English influence on the Continent, but of French Rayonnant influence on English Decorated.

But perhaps the main difference between Gross' great study and the attitudes reflected in these essays lies in their welcome embrace of heterogeneity, their ready appreciation of the diversity and variety of European architecture around the year 1300. To us, this multiplicity of patronage, art centres and formal modes is one of the main attractions of early fourteenth-century architecture; to Gross it posed a serious problem of method. His essentially formalist *Stilkritik* required the reconciliation of such opposites; it demanded the existence of a single stylistic common factor which visually united the complexities of Rayonnant with the austerities of mendicant and Cistercian *Reduktionsgotik.* Only then could he uncover the "core" and generating principle of the style. Gross located this common denominator in what he regarded as a new treatment of interior enclosing walls, particularly in the church's main elevations, namely, a reduction of the wall to a weightless surface receptive equally to the overlays of tracery (in the north) and to illusionistic fresco painting (the south).[6]

This essentially post-Hegelian normative theory of style no longer carries conviction. The interiors of Santa Croce in Florence and Saint-Urbain in Troyes are remarkable more for their striking dissimilarities than for any notion of a shared mural weightlessness. For us, the very absence of formal unity is one of the salient features of architecture circa 1300. Indeed, Norbert Nussbaum puts the notion of "the hybrid" at the very centre of fourteenth-century architecture. Hybrids synthesize elements not usually connected into surprisingly new and meaningful constructions. The contrasts in fourteenth-century architecture between a tendency to extreme simplicity and an unprecedented increase in typological and formal repertories is one such formation, since hybrids prosper in situations of mutually enhancing difference. Fourteenth-century architecture is grounded in what Nussbaum calls "the aesthetics of effect": a certain showy virtuosity which prefigures the contrasting and paradoxical structures of the German Late Gothic. Hans von Burghausen's choir gallery of St Martin's at

Landshut, with its pointed contrasts between bare wall and intricately nodding ogee arches is one (Late Gothic) case; another is Peter Parler's transformation, on the south transept façade of Prague Cathedral, of a buttress into its opposite: an openwork spiral staircase. Both solutions had precedents, though less showy, earlier in the fourteenth century. Nussbaum sees similar disjunctions and miss-matchings in the looser and more "relaxed" geometrical dispositions of fourteenth-century choir plans.[7]

Northern European Rayonnant architecture and its transformations figure as prominently in our volume as in Gross' conspectus. But whereas Gross was content to describe and identify Rayonnant's special graphic and linear qualities, we concentrate on a wider set of problems associated with the style: on questions of influence and cultural context, on matters of use, technique and audience, and on inconsistencies and variations behind Rayonnant's apparent uniformity.

Some outstanding buildings seem to have been *too* ingenious for established taste. Christopher Wilson points to the mannered eccentricity of the parish church of Saint-Urbain at Troyes (begun 1262) as one reason why a building of such imaginative brilliance exercised little or no influence on later Rayonnant architecture in northern France. Other Rayonnant enterprises, like the choirs of Evreux Cathedral and of Saint-Germain at Auxerre, delight in novelty with a freedom that Peter Kurmann has called "proto-Late Gothic".[8] Yet in the new choir of Saint-Ouen at Rouen (begun in 1318), Yves Gallet points to a "return to conservatism" – a retrospective restraint that deliberately recalled the clarity and coherence of the High Gothic of a century earlier. Gallet likens this retrenchment to John XXII's contemporary injunctions against elaborate polyphonic music, usually in motet form. Both music and architecture, Gallet argues, are liturgical objects, and both – Saint-Ouen and the Pope's critique – represent a call to order, a return to the principles and foundations of their respective disciplines. A similar conscious return to a traditional, austere, and, in this case, local style of Great Church, can be found in the new building of the ancient Benedictine abbey of Saint-Bénigne in Dijon, with its clear quotations from "the golden age" of early thirteenth-century Burgundian architecture. Alexandra Gajewski elucidates this updated version of Dijonnais tradition not, as some earlier commentators have done, in terms of provincial conservatism, or a decline in originality, but as a sensitive response to a new set of patronal and functional demands, namely, the renewed interest from the dukes of Burgundy in Saint Bénigne, their 'national' saint, and the monastery's increasing participation in civic functions and its growing dependence on the generosity and patronage of the lesser nobility and the middle classes. The sobriety of its cathedral-like structure was, therefore, not wholly the result of financial constraint or poverty of invention; it was a subtle adaptation of older formulae to new social and liturgical pressures.

Other contributors to this volume tease out neglected aspects of Rayonnant, notably its technical achievements and its power to organize devotional experience. Christian Freigang, in specific reference to Narbonne Cathedral, notes the constructional efficiency of Rayonnant's tendency to standardize, and reduce in number, templates for cut stone. Such uniformity has, he suggests, a profoundly visual value, for one of the essential constituents of Rayonnant is what he calls "the wall-framework structure", that is the regular and continuous integration of arches and their "supporting" shafts into smooth and uninterrupted grids. These visual frameworks lie over the surface of the wall, frame it into compartments and often disguise its irregularly-shaped core by their uniform repetitions and their seemingly weightless transitions. Michael T. Davis defines this kind of Rayonnant in pictorial as much as in architectural terms. For Davis, Rayonnant is not only a formal system but a quasi-magical scaffolding for image display. His holistic and multi-media analysis of the choirs of Clermont-Ferrand Cathedral and Saint-Urbain at Troyes reveals their "visual logic", a logic which shapes and directs liturgical and devotional experience by means of divisions and compartments, by framed hierarchies of images and by graduated spaces, all designed to give perceptible measure to the act of seeing. There are parallels here with contemporary studies of optics, for these carefully orchestrated frameworks of architecture and space, figure and frame, construct the viewer's vision and transform it stage by stage into a potentially transcendent experience.

How similar co-ordinations of space and imagery work to communicate an institution's self image is exemplified by Tim Ayers' analysis of the choir of Merton College Chapel, a rectangular long choir visually

dominated by Rayonnant traceried windows. The stained glass here sets out a rising hierarchy: from the clergy in their stalls to the figures of the Apostles (their rightful predecessors) in the stained glass above them, and to the image (repeated no less than twenty-four times) of the Chancellor of the university, Master Henry Mansfield, kneeling either side of an Apostle. And the whole community, fictive and living, is turned towards the climactic east window, which displays Christological themes and a proudly institutional heraldry. Here the liturgical divisions of the chapel's spaces, its choir, sanctuary and high altar, are matched by a correspondingly graded and framed imagery; and these hierarchies of image and space dissolve the boundaries between the living and the dead and re-shape them into a diagrammatic and ideal community. The living community of the clergy and their chancellor-patron, all endorsed by their fictive apostolic predecessors, eternally participate in the mystical body of Christ.

Little wonder that the dazzling imagery and the gravity-defying architecture of Rayonnant had, by the year 1300, become a truly international style, moving speedily from its homeland in northern France to England, northern Spain, the Rhineland, and the Danube. Not surprisingly, it was quick to appear in the duchy of Lorraine, bordering on the archdiocese of Reims. As Christoph Brachmann underlines, Lorraine – a neglected art historical territory – was neither an outpost of north French and Burgundian influences nor a mere corridor between France and Germany. Brachmann argues that early fourteenth-century Lorraine, particularly the church architecture of the imperial city of Metz and the Antonine church at Pont-à-Mousson, showed an inventiveness which paralleled – perhaps even anticipated – some of the most advanced forms of Rayonnant architecture in Alsace and the Upper Rhine. Marc Schurr includes Metz, principally its cathedral, in the mix that makes up what he calls the "second Rayonnant style", the style of the west front of Strasbourg cathedral and its offshoots, a style which deployed a now distinctly German version of Rayonnant and which exceeded its French models in structural daring and visual sophistication. Schurr traces some ingeniously "reduced" versions of Strasbourg to Niederhaslach and Salem, as well as identifying upper Rhenish impulses in Habsburg Lower Austria, particularly in the dazzling choir of the Cistercian church at Heiligenkreuz. Wilson addresses the stark asymmetry between French and English responses to arguably the most sophisticated product of French Rayonnant in the second half of the thirteenth century: the choir and transepts of Saint-Urbain at Troyes (1262- circa 1286). Its strict adherence to the format of evenly-sized upright windows is seen by Wilson as a critique of French Rayonnant's interest in all shapes of traceried window, while its skeletal and eccentric details became the blue-prints for the salient features of the Strasbourg west front. More importantly, Wilson traces Saint-Urbain's quirky inspiration in some of the most influential buildings of the English Decorated style, in the cathedral choirs of Exeter and St Paul's in London, in the chapter house of York Minster, and, most significantly, in Michael of Canterbury's St Stephen's Chapel in Westminster, the single most formative building of English Decorated.

Wilson explains this remarkable reception not through direct contact with the actual building but via collections of lodge drawings. The practice of architectural drawing, accelerating around the year 1300 with the foundation of collections of drawings in the lodges of Cologne and Strasbourg (and later Vienna and Ulm), radically altered the relationship between the architect and his sources. Drawings could open up a vast new repertory of knowledge, but they lacked the direct authority of the real model. With their sharp, inscribing linearity, drawings are paradigmatic images of the rigid geometrical frameworks of Rayonnant. With the clarity of a legal document, they fixed an architect's conception for the benefit of his patrons and the limitation of his successors. But as Robert Bork points out, drawings not only delineate detailed forms or general structures; their lines, pin-pricks and measurements lay bare the geometric ratios which underpin almost every aspect of masonic design: they open up to us the inherent logic of the architect's planning. And by means of Computer Aided Design researchers like Bork can investigate the geometry of Gothic buildings with new accuracy and rigour. Bork's analysis of Plan F in Cologne and Plan B in Strasbourg establishes the primacy of the Upper Rhenish design and shows that the Cologne architects knew the geometrical methods and even the units of measurement used by their Strasbourg colleagues.

The geometric procedures of drawing united all differences of scale and dimension. The same manipula-

tions governed the design of a large window as the miniature arches of an altar retable or a statue baldachin. As Freigang reminds us in his analysis of the Plan F for the colossal west facade of Cologne, the Cologne draftsman employed essentially the same design principles for large-scale buildings as for small fictive architectural structures of the kind found increasingly in contemporary manuscript illumination or in stained glass. The years around 1300 marked the emergence of microarchitecture as a creative medium for architects, draftsmen, glaziers, metalworkers, and illuminators. Toy buildings, usually variants of the niche or the baldachin, crowned reliquaries or framed standing figures in glass or fresco. They formed canopies for miraculous images and monopolized interior furnishings, such as stalls or screens. Much of later medieval masons' energies went into the making of these small but intricate confections, and since their form and geometrical design procedures were identical to full-scale architecture (Bork), they established a kind of magical kinship between the infinitely large and the infinitesimally small. Practically, microarchitecture, like drawing, could be treated as a testing ground for novelties which only later were constructed full scale. Aesthetically, microarchitecture contributed to a universal visual order, since its realizations in all media united the whole church in the same language of precise but miraculous geometry. Indeed, the eye-catching qualities of microarchitecture may explain the tendency of English architecture in circa 1290 to 1300 to compile designs for full scale buildings out of enlargements of the microarchitecture of French cathedral portals (Wilson). But in the last resort, microarchitecture's symbolic resonances far outweighed its aesthetic or practical advantages. As Achim Timmermann demonstrates in his essay on the intricate octagonal font ciborium of St Mary's at Luton (probably made in London), this miniature version of a full-scale, centralized building can only be properly understood against the background of a symbolic typology that began with octagonal Early Christian fonts, proceeded through centralized Tombs of Christ, and ended with the hyperelaborate font ciboria of German fifteenth-century Late Gothic (at Ulm and Erfurt, for example).

In stark contrast to this Rayonnant world of intricate geometrical ornament is the simplified and austere vocabulary of the friars' churches, especially in southern Europe, where the new orders acted as the importers of a pared-down version of northern Gothic. It would be simplistic to lay this architectural puritanism wholly at the feet of the mendicants. Tendencies to austerity and sobriety in architecture around 1300 were not the monopoly of the preaching orders. Zoë Opačić finds them in Cistercian basilicas and in parish and collegiate churches in Bohemia and Silesia, and especially in the simplified structure of the 'hall church' (*Hallenkirche*), exemplified by the church of the so-called Emmaus Monastery in Prague, a Benedictine house which – contrary to all expectations – adopted the format of a large but simple hall church rather than a traditional basilica. And Alexandra Gajewski's study of Saint-Bénigne in Dijon reminds us that certain branches of northern late Rayonnant also tended towards a "stark, monumental simplicity", and that even the most intricate Rayonnant was, as Gross was the first to note, not immune to reduction (*Reduktionsgotik*), purity (*Gereinigte Gotik*), and a new clarity (*neue Klarheit*). But the proliferation of simplicity across all branches of church architecture around 1300 cannot disguise the fact that the friars were the pioneers in the evolution of extreme *Reduktionsgotik*. Ethical precept and practical need led to their creation of a new genre of Gothic architecture in the second half of the thirteenth century, one characterized by mural simplicity and colossal spaciousness. Despite their modest use of "northern" window tracery, these buildings – especially their naves – seem to belong to a more secular world (barns, refectories, hospitals, and chapter houses) or to a deliberately un-Gothic revival of the simplicities of Early Christian architecture. As evangelists for the urban middle classes and teachers of theology in the new universities, the friars cut drastically into the textures of established Christian life, changing patterns of piety, attracting new classes of patron, conflicting with local clergy, and leaving their imprint in the cities they colonized in the form of a novel and unmistakable version of Gothic architecture. Ayers points out that the new choir of Merton College Chapel in Oxford, despite its dependence (ironically) on the dimensions and plan of the slightly earlier Dominican Church in Oxford, was built against the background of sharp conflict between the friars and the secular clergy of the university. The repetition of the Apostles in its glass (see above) endorse the collegiate clergy beneath them as their legitimate successors, and all of them find their *imprimatur* in the images of Christ in the climactic eastern window.

But the quarrels between the mendicants and the secular clergy were physical as well as intellectual; they concerned bodies as well as minds. The competition between the friars and other clergy over lucrative rights of burial and commemoration is the focus of Caroline Bruzelius' examination of the friars as intrusive forces in the religious life of their cities, especially in southern Europe. For Bruzelius the character of mendicant architecture cannot be defined solely in conventional visual terms, as the austere architecture of reform. It has to be understood as an architecture with its own unsystematic methods of construction, an architecture of "process and not project". It is informal, episodic, and additive. It also has its own functional agenda, expressed not in two but in three spatial divisions: a choir to accommodate the growing clericalization of the orders (a process especially relevant to the Franciscans); a nave, set aside not only for preaching but also for burial; and a large western facade fronting a square and dominated by a pulpit. Exterior preaching extended the church's liturgy out beyond the facade and the piazza into the town. But it was preaching with a special backdrop. The proliferating tombs that rapidly filled up the naves of friars' churches, some of them only half built and only slowly completed, reinvented the idea of the Early Christian funerary basilica, but now transferred from *extra muros* to the heart of the town. In bringing both Death and the Word to the centre of expanding cities, friars' architecture tested the barriers between the church and the street, the dead and the living, the secular and the sacred.

The fourteenth century saw the heyday of European municipalities. Independent, wealthy and ambitious, towns mounted a creative challenge to the ecclesiastical monopoly of Gothic. Thomas Coomans examines the growth of new types of architecture in the Low Countries, the richest nexus of cities north of the Alps. Here the years around 1300 marked a moment of genuine political and economic change. Conventional Great Church architecture continued to flourish in the coastal cities of modern-day Holland, and in Brabant (French, German or local in style?), but it now found itself accompanied by new and ambitious types of specifically urban building: walls, merchants' houses, town halls (though none survive from this period), belfries, cloth halls, beguinages, hospitals and hall churches (especially in Flanders). Urban life also stimulated accelerated exchanges in stylistic patterns and aesthetic novelties. "Towns", said Braudel, "are like electric transformers. They increase tension, accelerate the rhythm of exchange and constantly recharge human life".[9] Zoë Opačić unpicks the complex circuits of stylistic interconnection in eastern-European fourteenth-century church architecture generated by the greatest single urban enterprise north of the Alps in our period: Charles IV's New Town in Prague. The eclectic and radical *Reduktionsgotik* developed here, and particularly in the hall church of the Emmaus Monastery, anticipates and parallels, the sober and monumental language of fourteenth-century "town Gothic" in Silesia (and especially Wrocław). This 'New Town' style – indebted to, but going far beyond, a previous generation of Bohemian urban and monastic architecture – seems to have had a particularly urban identity, for it showed little or no connection with the up-to-date Rayonnant evolving simultaneously in the Prague cathedral lodge. Yet its horizons were far from provincial, for the New Town's *Stadtbaumeister* may have been (Opačić suggests) no less a figure than Matthias of Arras, the cathedral's first architect; and the structure and spatial organization of the Emmaus church implies a knowledge of Pope Clement VI's mausoleum at La Chaise-Dieu. Here the local, the imperial and the papal come together in a metropolis that was conceived, from the start, as a "world city".

Many of these urban building types spoke the language of collective civic identity and registered changing habits of piety. In embracing new formal languages and new forms of building, Gothic acquired unfamiliar powers of expression: a novel vocabulary to articulate a new set of ambitions. Architecture, of course, had always been *parlante*, a semiotic medium both forceful and imprecise. A case in point is the Parisian-inspired Rayonnant of the mid-thirteenth century. By the year 1300 this style had lost some of its original inspirational force, but not its political associations. It had served the Capetian image of sacred kingship so theatrically that it continued to cast a glamorous glow over the ambitions of royal and aristocratic patrons throughout Europe, and right into the fourteenth century. An ultimately French-inspired Great Church associated with royalty and rulership, defined by Hans Sedlmayr as *Königskirche*, dominated the architectural programmes of the increasingly

wealthy monarchies and principalities of Central Europe.[10] Klára Benešovská discusses this retrospective love affair with Capetian kingship and Parisian fashion in relation to two Bohemian *Königskirchen* of the late thirteenth century – the Cistercian churches of Sedlec and Zbraslav. Both are associated with the interests and patronage of King Wenceslas II Přemyslid, an admirer and collector of all things Parisian. Sedlec, on the scale and in the shape of a French High Gothic cathedral, is both an echo of Suger's Saint-Denis and a reworking of the "Cistercian High Gothic" of the Île-de-France. It is also a highly sophisticated experiment in the most up-to-date language of Central European Cistercian *Reduktionsgotik*. By contrast, Zbraslav, the Přemyslids' mausoleum, combined the functions of Royaumont with the hall choir format of the Austrian Cistercian church of Heiligenkreuz, a model chosen for its "French" Rayonnant brilliance and its Habsburg connections. In both cases a "court" art is grafted on to international monastic traditions in order to advertise cultural modernity and to play out political rivalry.

An even more specific case of architectural language expressing political allegiance is neatly exemplified in the story of the new choir of Kraków Cathedral, the coronation church and mausoleum of the revived Polish Piast dynasty. Tomasz Węcławowicz alerted the conference to the recent discovery of the foundations of a Sedlec-style chevet beneath the present fourteenth-century choir of the cathedral. It was clearly laid out by the Czech Bishop of Kraków, Jan Muskata, in the second decade of the fourteenth century, to demonstrate unequivocally to the citizens of Kraków his allegiance to Wenceslas II, then King of Poland as well as Bohemia. But by 1320 Wenceslas' death had ushered in a new, Piast-led dynasty as kings of Poland, and Muskata's demise prompted the abandonment of the Bohemian model – and all that it stood for – in favour of a more local design. The new Piast *Königskirche* scrupulously avoided any clear reference to Bohemian Gothic, and modelled itself on the choir of the more traditional, and more "Piast" Wrocław Cathedral, begun about seventy years earlier. As a public art, attuned to the needs of its patrons, architecture can never wholly escape from political or religious ideologies.

But equally, we must resist the temptation to reduce agency in architecture to social, economic or ideological imperatives. If architecture around 1300 is prominent for its diversity, for its regional and national dialects, for its new agents of patronage and its new centres of experiment, it is also remarkable for its extraordinary creativity – its skill in answering new functional challenges in forms that are both beautiful and inventive. As Christopher Wilson reminds us, the crucial factor in the influence of Saint-Urbain at Troyes on English Decorated architecture was not patronal intervention or functional parity or ideological meaning, but the architect's keen appreciation of Saint-Urbain's uniquely brilliant architecture. Agency here is not cultural or collective, but individual. The borrowings made by English architects in this case were meaning-free and aesthetically motivated; and in their transformation of the Troyes model into a characteristically English product they stand as an object lesson in the imaginative powers of the medieval architect. If the richness of early fourteenth-century architecture registered a period of extraordinary social and political change, it also reflected a special ingenuity on the part of its creators. "The main motive of innovation and change", writes Wilson, "alongside institutional competitiveness, was the creative imagination of the architect".

In the history of European Gothic the architecture of the years around 1300 marks a moment of rare openness, internationalism, and inclusivity. For our "post-modern" sensitivities, its multivalence, its pluralities, its transference from established centres to new margins, strike us as especially sympathetic. And its internationalism is in tune with our modern suspicion of the national and regional. Who could not admire an architecture that set out to take advantage of diversity and its tensions? Indebted to High Gothic but prefiguring Late Gothic; welcoming extremes of scale, yet disciplining them into systems; tolerating an enriched repertory of decorative forms, but shaping them into a semiotic discipline – "western" church architecture around the critical year of 1300 was at once devotional and social, political and creatively aesthetic.

NOTES

[1] Werner GROSS, *Die Abendländische Architektur um 1300*, Stuttgart, 1948.

[2] Werner GROSS, "Die Hochgotik im deutschen Kirchenbau", in *Marburger Jahrbuch für Kunstwissenschaft*, 7, 1933, p. 2-58.

[3] In fact, Gross wrote his book in the late 1930s and completed it in 1941. See GROSS, *Die Abendländisch Architektur um 1300*, p. 10.

[4] Nikolaus PEVSNER, *An Outline of European Architecture*, Harmondsworth, 1942.

[5] Jean BONY, *The English Decorated Style. Gothic Architecture Transformed*, Oxford, 1979.

[6] The modernist parallels between Gross' emphasis on weightless wall surfaces and the inter-war International Style, particularly Mies van der Rohe's *Weissenhofsiedlung*, in Stuttgart, whose construction Gross saw at first hand, have been perceptively drawn by Wolfgang SCHENKLUHN, *Ordines Studentes. Aspeckte zur Kirchenarchitektur der Dominikaner und Franziskaner im 13. Jahrundert*, Berlin, 1985, p. 22-23.

[7] Nussbaum's point here is prefigured in Paul Frankl's notion of "a relaxation of strict regularity" in the ground plans of fourteenth-century churches; see Paul FRANKL & Paul CROSSLEY, *Gothic Architecture*, London & New Haven, 2000, p. 195-200.

[8] Peter KURMANN, "Spätgotische Tendenzen in der europäischen Architektur um 1300", in *Europäische Kunst um 1300*, ed. Hermann FILLITZ & Martina PIPPAL (Akten des 25. internationalen Kongresses für Kunstgeschichte), Vienna, Cologne & Graz, 1986, p. 11-18.

[9] Fernand BRAUDEL, *Civilization and Capitalism 15th-18th Century, vol. 1: The Structures of Everyday Life*, transl. by Siân Reynolds, London, 1981, p. 479.

[10] Hans SEDLMAYR, "Die gotische Kathedrale Frankreichs als europäische Königskirche", in *Epochen und Werke*, Vienna, 1950; ID., *Die Entstehung der Kathedrale*, Graz, 2nd edition, 1976, p. 369-376 and p. 426-446.

The Visual Logic of French Rayonnant Architecture

Michael T. Davis

> They exit by the portal that enters into the cloister from the north and come to the chapel of Saint-John by way of the Tour de la Monnaie...The chanter begins the anthem *Postquam resurrexit* that is sung moving around the church to the east, preceded by banners and a horn...And they come to the portal of church that looks to the south; there the chanter begins the anthem *O rex gloriae*.[1]

Throughout the year, liturgy animated Notre-Dame, the cathedral of Clermont (today Clermont-Ferrand), as well as the surrounding streets and squares of the medieval city. Every space of the cathedral figured into this elaborate choreography as aisles, ambulatory, transept, and nave provided processional pathways linking stational nodes at the choir's high altar, the chapels, and portals. As we learn from the fourteenth-century itinerary for Ascension, the celebrants, after descending from the choir, exited the cathedral by the north transept and made their way to the nearby chapel of Saint-John, then circled the chevet to arrive at the south transept portal. During the Advent salute to the Virgin, the clergy chanted the *Inviolata* to an image of Notre-Dame de Grâce in the nave then left the church by the north portal to stand in a half-circle in front of its trumeau statue of the Virgin and Child as they listened to an anthem sung from the Tour de la Bayette, the northeast transept tower. On the vigil of the Assumption, the chapter concluded a route that wove in and out of the west and north doors with a tour of the ambulatory chapels.[2] Masses on the feast days of saints Agatha, John the Baptist, and Bonnet were celebrated at the altars of their respective chapels in the cathedral.[3]

Although the Clermont liturgical manuscripts chart the routes, prescribe the music, include directives for the display of reliquaries and mention images along the processional circuit, they do not convey either the architectural setting or the intensely visual nature of the experience. For example, the north transept trumeau figure of the Virgin was but one element in an elaborate sculptural programme that included the twelve Apostles on the jambs, the Last Judgment in the tympanum, and the seven Liberal Arts in the gable above. Activity at the south transept took place against the backdrop of St Austremoine on the trumeau flanked by a cohort of ten bishops and the Coronation of the Virgin in the tympanum.[4] When the procession turned into the choir aisle to begin its tour of chapels, it faced a single glittering window at the end of the vista (Fig. 1). As the participants moved along the ambulatory, solid buttress walls cut off expansive lateral views revealing the stained glass narratives of the chapel windows one at a time.[5] Within the chapels, votive paintings of departed colleagues adorned the lower walls: an angelic guide ushers five canons and a priest toward the altar of St. Bonnet, a canon prays to the Virgin in the chapel of the Magdalene (Fig. 2).[6] Finally, as the procession re-entered the choir, it faced the five great reliquaries of the Virgin, John the Baptist, Agricole and Vitalis, Austremoine, and George arrayed on the high altar before a sweeping glass cyclorama of sacred history while overhead, above the dark band of the triforium, the Assumption of the Virgin floated in the axial lancets accompanied by apostles and prophets in the clerestory windows to the west (Fig. 3).[7]

Fig. 1. Clermont Cathedral (today Clermond-Ferrand), Notre-Dame, south aisle and interior of choir (Sam Sweezy).

The multimedia environment of Notre-Dame of Clermont, which took shape during the second half of the thirteenth and early fourteenth centuries, resembled other elite churches, such as the cathedrals of Chartres, Paris, or Reims, that exemplify the explosion of pictorial embellishment during the twelfth and thirteenth centuries.[8] Portals evolved into tiered stages for sculptural dramas while the solid walls of the interior metamorphosed into glazed figurated surfaces of an architecture that created the spaces for ritual movement. At the same time, Clermont and its contemporaries manifest a distinct sensibility that defined the new Rayonnant style. In projects launched from the 1230s on, including the Abbey of Saint-Denis, the Sainte-Chapelle in Paris, or the transept façades of the cathedral of Paris, the building's structural matrix was rethought in terms of gaunt shafts, grids of finely scaled mouldings, and filigree screens of tracery. The motivations behind these changes, whose consequences resonated through the waves of experimentation around 1300, were myriad and touched every aspect of the architectural process from workshop production to theological conception.[9] As Paul Crossley cogently summarized, "At every level – stylistic, structural, patronal and ideological – Rayonnant represented a real break with the values of High Gothic."[10]

An additional level of Rayonnant originality – and the focus of this essay – emerges from a consideration of the critical role played by the architectural frame in defining visual experience, what Wolfgang Kemp has termed the "extrinsic conditions of access" between the beholder and the image.[11] The symbiotic interchange between form, space, image, and a moving viewer has, of course, long been recognized. In 1893, when August Schmarsow defined architecture as the "creatress of space... the visible indication, designation, and enclosure of a spatial area," he emphasized "*visual* appreciation as the truly essential element."[12] A half century later, Lisa Schürenberg and Werner Gross both signalled the critical roles played by new strategies of optical organization in the transformations of northern European architecture around 1300.[13] Further, Schmarsow's insistence on the relationship of space to the creator and the observer implicitly invited consideration of the impact of other arts on both design and experience, a step taken by Schürenberg and elaborated by Louis Grodecki who outlined the parallels between stained glass and architecture during the twelfth and thirteenth centuries.[14]

My remarks, which build on these insights, propose that the distinctive character of Rayonnant design emerged from purposeful attempts to coordinate the variables – architectural, pictorial, and human – of the ecclesiastical setting. In two case studies of the cathedral of Clermont and the collegiate church of Saint-Urbain, Troyes, we will see that their master masons conceived buildings in terms of a series of boundaries, divisions, and compartments whose scale and organization operated to give perceptible measure and meaning to the act of seeing. In drawing attention to this "optical consciousness" behind Rayonnant architecture, I aim to complement, rather than supplant,

approaches based on archaeological examination, formal taxonomy, structural analysis or socio-economic explanation and to reassemble the building's body as a complex whole once its "autopsy" is complete, its construction chronology deciphered and its network of sources identified. For viewers entering the memory house of Christian history, architecture calibrated the ascent, to borrow Suger's words, from "that which is material to that which is immaterial" as it connected kinetic devotional performance in the present to both the sacred past and a celestial future represented in glass, paint, and stone.

The Cathedral of Clermont

Construction of Notre-Dame of Clermont began in 1248, possibly inspired by a visit to Paris by Bishop Hugues de la Tour for the April dedication of the Sainte-Chapelle.[15] Directed by the master mason, Jean Deschamps, the first building phase of the new choir concentrated on the ambulatory and five chapels whose completion in the early 1260s is signalled by recorded burials in the new edifice and a concentration of endowments. Jean also appears to have begun – then altered – the upper levels of the seven hemicycle bays.[16] During the next decade and following the demolition of the Romanesque chevet, a second master pushed west: in 1273 the chapter purchased part of the bishop's garden to continue the project into the south transept, definitively regulated the plan, and settled questions of access to the portal. Finally, work on the choir clerestory was completed along with the outer walls of the transept and eastern bay of the nave. The style of the glass indicates that the high windows were installed during the 1280s.[17]

Jean Deschamps conceived the cathedral in a purebred Parisian style for his formal repertory links to contemporary projects in and around the capital such as Saint-Denis, Royaumont, and the nave chapels and north transept at Notre-Dame.[18] Despite its up-to-date tracery patterns and moulding details, his composition of the three-storey elevation appears thoroughly familiar and with its dark triforium even conservative in comparison to the glazed passages that appeared at Saint-Denis, Troyes Cathedral, or Beauvais Cathedral (Fig. 3). Neither did Jean's handling of structural articulation venture outside of the norm as

Fig. 2. Clermont Cathedral (today Clermont-Ferrand), Notre-Dame, ambulatory chapels (Sam Sweezy).

capitals appear throughout the building to mark the transition from vertical support to spanning arch, eschewing the elisions that mark the work of Hugues Libergier at Saint-Nicaise in Reims or Pierre de Montreuil in the Virgin Chapel of Saint-Germain-des-Prés.[19] Thus, at first glance, Clermont seems a facile, if elegant, refinement of well-established architectural ideas.

However, if we consider the choir as an integrated body composed of both masonry and glass rather than an agglomeration of individual forms, we can begin to grasp the novel sensibility that informed its design. For example, the radiating chapels have been singled out for their unusual inclusion of a narrow quadripartite bay that fronts the polygonal space (Fig. 2). While this

Fig. 3. Clermont Cathedral (today Clermont-Ferrand), Notre-Dame, choir interior (Sam Sweezy).

feature may well have a structural motivation, founding a solid footing for the flyer above, or reveals additional sources known by Jean Deschamps – the cathedrals of Cambrai or Le Mans perhaps – it is also treated as part of a system that regulates the rhythms of viewing. From a position in the ambulatory, the observer peers into a chapel introduced by a section of stark, solid wall followed by a bay in which solid masonry retreats behind a scrim of blind tracery. Visual entry climaxes in the huge windows that surround the altar with luminous sacred stories.

Jean Deschamps then extended the principles of his chapel design to the entire building. He calibrated all of the interior architecture to the window tracery to establish a commensurable relationship between viewer, space, and image visualized by the woven network of shafts and mouldings. Instead of the abrupt jump that differentiates the monumental High Gothic supports from the finely scaled framing of the window openings, the Clermont piers are rethought in terms of grouped bundles of attenuated shafts whose dimensions and ornamentation are comparable to the tracery mullions (Figs 1 and 2). In this, Deschamps may well have followed the lead of the new work at Saint-Denis where the uniform application of the compound pier achieved a consonance of the wall and free-standing supports.[20] He may also have found inspiration in contemporary chapel projects, notably those added to the nave of Notre-Dame in Paris or the Sainte-Chapelle, in which the architecture was pared to a masonry fretwork that enclosed glazed walls. But Deschamps went even further by placing all of the capitals of the ground floor at the same level, an adjustment that made sure that the chapel windows were seen as an integral component of the architecture rather than divorced from the structural skeleton and consigned to the outer wall plane as they are at Reims, Amiens, or Beauvais.

As a result, the visual cues of the architecture give tangible expression to the ladder of spiritual experience as the imagery unfolds across of series of crisply demarcated borders defined by interlaced vertical vault colonnettes, the horizontal string course, and window tracery. The Clermont choir interior organizes a lucid hierarchy of compartments with votive paintings of cathedral canons, priests, and wealthy bourgeois occupying the lower and outer zones while the glazed histories of prophets, Christ, the Virgin, and saints rise in the windows above.[21] The frame also unfolds in three-dimensions to place a spectator within this matrix whose graduated thresholds diagram ascending modes and levels of sight. Through physical vision, he first perceives the "matter" of his present location in the cathedral interior, "the figures and colours of visible things".[22] Crossing into the chapel, the effigies of the dead, directed toward the altar by angels, stepped into the liturgical realm of funerary ritual and memory, while a third step reached the sacred stories of the windows whose contemplation, in the words of Henry Suso lifted one "from this false, downward-dragging world to a higher godly one".[23]

Although this visionary prospect opened into the other worldly, the rigorous unity of the building, achieved through geometric proportionality, composition in terms of homologous parts, and repetition,

constructed space that was visibly commensurate and knowable – the very opposite of the formless incomprehensibility of chaos.[24] Separated from the imagery by the architecture's insistent boundaries, the viewer, nevertheless, inhabited the same structure and by crossing the optically permeable divisions encountered the alternate worlds of the past, the dead, and the sacred. Even if, as argued by Marvin Trachtenberg, the impossibly thin colonnettes negated their antique columnar origins or terrestrial materiality, their consistent rhythm and scale confirmed that the church, like divine creation, was "ordered in measure, number, and weight".[25]

In designing the upper levels of the Clermont choir, Jean Deschamps again skilfully manipulated masonry and glass, light and dark to structure visual experience (Figs 1 and 3). The surprising appearance of the dark triforium, which has been explained by Jean's turn to old-fashioned or monastic sources, is better understood in the context of its optical role in the elevation.[26] Crowned by miniature gables that mask the mural transition to the clerestory above, the ornate aedicules of the passage, like the mosaic porticos that ring the dome of the Orthodox Baptistery in Ravenna, present a gateway to the celestial realm above.[27] In this higher world the heavily saturated palette of the bustling narratives of the chapel glass gives way to figures of prophets and apostles that accompany the Assumption of the Virgin hovering in fields of grisaille. Rather than a product of sequential campaigns, colouristic distinction serves as a metaphor for the transformation of terrestrial perception and physical light (*lumen*) into the primary and white light (*lux*) of the divine.[28] Standing within jewelled tabernacles identical to the architecture of the triforium, these iconic figures transcend time and space to offer viewers an image of divine vision.[29]

Complementing his use of the dark triforium, Jean Deschamps again departed from up-to-the-minute convention by introducing the "recessed *parti*," that is, windows framed by a mural border, in the western clerestory bays of the choir (Fig. 1). But rather than search for precedents elsewhere, consider the internal logic of the choir design. Viewed down its length, a continuous cylinder of glass envelops the seven eastern bays focused on the Assumption surrounding the high altar. The masonry caesura intrudes to partition the territory of Old Testament prophets from the region of the Virgin and her apostolic companions while also marking the boundary occupied by the canons' stalls on the floor below.

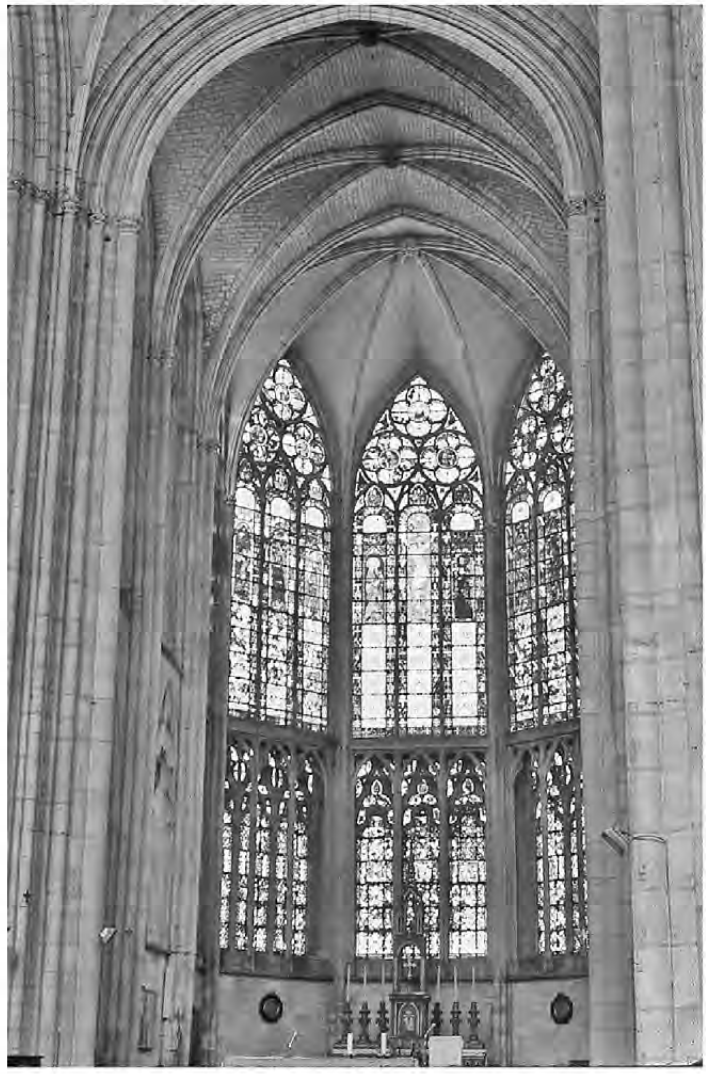


Fig. 4. Troyes, Saint-Urbain, choir interior (Michael T. Davis).

In sum, the "optical transformation and ornamentalization of architecture" of late thirteenth-century architecture, noted by Gross, represented more than the whittling away of physical mass and the pursuit of extravagant geometric tracery as "an end in itself".[30] Exemplified by Clermont Cathedral, Rayonnant design invested architecture with a pictorial role whose logic coordinated the building with its imagery, and viewer experience. However, the tiers of arcaded

Fig. 5. Troyes, Saint-Urbain, choir, south side (Michael T. Davis).

panels, niches, and lancets that composed these edifices and organized crowded figured surfaces into legible fields did not dictate either the specific content or sequence of subject matter; neither did it impose programmatic unity on sprawling anthologies of imagery.[31] By defining discrete zones, the Clermont frame set up a template that maintained perceptual clarity while admitting additions or alterations over time. It also accommodated multiple viewing itineraries: to the priest at the altar, windows could be read in their entirety complemented by the panoply of liturgical *ornamenta*; seen in motion and approached by different routes, they appeared in passing fragments, the uniform tempo laid down by the architecture along with repeating colours, compositions, and gestures inviting a personal ordering of narrative and thematic connections.[32]

Changes to the Clermont design during construction illustrate the supple relationship between the architectural armature and imagery. As revealed by preliminary drawings for two windows etched into the pavement of the choir terrace, Jean Deschamps altered the pattern of the clerestory in the straight bays from four lancets to three.[33] This reduced the number of lights from forty to thirty four, yet there is no hint that the bishop or chapter ever worried that the revision compromised the meaning of the programme. The Assumption with nine apostles instead of twelve as well as their imaginative location in a celestial realm remained perfectly comprehensible. Moreover, while Clermont may have triggered a series of variants across southern France, including a nearly identical version at Saint-Etienne, Limoges, it was by no means the only model through which religious vision might be orchestrated.[34] The protean nature of Rayonnant invention can be seen in our second example, the church of Saint-Urbain in Troyes.

Saint-Urbain, Troyes

The Troyes native, Jacques Pantaléon, elected Urban IV in 1261, envisioned the collegiate church of Saint-Urbain as a shrine to his patron saint and as a personal memorial. Erected over his birthplace in the heart of the commercial quarter of the city, Saint-Urbain was begun in 1262. Thanks to generous papal support, construction proceeded rapidly and a dedication of the new edifice, now over half complete, appears to have been scheduled for the feast of St Urban, 25 May 1266. However, a series of disasters – vandalism, arson, and financial malfeasance – struck the project and although the building's damaged fabric was repaired and a second campaign completed the transept and ground floor of the nave, work was abandoned by the late 1280s.[35] Yet despite its tragic history, the Saint-Urbain choir exhibits a stunning originality in its sophisticated handling of architectural ornament and agile manipulation of alignment, colour, and scale (Fig. 4). No other contemporary design reached the same level of visual complexity.[36]

Fig. 6. Troyes, Saint-Urbain, exterior, view from southeast (Michael T. Davis).

If Clermont emphasized clear articulation through an orthodox use of the capital, Saint-Urbain began to pull the structure apart to reveal its constituent pieces. The pier design offers a case in point. Deleting capitals from parts of the arcade support exposed a convex core between engaged columns that appears to penetrate into (and implicitly through) the concave order of the arch. But rather than a column set within a cage of colonnettes as in the *pilier cantonné*, this bare cylinder of masonry is turned into a representation of a mural nucleus sheathed in a tubular casing (Fig. 5). This may seem like a minor detail, but the placement of capitals creates a subtle code that identifies the wall mass, the exposed skeleton, and the decorative tracery panels assembled in the building. A similar fragile equilibrium between geometric rigidity and motivic variety informs the exterior where a brittle rectilinear frame, pierced by gables, encloses an array of arches, lobed, ocular, and whirling forms (Fig. 6). The architect's inventive virtuosity not only mimics the precious architectural fantasy of metal shrines to capture Saint-Urbain's memorial character, but it also creates a visual incertitude that confounds rational analysis: what holds up the building? how are the structure and glass connected? what supports those gables?[37]

Two distinct elevations are brought together in the interior of the church (Fig. 5). The nave, transept, and western bay of the two straight bays of the choir rise in two equal sections of arcade and clerestory; the five-sided apse features a tall glazed passage and clerestory set on a plain masonry dado. The two sections are soldered together by an intermediate bay whose three-part elevation emulates the apse *parti*, while the string course and window sill maintain the horizontal levels to the west. This puzzling disjunction would have been mitigated by a choir screen that spanned the choir across the hybrid bay (Fig. 7). Planned from the beginning as an integral feature of the interior, the *jubé* would have been accessed from the short walkway that opens from the lateral stair turrets and runs behind the open tracery to dead-end at the pier.[38] Discontinuous

Fig.7. Troyes, Saint-Urbain, choir interior, photomontage showing destroyed choir screen (Michael T. Davis).

from the glazed apse gallery, this passage connected the choir screen to the flanking aisle chapels and the sacristy on the south side.

The effect of this missing screen on the experience of Saint-Urbain would have been profound. Looking into the apse passage, the viewer discovers narrative panels of the Passion of Christ suspended against a background of opulent grisaille (Figs 4 and 7). Seen through the grille of the front plane of tracery, these coloured cells are framed by a different pattern.[39] But the alignment of these contrasting designs and the careful placement of flecks of colour that wink out through the spandrel openings confuse any attempt to judge the depth of the passage producing an optical indeterminacy that undermines the visual stability of the elevation.[40] To the viewer outside the choir, framed by an architecture of muscular piers shouldering powerful arcades and gazing over the *jubé*, the glazed zones of the gallery and clerestory float in precarious tiers. Above the passage, continuous linking mullions and the flattened window sill pull the clerestory glass to the inner plane of the wall. Barred from the apse by the screen, the lay worshipper recognizes in the Crucifixion, appearing to hover in the axial light over the altar, that the direct vision of Christ is reserved for the clergy whose celebration of the Eucharist conjures up the vision of his sacrificed body.[41] And it is here in this monumental, still image that all of the ambiguity, tension, and restless variety aroused by the architecture is harmoniously resolved.

Touted by architectural historians as one of the most original features of the Saint-Urbain master's design, the "evacuation of the wall",[42] can only have been conceived in conjunction with the stained glass programme that crystallized Urban's personal devotion to the *Corpus Christi*. The diaphanous planes of the interior created hierarchical spaces for images – intimate historical episodes in the recesses below, a vast eschatological vision on the glazed surfaces above – that organizes different levels of meaning. Saint-Urbain's architectural boundaries define distinct spaces of experience within the Christian community, while simultaneously focussing collective attention on the climactic subject of the church.[43] That Clermont Cathedral, held up as an exemplar of the "rehabilitation of the wall" in late thirteenth-century projects, pursued similar ends by opposite means reveals the creative latitude with which masons approached the idea of the frame and its function. At Saint-Thibault-en-Auxois a dark triforium is inserted into the traceried lantern of a choir based on the apse of Saint-Urbain, while at the other extreme, Saint-Pierre-ès-Liens at Mussy-sur-Seine reduced Saint-Urbain's rich formal vocabulary to a minimalist grid of mouldings that imposes a regular graphic pattern on the austere masonry structure and establishes an outer border for the glazed programme of the apse.[44] Rayonnant architecture's emphasis on boundaries articulated by taut shafts and rigid geometric tracery may have produced the "new clarity" noted by Werner Gross, but it never atrophied into a formulaic exercise or a prescribed order.[45] Instead, masons such as Jean Deschamps and the Master of Saint-Urbain found myriad ways to use compositional organization, contrasts in light, chang-

es in scale, shifts of colour to orchestrate perception and experience.

Conclusion

This essay proposes that the new architectural directions of the later thirteenth century emerged not only out of internal developments such as the mastery of pinpoint supports that allowed the substitution of glass for load-bearing wall, but also responded to the heightened visual awareness of the moment reflected in the burgeoning study of optics and attitudes toward imagery. Even though direct connections between scientific theories of optics formulated by Robert Grosseteste, Roger Bacon, or John Pecham and contemporary architectural currents are difficult to ascertain, it is worth noting that these scholars explained sight in geometric terms similar to those used in architectural design and that the tools of *perspectiva* likely aided Giotto and later artists in their construction of illusionistic spaces and buildings.[46] It may be no accident that Rayonnant architecture emerged around Paris at a time when the University took the lead in the study of optics. Further, the theory of "multiplication of species", which posited intromitted rays from a visible object as the immediate cause of vision, endowed images with an inherent and active radiant power that transmitted meaning to a viewer. As Roger Bacon wrote in his *Opus maius*:

> ...(I)t is not possible for the literal sense of these (Scriptural works) to be known unless a person has their figures depicted or even made bodily (present)... to the senses...Oh how ineffable would the beauty of divine wisdom shine forth and how much would its infinite utility abound, if these geometrical things that Scripture contains could be placed in bodily figures before our eyes...Let us recall to our memories that nothing can be known about things in this world without the power of geometry...(and that) nothing is completely intelligible to us unless it is displayed in figures before our eyes.[47]

Thus, far from being scorned as superfluous distractions, theologians revalued images as conduits of Christian knowledge through likeness to their divine referent. As Christ himself informed Gertrude of Helfta, a thirteenth-century Saxon mystic... "no one ought to despise what is revealed by means of bodily things, but ought to study anything that would make the mind worthy of tasting the sweetness of spiritual delights by images of bodily things".[48] Rayonnant architecture took on the "job" of presenting these "bodily figures" of Christian faith to public eyes in frames that were ordered by geometry and composed to lead the viewer by stages to visionary experience.

In the chapter "Miniature" in his *Poetics of Space*, Gaston Bachelard recounts a tale by Hermann Hesse in which a prisoner escapes his cell on a miniature train that chugs away into a tunnel he has painted. Writes Bachelard, "How many times as they painted their dreams poet-painters have escaped through a crack in the wall. And so, if we follow the poets of miniature sympathetically, if we take the imprisoned painter's little train, geometrical contradiction is redeemed and Representation is dominated by Imagination".[49] It is exactly this escape that the artful scenography of Rayonnant architecture offered the viewer and that, by contrast, the austere churches of the Mendicants sought to deny. Legislating bans against pictures, sculptures, and figural stained glass windows, the Franciscans and Dominicans eliminated the need for the masons' "exquisite craftsmanship...in columns and suchlike" within which the images were wrapped.[50] The plain barn of Sainte-Marie-Madeleine in Paris or the cavernous box of Santa Chiara in Naples, shorn of shafts, mouldings, and tracery, wrenched attention away from decorated walls and windows forcing the worshipper to concentrate on the liturgy and the words of the sermon performed in the here and now of the church interior, whereas the Rayonnant's agile choreography of frame, figure, and space imaginatively unlock the doors of heaven.[51] The premises of this architecture of thresholds, which can be followed across the divide of the year 1300 to late medieval Nuremberg and, ultimately, to fifteenth-century Flemish painters such as Jan van Eyck or Rogier van der Weyden, found their beginnings in the fresh visions of the Sainte-Chapelle, Clermont Cathedral, and Saint-Urbain.[52]

NOTES

[1] *Exeunt per portam qua intratur in claustrum ab aquilone et per domum Monete veniunt ad capellam S. Joannis...Incipit cantor ant. Postquam resurrexit, quam cantando circumdant ecclesia ab oriente vexillis praecedentibus et cornu...Et veniunt ad portam ecclesiae que respicta meridie; ibi incipiat cantor ant. O rex gloriae.* Directions for the feast of the Ascension are taken from the Customary (Coutumier) of the cathedral, written during the first half of the fourteenth century and now Bibliothèque municipale de Clermont-Ferrand MS. 56. They are quoted by Abbé RAPHANEL, "Anciens usages liturgiques du diocèse de Clermont, Ascension", in *Semaine religieuse de Clermont*, 1901, p. 363-367.

[2] For a summary of Advent services, Abbé RAPHANEL, "Anciens usages liturgiques du diocèse de Clermont, L'Avent", in *Semaine religieuse de Clermont*, 1901, p. 1001-1011; the Feast of the Assumption, Abbé RAPHANEL, "Anciens usages liturgiques du diocèse de Clermont, Assomption", *Ibidem*, 1901, p. 621-629.

[3] The Coutumier, MS. 56, locates the first and last masses on the feast of St Agatha, *in capella ip(s)ius* (fol. 175r), the first mass for John the Baptist *ad altare s(an)c(t)i Joh(ann)is retro magnu(m) altare...* (fol. 180r), and the first mass for Bonnet *in capella eiusdem* (fol. 171v).

[4] Most of the sculpture was destroyed during the French Revolution with the exception of Christ from the north transept tympanum, now on view in the cathedral nave, and the trumeau figure of the Virgin in the church of Saint-Pierre des Minimes in Clermont-Ferrand. The programmes of both transept entrances are described by Pierre AUDIGIER, "Histoire de la ville de Clermont," Paris, BNF, fonds français MS. 11485, fols. 110r-111r. See also Anne COURTILLÉ, *La Cathédrale de Clermont*, Nonette, 1994, p. 84-91.

[5] The most complete study of the cathedral glass remains Henri DU RANQUET, *Les vitraux de la cathédrale de Clermont-Ferrand (XII^e, XIII^e, XIV^e, XV^e siècles)*, Clermont-Ferrand, 1932. See also Louis GRODECKI & Catherine BRISAC, *Gothic Stained Glass 1200-1300*, trans. Barbara Drake Boehm, London, 1985, p. 142-144. A summary of the subject matter of the choir glass is provided by COURTILLÉ, *La Cathédrale*, p. 111-149.

[6] The votive paintings have been studied by Paul E. ROBINNE, "Peintures murales des XIII^e, XIV^e et XV^e siècles à la cathédrale de Clermont-Ferrand", in *Bulletin historique et scientifique de l'Auvergne*, 86, 1974, p. 225-236; Anne COURTILLÉ, "Peintures votives et funéraires à la cathédrale de Clermont", in *Bulletin historique et scientifque de l'Auvergne*, 97, 1995, p. 329-241. For the image in the Magdalene chapel, Michèle PRADELIER, "L'image de la Vierge de la Chandeleur aux XIII^e et XIV^e siècles", in *De la création à la restauration. Travaux d'histoire de l'art offerts à Marcel Durliat pour son 75e anniversaire*, Toulouse, 1992, p. 342-350.

[7] For a description of the reliquaries, Abbé RAPHANEL, "Pentecôte", in *Semaine religieuse de Clermont*, 1901, p. 403, note 3. The *châsses* contained relics of the Virgin Mary, John the Baptist, Sts Agricola and Vitalis, St Austremoine, and St George. See Michael T. DAVIS, "Frames of Vision: Architecture and Stained Glass at Clermont Cathedral", in *The Four Modes of Seeing: Approaches to Medieval Imagery in Honor of Madeline Harrison Caviness*, Oxford, 2007 (forthcoming) for the cathedral's coordination of relics, sculpture, chapel dedications, and stained glass.

[8] GRODECKI & BRISAC, *Gothic Stained Glass*, p. 13-16; Wolfgang KEMP, *The Narratives of Gothic Stained Glass*, trans. Caroline Dobson SALTZWEDEL, Cambridge, 1997, p. 3; Cynthia HAHN, *Portrayed on the Heart: Narrative Effect in Pictorial Lives of Saints from the Tenth through the Thirteenth Century*, Berkeley, 2001, p. 327-328; Hiltrud WESTERMANN-ANGERHAUSEN, "Glasmalerei und Himmelslicht—Metapher, Farbe, Stoff," in *Himmelslicht: Europäische Glasmalerei im Jahrhundert des Kölner Dombaus (1248-1349)*. Schnütgen-Museum, ed. Hiltrud WESTERMANN-ANGERHAUSEN, Cologne, 1998, p. 95-96.

[9] Lisa SCHÜRENBERG, *Die kirchliche Baukunst in Frankreich zwischen 1270 und 1380*, Berlin, 1934; Werner GROSS, *Die abendländische Architektur um 1300*, Stuttgart, 1948; Robert BRANNER, *Saint Louis and the Court Style in Gothic Architecture*, London, 1965, mapped the development of Rayonnant architecture. More recently, see Dieter KIMPEL & Robert SUCKALE, *Die gotische Architektur in Frankreich 1130-1270*, Munich, 1985, p. 376-469; Peter KURMANN, "Spätgotische Tendenzen in der europäischen Architektur um 1300", in *Europäische Kunst um 1300*, ed. Hermann FILLITZ & Martina PIPPAL (Akten des 25. Internationalen Kongresses für Kunstgeschichte), Vienna, Cologne & Graz, 1986, p. 11-18; and Roland RECHT, "Le goût de l'ornement vers 1300", in *1300..., L'Art au temps de Philippe le Bel*, ed. Danielle GABORIT-CHOPIN, François AVRIL & Marie-Cécile BARDOZ (XVI^e rencontres de l'École du Louvre), Paris, 2001, p. 149-161.

[10] Paul FRANKL & Paul CROSSLEY, *Gothic Architecture*, London & New Haven, 2000, p. 23.

[11] Wolfgang KEMP, "The Work of Art and Its Beholder: The Methodology of the Aesthetic of Reception", in *The Subjects of Art History*, ed. Mark A. CHEETHAM, Michael Ann HOLLY & Keith MOXEY, Cambridge, 1998, p. 180-196, esp. p. 185-186; also Wolfgang KEMP, "The Narrativity of the Frame", in *The Rhetoric of the Frame*, ed. Paul DURO, Cambridge, 1996, p. 11-23.

[12] August SCHMARSOW, "The Essence of Architectural Creation", in *Empathy, Form, and Space: Problems in German Aesthetics, 1873-1893*, trans. Harry F. MALLGRAVE & Eleftherios IKONOMOU, Santa Monica (California), 1994, p. 285-288; Mitchell SCHWARZER, "The Emergence of Architectural Space: August Schmarsow's Theory of 'Raumgestaltung'", in *Assemblage*, 15, 1991, p. 48-61.

[13] SCHÜRENBERG, *Die kirchliche Baukunst*, p. 277, discussed the optical grouping of mouldings that, in her opinion, signified a change in purpose from the expression of architectural form to decoration; also GROSS, *Die abendländische Architektur*, p. 145-146.

[14] SCHÜRENBERG, *Die kirchliche Baukunst*, p. 282-283; Louis GRODECKI, "Le vitrail et l'architecture au XII^e et au XIII^e siècles", in *Gazette des beaux-arts*, series 6, 36, 1949, p. 8-24, especially 22-24 for later thirteenth-century developments. See also Anne PRACHE, "Architecture rayonnante et vitrail dans la France du Nord vers 1300", in *Europäische Kunst um 1300*, p. 25-30; and Robert SUCKALE, "Glasmalerei im Kontext der Bildkünste um 1300", in *Himmelslicht*, p. 73-77.

[15] Hugues de la Tour's presence at the Saint-Chapelle dedication

is reported in Denis DE SAINTE-MARTHE, *Gallia Christiana in provincias ecclesiasticas distributa*, vol. 2, Paris, 1715, col. 277; Henri DU RANQUET, "Les Architectes de la cathédrale de Clermont-Ferrand", in *Bulletin monumental*, 76, 1912, p. 99, connected the bishop's visit to Paris with the hiring of Jean Deschamps. The construction chronology laid out by Michael T. DAVIS, "The Choir of the Cathedral of Clermont-Ferrand: The Beginnings of Construction and the Work of Jean Deschamps", in *Journal of the Society of Architectural Historians*, 40, 1981, p. 181-202, has been endorsed by KIMPEL & SUCKALE, *Die gotische Architektur*, p. 456-459.

[16] For changes to the choir design, Michael T. DAVIS, "On the Drawing Board: Plans of the Clermont Cathedral Terrace", in Ad Quadratum: *the practical application of geometry in medieval architecture*, ed. Nancy Y. WU, Aldershot, England and Burlington (Vermont), 2002, p. 183-204.

[17] The clerestory windows are described and dated by DU RANQUET, *Les vitraux de la cathédrale*, p. 271-286; GRODECKI & BRISAC, *Gothic Stained Glass*, p. 144; and COURTILLÉ, *La Cathédrale*, p. 145-149.

[18] John JAMES, *The Template Makers of the Paris Basin*, Leura (Australia), 1989, p. 53, proposed that Jean Deschamps worked on the lower chapel of the Sainte-Chapelle. In my opinion, he is more closely connected with the reconstruction of Saint-Denis and the nave chapels at Notre-Dame, Paris.

[19] BRANNER, *St. Louis*, p. 28-30, 68-69, 100-105 for an assessment of the work of Hugues Libergier and Pierre de Montreuil.

[20] This point was made long ago by Erwin PANOFSKY, *Gothic Architecture and Scholasticism*, New York, 1951, p. 84-85. Also Anne-Marie SANKOVITCH, "The myth of the 'myth of the medieval': Gothic architecture in Vasari's *rinascita* and Panofsky's Renaissance", in *Res*, 40, 2001, p. 29-50, esp. p. 46-50.

[21] The single lay figure among the paintings is found on the west wall of the chapel of St Agatha. See Anne COURTILLÉ, "Nouvelles découvertes de peintures murales à la cathédrale de Clermont-Ferrand", in *Bulletin monumental*, 153, 1995, p. 180-182.

[22] The "modes of sight" referred to here follow those outlined by Richard of St. Victor and discussed by Madeline CAVINESS, "Images of Divine Order and the Third Mode of Seeing", in *Gesta*, 22, 1983, p.115-116; also DAVIS "Frames of Vision".

[23] Suso is quoted in Paul CROSSLEY, "The man from inner space: architecture and meditation in the choir of St Laurence in Nuremberg", in *Medieval Art: recent perspectives*, ed. Gale OWEN-CROCKER & Timothy GRAHAM, Manchester, 1998, p. 174.

[24] Anthony VIDLER, "Interpreting the Void: Architecture and Spatial Anxiety," in *The Subjects of Art History*, ed. Mark A. CHEETHAM, Michael Ann HOLLY & Keith MOXEY, Cambridge, 1998, p. 288-307, esp. p. 293 where Vidler writes, "Modern space, after all, took its initial definition from the sublime, where infinite extension, whether of distance, height, depth, or light and dark, approximates the terror of the naturally infinite. Space in the sublime of Burke and Schiller is precisely that incommensurable, unknowable, invisible nothingness that represents, if it represents anything, the very extent of our incapacities." GROSS, *Die abendländische Architektur*, p.106-108, proposed that constructive mathematics was given concrete form in tracery and by around 1300 tracery had come to "embody the spirit of measure and number".

[25] Marvin TRACHTENBERG, "Desedimenting time: Gothic column/paradigm shifter", in *Res*, 40, 2001, p. 25-27. Quotation taken from AUGUSTINE, *City of God*, book 11, ch. 30, trans. Henry BETTENSON, London, 1984, p. 465, itself paraphrased from the Book of Wisdom, 11: 20. The importance of proportion in medieval art is summarized by Umberto ECO, *Art and Beauty in the Middle Ages*, trans. Hugh BREDIN, New Haven, 1986, p. 19, 28-42.

[26] BRANNER, *St. Louis*, p. 98-100; and KIMPEL & SUCKALE, *Die gotische Architektur*, p. 457-458. These authors, while emphasizing the originality of the Clermont design, attempt to explain the unglazed triforium in terms of sources known by the master mason or recommended by the patron, Bishop Guy de la Tour.

[27] Spiro KOSTOF, *The Orthodox Baptistery of Ravenna*, New Haven, 1965, p. 76-82, for the mosaic structures in the Orthodox Baptistery dome. Bruno BOERNER, "Interprétation du programme iconographique de la châsse de sainte Gertrude à Nivelles", in *Un trésor gothique: La châsse de Nivelles*, Paris, 1996, p. 225-233, characterizes the niche figures that surround reliquary structures as guardians of the gates of paradise.

[28] John GAGE, "Gothic Glass: Two Aspects of a Dionysian Aesthetic", in *Art History*, 5, 1982, p. 36-59, especially 46-49; ID., "*Lumen, Alluminar, Riant*: Three Related Concepts in Gothic Aesthetics", in *Europäische Kunst um 1300*, p. 11-18; and Andreas SPEER, "*Lux mirabilis et continua*: Anmerkungen zum Verhältnis von mittelalterlicher Lichtspekulation und gotischer Glaskunst", in *Himmelslicht*, Cologne, 1998, p. 89-94. Meredith LILLICH, "Monastic Stained Glass: Patronage and Style", in *Monasticism and the Arts*, ed. Timothy VERDON, Syracuse, 1984, p. 225-236, has proposed, based on verbal and pictorial evidence, that the clerestory of Saint-Denis, like that at Clermont, featured "band windows" with coloured figures sandwiched between grisaille.

[29] For architectural framing in stained glass, Rüdiger BECKSMANN, "Le vitrail et l'architecture", in *Les Bâtisseurs des cathédrales gothiques*, ed. Roland RECHT, Strasbourg,1989, p. 297-305; and Peter KURMANN, "'Architektur in Architektur': der gläserne Bauriß der Gotik", in *Himmelslicht*, p.35-44. For a consideration of the way in which the manipulation of space and image may have intended to "represent" divine vision, Clemena ANTONOVA, "Seeing the World with the Eyes of God: The Vision Implied by the Medieval Icon", in *Hortulus: The Online Graduate Journal of Medieval Studies*,1, 2005, p. 7 (http://hortulus.net/jan05journal/antonova.html).

[30] GROSS, *Die abendländische Architektur*, p. 106-109.

[31] Wilhelm SCHLINK, "Existait-il un programme d'ensemble?", in *Le monde des cathédrales*, ed. Roland RECHT (Cycle de conférences organisé par le musée du Louvre du 6 janvier au 24 février 2000), Paris, 2003, p. 16-40; and Madeline CAVINESS, "Biblical Stories in Windows: Were they Bibles for the Poor?", in *The Bible in the Middle Ages, Its Influence on Literature and Art*, ed. Bernard S. LEVY, Binghamton (New York) 1992, p. 128-47, have voiced a healthy scepticism concerning the coherence of glass and sculpture ensembles that were often installed over long periods of time. Clermont, on the other hand, appears to offer an example of the conscious coordination of exterior sculpture, stained glass narratives, relics, and chapel dedications.

[32] Mary J. CARRUTHERS, *The Book of Memory: A Study of Memory in Medieval Culture*, Cambridge, 1990, p. 71-79, 122-155, discusses the "architectural mnemonic" in medieval memory systems that allows for multiple paths of navigation and recall. Bettina BERGMANN, "Playing with boundaries: painted architecture in Roman interiors", in *The Built Surface, Volume 1: Architecture and the Picto-*

rial Arts from Antiquity to the Enlightenment, Aldershot, 2002, p. 15-46, considers the pragmatics of reception in the Roman domestic interior, while CROSSLEY, "The man from inner space", p. 174-177, investigates the relation between architectural space, liturgical movement, and the display of images at St Laurence. Nuremberg.

[33] DAVIS, "On the Drawing Board", p. 188-192.

[34] For a recent summary of the accrued scholarship on and problem of Jean Deschamps, his "family", and their buildings, Christian FREIGANG, "Jean Deschamps et le Midi", in *Bulletin monumental*, 149, 1991, p. 265-298. In adddition to Limoges, the cathedrals of Narbonne, Rodez, Toulouse, the choir of Bordeaux Cathedral, and the Abbey of Valmagne have been associated with the activity of the Deschamps masons.

[35] SCHÜRENBERG, *Die kirchliche Baukunst*, p. 206-212; Francis SALET, "Saint-Urbain de Troyes", in *Congrès archéologique de France*, 113, 1955, p. 96-112; Michael T. DAVIS, "On the Threshold of the Flamboyant: the Second Campaign of Construction of Saint-Urbain, Troyes", in *Speculum*, 59, 1984, p. 847-884; Caroline BRUZELIUS, "The Second Campaign at St-Urbain at Troyes", in *Speculum*, 62, 1987, p. 635-640; a Christine ONNEN, *Saint-Urbain in Troyes: Idee und Gestalt einer päpstlichen Stiftung*, Kiel, 2004.

[36] RECHT, "Le goût de l'ornement", p. 155, 157; also the appreciative comments concerning the originality of the Saint-Urbain master in KIMPEL & SUCKALE, *Die gotische Architektur*, p. 442-447.

[37] The relationship between Rayonnant architecture and metalwork has also been explored by Jean BONY, *French Gothic Architecture of the 12th and 13th Centuries*, Berkeley, Los Angeles & London, 1983, p. 398-405; also Peter KURMANN, "Cathédrale miniature ou reliquaire monumental? L'Architecture de la châsse de sainte Gertrude", in *Un Trésor Gothique*, p. 135-153.

[38] ONNEN, *Saint-Urbain in Troyes*, p. 66, concludes that the socle of the western half of this transitional bay was added during Emile Selmersheim's restoration of the building. Suffice it to say that graphic evidence is contradictory on this point. A new structure was erected in 1743 at the western boundary of this hybrid bay, which suggests to me the location of the medieval screen. For this 18th-c. project, ONNEN, *Saint-Urbain in Troyes* , p. 87-88; Gildas BERNARD, "Le Changement de jubé à Saint-Urbain de Troyes au XVIIIe siècle", in *Bulletin monumental*, 123, 1965, p. 45-49.

[39] A similar situation obtains in the choir chapels and aisles where the doublets framing the glass are fronted by a pattern composed of a cusped arch surmounted by a trefoil.

[40] See Louis GRODECKI, "Les vitraux de Saint-Urbain de Troyes", in *Congrès archéologique de France*, 113, 1955, p. 123-138; GRODECKI & BRISAC, *Gothic Stained Glass*, p. 172-175, 263.

[41] Miri RUBIN, *Corpus Christi. The Eucharist in Late Medieval Culture*, Cambridge, 1991. Especially relevant to Saint-Urbain is her chapter on the feast of Corpus Christi promoted by Urbain IV, p. 164-212.

[42] RECHT, "Le goût de l'ornement", p. 155.

[43] The idea of the architectural frame as both boundary and focalizer is discussed by Oleg GRABAR, *The Mediation of Ornament*, Princeton (New Jersey), 1992, p. 186-193.

[44] For Saint-Thibault-en-Auxois, Christian FREIGANG & Peter KURMANN, "L'église de l'ancienne prieuré de Saint-Thibault-en-Auxois: sa chronologie, ses restaurations, sa place dans l'architecture gothique", in *Congrès archéologique de France*, 144, 1986, p. 271-289. Mussy-sur-Seine has been studied by SCHÜRENBERG, *Die kirchliche Baukunst*, p. 212-213; Francis SALET, "L'église de Mussy-sur-Seine", in *Congrès archéologique de France*, 113, 1955, p. 320-337; and Meredith P. LILLICH, *The Queen of Sicily and Gothic Stained Glass in Mussy and Tonnerre* (Transactions of the American Philosophical Society, vol. 88, part 3), Philadelphia, 1998, p.21-22, who dates the church to circa 1285-1290.

[45] GROSS, *Die abenländische Architektur, passim*.

[46] See Alistair C. CROMBIE, *Science, Optics, and Music in Medieval and Early Modern Thought*, London, 1990, p. 12-13, for the shared contexts of mathematical sciences and the arts. Leading studies of optics in the 13th and 14th c. are David C. LINDBERG, *Theories of Vision from Al-Kindi to Kepler*, Chicago, 1976, p. 94-132; David C. LINDBERG, ed., *John Pecham and the Science of Optics*, Madison (Wisconsin), 1970; Katherine H. TACHAU, *Vision and Certitude in the Age of Ockham: Optics, Epistemology, and the Foundations of Semantics 1250-1345*, Leiden, 1988, p. 3-54; Katherine H. TACHAU, "Seeing as Action and Passion in the Thirteenth and Fourteenth Centuries", in *The Mind's Eye: Art and Theological Argument in the Middle Ages*, ed. Jeffrey HAMBURGER & Anne-Marie BOUCHÉ, Princeton, 2006, p. 336-359, esp. p. 354.

[47] Quoted by TACHAU, "Seeing as Action and Passion", p. 354-355. "Multiplication of species" is explained by Lindberg. *Theories of Vision*, p. 113-115; and TACHAU, *Vision and Certitude*, p. 3-26.

[48] The words spoken to Gertrude of Helfta are taken from the chapter "The Visual and the Visionary: The Image in Late Medieval Monastic Devotions", in Jeffrey HAMBURGER, *The Visual and the Visionary: Art and Female Spirituality in Late Medieval Germany*, New York, 1998, p. 147. HAMBURGER, "The Visual and the Visionary", p. 131-134; and Michael CAMILLE, "'Him Whom You Have Ardently Desired You May See': Cistercian Exegesis and the Prefatory Pictures in a French Apocalypse", in *Studies in Cistercian Art and Architecture*, vol. 3, ed. Meredith P. LILLICH, Kalamazoo (Michigan), 1987, p. 137-160, especially 142-147 describe the step by step structure of devotional exercises that involves changing relationships to images and different experiences of vision.

[49] Gaston BACHELARD, *The Poetics of Space*, Boston, 1964, p. 150.

[50] A brief excerpt of the 1260 Franciscan statutes is published by Wolfgang BRAUNFELS, *Monasteries of Western Europe: The Architecture of the Orders*, trans. Alastair LAING, Princeton (New Jersey), 1972, p. 246. John GAGE, "*Lumen, Alluminar, Riant*", p. 32, emphasizes their friendly attitude toward glass in allowing a limited number of subjects (Crucifixion, the Virgin, St. Francis), "in the main window of the choir behind the high altar". For Dominican legislation, see Richard A. SUNDT, "*Mediocres domos et humiles heabeant fratres nostri*: Dominican Legislation on Architecture and Architectural Decoration in the 13th Century", in *Journal of the Society of Architectural Historians*, 46, 1987, p. 394-407.

[51] Santa Chiara in Naples has been discussed by Caroline BRUZELIUS, *The Stones of Naples: Church Building in Angevin Italy*, New Haven, 2004, p.133-153; the Cordeliers in Paris by Laure BEAUMONT-MAILLET, *Le Grand Couvent des Cordeliers de Paris. Etude historique et archéologique du XIIIe siècle à nos jours*, Paris, 1975, p. 250-276; and Wolfgang SCHENKLUHN, Ordines Studentes: *Aspekte zur Kirchenarchitektur der Dominikaner und Franziskaner im 13. Jahrhundert*, Berlin, 1985, p. 78-84.

[52] CROSSLEY, "The man from inner space", p. 165-182; Craig HARBISON, *The Mirror of the Artist: Northern Renaissance Art in Its Historical Context*, New York, 1995, p. 34-42.

French Gothic 1250-1350 and the Paradigm of the Motet

Yves Gallet

One of the many questions that are raised when talking of a new European architecture around 1300, is how it evolved from the High Gothic and Rayonnant styles of the 1250s into the Late Gothic style, beginning in the middle of the fourteenth century. Of course, categories such as "High" or "Late" Gothic must not be considered as entities in themselves. But there is little doubt that a radical departure in the way architecture was conceived occurred when the conventional Rayonnant style made way for the original, complex, unorthodox, disorganized art of the fourteenth century.

If anything, Late Gothic can be described as confusing and transgressive, as opposed to the clarity and logic of Rayonnant. Apart from the austere currents into which Late Gothic art sometimes broke up, buildings of that time are usually covered with an abundant decor obscuring the structural lines. Capital-less columns, suggesting flowing transitions, conceal the exact break between shafts and vaults, so that nobody can tell precisely where the support ends and where the load begins. Multiples of ribs and pendant bosses, besides embellishing the buildings, aim at concealing the implicit anatomy of the vault. Some of the illusionist builders of that time went as far as to conceive skeletal ribs, devoid of vault cells and, ultimately, vaults devoid of ribs. Form and function are systematically and intentionaly untied or disarticulated from each other, so that the vagaries of Late Gothic often seem to transgress and even delight in transgressing the rules of "good", readable architecture.

This paper reconsiders the case of French Gothic within the context of these well-known evolutions. France – particulary northern France – is a very special case indeed, since it is generally assumed, in the historiography of Gothic architecture, to have ossified into academic and doctrinaire orthodoxy rather than having contributed to the creation of a new European architecture. But as I will try to suggest, thanks to the paradigm of music around 1300-1330, such a retrogressive attitude might be rooted in liturgical phenomena and therefore mean much more than a medieval debate between the Ancients and the Moderns.[1]

French Gothic in the context of European Architecture

Generally speaking, we know how Gothic architecture developed in England from the 1250s onwards. The starting point was the rebuilding of Westminster Abbey, which introduced to Early English Gothic a growing taste for Rayonnant traceries. As Jean Bony has shown, the Rayonnant system was not adopted as a ready-made system, but as a repertory of forms and structures which architects could combine as independent elements.[2] And so they did, with increasing freedom and with a creative and dynamic concept of space, giving rise, in the second half of the thirteenth century, to the highly refined Decorated style.

We also know that, apart from the reaction leading to the Perpendicular style, the same evolution can be

Fig. 1. Rouen, Saint-Ouen, choir interior, view from south aisle (Yves Gallet).

traced in many regions of the German Empire. This is particularly true of the Rhineland, where ambitious and impressive churches were under construction at the beginning of the fourteenth century, once French Rayonnant had been adopted both in the nave of Strasbourg Cathedral and in the choir of Cologne shortly before 1250. Thanks to buildings such as the collegiate church of Oppenheim, or St Catherine's chapel in Strasbourg Cathedral in its original state, architecture gradually progressed towards a decorated style based upon diversity and variety, featuring the newest forms of Rayonnant traceries, pendants, and skeletal ribs.[3] Those inventive compositions, together with a plausible influence of the English West Country around 1320-1330,[4] inspired the work of Peter Parler in Prague, thus opening the way for Late Gothic developments.

One might expect a similar process to have occurred in French Rayonnant Gothic. Evidently, this was not the case. The situation in northern France is exemplified by the monastic church of Saint-Ouen in Rouen, the choir of which was rebuilt from 1318 onwards (Fig. 1). At the time of its completion, by 1339, the transept was under construction, as was the westernmost bay of the nave. As in any other large thirteenth-century French church, the choir is surrounded by an ambulatory and radiating chapels. The three-storey elevation is rather conventional and the triforium is glazed, as is usually the case in Rayonnant Gothic. There is a clear hierarchy between the mullions in the triforium and in the clerestory. As to the piers, they are strongly reminiscent of a columnar pier with four attached colonnettes, both in the plasticity of the shafts and in design: they seem therefore much more indebted to the Chartres tradition than to the fasciculate piers of the second half of the thirteenth century. Last but not least, the same window pattern is uniformly repeated throughout the building, unlike Exeter or Oppenheim, for instance, where several

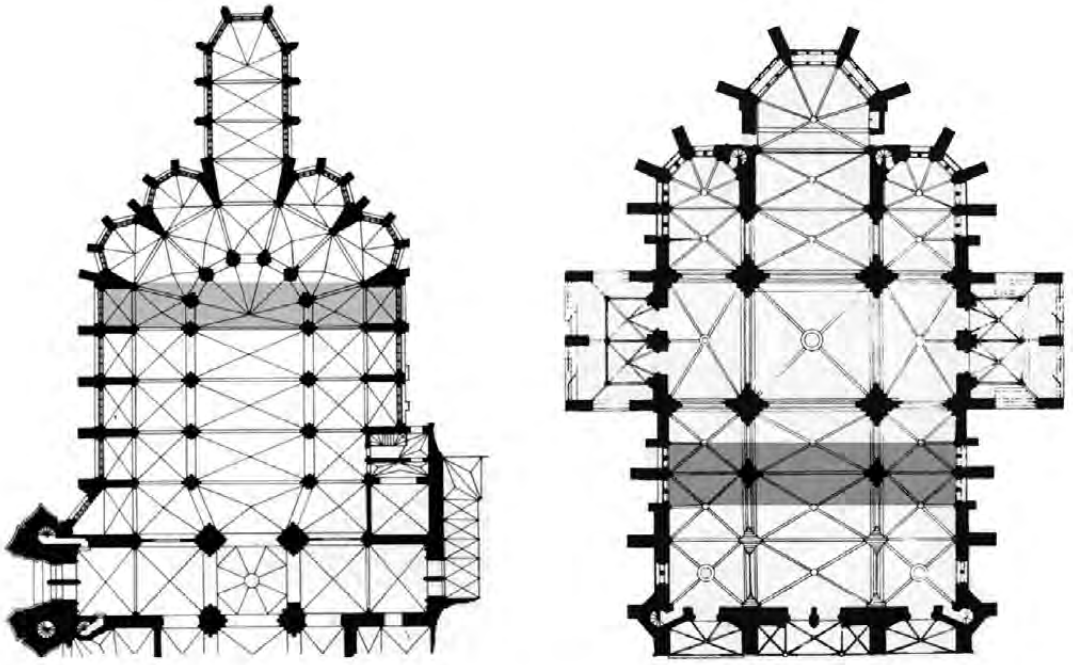


Fig. 2. Evreux Cathedral and Troyes, Saint-Urbain, ground plans.

different tracery patterns are combined in windows placed side by side and where nominalistic variety is the norm. Thus the choir of Saint-Ouen, no doubt the greatest and most important French undertaking in the first quarter of the fourteenth century, can in some ways be seen as a resurgence of the "classic" cathedral type.[5]

The French Paradox

This "classic" revival represents a paradox, since it occurred at a rather unexpected moment. As a matter of fact, the creativity of French Rayonnant seems to have remained alive up until 1300. Many churches under construction during that period in Normandy, in the Paris region, in Champagne, in Burgundy, and in Brittany prove to be very modern buildings. Either in plan, elevation, tracery patterns, or vault system, they show what Peter Kurmann aptly calls "proto-Late Gothic" aspects[6] that promised to become increasingly influential in the early fourteenth century. I shall take three examples.

The first concerns discrepancies in the ground-plan. In the choir of Evreux Cathedral, rebuilt from 1250-1255 onwards, the sanctuary is a seven-sided polygon, surrounded by an ambulatory. In a logical and conventional plan, there should be seven radiating chapels. But there are only five: the chapels opening onto the first turning bays of the ambulatory, which we expect to be radiating, are rectangular (Fig. 2). Similarly, the designer of Saint-Urbain at Troyes went as far as to add a fifth rib to the quadripartite vaults of the aisles and to push the windows to the side of the bays, thus suggesting an independent, secondary, minor rhythm, superimposed onto the major rhythm of the transverse arches. Understood as a series of uniform spatial units, the conventional bay division, a central feature of High Gothic, is challenged by this audacious, syncopated composition.

Another aspect of the mature French Rayonnant style is the unorthodox articulation of the architectural elements. Columns without capitals are to be found in many buildings of the second half of the thirteenth century, whether in secondary blind arcades (in Pierre de Montreuil's reconstruction of the south transept doorway of Notre-Dame in Paris between 1258 and 1267), in triforiums (at Saint-Pol de Léon Cathedral and at the church of Redon Abbey (Fig. 3), both

Fig. 3. Redon, Saint-Sauveur, choir interior, north side, triforium and clerestory (Yves Gallet).

in Brittany and built in the very last years of the thirteenth century), or in arcades (for instance, the lateral porches of Saint-Urbain at Troyes from the 1280s, the nave arcades at Mussy-sur-Seine circa 1295, or the piers of the axial chapel at Saint-Germain of Auxerre, after 1309).[7] These examples show how rational articulation, which had been hitherto a key concept of French Gothic, was increasingly questioned.

At the same time, relations between structure and what Paul Frankl called texture[8] were redefined by the detailing which now covers structural elements. A good example is the multiplication of ribs which causes the rib to look decorative rather than structural (if ribs ever had such a function): a well-known French example can be found in the crossing at Amiens Cathedral and in the collegiate church of Saint-Quentin (Fig. 4), not to mention, of course, the much earlier Angevin experiments. As to tracery, an important index of fourteenth-century decorated architecture, many French buildings around Paris and in Normandy show that variety and exuberant diversity were leading aesthetic principles. Unlike Saint-Ouen at Rouen with its uniform tracery pattern, the radiating chapels added to the twelfth-century ambulatory of Mantes (circa 1265-1280) display an extraordinarily rich and prolix set of forms[9]. In the last third of the thirteenth century, we can observe a similar taste for varied traceries in the choir of Le Mans Cathedral, in the nave chapels of Rouen Cathedral (Fig. 5), in the transept of Meaux Cathedral, in the radiating chapels of Sées Cathedral, and in the harp-string tracery dividing the Rayonnant nave chapels at Coutances. At Rouen Cathedral, the early or mid fourteenth-century rose of the south transept is a highly intellectual conception: the architect decomposed decorative tracery units of the Rayonnant model into separate elements, then freely recombined those elements as pairs of petals, thus creating a modern and more rhythmi-

Fig. 4. Saint-Quentin, interior, vaults of eastern transept (Yves Gallet).

cally varied pattern (Fig. 6). The same process is at work in Nuremberg and was to be used, in a very "jazzy" way, by Peter Parler in Kolin.

Undoubtedly, this list of proto-Late Gothic elements could be much longer. We should not forget, for instance, the lower storey of the choir of Saint-Urbain at Troyes. Treated as a glazed triforium, it consists of two superimposed layers of tracery, but neither the design nor the rhythm of the lancets coincide. Thus, it is impossible to tell where the inside space ends and where the outside begins. This contrived disparity, repeated in the apse of Saint-Thibault-en-Auxois around 1300 (Fig. 7), anticipates a new, Late Gothic feeling for space, where the sense of limitation is almost systematically undermined.

In a sense, France enjoyed a proto-Late Gothic up until 1300. But this recognition opens a whole set of new questions: why did great churches of the first quarter of the fourteenth century show such an unexpected shift toward classicism? Why did France not go the way of England or Germany, even though it had, close at hand, all the possibilities to build on? There is of course no single explanation for such retrospection, and various attempts have been made to account for it.

Is it a lack of inventiveness and creativity, as if the great inspiration of the thirteenth century had dried up, as if architects were by then unable to try something new? This idea, repeatedly suggested since Georg Dehio, is now a cornerstone of the historiography of French Gothic architecture. However, there are several problems with this argument. Even the choir of Saint-Ouen in Rouen incorporates a number of very modern features: the spur-shaped piers, the triforium arcade with inner and outer planes that do not

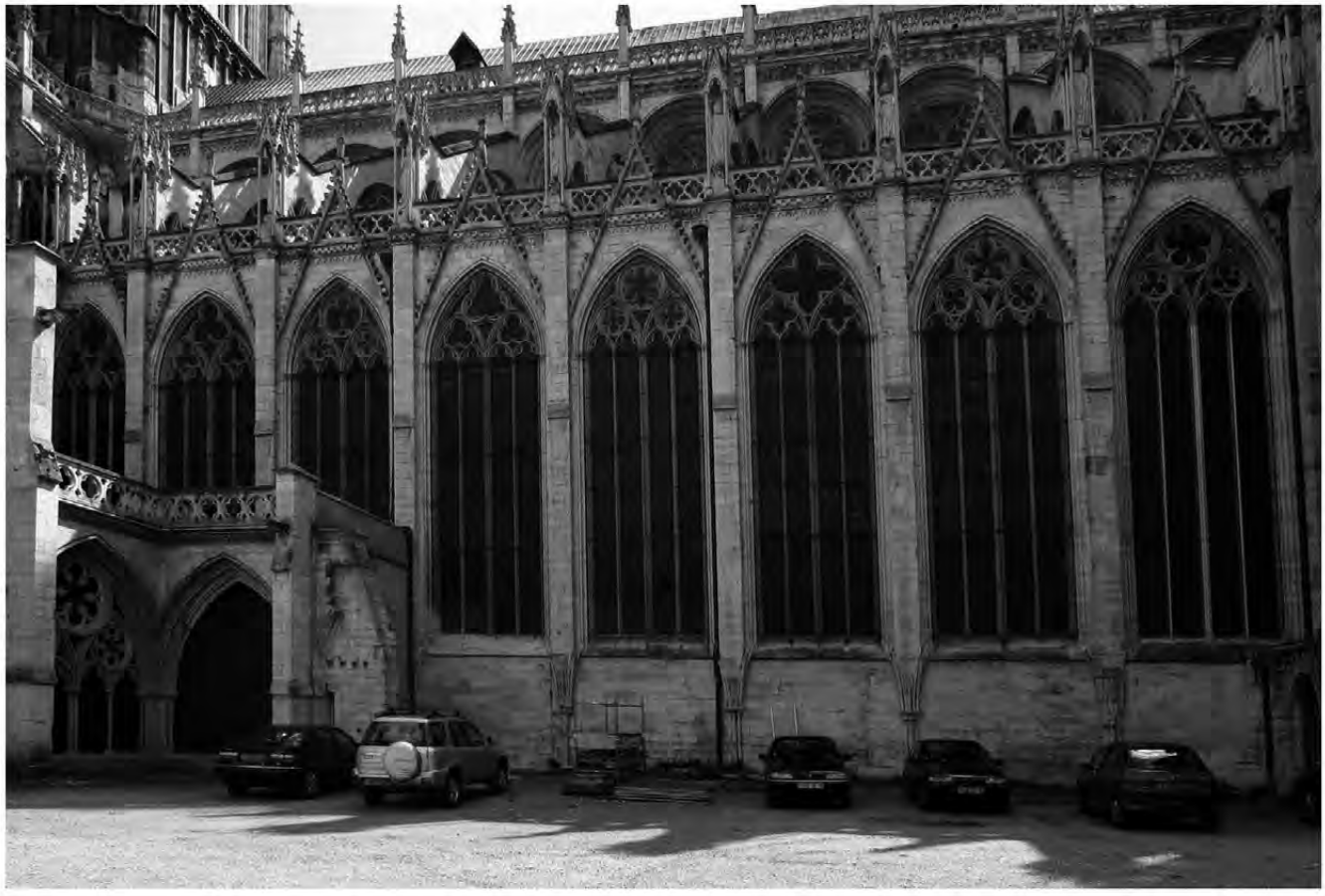


Fig. 5. Rouen Cathedral, exterior, nave chapels, north side (Yves Gallet).

match, the unorthodox proportions of the elevation, and finally the extraordinary size of the bays which creates a sense of space hitherto unknown in Rayonnant Gothic.[10]

Is it deliberate conservatism? Looking across the Channel or the Rhine, French architects may well have considered English Decorated or pre-Parlerian works somewhat eccentric. It seems quite possible that they felt they had to act as "guardians of the temple" and help preserve Gothic architecture, so to say, *sicut erat in principio*. Similarly, French architects may also have been thinking that, as far as the great church was concerned, classic High Gothic architecture had provided them with works of the highest order and with an aesthetic they saw no need to change.

Those explanations are both interesting and plausible, but they are aesthetic-related or art history-oriented: they not only postulate that architects had a clear idea of how the Gothic style developed, but also that artistic choices dictated their reply. We should not forget, however, that a church was primarily devoted to liturgical use. From this point of view, were ostentatiously over-decorated churches suitable for the performance of the liturgy and for the expression of the sacred? Paradigmatic for this is the motet.

Architecture and Music: a special relationship

The motet is, as everybody knows, one of the most important forms of polyphonic music from the 1250s onwards. As practised in France,[11] it is a composition based on a *tenor*, to which upper voices are added. Typically, the *tenor* is a slow-moving plainchant melody with liturgical words from the Gregorian Mass. The upper voice, which we call "motet", ornaments the

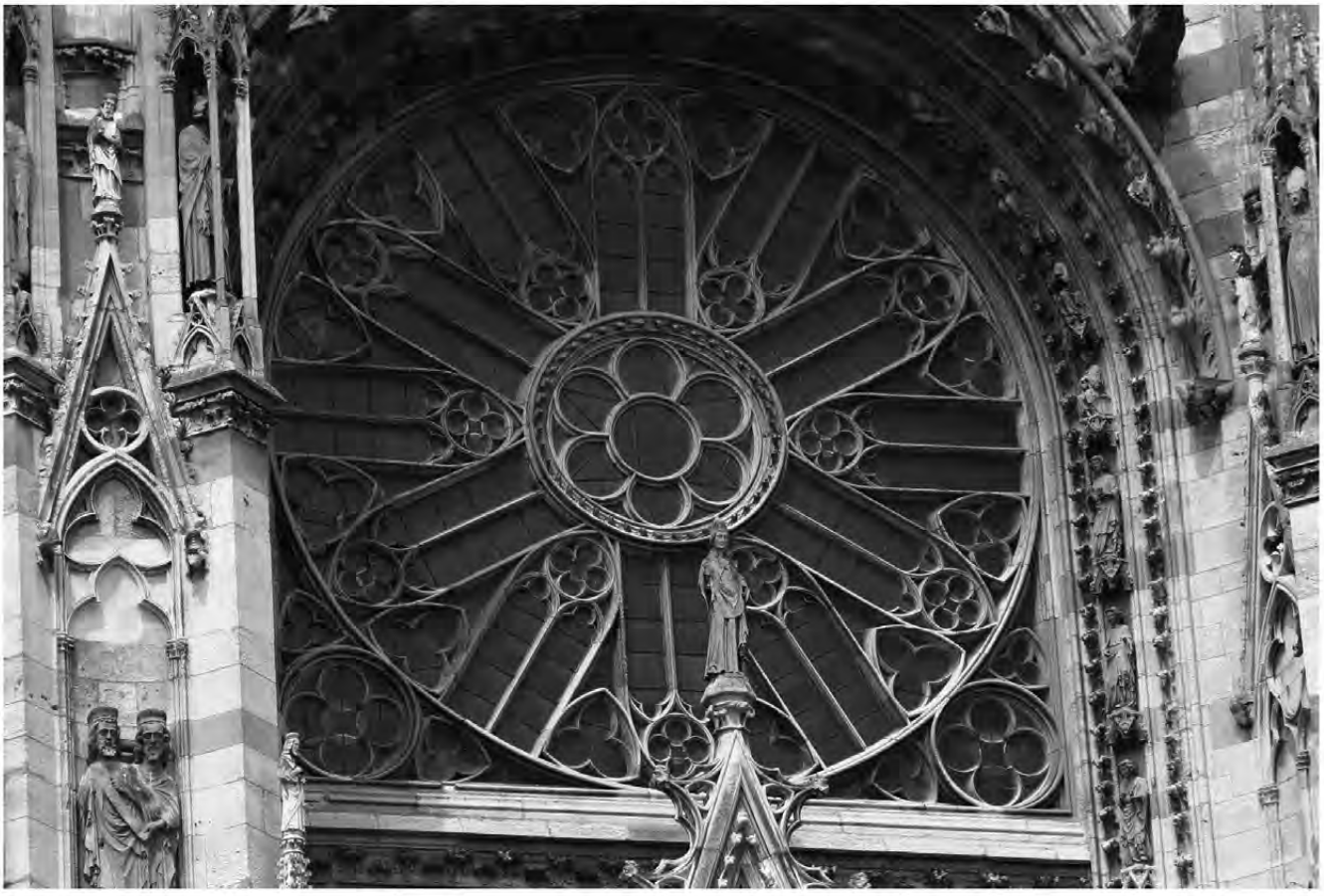


Fig. 6. Rouen Cathedral, exterior, *portail de la Calende* (south transept), rose window (Yves Gallet).

tenor's melody. As a musical style, the motet originates in the thirteenth century *organum*, a long-lasting liturgical composition in the middle of which brief interludes were sung as a descant over a plainchant *cantus firmus*. Gradually, those interludes were performed as free-standing musical pieces, the descant became an autonomous upper voice, with its own text – hence the name "motet", which comes from the French "mot", "word".

As time went on, motets became increasingly sophisticated. New lines were added to the polyphonic basis, such as the *triplum*, which was the highest voice of the composition, or the *contratenor*, in modern ranges the bass. Sometimes secular texts in French were used, while the *tenor* kept its Latin liturgical words, and this in turn reinforced the polytextual nature the motet had been given from the beginning. Numerically constructed rhythmic refinements began to proliferate. The short repeated rhythmic pattern in the *tenor* used longer note values, whereas the upper voices were given a rapidly moving rhythm, even if that might cause daring dissonances. More rhythmically active passages, where the same melody was sung by two voices, each one alternating on each note, and thus significantly called *hoquetus*, that is to say "hiccup", were also performed by the motet and the *triplum*.

By 1300, there was a growing trend towards kaleidoscopic embellishment, amazing subtlety and intellectual complexity, just as was the case in mature Rayonnant architecture. A good example is provided by motets, such as Philippe of Vitry's famous *Quoniam secta latronum*, incorporated in 1316-1317 into Chaillou du Pesstain's *Roman de Fauvel*, where the musical, textual, numerical, and symbolic links are so rich that it is almost impossible to pick them up by ear or enjoy them at first-hearing. Once performed *ex usu*, the

Fig. 7. Saint-Thibault-en-Auxios, choir interior, detail (Yves Gallet).

motet was now shaped *ex arte*. Little wonder then that French composers around 1320 claimed they had created a new musical art, as did Johannes de Muris with his *Ars novae musicae* in 1321 and Philippe of Vitry in his 1322 treatise, meaningfully entitled *Ars nova* .[12]

It is indicative that, a few years later, those highly refined polyphonic compositions were officially condemned. In 1324-1325, Pope John XXII's decree on church music, known as *Docta sanctorum*, solemnly criticized the vagaries of these avant-garde motet composers.[13] *Novellae scholae discipuli*, as the decretal says,[14] were reproached with an excessive use of novelties and rhythmic refinements, disturbing liturgical performances and diverting the faithful from their devotions. *Novis notis intendunt*: they invented new notes, *melodias hoquetis intersecant*: they interrupted melody with hockets, *discantibus lubricant*: they soiled melody with descants, and, *ut interdum antiphonarii et gradualis fundamenta despiciant*, losing sight of the fundamentals of church music, *ignorent super quo aedificant*, they did not know what they were building upon. As a consequence, polyphonic compositions were strictly prohibited for the choir and more chant-like musical pieces were restored.

Of course, musical novelties had already been attacked in the past. Pope John's decree is the outcome of a series of critics complaining about the overuse of polyphony within the conduct of the liturgy from the first quarter of the fourteenth century onwards, not to mention much earlier fulminations.[15] In 1297, the Cistercian *Statuta* tried to restrict the use of polyphonic compositions, and in 1320, syncopated notes and hockets were explicitly prohibited from the celebrations of the order. In his conservative *Speculum musicae*, Jacques of Liège (circa 1260-1330) complained about the cult of novelty and all the changes that had occurred at the beginning of the century, hastening the decline of proper church music. But what is new about John XXII's decree is that for the very first time the pope himself decided to react.

It is worth considering that a similar conservative reaction may have been at work in early fourteenth century French architecture. Music and architecture had so much in common. They were both the physical medium through which the sacred was expressed.[16] Architecture was the general setting of liturgy, music was performed as part of the liturgy. And, of course, both had a symbolic dimension. Every Gothic "glass shell" church was an evocation of the Heavenly Jerusalem, as has often been stressed by art historians. Similarly, the immateriality of sound echoing the immateriality of light, and ultimately the nature of God, music was viewed as a *speculum* of the celestial harmony, a reflection of the "music of the spheres".

Given that the distinctive features of late thirteenth-century Rayonnant buildings are remarkably analogous to those which caracterize the late thirteenth-century motet, it appears plausible that, around 1300-1320, French builders – or their ecclesiastical patrons – considered that the solemn character and spiritual dimension of the great churches would be altered by an overuse of refined ornaments or varied, up-to-date traceries. In the words of John XXII, French architects may have considered that their colleagues in England or Germany *ignorabant super quo aedificabant*. This would account rather well for the shift towards homogeneity and simplicity exemplified by Saint-Ouen at Rouen, for its stress on overall coherence as opposed to detail.

From Paradox to Paradigm

To conclude, I am not arguing that the analogies between music and architecture were due to some sort of *Zeitgeist* or to contacts between builders and music composers. Neither am I trying to correlate Gothic architecture and music in the way Panofsky tried to parallel Gothic and scholasticism. Instead, I would like to suggest that art historians should regard the history of music not merely as a parallel but as a *paradigm* that may offer greater insight into the kind of reaction that occurred in French Gothic around 1300, because it provides us with documentary evidence: the prohibition of the motet best exemplifies the way many builders or their ecclesiastical commissionners may have been thinking around 1300. Conversely, we should not expect that someone should find documentary evidence that would be the equivalent, in architecture, to the call to order of Pope John XXII. Music, being officially part of the *quadrivium*, had obviously to be reminded of its duty. Architecture did not rank among the *artes liberales*, so Avignon had no reason to interfere in the evolution of architecture.

If not the only plausible explanation, the paradigm of the motet can help us understand the reason why French architects failed to create an outstanding building that would have established France among the most advanced centres of the new European architecture. Finally, what underlies this paradigm is no less than the question of the artistic status of architecture by 1300. The 1324 decretal raises a question: did music become artistically independant from its liturgical duty? Obviously not. The same question has to be asked about architecture, and it is not sure whether everywhere in Europe, and especially in France, the answer would have been "yes".

NOTES

[1] This paper was made possible through corresponding and exchanging views with Prof. Paul Crossley following the British Archaeological Association conference held in Mainz in 2003. I am much indebted to his discerning and stimulating observations, in a field of research he has so deeply investigated for years. I would like to thank him warmly, as well as Alexandra Gajewski and Zoë Opačić, for inviting me to the '1300 Conference': I am grateful to their support, both intellectual and material. For their learned criticism of specific points, I would like to thank Klára Benešovská, Paul Binski, Lindy Grant, John Lowden, Marc Schurr, and Neil Stratford. The whole text was read by Alexandra Gajewski, and I am very grateful for her comments and corrections. A travel grant was provided by the Université de Bretagne Occidentale (CRBC) and the Courtauld Institute.

[2] Jean BONY, *The English Decorated Style. Gothic Architecture Transformed, 1250-1350*, Oxford, 1979, chapter I.

[3] Strasbourg: Roland RECHT, "L'architecture de la chapelle Sainte-Catherine au XIV[e] siècle", in *Bulletin de la Société des Amis de la cathédrale de Strasbourg*, 9, 1970, p. 95-101; Rüdiger BECKSMANN, "Architecture, sculptures et verrières de la chapelle Sainte-Catherine de la cathédrale de Strasbourg: un ensemble artistique au seuil du gothique tardif", in *Bulletin de la Société des Amis de la cathédrale de Strasbourg*, 25, 2002, p. 113-134. Oppenheim: Bernhard SCHÜTZ, *Die Katharinenkirche in Oppenheim*, Berlin & New York, 1982; Yves GALLET, "Is There a German Decorated Style? Reflections on the Church of St Catherine (Oppenheim) and German Gothic Architecture in the First Half of the 14[th] Century", in

Mainz and the Middle Rhine Valley: Medieval Art, Architecture and Archaeology, ed. Ute ENGEL & Alexandra GAJENSKI (The British Archaeological Association Conference Transaction, 30), London, 2007. For a general survey, see Norbert NUSSBAUM, *German Gothic Church Architecture*, New Haven & London, 2000, and Paul FRANKL & Paul CROSSLEY, *Gothic Architecture*, New Haven & London, 2000.

[4] Paul CROSSLEY, "Peter Parler and England. A Problem revisited", in *Wallraf-Richartz-Jahrbuch*, 64, 2003, p. 53-82.

[5] For a detailed account of the building, see André MASSON, *L'abbaye de Saint-Ouen de Rouen*, Paris, 1930, and most recently Peter SEYFRIED, *Die ehemalige Abteikirche Saint-Ouen in Rouen*, Weimar, 2002.

[6] Peter KURMANN, "Spätgotische Tendenzen in der europäischen Architektur um 1300", in *Europäische Kunst um 1300*, ed. Hermann FILLITZ & Martina PIPPAL (Akten des 25. Kongresses für Kunstgeschichte), Vienna, Cologne & Graz, 1986, p. 11-18.

[7] The history of the cathedral of Saint-Pol de Léon remains obscure: the nave is said to have been dedicated in 1334, and, on stylistic grounds, the triforium can be dated to the 1290s or to the beginning of the fourteenth century. For Redon, see Lisa SCHÜRENBERG, *Die kirchliche Baukunst in Frankreich zwischen 1270 und 1380*, Berlin, 1934, p. 45-48, and Pierre HÉLIOT, "Le chevet de Saint-Sauveur à Redon", in *Bulletin et Mémoires de la Société archéologique du département d'Ille-et-Vilaine*, 79, 1976, p. 31-51, with a chronology which clearly dates the building too early. For Troyes, see Michael DAVIS, "On the Threshold of the Flamboyant: The Second Campaign of Construction of Saint-Urbain, Troyes", in *Speculum*, 59, 1984, p. 847-884, and Caroline BRUZELIUS, "The Second Campaign at Saint-Urbain at Troyes", in *Speculum*, 62, 1987, p. 635-640. For Mussy, see Francis SALET, "L'église de Mussy-sur-Seine", in *Congrès archéologique de France*, 113, 1955, p. 320-337. As for Auxerre, St Germain, a date circa 1277 was suggested by Jean VALLERY-RADOT ("Saint-Germain d'Auxerre. L'église haute", in *Congrès archéologique de France*, 116, 1958, p. 26-39) and Robert BRANNER (*Burgundian Gothic Architecture*, Londres, 1960, p. 94). This dating is disputed by Hermann ARNHOLD, "Le chœur de Saint-Germain d'Auxerre et l'architecture du gothique rayonnant", in *Archéologie et architecture d'un site monastique, V^e-XX^e siècles: dix ans de recherches à l'abbaye Saint-Germain d'Auxerre*, ed. Christian SAPIN, Paris, 2000, p. 158-163, who argues for a date c. 1309-1334.

[8] See the comments by Paul Crossley in FRANKL & CROSSLEY, *Gothic Architecture*, p. 10.

[9] Yves GALLET, "Les chapelles du chevet de la collégiale de Mantes. Un petit chef-d'œuvre du gothique rayonnant", in *Bulletin monumental*, 163, 2005, p. 101-114.

[10] For a reassessment of Saint-Ouen: Yves GALLET, "Rouen, abbatiale Saint-Ouen. Le chevet et l'architecture rayonnante au XIV^e siècle", in *Congrès archéologique de France*, 161, 2003, p. 227-238.

[11] Olivier CULLIN, "Motet", in *Guide de la musique du Moyen Âge*, ed. Françoise FERRAND, Paris, 1999, p. 216-224.

[12] An important contribution is Daniel LEECH-WILKINSON, *Compositional Techniques in the Four-Part Isorhythmic Motets of Philippe de Vitry and his Contemporaries*, New York, 1989. See Ursula Günther, "Philippe de Vitry", in *Dictionnaire de la musique. Les hommes et leurs œuvres*, ed. M. HONEGGER, vol. 2, Paris, 1986, p. 1300-1301, and the related notes on "Ars nova", "Jean des Murs", and "Philippe de Vitry" by Nigel WILKINS & Olivier CULLIN in *Guide de la musique du Moyen Âge*, ed. Françoise FERRAND, Paris, 1999, p. 418-421, 476-478, 562-568. Sarah FULLER, "A Phantom Treatise of the 14th Century? The *Ars Nova*", in *Journal of Musicology*, 4, 1985-1986, p. 23-50, doubts the attribution to Philippe of Vitry.

[13] Étienne ANHEIM, "Une controverse médiévale sur la musique: la bulle *Docta sanctorum* (1324/1325) de Jean XXII et le débat de l'*ars nova* dans les années 1320", in *Revue Mabillon*, 11, 2000, p. 221-246. The meaning of the decree is radically questioned by Olivier CULLIN, *Laborintus. Essais sur la musique au Moyen Âge*, Paris, 2004, p. 113-131, who shows that the decree was issued in order to reassert the traditional role of music as expressing the sacred and stirring up devotional practices, in a pivotal period during which the Papacy, considered weakened and divided, tried to restore the authority of the Church.

[14] *Sed nonnulli novellae scholae discipuli, dum temporibus mesurandis invigilant, novis notis intendunt, fingere suas quam antiquas cantare malunt, in semibreves et minimas ecclesiastico cantatur, notulis percutiuntur. Nam melodias hoquetis intersecant, discantibus lubricant, triplis et motetis vulgaribus nonnumquam indulcant adeo, ut inderdum antiphonarii et gradualis fundamenta despiciant, ignorent super quo aedificant, tonos nesciant quos non discernunt, immo confundunt, quum ex earum multitudine notarum adscensiones pudicae, descensionesque temperatae, plani cantus, quibus toni ipsi sercernuntur ad invicem, obfuscentur. Currunt enim, et non quiescunt, aures inebriant, et non medentur (...)*: "There are certain disciples of the new school who, devoting all their attention to measuring time, apply themselves to the making of notes in a different fashion. They prefer to compose their own songs rather than to sing the old ones, divide the Church pieces into semibreves and minims, and chop up the chant with notes of short values. They truncate the melodies with hockets, pollute the melodies with descants and go as far as to muffle the upper voice in the vulgar tongue. Thus they ignore the principles of the antiphoner and the gradual, they do not know anymore what they are building upon. They ignore the tones, which they no longer distinguish and even mingle together; under this avalanche of notes, the chaste ascencions and the discreet closes of the plainchant, by which the tones themselves are distinguished, become unrecognizable. Always running, they never rest, and intoxicate the ear rather than quietening..." For the full version of the decree see Olivier CULLIN, *Laborintus. Essais sur la musique au Moyen Âge*, Paris, 2004, p. 118-122.

[15] See Christopher PAGE, *The Owl and the Nightingale: Musical Life and Ideas in France, 1100-1300*, Berkeley, 1990, and Paul BINSKI, *Becket's Crown. Art and Imagination in Gothic England, 1170-1300*, New Haven & London, 2004, esp. p. 261-266.

[16] Albert SEAY, *Music in the Medieval World*, Prospect Heights, 1975, especially chapter I-3 and I-4.

Saint-Bénigne at Dijon around 1300, "La province qui s'endort"[1]?

Alexandra Gajewski

Following the discovery that the precious relics of St Benignus had survived the collapse of the central tower in 1271,[2] the first stone for the rebuilding of the Benedictine abbey church of Saint-Bénigne at Dijon was laid on 8th February, 1281.[3] The new church replaced an eleventh-century building, consisting of a basilica connected to a large rotunda in the east. The complex had served the community for more than 200 years. It had been built under the rule of the reforming abbot, William of Volpiano (990-1031), and was celebrated in the eleventh-century chronicle of the abbey.[4] In 1137, having been damaged by a fire which also destroyed part of the town, the church was repaired and a new portal added to the west end.[5] The rebuilding of 1281, however, radically transformed the site. Of the earlier constructions, the new church incorporated only the western portal. The eastern rotunda survived, but there was no longer direct access to it from the new church.

The late thirteenth-century rebuilding of Saint-Bénigne was one of the last great construction sites to be set up in Burgundy, where almost no major new projects were started in the first half of the fourteenth century.[6] Together with the collegiate church at Mussy-sur-Seine, the Benedictine priory of Saint-Thibault-en-Auxois (both in the diocese of Langres), and the Benedictine abbey church of Saint-Germain in the neighbouring cathedral town of Auxerre, Saint-Bénigne is an important representative of late Rayonnant architecture in the region.[7] However, Saint-Bénigne appears to be something of an outsider among that group (Fig. 1). Saint-Germain and Saint-Thibault (Fig. 2) correspond perfectly to our idea of the Rayonnant style: the chevets impress by their lightness and verticality. We admire the ingenuity with which surfaces are dissolved into delicate tracery patterns, as at Saint-Thibault, or exciting new vistas are created, as at the entrance to the eastern chapel at Saint-Germain. Even at Mussy, where the detailing is austere, the superimposed window zones of the east end radiate lightness. Saint-Bénigne, in contrast, surprises by its stark, monumental simplicity.

The church consists of a nave with lateral aisles, a non-projecting transept, and an east end with a large polygonal apse flanked by two smaller apses (Fig. 3). Massive compound piers mark the crossing and the two straight bays of the east end where stepped responds rise up to the high vaults, dividing the bays (Fig. 1). The elevation of the east end consists of three storeys with an unlit triforium separating the main arcade from the clerestory above.[8] The monumentality of the structure is enlivened only by a sprinkling of Rayonnant features in the triforium and clerestory: brittle trefoil arches delineate the triforium arcades which are carried by triple colonnettes with foliage capitals. Nonetheless, as if to counter an impression of delicacy these features might evoke, the colonnettes of the triforium are set against deep, rectangular pillars. In the clerestory, the windows are decorated with triple lancets surmounted by two trefoils and an octafoil oculus, all made from slender, chamfered bars. The illusion of dissolving surfaces is reduced, however, since the windows are set within a large expanse of undecorated masonry, perhaps the most surprising aspect of the chevet.

Fig. 1. Dijon, Saint-Bénigne, interior, view to east (Alexandra Gajewski).

Most of the features reappear in the nave, notably the three-storey elevation and the emphasis on plain, undecorated wall space. However, the architecture has found a new balance, being at the same time more lightweight and still more austere. The *piliers cantonnés* of the nave arcades are more slender than the compound piers in the east end. The mouldings of the arches have lost their sturdy rolls and softened into smooth ogee curves. The vaulting shafts are attenuated triple responds without a dosseret. The change in tone is most evident in the triforium zone where the lancets, outlined by a continuous moulding consisting of a roll and a chamfer, appear to be punched out of the thin membrane of the wall in which they are set. The tracery of the clerestory is also simplified compared to the east end: now the upper windows contain two lancets filled with double arches topped with empty oculi. The most profound change to the structure is the introduction of the clerestory passage. It creates a double-layer wall, separating the front plane of the elevation – the slender vaulting shafts and the thin wall into which the triforium arches have been pierced – from the walls, windows, and buttresses behind, effectively disguising the heavy system of supports.[9] Together with the new technique comes the choice of building material: while in the eastern arm the soft white stone of Asnières is used for the triforium and for the upper parts of the elevation, it hardly appears in the central nave where the harder stone from Dijon is used.[10]

With this unusual balance of masculine simplicity and understated sophistication, it is perhaps not surprising that the study of the Gothic church of Saint-Bénigne has been eclipsed by the extensive scholarship on its predecessor, William of Volpiano's church, considered to be one of the most original buildings of its time.[11] Of the few authors who discussed the thirteenth-century building, many have commented negatively on the severity of the architecture, especially of the nave. Robert Branner argued in his book *Burgundian Gothic Architecture* that the apse was an "unremarkable design on a colossal scale", and that in the nave the Rayonnant style was rejected.[12] Both Jean Bony and Lisa Schürenberg included Saint-Bénigne in their general surveys of French Gothic architecture because, for them, the abbey church not only demonstrated the decline of architectural innovation in Burgundy, but also reflected more widely the situation in northern and eastern France around the year 1300.[13] Bony introduced Saint-Bénigne as the final example in his discussion of French Gothic architecture of the twelfth and thirteenth centuries. With Saint-Bénigne, he remarked, Burgundy settled into calm conventionality. For Schürenberg, the nave was representative of the architectural orthodoxy of this period in France, and she identified an unpleasant schematism in the building.[14] In the opinion of these scholars, French Gothic architecture reached a dead end with Saint-Bénigne. The lack of fresh, stimulating influence from the centre coincided with a demise of artistic invention in the region.

Elsewhere in this volume, Yves Gallet challenges the notion of the decline of creativity in France around 1300 of which, according to Bony and Schürenberg, Saint-Bénigne was a prime example.[15] Gallet argues that the sobriety that can be observed among many French churches of that period represents an adherence to earlier thirteenth-century architectural traditions and might have been motivated by liturgical considerations. Thus, he suggests, austerity could have been a deliberate choice on the part of the patrons and the builders. Rather than considering Saint-Bénigne as part of a wider phenomenon, I propose to investigate the situation of its monastic community in the late thirteenth and early fourteenth centuries in order to understand whether there were any specific circumstances which made simplicity and austerity the guiding principles of the construction. A starting point for the discussion is the local historian, Abbé Louis Chomton.[16]

For Chomton, writing at the turn of the twentieth century, the key to explaining the simplicity of the nave was the abbey's financial situation. In his detailed study of the history of Saint-Bénigne, Chomton argued that, following an auspicious start, the abbey ran into severe financial problems in the first half of the fourteenth century. As a result of those problems, construction was long and drawn out and the nave was finished in, what he considered, a mediocre and poor fashion, according to a simplified and cheaper design.[17] In order to consider Chomton's arguments, it is necessary to have a closer look at the evidence.

The driving force of the reconstruction was Abbot Hugh of Arc-sur-Til. Hugh was elected in 1269, three years before the collapse of the crossing tower of the old church on 14th February, 1272.[18] The project was clearly central to his interests because he chose the north chapel of the newly built east end as his last resting place.[19] Hugh was brilliantly positioned to raise funds for the rebuilding. He was born into an aristocratic family near Dijon, and as the many donations of the 1270s and '80s confirm, he had all the connections necessary to loosen the right purse-strings.[20] One of the most prestigious donors was Duke Robert of Burgundy (1272-1306).[21] Work started in 1281, nine years after the tower collapsed, probably because that time was needed to raise the money and clear the site of the rubble. Over the next few years work proceeded swiftly and the main altar was dedicated on 27th April, 1287.[22] One year later, in 1288, the relics of St Benignus were transferred from the crypt of the rotunda to a new reliquary behind the main altar of the Gothic church.[23] At least the three eastern apses must have been completed by that stage. Construction continued to be generously funded. In his will of 1298, Duke Robert left a hundred livres to the building campaign.[24] In 1299, Abbot Hugh gave 2000 livres tournois to the community, partly to be invested and partly to be used for the completion of the church.[25] And when he died on 12th June, 1300 he bequeathed in his will another 1300 florins of gold to be used for the building.[26]

Fig. 2. Saint-Thibault-en-Auxois, interior, eastern apse (Alexandra Gajewski).

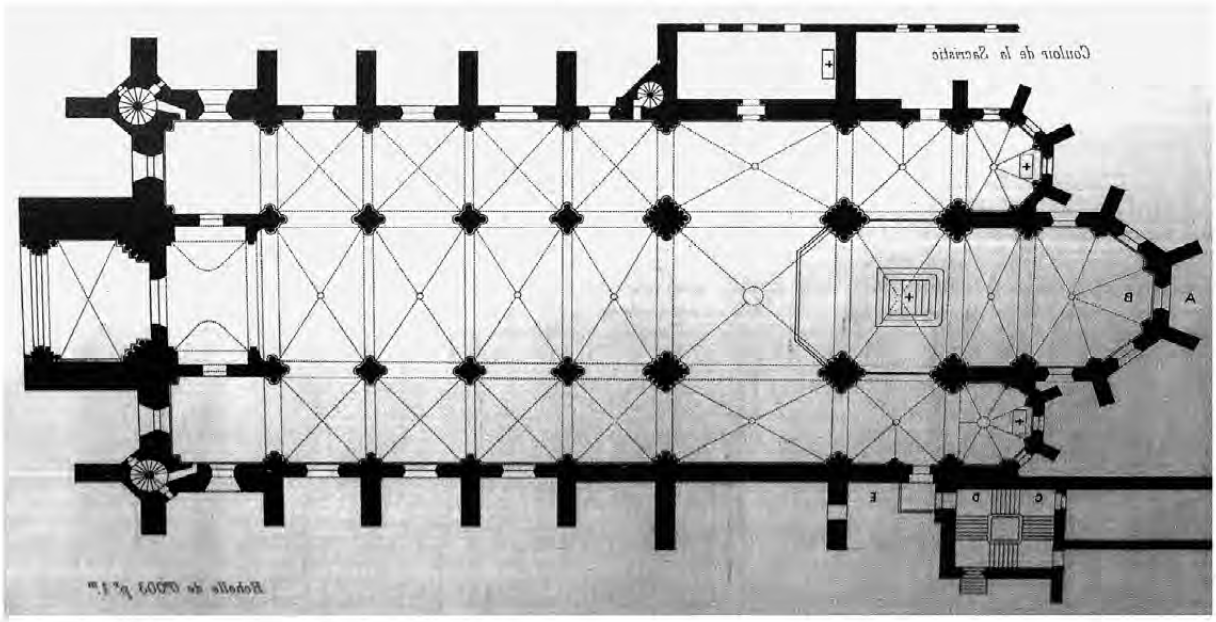


Fig. 3. Dijon, Saint-Bénigne, ground-plan from 1896 after Louis Chomton, *Histoire de l'église Saint-Bénigne à Dijon*, Dijon, 1900, plate XIX.

Despite such favourable beginnings and Hugh's generosity, the community ran into difficulties following his death. In 1307, his successor, Abbot Milo, borrowed 2350 livres from Sienese merchants.[27] In 1310, with the death of the next abbot, John, the abbey defaulted on a loan of 7000 livres from Florentine merchants, who obtained their security by confiscating the abbey's property.[28] The resort to borrowing may indicate the chapter's growing financial difficulties, and could be interpreted as a sign that ready money for construction was no longer available. However, there is no clear evidence to show how far construction had advanced between 1287/1288, when at least the three eastern apses must have been finished, and the first quarter of the fourteenth century. A charter dated January 1308 shows that the area west of the church was levelled, suggesting that the *parvis* (church yard) was created. Therefore, the new porch and the lower stories of the western towers were probably finished.[29] The report that Prior John Villiers was buried in the north tower in 1310, however, is of doubtful authenticity.[30] Thereafter, information becomes sparse. Some years later, in 1316, several members of the chapter promised to donate a sum proportionate to their revenues for the completion of the construction.[31] Both in 1325 and in 1351 a master mason was in place.[32] The dedication of the church took place only in 1393.[33]

For Chomton it was clear that the construction of the nave was slow and conducted under the difficult conditions of the first half of the fourteenth century. He tentatively suggested that the church might have been completed by the time of the death of Abbot Odo in 1341.[34] The only other scholar who seriously considered the evidence for the construction, the architectural historian Marcel Aubert, proposed a faster sequence of campaigns. Unbiased by aesthetic prejudices, he devoted a third of his 1928 *Congrès archéologique* paper on Saint-Bénigne to the thirteenth-century building. Based on a brief review of the documentary sources and a careful investigation of the architectural evidence, he proposed that the church was built in two major campaigns: the whole of the east end, the eastern walls of the transept, and the outer wall of the south aisle were completed by 1288 or 1290 and the rest of the church was built in a second campaign between 1300 and 1325.[35]

A closer examination of the architecture confirms Aubert's dating, but reveals a slightly more complicated picture of the campaigns.[36] To summarise some of the evidence, the great homogeneity of the detailing in the east end and on the eastern walls of the transepts suggests that these parts were built in a single, swift campaign and were possibly completed by the time of

the translation of the relics in 1288, as Aubert argued. The design was modified in a second phase, when the north and south transept façades were built. The string-course supporting the bases of the triforium arches disappeared, together with the capitals of the triforium arcades, and the whole triforium is slightly taller. Nonetheless, the ogee-keeled bases of the trefoil arches can be compared to some of the bases of the first campaign. Thus, it seems that the same masons, or at least their original templates, were still in place. Together with the fact that the abbey continued to receive numerous donations for the construction, this suggests that construction would have picked up again soon after 1288. Before long, the lower parts of the south-western crossing pier, the arch at the entrance to the south aisle of the nave, and the outer wall of the south aisle must have been built: the stepped core of the pier, the moulding profile of the arch, and the cusped tracery of the windows of the southern aisle of the nave are closer to the forms in the east end than to those in the nave.[37]

Rather than continuing in an east to west direction, construction seems to have moved to the western façade next where the twelfth-century western portal was to be preserved.[38] At this stage, the old façade had to be demolished, and it is conceivable that this would have taken the project into the late 1290s. Several new features appear for the first time at this stage. In the westernmost bay of the nave *piliers cantonnés* with plain bell capitals were introduced, together with a new type of triforium which continues along the inner wall of the façade (today hidden by the seventeenth-century organ). The lancets of this triforium, together with the first three lancets of the next bay to the east, differ in small but significant details from the lancets in the eastern bays of the nave (Fig. 5). Although the moulding profiles, the lack of capitals, and the thin wall out of which the lancets are punched are the same, only the arches in the western bays are decorated with trefoils, and small triangles perforate the spandrels between the arches. This western bay- and-a-half of the nave (except the clerestory) must have been built together with the porch and the adjacent lower tower bays and, therefore, completed by 1308, when the *parvis* was created to the west of the church. Once work continued on the second bay from the east, the triforium design was simplified (the trefoils and the spandrel decoration disappear) and a clerestory pas-

Fig. 4. Dijon, Saint-Bénigne, tomb of Hugh of Arc-sur-Til after Gaignières (see note 42).

Fig. 5. Dijon, Saint-Bénigne, nave interior, north side, western bays of the triforium (Alexandra Gajewski).

sage was introduced. At the same time, window tracery devoid of cusps was first used in the clerestory. In this ultimate campaign, the three eastern bays of the nave, the western walls of the transept, and the north-western crossing pier were built, and the crossing and the nave were vaulted.[39]

Despite the simplification of the triforium design, the nave presents a homogenous appearance which suggests that the last campaign followed immediately, or soon after, the western bays. Starting around 1308, this campaign might well have been completed with the donations of 1316 and the church finished, as Aubert suggested, by 1325. It remains open to question why a master mason was in place in 1351 and why the consecration was delayed until 1393. Certainly, repairs and maintenance might explain the presence of the master mason (especially as it is unclear whether this was a continuing presence or a brief employment), and a variety of events, for example the availability of a suitable number of eminent bishops, might have delayed the consecration. While probably unrelated to the construction of the church, the consecration might have coincided with the completion of the choir screen, dated to the last quarter of the fourteenth century.[40]

According to the architectural evidence, therefore, some of the main features of the nave design – the use of *piliers cantonnés* and a slightly more elaborate version of the triforium design than the one ultimately

used – were decided around 1300 and certainly before 1308. The sources report financial problems in 1307 and 1310, which makes it too late to have had an effect on the design of those features. Admittedly, the dates are rather close and it is certainly possible that the simplification of the triforium in the second bay from the west or the choice of tracery motifs without cups reflect a tightening of the resources. At the same time, there are other elements that contradict the idea of a cheap design. For example, the decision to employ a window passage in the nave must have complicated the construction process. Furthermore, the presence of intricately carved figurative friezes on the south-west towers show that some talented and undoubtedly expensive sculptors formed part of the masons' lodge at this time. Indeed, it is equally conceivable that the shortage of money was the direct result of continued spending on the construction.

Clearly, the financial argument can be twisted in different directions. Moreover, Chomton's interpretation of the historical and architectural evidence is not the only problematic issue. More significantly, his concentration on the fourteenth-century situation implies that only the nave requires an explanation. However despite their differences, the east end and the nave share many common features, and the case for a radical change of plan is not as strong as it first seems (Fig. 1). An austere design and a preference for plain wall spaces characterize the nave as much as the east end where the clerestory windows fill only part of the bay above the triforium. And, although the use of the window passage in the nave suggests that a rethinking of the structure took place, the presence of a passage is already suggested visually in the eastern apse by the expanse of flat wall below the clerestory windows. A wall of this kind situated behind a window passage is typical for the churches of the region, as in the chevet of Auxerre Cathedral, at Notre-Dame at Dijon, and at Semur-en-Auxois.

Furthermore, not all changes in design necessarily indicate a change of plan. For example, as Pierre Quarré has shown, the introduction of a different type of tracery in the nave clerestory may have been envisaged right from the start of the first campaign.[41] Quarré argued that there is possible evidence for an original plan of the exterior elevation of the church on Abbot Hugh's tombstone. Only fragments of the tomb have survived the Revolution, but it is known from a seventeenth-century engraving by François-Roger de Gaignières.[42] The engraving shows the abbot holding the reliquary of Saint-Bénigne and standing underneath a representation of the abbey church he helped to build (Fig. 4). Luckily, this part of the tomb still exists and can be compared to the present building.[43] As Quarré argued, the quality of the representation and the accuracy of some of the details suggest that it was perhaps a copy of a contemporary design. If the tomb dates to around 1300, the date of Hugh's death, this could have been the original project for the reconstruction, appropriately shown above the head of its patron on the tomb. The representation shows the east end with three lancet windows in the clerestory and the nave with four, as they are now. The only difference between the image and the present clerestory is that on the tombstone the oculi are decorated with cusps. According to this evidence, the tracery of the nave had always been intended to differ from that of the east end; the change consisted in a mere simplification of the design.

Indeed, there are probably structural and functional explanations for a distinctive treatment of the nave. For example, the massive piers in the crossing are clearly intended to support a spire over this area and would be unnecessary in the nave.[44] Furthermore, the contrast between the east end and the nave could be related to the liturgical use of the spaces. The monks' choir screen that was installed in the late fourteenth century terminated just to the west of the western crossing piers.[45] Thus, the richly articulated compound piers and stepped responds of the east end would also have marked the most sacred space of the cathedral which housed the shrine of St Benignus. It is probably no coincidence that decorative features, such as trefoil arches and cusped tracery, were reserved for the east end.

Clearly, numerous aspects of the design, the stark monumentality and the distinction between the nave and the eastern parts, were part of the original plan and only adjusted in the course of the construction. Thus, we have to look to the original project – and not only to the financial situation of the fourteenth century – in order to understand the reasons for the austerity of the design. Indeed, it seems likely that financial considerations played a role in the construction of

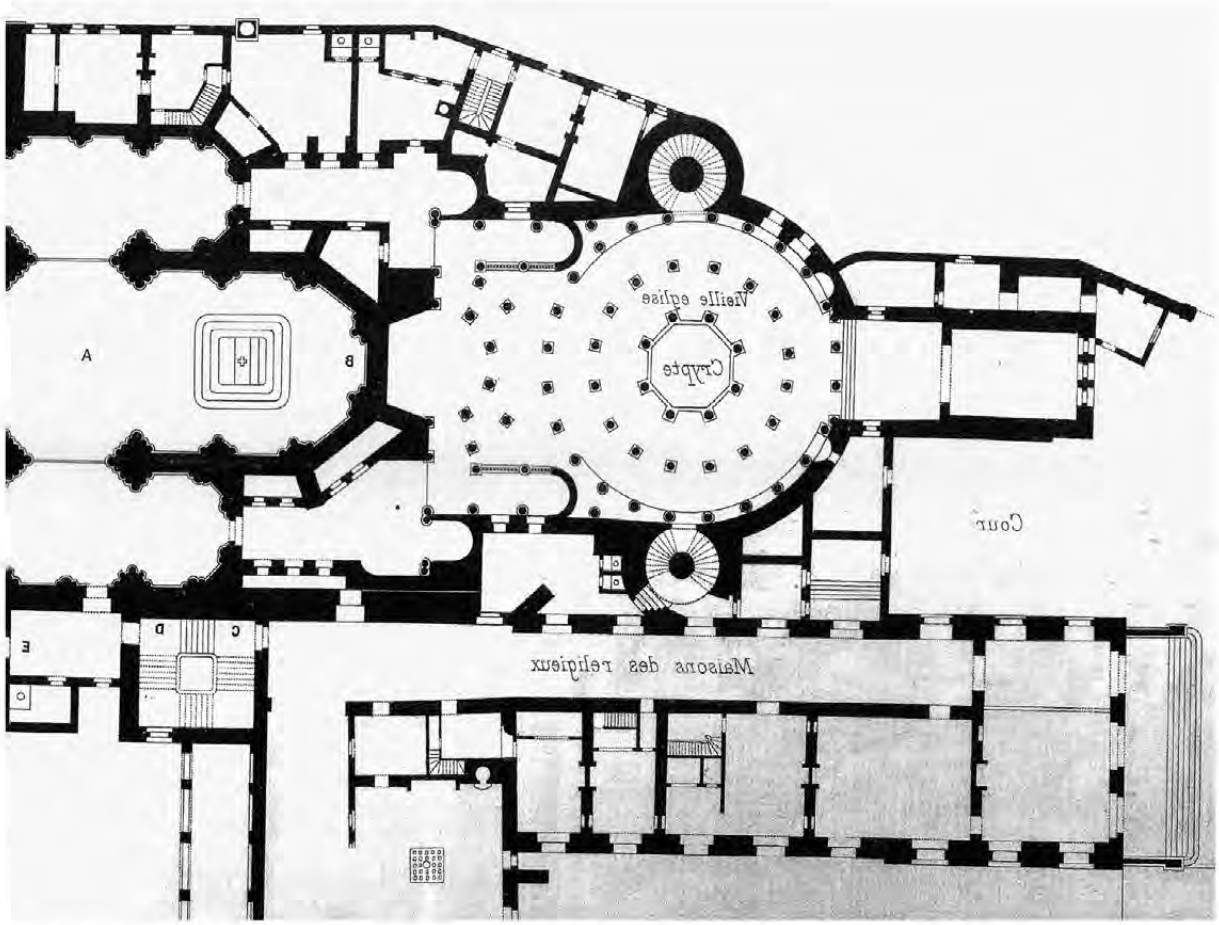


Fig. 6: Dijon, Saint-Bénigne, ground-plan from 1791 after Louis Chomton, *Histoire de l'église Saint-Bénigne à Dijon*, Dijon, 1900, plate XVIII, showing the eastern apse of the Gothic church and the eleventh-century rotunda. In the seventeenth century, a connection between the two buildings had been created via the lateral chapels of the church.

the church right from the start, and that the budget had always been tight. Like many of the old monastic foundations in the region, Saint-Bénigne had been in financial difficulties throughout the thirteenth century.[46] This is partly a reflection of a general crisis which affected Benedictine monasticism in the late twelfth and thirteenth centuries.[47] The collapse of the crossing tower itself in 1272 may well indicate that the chapter did not have sufficient resources to keep the venerable but no doubt ramshackle old church in good repair. Hugh was evidently an astute and a far-sighted administrator who managed to steer the financial affairs of the abbey back onto an even keel. It is charateristic that, when he gave 2000 livres to the monastery in 1299, he wanted the money to be partly invested, thus ensuring the future of the community, and partly used so that the building might be "perfected and fully completed".[48] In line with his attitude to money, Hugh might also have instructed his architect to build a church that was as impressive as it was simple, in order to guarantee a rapid completion that he would accomplish with the funds he had left for the purpose. A similar interpretation of Hugh's character is suggested by the inscription on his tomb, which likened the abbot to Cato and Cicero, known for their high morality and prudence.[49]

Other aspects related to the abbey's history and its thirteenth-century crisis also help us gaining a clearer understanding of the intentions of its patrons and builders. In the thirteenth century, the community of Saint-Bénigne could look back to a glorious past. The

abbey had developed from a small church, built over the tomb of Benignus on the cemetery outside the *castrum* of Dijon. Benignus, as Gregory of Tours explained, had been instrumental in christianizing Burgundy.[50] Under Abbot William of Volpiano in the early eleventh century the monastery expanded and became the mother-house of a number of reformed abbeys as far away as Normandy, Lorraine, and Italy.[51] This was undoubtedly the high point in the abbey's history, when the relics were displayed in the crypt of William's new rotunda.[52]

In the late twelfth and thirteenth centuries, however, Saint-Bénigne lost much of its eminence. Many of the priories became independent, and the abbey found itself not only in financial difficulties, as discussed above, but also in need of reform.[53] The 1272 collapse of the abbey's tower thus occurred at a crucial point in its history. The damage caused by the collapse seems to have occurred mainly in the eastern apse of the basilica; the sixteenth-century chronicle reported that the shrine of St Benignus in the old crypt escaped the incident only by a miracle.[54] That explains the decision to start the reconstruction with the building of a new chevet. Further to the east, the rotunda was preserved (Fig. 6), but the link with the nave, which had once existed on three levels, was closed off, and there was no longer any access to the crypt from the church, until it was reinstated by the monks of the congregation of Saint-Maur in the seventeenth century.[55] After the rebuilding, the chapter and the pilgrims used entrances on the north and south side of the rotunda to descend to the crypt. Of the many saints who were interred in the rotunda, only Benignus was translated into the church. Thus, in effect, the abbey now had two churches: the old rotunda, dedicated to the Virgin, which continued to function as a pilgrimage church, and the new church which was dedicated to St Benignus. Such a drastic alteration must have effected profound changes in the way the abbey functioned.

In particular, for the monastic community, the new arrangement had practical and liturgical consequences. Before, the monks descended into the crypt on saints' and feast days to say Mass at the tomb of Benignus and to visit the other shrines.[56] After the reconstruction, undoubtedly, processions would have still led them into the rotunda, and on those occasions they would have had to leave the church and enter the rotunda from the cloister. The relics of Benignus, however, were now accommodated within their monastic choir. The practice of positioning major relics outside of crypts and behind main altars had become widespread in the twelfth and thirteenth centuries. Nonetheless, the arrangement was not adopted everywhere. As far as can be discerned, the relics St Germain remained in the crypt of the abbey at Auxerre throughout the Middle Ages.[57] At Vézelay, the twelfth-century reconstruction of the east end does not seem to have included the translation of the relics of Mary Magdalene to the upper church, since the relics remained underneath the main alter in the crypt until 1267, when an inquest into the authenticity of the relics took place.[58] Similarly, at Flavigny, not far from Dijon, the abbey of Saint-Pierre and Saint-Prix had an eastern crypt with a polygonal church, not unlike Saint-Bénigne. During the thirteenth century, the nave of Flavigny was rebuilt, but the old east end was preserved and connected to the new nave.[59] Finally, relics of St Médard where originally kept in the eleventh-century crypt of the collegiate church of Saint-Etienne at Dijon. It is uncertain whether the relics remained there in the twelfth and thirteenth centuries, but the crypt continued to function and the east end of the upper church was probably only rebuilt in the fifteenth century.[60] Therefore, the monks of Saint-Bénigne seem to have been exceptional amongst the local monastic communities in taking their main saint out of the crypt and into the choir. This significant step is an indication that, at the same time, the community was readjusting its image and taking on new roles, a development prompted by a shift in its patronal network.

Although in the tenth, eleventh, and early twelfth centuries, the bishops of Langres, had been the main patrons of the abbey, they lost interest in Saint-Bénigne in the later twelfth century.[61] Instead, they became more closely involved with the reformed orders, and in particular they developed close links with the Cistercian abbey of Clairvaux, where many of the bishops where buried.[62] As we have seen, in the late thirteenth century the duke of Burgundy was one of the donors of the abbey. With their principal seat situated at Dijon, the dukes were long-standing patrons of Saint-Bénigne and acted as advocates of the community until 1193. However, the support of the dukes had not

always been reliable.[63] In the mid-twelfth century they had also favoured the new monastic orders, and especially the Cistercian abbey of Cîteaux, where several of the dukes were buried. Only in the late twelfth and thirteenth centuries, Duke Odo III (1192-1218) and his successors turned their attention back to Saint-Bénigne. Duke Robert continued that tradition by making several donations to the reconstruction of the church. In his 1298 will, he left a hundred livres to Saint-Bénigne, the same sum to the Sainte-Chapelle, and forty livres to Saint-Thibault.[64] This triple donation is particularly interesting, for the Sainte-Chapelle was the duke's palace chapel at Dijon and undoubtedly a project close to the nobleman's heart.[65] Saint-Thibault, situated to the north-east of Dijon, held the relics of a saint popular among the aristocratic families of northern Champagne, Theobald (Thibault) of Provins (d. 1066).[66] Theobald was born into a knightly family that could trace its origins back to the famous tenth-century duke of Burgundy, Richard the Justicier (d. 921) and further back in time to the Carolingian Emperor Charles Bold, the illustrious ancestor of the counts of Champagne. More recently, the marriage of Marie of Champagne with Duke Odo II (1143-1162) had established a link between the Capetian line of the dukes and the counts of Champagne.[67] If the dukes felt a special attachment to the chivalric cult, as generous donations to the church of Saint-Thibault suggest,[68] it might have been on account of these family and historical connections.

In the same way, the dukes might also have welcomed the particular attention that was given to St Benignus in the new abbey church where the community associated itself both spatially and visually with the relics. As the apostle of Burgundy, he was the patron saint of the duchy. A concentration on saints who held a place in Burgundy's history at this time would be in line with the dukes' efforts to centralize the region in the thirteenth century, a development which, although late in comparison to other regions, was nonetheless very effective and created a powerbase which the Valois dukes were to inherit and develop.[69]

Yet, in addition to its traditional donors, the abbey was also attracting new patrons. As the necrology of the abbey shows, in the thirteenth century, it was increasingly local burghers and knights who were commemorated at Saint-Bénigne, most of them having founded chantries in the abbey. From about 1200 onwards, the mayors of Dijon appear consistently in the necrology.[70] Perhaps not coincidently, in the first half of the fourteenth century, Saint-Bénigne found itself no longer outside the fortified *castrum* but inside the city walls.[71] By 1334, the abbey had taken on civic functions: the new dukes swore an oath on the altar of St Benignus to maintain the liberties of the duchy and the municipal franchises, and to remain faithful to the mayor and the magistrates.[72] This was particularly significant in the context of the ecclesiastical and political situation of the city. Although the duke's principal seat, Dijon was not a cathedral town. And when the influence of the bishops of Langres diminished, from the twelfth century onwards, Saint-Bénigne vied for influence with the town's collegiate church of Saint-Etienne.[73] At the time the abbey church was rebuilt in 1281, the institution was transforming itself from an out-of-town monastic and pilgrimage church, into a town church which served the resident duke and a new urban audience. Not having parish duties,[74] it was the presence of Benignus, and his crucial role in local history, which justified the new civic functions of the abbey.

The models chosen for the design of this rebuilding also reflect the chapter's more central role in the activities of the town. As Christian Freigang and Peter Kurmann have noted, the three story elevation, the use of *piliers cantonnés*, and the unlit triforium seem to look back to the cathedrals of the early thirteenth century, such as Chartres and Reims.[75] Moreover, the design also reflects local, Dijonnais traditions.[76] The low arcade zone, the dark triforium and the clerestory passage, as well as a certain austerity of the elevation with expanses of plain wall space, characterized the parish church of Notre-Dame and the ducal chapel, the Sainte-Chapelle, both of the first half of the thirteenth century.[77] Saint-Bénigne could be described as an updated version of the Dijonnais tradition which has been expanded to cathedral dimensions. The destruction of most of Dijon's medieval churches makes it impossible to evaluate other architectural developments within the urban framework. We know hardly anything about the architecture of the collegiate church of Saint-Etienne around 1300, and very little about the mendicant foundations.[78] As mentioned above, the east end of Saint-Etienne was probably only rebuilt in the fifteenth century,[79] and the Dominican

church, situated south east of Saint-Bénigne and built in 1238, was a large, but exceedingly plain, structure. As nineteenth-century drawings show, it had a two-storey elevation, columnar piers and a wooden barrel vault.[80] One could speculate that the architect and patrons at Saint-Bénigne were aware that their brand-new abbey church, divorced from most of its architectural traditions (notably the link with the crypt), would have to meet the varying expectations of a new urban audience. On the one hand, this may have suggested a design that was impressive, but on the other hand it may also have suggested respecting the sober architectural mode prevalent in the city.

However, it would be misleading to describe Saint-Bénigne's architecture as mainly retrospective or oblivious of contemporary Rayonnant architecture. As Freigang and Kurmann have demonstrated, there are links between the architecture of Saint-Bénigne and Saint-Thibault.[81] A relationship between the two churches seems at first paradoxical, since Saint-Thibault is considered one of the most progressive buildings of the period, considered by Jean Bony a possible source for the Perpendicular style.[82] But, as Freigang and Kurmann have shown, despite the evident difference in the quality and the amount of decorative detailing, there are similarities in the details of shafts and tracery patterns and in the use of plain wall space. These links suggest that the churches were not only built during the same period but also that there was continued contact between the sites during the different phases of construction. Indeed, even if their effect is totally different, both churches seem to grow out of the same artistic ground, suggesting that, at Saint-Bénigne, Rayonnant complexities were neither rejected nor ignored, but renounced in favour of an economic yet impressive type of elevation, appropriate in urban and monastic contexts.

Seen from this perspective, the arguments of Bony and Schürenberg that Saint-Bénigne demonstrates the loss of creative energy in northern France, and particularly in the province, seem less convincing. The key to understanding the simplicity and austerity of the nave is to be found in the specific situation of the abbey when the old tower collapsed. The circumstances suggest that it was thirteenth-century fiscal problems, rather than fourteenth-century ones, that determined, at least in part, the austere and simplified design of the church. In addition, by 1281, the abbey had survived the loss of the position it held in the early Middle Ages and was reinventing itself as a principal site of Burgundian heritage and as an urban institution. The concerns for the laity, for structural economy, and for architectural simplicity are precisely the preoccupations of the ascendant mendicant orders which were competing with the traditional orders in many towns. Interestingly, at Dijon, the mendicants were never able to draw the same crowds as elsewhere[83] – undoubtedly, this was to some degree proof of the attraction Saint-Bénigne continued to hold. From that perspective, Saint-Bénigne was not backward-looking, but rather forward-looking to an aesthetic appropriate for a more urban and secular space.

NOTES

[1] From Jules LAFORGUE (1860-1887), "Complainte de la Lune", in *Les Complaintes*, Paris, 1885.

[2] *Annales Sancti Benigni Monasterii Divionensis*, ed. Georg WAITZ, in *Monumenta Germaniae Historica*, S.S., ed. Georg Heinrich PERTZ, vol. 5, Hannover, 1844, p. 37-50, esp. p. 50: *ad annum 1271: Hoc anno cecidit turris de choro et neminem oppressit.* The miraculous survival of the relics is described in the sixteenth-century continuation of the chronicle: *Chronici Abbatiae S. Benigni Continuatio*. See Émile BOUGAUD & Joseph GARNIER (ed.), "Chronique de l'abbaye de Saint-Bénigne de Dijon", in *Analecta Divionensia*, 9, 1875, esp. p. 208.

[3] Louis CHOMTON, *Histoire de l'église Saint-Bénigne à Dijon*, Dijon, 1900, p. 205. In 1731, the diocese was moved to Dijon, and in 1792, Saint-Bénigne became cathedral.

[4] The literature on William of Volpiano's church which pre-dated the thirteenth-century reconstruction is extensive, see notably: Jean-Pierre ADAM, "La rotonde de Saint-Bénigne à Dijon, création ou héritage", in *Congrès archéologique de France*, 152 (Côte-d'Or), 1994, p. 239-258; Marcel AUBERT, "Église Saint-Bénigne", in *Congrès archéologique de France*, 91 (Dijon), 1928, p. 16-38, esp. 27-33; Carolyn MARINO MALONE, "Les fouilles de Saint-Bénigne de Dijon (1976-1978) et le problème de l'Église de l'an mil", in *Bulletin monumental*, 138, 1980, p. 253-291; and Wilhelm SCHLINK, *Saint-Bénigne in Dijon, Untersuchungen zur Abteikirche Wilhelms von Volpiano (962-1031)* (Frankfurter Forschungen zur Architekturgeschichte, 5), Berlin, 1978. For the description of the church in the eleventh-century chronicle see *Ibidem*, esp. p. 188-190.

[5] MARINO MALONE, "Les fouilles", p. 273-274.

[6] Robert BRANNER, *Burgundian Gothic Architecture*, London, 1960, p. 97-100. Branner mentions the completion of Auxerre Cathedral as one of the few major building projects of the first half fourteenth century.

[7] BRANNER, *Burgundian Gothic Architecture*, p. 92-100. Branner mentions, furthermore, the nave of Saint-Pierre at Varzy, the chevet of Nevers Cathedral, and the nave of Chalon Cathedral. For Saint-Thibault see also Christian FREIGANG & Peter KURMANN, "L'église de l'ancienne prieuré de Saint-Thibault-en-Auxois: sa chronologie, ses restaurations, sa place dans l'architecture gothique", in *Congrès archéologique de France*, 144 (Auxois-Châtillonnais), 1986, p. 271-290. For the dating of Mussy see Francis SALET, "L'église de Mussy-sur-Seine", in *Congrès archéologique de France*, 113, 1955, p. 320-337, and for Saint Germain see Jean VALLERY-RADOT, "Saint-Germain d'Auxerre. L'église haute", in *Congrès archéologique de France*, 116, 1958, p. 26-39. For the dating of Saint-Germain see also Yves GALLET, "French Gothic 1250-1350 and the Paradigm of the Motet", in this volume, note 6.

[8] Originally, there were no windows in the lower storey of the central eastern apse which was built against the rotunda behind. The present windows date to after 1847 when a photo (Médiathèque de l'architecture et du Patrmoine, Photothèque, shelf-mark 0080/103/0001) shows the east end still without the windows.

[9] Vincent FLIPO, *La cathédrale de Dijon* (Petites monographies des grands édifices de la France), Paris, 1928, p. 43-51.

[10] The ochre colour of the eastern arm dates from the 1993/1994 restoration. For the stone see Louis COUREL & Jean-Louis LACROIX, *Les routes de la pierre en Bourgogne* (Un guide du Centre de Culture Scientifique Technique et Industrielle de Bourgogne), Dijon, 1997, p. 18.

[11] See above note 4.

[12] BRANNER, *Burgundian Gothic Architecture*, p. 97.

[13] Jean BONY, *French Gothic Architecture of the 12th & 13th centuries*, Berkely, Los Angeles & London, 1983, p. 462; Lisa SCHÜRENBERG, *Die kirchliche Baukunst in Frankreich zwischen 1270 und 1380*, Berlin, 1934, p. 169-170.

[14] SCHÜRENBERG, *Die kirchliche Baukunst*, p. 162.

[15] GALLET, "French Gothic", in this volume. See also Paul CROSSLEY's review of Jean Bony, *The English Decorated Style: Gothic architecture transformed*, in *Journal of the British Archaeological Association*, 134, 1981, p. 132-137, esp. p. 135.

[16] Louis CHOMTON, *Histoire de l'église Saint-Bénigne à Dijon*, Dijon, 1900, p. 201-302.

[17] CHOMTON, *Histoire*, p. 211.

[18] See above note 2.

[19] CHOMTON, *Histoire*, p. 212. Later, Hugh's tomb was situated in the choir bay. Chomton suggests that it was moved there under Abbot Claude de Charmes (1488-1510).

[20] *Chronici Abbatiae S. Benigni Continuatio*, p. 210; CHOMTON, *Histoire*, p. 199, 204 with note 1.

[21] See CHOMTON, *Histoire*, p. 204. For the earlier history of Saint-Bénigne see also Maurice CHAUME & Georges CHEVRIER, *Chartes et documents de Saint-Bénigne de Dijon, prieurés et dépendances: dès origines à 1300*, vol. 1, *VIe-Xe siècles*, Dijon, 1986, vol. 2, *990-1124*, Dijon, 1946. Unfortunately, the third volume, which would concern the period covered in this paper, has not yet been published. The relevant documents are to be found in the Bibliothèque Nationale, *Collection Bourgogne*, vols 11-14, and in the Archives départementales de la Côte-d'Or, esp. series H. Here they are mainly quoted after CHOMTON, *Histoire*.

[22] CHOMTON, *Histoire*, p. 206.

[23] Bernard PROST, "Le trésor de l'abbaye de Saint-Bénigne de Dijon", in *Mémoires de la Société Bourgignonne de Géographie et d'histoire*, 10, 1894, p. 7-153, esp. p. 19, 29-34.

[24] See Urbain PLANCHER, *Histoire générale et particulière de Bourgogne*, vol. 2, p. xciv (number 145), quoted after FREIGANG & KURMANN, "Saint-Thibault-en-Auxois", p. 288.

[25] CHOMTON, *Histoire*, p. 212.

[26] For Hugh's will see Archives départementales de la Côte-d'Or, 1-H-129, quoted after Benedicte DELATTE, *L'église de Saint-Bénigne à Dijon à l'époque gothique*, unpublished thesis (*Mémoire de maîtrise*), University of Dijon, 1994, p. 32; see also CHOMTON, *Histoire*, p. 211-213.

[27] CHOMTON, *Histoire*, p. 212-213.

[28] *Ibidem*, p. 215.

[29] *Ibidem*, p. 212-213.

[30] *Ibidem*, p. 212-213.

[31] *Ibidem*, p. 216.

[32] *Ibidem*, p. 226.

[33] According to a fourteenth-century note inserted in a later man-

uscript. See CHOMTON, *Histoire*, p. 236-237 with note 1.

[34] CHOMTON, *Histoire*, p. 220.

[35] Marcel AUBERT, "Église Saint-Bénigne", in *Congrès archéologique de France*, 91 (Dijon), 1928, p. 16-38, esp. 27-33.

[36] There is no detailed history of the construction and restoration of the Gothic church in publication, but see the impressive analysis by DELATTE, *L'église de Saint-Bénigne*. The church has been extensively restored in the nineteenth and twentieth centuries. In the nineteenth century, notably the north aisle, the north transept façade, and the side chapels of the eastern apse were rebuilt and a new window was inserted in the western façade (replacing an eighteenth-century window). See DELATTE, *L'église de Saint-Bénigne*, p. 68-140. In 1862, the church of Saint-Bénigne became "monument historique", for the restoration reports from after that date until today see Médiathèque de l'architecture et du Patrimoine, Paris, numerous dossiers, see notably shelf-marks 0081/21/0029, 0081/21/0027, 0080/041/0007.

[37] AUBERT, "Église Saint-Bénigne", p. 32-33.

[38] According to FLIPO, *La cathédrale de Dijon*, p. 38: "On utilisa pour raison d'économie les vielles fondations partout où cela fût possible, c'est à dire du côté du cloître." However, his statement has to be questioned since Caroline Marino Malone's excavations showed that the north wall of the nave of the eleventh-century church was situated further to the south than the north wall of the nave of the present church. See MARINO MALONE, "Les fouilles de Saint-Bénigne", esp. p. 258-266, fig. 13 (sondage 3).

[39] The clerestory windows on the western transept walls are similar to the windows in the east end, suggesting perhaps that the parts had been pre-fabricated or that the older type of tracery was used here for reasons of uniformity.

[40] Denise BORLÉE, "L'ancienne clôture du chœur de Saint-Bénigne de Dijon", in *Bulletin monumental*, 150, 1992, p. 21-37.

[41] Pierre QUARRÉ, "Saint-Bénigne de Dijon d'après la tombe de l'abbé Hugues d'Arc", in *Bulletin monumental*, 103, 1945, p. 231-242.

[42] For Gaignière's design see Jean ADHÉMAR, "Les tombeaux de la collection Gaignières", in *Gazette des beaux-arts*, 6th series, 84, July-September 1974, p. 5-192, esp. p. 93, n° 490.

[43] It is now exhibited in the Musée Archéologique de la ville de Dijon.

[44] According to CHOMTON, *Histoire*, p. 225, the first known spire dates to Abbot Claude de Charmes (1488-1510).

[45] See BORLÉE, "L'ancienne clôture", p. 21-37.

[46] See CHOMTON, *Histoire*, p.131-133, 160, 169.

[47] The literature on the subject is vast. See, for example, Clifford Hugh LAWRENCE, *Medieval Monasticism, Forms of Religious Life in Western Europe in the Middle Ages*, second edition, London - New York, 1989, p. 275-276.

[48] *Ad plenum perfectionem et completionem integre deducatur*, see CHOMTON, *Histoire*, p. 212.

[49] See QUARRÉ, "Saint-Bénigne de Dijon d'après la tombe de l'abbé Hugues d'Arc", p. 232, 235-236. The inscription read *Hugo suis arcus, Cato sensu, dogmate Marcus, nec meritis parcus, jacet hic, quem protulit arcus.* Cato was known in the thirteenth century as the alleged author of the *Disticha de moribus*, used for the education of the young. See Ernstpeter Ruhe, *Untersuchungen zu den altfranzösischen Übersetzungen des* Disticha Catonis, Munich, 1968. For the appreciation of Cicero in the Middle Ages see Alain Michel, *La parole et la beauté, Rhétorique et esthétique dans la tradition occidentale*, Paris, 1982.

[50] GREGORY OF TOUR, *Liber Gloria in Martyrium*, in *Patrologiae cursus completus series Latina*, ed. Jaques-Paul Migne, vol. 71, Paris, 1841-1864, column 752.

[51] Neithard BULST, *Untersuchungen zu den Klosterreformen Wilhelms von Dijon, 962-1031* (Pariser Historische Studien, 11), Bonn, 1973.

[52] See above note 4.

[53] See CHOMTON, *Histoire*, p.131-133, 160, 169.

[54] See above note 2.

[55] SCHLINK, *Saint-Bénigne*, p. 66-70.

[56] See the Offices of the Feast of the Passion of St Bénigne (1st and 2nd November) and of the Feast of Translation (24th November) edited by CHOMTON, *Histoire*, p. 449-453.

[57] See John CROOK, *The Architectural Setting of the Cult of Saints in the Early Christian West*, Oxford, 2000, p. 141-144.

[58] See Victor SAXER, *Le Culte de Marie Madeleine en Occident des origines à la fin du moyen âge* (Cahiers d'Archéologie et d'Histoire, 3), Auxerre, Paris, 1956, p. 185-195. However, CROOK, *The Architectural Setting*, p. 133-134, thinks that the relics might have been translated to the upper church in the twelfth century.

[59] For the crypt see CROOK, *The Architectural Setting*, p. 144-146; Christian SAPIN, "Saint-Pierre de Flavigny, l'ancienne abbatiale et ses cryptes", in *Congrès archéologique de France*, 144 (Auxois-Châtillonnais), 1986, p. 97-109. For the thirteenth-century church see BRANNER, *Burgundian Gothic Architecture*, p. 139-140; Christian SAPIN, "Flavigny Gothique, Éléments nouveaux pour l'étude de l'architecture et de la sculpture gothique en Bourgogne", in *Bulletin monumental*, 138, 1980, p. 416-437.

[60] See Christian SAPIN, "L'abbatiale Saint-Étienne de Dijon et ses cryptes", in *Congrès archéologique de France*, 152 (Côte-d'Or), 1994, p. 259-267.

[61] This is evident from the necrology of Saint-Bénigne, see Barbara SCHAMPER, *S. Benigne de Dijon, Untersuchungen zum Nekrolog der Handschrift Bibl. mun. de Dijon, ms. 634* (Societas et Fraternitas), Munich, 1989, esp. p. 139.

[62] Alexandra GAJEWSKI, "Burial, Cult, and Construction at the Abbey Church of Clairvaux (Clairvaux III)", in *Cîteaux, commentarii cistercienses*, 56, 2005, p. 47-85.

[63] See Constance Brittain BOUCHARD, *Sword, Mitre, and Cloister, Nobility and the Church in Burgundy, 980-1198*, Ithaca & London, 1987, p. 129-130, 150-152; SCHAMPER, *S. Benigne de Dijon*, p. 140. For earlier donations by the dukes of Burgundy see Ernest PETIT, *Histoire des ducs de Bourgogne de la race capétienne*, vol. 3, Paris, 1885-1905, p. 258 (number 718), 265 (746), 405 (650).

[64] See Urbain PLANCHER, *Histoire générale et particulière de Bourgogne*, vol. 2, p. xciv (number 145), quoted after FREIGANG & KURMANN, "Saint-Thibault-en-Auxois", p. 288, note 10.

[65] For the Sainte-Chapelle see Didier SECULA & Denise BORLÉE, "Sainte-Chapelle", in *Sculpture médiévale en Bourgogne, Collection lapidaire du Musée archéologique de Dijon*, ed. Monique JANNET-VALLAT & Fabienne JOUBERT, Dijon, 2000, p. 197-210.

[66] *Acta sanctorum quotquot toto urbe coluntur*, ed. Johannes BOLLANDUS & al., *Junii*, vol. 5, Antwerp, 1709, p. 593-595.

[67] See Michel BUR, *La formation du comté de Champagne v. 950 – v. 1150* (Mémoires des Annales de l'Est, 54), Nancy, 1977, p. 240-244.

[68] FREIGANG & KURMANN, "Saint-Thibault-en-Auxois", p. 271-273.

[69] Jean RICHARD, *Les ducs de Bourgogne et la formation du Duché du XI^e au XIV^e siècle*, Dijon, 1951, p. 389-516.

[70] SCHAMPER, *S. Benigne de Dijon*, p. 144-151.

[71] DELATTE, *L'église de Saint-Bénigne à Dijon*, p. 32; BOUGAUD & GARNIER, "Chronique", p. 212 note 1.

[72] The tradition was established by Duke Odo IV (1315-1350), see PLANCHER, *Histoire générale*, vol. 2, p. 185.

[73] See Alain RAUWEL, "*Rationabile servitium*: recherches sur la vie religieuse à Dijon à la fin du Moyen Âge", in *Annales de Bourgogne*, 71, 1999, p. 119-130, esp. p. 119-121.

[74] Saint-Bénigne's parish church Saint-Philibert was situated immediately to the south of the abbey church. See BRANNER, *Burgundian Gothic Architecture*, p. 134-135; and Fabienne JOUBERT, "Église paroissiale Saint-Philibert", in *Sculpture médiévale en Bourgogne*, p. 259-264.

[75] FREIGANG & KURMANN, "Saint-Thibault-en-Auxois", p. 286.

[76] BRANNER, *Burgundian Gothic Architecture*, p. 97, described this as the "revival of the Burgundian parti".

[77] For Notre-Dame see Alain ERLANDE-BRANDENBURG, "Notre-Dame de Dijon, la paroissiale du XIII^e siècle", in *Congrès archéologique de France* (Côte-d'Or), 152, 1994, p. 269-275. The Sainte-Chapelle was destroyed after the Revolution, but see the nineteenth-century drawings in SECULA & BORLÉE, "Sainte-Chapelle", figs 71 and 72.

[78] By the mid-thirteenth century, the Dominicans (from 1237) and the Franciscans (from 1243) were established in Dijon.

[79] SAPIN, "L'abbatiale Saint-Étienne de Dijon", p. 260-262.

[80] Didier SECULA, "Église des Jacobins", in *Sculpture médiévale en Bourgogne*, p. 185-193.

[81] FREIGANG & KURMANN, "Saint-Thibault-en-Auxois", p. 286-287.

[82] Jean BONY, *The English Decorated Style, Gothic Architecture Transformed 1250-1350*, Oxford, 1979, p. 60.

[83] RAUWEL, "*Rationabile servitium*", p. 120.

The Church of the Order of St Antony at Pont-à-Mousson and post-1300 Gothic Architecture at Metz

Christoph Brachmann

Lorraine around 1300: What do we know about that region during that period? Thanks to the recently published catalogue by Josef Adolf Schmoll gen. Eisenwerth, we are now acquainted with the sculpture, the quality of which was, it seems, greatly admired at the time.[1] In fact, as plenty of evidence attests, pieces were traded not only all over Lorraine but also exported to the Holy Roman Empire.[2] What is more, the Lorraine region, and in particular the former imperial city of Metz, enjoyed considerable political and historical importance. Lorraine profited from its proximity to Luxembourg. John, count of Luxembourg, became king of Bohemia (1310-1346), while two other members of the family, Henry VII (1308-1313) and – famously – Charles IV (1346/55-1378), were both elected king of the Romans and emperor. Especially at the beginning of his political career and before his permanent establishment in Prague, Charles IV kept in contact with his ancestral homeland and the surrounding regions.[3]

Charles' IV first important appearance in the region was his entry in Metz in March 1354. Only two years later, when Charles had already been crowned emperor, he celebrated Christmas in the cathedral of that city and, on the same day, he announced the imperial law of the Golden Bull in its definitive form. This event took place on the largest square in Metz – the Champ-à-Seille – which had been specially prepared for Charles' speech.[4] In the following years, Charles did not loose sight of the bishopric of Metz. The proximity to Aachen and to other important places, many of them situated in the ancestral lands of the Luxembourgs, ensured his continued interest in Metz. In 1376, for example, he demonstrated his attention to the cathedral by donating the head of St Stephen, for which Bishop Dietrich Beyer of Boppard (1365-1384) commissioned a precious reliquary.[5]

Far less is known about the architecture of Lorraine in this period. A few exceptions notwithstanding, attention in this context usually focuses on the final, late fourteenth-century campaigns at the cathedrals of Metz, Toul, and Verdun, the three dioceses in Lorraine, and on the architect Pierre Perrat (d. 1400) who is considered responsible for their completion as well as for the Carmelite church in Metz, all attributed to him on account of an inscription on his tomb at Metz Cathedral.[6] Obviously, this makes Perrat too late to be of direct concern to us here; and yet his case is indicative of a particularly pronounced idiosyncrasy that characterised Lorraine architecture not only during Perrat's lifetime, but indeed across a number of centuries – namely the fact that architectural designs, once adopted, were adhered to right through the construction process, suggesting a highly traditionalist attitude. This is evidenced by the cathedral of Toul, where, on 23rd August 1381, the chapter and Pierre Perrat signed a contract for works that were not precisely specified.[7] Although Jean Vallery-Radot[8] and Alain Villes[9] slightly differed over which part of the fourteenth-century nave they attributed to the architect, both highlighted the unique conformity between the first building campaign from 1240 to 1250 (the eastern choir, the transept, and the first bay of the nave) and the fourteenth-century campaign. Villes rightly emphasized the

Fig. 1. Pont-à-Mousson, former church of the Order of St Antony, view to the east (Markus Hilbich).

astonishing insistence on a building project that was over hundred years old and which was followed into the smallest details: thus, even individual elements, such as bases and capitals, reveal hardly any difference between the two campaigns.[10] Villes argued that "Il s'agit d'un phénomène probablement plus fréquent qu'on ne le croit, auquel l'archéologie donne le nom de *conformité*",[11] and thus considered it a common and widespread phenomenon in the Middle Ages, singling out the cathedrals of Reims, Châlons-en-Champagne, and others from among the numerous examples.[12]

A similar, albeit more complex case can be observed at the cathedral of Metz, where not only the crossing piers added during the fifteenth- and sixteenth-centuries extension phase exactly match the profiles of the thirteenth-century ones:[13] even the tracery forms of the Late Gothic sections in the choir and transept and the parts of the nave that were completed mainly in the fourteenth century could, at first sight, be mistaken for thirteenth-century structures.[14] Occasionally, such a mimicry-like approach persuaded some scholars to date the large west-window to around 1285 because of its formal similarities with the rose window at Reims.[15] However, upon closer inspection, the Metz window, like the one at Toul, reveals itself as a product of the late fourteenth century, not least on account of the use of spherical details and its generally much sharper, more arid appearance.

The enduring influence of these Reims forms in the region is, last but not least, also manifest in the western façade of the church of the Order of St Antony at Pont-à-Mousson,[16] situated on the banks of the river Moselle, half-way between Metz and Nancy, where that type of rose window still found an application at the end of the fifteenth century.[17] This retrospective attitude to architecture is already evident in an earlier phase of construction. A comparison between, for example, the Pont-à-Mousson clerestory windows and the openings flanking the rose of the western façade at Reims reveals configurations clearly modelled on the western façade of the Champenoise cathedral – though no one has argued that the late thirteenth-century dating of Reims suggests a corresponding dating for the church of Pont-à-Mousson. In the following, this article will concentrate on this church at Pont-à-Mousson, situated on the extreme south-western border of the diocese of Metz (Figs 1 and 2).[18]

Remarkably, the date of the consecration of Pont-à-Mousson – 17th September, 1335 – [19] has been transmitted in the sources. Thus, construction probably started in the early fourteenth century, which makes the church a contemporary of the church of Our Lady in Oberwesel (1308-1331). In spite of the exact date, scholarship has so far rather neglected this Lorraine structure; indeed, even the date itself has time and again been called into question. Lisa Schürenberg, for example, simply noted it in her 1934 study *Die kirchliche Baukunst in Frankreich 1270-1380* and referred to the structure's unusual Late Gothic forms – namely the ribs of the vault which spring directly, that is with-

out capitals, from the responds –, yet she crucially omitted to explain them in any detail.[20] Pierre Marot's contribution to the *Congrès Archéologique* of 1933 is equally contradictory. Despite the fact that the moulding profiles and the tracery forms point to the fourteenth century, he dated the building to the fifteenth century, arguing that a surviving epitaph of the Preceptor Thierry Sorlier or Surlier (1453-1469) links that man to the construction campaign.[21] Finally, in 1991, Jean Fréchet made the case for the church being a far less uniform structure than had hitherto been assumed. In his view, the 1335 consecration date refers to a late thirteenth-century campaign of reconstruction. Only twenty years after this consecration, the church would have been replaced by the structure we see today.[22] The basis for this astonishing assumption was a remark found in a first treatise on the church, published in 1844, which says that the church was rebuilt for the second time in 1354. However, the author, Victor de Sansonetti, is not considered to be reliable; in fact, he does not produce a single piece of evidence for his statement.[23] There is little point in rehearsing Fréchet's argument in full here,[24] not least because, ultimately, one of his main contentions, namely the alleged lack of uniformity of the architecture at Pont-à-Mousson, does not stand up to closer scrutiny:[25] a more detailed examination of the evidence reveals that the structure is, as had indeed been generally assumed up to this point, more or less of a piece.

Fig. 2. Pont-à-Mousson, former church of the Order of St Antony, view from the east into the north aisle (Markus Hilbich).

Until now, the architecture of the Order of St Antony, to which Pont-à-Mousson belongs, is not sufficiently researched. The origins of the order go back to 1095, when a fraternity was founded with the intention of providing aid for the pilgrims at La Motte-aux-Bois in the Dauphiné. Since about 1070, La Motte – or Saint-Antoine-en-Viennois, as it became known from the fourteenth century – developed into a prospering pilgrimage centre, claiming to hold the relics of St Antony of Egypt. The new institution established houses for the infirm. This was probably linked to a massive rise in ergotism, also called St Antony's Fire, in the years 1085-1096, since the relics of St Antony were believed to cure the disease.[26]

Initially a lay fraternity, the hospitallers developed into an independent religious order, living according to the Rule of St Augustine. The number of their foundations exploded from hundred houses at the end of the twelfth century to 364 in the mid-fourteenth century.[27] The order combined "the characteristics of choir monks with their emphasis on liturgy and prayer, of hospitallers with their emphasis on the care for the diseased, and of the mendicants with their emphasis on regular collection of alms".[28] Scholars have often noted that the hospital activity of the order – which early on embraced the cure of other diseases – soon declined. Increasingly, the members of the order, who generally belonged to the nobility, adopted the way of life of regular canons.

The preceptory at Pont-à-Mousson was founded in 1198 by Bertram, bishop of Metz, during an ergotism

epidemic,[29] and it belongs to the first wave of expansion of the order in the Holy Roman Empire.[30] The first preceptor whose name we know is William of Dijon, active in 1200.[31] A further indication of the seniority of the house within the order is the fact that Pont-à-Mousson – like other early foundations – was later given the status of a preceptory general, in charge of several other preceptories.[32]

The preceptory of Pont-à-Mousson is situated on the right side of the Moselle, close to the castle of Mouzon which dominates the valley. In the twelfth century, the castle was the main residence of the counts of Bar, who represented, next to the dukes of Lorraine, the main lay power in the region.[33] In fact, until Theobold I. (1190-1214), the counts used Mouzon as a toponym indicating the importance of this stronghold for the family; only later Bar-le-Duc, became customary.[34] The castle, which was built shortly after 1000, controlled not only the valley, but also a contemporary bridge, mentioned in a charter from 1128.[35] This bridge made it possible to turn off the important north-south axis of the valley of the Moselle, and to take a route leading towards the regions further west, especially to Bar-le-Duc, the second residence of the counts, and via Verdun and Champagne to the French crownland.

Several sources attest that Pont-à-Mousson – although originally an episcopal foundation – received its main support from these counts. Henry II of Bar (1214-1239) was particularly generous to the order and, in 1217, he donated a poorhouse, which had initially been founded by his grandmother Agnes of Champagne (d. 1207).[36] A forest belonged to the poorhouse in which the hospitallers were allowed to cut wood and graze their livestock.[37] The poorhouse and the forest were situated on the same site where slightly later the monastery of St Antony was built, including the church, the monastic buildings, and the associated hospital.[38] Together with the buildings of the city which the count of Bar had founded in 1261 on the west side of the river,[39] the complex formed a remarkable architectural ensemble. Some of the buildings should be mentioned: already in 1257, Theobold II of Bar had founded the hospital of Notre-Dame with a church. In 1272, he founded the college of Sainte-Croix in its vicinity; it was later to become the private church of the counts of Bar.[40] Notre-Dame and Sainte-Croix marked the bridge on the west side of the river.

In the fourteenth century, the interest of the counts of Bar in Pont-à-Mousson did not weaken. The main event in this context was the reconstruction of the above-mentioned bridge over the Moselle. Building started in 1323, under Count Edward of Bar (1302-1336), remarkably at the same time that the church of St Antony was also being rebuilt. The bridge at Pont-à-Mousson was constructed in stone, possibly for the first time:[41] an immense undertaking which must have represented a, if not *the*, main example of comital architectural patronage at that time.[42] The ambitions of the counts of Bar were also evident from other projects of that period. Only slightly later, Edward's successors reconstructed the *maison forte*, already mentioned in thirteenth-century sources, which was situated on the north-eastern corner of the town, west of the river. The house was now enlarged to become a veritable palace.[43] The efforts to enhance the status of the comital family and of their residence at Pont-à-Mousson were finally crowned with success. Robert was courted by all sides. In 1354, King John the Good raised the family's lands situated on French territory to the status of a duchy. Slightly later, the counts of Bar were elevated to the status of *Reichsfürst* (an honorary title without an exact definition, but indicating a closer association with the Emperor) when Robert received from Charles IV the title Marquis of Mousson (*Markgraf von Mousson*) for the only domain around the castle of Mouzon which had remained in the Empire.[44]

The large complex that formerly constituted the preceptory of St Antony should be set in the context of the fourteenth-century building campaign discussed above. Today, only the church has survived. The monastic buildings have to be reconstructed from a 1768 ground plan of the site, which shows the institution already functioning as a university.[45] The buildings which adjoin the church immediately to the north clearly belonged to the original monastery; however, a complete and reliable reconstruction is difficult, especially since the Order of St Antony is not known to have developed a uniform lay-out for the churches and monastic buildings of its institutions. Therefore, a comparison with the other monasteries of the order is not necessarily helpful. However, commonly held views on the architecture of the order might be based on a lack of research on the subject. For example, the majority of scholars accept that Antonine churches are

not associated with a recognisable type of architecture;[46] yet, there is no single, general survey of the order's architecture. No recent and up-to-date study exists, even of the mother-house of the order at Saint-Antoine-en-Viennois –the order's San Francesco of Assisi, so to speak.[47]

The church at Pont-à-Mousson is a basilica with a central vessel and two side-aisles in the nave, a narrow transept, and a tripartite, staggered east end. The central apse of the east end consists of seven sides of a dodecagon. The compound piers of the main elevation in the nave can be regarded as having evolved from *piliers cantonnés*. Four three-quarter round shafts are set in the cardinal directions with small, attached colonnettes wedged between them. In the eastern bays, the colonnettes sporadically feature small capitals, otherwise capitals are renounced. The three-storey elevation, meanwhile, suggests almost cathedral-like aspirations. Interestingly, it is devoid of any decorative elements, but rather emphasises the contrast between simple, smooth surfaces on the one hand, and, on the other, deliberately juxtaposed smaller forms such as convex against concave or angular against rounded elements. The overall maxim here is radical reduction combined, however, with an exquisitely refined attention to detail.

Fig. 3. Remiremont, Collegiate Church of Saint-Pierre (Christoph Brachmann).

Its considerable power of innovation with regard to specific forms notwithstanding, the overall design of the church at Pont-à-Mousson is, first and foremost, characterised by its allegiances to local traditions. The staggered choir is typical in this context. The reduced version realised here reminds us immediately of the thirteenth-century parish churches of Metz, most notably Sainte-Ségolène,[48] where the lay-out and the overall effect of the main choir bear numerous relations to Pont-à-Mousson.[49] A more direct link exists with the convent at Remiremont, a community of canonesses, where the church was dedicated on 14th May, 1299 (Fig. 3).[50] The architecture is modelled on the cathedral of Toul, as is indicated by the design of the piers. As at Toul, a section of the piers continues as responds beyond capital level up to the high vault.[51] The feature which connects Remiremont directly to Pont-à-Mousson is the formerets: as in the clerestorey of the central eastern apse of the church of the hospitallers, the formerets rise from a string-course at the base of the windows up into the vault without capitals or change of profile. Furthermore, as at Remiremont, there are large sections of undecorated wall space and forms are concentrated and reduced to a small number of distinctive features that are basically derived from the thirteenth-century repertory of Rayonnant Gothic. It is significant that in both cases the reduction of forms does not reflect the modesty of the project, rather its simplicity was aesthetically motivated. After all, Remiremont was one of the wealthiest convents in the Empire and Pont-à-Mousson was not only affluent but also the leading establishment of the Order of St Antony in Lorraine. It is clear that these churches were not intended to express poverty.

The features of the design of Pont-à-Mousson that have been discussed so far show clear connections with buildings of the thirteenth and early fourteenth centuries. Other features, until now considered as Late Gothic, also reveal numerous parallels to the architec-

Fig. 4. Mainz, former church of the Order of St Antony, view to the east (Markus Hilbich).

ture of that period. Indeed, these forms would be strangely antiquated if, as was assumed in the past, the church was only built in the fourteenth or even fifteenth century. The first of these concerns the well-documented similarities between the rectangular frames of the triforium openings at Pont-à-Mousson and those of several late thirteenth-century cathedrals in the south of France, notably Bordeaux, Rodez, and Limoges.[52] Another and even more conclusive piece of evidence for an early fourteenth-century construction are the types of tracery at Pont-à-Mousson, in particular those found in the windows of the side-aisles and transept: their configuration with three squares arranged in a circle, each pointing inwards with one of their vertices, exactly matches those found in the clerestory windows of the western bay at Freiburg Cathedral (this section completed circa 1290 to 1301),[53] or indeed those at the Church of Our Lady at Friedberg, constructed around 1310/20, and also linked with the churches of the upper Rhine.[54] During the first half of the fourteenth century, they are also an extremely common feature among churches in the neighbouring regions of Swabia and Alsace, and can be found for example in the choir of Saint-Martin in Colmar (shortly after 1350),[55] and in the churches at Thann (1330s), Niederhaslach,[56] or Esslingen.

What is more, there are numerous correspondences between the type of tracery used in the clerestory windows of Pont-à-Mousson and other early fourteenth-century structures. It consists of two lancets crowned with a quatrefoil. The tympanum of each lancet is decorated with a trefoil placed on a trefoil arch. As mentioned above, a similar configuration can be found, for example, in the upper storeys of the western façade at Reims in the 1270s where, in contrast to Pont-à-Mousson, the mullions are decorated with roll-mouldings that suggest a slightly earlier date. An early example of this type of tracery can also be found at the Dominican church of Sainte-Madeleine at Saint-Maximin la Sainte-Baume in the south of France, started in 1295.[57] At Sainte-Madeleine the motif is consistently used for all the windows. A slightly later example, from around 1340, can be found at Saint-Martin in Colmar, where the form becomes a leitmotiv for the entire western gable.[58]

Another building is most revealing in this context and should be seen in direct relationship with Pont-à-Mousson: the church of the neighbouring preceptory at Mainz,[59] situated about 150 kilometers to the north-east (Fig. 4) and in a region which, already in the thirteenth century, received Gothic influences from France. It is true that, at first sight, the two churches seem to confirm the idea that there is no Antonine architecture. Pont-à-Mousson has very little in common with Mainz where the chapel-like church is of much smaller size.[60] Nonetheless, Mainz shares one crucial feature with Pont-à-Mousson: the tracery pattern of the windows in the apsidial east end (excepting the central, eastern window) is similar to that of the clerestory windows at Pont-à-Mousson.

This significant analogy between two buildings of the same order is particularly important since the Antonine church in Mainz is dated. Documentary evidence shows that the house was founded on 27th September, 1324 and that the construction of the church was started in 1331. Considering the small size of the church, it was probably completed soon after.[61] Notably, this dating corresponds closely to the date of 1335, when the nearby church at Pont-à-Mousson was dedicated.

And as regards the most crucial – and so far most widely mistrusted – design element, namely the deliberate absence of capitals, there is plenty of evidence that this was a relatively common feature at the turn of the fourteenth century. It is important to note in this context, that there is no continuation between the profiles of the responds and those of the ribs at Pont-à-Mousson, as is the case, for example, in the elaborate vaults of the tower hall at Cologne,[62] of the Wiesenkirche at Soest, constructed circa 1313,[63] or of the east end of the above-mentioned Antonine church in Mainz (circa 1331). Rather, the profiles of the ribs at Pont-à-Mousson emerge from rounded shafts. Early precursors of this form can be found in the post-1266 southern and northern porches of Saint-Urbain at Troyes,[64] or in the axial chapel of Saint-Germain at Auxerre (after 1277).[65] The piers in the eastern choir arm of the cathedrals of Narbonne and Toulouse are even more closely related to the forms found at Pont-à-Mousson.[66] There, sections of the arcade profile spring directly from round columns. However, the general appearance of the piers at Narbonne and Toulouse is still very much shaped by the thin shafts with their unassuming capitals which carry the central and outer arch profiles and rise up to become a vaulting shaft.

However, it is not always necessary to look as far as the south of France in order to find comparisons for the features of the Antonine church at Pont-à-Mousson. A good example is the vault ribs which grow seamlessly out of the simple, individual responds in the eastern choir apse. A comparable treatment can be found in the choir of the Dominican church at Colmar, dedicated in 1291[67] and situated only some hundred kilometers to the east, or in the parish church of St Dionysius at Esslingen, completed in 1297.[68] Furthermore, in these regions, comparative examples can be found for the nave pier of Pont-à-Mousson: the piers in the naves of the Dominican churches at Gebweiler and Colmar are very similar and both were constructed at the beginning of the fourteenth century.[69]

The reduction of forms that can be observed in the buildings just mentioned is generally connected with the intentions of the new mendicant orders. Nonetheless, several churches in Alsace from around 1300 demonstrate that the phenomenon is, in fact, completely independent of any monastic order. One could mention the nave of Saint-Pierre-le-Jeune in Strasbourg, completed before 1320.[70] The piers of the main elevation are of simple, square plan with chamfered corners. Facing the central vessel, the piers continue as pilaster-type responds, running uninterrupted up to the high vault. The ribs of the vault spring from corbels that have been attached to the responds at clerestorey level (with the exception of the crossing piers), so that the vault seems to be suspended above the main vessel. In the side aisles, the simplification of the system of vaulting shafts and supports is even more clearly developed. The south aisle consists of two vessels, and neither the square responds along the outer wall nor the columnar piers which separate the vessels have any capitals (Fig. 5). This solution was by no means uncommon at that time, as is demonstrated by the Swiss Cistercian abbey of Kappel am Albis.[71] The church is particularly important because, thanks to the dendrochronological analysis of the roof trusses, it can be securely dated: the main structure must have been finished by 1304 and the building was completed by 1307. This confirms the dates recorded for Saint-Pierre-le-Jeune. Other, slightly different versions of this type of pier can be found in the east end of the Cistercian abbey church at Salem (before 1301)[72] and in the nave of the collegiate church of St Florent in Niederhaslach, in upper Alsace (after 1287, probably first quarter fourteenth century).[73] In the aisles of both churches and in the main vessel of Niederhaslach, the ribs spring directly and without capitals from the core of square piers.

Saint-Thiébaut in Thann is another important building which connects the regions of Alsace and Lorraine even more strongly. The church has been mentioned above in connection with the use of tracery motifs in the aisles that resemble those at the Antonine church at Pont-à-Mousson. There are further

Fig. 5. Strasbourg, Saint-Pierre-le-Jeune, side aisle (Markus Hilbich).

parallels to be observed in the parts of the building that relate to the first phase of construction, started in 1332[74] and consisting of most of the south aisle, including the exterior south wall, the piers of the main elevation, and part of the upper storey. Especially the clustered piers with their eight bunched shafts recall the nave piers at Pont-à-Mousson. In many ways, at Thann, the affinity with the *pilier cantonné* is still stronger. The intermediate shafts carry the outer arcade moulding, rather than the ribs of the aisle vaults, as at Pont-à-Mousson. The significant comparison between the two piers is, however, the fact that the profiles of the ribs grow smoothly, and unbroken by a capital, out of the rounded shafts of this, for the fourteenth century, rather conservative type of pier. The fact that capitals are still used occasionally at Thann, as in the eastern bays of the aisles at Pont-à-Mousson, shows once more that this is a period of transition.

What is more, the Pont-à-Mousson type of the free-standing piers without capitals, so characteristic of Late Medieval church architecture, also finds a counterpart in a Swabian town, situated some hundred kilometres further east: the piers of the 1335/40 nave of the church of Our Lady at Esslingen.[75] Essentially conceived with a hall church design in mind, the system of piers at Our Lady comes very close indeed to the piers in the nave of the church at Pont-à-Mousson, the latter having been consecrated, as we know, in 1335. The only difference between the two lies in Esslingen's idiosyncrasy of incorporating, in addition to simple round elements, a variety of other forms into the piers' cross-section.

Lorraine, as a historical region, is known as a transfer region between French and German culture and language. The study of its fourteenth-century architecture shows that it has not been sufficiently recognized for its independence and creativity. A series of further buildings could be mentioned in this context, but can not be discussed in detail. One of them is the nave of the collegiate church St Arnual in Saarbrücken,[76] as well as its model, the largely unknown collegiate church of Saint-Nicholas in Munster-en-Lorraine, near Albestroff (Moselle),[77] with its piers which look positively Late Gothic. It is an indication how modern they appear, that they have been dated – especially in the nave – to the fifteenth century, and indeed, for the fourteenth century the features found in the nave are unusual. Nonetheless, all those forms can already be found in the east end of the church, the dedication of which took place in February 1293.[78] The church in Domfessel, built in the 1320/30s and situated in lower Alsace, confirms once more that, in the fourteenth century, Alsace and Lorraine were not isolated regions.[79] Domfessel proves to be a synthesis of the architecture of Niederhaslach (upper Alsace) and of Remiremont (Lorraine), situated one hundred kilometres further to the west.

The concluding part of this article addresses the question of the potential links between Pont-à-Mousson and the true centre of the region, namely the city

of Metz – a link already hinted at in the brief reference to Sainte-Ségolène, and a question that becomes all the more pertinent once we consider the fact that Pont-à-Mousson was part of the Metz diocese, albeit situated on its western periphery. What, then, are the characteristic features of Metz architecture in the second decade of the fourteenth century, the period in which the construction of the church at Pont-à-Mousson presumably began? Sources do not record any construction taking place at Metz Cathedral during these years despite the fact that, between 1325 and 1330, there were unusually intense and hitherto wholly unprecedented levels of fundraising activity.[80]

The only Metz structure of this period that we can date precisely is the cloister of the Poor Clares,[81] which was rebuilt some time after 1320 after having been destroyed in a fire.[82] The cloister is a plain structure with simple pointed arches, again without any sort of capitals. Doubtless, the simplicity of the cloister with its reduced forms was influenced by the neighbouring Franciscan cloister, which was probably built some years earlier (Fig. 6).[83] It is similar in structure, although it has slightly more elaborate detailing.[84] The profile of the pointed arches is more sophisticated, consisting of two ogee mouldings connected by two differently sized hollows. The effect is a curious, subtly textured interplay of shadow and light. These forms can be regarded as a development of stylistic tendencies that were already present in thirteenth-century Metz buildings, notably at Saint-Vincent, where asymmetric hollows, ogee mouldings, and sharp-edged profiles were used to richly contrasting effect as early as circa 1248.[85] At that time, however, the separation of individual forms by means of chamfers and similar elements was still important, in contrast to the soft merging of the profiles in the cloister of the Franciscans. Nonetheless, there are also early examples for that type of effect at Saint-Vincent, found on the upper parts of the towers which flank the choir, built in the 1250s.[86] Undoubtedly, the profiles of the Franciscan cloister at Metz also recall more contemporary stylistic phenomena of the first quarter of the fourteenth century, notably the distinctive *piliers ondulés* of Rodez Cathedral.[87] In thirteenth-century Metz the architecture of the southern French regions was well known, as is demonstrated by a remarkable vault structure found in a secular building at Metz and dated to around 1300:[88] The prolongation of the respond

Fig. 6. Metz, Franciscan monastery, cloister arcade (Christoph Brachmann).

mouldings into the vaults where they continue as ribs, interrupted only by a narrow band of capitals with an identical profile, displays striking similarities to vaults at Narbonne, Rodez, and also at Salem, which were all built in the late thirteenth century.[89]

If there are formal similarities between the contrasting use of relatively few, yet intricately cut profiles in the Metz cloisters and the triforia openings at Pont-à-Mousson, we ought to be able to establish a link that would connect the construction of Pont-à-Mousson, begun around 1315/20, with the almost simultaneous, or perhaps slightly earlier, erection of the two structures at Metz. A clue can be found in the modest remnants of the Metz Carmelite church (Fig. 7), Grands Carmes, referenced in the literature mostly on account of its presumed association with the architect Pierre Perrat, who, as we know, died in 1400. What survives of this church, however, hardly points to it being the work of Perrat, but rather to its construction some

Fig. 7. Metz, Grands Carmes, remains of the south side of the east end (Christoph Brachmann).

time in the early fourteenth or even the late thirteenth century: for the year 1275, for example, sources record that, after the order had established itself in this location, permission was granted for collections towards a new church building.[90]

The continuous coursing of the stones in the surviving south-eastern corner of the former choir clearly suggests that it was built in a single construction campaign. The most striking and immediately noticeable element in this context are the rounded responds in the polygon, from which, just as at Pont-à-Mousson or at St Dionysius at Esslingen before, the ribs of the vault emerge directly. At Grands Carmes, another obvious similarity with the church of the Order of St Antony lies in the – at least sporadic – use of extremely simple capitals for the responds of the windows and in the use of triple shafts as responds. Meanwhile, what remains of Grands Carmes compares to the Franciscan cloister with regard to the effect of fusing individual moulding profiles: the seamless merging of both the section roll-hollow-roll on the triple-shaft responds and of the individual forms of the transverse arch which springs from the responds are notable in this context; in the case of the latter, the roll moulding runs over a hollow and directly merges with the ogee moulding. Elaborate asymmetric profiles can, finally, also be found on the blind arch of the dado zone, referencing, in its turn, earlier forms present in the Metz abbey of Saint-Vincent.[91]

Viewed collectively, then, the relevant Metz structures contain a wide variety of elements that bear clear relations to the church of the Order of St Antony at Pont-à-Mousson – some of them, as seems the case with Grands Carmes, even anticipating them. And indeed, the arsenal of forms employed at Pont-à-Mousson is, in large part, tied to the older architectural tradition of Metz, a city that evidently did not loose any of its significance as a centre of innovation after the thirteenth century had come to a close. The forms and concepts that had emerged during that century were developed further here, enriched, as the examples discussed seem to suggest, by knowledge of more recent French inventions. The quality and character of these structures remained, for the most part, true to thirteenth-century traditions. We thus have to ask ourselves whether – similar to the case of the sculptures of the Virgin from Lorraine mentioned at the begin-

ning of this article – the city of Metz and with it the entire Lorraine region continued, in architectural terms, to function as a creative centre during the late thirteenth and early fourteenth centuries and influenced, or at least was in close contact with, projects located in more eastern regions. The results of a whole range of current research suggests that this was indeed the case: for example, the matching organisation of the tracery of the sedilia in the choir of St Dionysius at Esslingen (before 1297) and the Tour de Chapitre at Metz, completed at around 1260.[92] A similarly striking resemblance exists between Pont-à-Mousson and the oldest sections of the collegiate church at Thann,[93] where we find not only identical tracery windows, but also very similar compound piers directly abutting the vaults ribs without capitals. Last but not least, we have to recall the correspondences between the tracery figurations at Pont-à-Mousson and those of a great number of Alsatian and Swabian structures.

All this seems to cast considerable doubt on Lisa Schürenberg's 1934 hypothesis, according to which early fourteenth-century Gothic architecture in the Lorraine was entirely dominated by influences from Champagne and thus ought to be viewed as standing firmly and exclusively in the French tradition, while contemporary Alsatian architecture was integrally aligned with the German tradition.[94] I am, of course, not suggesting that what we are witnessing here is a uniform migration of innovative ideas from the west to the east, as is commonly assumed to have been the case in the thirteenth century; rather, we are talking about a phenomenon of concurrent forms and fashions that, at the beginning of the fourteenth century, define Lorraine, in art-geographical terms, as equally part of the Holy Roman Empire *and* the French-speaking world. These observations aside, and in particular in view of such architectural remains as those of Grands Carmes at Metz, we have to ask ourselves whether certain innovations that today are associated with the regions of Swabia and Alsace may not have had precursors east of the Vosges mountains after all, in particular in the now derelict or destroyed structures at the former imperial city of Metz.

NOTES

[1] Josef Adolf SCHMOLL GEN. EISENWERTH, *Die lothringische Skulptur des 14. Jahrhunderts*, Petersberg, 2005.

[2] The sculptures from Lorraine help to explain the dissemination of French types to the eastern parts of the Empire ; in particular, the spread of French types to the easternmost territories of the Empire. This is suggested, for example, by the similarities between the Virgin from Munster-en-Lorraine (near Albestroff; circa 1325/30) and the Old Town Hall Madonna in Prague (1350s). See the illustration in: SCHMOLL GEN. EISENWERTH, *Die lothringische Skulptur*, p. 223

[3] Winfried EBERHARDT, "Herrschaft und Raum. Zum Itinerar Karls IV.", in *Kaiser Karl IV., Staatsmann und Mäzen*, ed. Ferdinand SEIBT, München, 1978, p. 101-108.

[4] Jean FRANÇOIS & Nicolas TABOUILLOT, *Histoire de Metz par les religieux bénédictins de la congrégation de Saint-Vannes*, 7 vols, Metz 1769-1787, here vol. 2, 1775, p. 550-554.

[5] Franz Xaver KRAUS, *Kunst und Alterthum in Lothringen*, Straßburg, 1889, p. 495.

[6] *Desoubs – Cest – Alteit – Gist – Maistre – Piere – Perrat – le Masson – Maistre – de louraige – de l'Eglixe – de Saians – et – Maistre – de l'oraige – de la citeit – de Mes – et de l'eglixe – de Nôtre Dame – du Carme – et de la grant – Esglixe de Toult – et – de Verdun – qui Morut – le xxv^e^ – Jour – dou – moy – d'Julet – L'an – d'grace – Nostre segnour M – et cccc – pries – a Deu – pour Luy.* Quoted in Auguste PROST, "La cathédrale de Metz", in *Mémoire de la société d'archéologie et d'histoire de la Moselle*, 16, 1885, p. 217-698 (p. 266, 399).

[7] Archives départementales Meurthe-et-Moselle, registre 670, fol. 171 (20), quoted in Alain ERLANDE-BRANDENBURG, *Le sacre de l'artiste. La création au Moyen Age, XIV^e^-XV^e^ siècle*, Paris, 2000, p. 104-105.

[8] Jean VALLERY-RADOT, "Toul, cathédrale", in *Congrès Archéologique de France*, 96, 1933, p. 228-257 (p. 232).

[9] Alain VILLES, "Les campagnes de construction de la cathédrale de Toul (Deuxième partie): La campagne du XIV^e^ siècle", in *Bulletin Monumental*, 133, 1975, p. 233-243 (p. 240); Alain VILLES, *La cathédrale de Toul. Histoire et architecture*, Metz, 1983, p. 109-130 (esp. p. 110, 112-113, 115-120 and 128).

[10] VILLES, "Les campagnes de construction de la cathédrale de Toul (Deuxième partie)", p. 240-241.

[11] VILLES, *La cathédrale de Toul*, p. 115.

[12] VILLES, "Les campagnes de construction de la cathédrale de Toul (Deuxième partie)", p. 241, 243; VILLES, *La cathédrale de Toul*, p. 112-113.

[13] See the earlier publication Christoph BRACHMANN, *Gotische Architektur in Metz unter Bischof Jacques de Lorraine (1239-1260): Der Neubau der Kathedrale und seine Folgen*, Berlin, 1998, p. 40, 80-81.

[14] Alain VILLES, "Remarques sur les campagnes de construction de la cathédrale de Metz au XIII[e] siècle", in *Bulletin Monumental*, 162, 2004, p. 243-272.

[15] Compare the chronology of the cathedral of Metz by Villes, which, in the form that it is presented, cannot be quite correct. VILLES, "Remarques sur les campagnes", esp. p. 263, 266, 272 (note 106). – It seems that the author mistakenly transferred the chronology of the nave of the cathedral of Toul – built in two separate, horizontal campaigns – to the nave of Metz. However, at Metz, there is no supporting evidence for such a case. See VILLES, "Les campagnes de construction de la cathédrale de Toul (Deuxième partie)", p. 240.

[16] Further discussed in Christoph BRACHMANN, *Um 1300. Vorparlerische Baukunst im Elsaß, in Lothringen und in Südwestdeutschland*, Korb, forthcoming 2008.

[17] On 9th Mai 1460 Jacquemin de Lenoncourt was commissioned with the construction of the western façade of Pont-à-Mousson designed by Tristan de Hattonchâtel (Archives départementales Meurthe-et-Moselle, G 74 fol. 141v). ERLANDE-BRANDENBURG, *Le sacre de l'artiste*, p. 166. – *advis frère thierry sorsier me faisait/ quand moult pieux frère benoist de montferrand me visitait en mccccLxvi*. Victor de SANSONETTI, *Description de l'ancienne église des Antonistes maintenant paroisse Saint Martin de Pont à Mousson*, Nancy/Paris, 1844, p. 3.

[18] Pierre MAROT, "Église des Antonistes, aujourd'hui paroisse Saint-Martin", in *Congrès Archéologique de France*, 96, 1933, p. 208-214; BURNAND, *La Lorraine gothique*, Paris, 1989, p. 265-268; Georges FRÉCHET, "L'église Saint-Martin de Pont-à-Mousson", in *Congrès Archéologique de France*, 149, 1991 (1995), p. 255-271; Dom Augustin CALMET, *Histoire ecclésiastique et civile de Lorraine*, second edition, 7 vols, Nancy, 1745-1757, here vol. 5, 1745, col. 240-241 and vol. 7, 1757, col. viij-x; Charles HYVER, "L'église de la Commanderie de St-Antoine de Pont-à-Mousson", in *Mémoires de la Société philotechnique de Pont-à-Mousson*, no volume number, 1878, p. 39-87; SANSONETTI, *Description de l'ancienne église des Antonistes*.

[19] *(...) ab incarnatione Domini millesimo trecentesimo tricesimo quinto die domenica post festum Exaltationis Sancte Crucis.* [= 17. September 1335] *In nomine omnipotentis Dei et gloriosissime Virginis Marie ejus matris ac beati Anthonii ipsius Ecclesie gloriosissimi Patroni dedicavimus et consecravimus.* Archives départementales de Meurthe-et-Moselle, H 2125, quoted in HYVER, "L'église de la Commanderie de St-Antoine de Pont-à-Mousson", pièces justificatives, p. I.

[20] "Für die Detailbehandlung wiegen dagegen diejenigen vor, die auf die Spätgotik weisen. Nirgends sind Kapitelle und Kämpfer verwendet und die Birnstabprofile schneiden aus den Vorlagen heraus." Lisa SCHÜRENBERG, *Die kirchliche Baukunst in Frankreich 1270-1380*, Berlin, 1934, p. 217.

[21] MAROT, "Église des Antonistes", p. 209.

[22] FRÉCHET, "L'église Saint-Martin de Pont-à-Mousson", p. 256.

[23] "Les généraux et commandeurs de l'ordre [= the Antonites] résolurent, en 1354, de construire une nouvelle église plus vaste, et plus magnifique que l'ancienne, trop peu spacieuse de jour en jour, pour contenir la foule croissante des pélerins. Cette église, aujourd'hui paroisse Saint-Martin, fut dédiée à saint Antoine, et bâtie aux frais de tout l'ordre." SANSONETTI, *Description de l'ancienne église des Antonistes*, p. 2.

[24] A detailed discussion of Fréchet's arguments, especially of the sources used by him, will be found in BRACHMANN, *Um 1300*, forthcoming.

[25] FRÉCHET "L'église Saint-Martin de Pont-à-Mousson", p. 255, 263-264.

[26] Adalbert MISCHLEWSKI, *Grundzüge der Geschichte des Antoniterordens bis zum Ausgang des 15. Jahrhunderts*, Cologne & Vienna, 1976, p. 17, 19-20, 22-25.

[27] Hans WENTZEL, "Antoniter, Antonitergilden" in *Reallexikon zur deutschen Kunstgeschichte*, ed. Otto SCHMITT, vol. 1, 1937, col. 742-747 (col. 744).

[28] MISCHLEWSKI, *Grundzüge der Geschichte des Antoniterordens*, p. 65-66.

[29] SANSONETTI, *Description de l'ancienne église des Antonistes*, p. 2.

[30] MISCHLEWSKI, *Grundzüge der Geschichte des Antoniterordens*, p. 195-196.

[31] CALMET, *Histoire ecclésiastique et civile de Lorraine*, 7, col. ix; HYVER, "L'église de la Commanderie de St-Antoine de Pont-à-Mousson", pièces justificatives, p. VII.

[32] In a document from 1354 Pont-à-Mousson was called *Praeceptoria generalis Sancti Antonii Leodiensis et Lotharingiae, i.e.* the preceptory general of Liège and Lorraine. FRANÇOIS & TABOUILLOT, *Histoire de Metz par les religieux bénédictins*, 2, p. 308, 649; Madeleine BRUTHIAUX, *Le fond de l'ordre des Antonistes en Lorraine 1200-1350*, unpublished thesis (*Mémoire de Maîtrise*), Université Nancy, 1971, p. 26-27; MISCHLEWSKI, *Grundzüge der Geschichte des Antoniterordens*, p. 195-196.

[33] M. GROSDIDIER DE MATONS, *Le comté de Bar, des origines au traité de Bruges (vers 950-1301)*, Paris, 1922; Michel PARISSE, *La noblesse lorraine XI[e]-XIII[e] siècle*, Lille, 1976, p. 571-588.

[34] Alain GIRARDOT, "Les origines de la ville de Pont-à-Mousson (1261-1300)", in *Annales de l'Est*, 24, 1972, p. 107-126 (p. 109-110); Hubert COLLIN, "Le château, les églises et le site de Mousson. Notes d'histoire et d'archéologie", in *Lotharingia*, 2, 1990, p. 103-134 (p. 106). – The most prominent example is probably Renaud de Mouzon, bischop of Chartres (1182-1217), under whom the cathedral was rebuilt after 1194.

[35] *Lexikon des Mittelalters*, vol. 6, Munich, 1993, col. 876; *Lexikon des Mittelalters*, ed. Norbert ANGERMANN, Robert-Henri BAUTIER & al., vol. 7, Munich, 1995, col. 92.

[36] Archives départementales de Meurthe-et-Moselle, H 1658 and H 1627, p. 217.

[37] Archives départementales de Meurthe-et-Moselle, H 1657-1255, quoted in BRUTHIAUX, *Le fond de l'ordre des Antonistes*, p. 30.

[38] BRUTHIAUX, *Le fond de l'ordre des Antonistes*, p. 8-9.

[39] GIRARDOT, "Les origines de la ville de Pont-à-Mousson", p. 116.

[40] FIEL, *La Collégiale Sainte-Croix*, p. 6-7; GIRARDOT, "Les origines de la ville de Pont-à-Mousson", p. 123.

[41] COLLIN, "Le château, les églises et le site de Mousson", p. 118.

[42] The various construction projects proved extremely expensive, and in 1336 it became necessary to raise taxes in the county of Bar, explicitly "pour faire les ouvraiges dou pont entre les dous villes dou Pont-à-Mousson". Archives départementales de Meurthe-et-Moselle, B 966, fols 4-8, quoted in COLLIN, "Le château, les églises et le site de Mousson", p. 118.

[43] Victor SAVAIS, *Annales historiques du Barrois de 1352-1411*, 2 vols, Bar-le-Duc, 1865, esp. vol. 1, p. 81.

[44] François & Tabouillot, *Histoire de Metz*, 2, p. 549; *Lexikon des Mittelalters*, 7, col. 91-92.

[45] See Archives départementales Meurthe et Moselle, H 2122, 'Plan du Rez de Chaussée de la Maison des Jesuits de Pont-à-Mousson', dating to August 1768. It will be reproduced in Brachmann, *Um 1300*.

[46] Wentzel, "Antoniter", col. 745.

[47] The standard work of reference remains Pierre Quarré, "L'église abbatiale de Saint-Antoine-en-Viennois", in *Congrès archéologique de France*, 130, 1972 (1974), p. 411-427.

[48] Brachmann, *Gotische Architektur in Metz*, p. 88-89 and fig. 35h and i.

[49] What is unusual at Pont-à-Mousson, however, is the combination of these ground plans with a transept.

[50] Georges Durand, *Eglises romanes des Vosges*, Paris, 1913, p. 287.

[51] This feature can be traced back to the cathedral of Bourges. It was introduced in Lorraine in the mid-thirteenth century during the second campaign of the cathedral of Toul which saw the construction of the transept and the first bay of the nave. Jürgen Michler, "Zur Stellung von Bourges in der gotischen Baukunst", in *Wallraf-Richartz-Jahrbuch*, 41, 1980, p. 27-86.

[52] Frêchet, "L'église Saint-Martin de Pont-à-Mousson", p. 261; Christan Freigang, Imitare Ecclesias Nobiles: *Die Kathedralen von Narbonne, Toulouse und Rodez und die nordfranzösische Rayonnantgotik im Languedoc*, Worms, 1992, figs 123, 115 and 97.

[53] The earliest example for this type of tracery in the region is thought to be found on Plan B from Strasbourg (1275/77). See Günther Binding, *Maßwerk*, Darmstadt, 1989, p. 262-265.

[54] Hartmut Seeliger, *Die Stadtkirche in Friedberg in Hessen. Ein Beitrag zur Geschichte der gotischen Baukunst in Hessen und am Mittelrhein*, Darmstadt, 1962, p. 37; Binding, *Maßwerk*, p. 264-265.

[55] Roland Recht, in *Die Parler und der Schöne Stil 1350-1400. Europäische Kunst unter den Luxemburgern*, ed. Anton Legner (Exhibition Catalogue, Schnütgen-Museum), 3 vols, Cologne, 1978, here vol. 1, p. 283.

[56] Roland Recht, *L'Alsace gothique de 1300 à 1365. Etude d'architecture religieuse*, Colmar, 1974, p. 179-184 and p. 155-168.

[57] Wolfgang Schenkluhn, *Architektur der Bettelorden. Die Baukunst der Dominikaner und Franziskaner in Europa*, Darmstadt, 2000, p. 190-191.

[58] Peter Anstett, *Das Martinsmünster zu Colmar. Beitrag zur Geschichte des gotischen Kirchenbaus im Elsaß*, Berlin, 1966, p. 50-52.

[59] M. Laetitia Brede & Fritz Arens, *Kirche und Kloster St. Antonius zu Mainz*, Mainz, 1950.

[60] The building was 7 m wide and 13 m high. Originally, it consisted of two bays with an eastern apse (5 sides of an octagon) and a small extension on the north side. Brede & Arens, *Kirche und Kloster St. Antonius (Armklaren) zu Mainz*, p. 31, 33, 37-38.

[61] *Ibidem*, p. 2, 31, 60-61, 78, 87.

[62] These vaults were already designed in the 1270s. Freigang, Imitare Ecclesias Nobiles, p. 271; Marc Steinmann, *Die Westfassade des Kölner Domes. Der mittelalterliche Fassadenplan F*, Köln, 2003, Fig. 217, 219, 221.

[63] Norbert Nussbaum, *Deutsche Kirchenbaukunst der Gotik. Entwicklung und Bauformen*, Köln, 1985, p. 128.

[64] Freigang, Imitare Ecclesias Nobiles, p. 276; Michael T. Davis, "On the Threshold of the Flamboyant: The Second Campaign of Construction of St-Urbain, Troyes", in *Speculum*, 58, 1984, p. 847-884.

[65] Dieter Kimpel & Robert Suckale, *Gotische Architektur in Frankreich 1130-1270*, Munich, 1985, p. 505.

[66] Freigang, *I*mitare Ecclesias Nobiles, figs 27, 29, 64.

[67] Recht, *L'Alsace gothique de 1300 à 1365*, p. 127..

[68] Bernd Becker, Hans-Jürgen Bleyer & Burghard Lohrum, "Dendrochonologische und gefügekundliche Untersuchungen", in *Die Stadtkirche St. Dionysius in Esslingen a. N.*, ed. Günther Fehring, Barbara Scholkmann & Peter R. Anstett, 3 vols, Stuttgart 1995, here vol. 2, p. 358-359.

[69] Recht, *L'Alsace gothique de 1300 à 1365*, p. 127-140; Freigang, Imitare Ecclesias Nobiles, p. 283.

[70] Recht, *L'Alsace gothique de 1300 à 1365*, p. 148-155; Franz Xaver Kraus, *Kunst und Alterthum im Unter-Elsaß*, Straßburg, 1876, p. 510-517.

[71] Hans Rudolf Sennhauser, "Das Kloster Kappel im Mittelalter. Bemerkungen zur Klosterkirche und zur Baugeschichte", in *Zisterzienserbauten in der Schweiz. Neue Forschungsergebnisse zur Archäologie und Kunstgeschichte*, 2 vols, Zürich, 1990, here vol. 2, p. 85-126.

[72] Ulrich Knapp, *Salem. Die Gebäude der ehemaligen Zisterzienserabtei und ihre Ausstattung*, Stuttgart, 2004, p. 184-185.

[73] The dating of Niederhaslach is debated and suggestions range from "shortly after 1300" to the second third of the fourteenth century. See Kraus, *Kunst und Alterthum im Unter-Elsaß*, p. 189-201 (p. 191); Recht, *L'Alsace gothique de 1300 à 1365*, p. 155-168 (p. 157-159); Knapp, *Salem*, p. 231-233.

[74] Franz Xaver Kraus, *Kunst und Alterthum im Ober-Elsaß*, Straßburg, 1884, p. 631-656; Recht, *L'Alsace gothique de 1300 à 1365*, p. 179-183.

[75] See Klaus Jan Philipp, *Pfarrkirchen. Funktion, Motivation, Architektur*, Marburg, 1987, p. 76-83, and Marc Carel Schurr, "Die Architektur der Esslinger Frauenkirche: Form und Funktion im Mittelalter", in *Die Esslinger Frauenkirche: Architektur, Portale, Restaurierungsarbeiten*, ed. Ulrich Knapp, Karin Reichardt & Marc Carel Schurr (Esslinger Studien, 18), Esslingen 1998, 7-88.

[76] Walter Zimmermann, *Die Kunstdenkmäler der Stadt und des Landkreises Saarbrücken*, Düsseldorf 1932, p. 141-180 (esp. p. 151); Hans Josef Böker, "Zur Datierung der Stiftskirche St. Arnual in Saarbrücken", in *Bericht der Staatlichen Denkmalpflege im Saarland, Beiträge zur Archäologie und Kunstgeschichte, Abteilung Kunstgeschichte*, 22, 1975, p. 39-43; Hans-Günther & Kristine Marschall, "Die gotische Stiftskirche St. Arnual", in *Die Stiftskirche St. Arnual in Saarbrücken*, ed. Hans-Walter Herrmann, Köln, 1998, S. 345-374.

[77] The only publications on this subject are Kraus, *Kunst und Alterthum in Lothringen*, p. 808-816; Burnand, *La Lorraine gothique*, p. 238-241; see the forthcoming Brachmann, *Um 1300*.

[78] Archives départementales Meurthe-et-Moselle, G 928; Kraus, *Kunst und Altertum in Lothringen*, p. 808 (he gives a wrong shelfmark). The simple, geometric tracery forms also suggest an early dating.

[79] Recht, *L'Alsace gothique de 1300 à 1365*, p. 168; Kraus, *Kunst und Alterthum im Unter-Elsaß*, p. 44-45.

[80] KRAUS, *Kunst und Altertum in Lothringen*, p. 489-491; Heinrich Volbert SAUERLAND, "Geschichte des Metzer Bisturns während des vierzehnten Jahrhunderts", in *Jahrbuch der Gesellschaft für lothringische Geschichte und Altertumskunde*, 6, 1894, p. 119-176; 7, 1895, p. 69-168; Heinrich Volbert SAUERLAND, "Die ältesten Urkunden zur Baugeschichte des Metzer Domes", in *Metzer Dombaublatt*, 10/11, 1896, p. 11-48.

[81] For the Poor Clares generally see BRACHMANN, *Gotische Architektur in Metz*, p. 95.

[82] KRAUS, *Kunst und Alterthum in Lothringen*, p. 669; G. THIRIOT, Typescript of the unpublished second volume of his *Recueil des épitaphes de collégiales et couvents de la ville de Metz*, Metz, Archives Municipales, CB 1793, no page numbers.

[83] The recorded dates of the tomb stones also suggest a construction of the cloister 'around 1300'. Thus, Bouteiller mentions the tomb of someone who died in 1304 and two further tomb stones which report 1301 and 1310 as the years of death. E. DE BOUTEILLER, "Notice sur les monastères de l'Ordre de Saint-François à Metz", in *Mémoires de l'Académie impériale de Metz*, second series, 16, 1868, p. 235-327 (esp. p 252-257), p. 254; see also KRAUS, *Kunst und Alterthum in Lothringen*, p. 686-689.

[84] See the plan in Wilhelm SCHMITZ, *Der mittelalterliche Profanbau in Lothringen*, Düsseldorf, 1900, without page number.

[85] Preparations from 1242/43; the foundation stone was laid 8th May 1248; the church was completed before 16th February 1256. See BRACHMANN, *Gotische Architektur in Metz*, p. 55-82.

[86] BRACHMANN, *Gotische Architektur in Metz*, fig. 27k.

[87] Freigang, in his analysis of the construction campaigns of the cathedral of Rodez, suggests the 1320s as the earliest dating for this type of forms. FREIGANG, Imitare Ecclesias Nobiles, p. 176.

[88] The building is situated in the Rue des Piques. See BRACHMANN, *Um 1300*.

[89] FREIGANG, *Imitare Ecclesias Nobiles*, plate 29, 98, 99.

[90] See the short mention of this building in FRANÇOIS & TABOUILLOT, *Histoire de Metz par les religieux bénédictins*, 2, p. 445; KRAUS, *Kunst und Alterthum in Lothringen*, p. 600-601, 696-698.

[91] BRACHMANN, *Gotische Architektur in Metz*, fig. 42l, n.

[92] Markus HÖRSCH, "Die Esslinger Sakralbauten. Zum Stand ihrer bau- und architekturgeschichtlichen Erforschung", in *Geschichte, Archäologie und Bauforschung in Esslingen*, ed. Hartmut SCHÄFER, Bamberg, 2001, p. 159-206 (Fig. 146); BRACHMANN, *Gotische Architektur in Metz*, Fig. 7a.

[93] RECHT, *L'Alsace gothique de 1300 à 1365*, Fig. between p. 144 and 145.

[94] SCHÜRENBERG, *Kirchliche Baukunst*, p. 61.

Changes in Vaulting, Changes in Drawing. On the Visual Appearance of Gothic Architecture around the Year 1300

Christian Freigang

It is well-known to architectural historians that, around 1300, the relationship between vaults and their supporting structures, such as piers and walls, was undergoing a major change. This is all the more significant since that relationship had been a characteristic feature of Gothic architecture. While before 1300 there had been a more or less marked difference between the form and profile of the supports and those of the arches and ribs of the vault, after 1300, supports and ribs became increasingly alike in a number of buildings, until they began to merge completely into a single element – announcing an aesthetic typical of Late Gothic architecture.[1]

One of the most characteristic examples of this change in which forms were assimilated can be found in southern France. At Narbonne Cathedral, begun in 1272, the ribs of the chapels and the ambulatory seem to grow out of the pier responds without any significant interruption by capitals, imposts, or anything else (Fig. 1). Technically, this is the result of a new way of conceiving the entire structural system of the building. First the main axes of the ground plan and the structural elements – piers, buttresses, walls, and so on – are laid out. In a second step a small number of standardized profiles for the arches and the tracery are drawn up. Finally, the mouldings of the ribs are continued down the circular core of the pier to become the responds. Therefore, the horizontal section of the pier is a combination of the pier core and the moulding profiles of the ribs. The design of all of the supporting structures follows this principle. Thus, even the tiny hexagonal plinths at the bottom of the chapel responds are carefully aligned with the corresponding ribs of the vault. The pier as a whole is no longer a more or less autonomous entity, but the logical extension of the vaulting system to the supports. As the design of the pier is already contained in the design of the vault, it is evident that this new procedure considerably increased the efficiency of planning. At Narbonne, the number of templates necessary for the design of the ambulatory chapels was reduced to five standard units, including the mouldings for the window jambs and the tracery.[2]

As a result, at Narbonne the column is no longer treated as a tectonic structure or an autonomous entity. The design discards the ancient model of the anthropomorphic column with a capital to visualise the task of supporting the heavy weight of the entablature or arch. As Sauerländer observed, this antique tradition had persisted up to the High Gothic period, despite all tendencies towards slim vertical elements.[3] Even in innovative buildings, such as Clermont Cathedral, the distinction between the rounded shafts of the colonnettes with their capitals and the sharpened ribs above remained perceptible. At Narbonne and elsewhere, however, the dichotomy between jambs and arches, between supporting structures and upper load has been eliminated. Now, the principal element is the continuously moulded arch that serves as a structural framework. Even if some of the moulded arches merge with the circular core of the pier to the point of disappearing, each voussoir and each moulding is conceived as forming part of such an arch, which seems to be set within a tall, thin wall. We may thus call this a wall-framework structure.[4]

Fig. 1. Narbonne Cathedral, interior, ambulatory vaults (Chrisitian Freigang).

Therefore, it is possible to describe the entire, complex ambulatory scheme of Narbonne Cathedral as a system of intersecting wall-framework structures that form the transverse arches, the entrance arches of the radiating chapel, the diagonal ribs, and so on (Fig. 2). What is new about this is not so much the fact that some moulding profiles are penetrating the pier and merging with its shafts. We can observe similar solutions long before Narbonne, for instance in the ambulatory arcades of Rouen Cathedral, built in the 1220s.[5] Nor is the system of perpendicularly or diagonally intersecting arcades which determine the form of the supporting pier completely new. At Laon Cathedral, for example, the compound pier at tribune level is composed of the shafts that support the arches of the tribune and the vaults behind. In fact, what is new at Narbonne is the transformation of the traditional sequence of column and arch as individual, distinguishable elements into a continuously moulded wall-framework structure.

Of course, Narbonne is analysed here merely as a prominent example. As we will see, other buildings of the same period could also be mentioned. Moreover, it must be observed that the wall-framework structure as a general principle of building was known long before 1300 and was used as a method of Gothic arcading. The technique was employed in many minor churches, such as Saint-Pierre at Jumièges (dating to 1230/40?), where the chamfered and stepped corners of the rectangular piers are continued into the voussoirs to become the arch mouldings of the arcades.[6] Further, many secular buildings, such as barns and market halls, have supports and arches that are decorated with one continuous moulding. Nonetheless, in most of those cases a simple chamfered moulding was used, emphasising the austere character of the buildings, and far removed from the column-like piers and complicated arch mouldings of, for example, Narbonne. Finally, the use of such continuous mouldings in secular buildings does not imply a break with

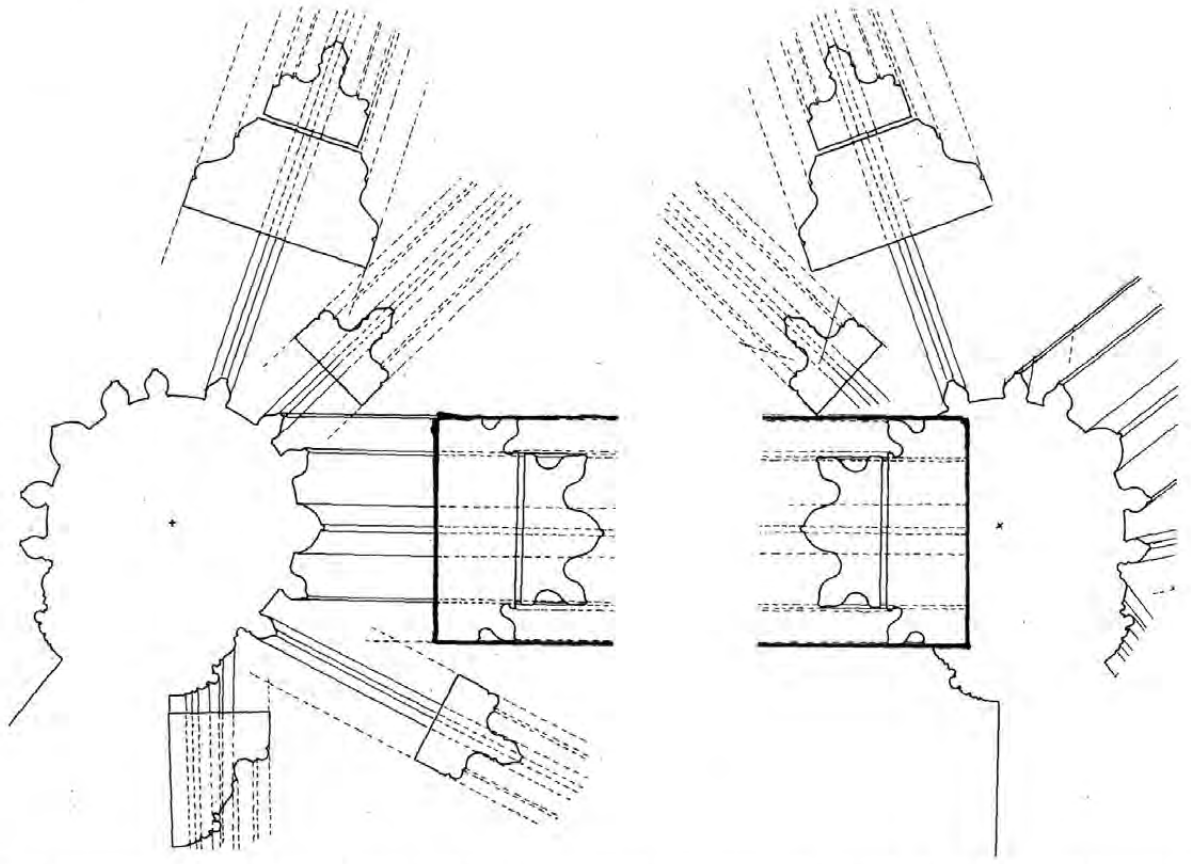


Fig. 2. Narbonne Cathedral, plan of piers in the ambulatory at the entrance to the chapels showing the wall-framework structure (highlighted: the main frame structure of the chapel entrances) (Christian Freigang).

antique practice. Arcades with square or chamfered arches without bases and capitals have their own tradition in antique architecture, where they were used, for example, for bridges or aqueducts.

The origin of the complex, continuously moulded wall-framework structure can be found in minor architectural features, such as portals and window openings, which are often decorated with a continuous profile all around. Similarly, the invention of tracery was largely based on the idea of a continuous wall-framework structure. It is interesting to note that one of Villard de Honnecourt's drawings of Reims Cathedral (fol. 32) indicates the position of such a wall-framework structure.[7] The drawing shows the horizontal section of several types of mullions and other elements of window tracery, set between two lines. These lines, rather than being mere auxiliary drawing lines, seem to indicate the thickness of the arcade. In the same way, on Villard's ground plan of the last storey of the tower at Laon Cathedral (fol. 9v), two lines indicate the thickness of the open arcades. A further important step in this development was taken on the south portal of Notre-Dame in Paris in the 1250s, where for the first time on the continent the sharpened mouldings of the archivolts are continued without interruption down to the bases of the jamb. Similar features appear in the windows of a considerable number of Rayonnant chapels, for example at Saint-Germer-de-Fly or in the eastern chapel at Saint-Germain at Auxerre.

With their large windows or wall openings, all these examples are clearly wall-framework structures. However, in none of the cases are the vaults combined with freestanding piers. For this reason I would like to stress the importance of the fact that by 1270, not only wall openings, but tall piers and a large number of moulded profiles are showing a tendency to assimilate the mouldings of the supports to the rib vaults. Besides

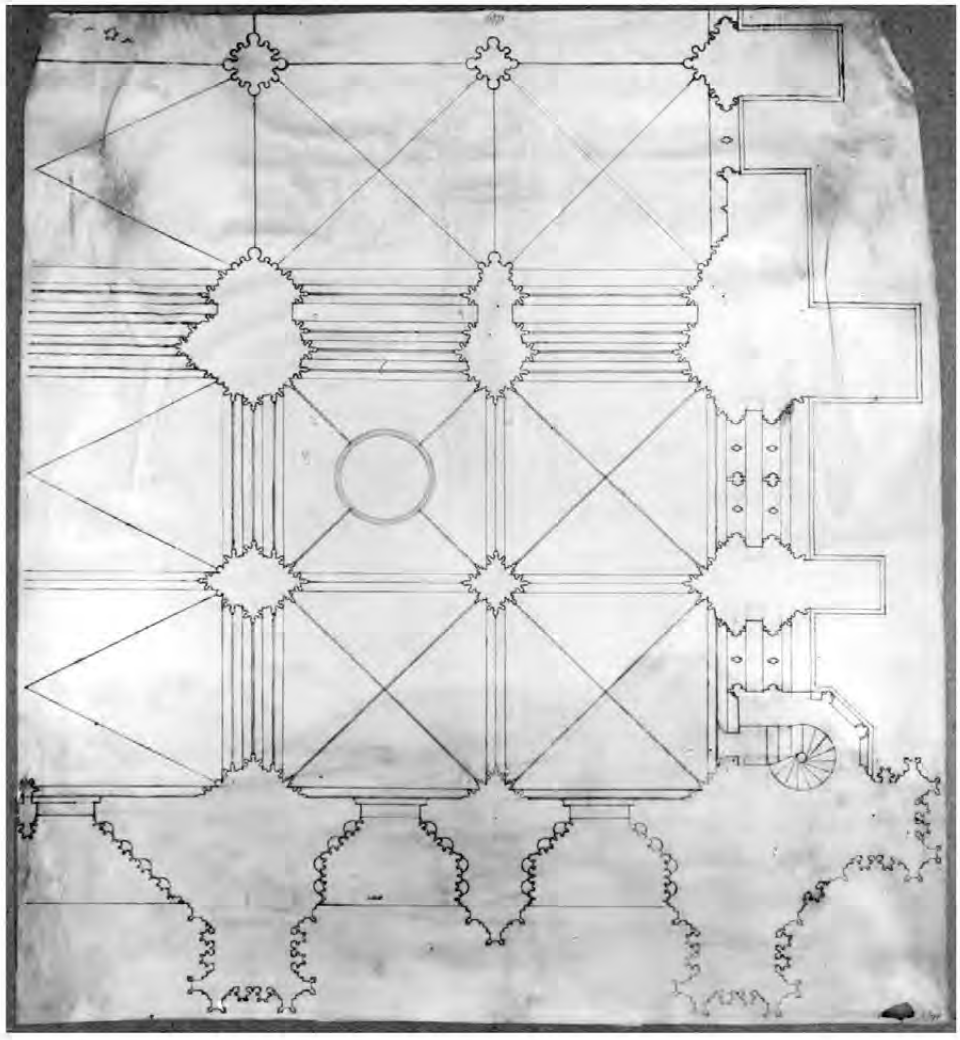


Fig. 3. Cologne, Plan A (Vienna, Akademie, photo Marc Steinmann).

Narbonne, we may mention Saint-Urbain at Troyes as an immediate forerunner from the 1260s, the piers in the sanctuary of Saint-Germain at Auxerre, the cathedrals of Toulouse, Nevers, and Limoges. By the beginning of the fourteenth century this system is apparent in the chevets of Saint-Ouen at Rouen or Evreux Cathedral. At that time, the wall-framework structure was frequently employed for the major arches in German brick buildings. Nikolaus Zaske observed this long ago in the ambulatory of St Mary's church at Lübeck.[8] It is interesting to note that the formal solutions adopted for those buildings were all different. At Toulouse the ribs merge with the core of the circular pier, while at Auxerre the compound pier continues to be used and the architect managed to adapt the rib profiles to the profiles of the shafts. At Evreux and Rouen, shafts with capitals surrounding the core of the pier remain part of the design. Admittedly, the design technique is fundamentally as efficient as in the other examples since the mouldings of the arches have the same profiles as the responds. Nonetheless, the traditional choice of capitals for the supports in those Norman and Burgundian buildings somehow contradicts the use of the modern technique. In view of this traditionalism, the innovative treatment of the supports at Saint-Urbain and Narbonne is all the more striking. There, ancient tectonic models are abandoned and replaced by radically refined, graphic structures, in which sharpened profiles, like ogee mouldings, are now playing a key role.

The new profiles are not only characterized by a sharpened contour, but also by an increasing tendency to project. For example, in plan, the central mullion of a tracery window often projects neatly beyond the lateral profiles. Most of the templates necessary to draw these profiles could be inscribed in stretched triangles. As Viollet-le-Duc remarked, when such profiles are used for voussoirs their projecting parts risk cracking.[9] They therefore represent a complicated, technically ambitious form. According to Viollet-le-Duc, the main reason for the use of such complicated mouldings was the complex visual effects produced by light, because the deep hollows and projecting rolls create sharp contrasts between light and shadow.[10] Viollet-le-Duc was clearly correct but a further observation should be added. Seen from an angle, the new stretched mouldings permit more interesting views by allowing the viewer to appreciate the variety produced by the graduation of the mouldings, which is undoubtedly more "exciting" than the relatively flat surfaces of the early thirteenth century.

The new technique of continuous arcading also seems to be linked to changes in the practice of architectural drawing. It is indeed striking that the oldest extant series of ground plans of a Gothic building (the southwest tower of Cologne Cathedral) is using both the wall-framework structure and the ogee moulding in a very sophisticated way.[11] On the earliest of the drawings, Plan A, executed in the 1270s, for instance, the doubled tracery windows on the south side of the tower are each set within two thin lines. The lines should therefore be understood as two thin arcades (Fig. 3). Other lines on the plan that were later eliminated indicated the thickness of the buttresses situated on the south side. Those lines were running in north-south direction and were originally intersecting with the lines indicating the window arcades. Therefore, the design of the tower was initially conceived as intersecting arcade systems: the massive buttressing system (running in north-south direction) was superimposed on the window layers (running in east-west direction). Only in a second step were the responds added.[12]

Furthermore, the plan indicates how the wall-framework structure works inside the tower bay. The piers are composed of two basic types or units of moulding profiles, each consisting of a group of three ogee mouldings: a narrower unit, which serves as a respond for the diagonal ribs, and a broader unit, which serves as a respond for the arcade arches and the vaulting shafts of the high vault. Those units can be combined in different ways. On the north and east side, for example, a triple combination of the broader unit is employed for the major arches. It is significant to observe the use of moulding units on the eastern side, where a supplementary arcade layer is added in order to strengthen the piers. The piers on that side together with the eastern arcade are effectively stretched eastwards; nonetheless, there is no major change in the type of moulding profile units employed.[13] Clearly, those units are made to slide from pier to pier like a system of curtains, and this sliding does not impair the proper rhythm of the mouldings of the piers.[14]

The flexibility that such a standardized system of arch mouldings allows can be seen in the modifications of the tower piers noticeable on ground plans A, B, and D (Figs 3 and 4). Compared to Plan A, the piers on the east and on the north side of Plan B and D are considerably broadened in order to strengthen the piers. Nonetheless, the strengthening does not necessitate a modification of the general conception of the piers. The section of the piers remains essentially unaltered with only one plain chamfered arch and one moulded arch inserted behind the central respond on the north and east side respectively. Had the designer employed traditional compound piers with thick, round shafts as responds, it would have been difficult to connect the responds to the various arches and ribs on the next level and to create a pier of regular plan at the same time. Clearly, the use of re-combinable units of fine mouldings gives much greater flexibility in planning than traditional construction methods.

However, it is not only planning efficiency which is sought here, but also a certain aesthetic. The evolution from Plan A to Plan D shows that each side of the pier has become a façade of marvellous visual homogeneity, especially in the case of the irregularly shaped north-eastern pier (Fig. 4). Seen from inside the tower bay or from the central vessel of the nave, those diagonal placed façades of the pier appear almost symmetrical and regular.

The use of the wall-framework structure has yet another advantage: The continuous moulding of the arcade simplifies the depiction of the arches on the

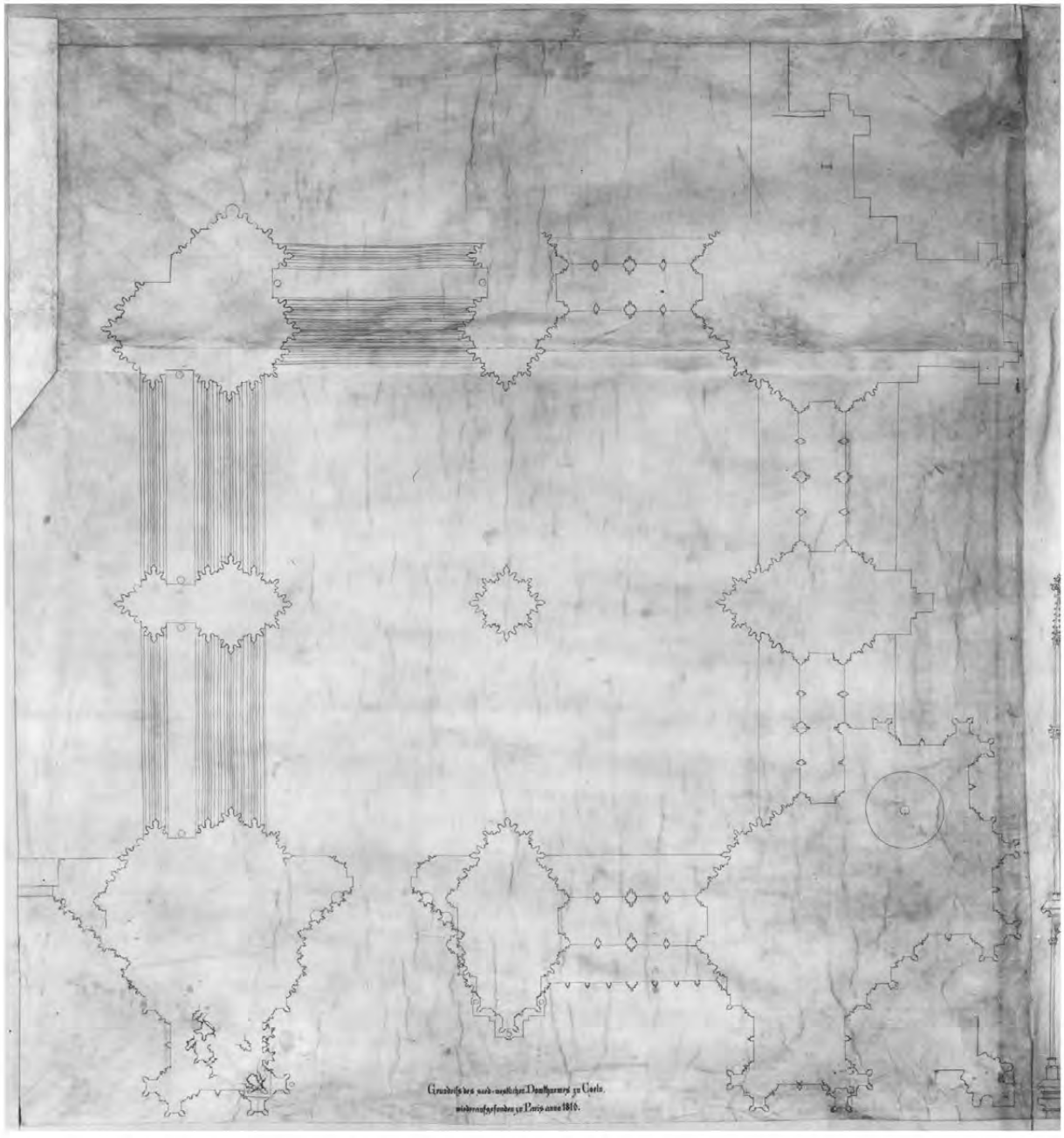


Fig. 4. Cologne, Plan D (Cologne, Dombauverwaltung, photo Marc Steinmann).

plan. The lines indicating the mouldings of the jambs are simply prolonged to indicate the voussoirs. In this way, the outer and the inner edges of each arch are exactly determined. Furthermore, a pointed arch with a gable is a recurring motif on the façade at Cologne and its proportions are nearly always the same. Applying those proportions, the medieval master mason can easily determine the height of each arch and each gable. The distance between two corresponding shafts serves as a base to erect, with a pair of compasses, the arch and gable above. In the case of Cologne this is of particular importance, since the highly complex composition of the façade, consisting of rectangular fields filled with arches and gables, also had to take into account the interior structure of the building and vice versa.

The close relationship between the design of the ground plan and the elevation is also evidenced in some of the details that can be seen on the large Plan F of the façade of Cologne Cathedral. Thanks to the recent study of this famous drawing by Marc Steinmann, we do now know more about certain aspects of its design. Even if Plan F has to be regarded as a definitive graphic representation of the tall, double tower façade and not as a preparatory drawing, some of its details allow an insight into the design process and the techniques employed. The depiction of the mouldings of the window-jambs on the second and third stories of the south tower is an interesting example (Fig. 5). The drawing shows the elevation of each window with its jamb mouldings as well as a horizontal section of the moulding profile in order to indicate the exact shape and position of the vertical elements.[15] The section is executed in graphite pencil and should be regarded as a contemporary preparatory drawing, copied from a draft of the ground plan of the window. While the elevation only shows the jambs as a series of regularly alternating, finer and larger strips, the section, on the other hand, is much more detailed, revealing rolls and hollows of diverse shapes and sizes. Nonetheless, it seems to me that the choice of the profile, as seen in the section, is closely related to the depiction of the jamb mouldings in the elevation. Their representation as a series of larger and thinner strips is responsible for the harmonious framing of the great window. Visually, it continues the rhythm of the tracery of the window with its series of mullions which are also represented as alternating larger and thinner strips. Therefore, aesthetic considerations concerning the drawing of the façade seem to have had important repercussions for the design of the architecture.

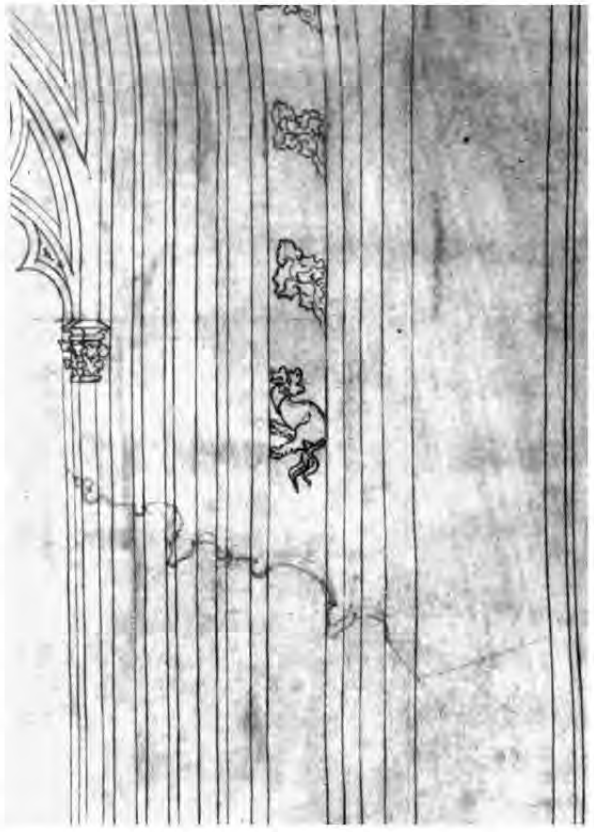


Fig. 5. Cologne, Plan F, detail (Cologne, Dombauverwaltung, photo Marc Steinmann).

Close connections between media are also responsible for the striking similarities between real architecture and the virtual representation of architecture in two-dimensional paintings that can be found at the same time in and around Cologne Cathedral. Architecture is represented, for example, in the stained glass windows of the cathedral sanctuary, but also in book illumination. The accurate detailing of architectural elements in such paintings is largely due to the correct use of proportions for shafts, mouldings, and tracery. As Rüdiger Becksmann and Peter Kurmann have shown, there can be no doubt that in these images of architectural motifs the principles of architectural drawings are employed.[16] It is important to remember, however, that the relationship between architecture and painting worked both ways. As I have proposed, at Cologne, the design of a complex, three-dimensional building (the façade) is at least partly based on aesthetic considerations relating to the two-dimensional drawing of the façade. Around 1300, when designing the ground plan of compound piers, window jambs, archivolts, etc., the medieval architect was constantly considering the two-dimensional depiction of those elements in the form of a drawing.

We may compare the task of that architect to the carving of an "architectonic" altar retable, dressed in microarchitectural forms, as for example the high altar of St Elisabeth's at Marburg.[17] There is no doubt that in these retables architectural elements, such as arcades, gables, and tracery, are designed according to visual rather than structural principles. Reduced to miniature size, the three dimensional architectural form is

valued for its pictorial quality which makes it a precious frame for the venerated statues of saints. An artist can execute an ambitious piece of relief sculpture without paying attention to structural or tectonic considerations affecting the shape of mouldings and profiles. Those are chosen on account of the optical effects that can be created and that are to enrich and beautify the altar. In contrast, on the monumental scale of real architecture the planning process becomes much more complicated because the carefully calculated visual appearance has to be coordinated with technical demands. Thus, the façade of Cologne Cathedral is not merely "decorated" by an intelligently laid-out grid of arcades, gables, and tracery. Instead, the two aspects, technical demands and visual appearance, are intimately related and conceived together right from the beginning of the design process.

In this respect, it is clear that the use of the wall-framework structure with a continuous moulding is more than a ploy to suppress references to antique archictectural models. Around 1300, the wall-framework structure frequently resembles the architecturally framed but flat wall panels that are used as a basic module for the design and decoration of baldachins, choir screens, funeral monuments, altarpieces, and so on, for instance in the case of the Marburg retable, mentioned above. Such "wall-frame panels" have one main front, similar to a picture. Within the context of large-scale, three-dimensional architecture, however, the flatness and frontal conception of the moulded frame structure as the basic design element is hardly noticeable, all the less as it is normally intersected by – or combined with – other arcades, or multiplied by the superposition of several layers, one disposed in front of the other – as can be seen in the portal archivolts of Cologne Cathedral, but as well in a large number of Rayonnant buildings such as the gables of Saint-Urbain at Troyes, the transepts of Rouen Cathedral, the west front of Strasbourg Cathedral, and many others. The importance of the wall-framework structure as a principle of construction is best demonstrated by looking at the treatment of the main arcades in a number of Rayonnant buildings: especially in the buildings that first adopted the wall-framework structure in a consistent manner, the main arcades are completely transformed into gigantic, pointed frames. In the central naves of the chevets of Narbonne and Toulouse Cathedrals, the shafts and arches with their sharpened profiles are treated like a frame with a sharp edge that defines an immense opening. The same principle is also apparent inside the towers in Cologne where the wall arcades with their continuous jamb mouldings create a perfect façade with a gigantic portal that opens from the main vessel into the tower hall.

Clearly, there is a tendency for the new wall-framework structure to be used as pictorial frames. As a result, the arcade should no longer be conceived as a simple work of stone, but as something oscillating between architecture, painting, sculpture, and the precious arts. This observation is not new. Peter Kurmann correctly questioned how the analogies between a microarchitectural structure, such as the shrine of St Gertrud at Nivelles, and a late Rayonnant church should be interpreted: Is the shrine a microarchitecture or is the architecture a macro-shrine?[18] In the case of the façade of Cologne, where the visual effects produced by its design are treated with the utmost care, one might ask: Is it a screen turned into a building or a building turned into a screen? The comparison of the façade with a gigantic screen, far from being new, is habitually evoked when its architecture is described in modern terms. The underlying suggestion is that the stylistic phenomenon unconscious result of Gothic construction methods. As reference to a historical phenomenon, or, to be more precise, an important principle of Gothic architectural design, however, the term screen has – to my knowledge – never before been employed. It is, in fact, the most appropriate term, since Rayonnant architecture around 1300 is deliberately pictorial by using a sophisticated new interpretation of the arcade and new design methods.

This argument can be taken a bit further: it is well known that, around 1300, architectural motifs are very often adopted in painting. Especially in stained glass, architectural motifs appear to be designed like real architectural drawings. In the case of Cologne, we can compare numerous designs from the stained glass windows to Plan F.[19] However, stained glass design is clearly more than a mere copy of tracery patterns. In some cases, in fact, illusionistic devices are employed in the design. In the axial chapel, for instance, the decorative strips that traditionally flank the central motif of the windows seem to be transformed into concave mouldings filled with crockets and accompa-

nied by two fine roll mouldings – just like the outer archivolt of the great window on Plan F. This is an example of the *gläserne Bauriss*, a plan drawn on glass.[20] The two-dimensional depiction is not at all a simplification of the design process but instead reveals a profound understanding of three-dimensional architectural forms. Similar effects can be observed in stained glass painting, for instance, at Cologne, in the clerestory, and in the ornamental panels situated in the axial chapel and in the chapel of St John (Fig. 6), and at Freiburg, in some of the ornamental, stained glass panels from the Blackfriars Church.[21] It has to be stressed that this new linearity is not the result of a mere refinement of taste, but of the combined effects of a new design technique and the pictorial demands, which meet in Gothic drawing practice.

While painters look to architecture, architects look to painting. In order to produce frames of the same graphic linearity as those found in stained glass, the architect uses rich profiles, composed of alternating hollows and ogee mouldings that create multiple visual effects when light falls on them: then the deep hollows are transformed into dark shadowy strips and the rounded profiles into broader lighted strips. Of special importance is the ogee moulding, since it produces a contour line which is at the same time fine and sharply cut.

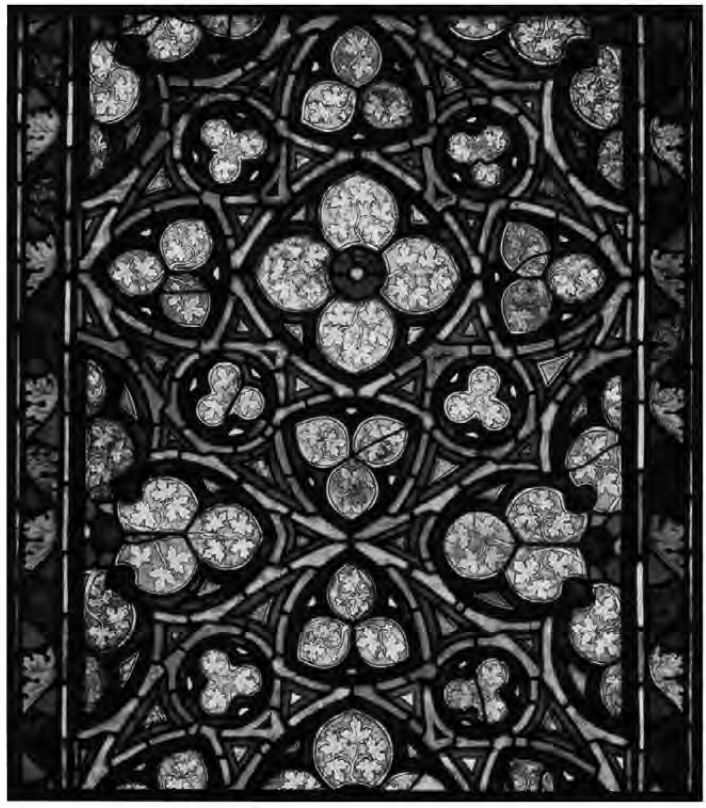


Fig. 6. Cologne Cathedral, ornamental panel from the axial chapel (St Peter and St Maternus window) (after H. Westermann-Angerhausen ed., *Himmelslicht. Europäische Glasmalerei im Jahrhundert des Kölner Dombaus (1249-1349)*, Cologne, 1998, number 62).

In conclusion, around 1300, two important tendencies can be observed in Rayonnant architecture, at least in the highly developed regions of northern and southern France and in the Rhine Valley. First, when architects transformed the pier-vault system into a wall-framework structure they not only abandoned a structural understanding of architecture that had its roots in antiquity. Even more importantly, they aimed at making architectural appearance largely independent of construction, materials, and scale, since the same design could be applied to small, precious objects and to buildings. The "immaterialization" of architecture in this period is not merely an observation of twentieth-century scholars, but it describes precisely how optical effects were used in the medieval design process in order to transform the properties of the material into the immaterial. This affected not only architecture but all types of media. Weightless structures can be compared to floating stone or nature deprived of colour in contemporary Gothic painting. What has become a commonplace in the discussion of Rayonnant architecture can thus be seen in a new light.

It is no accident that the leitmotiv of this language is the arcade that oscillates between a framing architecture and an architectonic panel, between the frame as a pictorial element and the arch as a tectonic structure. Second, the façade of Cologne Cathedral is not "decorated" architecture in the sense of a "wrapped" core; instead, the design reconciles the technical problems of the structure with the requirements of visual appearance. Equally, by adopting the wall-framework structure the Gothic architect had to take into account the visual effects of mouldings in order to achieve the intended picture-like character in architecture. Clearly, we cannot consider architecture as the leading art, superior to the other media of painting and sculpture. Of course, architectural motifs that appear in painting or sculpture are reflecting real architecture, but at the

same time architectural conception itself is also – and in a highly sophisticated manner – taking into account the effects of contemporary painting.

Phenomena like these should be put into a broader perspective. As we have seen, the boundaries of technical and artistic genres – normally defined by the specific properties of function, scale, material, and craftsmanship – are in a certain way disappearing or at least merging. Architecture can be understood as an immensely enlarged picture or as a painted and decorated shrine or retable, seemingly made of precious metal – and vice versa. The specific properties of the material qualities are deliberately denied or at least veiled in order to transform the object into something in which earthly physics and human skill seem to have been suspended. Massif stone appears like thin, boldly elongated metal work, framing painted surfaces, or translucent glass panels. Silver shrines are figuring as realistic, but astonishingly tiny architectures. In both cases, the actual building material, that is, the stone or silver is apparently transformed into an (even more) incredibly precious substance. Thus, visual appearance defies the laws of structure, but nevertheless the viewer always remains conscious of the transformation. Nobody would ever doubt that cathedrals are made of stone or consider that silver shrines serve as habitable houses, but it is obvious to the viewer that reality is transcended to adopt a new, unearthly materiality. Oscillating between factual presence and apparent impossibility this perception is close to the medieval concept of the marvel and the marvellous.[22]

The marvellous was not considered part of God's Creation, but a wonderful thing that could be conceived with the mind. It was found in foreign regions and removed in time and/or space, such as the enchanted palaces of Alexander or the realm of the legendary Arch-Presbyter John of India. The marvellous normally contains a hidden enigmatic significance referring to the will of God and to a master plan for the world. It does not belong to the everyday, earthly world. In this context it is noteworthy that medieval literary descriptions of marvellous architecture share important features with the concepts of architectural works around 1300 described above: bold constructions, precious materials on superhuman scale, incredible technical skill, and the combination of all sorts of crafts are needed to produce a fictional marvel. As these descriptions consider the works from changing and fragmentary perspectives, they are deliberately not intending to permit "archaeological" reconstructions of real, built constructions. As Achim Timmermann has noted, such conceptual strategies can be compared to the incredible boldness of late medieval microarchitecture – especially sacrament houses – with their exquisite decoration as well as their various references to micro- und macroarchitecture.[23]

Michaela Krieger has interpreted the new pictorial effects of grisaille in miniature painting and the silver-yellow-pigmentation in stained glass in a similar way.[24] Both colouration techniques were invented around 1300 and suggest a new consciousness of the various medial qualities of the image. Artists were deliberately transcending mere superficial pictorial imitation of the real world and were aspiring to create a new, light-filled colour, different from earthly chromatic effects. A similar phenomenon can also be observed, for example, in the interesting combination of pictorial effects in the Hours of Jeanne d'Evreux, illuminated by Jean Pucelle. Pictorial illusionism, a combination of architectural, sculptural, and naturalistic illusions, was used to create a seemingly palpable and measurable but nevertheless strange and unearthly world. Even if real architecture uses methods of planning and execution which are completely different from manuscript illumination, the methods of architectural conception which were developed around 1300 reveal a comparable consciousness of medial qualities. With the emphasis placed on "immaterialization" and on the pictorial, architecture could transcend architecture.

NOTES

[1] See generally Virginia JANSEN, "Dying Mouldings, Unarticulated Springer Blocks, and Hollow Chamfers in Thirteenth-Century Architecture", in *Journal of the British Archaeological Association*, 135, 1982, p. 35-54; Norbert NUSSBAUM & Sabine LEPSKY, *Das gotische Gewölbe. Eine Geschichte seiner Form und Konstruktion*, Darmstadt, 1999, p. 169-174.

[2] Christian FREIGANG, Imitare ecclesias nobiles. *Die Kathedralen von Narbonne, Toulouse und Rodez und die nordfranzösische Rayonnantgotik im Languedoc*, Worms, 1992, p. 67-73, 268-280; NUSSBAUM, *Gotische Gewölbe*, does not discuss these aspects or the relevance of Narbonne Cathedral.

[3] Willibald SAUERLÄNDER, "Abwegige Gedanken über frühgotische Architektur und "The Renaissance of the Twelfth Century"", in *Études d'art offertes à Louis Grodecki*, ed. Sumner McKnight CROSBY & al., Paris, 1981, p. 169-184.

[4] See Nikolaus ZASKE, "Stiltypik der bürgerlich-gotischen Backsteinkathedrale", in *Stil und Gesellschaft*, ed. Friedrich MÖBIUS, Dresden, 1984, p. 338-359, who uses the term *Wandrahmensystem* or *Wandrahmengerüst*.

[5] See Dorothee HEINZELMANN, *Die Kathedrale Notre-Dame in Rouen. Untersuchungen zur Architektur der Normandie in früh- und hochgotischer Zeit* (Beiträge zur Kunstgeschichte des Mittelalters und der Renaissance, 9), Münster, 2003, esp. p. 246-247. For further examples see JANSEN, "Dying Mouldings".

[6] See Jean BONY, *French Gothic Architecture of the 12th and 13th Century*, Berkeley, Los Angeles & London, 1983, p. 439.

[7] [*Portfolio of Villard de Honnecourt*], circa 1230: Paris, Bibliothèque nationale, MS. fr. 19093; for a reproduction see Hans R. HAHNLOSER, *Villard de Honnecourt. Kritische Gesamtausgabe des Bauhüttenbuches MS. fr 19093 der Pariser Nationalbibliothek*, second edition, Graz, 1972, pl. 63.

[8] ZASKE, "Stiltypik".

[9] Eugène-Emmanuel VIOLLET-LE-DUC, *Dictionnaire raisonné de l'architecture française du XIe au XVIe siècle*, vol. 7, second edition, Paris, 1868-1873, p. 483-532 (art. "profil"), esp. p. 519-525.

[10] VIOLLET-LE-DUC, *Dictionnaire*, 7, p. 483-532 (art. "profil"), esp. p. 524-528.

[11] Marc STEINMANN, *Die Westfassade des Kölner Domes. Der mittelalterliche Fassadenplan F* (Forschungen zum Kölner Dom, 1), Cologne, 2003, p. 185-191; Hans KAUFFMANN, "Die Kölner Domfassade", in *Der Kölner Dom. Festschrift zur Siebenhundertjahrfeier 1248-1948*, Cologne, 1948, p. 78-137, esp. 80-97; Eva ZIMMERMANN-DEISSLER, "Das Erdgeschoß des Südturmes vom Kölner Dom", in *Kölner Domblatt* 14/15, 1958, p. 61-96.

[12] STEINMANN, *Die Westfassade*, Fig. 229.

[13] At first glance the lateral units of the triple combination seem to have only two ogees. However, in reality, each unit has three ogees. The inner ogee of the lateral units is not entirely articulated because it merges with the projecting profile next to it. Furthermore, on Plan A, the rib-moulding that corresponds to the narrow unit is shown slightly reduced. The profile can be seen in detail on Plan D, see Fig. 4.

[14] STEINMANN, *Die Westfassade*, Fig. 217.

[15] I am grateful to Marc Steinmann for discussing the date of the different drawings on the plan with me. Steinmann is cautious as far as the exact dating of the drawings is concerned. In my opinion, since the horizontal section does not exactly compare with the vertical jamb mouldings, it is unlikely that it is a later addition to the plan, based on the elevation of the window on the same plan. Nor are the drawings sufficiently precise to be the result of exact modern measurements made when the tower was completed in the nineteenth century. Therefore, I believe that we have to interpret the horizontal section of the profiles as an auxiliary drawing, made at the same time as Plan F.

[16] See Rüdiger BECKSMANN, *Die architektonische Rahmung des hochgotischen Bildfensters. Untersuchungen zur hochgotischen Glasmalerei von 1250 bis 1350* (Forschungen zur Geschichte der Kunst am Oberrhein, 9/10), Berlin, 1967; Peter KURMANN, "'Architektur in Architektur': der gläserne Bauriß der Gotik", in *Himmelslicht. Europäische Glasmalerei im Jahrhundert des Kölner Dombaus (1249-1349)*, ed. Hiltrud WESTERMANN-ANGERHAUSEN (Exhibition-Catalogue, Schnütgen-Museum), Cologne, 1998, p. 35-43; see also Brigitte KURMANN-SCHWARZ, "L'architecture et le vitrail aux XIIe et XIVe siècles", in *Mémoires de Champagne*, ed. François GILET, vol. 3. (Actes du 4e mois médiéval), Langres, 2001, p. 183-204 ; Rüdiger BECKSMANN, "Architecture, sculptures et verrières de la Chapelle Sainte-Catherine de la cathédrale de Strasbourg: un ensemble artistique au seuil du gothique tardif", in *Bulletin de la cathédrale de Strasbourg*, 25, 2002, p. 113-134; Daniel PARELLO, "Zum Verhältnis von Architektur und Glasmalerei am Beispiel der Marburger Elisabethkirche", in *Ars*, 37, 2004, p. 19-39.

[17] See Jürgen MICHLER, *Die Elisabethkirche zu Marburg in ihrer ursprünglichen Farbigkeit* (Quellen und Studien zur Geschichte des Deutschen Ordens, 19), Marburg, 1984, p. 209-220.

[18] See also Hiltrud WESTERMANN-ANGERHAUSEN (ed.), *Schatz aus den Trümmern. Der Silberschrein von Nivelles und die europäische Hochgotik* (Exhibition-Catalogue, Schnütgen-Museum), Cologne,1995.

[19] See STEINMANN, *Die Westfassade*, p. 72-76.

[20] KURMANN, "'Architektur in Architektur'".

[21] See WESTERMANN-ANGERHAUSEN, *Himmelslicht*, p. 27, 28, nos. 43, 62.

[22] For the latter see Susanne FRIEDE, *Die Wahrnehmung des Wunderbaren. Der Roman d'Alexandre im Kontext der französischen Literatur des 12. Jahrhunderts* (Beihefte zur Zeitschrift für romanische Philologie, 317), Tübingen, 2003.

[23] Achim TIMMERMANN, "Architectural vision in Albrecht von Scharfenberg's "Jüngerer Titurel": a vision of architecture?", in *Architecture and Language. Constructing Identity in European Architecture c. 1000-c. 1650*, ed. Georgia CLARKE & Paul CROSSLEY, Cambridge, 2000, p. 58-71.

[24] Michaela KRIEGER, *Grisaille als Metapher. Zum Entstehen der* peinture en Camaieu *im frühen 14. Jahrhundert*, Wien, 1995.

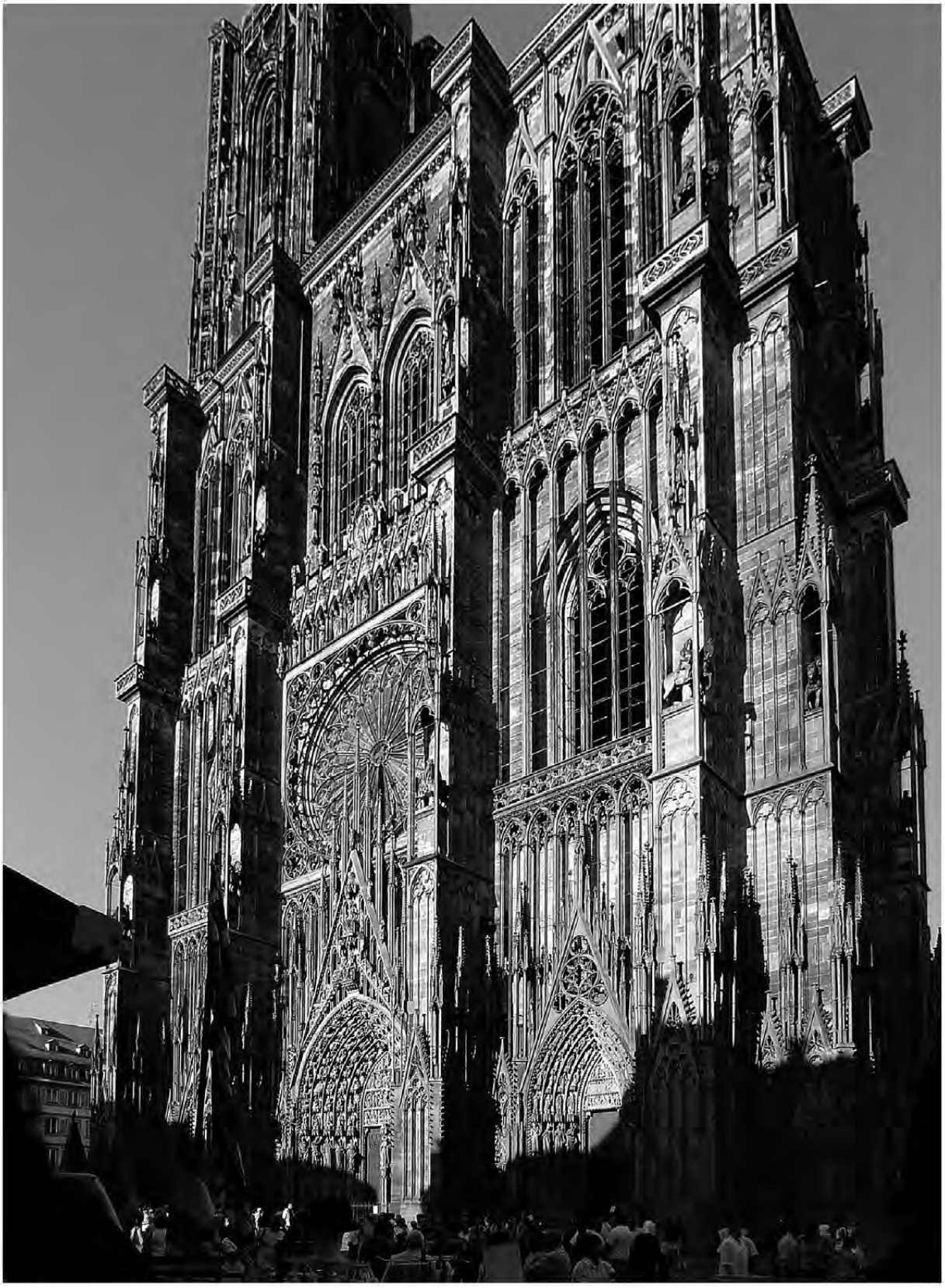


Fig. 1. Strasbourg Cathedral, west façade (Marc Carel Schurr).

The West Façade of Strasbourg Cathedral and its Impact on Gothic Architecture in Central Europe

Marc Carel Schurr

On May 25th 1277, the masons of the lodge at Strasbourg Cathedral began to build a new western façade (Fig. 1).[1] It was to replace the minster's old and venerable façade which had been erected under Bishop Werinher in the eleventh century.[2] The destruction of the old façade might have been considered a significant loss by the more conservative members of the chapter. It had not been initially intended when, around 1200, a reconstruction campaign began, starting with a new Late Romanesque choir,[3] followed by the well-known Gothic nave.[4] Only during the construction of the first bays of the new nave was the decision taken to rebuild the façade as well.[5] As several surviving drawings show,[6] the idea of building a new façade in a grand style must have become too tempting to resist. The new façade was begun immediately after the completion of the nave. It was meant to outdo any contemporary building within the boundaries of the Holy Roman Empire, including the fabulous choir of Cologne Cathedral, then under construction.[7]

Cologne borrowed its design principles from the most modern and prestigious buildings of the Paris area, and its vaults were to rank among the highest in Christendom. Already during the construction of the Gothic nave at Strasbourg –started in the early 1240s and thus just a few years before the choir of Cologne Cathedral[8] – a sense of competition had established itself between the lodges of Strasbourg and Cologne.[9] Both buildings followed the canon of the Rayonnant style as it had been established by the masters who rebuilt the abbey church of Saint-Denis during the 1230s.[10] Both Strasbourg and Cologne share a design which at the time was quite rare in the German speaking parts of the Empire. They feature a three-storey elevation in the nave, shafts rising from the floor to the high-vaults without any interruption, and a glazed triforium which is linked to the large clerestory windows by the framing shafts and wall-arches.

However, there are noticeable differences between the two cathedrals and, in many cases, the differences seem to be the result of directly opposing artistic choices. The evidence suggests that they were intended to establish a clearly noticeable distinction between the two workshops. Within the same artistic vocabulary of the most modern style of the day, each of the architects applied a different 'articulation'.[11] For instance, in Cologne Cathedral, the core of the main arcade pier is rounded whereas its counterpart in Strasbourg is cruciform. In Cologne, the profiles of the colonnettes and arches in the window tracery and in the triforium are rounded. In contrast, the master of the nave at Strasbourg employed a highly unusual chamfered profile for the corresponding elements in the aisle windows and in the triforium (Fig. 2). In Cologne, even the spandrels between the openings of the triforium are pierced, and the string course which separates the triforium from the upper windows is flat and unobtrusive, helping to create the optical impression of a fusion of the two storeys. As if they wanted to avoid copying Cologne Cathedral by all means, the masons in Strasbourg filled the spandrels between the openings of the triforium with beautifully sculpted animals and foliage (Fig. 2). Above the triforium, they placed an angular, strongly projecting cornice, which

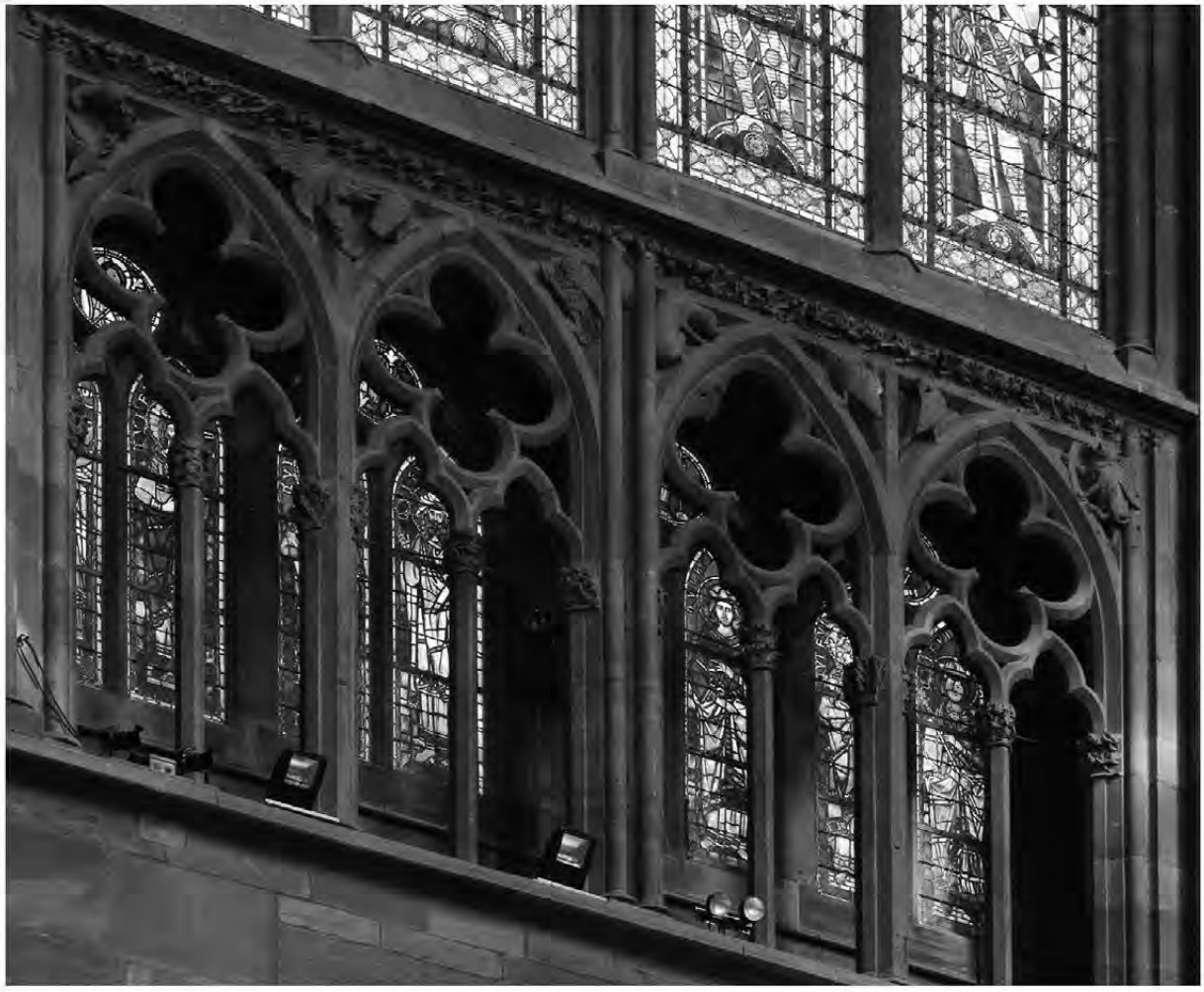


Fig. 2. Strasbourg Cathedral, triforium of the nave (Marc Carel Schurr).

interrupts all the columns running down from the clerestory tracery except the two framing shafts that support the wall-arch. But, as the general layouts as well as the lavishness of details in both places prove, the one thing both buildings had in common was their ambition. Evidently, in both cases, the architecture had to be highly representative and built in the most modern style.

This is remarkable, as it shows that perhaps for the first time in the history of architecture in the German speaking countries, innovation had become a highly desirable quality in itself, appropriately expressing the prestige of the institution and the patron who supported the building.

However original and sophisticated the ideas employed by the architect of the nave at Strasbourg might have been, there was one area where there was no possibility for him to outdo the competing lodge on the Lower Rhine: The dimensions and proportions of Strasbourg's nave were determined by the Romanesque eastern parts of the cathedral. In contrast, the master of Cologne Cathedral was free to build a structure that was as impressive in its dimensions as in its design. Still today, the interior of Cologne Cathedral never fails to deliver a stirring visual experience to each and every visitor.

Thus, it must have come as no surprise to see the Strasbourg workshop start a new, gigantic western façade immediately after the completion of the new

nave (Fig. 1).[12] With the project of a new west façade, there was finally a chance to match the most up-to-date style with the kind of towering dimensions intended for the choir of Cologne.

The main idea for the new façade was inspired by the great western façades of the French cathedrals, especially by that of Reims, begun some twenty years earlier and representing at the time the most modern version of this well-known type.[13] Like all its French models, the façade of Strasbourg Cathedral was to be equipped with three porches in the lower storey, opening into the nave and the aisles, a huge rose-window in the centre of the upper storey, and two towers above the lateral bays (Fig. 1). All of this is shown on the famous Plan B, the drawing on which the construction of the actual façade was based when work started in 1277.[14] Around 1300, after the completion of the lower storey, Plan B was slowly abandoned.[15] Nevertheless, the overall design was not changed until the 1350's when it was decided to build a belfry above the rose window by inserting an additional storey between the two towers which were nearly completed at that time.[16] As a result, the façade became a big, monumental block in the shape of an upright rectangle, combining a massive appearance with a strong vertical impulse. In fact, the new design amplified the verticality of the proportions which had already been inherent in each segment of the façade in both the upper and the lower storeys of Plan B.

This verticalism was probably inspired by the west façade of Reims Cathedral with its numerous gables and pinnacles and has always been looked upon as one of the main characteristics of the western façade at Strasbourg.[17] Apart from the general proportions and the upward-pointing details, the effect is largely due to the four monumental buttresses that separate the axes and support the vaults and the towers (Fig. 1). Not only do they cut through each of the horizontal elements, they also help to create the impression of an accelerating upward movement closely comparable to the breathtaking height of the interior of Cologne Cathedral.

However, its preference for vertical accents is not the only stylistic peculiarity of the cathedral's western façade. Another highly original feature is the diagonally planted pinnacles which seem to appear wherever space allowed it. Established as a leading architectural motif in the mid-thirteenth century when the transept façades of Notre-Dame in Paris were under construction,[18] the Strasbourg Master developed them into fragile, elongated structures, not without a trace of mannered exaggeration. One of their attenuated corners is turned outwards, catching the light and creating shadows, thereby optically reducing the three-dimensional bodies of the pinnacles to simple graphic lines. Between the rows of pinnacles, the walls as well as the buttresses of the façade are completely covered with panels of blind tracery. They are surmounted by gables which, together with the gables of the porches, form a kind of screen similar to the façades of Saint-Nicaise in Reims[19] and the transepts of Notre-Dame. Once more, the massiveness of the stonework is concealed, whereas the rising, graphic lines of the ornament are emphasized.

This kind of linearism, which tends to replace the inherent plasticity of the architecture by seemingly untouchable, immaterial lines that are articulated solely by the play of light and shadow, is another hallmark of the Strasbourg workshop in the decades before and after 1300. It is the same spirit that developed the idea of concealing the mural surfaces of the façade behind a veil of tracery which forms a second layer, separate from the wall (Figs 1 and 4). Not only does the free-standing tracery conceal the heavy masonry behind it, but the thin, often sharpened or even ogee shaped mouldings and the tiny details have a tendency to melt into a confusing haze of stone-made filigree.

Again, there are comparable stylistic tendencies to be found at Cologne Cathedral during the 1270s and 1280s. For example the exterior of the clerestory – begun around 1270[20] – is decorated with diagonally planted pinnacles, and the gables above the windows contain the same triradial propeller motifs which decorates the gables of the portal zones in Strasbourg. The interior of the sacristy of Cologne cathedral, dedicated in 1277,[21] consists of a central column which supports four vaulted bays. The ogee moulding of the ribs grows out of the central column and the responds on the walls, generating an elegant flow of lines from the floor up to the keystones, only interrupted by the capitals. At about the same time, the masons of the Cologne workshop began with the erection of the northern transept façade. Although the latter has

Fig. 3. Clermont-Ferrand Cathedral, clerestory of the choir (Marc Carel Schurr).

never been completed in the Middle Ages, and all that remained was cleared away in the nineteenth century, old drawings and photographs show that its buttresses featured the same general design as their Strasbourg counterparts: they both had diagonally planted pinnacles on the edges and blind tracery covering the masonry.[22]

Considering the close sequence of the dates, it is difficult to judge if the new features of the design were first used by the masons in Strasbourg or in Cologne. However, in Strasbourg more than in Cologne they seem to be part of a coherent system of aesthetic principles that might be called a style of its own. Besides, many of its key elements can be traced back to Strasbourg's Plan A which has to be dated to the 1250s and marks the beginning of the process of designing the new west façade.[23] And, whereas in Cologne after 1300 the stylistic tendency moved towards a more conservative approach, the lodge of Strasbourg not only stayed faithful to their style, they also continued to develop its peculiarities further. Altogether, this seems to indicate that Strasbourg preceded Cologne in this respect.[24]

The new style of the western façade at Strasbourg, which I would like to characterize by the terms "verticalism" and "linearism", is accompanied by a whole string of details that can all be traced back to a specific group of monuments. It is the second generation of important buildings in the Rayonnant style.[25] Its architects drew on the architectural masterworks of the 1230s and the 1240s in the Ile-de-France, especially the Sainte-Chapelle in Paris and the abbey church of Saint-Denis, but not in order simply to imitate these seminal buildings. Instead, they delivered a new interpretation of Rayonnant and created a style in its own right that might be called "second Rayonnant".[26] Its most important representatives are the cathedral of Clermont-Ferrand, which is essentially an updated version of the great church *à la* Saint-Denis, and the collegiate church of Saint-Urbain in Troyes, a new and more intimate version of the *cage vitrée*, so splendidly represented by the Sainte-Chapelle.[27] Both the cathedral of Clermont and Saint-Urbain were under construction when the planning for Strasbourg's façade entered the terminal stage: the first was begun in 1248, the latter in 1262.[28]

The two buildings share with Strasbourg's western façade a linear approach to architecture that finds its expression in the very thin, often sharpened profiles of shafts and columns, in the predilection for sharp-edged mouldings, in the delicacy of details, such as tracery or gables, and – last but not least – in the thin and flattened structure of the walls. The relationship becomes especially obvious if one compares the clerestory of Clermont-Ferrand to the free-floating tracery of the west façade at Strasbourg (Figs 3 and 4). Not only does the organization of the tracery follow the same pattern (each unit is tripartite instead of the usual division into two or four lancets, and a row of tiny gables marks the transition of the storeys), even the slender, elegant mouldings of the tracery resemble each other. Nearly all the plasticity that the mullions possessed, for example, at Saint-Denis, has disap-

peared, seemingly reducing the mullions to lines drawn on the flat surface of the wall. And this is how the lateral strips of wall flanking the tracery in both monuments need to be understood: they form part of a tight membrane that serves as a drawing ground. That membrane may be glazed or not, it may even – as at Strasbourg – be hollowed out behind the free-standing tracery, leaving only thin lateral strips of the remaining membrane adjoining the projecting buttresses. These strips are an unobtrusive, but nevertheless clear sign of the close artistic relationship between Strasbourg and Clermont-Ferrand.

It has been argued for a long time that both the unusual tripartite tracery and the organization of the wall in two layers used by the architect of Strasbourg's west façade find analogies in the eastern parts of Saint-Urbain in Troyes.[29] In fact, the tripartite pattern of the openings at Strasbourg is probably inspired by the cathedral of Clermont-Ferrand. The free-standing tracery of the minster's façade, however, might indeed derive from Troyes. Nonetheless, the ultimate and probably most important precursor of the double-layered exterior of Saint-Urbain must have been the unfinished project of the double-layered tracery for the clerestorey at Metz Cathedral (Fig. 5).[30] This project, although never fully executed, was an integral part of the design in the late 1240s.[31] At the same time, the double-layered tracery of Metz Cathedral with its free-standing mullions would have had much more in common with Strasbourg's veil of tracery than with the rather simple version that can be found in Troyes. Thus, the idea of Strasbourg's double-layered façade might very well go back to the project at Metz (Figs 1 and 5).

Furthermore, there is a whole string of affinities between Metz and Strasbourg that reaches back as far as the construction of the nave of Strasbourg Cathedral. Among the numerous examples I will just name two highly original and quite rare details. First, the flying buttresses at Strasbourg and Metz are pierced with a circle containing a quatrefoil, just like those of Notre-Dame in Paris. And, perhaps even more amazingly, the tracery of the windows in the aisles looks very similar. Not only do these windows share the general disposition including the main design of the tracery, they even share the very unusual chamfered mullions and the equally rare use of capitals without abaci.

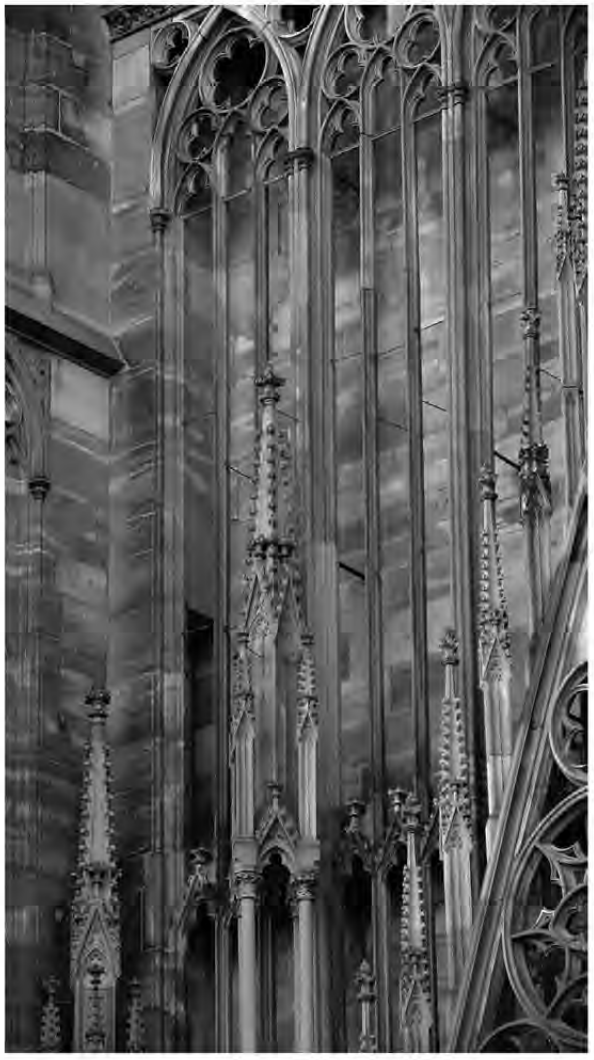


Fig. 4. Strasbourg Cathedral, tracery of the west façade, detail (Marc Carel Schurr).

Towards the end of the thirteenth century, the Strasbourg lodge had developed the motifs and principles inherited from the second generation of French Rayonnant buildings into a style all of its own. Its hallmarks were a preference for tripartite openings and an incredible richness of tracery designs which were constantly varied and combined to form ever new compositions, all in a simple and elegant architectural framework and characterized by the principles of verticalism and linearism. This style was to leave its mark on Gothic architecture in central Europe from around 1300 to after 1350, including Peter Parler's seminal work in Prague and Kolín.

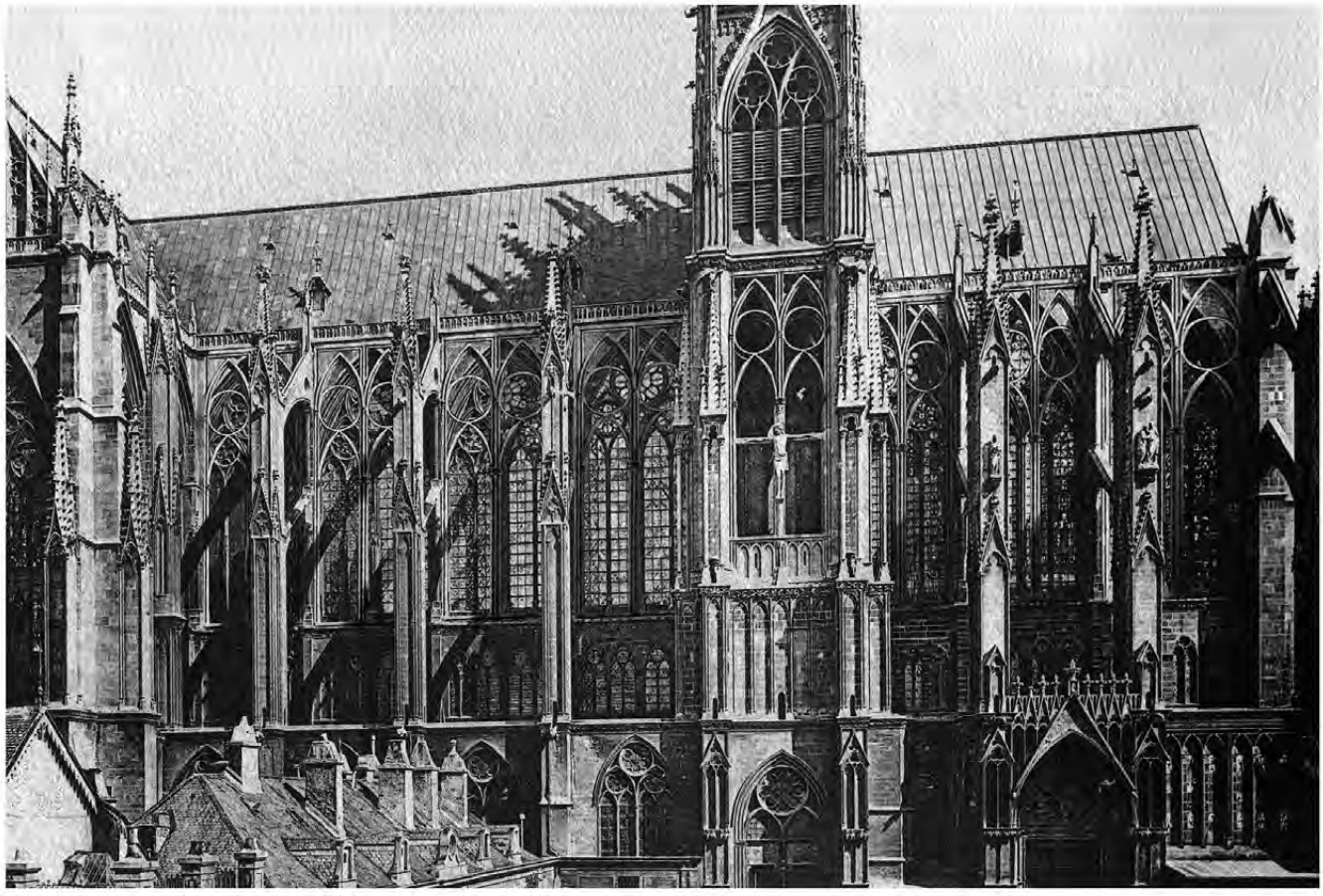


Fig. 5. Metz Cathedral, reconstruction of the double-layered tracery in the clerestory (photomontage, Marc Carel Schurr).

The head of the lodge of Strasbourg Cathedral at the time when this style was created is known by name: He was Master Erwin, first mentioned in 1284 and buried in 1318, who must have played an extremely important role, acting for more than 30 years both as an architect and as a director of the *fabrica*.[32]

He had at least one son who also became an architect. A memorial plaque which tells us the year of his death, 1330, is preserved near Strasbourg in the collegiate church of Niederhaslach, where Erwin's son was the architect responsible for the erection of the nave.[33] That nave, begun around 1310,[34] pushes the style of Strasbourg's west façade to its extremes. The piers are simple, sharp-edged rectangular prisms which are planted diagonally like the pinnacles of the cathedral's façade, and also like the base of the piers in the nave (Fig. 6). Thus, Niederhaslach's piers might be considered as a highly abstract version of the cathedral's piers in the linear style of its façade. This observation is confirmed by the ogee-shaped shafts that are sculpted out of the prismatic pier above the arcades. They reveal the true compound nature of the pier that was only disguised by the flat surfaces of the prismatic body in the lower storey. In the clerestory, the pear-shaped shafts and the rib mouldings are of identical profile and merge into each other without capitals, allowing an uninhibited flow of the elegant, slender lines of the architecture. As in Clermont-Ferrand, the wall is a flat, tight membrane. Openings, such as windows and arcades, seem to be inserted with the cut of a razor blade, an impression that is reinforced by the concave, chamfered jambs and archivolts. Concave surfaces can be found on the bases of Niederhaslach's piers (Fig. 6). They are just another way to underline the thinness of the parchment-like wall and to accentuate the graphic quality of the architecture. This design is complemented by the extremely thin and sharp-edged mould-

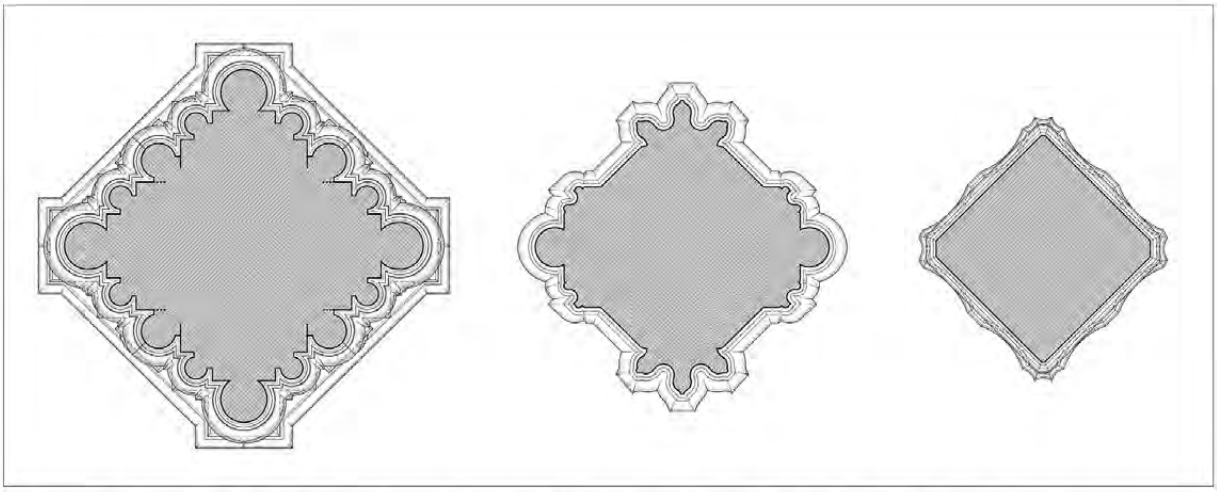


Fig. 6. Strasbourg Cathedral; Heiligenkreuz, Cistercian Abbey Church; Niederhaslach, church of St Florent; cross-sections of the piers (Katarina Papajanni).

ings of the tracery and mullions, the latter being continued over the blind, lower part of the windows. They are faintly suggestive of a triforium. But the presence of a central storey is reduced to the minimum, thus demonstrating a degree of abstraction from its obvious model (the nave of Strasbourg Cathedral) which is comparable to the treatment of the piers.

Niederhaslach is an architectural masterpiece that may be considered the purest representation of the linear style developed by the Strasbourg lodge around 1300. As late as 1360, Peter Parler drew his inspiration from Niederhaslach when he had to deliver a reduced, equally abstract version of Prague Cathedral in Kolín.[35]

Nevertheless, many of the elements that were brought together to create the magnificent architecture of Niederhaslach had been developed some time before, as is shown by a group of earlier buildings that were all heavily influenced by Strasbourg's west façade, if not even designed by masters who originated from the Strasbourg lodge.[36]

For instance, the prismatic piers, the concave jambs and the suggested triforium can equally be found in the Cistercian church of Salem, under construction from 1280 until 1314.[37] In Salem the pear-shaped shafts have the same moulding as the ribs of the vaults. The vaulting system consisting of pear-shaped shafts and ribs without capitals had been adopted for the first time in the choir of the Dominican church in Colmar, built with the support of King Rudolph of Habsburg and finished in 1290.[38] Finally, the use of ogee-shaped shafts and ribs merging into each other without capitals was to become one of the hallmarks of central European Late Gothic architecture. For example, Peter Parler used them to great effect in the Wenceslas Chapel at Prague where he created an aesthetic that is clearly different from the rest of the cathedral.[39]

Perhaps the patronage of King Rudolph was responsible for the stylistic links between Strasbourg and lower Austria, and the communications network of the Cistercian Order may also have had its share in this process. Certainly, the hall-choir of the church of Heiligenkreuz near Vienna, consecrated in 1295,[40] shows some stunning stylistic parallels to the buildings in the Upper Rhine area. For example, the tripartite tracery windows with extremely thin mullions are comparable to Strasbourg. Furthermore, the tracery windows at Heiligenkreuz are composed of three circles filled with foils that generate an ogee arch on top of the middle segment. Obviously, this design was inspired by the windows in the apse and the transept of Saint-Urbain in Troyes. But the idea must have come to Heiligenkreuz through the intermediary of the Upper-Rhine area,[41] as the windows in the choir of the church of Our Lady in Rouffach clearly demonstrate. They were executed between 1270 and 1280,[42]

and with the sharp-edged mouldings and the pronounced ogee-arch in the central part of their tracery they represent the immediate forerunners of the windows at Heiligenkreuz. The architect of the Austrian church adopted the basic design from Rouffach and modified it by adding multiple cusps, a feature that can be found at Salem or on the inner wall of the west façade of Strasbourg Cathedral.

Moreover, the design of the piers of the Austrian abbey church shows parallels with Strasbourg Cathedral and with buildings in the Upper Rhine area. As at Colmar and at Salem, the profiles of the shafts and responds at Heiligenkreuz are ogee-shaped and correspond perfectly to the rib-mouldings of the vaults. The simple, undecorated capitals that adopt the profile of the shafts closely resemble their counterparts in Salem. The piers themselves are bold prisms, very much like the piers of Niederhaslach (Fig. 6). A closer look at the cross-section of one of the piers in Heiligenkreuz reveals that, just like their counterparts in Niederhaslach, they were conceived as a reduction of the piers in the nave of Strasbourg Cathedral. Although they look quite different, they are all constructed around a cruciform core. The main difference is that while at Heiligenkreuz and at Niederhaslach the core is completely hidden, at Strasbourg the core is clearly marked by the rectangular responds of the shafts. A comparison of the cross-section of the pier at Heiligenkreuz with the plan of the base of the piers at Strasbourg shows that the main idea was already contained in the design of the diagonally planted base of the Strasbourg pier (Fig. 6). In Niederhaslach, Erwin's son followed the same principle, but he took the formal reduction even further by eliminating the last remnants of the cruciform core and by concealing not only the lateral shafts behind the prismatic shape of the pier, but also those that carry the arcades and the transverse arches (Fig. 6).

The elegant linearism of Strasbourg's west façade was not the only aspect of the design that was to have an enormous impact on the stylistic development of the first half of the fourteenth century in central Europe. Even small details of decoration were adopted and applied to new settings. A typical example would be the motif that was used in Strasbourg to cover the faces of the monumental buttresses of the façade, consisting of a blind tracery panel flanked by two diagonally planted pinnacles and topped by a tracery-filled gable. It reappeared as an almost literal quotation on a whole string of façades, reaching all over the German speaking countries and as far as Erfurt or Magdeburg. The most amazing transformation of this motif happened in Freiburg im Breisgau, where the Gothic "*serliana*" of diagonally planted pinnacles, flanking a tracery pattern and crowned by a gable was monumentalised and became the design principle of the ingeniously drafted octagon of the minster's imposing western tower.[43]

Nearly one hundred years later, Peter Parler repeated the Strasbourg design on the buttresses of the south transept façade of St Vitus Cathedral in Prague, facing the emperor's palace. It is here that one of the greatest architects of his times paid tribute to the lodge that more than any other paved the way for late Gothic architecture in central Europe, namely that of Strasbourg Cathedral.

NOTES

[1] For the much discussed history of construction see Reinhard WORTMANN, "Der Westbau des Straßburger Münsters und Meister Erwin", in *Bonner Jahrbuch*, 169, 1969, p. 290-318; Hans REINHARDT, *La cathédrale de Strasbourg*, Paris, 1972; Roland RECHT, *L'Alsace gothique de 1300 à 1365*, Colmar, 1974, p. 27-80; Reinhard LIESS, "Der Riß C der Straßburger Münsterfassade. J. J. Arhardts Nürnberger Kopie eines Originalrisses Erwins von Steinbach", in *Wallraf-Richartz-Jahrbuch*, 46/47, 1985/86, p. 75-117; Reinhard LIESS, "Der Riß A1 der Straßburger Münsterfassade im Kontinuum der Entwürfe Magister Erwins", in *Kunsthistorisches Jahrbuch Graz*, 1986, p. 47-121; Reinhard LIESS, "Der Riß B der Straßburger Münsterfassade. Eine baugeschichtliche Revision", in *Orient und Okzident im Spiegel der Kunst* (Festschrift für Heinrich Gerhard Franz), Graz, 1986, p. 171-202, Reinhard LIESS, "Das Kreßberger Fragment im Hauptstaatsarchiv Stuttgart. Ein Gesamtentwurf der Straßburger Münsterfassade aus der Erwinzeit", in *Jahrbuch der Staatlichen Kunstsammlungen in Baden-Württemberg*, 1986, p. 6-31; Reinhard WORTMANN, "Noch einmal Straßburg-West", in *Architectura*, 27, 1997, p. 129-172; Reinhard LIESS, "Zur Entwurfseinheit der Portale der Straßburger Westfassade: Skulptur und Architektur", in *Bulletin de la Cathédrale de Strasbourg*, 24, 2000, p. 23-120; Reinhard LIESS, "Eine Beobachtung am Sockel der Straßburger Westfassade", in *Bulletin de la Cathédrale de Strasbourg*, 25, 2002, p. 213-215.

[2] Jean-Philippe MEYER, *La cathédrale de Strasbourg. La cathédrale romane (1015-vers 1180)*, Strasbourg, 1998.

[3] *Ibidem*, and Jean-Philippe MEYER, "Le chœur depuis l'époque romane jusqu'à la construction du jubé (1015-vers 1260)", in *La cathédrale: histoires de chœur. Le chœur de la cathédrale de Strasbourg du Moyen Âge à nos jours* (Exhibition Catalogue, Archives de la Ville et de la Communauté Urbaine de Strasbourg), Strasbourg, 2004, p. 9-16.

[4] See Louis GRODECKI & Roland RECHT, "Le bras sud du transept de la cathédrale: architecture et sculpture", in *Bulletin Monumental*, 129, 1971, p. 7-38; Anne PRACHE, "La nef de la cathédrale de Strasbourg et l'architecture rayonnante en Champagne", in *Bulletin de la société des amis de la cathédrale de Strasbourg*, 1982, p. 99-103; Victor BEYER, Christiane WILD-BLOCK & Fridtjof ZSCHOKKE, in collaboration with Claudine LAUTIER, *Les vitraux de la cathédrale Notre-Dame de Strasbourg* (CVMA France 9-1, Département du Bas-Rhin 1), Paris, 1986; Brigitte KURMANN-SCHWARZ, review of Victor BEYER & al., "Les vitraux de la cathédrale Notre-Dame de Strasbourg", in *Bulletin Monumental*, 1989, p. 195-200; Yves GALLET, "La nef de la cathédrale de Strasbourg, sa date et sa place dans l'architecture gothique rayonnante", in *Bulletin de la cathédrale de Strasbourg*, 25, 2002, p. 49-82; Jean WIRTH, "La chronologie de la nef et du jubé de la cathédrale de Strasbourg", in *Bulletin de la cathédrale de Strasbourg*, 27, 2006, p. 129-146; Marc Carel SCHURR, *Gotische Architektur im mittleren Europa 1220-1340. Von Metz bis Wien*, Munich & Berlin, 2007, p. 88-97.

[5] Hans REINHARDT, "La nef de la cathédrale de Strasbourg", in *Bulletin de la Société des Amis de la Cathédrale de Strasbourg*, 1937, p. 3-28.

[6] Now in the collection of the Fondation de l'Oeuvre Notre-Dame in Strasbourg. See Roland RECHT (ed.), *Les batisseurs des cathédrales gothiques*, Strasbourg, 1989; see also the numerous articles by LIESS as mentioned in n. 1.

[7] Arnold WOLFF, "Chronologie der ersten Bauzeit des Kölner Domes 1248-1277", in *Kölner Domblatt*, 28/29, 1968, p. 7-230.

[8] WOLFF, "Chronologie der ersten Bauzeit"; SCHURR, *Gotische Architektur*, p. 96-97.

[9] SCHURR, *Gotische Architektur*, p. 93-96.

[10] See Robert BRANNER, *St. Louis and the Court Style in Gothic Architecture*, London, 1965; Caroline BRUZELIUS, *The 13th-Century Church at St.-Denis*, New Haven & London, 1985; Dieter KIMPEL & Robert SUCKALE, *Die gotische Architektur in Frankreich 1130-1270*, Munich, 1985, p. 376-393.

[11] The term 'articulation' is borrowed from Marc Carel SCHURR, *Die Baukunst Peter Parlers*, Ostfildern, 2003, p. 127-133.

[12] SCHURR, *Gotische Architektur*, p. 209-219.

[13] Hans REINHARDT, *La cathédrale de Reims*, Paris, 1963; Peter KURMANN, *La façade de la cathédrale de Reims. Architecture et sculpture des portails. Étude archéologique et stylistique*, 2 vols, Paris and Lausanne, 1987; Richard HAMANN-MACLEAN & Ise SCHÜSSLER, *Die Kathedrale von Reims*, vol. 1: Die Architektur, Stuttgart, 1993; Patrick DEMOUY, *Reims: la cathédrale* (Le ciel et la Pierre, 3), Saint-Léger-Vauban, 2000.

[14] RECHT, *L'Alsace gothique*, p. 27-54.

[15] *Ibidem*.

[16] RECHT, *L'Alsace gothique*, p. 69-80.

[17] See the brilliant descriptions by Georg DEHIO, *Das Straßburger Münster*, Munich 1921; and Paul FRANKL & Paul CROSSLEY, *Gothic Architecture*, New Haven & London, 2000, p. 171-173.

[18] See Dieter KIMPEL, *Die Querhausarme von Notre-Dame zu Paris und ihre Skulpturen*, Bonn, 1971; KIMPEL & SUCKALE, *Gotische Architektur in Frankreich*, p. 410-421; Caroline BRUZELIUS, "The Construction of Notre-Dame in Paris", in *Art Bulletin*, 69, 1988, p. 540-569; Alain ERLANDE-BRANDENBURG, *Notre-Dame de Paris*, Paris, 1997.

[19] On Saint-Nicaise see Charles GIVELET, *L'église et l'abbaye de Saint-Nicaise de Reims*, Reims, 1897; Maryse BIDEAULT & Claudine LAUTIER, "St-Nicaise de Reims, Chronologie et nouvelles remarques sur l'architecture", in *Bulletin Monumental*, 135, 1977, p. 295-330; KIMPEL & SUCKALE, *Gotische Architektur in Frankreich*, p. 345-347

[20] On the dating see WOLFF, "Chronologie der ersten Bauzeit", p. 211-230; Maren LÜPNITZ, "Der mittelalterliche Ringanker in den Chorobergadenfenstern des Kölner Domes", in *Kölner Domblatt*, 62, 1997, p. 64-84.

[21] WOLFF, "Chronologie der ersten Bauzeit", p. 211-230.

[22] See Fig. 266 in Marc STEINMANN, *Die Westfassade des Kölner Domes. Der mittelalterliche Fassadenplan F* (Forschungen zum Kölner Dom, 1), Cologne, 2003.

[23] WORTMANN, "Westbau des Straßburger Münsters", p. 290-300; LIESS, "Der Riß A1"; WORTMANN, "Noch einmal Straßburg-West", p. 129-139; SCHURR, *Gotische Architektur*, p. 227-229.

[24] SCHURR, *Gotische Architektur*, p. 79-87, 113-118, 209-219, 244-245. A different view was expressed by STEINMANN, *Fassadenplan F*. See also the review by Marc Carel SCHURR (*Kunstchronik*, 58, 2005, p. 105-108).

[25] For an overview of the architecture of this period see Lisa SCHÜRENBERG, *Die kirchliche Baukunst in Frankreich zwischen 1270 und 1380*, Berlin, 1934.

[26] SCHURR, *Gotische Architektur*, p. 211-214.

[27] For Clermont-Ferrand see Michael T. DAVIS, "The choir of the cathedral of Clermont-Ferrand: The beginning of construction and the work of Jean Deschamps", in *The Journal of the Society of Architectural Historians*, 40, 1981, p. 181-202; Christian FREIGANG, "Jean Deschamps et le midi", in *Bulletin Monumental*, 149, 1991, p. 265-298; Christian FREIGANG, Imitare ecclesias nobiles. *Die Kathedralen von Narbonne, Toulouse und Rodez und die nordfranzösische Rayonnantgotik im Languedoc*, Worms, 1992, p. 191-202. For Saint-Urbain see Francis SALET, "Saint-Urbain de Troyes", in *Congrès Archéologique de France*, 113, 1955, p. 96-122; Michael T. DAVIS, "On the threshold of the Flamboyant: the second campaign of construction of Saint-Urbain, Troyes", in *Speculum*, 59, 1984, p. 847-884; Caroline BRUZELIUS, "The second campaign at St.-Urbain at Troyes", in *Speculum*, 62, 1987, p. 635-640; Michael T. Davis, "Scenes from a design: The Plan of Saint-Urbain, Troyes", in *Avista Forum*, 10, 1996/97, p. 15-21; Michael T. DAVIS & Linda E. NEAGLEY, "Mechanics and Meaning: Plan Design at Saint-Urbain, Troyes and Saint-Ouen, Rouen", in *Gesta*, 39, 2000, p. 161-182; Christine ONNEN, *Saint-Urbain in Troyes. Idee und Gestalt einer päpstlichen Stiftung* (Kieler Kunsthistorische Schriften, new series, 4), Kiel, 2004.

[28] ONNEN, *Saint-Urbain*, p. 25-30.

[29] Already in the nineteenth century this was pointed out by Friedrich ADLER, *Das Straßburger Münster* (Deutsche Bauzeitung 1870), Berlin, 1870, p. 418.

[30] For the history of construction and the project of the "*réseau dédoublé*" see Jean VALLERY-RADOT, "La cathédrale de Metz. Description archéologique", in *La cathédrale de Metz*, ed. Marcel AUBERT, Paris, 1931, p. 103-199; Christoph BRACHMANN, *Gotische Architektur in Metz unter Bischof Jacques de Lorraine (1239-1260): Der Neubau der Kathedrale und seine Folgen*, Berlin, 1998, p. 48-54; Alain VILLES, "Remarques sur les campagnes de construction de la cathédrale de Metz au XIII[e] siècle", in *Bulletin Monumental*, 162, 2004, p. 243-272.

[31] VILLES, "Remarques", p. 247-248, 255-266; SCHURR, *Gotische Architektur*, p. 72-73, 216.

[32] Hans REINHARDT, "Les textes relatifs à l'histoire de la cathédrale de Strasbourg depuis les origines jusqu'à l'année 1522", in *Bulletin de la Société des Amis de la Cathédrale de Strasbourg*, 7, 1960, p. 17; Marie-Jeanne GEYER, "Le mythe d'Erwin von Steinbach", in RECHT, *Les bâtisseurs des cathédrales gothiques*, p. 322-329; Andrea KÖPKE & Reinhard LIESS, "Zur ehemaligen Erwin-Inschrift von 1277 an der Westfassade des Straßburger Münsters", in *Zeitschrift für Geschichte des Oberrheins*, 137/new series 98, 1989, p. 105-173; SCHURR, *Gotische Architektur*, p. 216-219.

[33] Hans REINHARDT, "Le fils d'Erwin à Niederhaslach", in *Cahiers alsaciens d'Archéologie, d'Art et d'Histoire*, 8, 1964, p. 127-130; RECHT, *L'Alsace gothique*, p. 234-235.

[34] RECHT, *L'Alsace gothique*, p. 155-168; Peter KURMANN, "La nef de l'église Saint-Florent", in *Congrès Archéologique de France*, 2006, p. 79-89; SCHURR, *Gotische Architektur*, p. 233-235.

[35] SCHURR, *Die Baukunst Peter Parlers*, p. 89-95, 113-115 ; Jiří KUTHAN, "Zu Parlers Chor der St. Bartholomäuskirche in Kolín an der Elbe", in *Parlerbauten. Architektur, Skulptur, Restaurierung* (Landesdenkmalamt Baden-Württemberg, Arbeitsheft 13), Stuttgart, 2004, p. 141-148.

[36] SCHURR, *Gotische Architektur*, p. 220-246.

[37] Jürgen MICHLER, "Neue Funde. Dendrochronologische Datierung des Salemer Münsters", in *Kunstchronik*, 38 1985, p. 225-228; Ulrich KNAPP, *Salem. Die Gebäude der ehemaligen Zisterzienserabtei und ihre Ausstattung* (Forschungen und Berichte der Bau- und Kunstdenkmalpflege in Baden-Württemberg, 11), Stuttgart, 2004; SCHURR, *Gotische Architektur*, p. 228-233.

[38] RECHT, *L'Alsace gothique*, p. 127-134; Roland RECHT, "L'ancienne église des dominicains à Colmar", in *Congrès Archéologique de France*, 136, 1978, p. 9-24.

[39] SCHURR, *Die Baukunst Peter Parlers*, p. 108-115, 127-133; FRANKL & CROSSLEY, *Gothic Architecture*, p. 200-209.

[40] See Dagobert FREY, *Die Denkmale des Stiftes Heiligenkreuz* (Österreichische Kunsttopographie, 19), Wien, 1926; Sibylle HAUSER-SEUTTER, "Heiligenkreuz und seine Stifter. Zur Datierung der Bauten in Heiligenkreuz", in *Mitteilung der Gesellschaft für vergleichende Kunstforschung in Wien*, 44, 1992, p. 2-9; SCHURR, *Gotische Architektur*, p. 256-262; Markus THOME, *Kirche und Klosteranlage der Zisterzienserabtei Heiligenkreuz. Die Bauteile des 12. und 13. Jahrhunderts*, Petersberg 2007.

[41] On the role of the Upper-Rhine area in the development of the ogee-arch see Paul CROSSLEY, "Salem and the Ogee Arch", in *Architektur und Monumentalskulptur des 12. – 14. Jahrhunderts*, ed. Stephan GASSER, Christian FREIGANG & Bruno BOERNER (Festschrift Peter Kurmann), Bern a.o. 2006, p. 321-342.

[42] See Dieter GRAF, *Die Baugeschichte der Marienkirche zu Rufach*, Freiburg i.Br., 1964; RECHT, *L'Alsace gothique*, p. 80-85; Hans REINHARDT, "Notre-Dame de Rouffach", in *Congrès Archéologique de France*, 136, 1978, p. 239-248; Rüdiger BECKSMANN, "Elsässische Scheiben des späten 13. Jahrhunderts auf Burg Kreuzenstein. Ein Beitrag zur Rekonstruktion der Chorverglasung der Rufacher Marienkirche", in *Österreichische Zeitschrift für Kunst und Denkmalpflege* (Festschrift Eva Frodl-Kraft), 40, 1986, p. 143-152.

[43] For the history of construction of the western tower of Freiburg Minster see Werner NOACK, "Der Freiburger Münsterturm", in *Oberrheinische Heimat*, 28, 1941, p. 226-247; Dieter MORSCH, *Die Portalhalle im Freiburger Münsterturm*, Münster, 2001; Thomas FLUM, "Zur Baugeschichte des Freiburger Münsterturms", in *Umění*, 49, 2001, p. 256-261; Wilhelm SCHLINK, "Les rapports entre Fribourg et Strasbourg dans le domaine de l'architecture gothique", in *Bulletin de la Cathédrale de Strasbourg*, 25, 2002, p. 148-150.

Stacking and "Octature" in the Geometry of Cologne Plan F

Robert Bork

The spectacular drawing known today as Cologne Plan F ranks among the most visionary products of the medieval architectural imagination.[1] It presents a superbly detailed elevation of Cologne Cathedral's west façade, complete with twin openwork spires 150 metres high (Fig. 1, left).[2] The draftsman who created Plan F in the years around 1300 must have understood that this magnificent vision would not be realized in his lifetime. Even so, he might have been surprised by the changing fortunes of his masterwork. In the late Gothic era, construction of the façade proceeded very slowly, even by medieval standards, in part because acrimonious relations between Cologne's bishops and the citizenry undercut popular enthusiasm for the cathedral project.[3] When work on the cathedral halted in the sixteenth century, therefore, only the lower storeys of its south tower had been completed. Plan F impressed the seventeenth-century Cologne Jesuit Hermann Crombach, who published an engraving of the foreseen façade in 1654, but the original medieval drawing was divided into halves that were lost during the Napoleonic wars. Their rediscovery early in the nineteenth century dramatically affected the history of the German Neo-Gothic movement, setting the stage for the resumption of work on the cathedral in 1842. Upon their completion in 1880, the twin spires of the Cologne façade were the tallest structures in the world, and they still dominate the local skyline today, roughly seven centuries after the creation of Plan F.[4]

Because of its importance for both medieval and modern builders, Cologne Plan F occupies a fairly prominent place in the scholarly literature of architectural history, but the first detailed monograph on the drawing appeared only in 2003, and many significant questions about the dating and character of the drawing remain controversial even now. Most attempts to date Plan F have involved formal comparisons between its details and the motifs seen in more securely dated specimens of Gothic design. These comparisons suggest that Plan F was drawn in the decades around 1300, but greater precision than that has proven difficult to achieve. Among the most important comparanda for Plan F are the drawing known as Strasbourg Plan B, whose lower half, at least, has been fairly unanimously dated to the years around 1275, and the openwork spire of the minster in Freiburg im Breisgau, completed probably in the first third of the fourteenth century. Marc Steinmann, author of the 2003 monograph on Plan F, argues that the Cologne drawing could have been drawn as early as 1280, immediately after the creation of Strasbourg Plan B. Most previous authors, by contrast, have dated Plan F to the first quarter of the fourteenth century, arguing that several decades must have passed between the conception of the brilliantly innovative Plan B and the full assimilation of its lessons in the more rigorously composed Plan F, which seems almost academic by comparison. Such interpretations, of course, have a strongly subjective component, and they are unlikely, by themselves, to compel consensus about the relative dating of the two drawings. Similar uncertainties have obscured the relationship between the Cologne and Freiburg spire designs, as well. Even Steinmann, armed with his proposed early dating for Plan F, stops short of claiming priority for the Cologne workshop in the invention of

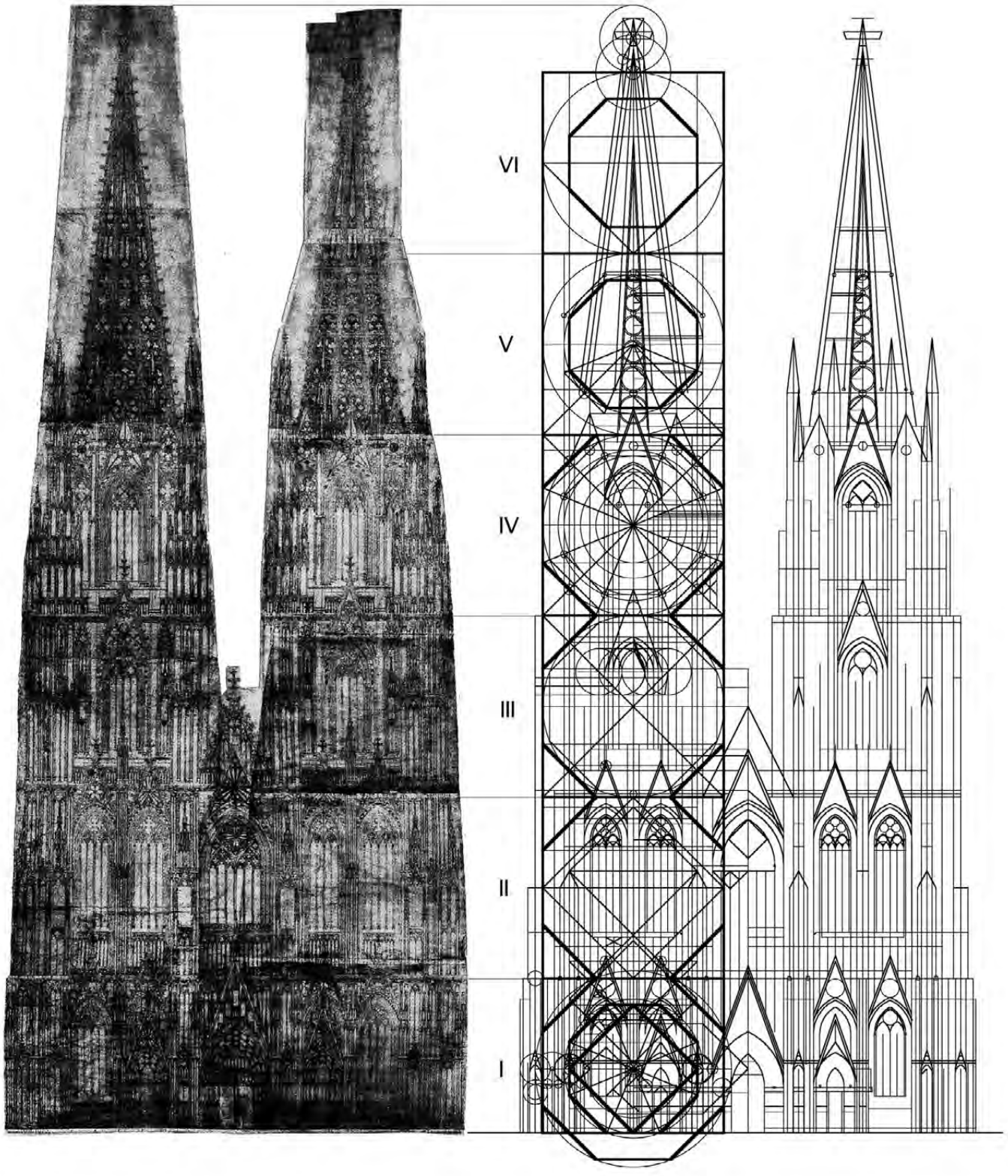


Fig. 1. Cologne Plan F, at left, with its geometrical armature and basic outline shown at right. Note how seams between parchment pieces line up with octagonal modules in armature (Photo Kölner Domarchiv, drawing Robert Bork).

the openwork spire type, admitting that this progressive idea must have been adopted at roughly the same time in Freiburg. More generally, however, there was clearly an active and rapid exchange of architectural ideas between Strasbourg, Cologne, and Freiburg in the final quarter of the thirteenth century, resulting in the creation of dramatic new forms, such as the openwork spire, by around 1300.[5]

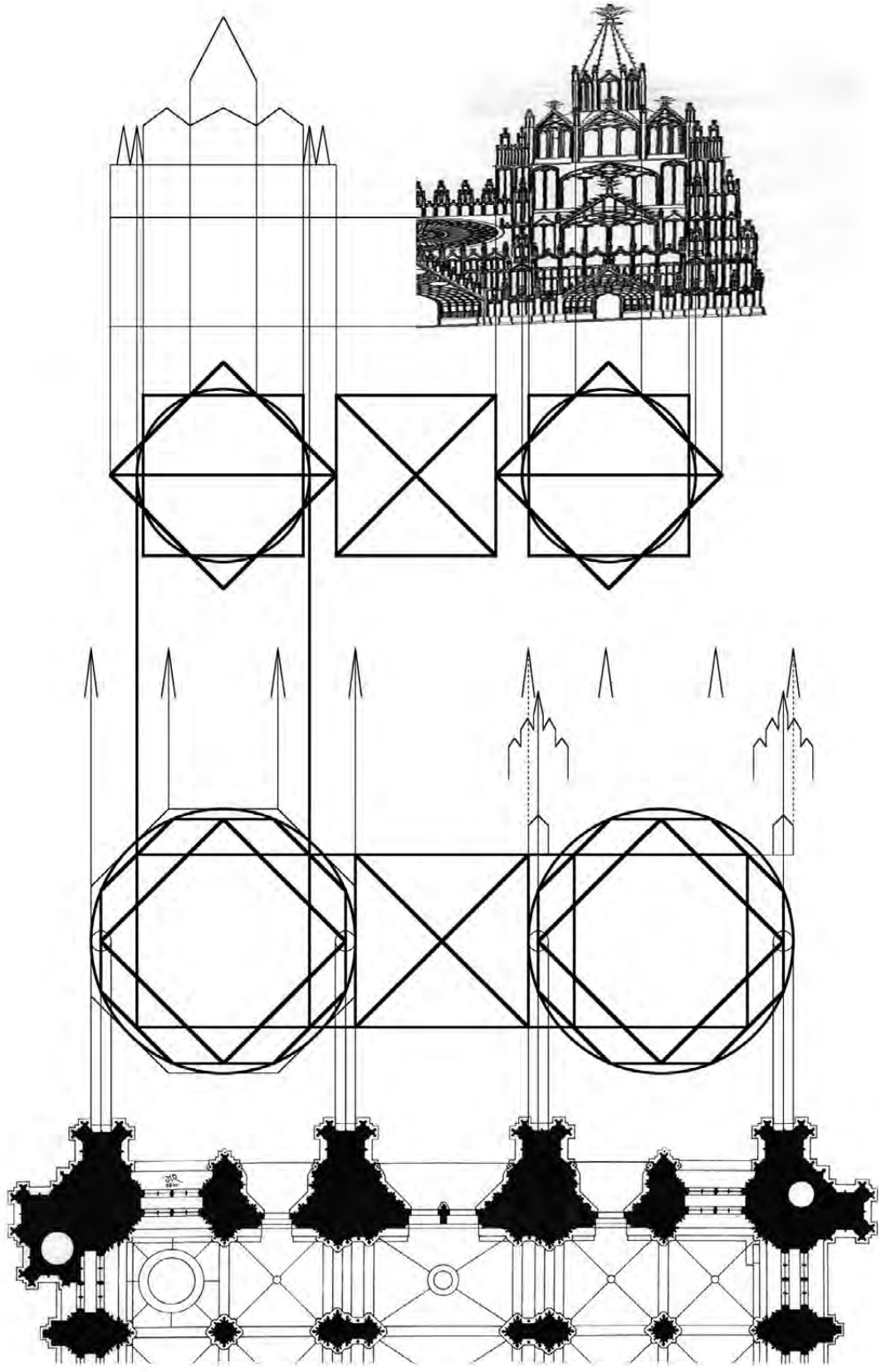
The present essay considers Cologne Plan F from a new perspective, using geometrical rather than purely formal analysis to clarify both its inherent logic and its relationship to other roughly contemporary projects. In recent decades, the rise of Computer Aided Design (CAD) systems has allowed researchers to investigate the geometry of Gothic buildings with new rigour.[6] Such software can also facilitate the analysis of Gothic drawings such as Plan F. Drawings, in fact, are ideal subjects for geometrical study. Their proportions are those intended by the designers, uncompromised by errors and distortions introduced in the construction process. These proportions, moreover, can be measured far more easily than those of a full-scale building. Drawings also include compass pricks, uninked construction lines, and other tell-tale traces of the creative process, giving modern researchers a surprisingly intimate perspective on the draftsmen's working methods. For these reasons, the computer-aided geometrical study of Gothic architectural drawings has great potential.[7]

Close analysis of Cologne Plan F reveals that a geometrical armature of stacked octagons governs the proportions of the drawing. More specifically, each tower of the foreseen façade corresponds to a stack of six large octagons, with the spire tip protruding slightly above this stack, as figure 1 shows. The striking regularity of this basic geometrical matrix, like the uniform articulation of the details in the drawing, attests to the cohesive planning of the façade. It also demonstrates clearly that Gothic design could be precise and rigorous, thereby providing a strong antidote to the many hostile accounts written since the Renaissance equating Gothic design with caprice and chaos.[8]

The geometrical armature of Plan F governs not only the drawing's overall proportions, but also its detailing. The relationships between the armature and the details, in fact, help to clarify the nature of the Gothic design process. The tracery patterns on the buttresses of Plan F, for example, relate closely to the geometrical armature, while the tracery patterns on the windows do not. This makes good sense, because the location and scale of the structurally important buttresses need to be established before the format of the windows can be determined. The window arrangement, in other words, depends upon the buttress placement, while the buttress placement depends more directly on the geometry of the overall design, as the present essay will demonstrate.

This geometrical investigation of Plan F helps to explain not only the drawing's formal articulation, but also certain subtle deviations from its generally symmetrical layout. It will be shown, for example, that the trimming of the parchment around the right-hand spire into a vaguely wine-bottle-like shape actually reflects the layout of the construction lines used to generate the drawing. The smooth taper of the parchment around the left spire has no such internal logic. The parchment pieces of the right tower, moreover, each correspond to a single octagonal module, as figure 1 shows, while those on the left tower do not. Significantly, too, schematic horizontal sections of the south tower were sketched onto the verso sides of the third and fifth parchment pieces in the right tower, while no such preparatory drawings appear on the left.[9] These facts, together with the greater geometrical precision of the right tower, strongly suggest that the left side was produced rather mechanically as a copy of the right side.[10] The pattern of sutures joining the 20 surviving parchment pieces of the drawing corroborates this chronology of production, since the upper and left-hand sections appear to have been sutured onto the parchment square at lower right, which would have served as the draftsman's point of departure.[11]

Geometrical analysis, finally, can provide a new and valuable gloss on the relationship between the Cologne and Strasbourg cathedral workshops. In general terms, these two lodges played parallel roles, since they were the two principal conduits for the importation of advanced French Gothic ideas into the German world. Closer formal analysis reveals, however, that they drew on somewhat different precedents, which they developed in rather different directions. The members of



the Strasbourg façade workshop, especially from the 1270s onward, looked most directly to the flat calligraphic variant of Rayonnant Gothic seen in Parisian structures such as the Notre-Dame transept frontals. Taking this brittle style as their point of departure, they created an even more daring architecture featuring transparent screens of openwork filigree, as seen in Strasbourg Plan B. The members of Cologne workshop, meanwhile, more readily incorporated influences from the cathedrals of Reims and Amiens, eventually synthesizing their features into a new style of great plasticity and grandeur, in which richly crocketed opaque gables figured prominently. These contrasting heritages deserve note, because they provide clues about the origin of the unusual gable form seen over the central portal of both Strasbourg Cathedral and Cologne Plan F. This gable type, with vertical openwork articulation on the interior and pinnacles rather than crockets along the margin, depends on Strasbourg's traditions more than those of Cologne. In this instance, at least, influence was probably flowing from Strasbourg to Cologne. In more general terms, in fact, it makes sense to see Plan F as the Cologne workshop's rejoinder to the openwork innovations seen in Strasbourg. Such an interactive dynamic could help to explain the invention of the openwork spires seen in Plan F, which combine the laciness characteristic of the Strasbourg tradition with the solid gables and complex geometries of the Cologne workshop.[12] The creator of Plan F, therefore, must have had some familiarity with the recent work of the Strasbourg lodge.

Geometrical analysis shows that the creator of Plan F knew not only the formal vocabulary of the Strasbourg façade builders, but also their geometrical planning methods and units of measure. As the middle registers of figure 2 show, the ground plans implied by Strasbourg Plan B and Cologne Plan F resemble each other very closely. Both involve octagonal spire footprints, with the nave bay corresponding to a closely related square box between the towers. Significantly, too, the span between the buttress axes in plan F exceeds the equivalent dimension in Plan B by a $\sqrt{2}$ ratio.[13] This relationship appears explicitly in the centre left of figure 2, which is to scale. The vertical lines connecting the two schematic ground plans link the aisle axes of the Plan B scheme, above, with the sides of a square inscribed in the Plan F scheme immediately below. This square, and a rotated square of the same dimension, can be inscribed within a regular octagon whose outer faces correspond the to main buttress axes of Plan F. These proportions, in turn, agree perfectly with those of the present Cologne façade, as the verticals connecting the schematic to the detailed ground plan in the lowest section of figure 2 indicate.

In Cologne Plan F, as in Strasbourg Plan B, the relationship between octagons and their circumscribing circles played an important role in the planning process. The two plans incorporate this relationship in slightly different ways, but the analogies between them are nevertheless striking. In Plan B, the octagonal spire bases inscribe circles whose diameter spans the axes of the main tower buttresses. In Plan F, conversely, the octagonal spire bases circumscribe circles that, in their turn, circumscribe the previously discussed octagons spanning the main tower buttresses.[14] Thus, the outermost pinnacles in the octagonal corona around the spire base in Plan F stand slightly outboard of the large compound pinnacles terminating the main façade buttresses, as the centre right portion of figure 2 indicates. While the spire bases are a bit wider than the buttress axes in Plan F, and a bit narrower in Plan B, however, the key point is that the same basic set of nested circular and octagonal forms defines the geometry in both cases. The relationship between these nested forms deserves more attention than it has received to date in the scholarly literature on Gothic architecture, which

Fig. 2. Comparison of the geometries implied by Strasbourg Plan B, above, and Cologne Plan F, below. The top row shows the elevation of Plan B, compressed along the vertical axis, with a fully articulated version at right and a simplified schematic at left. The second row shows the how this elevation lines up with the ground plan implied by Plan B. The third row shows a schematic elevation of Cologne Plan F, demonstrating how the outermost pinnacles in the octagonal corona at the spire base stand slightly outboard of the large pinnacles rising from the principal buttresses. The fourth row shows the ground plan implied by Cologne Plan F, to the same scale as that of Plan B above. The bottom row shows the ground plan of the current Cologne façade, whose geometrical structure precisely matches that of Plan F (elaborated version of Plan B drawn by Gustave Klotz, ground plan of Cologne Cathedral drawn by Arnold Wolff).

tends to be dominated by discussion of square rotation and quadrature, without consideration of the octagonal and circular geometries that result naturally from the use of these techniques. Because these octagon-based figures govern the proportions in many Gothic designs, in fact, it makes sense to recognize what might be called "octature" as an important form-giving strategy in its own right. [15]

In both Plan F and Plan B, the narrow interval between the octagonal spire bases and their circumscribing circles corresponds to an important element of buttress articulation. In Strasbourg Plan B, this interval corresponds to the half width of the very slender needle-like pinnacles terminating the main buttresses at the level of the spire base. In the more amply proportioned Cologne Plan F, the equivalent interval corresponds to the half-width of the blind tracery panels articulating the front faces of the principal façade bases at ground level. These relationships are evident in the top and bottom halves of figure 2, respectively.

One slight difference between the Plan F and Plan B ground plans suggests that the creator of Plan F knew not only Plan B, but also the geometry of the actual Strasbourg facade. In Strasbourg Plan B, the square in the ground plan corresponding to the central nave space appears to be pinched by the sharp tips of the star octagons flanking it to either side. In Cologne Plan F, though, the small interval between each spire base and its circumscribing circle separates the central nave square from the sharp tips of the star octagons. A precisely analogous arrangement governs the ground plan of the current Strasbourg façade block, begun in 1277.[16] Both Plan F and the Strasbourg façade, in other words, incorporate the same slight permutation on the geometry of Plan B.

The elevation of Cologne Plan F, like its implied ground plan, owes a great deal to Strasbourg Plan B. As a companion article to the present one demonstrated, a stack of octagons corresponding to the footprint of the spire base governs the elevation of Plan B.[17] The geometrical armature of Cologne Plan F, already shown in figure 1, incorporates the same basic stacking principle, but with even greater consistency. In geometrical as well as formal terms, therefore, Plan F embodies a quasi-academic rigorization of design themes introduced in Plan B.

To see precisely how the geometrical construction of Plan F may have unfolded, it makes sense to begin by zooming in on the bottom section of the right-hand tower, which was almost certainly the first part to be drawn. Because of the complexity of Plan F, it is helpful to define some shorthand terms for dealing with the many elements in the drawing. As figure 1 indicates, there are six major octagonal modules in each tower of Plan F, which can be given the Roman numerals from I to VI, working upward. On figure 3, which provides a close-up view of octagon I in the right-hand tower, the points on the vertical axis are labeled with arabic numerals, arranged in a rising sequence with 0 as the ground line. On the horizontal axis, the most important structural elements are the three main buttresses of the right-hand tower, whose centrelines are here called A, B, and C. The buttresses on axes A and C, at the tower corners, are thicker than the intermediate buttress B. Thus, while the slender intermediate buttress at B has left and right margins called Bl and Br respectively, the major buttresses include not only inner buttress core margins, called Al, Ar, Cl, and Cr, but also outer buttress margins, called All, Arr, Cll, and Crr. The centrelines of the inner and outer aisle windows fall exactly halfway between these buttress margins. Thus, the centreline AB falls halfway between Arr and Bl, while BC falls halfway between Br and Cll. Other significant points on the horizontal axis are O, the building centreline, Or, the right-hand jamb of the central portal, D, the centre of tracery doublet on the west face of the salient buttress sticking south on the actual façade, and E, the pinnacle axis on that buttress furthest from the centreline O. The superficial complexity of Plan F belies the clarity of its underlying geometrical structure. It is surprisingly easy, in fact, to see how the creator of Plan F could have established the basic outlines of his design. He may have followed a slightly different sequence than the one outlined in the subsequent paragraphs, but he undoubtedly went through most of the steps proposed here. It is worth considering the likely order of operations, moreover, to demonstrate that a drawing as complex as Plan F could have resulted from the repeated application of simple geometrical operations. Figure 3 describes the geometry of the lower zones, with the geometrical armature directly superposed over the original drawing to show its excellent agreement with the work of the medieval draftsman.[18] Figures 4, 5, and 6 show the lower, middle, and upper portions of the drawing with

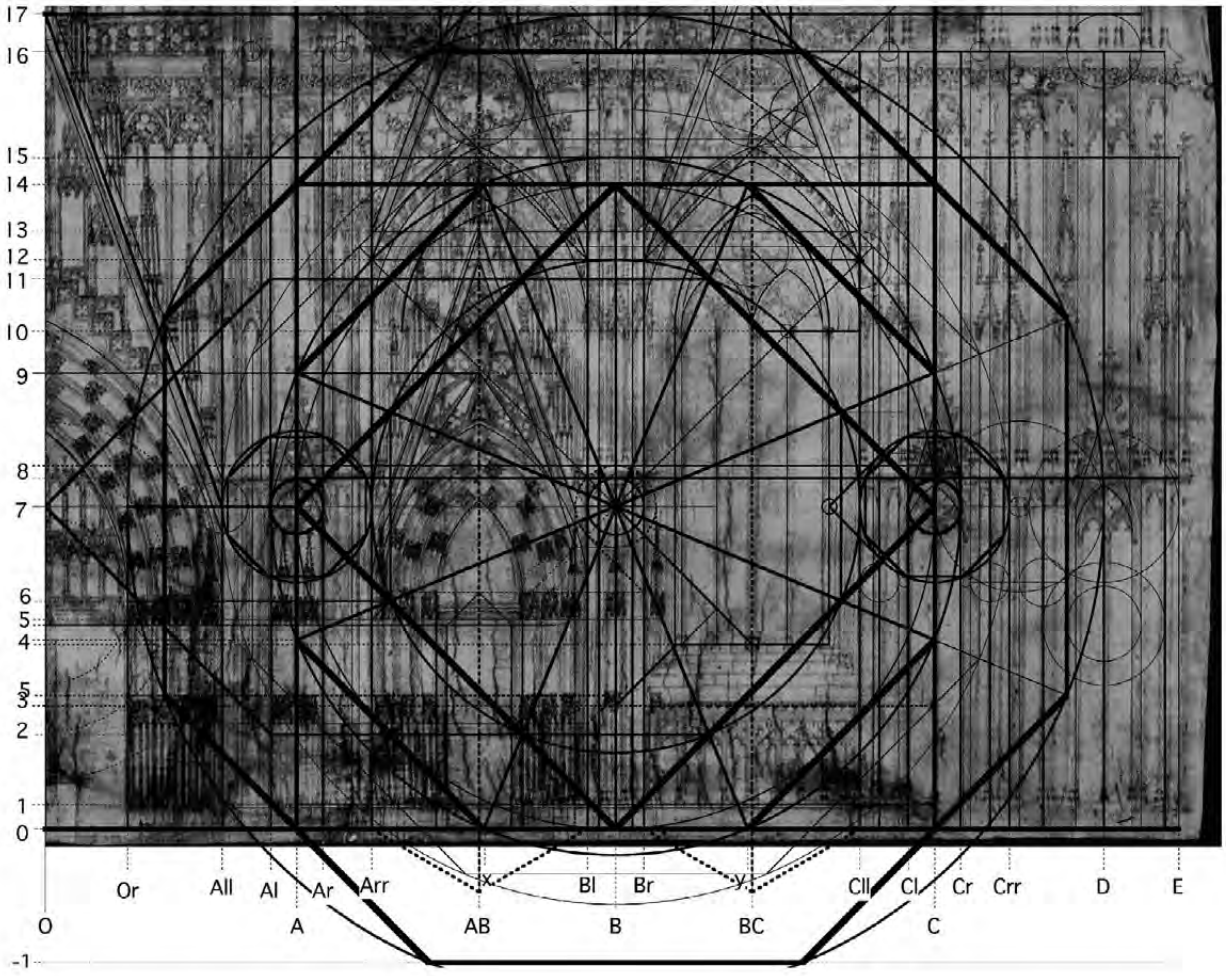


Fig. 3. Cologne Plan F, detail view of the lower right-hand section, with ideal geometrical armature overlaid (R. Bork).

the geometrical armature partially isolated, so that its individual lines can be seen more clearly at right.

The creator of Plan F almost certainly began by establishing his ground line at level 0, and the location of the two principal tower buttresses A and C. A square with those buttresses as its left and right margins reaches to level 14, as figures 3 and 4 show. The centre of this square, at level 7, serves as the geometrical centre of the whole lower storey. Within the large square, one can inscribe an octagon, and a rotated square, whose top and bottom corners fall on the centreline B of the intermediate buttress, while its left and right corners locate the centres of the small quatrefoils in buttresses A and C. This already begins to illustrate the way in which the articulation of buttresses can express key points in the governing geometry of a Gothic building. Even the size of the quatrefoils turns out to reflect a fundamental dimension of the façade, namely the spacing between the previously mentioned octagon and the circle circumscribed about it. The vertical axes Al and Cr, in other words, frame a circle circumscribed about an octagon framed by the main axes A and C, in an "octature" relationship crucial for the overall organization of the drawing. These same vertical axes Al and Cr continue on up the façade to frame the octagonal corona of the spire base, while the principal buttresses on axes A and C taper to form the enormous compound pinnacles flanking the octagonal tower core. Before getting that far, though, the creator of Plan F likely finished establishing the outlines of the lower tower zone.

All of the main buttress thicknesses in the lower façade involve derivations from the figures described above. The axes Ar and Cl are just reflections of Al and Cr about the main buttress axes A and C. Together, these lines define the width of the slender blind tracery lancets on the front of the principal tower buttresses. The total width of the slender intermediate buttress on axis B also equals that lancet width, as the establishment of the axes Bl and Br shows. The inner buttress margins Arr and Cll, meanwhile, frame a circle circumscribed about the octagon reaching from levels 2 to 11, i.e., the octagon inscribed within the original rotated square. The width of the main tower buttresses thus involves another simple "octature" derivation from the originally established spacing of the buttress axes. The door and window apertures of the twin aisles fit into the spaces defined by the three buttresses A, B, and C. As noted previously, therefore, the inner aisle centreline AB falls halfway between Arr and Bl, while the outer aisle centreline BC falls halfway between Br and Cll. These centrelines, in other words, are consequences of the buttresses' thicknesses.[19]

An octagon larger than the biggest one discussed previously locates the main points further out from the tower centreline. This large octagon, numbered I in the sequence from I to VI, circumscribes the original generating square framed by axis A, axis C, and the horizontal levels 0 and 14. It is thus exactly $\sqrt{2}$ larger than the octagon framed by axes A and C, and twice as large as the octagon used to define the buttress widths, so that the three octagons relate by a perfect quadrature sequence. The new octagon reaches up to level 16, where the lowest storey of the tower terminates at the bottom margin of a traceried balustrade. The upper margin of the balustrade, at level 17, lines up with the top of the circle circumscribed about this large octagon I, in another "octature" relationship. The left edge of this circle establishes the vertical axis Or, the right-hand jamb of the façade's central portal. The right edge of the circle, meanwhile, establishes axis D, the centreline of the blind tracery lancet on buttress sticking out south of the façade.

A simple construction involving the circles and octagons established in the tower base determines the placement of the façade's centreline, and thus the span of the nave. The key element in this construction is the smallest of the three nested octagons in this storey, the one used earlier to define the buttress widths through "octature." Extending a horizontal line from its upper surface at level 11 until it reaches the buttress margin Al, and then extending a diagonal downward and to the left until it hits the equator of the octagon at level 7, one finds the vertical axis O, defining the facade centreline. The façade described by Plan F would therefore have the schematic ground plan shown in the lower half of figure 2, with the box of the nave bay flanked by the large circles and inscribed octagons of the tower bases.

The geometrical armature described in the preceding paragraphs suffices to locate not only the main vertical axes of the façade, but also the main horizontals of the lower tower storey, as well. The tops of the statue canopies at level 6, for example, line up with the corners of the octagon whose upper surface at level 11 was already used to define the façade centreline. The lower margin of the prominent horizontal moulding at level 8 corresponds to the top of the original buttress quatrefoils centred at level 7, while its upper margin falls slightly further above level 7, as the circular construction centred at level 7 on axis B shows. A diagonal struck up from this construction toward the upper right intersects the circle framed by Arr and Cll at level 10, which serves as the springing level for the aisle window heads. The intersection of this diagonal with the vertical axis Cll defines level 12, where the tip of the aisle portal gable falls. The upper corner of the original octagon defines level 9, which serves as the centre for the inverted "Y" of tracery in that gable. Level 15, aligned with the top of the circle framed by Al and Cr, locates the point where all the lancets and pinnacles in the lower storey begin to terminate. The balustrade capping the lower tower storey, as noted previously, falls between levels 16 and 17, corresponding respectively to the top of octagon I and to the top of the circle circumscribed around it.[20]

Within this dense but orderly matrix of horizontal and vertical lines, the remaining elements of the lower façade articulation emerge fairly readily. The gable of the main portal, for example, involves a main diagonal descending from level 17 on axis O down to level 7 on axis All. This diagonal descends, in other words, from the top of the storey to the equator of its governing octagon. The aisle portal gable can be drawn in similarly between levels 13 and 7, with the inner frame

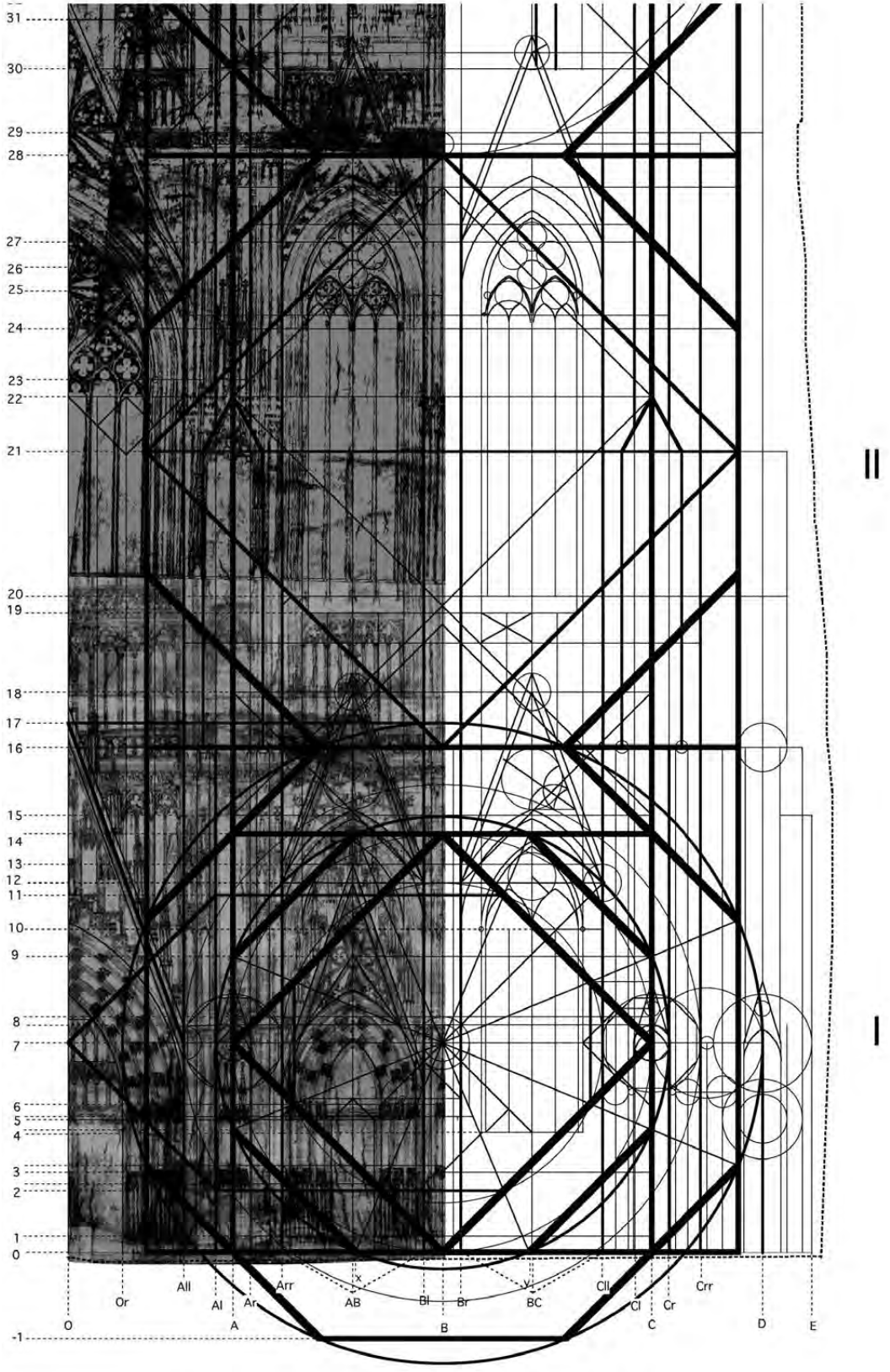


Fig. 4. Cologne Plan F, geometrical armature, lower third (Robert Bork).

starting a bit lower, at level 12. The arches of the main portal were drawn from centres halfway between Or and All, at level 6. The right margin of the aisle doorway falls where the ray from the octagon centre intersects the original rotated square, and the left margin can be found by reflection around the axis AB. The centres of curvature for the aisle portal arches fall halfway between these margins and the framing buttress axes Arr and Bl. In buttress C, meanwhile, the striking of diagonals leftward from the circle framed by Cll and Crr locates the right-hand margin of the outer aisle window, permitting the rest of the window frames to located by reflection. The window heads can then be drawn in, since the height of the arch springing points has already been established at level 10. A simple construction of inscribed circular tracery then fills in the spaces between those arches and the gables immediately above. The bottom of the outer aisle window, finally, corresponds to the lower line at level 4, where a diagonal struck down from buttress B at level 7 intersects the window axis BC. Further small details also emerge from the geometric matrix described here, but the analysis presented so far should suffice to demonstrate the importance of the octagon-based armature in determining both the proportions and the articulation of the lower façade in Plan F.

The same basic geometrical system seen in the lower façade repeats itself, with variations, in the levels from II to VI. Like the creator of Strasbourg Plan B, therefore, the creator of Plan F appears to have approached his design process in a somewhat modular fashion, rather than deriving the entire drawing from a single enormous geometrical figure. This decision made good practical sense from the draftsman's point of view, given the roughly four-metre height of the drawings in question. It also ensured that the proportions of each storey relate height and ground plan in a coherent way, which may well have facilitated the development of more detailed construction drawings and templates for each level.

In level II, a single great octagon just as large as I and stacked immediately above it reaches from the triforium base to the top of the clerestory zone, as figure 4 indicates. Halfway up this octagon, a horizontal line defines the level 21 where the tabernacles on buttresses A and C begin to terminate in gables. The tips of the gables fall at level 22, where diagonals rising from the buttress axes at level 15 intersect those buttresses. A large rotated square inscribed within octagon II intersects the vertical axes of the clerestory window frames just above level 24, defining the springing point for the window heads. The left upper diagonal of this rotated square, similarly, intersects axis Al at level 23, defining the springing point for the main nave window. The window space between the building centreline O and the leftmost buttress margin All is subdivided into four slices, with the three on the left corresponding to slender lancets, and the fourth to the thick moldings around the window, with the centre of curvature for the window head falling between the two zones. The intersection of the big octagon II with All at level 25 locates the base of the gable over the central window, while its intersections with A and Ar give the baselines for the lower and upper margins of the smaller gables over the clerestory-level windows in the tower bays. A few more such steps determine the remaining details of this storey, such as the height of the triforium and the composition of the clerestory window tracery. For the modern researcher, therefore, the analysis of Plan F can proceed fairly quickly and easily, once the geometry of the tower base is understood. For the medieval draftsman, too, the layout of the drawing could probably proceed quite quickly once the outlines of the ground plan had been established.

In the first free tower storey, shown in figure 5, octagon III determines the overall elevation, just as the equally-sized octagons I and II had in the storeys below. The centre of this octagon, at level 34, locates not only the tip of the main roof gable, but also the tip of the large pinnacle terminating the intermediate buttress on axis B. The corners of the octagon at level 37 locate the tip of the finial over the main roof gable. Halfway between these points, at level 35, the parchment has been trimmed horizontally from the finial over to the left-hand margin of the octagon III, where it begins to rise steeply, as the outline of the parchment in figure 5 shows. In this instance, and in several others to be examined later, the trimming of the parchment directly reflects the layout of Plan F's geometrical armature, rather than the articulation of the façade contained within that armature.

The biggest difference between level III and those below is the shift from a square to an octagonal ground plan, signaled in elevation by the shift from twin tower

windows to a single one per storey. Because of this geometrical disjunction, the vertical lines necessary for the creation of level III could not simply be carried upwards from the lower part of the drawing. Instead, they had to be derived from a detailed ground plan, such as the one that was sketched on the back of the parchment sheet corresponding to level V of Plan F. This octagonal plan geometry can also be sensed in the geometrical armature of level IV, which effectively reproduces the ground plan of the octagonal spire base. The small but heavily drawn circles in the upper half of figure 5 schematically represent the footprints of the twelve pinnacles surrounding the spire: eight small ones around the spire base proper, and four large corner pinnacles rising from the principal buttresses. This graphic thus recapitulates in detail the simplified ground plan shown in figure 2. As both of these figures show, the outer pinnacles of the octagonal corona lie slightly outboard of the principal buttress axes A and C. The centrelines of the inner pinnacle descend from level IV to level III, framing the single windows at each level. Another set of verticals, slightly further out from the tower's central axis, drops down from level 40 to describe the flat flanges flanking each window.

As in the lower reaches of the drawing, the octagonal geometries of the basic armature locate the principal horizontals in the articulation system of zones III and IV. The horizontal moulding between levels 28 and 29, for example, occupies the interval between the lower edge of octagon III and the slightly smaller octagon inscribed within its inner circle. The balustrade below the window of level III terminates at level 30, where the diagonals crossing the whole storey intersect the main buttress axes A and C. The subpinacles flanking axis B end at level 33, even with the corners of octagon III, and the pinnacle terminating buttress B ends at level 34, the octagon's centre. All the arches in the window spring at level 36, even with the corners of the slightly smaller inscribed octagon. Their centres of curvature may have been determined by subdividing the interval between the framing flanges into three equal segments, as the three overlapping circles at that level suggest, or the relevant dimensions may just have been transferred from another ground plan, such as the one on the reverse of the sheet above.[21]

Moving upwards into zone IV, the interval between levels 39 and 40 describes the radius of the prominent roundel in the gable over the window, just as the equivalent interval describes the thickness of the terminal moulding between levels 28 and 29 below. The springing point for the window of this storey falls at level 45, where the diagonals rising from the octagon centre intersect the verticals of the window frames. The many small horizontal lines between levels 43 and 47, meanwhile, correspond to intersections between the already established verticals and the rays out from the octagon centre to its corners. These guidelines governed the articulation of the complex corner pinnacles flanking the tower core in this zone.

The geometry of the spire base provides valuable clues about the draftsman's surprisingly pragmatic working method. Even a cursory glance at this zone reveals that the gable corona was not constructed with accurate projection techniques. The central gable appears narrower than its neighbors, instead of being $\sqrt{2}$ wider, as it should be—and as the equivalent gable in Strasbourg Plan B actually is. In the Strasbourg drawing, the view of the octagonally symmetrical spire drum is unencumbered, and its constituent elements are slender. In Plan F, by contrast, the corner pinnacles and thick flanges flanking the windows make it hard to take the visual measure of the tower core. For this reason, perhaps, the creator of Plan F chose to describe his gables by sighting to convenient points in his previously established geometrical matrix. The inner faces of the two side gables rise from level 49, in the spots corresponding to the centres of the two window-flanking pinnacles. Their outer faces, meanwhile, descend to level 48, at the points corresponding to the centres of the larger corner pinnacles.[22] Their upper vertices fall at level 52, on vertical axes that are subtly skewed toward the tower centreline. The creator of Plan F may have deliberately embraced this distortion to make the gable tips more visible behind the prominent corner pinnacles, or he may simply have assumed that no members of his audience would look askance at this slight deviation from accurate projection, which had only just been pioneered in drawings such as Strasbourg Plan B. The uniquely lavish execution of Plan F, with its large scale, meticulous detailing, and redundant representation of both sides of the foreseen façade, clearly demonstrates that no trouble was spared in producing the drawing, so the creation of the subtly skewed gables cannot be dismissed as the hasty creation of an offhand draftsman.

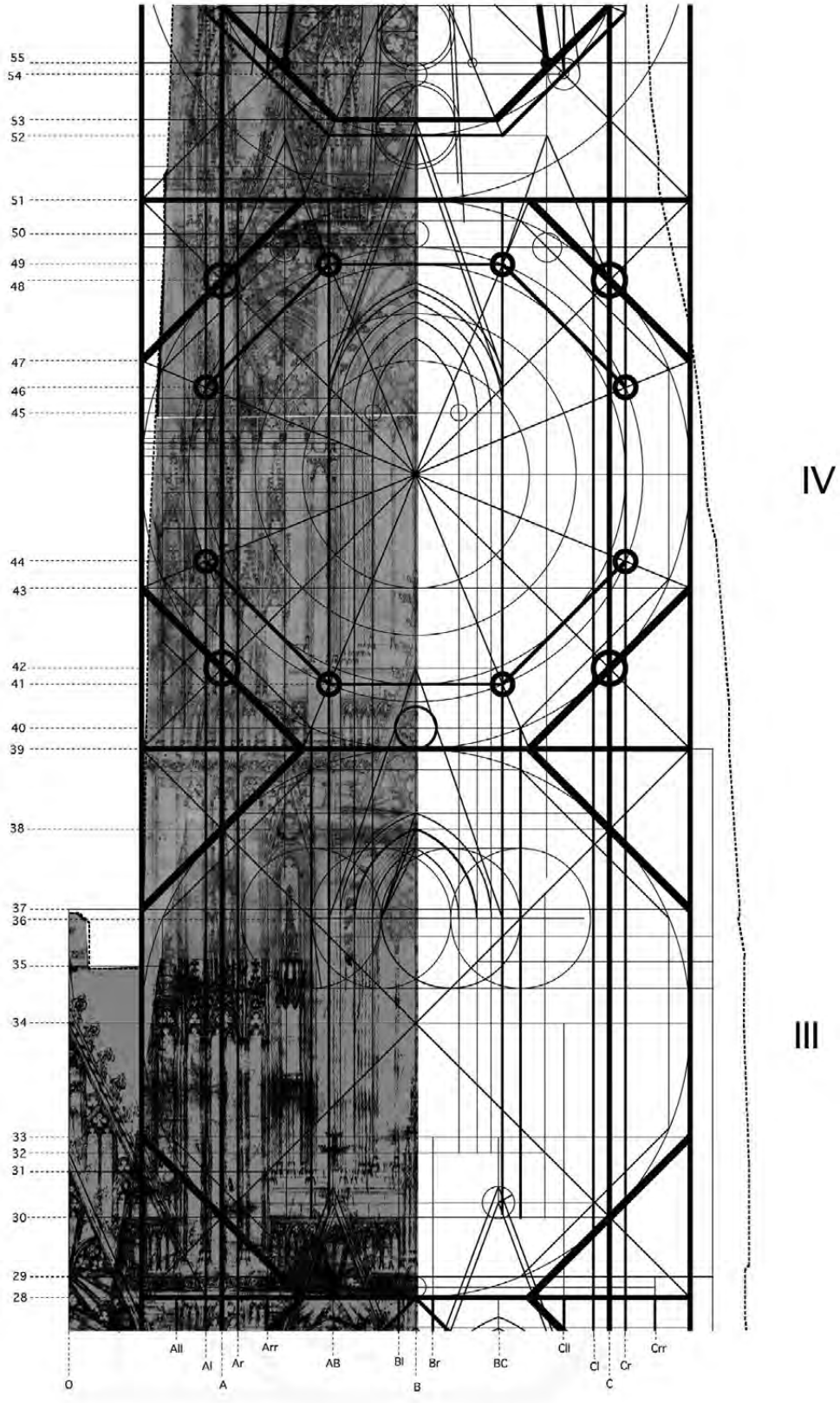


Fig. 5. Cologne Plan F, geometrical armature, middle third (Robert Bork).

Octagon-based geometries continue to play crucial roles even further up in the drawing, in the zone of modules V and VI. Most remarkably, perhaps, an octagon-based construction determines the taper of the main spire cone, as shown in figure 6. The main governing octagon in question here occupies the centre of module V, between levels 52 and 59. Its size equals that of the pinnacle corona described in zone IV, which is to say that its faces fit just within the axes Al and Cr defined at ground level.[23] Nested within it are a circle and a slightly smaller octagon, between levels 53 and 58, which fits between the principal buttress axes A and C. The diagonals reaching downward from the octagons' centre at level 56 intersect this smaller octagon at level 55. There, directly above the tips of the skewed gabled described in the previous paragraph, are two points that serve as the base of the main spire cone. Lines drawn from these base points through the upper corners of the larger octagon at level 59 precisely define the taper of the spire, which eventually converges to a point at level 68, slightly above the top margin of module VI.

This may seem like a bizarre spire construction method, but there is excellent circumstantial and concrete evidence for its use. Firstly, and most basically, it provides a mechanism for introducing a steep slope into a geometrical scheme otherwise governed by verticals, horizontals, and the 22.5-degree angles of the octagon. More concretely, the trimming of the parchment in the right-hand tower demonstrates that the octagonal frame mattered a great deal to the draftsman. The tapering edges of the parchment pass exactly through the corners of the generating octagon at level 57, as the dotted lines in figure 6 show. Further up, in module VI, the parchment edges become vertical again, following the axes that rise from the points on level 54 where the sides of the larger governing octagon intersect the diagonals falling outwards from the octagon center. Lines rising from these points parallel to the previously constructed main spire cone converge at level 70, describing the outer margin of the outboard spire ribs. The outermost set of tapering lines, finally, defines the spatial envelope to be occupied by the leafy crockets. Closer to the tower centreline, the margins of the inner ribs are described by lines descending from the main spire tip at level 68 down to the points where the rays of the octagon cut the horizontal of level 55.

Even the fine structure of the spire articulation and parchment trimming in Plan F attests to the use of the octagon-based geometrical scheme. The top of the generating octagon at level 59 defines the top point on the topmost openwork roundel in the spire face, while the thickness of the tracery bar between levels 59 and 60 equals the interval between the governing octagon faces at levels 58 and 59. It seems that the draftsman established this upper margin for the roundel zone before beginning to work downwards, in a recursive fashion, fitting progressively larger roundels between the diverging spire ribs until they disappeared behind the gable corona. Above the roundel zone, an inverted double-panelled lancet occupies the space between levels 60 and 62, where the bottom of another governing octagon provides a geometrical punctuation point. This octagon, rising from level 62 to level 65, fits exactly between the main buttress axes A and C. Its centre, at level 63, locates the upper tip of the final openwork lancet in the spire face. Its corners, at level 64, define the tip of the tapering moulding around that lancet. The full octagon would protrude beyond the parchment, as of course would the larger octagon inscribable within square module VI, but their vertical dimensions, at least, must have been noted on the parchment. Indeed, the trimming of the parchment provides further evidence for the active use of module VI, since the tapering parchment sides abruptly turn vertical at the very points between levels 61 and 62 where their vertical axes intersect the circle inscribed within module VI. There are, moreover, prominent dots on the drawing precisely where the tapering lines of the spire tip intersect the top edge of the module, at level 66. The octagon-based geometry described here thus cannot be dismissed as a scholarly fiction, as so many earlier geometrical reconstructions of Gothic designs have been.[24]

The geometrical structure of the large spire finial is not quite so clear as the octagon-based scheme governing the rest of Plan F, but a plausible layout sequence nevertheless emerges from the available evidence. Projecting vertical lines upward from the intersection of the outer spire margins with the upper octagon surface at level 65, one finds the width of the collar separating the spire from the finial. The intersection of these verticals with the sloping lines of the crocket envelope at level 67 determines the placement of the collar's top surface. The upper leaf layer of the finial, located

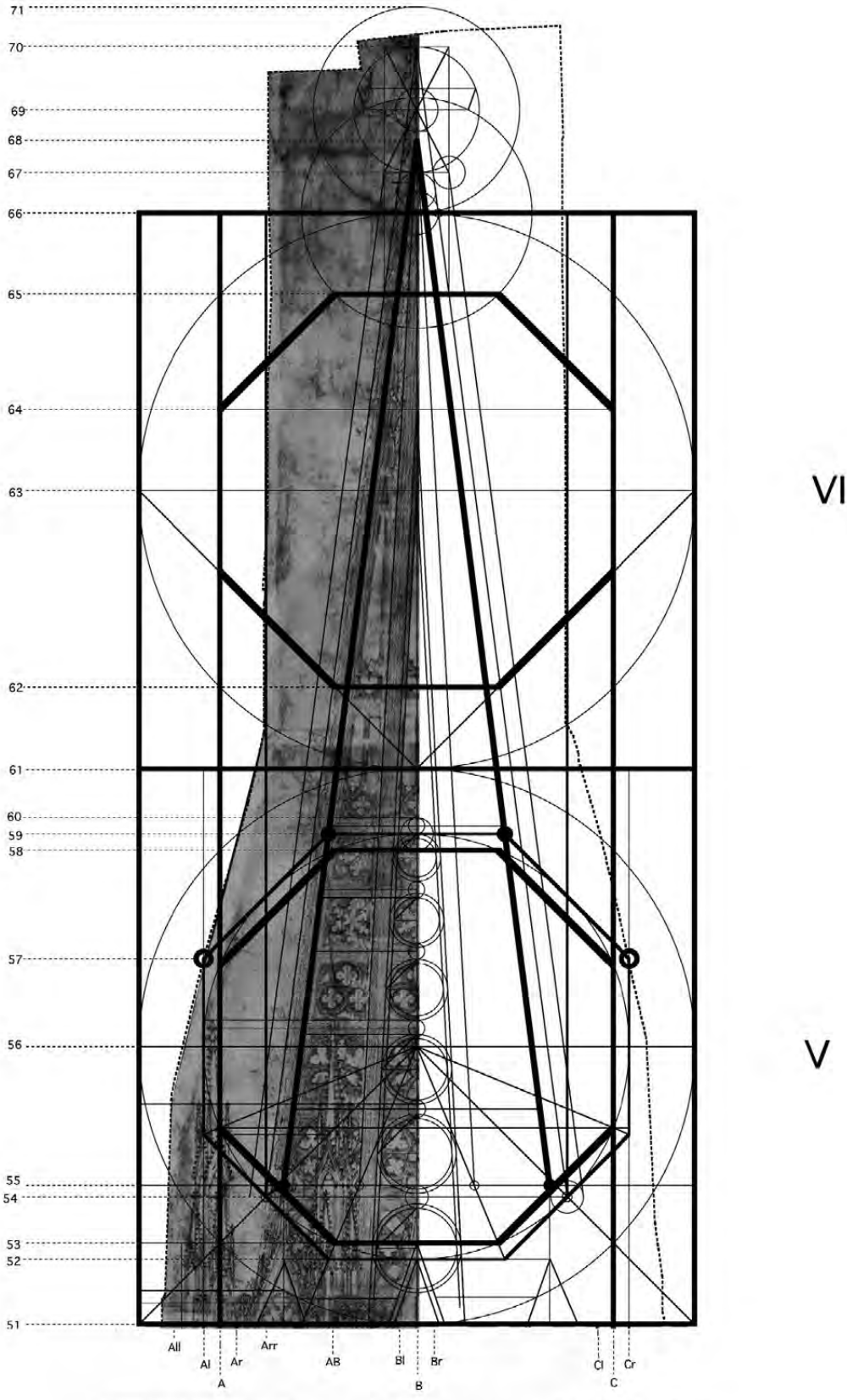


Fig. 6. Cologne Plan F, geometrical armature, upper third (Robert Bork).

where the spire tip ends at level 70, has the same width as the collar. The lower surface of the larger leaf layer falls halfway in between, at level 69. Its thickness is given by the radius of a small circle centred at level 69, and reaching down to the level where the bisectors of the finial's surrounding box cross the outer margins of the tapering spire tip. It is from these intersection points, in fact, that the leaves of this major layer begin to sprout. A larger circle centred at layer 69 and reaching down to level 66 reaches to the tip of the finial at level 71—which is present on the left tower, but truncated on the right tower—while a concentric circle of intermediate size embraces the upper corners of the leaf tips just above level 69. The lower corners of the layer, slightly closer to the spire axis, appear to have been determined by the intersection of the horizontal at layer 69 with a larger circle centred at level 66 and passing through the major octagon corners at layer 65. Thus, while the freehand drawing technique used to define the leaves of the finial somewhat complicates interpretation of this upper zone, the overall shape of the finial attests to a close geometrical relationship between the finial and the rest of the drawing.

In sum, then, it becomes clear that an amazingly coherent geometrical armature composed of stacked octagonal modules governed the composition of Cologne Plan F, from the base to the tip of the spire. The analysis presented here may appear complex, but it actually demonstrates that the draftsman responsible for Plan F used a series of strikingly simple geometrical operations to create his masterpiece. It would be hard to imagine a simpler explanation, in fact, for the myriad details in this spectacular drawing. The creator of Plan F took as his point of departure geometrical methods and dimensional units current in the Strasbourg façade workshop in the closing decades of the thirteenth century, deploying them to achieve an effect of unprecedented richness and rigour, in keeping with the traditions of the Cologne lodge. By treating his enormous drawing as a stack of manageably sized octagonal modules, he simplified his workshop process. By using identically sized modules at every level of the façade, moreover, he kept the geometrical relationships between the parts of the drawing clear and lucid. Thus, despite the manifest complexity of Plan F, and the tedious grittiness of the preceding paragraphs, it must be admitted that he used his simple geometrical tools with a remarkable economy of means.

This investigation of Plan F offers a number of lessons relevant to the study of Gothic architecture in general. Firstly, and most importantly, it demonstrates that Gothic forms arose from the establishment and assembly of precisely regulated geometrical figures. Thus, while Gothic design embodies a formal order very different than that of classical architecture, it cannot be dismissed as chaotic or undisciplined. Secondly, and more specifically, the case of Plan F shows that Gothic design could involve a by-play between circles and octagons, an "octature" relationship not fully captured in discussions of square rotation and quadrature. This analysis also shows that buttress articulation tends to reflect a design's geometrical structure more directly than window articulation, since the window location tends to be determined by the buttress' thickness. On a methodological level, meanwhile, this study demonstrates the power of computer-aided geometrical analysis of Gothic design. By the late twentieth century, geometrical analysis of Gothic architecture had fallen into some disrepute because too much could seemingly be "proven" by manually drawing thick lines on imprecise building plans. The computer offers a way out of this impasse, especially when applied to original medieval drawings that include compass pricks, construction lines, and other tell-tale traces of the draftsmen's labor. As the case of Plan F shows, even the shape of the parchment itself can offer valuable clues about the designers' thinking. Because it promises to reveal so much about the details of the medieval design process, truly rigorous geometrical investigation deserves to play a prominent role in the future of Gothic architectural scholarship.

APPENDIX: The relative scalings of Strasbourg Plan B, Cologne Plan F, and the current Cologne Cathedral facade

Calling the span between aisle axes AA_B in Strasbourg Plan B, and AA_F in Cologne Plan F, measuring in each case between the axes of the principal tower buttresses, one finds the following relationships in figure 2:

Proportional relations between the two drawings

$AA_F = (\sqrt{2})\ AA_B$ i.e. $AA_F = (1.414...)\ AA_B$

Proportional relations within Plan B

Spire octagon diameter = octagon inside AA_B = AA_B(cosine 22.5 deg) = $AA_B(.924)$

Nave space between tower axes = box + 2 triangles − 2 arcs

$= AA_B(.924) + 2/2\ (\sqrt{2}-1)AA_B(.924) - 2/2AA_B(1-.924)$

$= AA_B[.924 + (.414).924 - (.076)] = AA_B(.924 + .382 - .076) = AA_B(1.23)$

so that the span between tower buttresses is 1/1.23 or .813 times as great as the span between the buttresses flanking the nave.

Proportional relations within Plan F

Spire octagon diameter = octagon outside AA_F = AA_F /(cosine 22.5 deg) = AA_F (1.082)

Width of tracery doublet on each buttress front = 2 arcs = $2/2\ AA_F(1.082-1) = AA_F(.082)$

Nave space = box + 2 arcs = $AA_F/\sqrt{2} + AA_F\ (0.82)$ = $AA_F(.707 + .082) = AA_F(.789)$

so that the span of the nave between the principal buttresses is only .789 as great as the span of the enormous towers.

Scaling Plan F to the actual Cologne façade, in the horizontal dimension

In the actual Cologne façade, the width between the buttress axes in each tower is roughly 1727 cm. Since the minimum, maximum, and average tower widths in Plan F are approximately 45.0, 46.3, and 45.6 cm, respectively, the possible scales for the drawing range from a maximum of 45.0:1727, or 1:38.3, to 46.3:1727, or 1:37.3, with an average value of 1:37.9. Even the smallest of these values is somewhat larger than the scales of 1:35.8 or 1:36 proposed by Steinmann, p. 52-53. Steinmann's estimate is based on the comparison of elements in the drawing with elements in the Cologne Cathedral choir, which is a less direct and less reliable method than comparing the drawing with the façade elements it actually depicts.

Deriving the spire height intended by the creator of Plan F

The spire height of Plan F can be extrapolated either from direct measurement on the drawing, or from analysis of the computer model described in this study.

--Steinmann gives the height of the spire in the drawing as 405.75 cm, which he multiplies by what he sees as the minimum possible ratio of 35.82 to get 145.34 m as a lower bound for the intended spire height of the actual building. Multiplying the 405.75cm tower height in the drawing by the more plausible scale factors of 37.3, 38.3, and 37.9 described above, one finds intended heights range of heights from 151.34m to 155.40m, with 153.66m as the intermediate figure.

--In the computer model presented here, the height from level 0 to level 71 is 8.80 times the width of the tower between its axes. Multiplying the 17.27 m interaxial width of the present south tower by this factor of 8.80, one finds a height of 152.02 m from the ground to the tip of the spire finial, in the same range just determined from the drawing itself. The excellent agreement between these height estimates may be seen in figure 1, where the line across the top of the computer model lines up precisely with the tip of the untruncated left spire finial.

NOTES

[1] Plan F hangs today in the Johanneskapelle of Cologne Cathedral, but it is usually screened by protective curtains and invisible to visitors.

[2] For the 150-metre tower height, see the appendix on the scaling of Plan F.

[3] I previously made this point in Robert BORK, "Into Thin Air: France, Germany, and the Invention of the Openwork Spire", in *Art Bulletin*, 85, 2003, p. 25-53, and in Robert BORK, *Great Spires: Skyscrapers of the New Jerusalem*, Cologne, 2003, p. 132-145.

[4] The history and historiography of Plan F are well sketched in Marc STEINMANN, *Die Westfassade des Kölner Domes. Der mittelalterliche Fassadenplan F*, Cologne, 2003, p. 12-16.

[5] For the dating to circa 1280, see STEINMANN, *Die Westfassade*, p. 88. Scholars who had proposed later dates include Rosenau (1322), Kaufmann (1300-25), Zimmermann-Deissler (1310-1320), Wolff (1300), all cited by STEINMANN, *Die Westfassade*, p. 10. For another perspective on Steinmann's book and dating, see Marc Carel SCHURR's review in *Kunstchronik*, 58, 2005, p. 105-108. For the exchange of ideas between Strasbourg, Cologne, and Freiburg, see STEINMANN, *Die Westfassade*, p. 134-138, and BORK, "Into thin Air", especially p. 30-33 and 44-45.

[6] Pioneers in CAD use for the study of medieval architecture include Michael T. DAVIS & Linda NEAGLEY. See, for instance, their article "Mechanics and Meaning: Plan Design at Saint-Urbain, Troyes and Saint-Ouen, Rouen", in *Gesta*, 39, 2000, p. 159-180. For recent studies on Gothic geometry, see *Ad Quadratum: The Practical Application of Geometry in Medieval Architecture*, ed. Nancy WU, Aldershot, 2002.

[7] For a more comprehensive exploration of this analytical method and its possibilities, see Robert BORK, *The Geometry of Creation: Architectural Drawing and the Dynamics of Gothic Design*, Aldershot, forthcoming.

[8] Giorgio Vasari established the template for this critical tradition already in the sixteenth century. Frankl provides a good overview of the turn against Gothic in Paul FRANKL, *The Gothic: Literary Sources and Interpretations through Eight Centuries*, Princeton, 1960, p. 237-414, with particular attention to Vasari on p. 290-300.

[9] The drawings are reproduced in STEINMANN, *Die Westfassade*, figs 70 and 71.

[10] The aisle axes in the right-hand tower of Plan F are close to 45.6 cm apart at all levels of the drawing. The left tower starts out wider, at 46.3 cm, before tapering to about 45.0 cm at the level of the nave roof. This is because the nave centreline leans left as it rises, pushing in on the left tower. This inclination places the finial atop the main roof gable palpably closer to the left tower than to the right. All this suggests that the left tower was drawn after the leaning nave bay had already been drawn, but that the more regular right tower had been drawn before the nave bay.

[11] This suture structure is presented in: STEINMANN, *Die Westfassade*, p. 53 and fig. 1, but the author draws no conclusions from it. The right tower overlaps the left, however, just as the lower storeys of each tower overlap the higher ones. Since the tower base was surely drawn before the spire tips, this pattern suggests that the right tower predates the left. The substantial uniformity of the detailing in the drawing, though, confirms that the two halves were drawn with near simultaneity by a small drafting team, or even by a single individual, as argued in STEINMANN, *Die Westfassade*, p. 43-53.

[12] BORK, "Into Thin Air", p. 39-40.

[13] More precisely, the relationship approximates $\sqrt{2}$ closely enough to be significant, given the geometrical logic of the two designs and the accuracy with which they were drawn. The interaxial aisle span in Strasbourg Plan B is roughly 33.1 cm, as measured at the bottom of the parchment. The octagon-based geometrical structure of the drawing, as discussed in Robert BORK, "Plan B and the Geometry of Façade Design at Strasbourg Cathedral, 1250-1350", in *Journal of the Society of Architectural Historians*, 64, 2005, p. 442-473, suggests that a slightly smaller value may have been intended. The diameter of the octagonal spire drum in Plan B is 30.5 cm, so that the circle circumscribed about its footprint would have diameter 33.0 cm. This slight variation between 33.0 and 33.1 cm could easily have resulted from small drafting errors in between the tower zone and façade base. Norbert NUSSBAUM, "Der Chorplan der Zisterzienserkirche Altenberg. Überlegungen zur Entwurfs- und Baupraxis im 13. Jahrhundert", in *Wallraf-Richartz-Jahrbuch*, 64, 2003 p. 7-52, especially p. 36, identifies almost exactly the same dimension (33.2 cm) as the crucial unit measure in the Cistercian church of Altenberg, a building closely related to Cologne Cathedral in terms of workshop practice. In Cologne Plan F, meanwhile, the span between the principal buttress axes varies between roughly 45.0 cm and 46.3 cm, with most of the spans in the right tower falling very close to 45.6 cm. Dividing these values by $\sqrt{2}$, which is approximately 1.414, one finds values of 31.82, 32.74, and 32.24 cm, respectively. The larger value is of particular interest, because it very closely approximates several relevant quantities, including: the actual and probably intended aisle spans of Strasbourg Plan B (32.74/33.1=.989, and 32.74/33.0=.992); the module used at Altenberg (32.74/33.2=.986); and the French royal foot of 32.65 cm (32.74/32.65=1.003). For the latter unit length, see Alpay ÖZDURAL, "The Church of Saint George of the Latins in Famagusta", in *Ad Quadratum*, ed. WU, p. 217-242, especially p. 219. The slightly smaller average value of 32.24 cm seen in the right tower of Plan F, meanwhile, closely matches the more modern French royal foot of 32.48 cm. It thus seems likely that both Strasbourg Plan B and Cologne Plan F were drawn up starting from a simple one foot interval. In Strasbourg Plan B, the interval between the aisle axes would equal that one-foot span, with the drum of the spire octagon being inscribed within it. In Cologne Plan F, meanwhile, the width between the tower axes would be given by a diagonal of a square whose sides would almost exactly equal the same one-foot measure.

[14] For the precise numerical statement of the proportional relationships in these two schemes, see the appendix.

[15] In proportional terms, quadrature by itself gives relations of $\sqrt{2}$ – which approximates 1.414 – or its inverse, 0.707, which is the cosine of 45 degrees. Octagonal geometries involve the cosine of 22.5 degrees, which is 0.924. These octagonally-based proportions

are seen not only in Strasbourg Plan B and Cologne Plan F, but also in many other Gothic drawings, ranging from the thirteenth-century Reims Palimpsest to later drawings from the lodges of Orvieto, Siena, Clermont-Ferrand, Regensburg, Ulm, and Vienna, among others. All of these will be discussed in BORK, *The Geometry of Creation*. Significantly, the "octature" scheme appears to have governed not only the plans of octagonally symmetrical structures, but also the elevations of structures that have no obvious octagonal symmetry, as the French and Italian façade drawings demonstrate.

[16] See BORK, "Plan B", fig. 18.

[17] *Ibidem*, p. 452-459.

[18] The alignment between the ideal armature described here and the actual drawing is excellent, at least, if one straightens its crooked tower axes. In this investigation, a large poster of Plan F was scanned into the computer in ten small high-resolution slices, which were then carefully aligned with a vertical axis to create a corrected master image for geometrical analysis of each tower. This tower straightening process, significantly, leaves proportions unaltered. The skewed proportions and leftward lean of the nave axis, for example, are still present in the modified image. To determine the intended proportions of the nave, therefore, it was necessary to analyze both the drawing and the current structure of the Cologne Cathedral façade, where the relationship between the south tower and the building axis was already determined in the fourteenth century. As the bottom of figure 2 shows, the actual cathedral structure beautifully incorporates the proportions of the geometrical armature governing Plan F.

[19] If one defines the distance between buttresses A and B as one unit, then the distances from the tower midpoint B to each of the lines shown to the left are as follows: O, 1.789; Or 1.531; All, 1.235; Al, 1.082; A, 1.000; Ar, 0.918; Arr, 0.765; AB, 0.424, Bl, 0.082. The distances to the right are precisely equivalent, with D matching Or 1.531 units out, but the outer face of the right-hand buttress falls 1.747 units out, with no obvious partner on the left. Significantly, $1.747 = \sqrt{2}\ (1.235)$, hinting that the total tower width across the buttress faces was established by swinging a diagonal through the corner of the square-planned tower core. The same proportions are seen in ground plan corresponding to Plan F, the so-called Cologne Plan D. It is worth noting also that the axes AB and BC thus stand slightly but measurably further out from the tower centreline B than the corners of the middle-sized octagon framed by the buttress axes A and C: AB and BC stand 0.424 out, while the octagon corners stand only 0.414 out.

[20] This relationship is readily apparent in the accurately drawn tower base, but the warping of the parchment in the nave zone pushes the balustrade down, as the nave centreline leans to the left.

[21] That drawing is the same scale as Plan F, but it shows the window a bit narrower than the one on the front of the drawing, which conforms closely to the construction shown in figure 5.

[22] The slopes of the gable margins vary slightly, suggesting that the intersection point below level 48 may also have been used as a sighting aid.

[23] In figure 6, the left-most pinnacle of the corona sits slightly to the right of the axis it should occupy. The others five corona pinnacles visible in the original drawing, however, line up well with their intended axes, and the intervals between them are the size they should be given the plan geometry described here and in figure 2.

[24] For commentaries on the vexed history of geometrical analysis methods in Gothic, see Paul FRANKL, *The Gothic*, p. 712-734, Werner MÜLLER, *Grundlagen gotischer Bautechnik*, Munich, 1990, p. 35-120, and especially Konrad HECHT, *Mass und Zahl in der gotischen Baukunst*, Hildesheim, 1979. Hecht's stubborn refusal to acknowledge the importance of geometrical thinking in Gothic design must be criticized as dogmatic and misguided, but his critiques of sloppy geometrical scholarship are appropriately devastating.

Not without Honour save in its own Country? Saint-Urbain at Troyes and its Contrasting French and English Posterities

CHRISTOPHER WILSON

The failure of medieval writers to record the insights of their architecturally knowledgeable contemporaries imposes some severe constraints on present-day historians' ability to pursue certain lines of inquiry.[1] It means, for example, that if we wish to identify the buildings which were most admired in a particular milieu we can do little except to assume that they are the same buildings as those whose influence is most apparent in later designs. Applying this rule of thumb to Saint-Urbain at Troyes, a church which had hardly any effect on the subsequent course of French architecture, could easily lead to the conclusion that its current reputation as a masterpiece is nothing more than a projection of latter-day aesthetic values;[2] but it is my view that Saint-Urbain's exalted rating in modern scholarship is not anachronistic, and in this paper I shall substantiate that judgement by showing that this truly extraordinary building exerted influence on a majority of the most innovatory works designed between 1270 and 1300 on the English side of the Channel. As the title of this paper signals, I shall also be addressing the problem of the stark asymmetry between the French and English receptions of Saint-Urbain,[3] although in this case the answers proposed must be more tentative in nature on account of a further consequence of textual dearth, namely the absence of any contemporary testimony as to the motives behind the selection and rejection of exemplars.

*

Before discussing the late thirteenth-century reception of Saint-Urbain it is necessary to highlight an aspect of the church's relationship to earlier French Gothic architecture which has been totally neglected in the literature. Every account written since the 1940s is based on the twin assumptions that Saint-Urbain's innovations are practically all in the realm of detailing and that the basic formatting of the design is entirely a function of its comparatively modest size and simple plan.[4] Such an emphasis is not altogether surprising, for most writers on the topic have shown signs of being a little mesmerised by such arresting passages of design as the skeletonisation of the upper walls of the main apse (Fig. 1) or the clashing layers of pattern used in the lower windows of the east end (Figs 2 and 3). However, by viewing Saint-Urbain purely as a showcase for virtuosic detailing previous students of the building, myself included, have failed to notice how much effort was devoted by the architect of the first campaign of work (whom I shall dub the first master) to ensuring that his design effectively embodied in its large-scale disposition a novel concept of his own devising.[5] The essence of the first master's "big idea" was simply to ensure that the upper parts of the central vessels were lit entirely by large windows of upright format comparable to those in the clearstorey of the rectangular-plan bays (Figs 2 and 3). From the Romanesque period onwards northern European architects had probably regarded the internal elevations of such bays, which after all make up the greater part of any major medieval church, as the central object of their creative efforts; and since the bay design of French great churches was dominated from around 1200 by clearstoreys with high and broad openings subdivided by tracery, it is extremely likely that windows of that kind

Fig. 1. Troyes, Saint-Urbain, exterior elevation of south-east side of main apse (Christopher Wilson, 2005).

had been widely perceived as the key component of modern church architecture for some considerable time before work on Saint-Urbain began in 1262. What was unique about the first master's attitude to this motif, which I shall term the normative Gothic window, was his determination to remove all impediments to the absolute pre-eminence that he had decided to accord it. We can be sure that this imperative was grasped by the second master who, during the early 1270s fulfilled his predecessor's intentions for the transepts and crossing with only minimal changes. Further confirmation of that conceptual continuity is provided by the sculptured figures of the founder Pope Urban IV and his nephew which decorate the piscina inserted into the wall of the main apse by the second master, for the schematised yet perfectly recognisable "models" of the parts of Saint-Urbain that they carry include only the clearstorey-level windows (Fig. 4).[6]

The great church, the genre with which most of the first master's peers were concerned, presented five main obstacles to the attainment of pre-eminence by the normative Gothic window. The most obvious of these is the long-standing tradition of multi-storey elevations in central vessels, and it is telling that the inventor of the normative Gothic window, the first architect of the rebuilding of Chartres Cathedral after 1195, acknowledged that the introduction of the new feature into the clearstorey necessitated the rejection of the galleried four-storey elevation which for several decades had been virtually a standard component of the region's most ambitious churches.[7] Compared to the lofty and luminous clearstorey, the Chartres middle storey is modest, an arcaded triforium such as could be seen above the galleries of many Early Gothic cathedrals. The Chartres type of triforium remained unchallenged in the High Gothic "mainstream" until the 1220s, when the architect of Amiens Cathedral, Robert de Luzarches, substituted for its simple arcades pairs of normative Gothic windows consisting of unglazed plate tracery. In the earliest work of Rayonnant architecture, the remodelling of the abbey church of Saint-Denis from 1231, both the unglazed windows and the solid rear walls of Amiens were transformed into series of miniature versions of the normative Gothic window, complete with fully developed bar tracery, and the shafts on the mullions of the clearstorey tracery were extended down between each of the unglazed units in the front plane in a way which implies the subordination of the latter to the full-size normative Gothic windows overhead. Unlike practically all his contemporaries, the first master of Saint-Urbain declined to follow the Saint-Denis scheme. It seems likely that he had judged its middle storey to be an anomaly, a feature which ought to have been abolished altogether once the single-pitch aisle roofs that had been its raison d'être had been dispensed with. Presumably what stopped the vast majority of thirteenth-century architects and patrons of great churches from sanctioning simple two-storey elevations like those at Saint-Urbain was straightforward conservatism, the perception that high-status churches ought to possess three storeys, as they had generally done since the Romanesque period.[8]

The second impediment to the complete predominance of the normative Gothic window was the tradition of lighting the terminal walls of transepts by rose

windows. At Saint-Urbain roses are eschewed in favour of pairs of equally sized normative Gothic windows, and in order to conceal the solid spandrels that would have appeared between the window heads if the adjacent vault compartments had been of the ordinary quadripartite form each of those compartments acquires one extra rib and two extra webs (Fig. 2). The terminal windows' overall shape, the pattern of their tracery and their separation by single vault ribs all extend to the viewer the clearest possible invitation to compare the transept end walls with the apse terminating the choir, and the shallowness of the transepts greatly facilitates that comparison (Figs 2 and 3). As has often been noted, the circular shape and large size of rose windows makes them irreducibly self-contained in a way totally at odds with the concept, integral to Gothic aesthetics from the beginning, of subordinating the parts to the whole.[9] It is likely that the first master of Saint-Urbain viewed roses as troublesome leftovers from pre-Gothic times, for he showed himself determined to purge all residual Romanesque elements from the portals which were the other principal component of major French façades: archivolts and jambs whose incrustation with figure sculpture disrupted the articulation of their architecture, the deep and layered structure of which was in any case fundamentally un-Gothic; and tympana containing multiple horizontals that had no counterparts elsewhere on the exterior or in the interior. The moderate scale of Saint-Urbain's portals (Fig. 5) represents a rejection of another aspect of earlier French Gothic practice, that of inflating the size of portals to enable them to fill up the large amounts of space left below rose windows lighting steeply proportioned central vessels.[10] As if to signal to the attentive viewer what he was about, the Saint-Urbain designer inserted into the spaces left by the omission of sculptured tympana traceried and glazed openings that are prevented from qualifying as normative Gothic windows only by the incompleteness of their central mullions. The unique and disconcerting way in which their sills are allowed to cut part way through the cusped arches over the doorways creates the impression that these windows are forcing their way down into the line of vision of those entering the church.

The third limitation on the acceptance of the normative Gothic window as the leitmotif of the great church interior was the traditional planning of chevets, for the large number of compartments into which hemicycles are usually divided means that their individual clearstorey windows are of lancet-like narrowness. That severely limits the scope for tracery and also ensures that the windows of the symbolically and liturgically most important part of the church are comprehensively outshone by the rose windows lighting the terminal walls of transepts, traditionally spaces of comparatively low status. At Saint-Urbain the visual dominance of the normative Gothic window in views along the main axis of the church is secured by making the central vessel of the choir end in a simple apse which is planned as five sides of an octagon, a form that allows for much wider windows than the seven-sided hemicycles most favoured in thirteenth-century great church chevets (Fig. 3). The fourth hurdle which had to be overcome before the normative Gothic window could predominate is the massive obstruction to the overall visibility of the clearstoreys of rectangular-plan bays caused by the low-springing and steeply pitched vaults that were installed over most main vessels in the thirteenth century. At Saint-Urbain this problem was resolved by having recourse to the radical expedient of making the ribs of the high vault and the clearstorey window heads spring from the same level (Figs 2 and 3). A fifth challenge to the pre-eminence of the normative Gothic window came from the extremely elongated version of the motif pioneered in the early 1240s in the apse of the main upper chapel of the Sainte-Chapelle in Paris. By 1262 these windows were already spawning imitations in the immensely high clearstoreys lighting the main vessels of northern French cathedrals and French-style cathedrals beyond the borders of France. At Saint-Urbain the first master avoided any resemblance to the Sainte-Chapelle by placing the sills of his apse windows level with those of the clearstorey windows in all its rectangular-plan bays and by lighting the upper part of the arcade level of the apse with grouped lancets in two planes, a composition very obviously based on the standard Rayonnant great church triforium, albeit differently proportioned from its prototype.[11]

Some of these methods of privileging the normative Gothic window had been used before. High vaults springing from the same level as the clearstorey window heads first appeared at Saint-Denis in the 1230s, but since they had no sequels earlier than Saint-Urbain one has to assume that they were generally disliked.

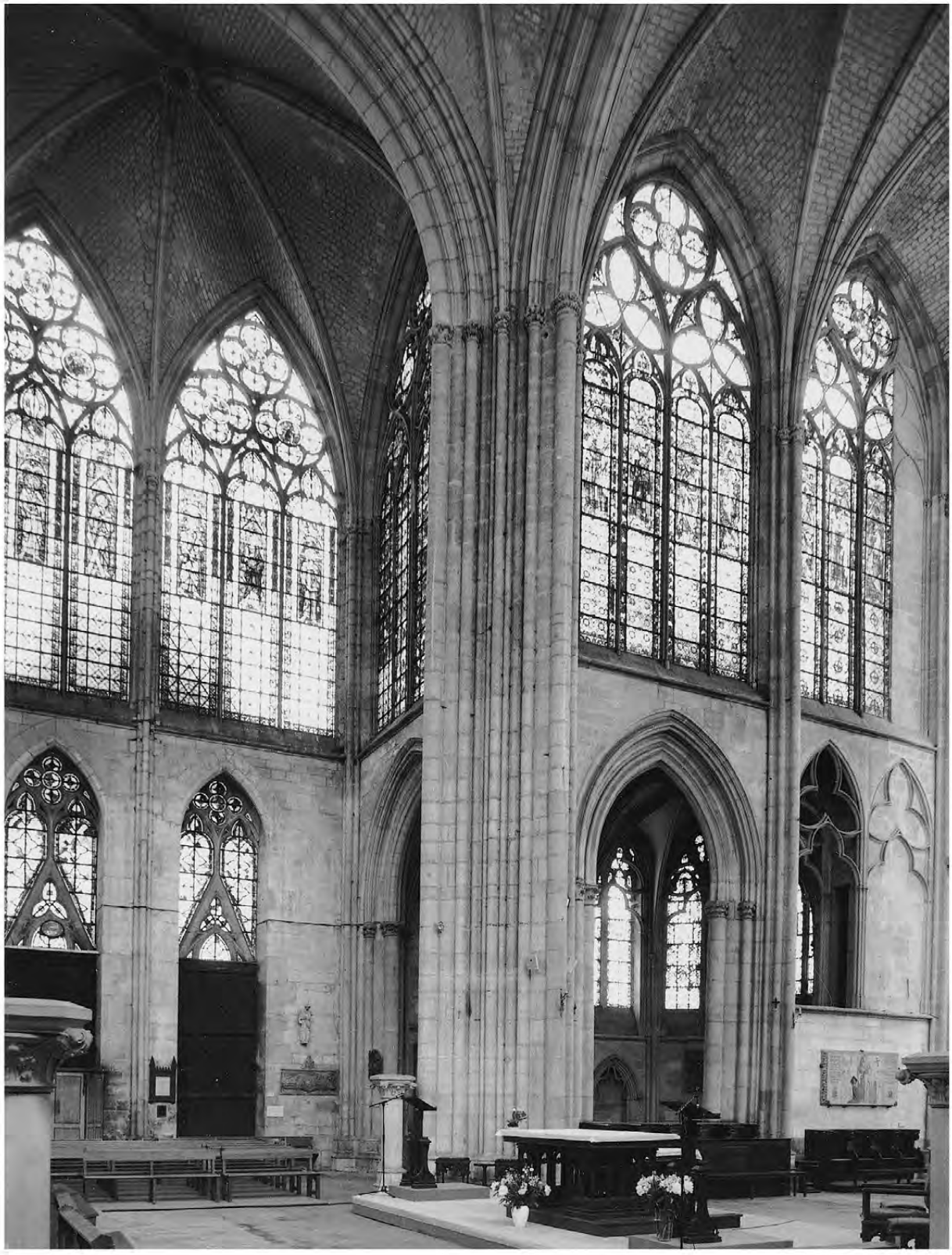


Fig. 2. Troyes, Saint-Urbain, interior looking north-east (Christopher Wilson, 2005).

Fig. 3. Troyes, Saint-Urbain, interior looking south-east (Christopher Wilson, 2005).

Fig. 4. Troyes, Saint-Urbain, piscina in main apse (Christopher Wilson, 2005).

Indeed the first Saint-Urbain master himself "corrected" the obtuse curvature of the Saint-Denis vaults by introducing acutely pointed transverse ribs of the conventional Gothic kind.[12] By contrast, hemicycles with fewer and wider windows had been pioneered in a building begun as far back as 1215, namely the choir of Auxerre Cathedral, and in the mid-thirteenth century the idea was rapidly gaining wide acceptance.[13] But the treatment of the transept end walls as pairs of upright windows appears to have been without any recent precedent.[14] Moreover, no other French church of the time possessed such a cathedral-worthy clearstorey but no triforium.[15] Most importantly of all, no other thirteenth-century church embodied such a systematically pursued strategy for maximising the role of the normative Gothic window. Implicit in that strategy was a highly critical view of the capacity of the conventional great church format to provide the best possible environment for the display of the single most important and distinctive product of thirteenth-century French architectural thought.

*

The root-and-branch character of the first master's critique of the current conventions of great church architecture, together with the clear indications in the detailing of his design that he relished his self-imposed mission to flout hallowed usage, must surely provide much of the explanation for his failure to initiate any movement to reform the Rayonnant great church. The tally of borrowings from Saint-Urbain in late thirteenth-century French architecture is indeed quite extraordinarily small. Practically the only work of importance which can be said to build on what had been done at Troyes is the choir of the priory church of Saint-Thibault-en-Auxois, probably begun around 1300.[16] Saint-Thibault lies about 100 kilometres south of Troyes in a locality where the incidence of Rayonnant architecture is decidedly sparse. The only great church building whose architect showed a significant measure of sympathy with the outlook of his Saint-Urbain colleague is the choir of Sées Cathedral in Normandy, started in all probability around 1270. The way in which the tracery of the inner layer of the triforium is bisected by mullions produced downwards from the clearstorey has long been recognised as a clear debt to Saint-Urbain,[17] and another borrowing is the proportioning of the two upper storeys, that is the relative tallness of the triforium and the lowness of the clearstorey. Although Normandy had been politically integrated into the kingdom of France for more than two generations, its architectural independence died very slowly and the Sées designer betrays his mid-century Norman training in quite a number of details.[18] Therefore Sées, far from being a rare instance of the work of a northern French disciple of the Saint-Urbain first master, is a key piece of evidence that manifestations of a positive response to Saint-Urbain have to be sought outside the heartlands of Rayonnant.

Were Saint-Urbain's innovations shunned in northern France wholly on account of the consensus-disrupting nature of the design itself, as implied in the previous paragraph, or was some other factor at work? The mannerism and eccentricity of Saint-Urbain are indeed so marked that it is not hard to imagine that

contemporary architects and patrons might have interpreted those qualities as evidence of a flippant mentality inappropriate to the serious task of designing a major church building. Perhaps the first master's failure to conform to prevailing norms was even viewed by his peers as uncollegial behaviour, a presumptuous and arrogant declaration of his own superior creative powers. A further possibility is that the comparatively simple format of the building would have reduced its potential to exert influence on the great churches, whose designers normally drew their inspiration from other great churches, although that line of argument is weakened by the already-mentioned evidence that a building well outside the genre, Louis IX's Sainte-Chapelle, was the source of the immensely tall clearstoreys that were being raised above north French cathedrals from the mid-thirteenth century onwards. Yet another possible factor is the series of destructive attacks on Saint-Urbain mounted in 1266 by agents of the nuns of the ancient and powerful Benedictine abbey of Notre-Dame-aux-Nonnains in Troyes, who believed that their jurisdiction had been infringed by the new foundation. The outrageous actions of those well-born furies, which ceased only when they were excommunicated in 1269, will have been a significant factor in the failure of Urban IV's executors to complete the building out of the funds provided by the founder,[19] and they might even have had the effect of making the church seem jinxed in the eyes of contemporaries. It is not beyond the bounds of possibility that the project had attracted the hostility of a still more important woman, namely Margaret of Provence, widow of Louis IX, who in 1275 got the county of Champagne (of which Troyes was the principal city) into the hands of her sister Eleanor's son, the English prince Edmund of Lancaster. In 1263 Pope Urban had rejected Edmund's candidacy as king of Sicily in favour of that of Margaret's brother-in-law and bitter adversary Charles of Anjou, and in Margaret's eyes Champagne could have been both a "compensation prize" for Edmund and a means of vexing Charles, whose lordship of Tonnerre lay very close to Troyes.[20] Of course distinguishing between these different possible explanations for the marginalisation of Saint-Urbain would be feasible only if we had available much more written evidence than we do, including testimony of kinds that scarcely ever survive from this period.

*

We turn now to Saint-Urbain's influence in England. The earliest example of the phenomenon is the relatively well-known one of the tracery in the aisles of the Gothic eastern arm added to the Romanesque cathedral of St Paul in London.[21] The "New Work", as this ambitious project was known at the time, was begun in spring 1259, and its immense crypt must have been far from complete when London became embroiled in the civil war which broke out in 1263. A majority of Londoners supported the baronial rebels, who were finally crushed by the royalists in 1265, and for some years afterwards the civic elite of London, whose backing will have been essential to the New Work, cannot have been in a position to lend much material assistance. The key points here are that the aisle walls of the main level are unlikely to have been begun before the very end of the 1260s or the early 1270s and that their detailed design need not have been settled until very shortly before their construction began. The principal visual record of this long-lost building is the series of mid-seventeenth-century engravings made by the Bohemian-born artist Wenceslaus Hollar, views which, though individually often deficient, provide a reasonably clear picture when considered together.[22] The east windows of the aisles copied the apse windows of Saint-Urbain, complete with their most idiosyncratic detail, the diminutive impaled trefoil sandwiched between the head of the central light and a supplementary arch placed above it. Hollar's views of the east wall show the double arches above the central lights, and though the impaled trefoils are omitted it can be assumed that this detail was present for it appears in the rather shaky rendering of the tracery in the lateral aisle walls which Hollar includes in his interior view looking east in the easternmost bays of the New Work. The aisle windows are shown with impaled trefoils over all three lights, a pattern seemingly paralleled only in the gable window of the north transept of Hereford Cathedral, probably of the late 1260s. There is no need to underscore the significance of the contrast between the extremely prominent use made of ideas drawn from Saint-Urbain in the most important building project of the English metropolis and the total indifference of northern France. Yet one must not lose sight of the important fact that this and the other borrowings of French detail in the New Work of St Paul's left undisturbed a wholly traditional English kind of structure with thick walls, richly profiled arches and supports, a high unlit middle storey, relatively

Fig. 5. Troyes, Saint-Urbain, south transept façade (Christopher Wilson, 2005).

narrow clearstorey windows and a flat-walled east end. Mention of the east wall brings us to the great east window, where we are confronted again by the problem of Hollar's inadequate rendering of Gothic tracery. There is a possibility, although this cannot be proved since we have no control for Hollar's testimony, that he gave the heads of the seven lights below the St Paul's rose such extreme boldness and angularity because they incorporated gablets like those in the lower-level windows at the east end of Saint-Urbain (Fig. 1). The few still-extant English windows which incorporate gablets into their tracery range in date from the mid-1280s to the first decade of the fourteenth century, and it may be that the east window of St Paul's was the immediate source in every case. Whether or not St Paul's was the conduit by which this strange motif was disseminated in England, there is no need to doubt the Troyes derivation of the earliest extant example, that in the centre of the west wall of the vestibule to York Minster's chapter house,[23] for there are several further indications that the designer of that exceptionally ambitious building was well acquainted with Saint-Urbain.

If the York chapter house was designed and begun in the early or mid-1280s, as seems very probable,[24] that would make it the earliest known example of the practice, which was peculiar to England in the years around 1290-1300, of compiling designs for full-scale buildings or parts of buildings out of enlargements of the microarchitecture of French cathedral portals. Such a procedure, strange enough in itself, is all the more so when one considers that English architects had hitherto paid almost no attention to this aspect of Rayonnant. The canons' stalls at York consist not of simple wall arcades, as in almost all earlier English chapter houses, but rather of magnifications of the kind of niches for jamb figures which were pioneered in the 1240s on the north transept portal of Notre-Dame in Paris and widely imitated thereafter (Fig. 6).[25] The only major change to the prototype made by the designer (almost certainly the Master Simon responsible for the York nave begun in 1291) was the opening out of the sides so as to reveal limited views into adjacent stalls, an adjustment essential to the creation of the impression one gains as one walks past that the intervals between the shafts are changing and the backs of the niches are participating in a continuous rippling motion. Flanking the entrance of the chapter house are single stalls for the apparitors, the officers who guarded the privacy of the chapter in conclave (Fig. 6, extreme right). They resemble the canons' stalls but include several special features. The most important of these, the miniaturised battlements with men's heads looking out from the embrasures, are doubtless symbolic of the apparitors' vigilance during chapter meetings, but they also reveal Simon's knowledge of one of the very few French uses of microarchitecture other than on portals or buttresses, namely the piscina introduced into the dado of the main apse of Saint-Urbain by the second master in the early 1270s (Fig. 4). Above the piscina's gabletted arches are four figures sheltered by canopies based on the kind of housings standardly used on the jambs and archivolts

of sculptured portals. The battlements of the Saint-Urbain canopies are manned by frenetically active soldiery not paralleled at York but some merlons are occupied by heads of static, outward-looking figures very similar to their York counterparts.[26] The fact that the Saint-Urbain piscina resembles the canons' stalls at York in being fitted immediately under the window openings overhead, together with the fact that at Saint-Urbain the dado consists, apart from the piscina, of plain ashlar, suggests that the York designer had found the starting point for his stalls by imagining the truncated niches at Troyes as if they had been restored to the length they had originally on portal jambs and as if they had been multiplied to fill the whole of the dado. This is of course a vastly more sophisticated way of exploiting Saint-Urbain as a design source than that evidenced by the aisle windows at St Paul's, but the major monuments of late thirteenth- and early fourteenth-century English Decorated architecture can show many such imaginative leaps, and one has to allow for the existence of some prodigious feats of creative athleticism if one is to have any hope of understanding the transformations of source material wrought by the period's most talented architects. What is placed beyond doubt, not only by the previously mentioned inclusion of gablets in the vestibule tracery but also by the exceptionally close resemblance of the tracery in the windows of the main room to those on the east sides of Saint-Urbain's transepts (Figs 3 and 6), is that Simon was very well-informed about both phases of the building which I am proposing was one of his principal sources.[27] As is nearly always the case in medieval architecture, there is no way of deciding precisely how that knowledge was transmitted, whether it was by means of architects' personal inspection, via designs circulating amongst architects, or via drawings which patrons commissioned to inform themselves about the buildings put up for peers and rivals.

The enthusiasm of England as a whole for the novel concept of buildings assembled from enlargements of Rayonnant microarchitecture was to be kindled not by the York chapter house but by the interior of the main chapel in the English counterpart to the Sainte-Chapelle, St Stephen's Chapel in the Palace of Westminster, begun in 1292 and now mostly destroyed. The architect, Michael of Canterbury, went out of his way to create a building which encompassed a great variety

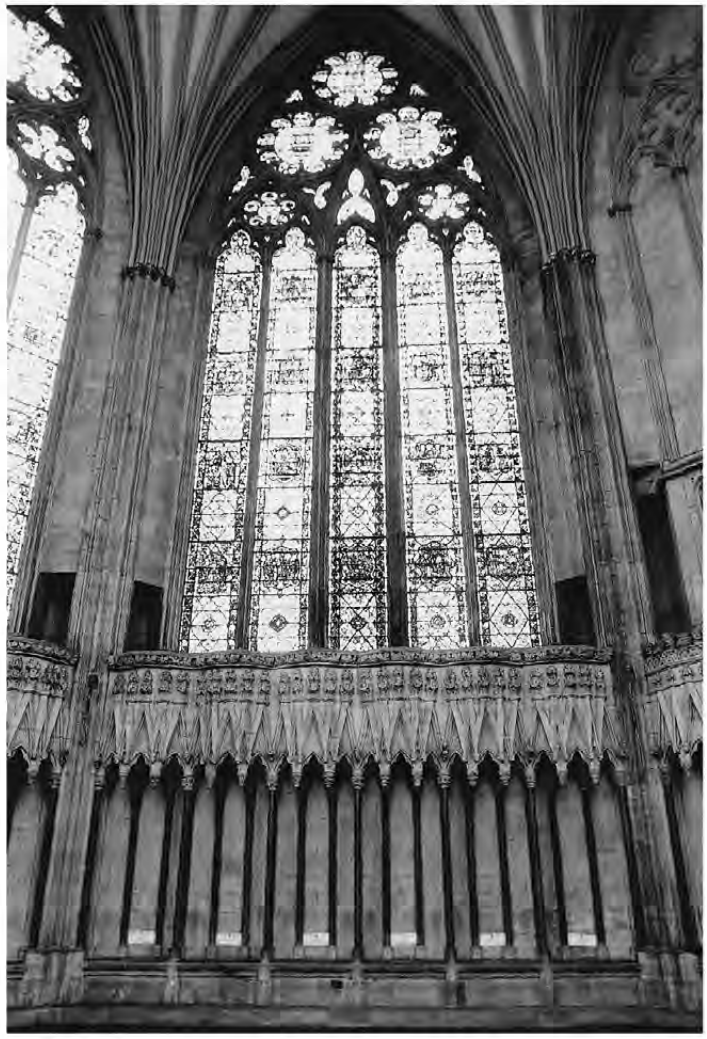


Fig. 6. York Minster, chapter house, interior elevation of south-west side (Christopher Wilson, 2006).

of extremely complicated effects, and one of the most curious – one is tempted to say "perverse" – aspects of the design is the way in which the exterior of each bay is treated like the interior of a Rayonnant great church clearstorey and triforium (Fig. 7).[28] The detailed handling of this part of the chapel includes two further mannered features: the impression given by the lower chapel windows that their openings are punching holes in the solid walling of the quasi-triforium; and the way in which the powerfully stressed horizontals separating the quasi-clearstorey from the quasi-triforium, the only intermediate horizontals in the elevation, do not mark the division between the upper and lower chapel. I think it extremely likely that the exterior elevations of St Stephen's were partly modelled on

Fig. 7. Westminster Palace, St Stephen's Chapel, part of south exterior elevation: upper chapel windows shown with hypothetically reconstructed tracery and later blocking in lower parts of lights (from F. Machenzie, *The Architectural Antiquities of the Collegiate Church of St Stephen, Westminster*, London, 1844, detail of Plate IV).

the exterior of the main apse of Saint-Urbain, which is the nearest approach in earlier Gothic architecture to Michael of Canterbury's strange notion of making a Rayonnant triforium sit on the ground (Fig. 1). Of course at Troyes there is still a solid masonry dado between the base of the quasi-triforium and the ground, but the likeness to St Stephen's is established by the tallness of the quasi-triforium and it is confirmed by the inclusion of gablets above each light and the oculi in the external spandrels over the windows of the quasi-clearstorey. The fact that the exterior elevations of the two glazed levels of Saint-Urbain's apse do not occupy the same plane might not have been apparent to Michael of Canterbury if, as is likely, his knowledge of it derived entirely from an elevation drawing. In a sense Michael's design is a cross between the interior elevations of Rayonnant upper storeys and elevations derived from the latter but which start at ground level, for example those of the Saint-Germer-de-Fly Lady Chapel (begun around 1260) and the aisles of the Sées choir. Nevertheless, it would appear to have been Saint-Urbain which provided the stimulus to bring such compositions out into the open air. The concept of externalising aspects of Rayonnant hitherto confined to interiors is of course associated pre-eminently with the west front of Strasbourg Cathedral, whose tracery "harp-strings" Jean Bony was surely right to see as in part a development from the skeletonised upper apse walls of Saint-Urbain.[29] We cannot hope to know for certain whether Michael of Canterbury was informed about Strasbourg, but if he had made it his business when designing St Stephen's to acquaint himself with the work of the leading centres of modern design, this spectacular building ought to have been on his list. The possibility that his creative manipulation of Saint-Urbain was not entirely unaided is raised by the existence at Strasbourg of a feature which has received far less scholarly attention than the freestanding tracery on the exterior. I refer to the enormous rectangular panels of blind tracery which flank the reverse of the central west door and which appear in Design D.[30] These are remarkably similar to the bays of the external elevation of St Stephen's, and share with the latter the appearance of being a variation on Saint-Urbain's exterior apse elevation.

The only instance of an English imitation of a feature of Saint-Urbain designed to privilege the normative Gothic window would seem to be the original two-storey elevation of the presbytery (the four easternmost bays of the eastern arm) of Exeter Cathedral (Fig. 8).[31] Construction of the central vessel of the presbytery began in the later 1280s or the early 1290s, making it roughly contemporary with St Stephen's and the York chapter house, although it is highly likely that its design had been drawn up when work began at the east end in the mid-1270s.[32] Dating the design shortly after the aisles of the New Work of St Paul's Cathedral would make sense of a certain number of resemblances to that building and would fit well with Exeter's general conformity to English norms in respect of wall structure and surface treatment, the latter very remote from the strongly Rayonnant-influenced detailing at

York and St Stephen's. Exeter's combination of two-storey elevation and tall clearstorey was unique in later thirteenth-century English architecture, and the fact that the clearstorey shares with its counterpart at Saint-Urbain three further important features besides its tallness virtually proves that the source was Urban IV's church, for in combination, if not individually, these were without precedent on the English side of the Channel. The features in question are the maximum lateral extension of the windows between the responds of the high vault, the positioning of the tracery approximately half way between the interior and exterior wall planes, and the inclusion between the tracery and the rear arches of plain, diagonally set embrasures. That the derivation of this unique scheme from Saint-Urbain has not been recognised hitherto is doubtless due to its markedly un-French detailed handling. The unconventional two-storey elevation (and possibly also the equally unusual and very prominent sloping sills of the clearstorey windows) must have been disliked by the cathedral authorities or by Master Roger (the architect in charge by 1297), for in the opening years of the fourteenth century the three-bay choir to the west of the presbytery was built with an arcaded triforium, and in 1318 or 1319 Roger's successor Thomas of Witney altered the presbytery elevation to bring it into conformity with the choir.[33] Yet even before its clearstorey was truncated by the belated introduction of a triforium, the presbytery will have been significantly less effective than Saint-Urbain as a showcase for the normative Gothic window, since the positioning of the tracery in a plane mid-way through the thickness of the clearstorey wall puts it at a greater distance from the main wall plane than the similar placing of the tracery within the much thinner walls of the rectangular-plan bays at Saint-Urbain. Moreover, the high vault at Exeter incorporates low-set conoids which are totally different from the high springings of the Saint-Urbain vaults, not least in the way they obstruct views of the clearstorey windows from all angles. It is therefore probable that the designer of the presbytery liked Saint-Urbain's two-storey elevation for its own sake and not for its capacity to privilege the normative Gothic window, and if that was indeed the case his attitude did not differ materially from that of other English architects influenced by Saint-Urbain, who saw the latter as a source of novel ideas rather than as an exemplar to be imitated wholesale.

Fig. 8. Exeter Cathedral, reconstruction of original form of presbytery elevation (drawing by Christopher Wilson).

*

The list of English buildings influenced by Saint-Urbain – the New Work of St Paul's, the York chapter house, – St Stephen's Chapel and the Exeter presbytery – is very nearly a roll-call of the outstanding achievements of the age. The only obvious absentee is the York nave.[34] What then is the explanation for Saint-Urbain's extraordinarily powerful influence in late thirteenth-century England? The fact that it was a pope's project is most unlikely to have made it seem interesting to the English, for the Sicilian Affair of the 1250s and early 1260s, together with the increasingly frequent provisions of papal officials and relatives to cathedral canonries, had already begun to sow the

seeds of disillusionment with the papacy in England. Moreover, the idea of building a church over the site of a birthplace would have reminded many Englishmen of St Thomas of Acon in London, a hospital church which occupied the site of St Thomas Becket's family home, and which was still under construction in 1262.[35] If that parallel was indeed one drawn frequently in England it will almost inevitably have had the effect of making Urban IV's church seem tainted by delusions of grandeur. But it is the fact that Saint-Urbain had a great impact on major late thirteenth-century projects in the Empire as well as in England which demonstrates most effectively that its influence outside northern France was not due to its associations or indeed any kind of meaning, for it can hardly have embodied a meaning that was relevant to the cathedral authorities in London, York, Exeter, Strasbourg, Metz and Regensburg,[36] as well as to King Edward I. The crucial factor must have been the architects' keen appreciation of the church's superb and unique architecture. English master masons are likely to have been particularly attracted to Saint-Urbain on account of certain traits which were quite untypical of French Gothic though fully consonant with English ideas, namely the effects of recession and plasticity in the lateral elevations of the main vessels[37] and the application to the transept terminal walls of the same aesthetic as that governing the rest of the building. Of course I realise that the idea of meaning-free and aesthetically motivated borrowings is at odds with much recent art-historical writing, but I am firmly convinced that the evolution of Gothic at its more ambitious levels makes very little sense unless one accepts firstly that it is an architecture whose emphasis on novelty and complexity deprived it of any strong allusive capacity and secondly that it is a tradition in which the main motor of innovation and change, alongside institutional competitiveness, was the creative imagination of the architect.

What are we to make of the evidence that Saint-Urbain seems to have been regarded in France as the work of a renegade while elsewhere it was seen as a forward-looking and exemplary building? Should we regard the inability of northern French architects of the late thirteenth century to take account of the work of their most gifted colleague as an indication that they were mere epigones by comparison with their counterparts in earlier generations? Or should the blame for the creative sclerosis (not to say stasis) which overtook the region's architecture after 1270 be laid at the door of patrons rather than architects? On balance it seems less likely that there was "consumer resistance" to change than that the architects' self-image had shifted from that of exponents of a long-lived "school" developed entirely within northern France to that of upholders of a tradition which had attained perfection and was in need of no infusions of fresh ideas from outside its own sphere. It is easy to imagine how the elegant forms and immaculate masonry technique of late thirteenth-century northern French Gothic could have reinforced such a perception, but an even more important factor is likely to have been the architects' proud awareness that the new style which we know as Rayonnant had been even more influential beyond the region's borders than its late twelfth- and early thirteenth-century predecessors. The capacity of late thirteenth-century English architects to produce innovatory designs must have owed much to the fact that expectations regarding major churches were far less rigidly defined in their country than in northern France precisely because from the mid-thirteenth century onwards England had been open to French influence, influence which became increasingly intense though never overwhelming. To appreciate the effects of the absence of a single dominant approach to great church design one has only to compare the totally different appearance of the two most important examples begun around 1290, the Saint-Urbain-based two-storey elevation of the Exeter presbytery and the almost orthodoxly Rayonnant nave of York Minster. But even in the more open-minded climate of late thirteenth-century England the great churches were required to exhibit a certain decorum, and it is very telling that it should have been the architects of the two most prestigious projects that were not so constrained, St Stephen's Chapel and the York chapter house, who made the most creative use of ideas from Troyes. As they busied themselves with the design of these buildings Michael of Canterbury and Simon cannot have had any inkling that their openness to the exploratory spirit of Saint-Urbain would very soon spark into existence the Decorated style,[38] that explosion of imaginative freedom hailed by Nikolaus Pevsner as "the most forward, the most important and the most inspired [late thirteenth- and early fourteenth-century architecture] in Europe".[39]

NOTES

[1] Possibly the only authentic record of a major medieval architect's creative processes, other than the records of the fourteenth- and fifteenth-century *expertises* at Milan and Gerona, is Gervase of Canterbury's discussion of William of Sens' reasoning behind the retention of the chapels and towers flanking the Romanesque ambulatory at Canterbury Cathedral; Robert WILLIS, *The Architectural History of Canterbury Cathedral*, London, 1845, p. 60-61.

[2] Remarkably, the seeming disparity between modern and medieval assessments of Saint-Urbain has attracted no comment in the literature. The church's reputation as an exceptional building begins with the high praise of its structural design by Viollet-le-Duc, who hailed its designer as "un homme de génie"; Eugène VIOLLET-LE-DUC, *Dictionnaire raisonné de l'architecture française du XI^e^ au XVI^e^ siècle*, vol. 4, Paris, 1861, p. 138. A useful, though not exhaustive, bibliography is in Christine ONNEN, *St-Urbain in Troyes. Idee und Gestalt einer päpstlichen Stiftung*, Kiel, 2004, an abridged version of the author's Kiel University doctoral thesis of 1999. Saint-Urbain is alos discussed by Michael T. Davis in the present volume.

[3] The first part of the title alludes to Matthew 13:57. The indebtedness to Saint-Urbain evident in several early fourteenth-century English buildings lies beyond the scope of the present paper. The much more widely acknowledged debts of some late thirteenth-century German buildings receive brief mention below.

[4] Nikolaus PEVSNER, "Bristol, Troyes, Gloucester: The Character of the Early Fourteenth Century in Architecture", in *Architectural Review*, 113, 1953, p. 88-98; Dieter KIMPEL & Robert SUCKALE, *Die gotische Architektur in Frankreich 1130-1270*, Munich, 1985, p. 442-447; Christopher WILSON, *The Gothic Cathedral. The Architecture of the Great Church 1130-1530*, London, 1990, p. 126-127.

[5] I can perhaps claim to have grasped more fully than others have done Saint-Urbain's status as a critique of recent and contemporary French Gothic; WILSON, *The Gothic Cathedral*, p. 126.

[6] The building chronology proposed by Davis has been refined by Bruzelius: Michael T. DAVIS, "On the Threshold of the Flamboyant: The Second Campaign of Construction of Saint-Urbain, Troyes", in *Speculum*, 59, 1984, p. 847-884; Caroline BRUZELIUS, "The Second Campaign at Saint-Urbain at Troyes", in *Speculum*, 62, 1987, p. 635-640. I accept the Davis-Bruzelius chronology and also Davis' demonstration that the transepts and crossing are the work of two architects whose contributions can be clearly distinguished. The nave and the controversies over its dating are not my concern here. For the dating of the piscina to the 1270s see n. 26 below.

[7] For reasons which cannot be entered into here, I disagree with the now widely held view that Soissons Cathedral pioneered these changes.

[8] That perception probably accounts for a highly unusual phenomenon discussed briefly below, the introduction of a triforium into the previously two-storeyed presbytery of Exeter Cathedral.

[9] The perplexity of French Gothic architects wrestling with this problem is evoked particularly well in Erwin PANOFSKY, *Gothic Architecture and Scholasticism*, Latrobe (Indiana), 1951, p. 70-74. Few historians of thirteenth-century French Gothic architecture have shown any willingness to acknowledge what seems to me the quite palpable disparity between the quality of thought evident in the design of façades and that lavished on the main bodies of churches, especially the interior elevations of central vessels.

[10] It seems safe to assume that the Saint-Urbain first master knew the slightly earlier attempt to reform French façade design represented by the west front of Saint-Nicaise at Reims.

[11] Also capable of being interpreted as a means of promoting the visibility of the windows is the narrowness of the high vault responds relative to their depth.

[12] The sloping lateral ridges which result from the use of transverse ribs rising higher than the apices of the clearstorey windows are reminiscent of numerous late twelfth-century French high vaults, although there the ridges usually have a slightly curved profile not found at Saint-Urbain.

[13] For instance the choirs of Tours Cathedral and the Augustinian abbey church of Saint-Martin-aux-Bois (circa 1260-1270), some 40 km east of Beauvais.

[14] Except possibly the west front of the destroyed Sainte-Chapelle in Dijon; ONNEN, *St-Urbain in Troyes*, p. 103. The date of the front is uncertain but fragments excavated in the nineteenth century at the west end of the nave have been dated to the 1240s; Robert BRANNER, *Burgundian Gothic Architecture*, London, 1960, p. 136. Another possible source is the Benedictine abbey church of Saint-Jean-aux-Bois (circa 1230-1250), around 10 km south-east of Compiègne, but there the paired windows in the transept terminals are a by-product of the two-aisled format of the transepts.

[15] The intended sense of "French" here (*i.e.* pertaining to the core areas of the kingdom of France, as in the discussion of Sées below) excludes the choir of Le Mans Cathedral. This has a two-storey elevation incorporating a very impressive Rayonnant clearstorey which was presumably complete by the time of the 1254 dedication of the cathedral; Robert BRANNER, *St Louis and the Court Style*, London, 1965, p. 81. The Le Mans elevation, which should probably be understood as a modernisation of such earlier two-storey Norman elevations as that of the choir of Coutances Cathedral, could have been known to the Saint-Urbain master, and an awareness of Norman Gothic generally would help explain the markedly un-French emphasis on recession and modelling in his main elevations.

[16] It is likely that Saint-Urbain influenced the widespread move in late thirteenth- and early fourteenth-century Rayonnant towards boldly projecting but narrow vault responds, but the problem is one which requires further consideration. On Saint-Thibault see most recently Christian FREIGANG & Peter KURMANN, "L'Église de l'ancien prieuré de Saint-Thibault-en-Auxois: sa chronologie, ses restaurations, sa place dans l'architecture gothique", in *Congrès archéologique de France*, 144, 1989, p. 271-290. Equally strongly influenced by Saint-Urbain, though far less ambitious, is the collegiate church begun circa 1300 at Mussy-sur-Seine, some 50 km south-east of Troyes, on which see most recently Bruno KLEIN, "Die Kirche von Mussy-sur-Seine, methodische Überlegungen zur französischen Architektur um 1300", in *Architektur und Monumen-*

talskulptur des 12.-14. Jahrhunderts: Produktion und Rezeption. Festschrift für Peter Kurmann zum 65. Geburtstag, ed. Stephan GASSER, Christian FREIGANG & Bruno BOERNER, Bern, 2006, p. 183-205.

[17] Paul FRANKL & Paul CROSSLEY, *Gothic Architecture*, New Haven & London, 2000, p. 168, but see also note 18 below.

[18] Notably the deep but repetitively profiled main arcade arches and the external screening of the apse clearstorey windows with tracery forms derived from the interior clearstorey screens in the mid-thirteenth-century nave at Sées. Although the way in which the nave's high vault responds cross over the blind tracery circles in the main arcade spandrels is very likely to have influenced the choir's much more copious use of the motif of bisected tracery, that does not reduce the likelihood of influence from Saint-Urbain.

[19] DAVIS, "Saint-Urbain, Troyes", p. 851, 878.

[20] Evidence which may possibly support such a reconstruction of events is Charles of Anjou's donations of building materials from Tonnerre in 1276, for which see BRUZELIUS, "The Second Campaign at Saint-Urbain", p. 636. Although Edmund of Lancaster appears not to be documented at Troyes, it would be surprising if his periods of residence in Champagne included no visits to the palace in the county's principal town.

[21] Jean BONY, *The English Decorated Style. Gothic Architecture Transformed 1250-1350*, Oxford, 1979, p. 10-11.

[22] They illustrate William DUGDALE, *The History of St Paul's Cathedral in London*, London, 1658. High-quality reproductions of Hollar's views of the interior of the easternmost bays and of the east front are in Derek KEENE, Arthur BURNS & Andrew SAINT (ed.), *St Paul's. The Cathedral Church of London, 604-2004*, New Haven & London, 2004, p. 134, 137.

[23] Nicola COLDSTREAM, "York Chapter House", in *Journal of the British Archaeological Association*, 3rd series, 25, 1972, p. 15-23, here p. 21, acknowledging Peter Kidson. All the other examples of the motif of which I am aware are also in east windows, namely those of the chancel of Barnack church in Cambridgeshire, the Lady Chapel of St Albans Abbey and the choir of Merton College Chapel, Oxford, the last discussed in this volume by Tim Ayers.

[24] The dendrochronological and other evidence for the dating is discussed in Sarah BROWN, *'Our Magnificent Fabrick'. York Minster: An Architectural History c. 1220-1500*, Swindon, 2003, p. 51-55.

[25] BONY, *The English Decorated Style*, p. 15. The only earlier Rayonnant stone stall canopies known to me, those in the choirs of Naumburg and Meissen Cathedrals, are perhaps unlikely to have been known to Simon, although it may be significant that they too derive from jamb figure canopies on French portals.

[26] It is difficult not to see the bristling battlements of Sint-Urbain's piscina as somehow connected to the recent attacks on the church at the behest of the nuns of Notre-Dame-des-Nonnains (see above). The mixture of static and active figures on the piscina must surely derive from the similarly varied figures shown on the battlements of a city gate on the lid of the tenth- or eleventh-century ivory casket in the treasury of Troyes Cathedral, an exceptionally high quality object traditionally said to have been brought from Constantinople after the 1204 sack by the chaplain of Cramier de Traisnel, bishop of Troyes; illustration in Helen C. EVANS & William D. WIXOM (ed.), *The Glory of Byzantium. Art and Culture of the Middle Byzantine Era A.D. 843-1261*, (exhibition catalogue, Metropolitan Museum of Art), New York, 1997, p. 204 (no. 141). The dating of the piscina to the early 1270s is clear from the absence of signs of damage by the 1266 fire and from its inclusion of a kneeling figure of Cardinal Ancher Pantaléon (the continuator of Saint-Urbain and nephew of Urban IV) holding a schematised representation of a full-height transept which, as was noted some time ago (Francis SALET, "St-Urbain de Troyes", in *Congrès archéologique de France*, 113, 1955, p. 96-122, here p. 105), differs from the representation of the main apse held by the balancing image of Pope Urban in having no roof. It has been demonstrated by Bruzelius that the transept roofs were erected in 1276; BRUZELIUS, "The Second Campaign at Saint-Urbain", p. 635-636. Further evidence for a dating coeval with the clearstorey level of the transepts is adduced in Julian GARDNER, "Cardinal Ancher and the Piscina in Saint-Urbain at Troyes", in *Architectural Studies in Memory of Richard Krautheimer*, ed. Cecil L. STRIKER, Mainz, 1996, p. 79-82, here p. 80.

[27] Also capable of being construed as a debt to Saint-Urbain is the inclusion (unique in an English chapter house) of a wall passage running directly above the stalls, although the main influence here is undoubtedly Westminster Abbey's aisle windows. Bony compared the gable over the entrance to the vestibule from the north transept to the gablets in the Saint-Urbain transept portals; BONY, *The English Decorated Style*, p. 46. The comparison is no doubt a valid one, though at York the sill of the "window" and the gablet do not intersect in the same way as their analogues at Saint-Urbain do.

[28] WILSON, *The Gothic Cathedral*, p. 196.

[29] Jean BONY, *French Gothic Architecture of the 12th and 13th Centuries*, Berkeley - Los Angeles - London, 1983, p. 424-425.

[30] Roland RECHT (ed.), *Les Bâtisseurs des cathédrales gothiques*, Strasbourg, 1989, p. 389-392.

[31] Another could be the remodelling circa 1270 of the east wall of the main vessel of the Romanesque choir of Romsey Abbey, a wealthy house of Benedictine nuns about 15 km southwest of Winchester (illustration in Nikolaus PEVSNER & David LLOYD, *The Buildings of England: Hampshire and the Isle of Wight*, Harmondsworth, 1967, fig. 12). If this was intended as the first stage of a remodelling of the upper levels of the whole choir it would have anticipated the two-storey elevation and high clearstorey windows of the original Exeter presbytery design. The tracery of the windows, their pairing, their tallness, and their separation by a respond intended to carry a vault springing at the same level as the window heads, are all features in common with the transept terminal walls of Saint-Urbain; but the pairing of the windows and their separation by a respond providing for a high-springing vault could have been influenced by the analogous features in the east choir wall of the late twelfth-century hospital church of St Cross, Winchester (illustration in PEVSNER & LLOYD, *Hampshire and the Isle of Wight*, fig. 20). Another possibility is that the high placing of the intended vault springing at Romsey was influenced by the chapter house of Salisbury Cathedral which, like its model at Westminster Abbey, is of interest in the present context as a parallel (albeit one arising from totally different premises) to Saint-Urbain's systematic equating of the springing levels of window heads and vaults.

[32] The earliest yearly fabric account to have survived is that for 1299-1300 and in general the documentary evidence for the earliest

phases of the rebuilding is very scrappy. Nevertheless it is clear that work had started in the mid- or late 1270s and also that, despite minor variations in detailing, all the late thirteenth-century work on the east arm followed a unified scheme. The only aisled limbs of an English cathedral with two-storey elevations pre-dating Exeter's were the late twelfth- and early thirteenth-century choir and transepts at Lichfield, not very probable examplars for Exeter.

[33] The Purbeck marble supports of the presbytery triforium were paid for in summer 1318; *The Accounts of the Fabric of Exeter Cathedral, 1279-1353*, ed. Audrey M. ERSKINE (Devon & Cornwall Record Society, new series, 24, 26), Torquay, 1981-1983, vol. 2, p. 98.

[34] The full roster of thirteenth-century English buildings influenced by Saint-Urbain should probably include the north nave aisle of Hereford Cathedral and the Romsey east wall (for which see n. 31 above). For discussion of the Hereford aisle in relation to Saint-Urbain see Richard MORRIS, "The Remodelling of the Hereford Aisles", in *Journal of the British Archaeological Association*, 3rd series, 37, 1974, p. 21-39, here p. 31, 37.

[35] For St Thomas of Acon see Frank BARLOW, *Thomas Becket*, London, 1986, p. 13-14; Derek J. KEENE & Vanessa HARDING, *Historical Gazetteer of London before the Great Fire*, 1, Cheapside (microfiche), London, 1987, 105/18.

[36] The very obvious indebtedness of the eastern parts of Regensburg to Saint-Urbain has been discussed many times. It seems to me almost as obvious, despite the fact that the point has apparently not been made in the literature, that Metz's very prominent use of the motif of tracery lights grouped under horizontals is a simplified version of the exterior treatment of the fenestration of the lateral apses at Saint-Urbain. For Strasbourg and Saint-Urbain see above and n. 29. My view that Saint-Urbain was not influential on account of some meaning inherent in it or ascribed to it receives some corroboration from the case of Sées Cathedral, the other most influential Rayonnant building in late thirteenth-century England, for Sées was an undistinguished see and one unlikely to have been of interest to English patrons. I am grateful to Lindy Grant for helpful discussions about Sées.

[37] The recession of the clearstorey tracery at Saint-Urbain, a feature previously found in comparatively minor churches in northern France, is probably present here on account of its capacity to complement the unusual degree of plasticity and recession in the main arcades, but for other possible explanations see KIMPEL & SUCKALE, *Die gotische Architektur in Frankreich*, p. 446.

[38] As noted above, the York chapter house exerted virtually no direct influence, but there can be little doubt that it was well known to Michael of Canterbury, whose influence in southern England proved to be both widespread and enduring.

[39] When first formulated, Pevsner's comments were less emphatic ("in some ways the most forward, the most important, and certainly the most interesting in Europe"; Nikolaus PEVSNER, *An Outline of European Architecture*, Harmondsworth, 1942, p. 50) but also much less prominent on account of not being placed, as they were in all the many subsequent editions of the same book, at the very end of a chapter treating mid-twelfth- to mid-thirteenth-century Gothic. Pevsner was the first scholar to assert the very high international importance of Decorated architecture, a perception which in my opinion remains valid, although I concur neither with his classification of English architecture 1250-1290 as Decorated nor with his view that this period produced buildings which were of European stature.

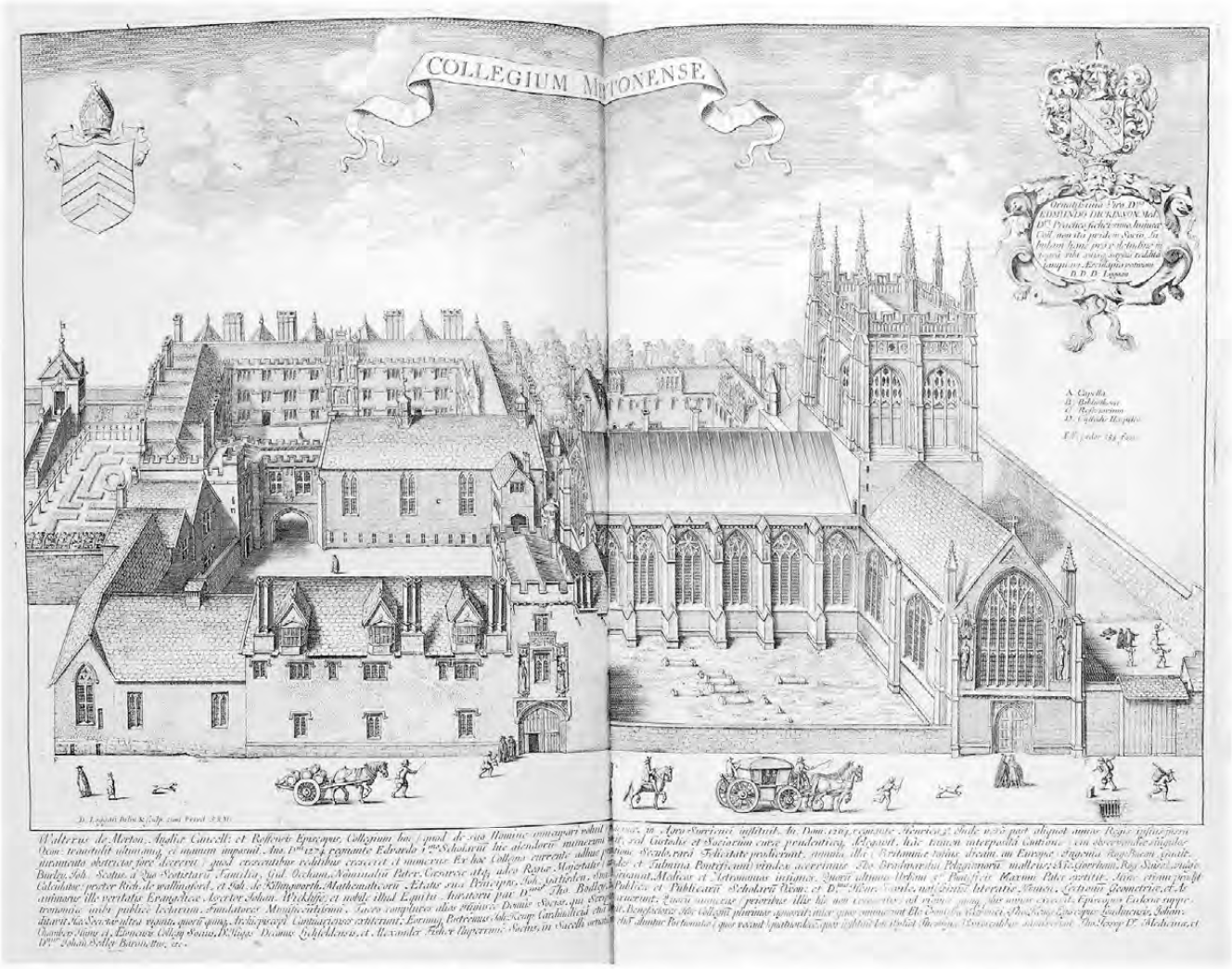


Fig. 1. Merton College from the north, engraving by David Loggan, from *Oxonia illustrata*, Oxford, 1675 (Merton College Library and Archives, Oxford).

Remaking the Rayonnant Interior: The Choir of Merton College Chapel, Oxford

Tim Ayers

The inventiveness of English masons in the late thirteenth and early fourteenth century has long been recognized. Elsewhere in this volume, Christopher Wilson touches upon their receptiveness, as a result, to the extraordinary architecture of the collegiate church of Saint-Urbain in Troyes. The present contribution looks at a building that may also owe something to Saint-Urbain, but the aim is to consider the reception of French Rayonnant traditions by an English institution, as patron. It considers architecture, but also the stained glass that filled its windows, at the ways in which this glass responded to the architecture (or not) on the one hand, and defined meanings for the institution, on the other. In the integration of media for broadly liturgical ends, it looks both back and forward within a tradition of major significance for the history of fourteenth-century English art and architecture.

Merton College, Oxford was one of the leading educational institutions of later medieval England (Fig. 1).[1] The statutes, the earliest dating to 1264, constituted the first self-governing college of the kind that would dominate the English medieval universities. In the words of A. B. Cobban, one of their recent historians, Merton is 'the prototype of the English "graduate college" of the pre-Reformation era'.[2] Until the foundation of New College a century later, this was the largest and richest single institution in the university, except for the convents of the Franciscans and Dominican friars. The colleges and other monuments in the English medieval universities have often been discussed in surveys of art and architecture, but usually detached from the specific context of their institutions. So a further aim of this essay is to redress the balance and suggest their interest for the relationship between Gothic art and scholasticism, if in a different way from that proposed by Panofsky.[3] It will consider monumental expressions of the university's material culture, at the very moment when institutions were being created that had wealth enough to build and create displays of this kind, and when Oxford was coming into its own intellectually on the international stage. It will address the college's self-image and, through this, its place in the university and society at large.

The choir of Merton College Chapel will serve as an example. From the beginning of its life in Oxford, the community met in the parish church of St John the Baptist, which therefore had a parish congregation attached.[4] To accommodate the community more fittingly, work began on a new cruciform building in the late 1280s, and the choir was substantially complete by 1300.[5] As it turned out, the rest was only ever partially finished. Let me first suggest how such university buildings have been interpreted in the past. For the French architectural historian Jean Bony, the choir is a building in a court style that was developing in the circle of Edward I and in London, in which the formulas of French architecture were adapted to "a new version of the Rayonnant style".[6] Subsequent critiques of court styles have tended to stress that the king was one patron among many. In fact, the great cathedral churches of London, Wells and York were quite as important for the commissioning of innovative new

Fig. 2. Merton College Chapel, east window, exterior (Tim Ayers).

buildings – chapter houses, for example – as important focuses of institutional identity.

As a building, the church at Merton was again a focus of institutional identity and a novelty. There was, in fact, no directly appropriate model in the university. The long unaisled choir, crossing and aisled nave are those of larger English minster and collegiate churches, for secular clergy and parish congregations (which is presumably what the aisled nave was going to be for). Yet there is also a local and educational context. In Oxford, the closest rivals in size were the churches of the mendicant orders, and the Franciscans and Dominicans dominated the study of theology, the highest degree, just as they did in Paris.[7] So it is probably not a coincidence that the length of the Merton choir is close to that of the Dominican church, built in the mid-thirteenth century.[8] Writing at that time, Matthew Paris, the well-informed and chatty monk of St Albans, had complained that the buildings of the mendicant orders, of which this was among the largest, were exceptionally grand,[9] and Oxford rapidly developed an internal discourse of architectural outdoing in the later Middle Ages. In other respects, however, the plainness of the Merton choir is in keeping with a counterbalancing theme of fitting sobriety in the architecture of the late medieval university. There was no stone vault, just a timber roof, and the structure is a rectangular box, whose architectural focus is the windows. It is the dazzling bar tracery of these windows that gives Merton its particular interest architecturally, above all the east window, overlooking the main quadrangle of the college (Fig. 2). The design is of seven lights, combining two Y-traceried units with a central rose, in a way typical of such contemporary buildings as the palace chapel of the bishop of Ely in London, begun in the 1280s.[10] The man responsible for building this, Bishop John Kirkby was the advisor to Merton College, and when he died in 1290, the college rang their bells for him.[11] The unusual choice of a twelve-petalled rose as the central feature of the Merton tracery may be inspired by that in the new east façade of St Paul's Cathedral in London, again set over seven lights, as shown in Wenceslaus Hollar's seventeenth-century engraving.[12] However, neither of these potential sources of inspiration explains the oddest feature of the Merton design, the inclusion of crocketed and finialed gables at the head of each main light. Ultimately, these may derive from the gables in the main lights at Saint-Urbain in Troyes (see Fig. 1 on page 108) but they are also arguably the solution to a particular design challenge. The east window overlooks the front quadrangle (Fig. 1) and there was no immediate opportunity to create a west front – as it turned out, the planned nave would never be completed. In short, the church faces the wrong way for the college. The intrusion of architectural sculpture is, arguably, an attempt to acknowledge the east end as a façade, in the same way that St Paul's incorporates a rose, more familiar from French façade design. If so, it is typical of the pragmatic and site-specific problem solving of a number of leading English master masons in the period. The architecture belongs within a national context of patrons and masons, as Bony outlined, but also arguably within a local one, tailored to

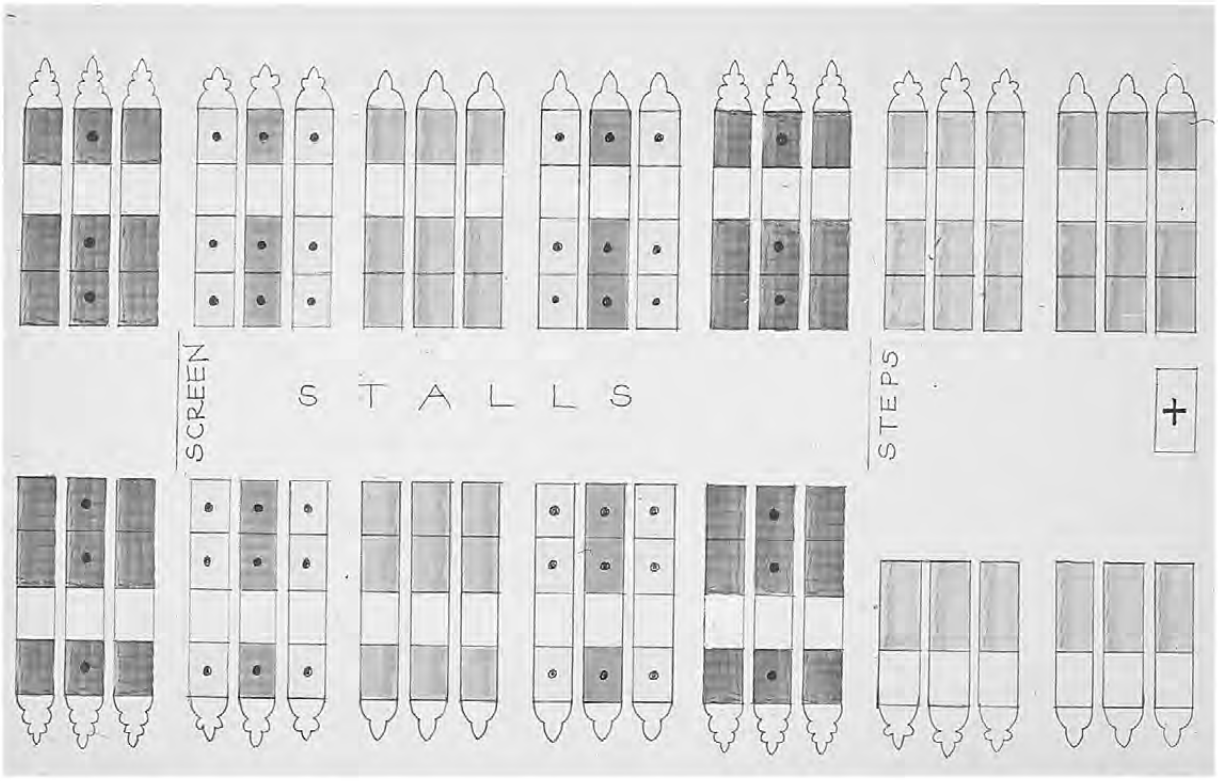


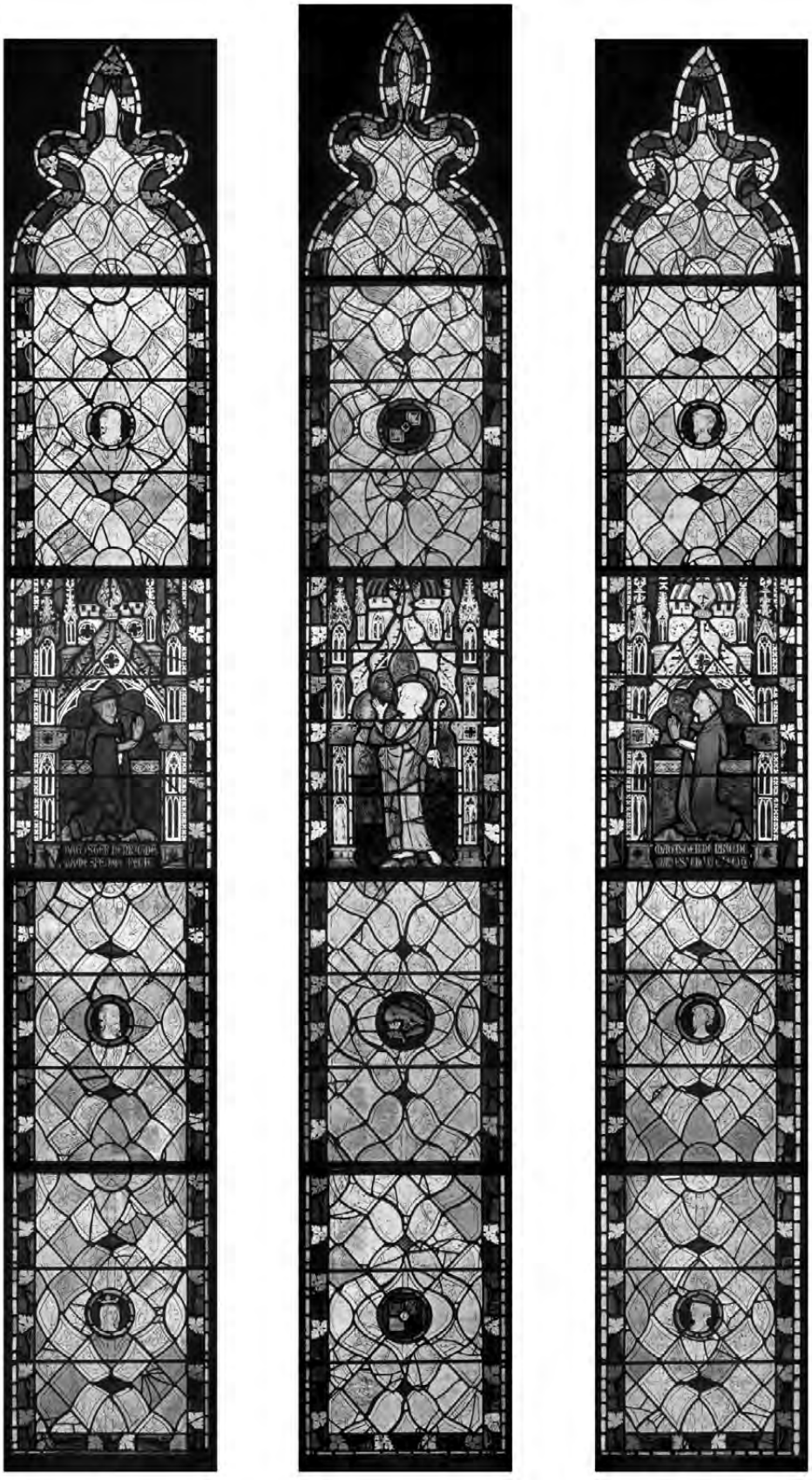
Fig. 3. Merton College Chapel, choir, distribution of grisaille patterns in relation to the liturgical layout with figurative bosses shown as dots (Tim Ayers).

this educational institution and responding to its site.

On the interior, the windows of the choir present a remarkable collection of stained glass.[13] Although the original screen, stalls, statues and furnishings can now be reconstructed only from documentary evidence, original glass survives in fourteen and a half of its fifteen windows, all made in the early fourteenth century (see below). Most previous surveys have considered this glass, again in formal terms, as an early introduction to England of the French Rayonnant band window, which is indeed their design. In this, the choir resembles the great churches of the secular clergy, such as the nave of York Minster, begun in 1291, with its Rayonnant interior elevation and band windows in the aisles. Both designs were conceived to combine the kind of brilliant illumination that was universally popular by this date in England, comprising grisaille or white glass painted with abstract or foliage designs, with bands of figurative subjects presented in a newly fashionable way. The whole Rayonnant package of banded figurative subjects in niches, naturalistic grisaille, coloured bosses and heraldic borders is taken up, inspired again by models like the choirs of the collegiate church of Saint-Urbain in Troyes or Sées Cathedral in Normandy.

A relationship has been proposed between this kind of brilliant illumination and the interest of thirteenth-century scholars in light metaphysics.[14] In one sense, there should be nowhere in England more appropriate than Oxford to consider such a question. The scholars Robert Grosseteste, bishop of Lincoln, and the Franciscan Roger Bacon had encouraged an exploration of optics and the cognitive process, in both Paris and Oxford, which engaged William of Ockham and several Mertonians in the early fourteenth century.[15] In another sense, however, these lines of enquiry had little direct effect upon the glazing of the choir at Merton. As mentioned previously, brilliant illumination was common by 1300. In fact, it is the imagery at Merton that suggests most forcibly the importance of viewing. Sight was central to the late

Fig. 4. Merton College Chapel, choir, main lights of a side window (sVII): including an Apostle and two kneeling figures (one restored), with inscriptions below *Magister Henricus de Mamesfeld me fecit*; and bosses showing St Paul and St Paul viewing the Pelican in Piety (G. King & Son, Norwich).



medieval devotional preoccupation with viewing the eucharist, as other contributors to this volume have emphasized, in the discussion of contemporary monuments on the continent.[16]

Viewing is demonstrably also at issue here. Averaging about 40 fellows in this period, and gathering for worship in the new eastern arm, the community of Merton College was the primary audience.[17] The scheme was conceived in relation to the liturgical spaces, complementing the meaning of the performance of the community below. This is clear in the grisaille itself, in which five designs are delicately painted with naturalistic foliage. Instead of being synchronized with the different tracery patterns of the windows, they define rather the sanctuary, altars and stalls (Fig. 3). So for example, the bays that housed the stalls have the greatest variety of patterns and include the largest number of figurative bosses, showing Sts Peter and Paul or kings and queens viewing the Pelican in Piety, a common allegory for Christ's sacrifice, and the feeding of his Church (Fig. 4). These depicted viewers may imply the actual viewers. In fact, the bosses seem to encapsulate the figurative iconography of the whole choir, for the edification of the community who gathered below. We shall encounter each element again, the Eucharist, kingship, the Apostles and the community itself.

In the east window, the lost main lights probably contained christological subjects, appropriate to the high altar beneath, for seven heads of Christ fill the seven strange gables at the top of each light (Fig. 5). It is likely, therefore, that the liturgical context of the east window originally shaped its content, as often elsewhere. I shall return to this, for it was probably picked up by contemporaries. The tracery then relates this liturgical theme to the college, presenting a dazzling expanse of clear and patterned glass, with coloured focuses within and on either side of the central rose. At its heart stand the royal arms of England and of Clare, the latter perhaps already appropriated by the college for itself.[18] This circular microscosm is pregnantly suspended between figures of the Angel Gabriel and the Virgin Mary, representing the Annunciation, for the dedication of church and college, to which Mary had recently been added. This was, therefore, a visual assertion of identity, in relation to the Plantagenet kings of England, deploying here not busts of kings and queens (as in the side windows) , but the newly fashionable and brightly coloured art of heraldry, part of the wider contemporary visual incorporation of chivalric modes.

The fourteen side windows amplify the apostolic presence. Each central light contains an Apostle or an Evangelist, within a microarchitectural niche with an ogee head, all facing east towards the high altar and the window above it (Fig. 4). Sets of Apostles appear often in the choirs and chancels of churches across Europe, great and small, but the legitimate succession to them, as the first Christian community and disseminators of the gospel, was a contentious issue. The friars and the secular clergy, the two key agents of pastoral reform within the thirteenth-century Church, both claimed it, one inside and one outside the parish structure. In theory at least, the university prepared both for their tasks, so it is not surprising to find their conflict played out there. In Oxford, it broke at exactly the moment when the Merton windows were being made, with the Dominicans opposing the actions of the seculars in excluding them from the passage of legislation.[19] A vivid account finds their representative confronting the chancellor himself at the entrance to his schoolroom some time in 1311, to serve notice of their appeal to the Pope. When the chancellor finally came downstairs, after taking his time, the friar seized the initiative and stuffed the mendicant objections down his front (*in gremio eius*).[20]

This snapshot of medieval academic politics is of more than anecdotal interest, for the chancellor was one Master Henry Mansfield, an old Mertonian whose schoolroom probably lay immediately to the west of the college church and who is named an astonishing twenty-four times in the choir windows. In relation to the text in Latin *Magister Henricus de Mamesfeld me fecit*, he is shown on either side of an Apostle (Fig. 4). The figures are again presented within microarchitectural frames. The making of this glass probably took place during Mansfield's time as chancellor, for payments recorded in the college archives may be for its delivery over the autumn and winter of 1310–11.[21] If so, it is substantially later than the architecture. In the glass, this eminent representative of the university is presented apparently in direct relation to the Apostles, and we may imagine that these familiar signs had a wide resonance both for him and for the college in their perception of themselves. The kneeling figures

Fig. 5. Merton College Chapel, east window tracery, interior (Thomas-Photos, Oxford).

are viewing the Apostles, just as the Apostles are viewing Christ and the Eucharist.

Mansfield's vanity has outraged, embarrassed and amused commentators in equal measure. His prominence is interesting both for the self-image of the contemporary scholar and for the development of visual strategies for commemoration, at a time when the doctrine of Purgatory was being assimilated, after the Council of Lyon in 1274. As many later institutions discovered, eminent donors found in stained glass attractive opportunities for self-representation and commemoration. The English secular clergy were at the forefront in exploiting this, in the nave of York Minster and the chapter house at Wells.[22] Yet, there is no clerical equivalent for the level of individual assertiveness at Merton, either in England, or to my knowledge on the Continent. The closest parallel lies not in stained glass but in projections of royal power and the representation of Queen Eleanor of Castile (d. 1290), in the spirit of the French *montjoies* for Louis IX, on the twelve crosses that marked stopping places on her funeral procession, and on her three tombs.[23] Both schemes represent commemoration, through repetition in relation to liturgical performance.

Mansfield's ubiquitous place in the scheme at Merton is ambiguous, perhaps a mark of the experimental nature of the solution. The little texts leave no doubt that he paid, yet they complement the images only

partially. His relationship to the painted Apostles and the living community of the college is not clarified – there is no request for prayers, for example. More promising, Henry is described as *magister*, defining his academic status, and the kneeling figures are indeed shown twenty-four times in the same academic dress: a hooded gown (in blue, red, purple or white) and an academical cap. The semiotics of academic dress were beginning to be codified at this time. The Merton statutes express the desire that fellows should eat together and be clothed similarly "as a sign of love", an outward form for inner harmony.[24] The university statutes, compiled probably by Mansfield's immediate successor as chancellor, reveal a concern that distinctions of dress should be observed.[25] In the glass at Merton, four figures of Mansfield wear blue gowns, a common substitution for black in stained glass, and probably represent doctors of divinity.[26] However, there is no record, as yet, of red, purple or white gowns for specific degrees. To whatever extent this visual playfulness correlated with contemporary codes, the variety of the display will have made a striking contrast to the mendicant habits of the Grey and Blackfriars, in monochrome. In this way, it may have contributed to the construction of an image for the secular order in the University.

The presentation of Henry Mansfield and the Apostles also poses, in an acute visual form, the question of the relationship between individual and community. Henry is named repeatedly as an individual, yet the Apostles invite collective consideration. If there were no inscriptions, we would certainly not think that the figures in their coats of many colours were just one person. As in the chapter house at Wells, where a large number of secular canons were once named and presumably represented in the windows, the repeated image of the scholar in his different guises arguably identifies this space as belonging to Merton's scholarly community. If so, this would associate the community with the tableau played out in the rest of the glass, as viewers of this imagery, successors of the Apostles, and participants in the mystic body of Christ at the mass. The statutes of Queen's College, corrected by the founder in 1340, include a recurring analogy of a similar kind, but prescribe a striking uniformity of dress. The provost and fellows are initially to be thirteen in number, as a reminder of Christ and his Apostles, and to wear purple robes recalling his saving blood, in

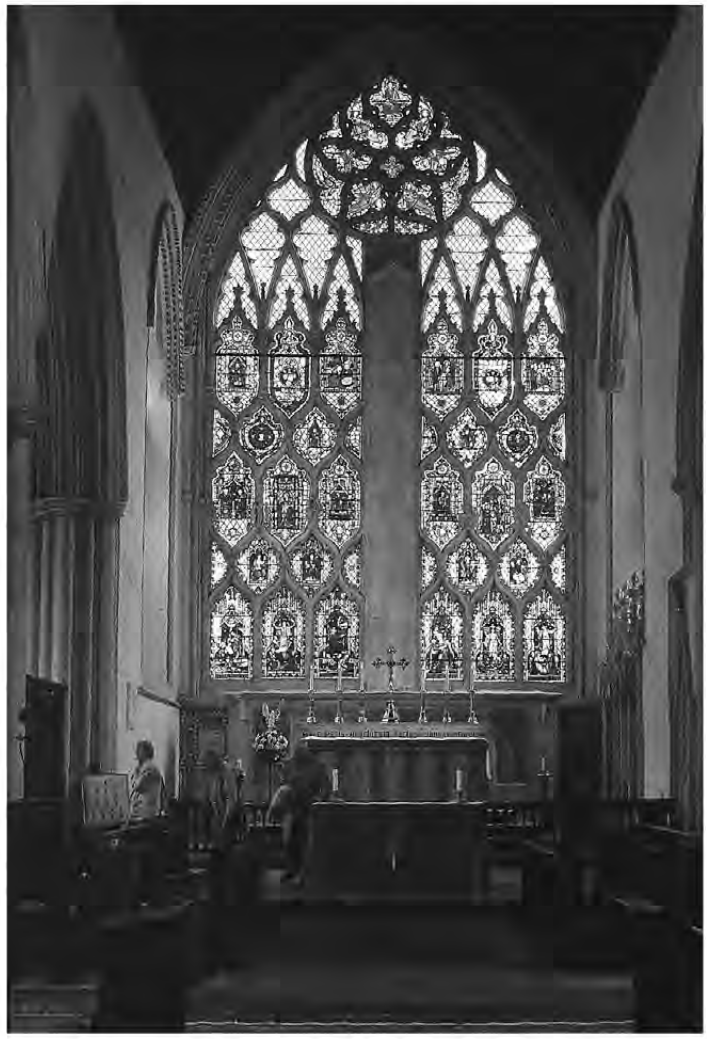


Fig. 6. Dorchester Abbey (Oxfordshire), east window, interior (Tim Ayers).

hall;[27] distributions of clothes to paupers there are also to be performed as a visible and memorable token of Christ's Passion.[28]

The coherent nature of the glazing scheme at Merton was the result of careful planning by a thoughtful corporate patron, no doubt in collaboration with the donor, but it is also symptomatic of preoccupations in the art of the thirteenth-century English church, generally. The Angel Choir at Lincoln Cathedral illustrates the point. Paul Binski argues that the architecture and decoration underline "in new formal terms the tendency in England for architecture to mesh with representation in a discursive fashion".[29] The famous sculpted angels in the spandrels at triforium level,

which give the structure its name, are loosely coordinated with the liturgical layout down below, accompanying Christ in Judgement, for example, over the high altar and sanctuary. They demonstrate the compelling power of art to supply liturgical effects, reminiscent of the liturgically sensitive scheme at Merton. The comparison could be of immediate relevance, for Oxford lay within the Lincoln diocese and several Mertonians will have known the cathedral well. Henry Mansfield held the office of dean from 1315.[30]

This kind of deployment in many media is demonstrated again in a local building that relates both to Merton and to Lincoln. The former Roman town of Dorchester lies about ten miles south of Oxford and the seat of the bishopric had actually been moved from Dorchester to Lincoln by William the Conqueror, in the 1070s.[31] From about 1300, the community of Augustinian canons that had subsequently taken over the church began rebuilding their sanctuary, which was finished by mid-century. It is a modest construction by comparison with the Angel Choir, with just one projecting bay, but it shares in a similar theatrical spirit. All three of its windows combine architecture, sculpture and painted glass in a startling way, but the east window is the grandest (Fig. 6),[32] The immediate inspiration for the design was undoubtedly the new east window of the church at Merton. At Dorchester, however, a stone frame or reredos is presented over the mullions, in honour of the altar below, and sprinkled with sculptural groups to complement narrative sequences that were once in the glass. The odd gables in the Merton window are now interpreted in a new way, as the point of departure for an image screen in many media. This is the English Decorated at its most exotic.

The chapel of Merton College is a new kind of building for a relatively new kind of institution, one of several new types of patron to be discussed at the 1300 conference. Within the university, the architectural forms would prove influential in unexpected ways, above all in layout. Set within the architectural context and framed in painted microarchitectural niches, the band windows presented a highly pertinent range of models, responsibilities and opportunities for the university trained clergy, within the Church and the kingdom of England, including the first of many images of grand alumni in the stained glass of the university – the first old boy, in fact. This kind of para-liturgical tableau is not unique to England, but it anticipates (and locally, inspired directly) the denser visual and decorative rhetoric of English art and architecture in the following half century.

NOTES

[1] On Merton, see Geoffrey H. MARTIN & John Roger Loxdale HIGHFIELD, *A History of Merton College, Oxford*, Oxford, 1997. On the University, see Jeremy I. CATTO (ed.), *The History of the University of Oxford*, I, *The Early Oxford Schools* (Trevor H. ASTON general editor), Oxford, 1984; Alan B. COBBAN, *The Medieval English Universities: Oxford and Cambridge to c.1500*, Berkeley and Aldershot, 1988; Jeremy I. CATTO & Ralph EVANS (ed.), *The History of the University of Oxford*, II, *Late Medieval Oxford* (Trevor H. ASTON general editor), Oxford, 1992.

[2] COBBAN, *Medieval English Universities*, p. 116.

[3] Erwin PANOFSKY, *Gothic Architecture and Scholasticism*, Latrobe (Indiana), 1951.

[4] On early chapels, see Roger HIGHFIELD, "The Early Colleges", in *Early Oxford Schools*, ed. CATTO, p. 256–257.

[5] *The Victoria History of the County of Oxford*, III, *The University of Oxford*, Oxford, ed. Herbert E. SALTER & Mary D. LOBEL, 1954 (reprinted London, 1965 and Folkestone, 1994), p. 100–101; MARTIN & HIGHFIELD, *Merton College*, p. 39–43.

[6] Jean BONY, *The English Decorated Style, Gothic Architecture Transformed 1250–1350*, Oxford, 1979, p. 12.

[7] Maurice W. SHEEHAN, "The Religious Orders 1220–1370", in *Early Oxford Schools*, ed. CATTO, p. 193–213; Jeremy I. CATTO, "Theology and Theologians 1200–1320", in *Ibidem*, p. 471–517.

[8] George LAMBRICK & Humphrey WOODS, "Excavations on the Second Site of the Dominican Priory, Oxford", *Oxoniensia*, 41, 1976, p. 174 (choir, 'c.31.00 m. (102 ft.) by c. 8.00 m. (26 ft.)') and fig. 9 (extent of the excavations). For the inspiration of their buildings, in scale, see MARTIN & HIGHFIELD, *Merton College*, p. 42–43. The Merton choir measures 101 ft by 28 ft, internally.

[9] *Matthaei Parisiensis, Monachi Sancti Albani, Chronica Majora*, ed. Henry R. LUARD, vol. 4, London, 1877, p. 279–80; vol. 5, London, 1880, p. 194–95. See William A. HINNEBUSCH, *The Early English Friars Preachers*, Rome, 1951, p. 129-130.

[10] BONY, *English Decorated Style*, p. 12, pls. 63–64, 67.

[11] *The Early Rolls of Merton College, Oxford*, ed. John Roger Loxdale HIGHFIELD, Oxford, 1964, p. 301.

[12] BONY, *English Decorated Style*, p. 10–11, pl. 26. On St Paul's see Richard K. MORRIS, "The New Work at Old St Paul's Cathedral and its Place in English Thirteenth-Century Architecture", in *Medieval Art, Architecture and Archaeology in London*, ed. Lindy GRANT (British Archaeological Association Conference Transactions for 1984), 1990, p. 74–100; Carol Davidson CRAGOE, "Fabric, Tombs and Precinct, 1087–1540", in *St Paul's, The Cathedral Church of London, 604–2004*, ed. Derek KEENE, Arthur BURNS & Andrew SAINT, New Haven & London, 2004, p. 127–142, fig. 75.

[13] On the stained glass at Merton, see: Heathcote William GARROD, *Ancient Painted Glass in Merton College, Oxford*, London, 1931; Peter NEWTON, 'Stained Glass in Oxford', in Jennifer SHERWOOD & Nikolaus PEVSNER, *The Buildings of England : Oxfordshire*, Harmondsworth, 1974, p. 75–90. A full volume in the *Corpus Vitrearum Medii Aevi* series is in preparation: Tim AYERS, *The Medieval Stained Glass of Merton College, Oxford*, CVMA Great Britain, vol. 6, forthcoming.

[14] John GAGE, "Gothic glass: two aspects of a Dionysian aesthetic", in *Art History*, 5, 1982, p. 36–58.

[15] On the study of the natural sciences at Merton, see: James A. WEISHEIPL, "Ockham and the Mertonians", in *Early Oxford Schools*, ed. CATTO, chapter 16; MARTIN & HIGHFIELD, *Merton College*, chapter 3; Katherine H. TACHAU, *Vision and Certitude in the Age of Ockham*, Leiden, New York, Copenhagen & Cologne, 1998, chapters 6, 8–10.

[16] See in particular the contributions by Achim Timmermann and Michael T. Davis in this volume.

[17] Trevor H. ASTON, "The External Administration and Resources of Merton College to *circa* 1348", in *Early Oxford Schools*, ed. CATTO, p. 367–68.

[18] On the arms of the college see Alan BOTT, "The Coats of Arms of Walter de Merton and his College", in *Postmaster and The Merton Record*, 1997, p. 73-79. On the east window, see Alan BOTT, *The Heraldry in Merton College, Oxford*, Oxford, 2001, p. 93.

[19] Hastings RASHDALL, "The Friars Preachers *v.* The University, A.D. 1311–1313", in *Collectanea*, Oxford Historical Society, 1890, p. 193–273; SHEEHAN, "The Religious Orders", p. 205–207.

[20] RASHDALL, 'The Friars Preachers', p. 244.

[21] Oxford, Merton College, Roll 4058. For a full discussion see AYERS, *Stained Glass of Merton College*.

[22] Sarah BROWN, *'Our Magnificent Fabrick'. An Architectural History of York Minster, c1220–1500*, London, 2002, p. 130–31; Tim AYERS, *The Medieval Stained Glass of Wells Cathedral* (CVMA. Great Britain, vol. 4), 2 vols, Oxford, 2004, here vol. 2, p. 468, 485–87.

[23] Paul BINSKI, *Medieval Death, Ritual and Representation*, London, 1996, p. 110.

[24] *Early Rolls*, p. 382: *(...) et mensam de suis porcionibus predictis pro qualitate personarum habeant communem, habitu se consimili quatenus poterint in signum dileccionis mutue vestientes.*

[25] *Statuta Antiqua Universitatis Oxoniensis*, ed. Strickland GIBSON, Oxford, 1931, p. 37, 39. On their date, see: Graham POLLARD, "The Oldest Statute Book of the University", in *Bodleian Library Record*, 8, no. 2, July 1968, p. 69–91.

[26] For a discussion, see AYERS, *Medieval Stained Glass of Merton College*.

[27] *Statutes of the Colleges of Oxford*, vol. 1, London/Oxford, 1853, "Statutes of Queen's College, Oxford", p. 7, 14.

[28] *Ibidem*, p. 34.

[29] Paul BINSKI, *Becket's Crown, Art and Imagination in Gothic England*, New Haven & London, 2004, p. 268–282, esp. p. 282.

[30] Alfred B. EMDEN, *A Biographical Register of the University of Oxford to A.D. 1500*, vol. 2, Oxford, 1958, p. 1211–12.

[31] On Dorchester Abbey, see: *The Victoria History of the County of Oxford*, VII, *Dorchester and Thame Hundreds*, ed. Mary LOBEL, London, 1962, p. 52–61; Jean COOK & Trevor ROWLEY (ed.), *Dorchester through the Ages*, Oxford University Department for Continuing Education, 1985, p. 40–49; Kate TILLER (ed.), *Dorchester Abbey, Church and People, 635–2005*, Witney, 2005, chapter 3.

[32] Tim AYERS, "Vitraux, retables et English Decorated Style: la verrière orientale de l'église abbatiale de Dorchester, comté d'Oxford", in *Représentations architecturales dans les vitraux*, Colloque international, Bruxelles, Palais des Académies, 22–27 août 2002 (Dossier de la Commission royale des monuments, sites et fouilles, 9), Brussels, 2002, p. 105–116.

Microarchitecture and Mystical Death: The Font Ciborium of St Mary's in Luton (circa 1330-40)*

Achim Timmermann

Over the past thirty or so years, scholars of late medieval architectural culture in England have placed increasing emphasis on the study of microarchitecture, and identified the decades between circa 1290 and circa 1340 as the formative period in the history of this artistic genre.[1] Monuments such as the Eleanor Crosses (circa 1291-1294), Bishop Stapledon's throne in Exeter Cathedral (1316-1320), or the tomb of Edward II at Gloucester Cathedral (1327-1331) have held centre stage in these narratives, and now effectively constitute a kind of canon. This essay explores a spectacular work of microarchitecture that has so far resisted the process of canonization, the font ciborium of St Mary's in Luton, Bedfordshire (Fig. 1).[2]

Like the church in which it is housed – in the later Middle Ages the largest parish church in the archdeaconry of Bedford, and a vicarage of St Albans Abbey – the ciborium is of considerable proportions, achieving a height of around 20 feet and a diameter of circa 10 feet. Accentuated by a gabled crest, the white limestone structure resembles a gigantic crown, looming in the westernmost bay of St Mary's nave. Together with its opposite pole and liturgical pendant in the chancel, the high altar, the ciborium determined a symbolic "axis of Redemption" along which access to the Church and its mysteries was mediated.[3] While the high altar provided perpetual spiritual nourishment in the sacrament of the Eucharist, the ciborium and its font orchestrated the liminal rites of spiritual exorcism, cleansing and purification, as celebrated in the non-renewable sacrament of baptism. Given the Scholastic exegesis of Christ's baptism as a prefiguration of His Passion,[4] both furnishings, especially when activated through the words and gestures of the officiating priest, also dramatized the gradual unfolding of salvific history.

With its entrance facing the high altar, the ciborium could accommodate about half a dozen celebrants, gathered around the font in its very midst. These generally included the priest and baptismal candidate (at this time usually a newly-born infant), as well as the parents and godparents. Like its font, the edifice has been extrapolated from an octagonal plan, and now soars above a modern plinth of black marble. Upon closer inspection, the ciborium becomes animated with contrasting horizontal and vertical architectural elements – elements that both attract and entrap the eye of the beholder. In the bottom part of the structure, visual interest is thus generated by an exquisite, arcaded dado adorned with triangular gablets, cinquefoil subcusps (with magnified, onion-shaped top cusps), and a crowning frieze of fleurons. Diagonally placed corner buttresses act as visual conduits, and direct the viewer's gaze upward, toward the lofty superstructure, an immense corona of alternating types of pinnacles, and steep, crocketed gables successively embellished with cinquefoil subcusps, quatrofoil oculi, and inverted falchions. These delicate tracery configurations in turn provide geometric openings through which to view the ciborium's sixteen-sided interior vault, which incorporates both diagonal ribs and ridge ribs, and which is capped by a central keystone depicting a lion battling a dragon – perhaps an iconographical allusion to the exorcism of Satan, effected during

Fig.1. Luton, St. Mary's, font ciborium, circa 1330-1340 (Achim Timmermann).

baptism. The intricate design of the baldachin can thus be said to have encouraged a considerable degree of "scopophilia". On the other hand, the structure's high dado and a (no longer surviving) door which intially closed off the entrance made the font virtually invisible, and it was only during those times when baptism was celebrated that this semantic nucleus, with its arcaded Purbeck *cuppa*, was revealed to the eyes of the viewer. Like other late medieval furnishings, then, the Luton font ciborium derived much of its auratic momentum from the carefully orchestrated contrast between the seeable and the hidden, suggested presence and absence.

Nikolaus Pevsner's dating of the ciborium to between 1330 and 1340[5] is corroborated by the structure's formal repertoire, with its preponderance of rectilinear detailing, which firmly places the design within the final phase of the Decorated style, or conversely, at the beginning of the Perpendicular movement. Certain features suggest indeed that the Luton baldachin was designed by a craftsman with a detailed knowledge of the œuvre of William Ramsey, royal master mason to Edward III between 1336 and 1349.[6] The steep crocketed gables that enliven the upper part of the ciborium recur in the first tier of Ramsey's west porch for St Stephen's Chapel in London (begun 1342; destroyed),[7] where they equally enclose cinquefoil subcusps of the kind found at Luton (that is, with an onion-shaped top cusp). The same type of gable, here deployed in three superimposed zones and encompassing miniaturized window tracery, also enframes the effigy in the tomb monument of Archbishop John Stratford (d. 1348) at Canterbury Cathedral, which Christopher Wilson has convincingly attributed to Ramsey.[8] On a purely structural level, the Luton ciborium recalls yet another of Ramsey's commissions, his chapter house for St Paul's Cathedral in London (begun 1332; Fig. 2),[9] which likewise features an octagonal plan, projecting corner buttresses, and an upper crown of traceried gables (initially) alternating with pinnacles, though, as I argue below, other possible prototypes for this kind of design also need to be acknowledged. Given the fact that none of the ciborium's distinctive formal elements occurs anywhere else at St Mary's, either in the fabric of the church or in any of its monuments, we can safely assume that the structure was a prefabricated import and reassembled locally. It is tempting to conclude that the baldachin was designed and produced by a London-based associate of Ramsey, perhaps even within the latter's own workshop, though any such style-based conclusions are necessarily conjectural.

While we can reasonably speculate about the ciborium's artistic context, the circumstances of its patronage remain somewhat murky. Two of the older guidebooks on St Mary's maintain that the structure was a gift of Philippa of Hainault, queen consort of Edward III (1328-1369).[10] This assertion is evidently based on

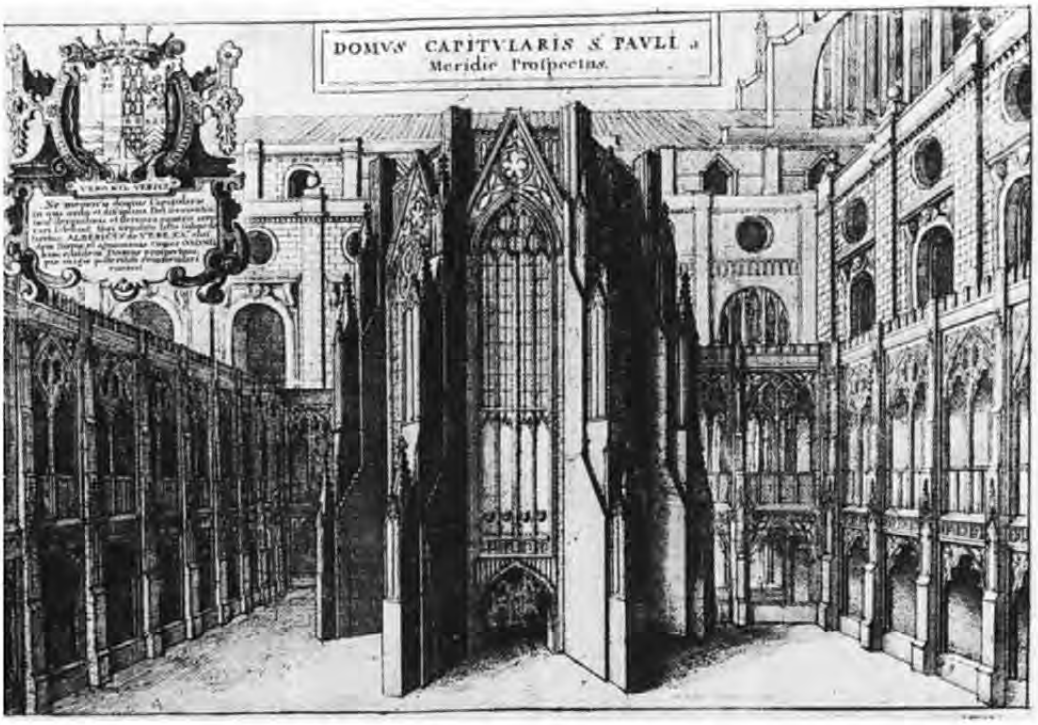


Fig. 2. London, St Paul's Cathedral, chapter house by William Ramsey, begun 1332, destroyed, engraving by Wenceslaus Hollar, 1658 (Achim Timmermann).

an escutcheon on the interior of Luton's west tower which late nineteenth-century scholars identified as that of the queen,[11] and on an anecdote recorded in Peter Newcome's antiquarian study of St Albans Abbey, according to which Philippa insisted that her son Edmund of Langley, the first duke of York (b. 5th June, 1341), be baptized by the abbot of St Albans, Michael de Mentmore (1336-1349).[12] To give weight to her words, she apparently "came to the abbey, and there made an offering of a cloth of gold of great value".[13] At first glance this story and the alleged heraldic evidence appear to provide us readily with a royal patron (whose husband furthermore entertained personal contacts with William Ramsey), as well as a specific date and occasion for the erection of the ciborium. But the dots don't quite connect. While Philippa's requests were indeed complied with, as Abbot Michael not only baptized Edmund but also became his godfather, the baptismal ritual was celebrated neither at St Albans nor at Luton, but at Edmund's place of birth, the royal manor of King's Langley in Hertfordshire.[14] As there is furthermore no reason to assume that simply by virtue of Abbot Michael's advowson rights Luton had somehow been considered as an alternative venue for the baptism of Edmund (or any other of Philippa's fourteen children, born between 1330 and 1355), we must conclude that the queen's involvement in the ciborium project is in fact a red herring. Future research on the patronage of the font baldachin would certainly benefit from considering the possibility of a local donor with strong connections to London or the Crown, for instance a member of the Acworth, Hoo, Hay, Fitzherbert and Wenlock families, all of whom were major landholders in late medieval Luton.[15]

A structure like the Luton ciborium was to a large extent erected to aestheticize and dramatize the performance of baptism, and to gloss upon its symbolic significance. But apart from playing such theatrical and metaphorical roles, this type of edifice, with its enclosing architectural shell and (initially) lockable door, also served a very practical purpose – namely, to protect the consecrated font water from misuse by the perceived enemies of the Church. Prompted in part by the Fourth Lateran Council (1215), which placed particular emphasis on pastoral, liturgical and sacramen-

Fig. 3. Magdeburg Cathedral, sixteen-sided chapel (*sechzehneckige Kapelle*), circa 1250 (SLUB Dresden/Deutsche Fotothek).

tal reform, especially of the eucharist and baptism,[16] but perhaps also spurred by a growing paranoia of heresy, the secure and decorous reservation of the hallowed water became a principal agenda item of virtually all thirteenth- and early fourteenth-century synods, both in the British Isles, and on the Continent. The statutes drawn up by Bishop Richard de Wich of Chichester (1245-52) are exemplary of this trend, as they not only mandate that all fonts in the diocese be covered and properly protected "against witchcraft", but also threaten offending priests with suspension from office (*Item fontes cooperiantur et honeste custodiantur propter sortilegia* [...] *sub pena suspensionis eis infligenda*).[17] Similar decrees, which could additionally call for padlocks and fonts of stone, were also promulgated by the synods of Salisbury (1238-44), Bath and Wells (circa 1258), London (1245-59), Exeter (1287), Chichester (1289) and Winchester (1305).[18]

The artistic solutions which thirteenth- and early fourteenth-century craftsmen and their ecclesiastical advisors put forward in the face of these challenges can be divided into two principal categories: font covers proper, which were directly placed onto the font, and font ciboria, which completely enclosed the font within an ostentatious microarchitectural envelope. At their most basic, font covers – also known as *coopercula* or *cooperturae* – assumed the form of circular, flat lids decorated with painted ornament, which were secured to the top of the font by iron bars, staples or bolts.[19] Other, more elaborate types of *coopercula* were given pyramidal shapes and either adorned with architectural motifs or with cycles of images. Three extant thirteenth-century font covers from Gotland are for instance accentuated by microarchitectural canopies whose staggered and compact silhouettes of spires, gables and aedicules were probably intended to connote St John's vision of the Heavely Jerusalem.[20] The magnificent bronze fonts of St Michael's at Hildesheim (circa 1220-5) and St Mary's at Rostock (1290) are by contrast surmounted by tall conoidal lids that feature sophisticated programmes of narrative, typological and allegorical imagery.[21] In addition to effectively sealing off the font, all five of these covers function as a kind of visual *explicatio* of the consecrated water which they surmount, and as such by far exceeded the minimum requirements of the Church and its fretful and suspicious bishops.

The architect of the Luton font ciborium certainly came up with the most eye-catching and structurally ambitious response to the concerns of the synods. As suggested above, in both its detailing and overall design the ciborium owes much to the work of William Ramsey, though on both formal and symbolic levels the structure also taps into other architectural traditions. Its octagonal ground plan, which here furthermore concentrically encloses an eight-sided font, thus clearly references the hallowed geometrical layout of early Christian baptisteries, such as those of Santa Tecla in Milan (late fourth century), San Giovanni in Laterano in Rome (circa 315, and 432-440), or Nocera in Campania (sixth century) – buildings whose eightfold plan symbolizes both regeneration, as the world

commenced on the eighth day of creation, and resurrection, for Christ rose from the dead on the eighth day of his Passion.[22] In Italy, such large-scale baptisteries, in which baptism was achieved through immersion in a central piscina, were to remain popular well into the high and later Middle Ages, with those of Parma (from 1196 to the early fourteenth century) and Chieri (last third of the thirteenth century) among the last to be completed.[23] Northern Europe, while initially also receptive to the idea of substantial, structurally autonomous baptisteries, by contrast witnessed a gradual diminution in the scale of its baptismal edifices. These were either transformed into font baldachins proper, with the ivory front cover of the Carolingian Drogo Sacramentary (after 844; Paris, Bibliothèque nationale, MS lat. 9428) depicting a particularly early example,[24] or else became small ancillary chapels attached to the main body of a church, as for instance at St Gereon and St Kunibert, both in Cologne (erected respectively between circa 1227 and 1250, and around 1260 to 1270).[25] The Luton ciborium may therefore be regarded not only as the conceptual heir of the late Antique baptistery, but also as a fourteenth-century spin-off of miniaturized baptismal architecture in northern Europe.

But another critical architectural discourse needs to be considered here. If the ground plan of the Luton baldachin evokes the prestigious history of baptisteries, other aspects of the structure – especially its elevation and elongated contours – reference the design of thirteenth-century Continental Easter Sepulchres (*Heilige Gräber*), as exemplified by the so-called Sixteen-Sided Chapel (*sechzehneckige Kapelle*) in Magdeburg Cathedral (circa 1250; Fig. 3),[26] and the Holy Sepulchre in the Rotunda of St Maurice (*Mauritiusrotunde*) at Constance Cathedral (circa 1270-80; Fig. 4).[27] The elevation of both sepulchres thus equally comprises a socle or dado zone (structured by openwork tracery at Constance), a central, windowed tier, and, most importantly, a surmounting corona of steep gablets pierced by oculi (which at Constance additionally features arrays of crockets and crowning finials). Furthermore, just like the Luton ciborium both Holy Sepulchres created hermetic and symbolically charged liturgical settings within their respective churches, settings which here served to dramatize the Easter ceremonials of the *depositio* and *elevatio crucis*. Given the belief that during the rite of baptism candidates experienced a mystical death and a subsequent rebirth in Christ,[28] and the Scholastic exegesis of (triple) immersion as a symbol of Christ's burial and *triduum mortis*,[29] it is in fact likely that the font ciborium was also intended to summon to St Mary's in Luton the Anastasis Rotunda in Jerusalem.[30]

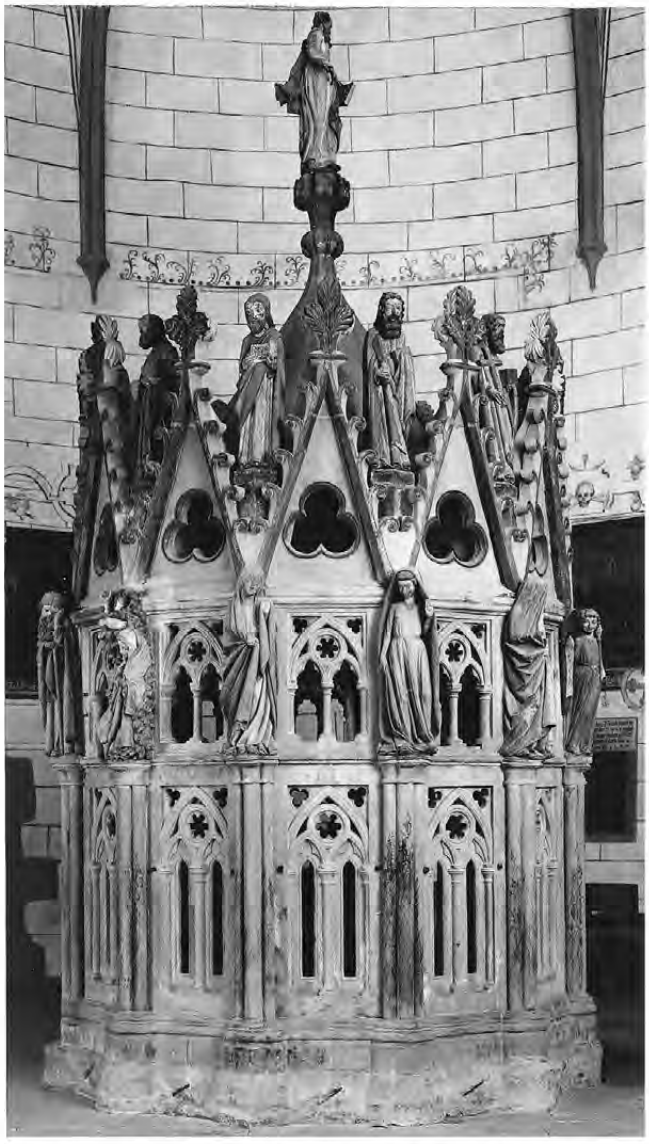


Fig. 4. Constance Cathedral, *Heiliges Grab*, circa 1270-1280 (Bildarchiv Foto Marburg).

Just how the master of the Luton baldachin might have learned about the Continental Easter Sepulchre tradition is open to speculation, though we certainly need not assume that he crossed the Channel to do so.

Fig. 5. Essen, cathedral treasury, arm reliquary of Abbess Beatrice of Holte, circa 1300 (Bildarchiv Foto Marburg).

Representations of polygonal *Heiliggräber* or *Heiliggrab*-like canopies in the manner of Magdeburg or Constance thus abound in thirteenth- and fourteenth-century manuscript and panel painting, where they usually provide majestic backdrops to biblical, hagiographical and liturgical narratives.[31] It might therefore be conjectured that the craftsman had access to one or several such images, for instance in the collection of an ecclesiastical or secular patron. In addition to these painterly versions, the artist could have come in contact with portable *vasa sacra* for which a monument like Magdeburg's Easter Sepulchre (or a similar such structure) would likewise have furnished an authoritative blueprint, relic shrines and eucharistic tabernacles in particular. Prominent examples are provided by an arm reliquary commissioned in circa 1300 by Beatrice of Holte, Abbess of the Convent at Essen (1292-1327),[32] which has an exquisite, hexagonal chapel (here topped by a buttressed spire) growing from the tips of its fingers (Essen, Cathedral Treasury; Fig. 5), and by the small wooden sacrament house in the Cistercian abbey church of Sénanque in the Vaucluse (late thirteenth century),[33] an octagonal micro-edifice with horseshoe arch galleries and a Romanesque lantern tower (Fig. 6). Like the Luton ciborium, both works doubled up as actual or symbolic sepulchres; the delicate *tempietto* raised by the reliquary arm thus enshrined a saint's body part, while the archaizing tabernacle encapsulated nothing less than the *totus Christus*, the whole body of Christ, substantially present in the consecrated species.

I will conclude with a brief outlook. In the history of late medieval "baptismal microarchitecture" the Luton font baldachin represents a unique formal and structural experiment. The question of chance survival aside, the extant monumental evidence suggests that subsequent generations of clerics and liturgists gave clear preference to pyramidal font covers carved from wood and lowered directly onto the font by means of a counterpoised weight, crane or winch, which were at once space-saving and visually conspicuous. Dozens of microarchitectural *coopercula* thus remain *in situ*, especially in the south east of England, with those of St Mary's at Ewelme (Oxfordshire, circa 1440), St Mary's in Ufford (Suffolk, late fifteenth century), and North Walsham (Norfolk, late fifteenth century) providing particularly dramatic cases in point.[34] By comparison, only two other late medieval

font ciboria presently survive in English churches, at St Botolph in Trunch (Norfolk, circa 1500) and at St Peter Mancroft in Norwich (circa 1500, with Victorian additions).[35] In opposition to their counterpart at Luton, however, both works are entirely carved from wood, rise over a hexagonal ground plan, and feature stout, two-tiered superstructures accentuated by radiating statue baldachins.

Continental patrons appear to likewise have favoured movable font covers over fixed font ciboria, though in contradistinction to their English peers, and continuing the tradition inaugurated at Hildesheim and Rostock, they frequently placed their commissions with bronze-founders rather than joiners and carpenters. This trend is typified by the bronze *cooperturae* of St Mary's in Frankfurt an der Oder (1376)[36] and St Mary's in Salzwedel (1520-2, by Hans of Cologne),[37] both in northeastern Germany, and by the Netherlandish brass covers of St Martin in Hal/Halle (1446, by Guillaume Lefèvre),[38] St John's Cathedral in 's Hertogenbosch (1492, by Aert van Tricht),[39] and the Grote Kerk in Zutphen (1527, by Gielis van den Eynde).[40] In only two cases, it seems, was the artistic stage management of baptism entrusted to established master masons, namely Hans Kun, *magister operis* at Ulm Minster from 1417 to 1435, and Hans Pfau of Strasbourg, Erfurt's cathedral and city architect (*Dom- und Stadtwerkmeister*) between circa 1460 and 1473. Because they were generously allocated with both space and funds, but perhaps also because of their training as architects, the two masters were able to experiment with more complex and monumental designs, eventually breathing new life into the idea of the font ciborium. In contrast to Luton, however, their creations, the *Taufziborien* of Our Lady in Ulm (1420s) and St Severus in Erfurt (completed 1467) were conceived as multi-storeyed structures rising over a triangular ground plan.[41] The choice of this geometric figure furthermore occasioned a semantic shift, as it no longer directly referenced the layout of baptisteries and Easter Sepulchres, but instead symbolized the Trinity, invoked during the ritual of baptism. Considered in less antithetical terms, all three font ciboria, at Luton, Ulm and Erfurt, display an astonishing diversity, and as such suggest the enormous structural, symbolic and aesthetic potential of a category of microarchitecture which, perhaps curiously, never quite achieved the recognition that it clearly deserved.

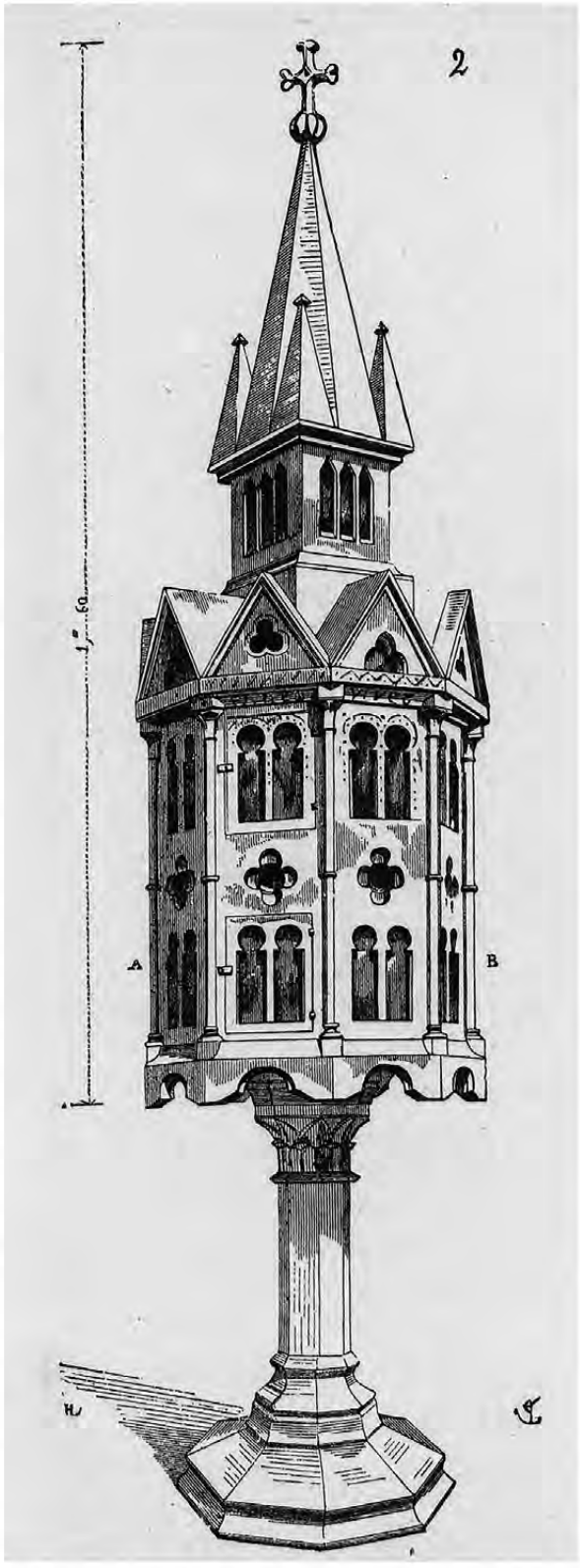


Fig. 6. Sénanque, Cistercian Abbey Church, sacrament house, late thirteenth-century, reconstruction by Viollet-le-Duc, 1875; columnar support conjectural (A. Timmermann).

NOTES

[*] Regrettably my original conference paper *Microarchitecture and the Eucharist Around 1300* could not be published in this transaction volume. The present essay, which was especially written for this publication, has greatly benefited from the generous advice of Paul Crossley and Tim Ayers. It is the third in a three-part study exploring the architectural stage management of baptism in the later medieval period. The two other studies centre on the fifteenth-century font ciboria of Ulm Minster and St Severus in Erfurt respectively. See Achim TIMMERMANN, "Das Taufziborium im Ulmer Münster: Studien zur Kleinarchitektur der Gotik", in *Ulm und Oberschwaben*, 52, 2001, p. 9-18, and Achim TIMMERMANN, "A Promise of Paradise: Microarchitecture, Baptism and the Font Ciborium of St. Severus in Erfurt", in *Biuletyn Historii Sztuki*, 69, 2007, forthcoming.

[1] See for instance Günter KOWA, *Architektur der englischen Gotik*, Cologne, 1990, p. 166-170 (with references to older literature); Nicola COLDSTREAM, *The Decorated Style: Architecture and Ornament 1240-1360*, London, 1994, chapters 1 and 3 *passim*.

[2] The ciborium and the font which it encloses are briefly described in Henry COBBE, *Luton Church, Historical and Descriptive*, London, 1899, p. 309-311; Constance ISHERWOOD, *St Mary, Luton, the Most Interesting Parish Church Near London*, London, 1905, p. 2-3; Francis BOND, *Fonts and Font Covers*, London, New York – Toronto, 1908, p. 289; Thomas George HOBBS, *Luton Parish Church: An Album of Photographic Studies*, London, 1924, p. 3; William AUSTIN, *The History of Luton and its Hamlets*, vol. 1, Newport, 1928, p. 167-168; Edmund TYRRELL-GREEN, *Baptismal Fonts Classified and Illustrated*, London, 1928, p. 29, 92; Nikolaus PEVSNER, *Buildings of England: Bedfordshire and the County of Huntingdon and Peterborough* Harmondsworth, 1968, p. 114; *Bedfordshire Churches in the Nineteenth Century, Part II: Parishes Harlington to Roxton*, ed. Chris PICKFORD (The Publications of the Bedfordshire Historical Record Society, 77), Bedford, 1998, p. 437, 456 note 4 (with references to antiquarian drawings and descriptions from the eighteenth and nineteenth centuries).

[3] The current high altar is a modern structure, but marks the location of its medieval predecessor.

[4] See for example Thomas AQUINAS, *Summa theologiae*, ed. Thomas GILBY, 60 vols., London, 1963-1976, here vol. 57, 1975, at 3a.66.2.1 *Ad primum ergo dicendum quod etiam ante passionem Christi baptismus habebat efficaciam a Christi passione, inquantum eam prefigurabat: aliter tamen quam sacramenta veteris legis.*

[5] PEVSNER, *Bedfordshire*, p. 114.

[6] For a detailed analysis of Ramsey's work and artistic significance, see Christopher WILSON, *The Origins of the Perpendicular Style and its Development to circa 1360*, unpublished doctoral dissertation, University of London, 1979, p. 171-259. See also the biographical entry in John HARVEY, *English Medieval Architects: A Biographical Dictionary down to 1550*, (revised edition) Gloucester, 1987, p. 242-245.

[7] St Stephen's Chapel itself was begun by Michael of Canterbury in 1292 and largely complete by 1326. Ramsey's contribution to this monument discussed *in extenso* in WILSON, *The Origins of the Perpendicular Style*, p. 226-233. For an easily accessible antiquarian view of the west front, see KOWA, *Architektur der englischen Gotik*, fig. 189.

[8] For Stratford's sepulchre, see WILSON, *The Origins of the Perpendicular Style*, p. 250-254, and Christopher WILSON, "The Medieval Monuments", in *A History of Canterbury Cathedral*, ed. Patrick COLLINSON, Nigel RAMSAY & Margaret SPARKS, Oxford, 1995, p. 451-510, at p. 486-469, with figs 101 (for the entire monument), 111 (for the effigy and its microarchitectural frame), and 117 (for the effigy's head). The peculiar cinquefoil cusps that accentuate the dado and gablets of the Luton ciborium reappear on the chest fronts of two other tomb monuments that are likely to have been produced in Ramsey's London-based workshop, namely those of Sir Oliver de Ingham (d. 1344) in the parish church of Ingham, and of Sir William de Kerdiston (d. 1361) at Reepham, both in Norfolk. For the Ingham monument, see WILSON, *The Origins of the Perpendicular Style*, p. 248-249, with fig. 488. For the Reepham tomb, see the entry by Christopher WILSON in *Age of Chivalry: Art in Plantagenet England 1200-1400*, ed. Jonathan ALEXANDER & Paul BINSKI, (exhibition catalogue, Royal Academy), London, 1987, p. 248-249, no. 131. See also Arthur GARDNER, *English Medieval Sculpture*, Cambridge, 1951, fig. 419 with a good reproduction of the tomb arcade and its cinquefoil cusps.

[9] For Ramsey's chapter house and surrounding cloister at St Paul's, see WILSON, *The Origins of the Perpendicular Style*, p. 197-226. See also the entry by Thomas COOKE & Christopher WILSON in *Age of Chivalry*, p. 369-370 no. 386, and John Robert ZUKOWSKI, *The Polygonal Chapter House: Architecture and Society in Gothic Britain*, unpublished doctoral dissertation, SUNY Binghamton, 1977, p. 24-25, and chapter 2 with a comparative analysis of other octagonal chapter houses in England and Scotland. For the architecture of English Gothic chapter houses (including Ramsey's at St Paul's) see equally Wolfgang GÖTZ, *Zentralbau und Zentralbautendenz in der gotischen Architektur*, Berlin, 1968, p. 299-321.

[10] ISHERWOOD, *St Mary, Luton*, p. 2; HOBBS, *Luton Parish Church*, p. 3.

[11] See COBBE, *Luton Church*, p. 297-298, with further sources.

[12] Peter NEWCOME, *The History of the Ancient and Royal Foundation, Called the Abbey of St Alban*, London, 1795, p. 241.

[13] *Ibidem*, p. 241.

[14] See the entry by Anthony TUCK in the *Oxford Dictionary of National Biography*, ed. Henry Colin Gray MATTHEW & Brian Howard HARRISON, 60 vols, Oxford, 2004, vol. 17, p. 762-766.

[15] That such ties were indeed cultivated is suggested by the later case of William Wenlock, who served as prebendary of St Stephen's in Westminster and canon of St Paul's Cathedral (d. 1391). For Wenlock's tomb in the so-called Wenlock Chapel at St Mary's see COBBE, *Luton Church*, p. 337-339. For the Wenlock Chapel and its imagery see Richard MARKS, *Image and Devotion in Late Medieval England*, Stroud, 2004, p. 157-158.

[16] For the Fourth Lateran Council's impact on the theory and practice of baptism, see especially Bryan D. SPINKS, *Early Christian and Medieval Rituals and Theologies of Baptism: From the New Testament to the Council of Trent* (Liturgy, Worship and Society Series), Aldershot – Burlington (Vermont), 2006, chapter 7; Alois

STENZEL, *Die römische Taufliturgie: Eine genetische Erklärung* (Forschungen zur Geschichte der Theologie und des innerkirchlichen Lebens, 7-8), Innsbruck, 1958. See also Ann EILENHOLM NICHOLS, *Seeable Signs: The Iconography of the Seven Sacraments, 1350-1544*, Woodbridge, 1994, chapter 3.

[17] For the entire text of this decree, see *Councils and Synods, with Other Documents Relating to the English Church, II: A.D. 1205-1313*, ed. Frederick Maurice POWICKE & Christopher Robert CHENEY, Oxford, 1964, p. 453.

[18] See *Councils and Synods*, ed. POWICKE & CHENEY, p. 368-369, 600, 635, 1006, 1082, and BOND, *Fonts and Font Covers*, p. 281, 284.

[19] See Johnny ROOSVAL, *Die Steinmeister Gottlands* [sic]*: Eine Geschichte der führenden Taufsteinwerkstätte des schwedischen Mittelalters, ihrer Voraussetzungen und Begleit-Erscheinungen*, Stockholm, 1918, p. 14, with a brief discussion of Scandinavian examples from the thirteenth century. The use of padlocks and other fastening devices on English fonts is described by Norman PAUL, "English Fonts and Font Covers: Developments in Styles and Designs", in *Local Historian*, 23, 1993, p. 130-145, at p. 142.

[20] See Hans REUTHER, "Architekturmodelle auf gotländischen Taufsteindeckeln", in *Niederdeutsche Beiträge zur Kunstgeschichte*, 18, 1979, p. 93-101, with further literature. The fonts in question are at Bro, Endre and Hejdeby. See also Justin E.A. KROESEN & Regnerus STEENSMA, *The Interior of the Medieval Village Church – Het middeleeuwse dorpskerkinterieur*, Leuven – Paris, 2004, p. 362, with colour reproduction of the font cover at Endre.

[21] For the Hildesheim font, see Robert FAVREAU, "Les inscriptions des fonts baptismaux d'Hildesheim: Baptême et quaternité", in *Cahiers de civilisation médiévale*, 38, 1995, p. 115-140, with further bibliography. For the font at Rostock see Gottfried HOLTZ, "Die Erztaufe in der Marienkirche zu Rostock", in *Wissenschaftliche Zeitschrift der Universität Rostock, gesellschafts- und sprachwissenschaftliche Reihe*, 7, 1957-58, p. 33-39.

[22] The first two of eight distychs inscribed around the font of Milan's baptistery and ascribed to St Ambrose thus read: *Octachorum sanctos templum surrexit in usus / octagonus fons est munere dignus eo / Hoc numero decuit sacri baptismalis aulam / surgere, quo populis vera salus rediit (...)*. The scholarly literature on Early Christian and medieval baptisteries is considerable. Recent studies include Andrea LONGHI (ed.), *L'architectura del battistero: Storia e progetto*, Milan, 2003; Barbara BRUDERER EICHBERG, "Prolegomena zur frühchristlichen und frühmittelalterlichen Tauforganisation Roms: Die Baptisterien und die Stifterrolle der Päpste", in *Art, cérémonial et liturgie au Moyen Âge: Actes du colloque du 3e Cycle Romand de Lettres, Lausanne – Fribourg 2000*, ed. Nicolas BOCK & Peter KURMANN, Rome, 2002, p. 321-356; *L'edificio battesimale in Italia: Aspetti e problemi – Atti dell'VIII Congresso nazionale di archeologia cristiana, Genova, Sarzana, Albenga, Finale Ligure, Ventimiglia, 21-26 settembre 1998*, 2 vols, Bordighera, 2001; Jean GUYON, *Les premiers baptistères des Gaules, IVe-VIIIe siècles*, Rome, 2000; Sebastian RISTOW, *Frühchristliche Baptisterien* (Jahrbuch für Antike und Christentum, Ergänzungsband, 27), Münster, 1998; Manuel KLING, *Romanische Zentralbauten in Oberitalien: Vorläufer und Anverwandte*, Hildesheim, Zürich & New York, 1995; Annabel Jane WHARTON, "Ritual and Reconstructed Meaning: The Neonian Baptistery in Ravenna", in *Art Bulletin*, 69, 1987, p. 358-375. But see also Richard KRAUTHEIMER, "Introduction to an 'Iconography of Mediaeval Architecture'", in *Journal of the Warburg and Courtauld Institutes*, 5, 1942, p. 1-33; Romuald BAUERREISS, *Fons sacer: Studien zur Geschichte des frühmittelalterlichen Taufhauses auf deutschsprachlichem Gebiet* (Abhandlungen der Bayerischen Benediktiner-Akademie, 6), Munich, 1949; John Gordon DAVIES, *The Architectural Setting of Baptism*, London, 1962; Marina FALLA CASTELFRANCHI, *Baptisteria: Intorno ai più noti battisteri dell'oriente*, Rome, 1980. On the baptistery of S. Giovanni in Laterano in particular, see now Barbara BRUDERER EICHBERG, "Die Erneuerung des Lateransbaptisteriums durch Sixtus III, 432-440, als Sinnbild päpstlicher Tauftheologie und Taufpolitik – Die Apsismosaiken des Vestibüls", in *Marburger Jahrbuch für Kunstwissenschaft*, 30, 2003, p. 7-34 (with older literature); Olof BRANDT, "Constantine, the Lateran, and Early Christian Building Policy", in *Acta ad archaeologiam et artium historiam pertinentia*, 15, 2001, p. 109-113; Marco ROMANO, "Materiali di spoglio nel Battistero di San Giovanni in Laterano", in *Bollettino d'Arte*, 76, 1991, p. 31-70.

[23] See GÖTZ, *Zentralbau*, p. 321. For the Parma baptistery, see Giorgio SCHIANCHI (ed.), *Il Battisterio di Parma: Iconografia, iconologia, fonti letterarie*, Milan, 1999; for the baptistery at Chieri, see Michaela DI MACCO & Giovanni ROMANO (ed.), *Arte del Quattrocento a Chieri: Per i restauri nel battisterio*, Turin, 1988.

[24] For the front cover, see in particular Theodor BOGLER, "Österliche Szenen auf dem Elfenbeindeckel des Drogo-Sakramentares", in *Paschatis sollemnia: Studien zu Osterfeier und Osterfrömmigkeit*, ed. Balthasar FISCHER & Johannes WAGNER, Basel, 1959, p. 108-119, with pls 1-7. See also Roger E. REYNOLDS, "Image and Text: A Carolingian Illustration of Modifications in the Early Roman Eucharistic Ordines", in *Viator*, 14, 1983, p. 59-75, with particular focus on the Sacramentary's back cover.

[25] For St Gereon's baptismal chapel, see Anna SKRIVER, *Die Taufkapelle von St. Gereon in Köln: Untersuchungen zur Wechselwirkung zwischen Architektur und Farbfassung spätstaufischer Sakralräume im Rheinland*, Cologne, 2001. For the *Taufkapelle* at St Kunibert, see Clemens KOSCH, "Hochmittelalterliche Anbauten und Nebenräume von St. Kunibert", in *Colonia Romanica*, 7, 1992, p. 78-113.

[26] The *sechzehneckige Kapelle* was converted into a Marian sanctuary (*capella Mariae rotundae*) in the fourteenth century. Its original function as a Holy Sepulchre is reaffirmed by Heiko BRANDL, "Die sechzehneckige Kapelle im Magdeburger Dom", in *Zur Architektur und Plastik des Mittelalters in Sachsen-Anhalt*, ed. Wolfgang SCHENKLUHN (Hallesche Beiträge zur Kunstgeschichte, 2), Halle a. d. Saale, 2000, p. 33-54 (note 1 with older literature). I am grateful to Dr Brandl for making this publication available to me.

[27] On the *Heiliges Grab* at Constance, see in particular Peter KURMANN, "Das Heilige Grab zu Konstanz: Gestalt und Funktion", in *Konstanz 1985: Dokumentation der Dombaumeistertagung*, Constance, 1985, p. 71-79. But see also Rudolf BUSCH, "Das Heilige Grab zu Konstanz", in *Oberrheinische Kunst*, 1, 1925-26, p. 106-125; Georg POENSGEN, *Das Heilige Grab zu Konstanz: Ein Bildband*, Überlingen, 1948; GÖTZ, *Zentralbau*, p. 230-231.

[28] See for example St Paul in his letter to the Romans (6:4): *Consepulti enim sumus cum illo* [*Christo*] *per baptismum in mortem ut quomodo surrexit Christus a mortuis per gloriam Patris ita et nos in novitate vitae ambulemus.*

[29] See for instance AQUINAS, *Summa theologiae*, at 3a.66.7.2: *Ad*

secundum dicendum quod in immersione expressius repraesentatur figura sepulturae Christi: et ideo hic modus baptizandi est communior and laudabilior (...), and at 3a.66.8: *(...) per trinam autem immersionem significatur triduum sepulturae Christi.*

[30] On the symbolic nexus between baptism and the Holy Sepulchre, see esp. KRAUTHEIMER, "Introduction", *passim*. But see also David STOCKER, "*Fons et origo*: The Symbolic Death, Burial and Resurrection of English Font Stones", in *Church Archaeology*, 1, 1997, p. 17-25; Eloise M. ANGIOLA, "Gates of Paradise and the Florentine Baptistery", in *Art Bulletin*, 60, 1978, p. 242-248; Urs BOECK, "Das Baptisterium zu Pisa und die Jerusalemer Anastasis", in *Bonner Jahrbücher*, 164, 1964, p. 7-43. For other aspects of medieval *Heiliggrab-Rezeption* see Justin E. A. KROESEN, *The Sepulchrum Domini Through the Ages*, Leiden, 2000; Antonio CADEI, "Gli Ordini di Terrasanta e il culto per la Vera Croce e il Sepolcro di Cristo in Europa nel XII secolo", in *Arte medievale*, new series 1, 2002, p. 51-69; Matthias UNTERMANN, *Der Zentralbau im Mittelalter*, Darmstadt, 1989, p. 53-82; Geneviève BRESC-GAUTIER, "Les imitations du Saint-Sépulchre de Jerusalem (IX^e^-XV^e^ siècles): Archéologie d'une dévotion", in *Revue d'Histoire de la Spiritualité*, 1, 1974, p. 319-342; GÖTZ, *Zentralbau*, p. 219-236. On the Holy Sepulchre as a 'mnemonic afterimage' in medieval art, culture and consciousness, see Stephen LAMIA, "Souvenir, Synaesthesia, and the *sepulcrum Domini*: Sensory Stimuli as Memory Stratagems", in *Memory and the Medieval Tomb*, ed. Elizabeth VALDEZ DEL ALAMO & Carol STAMATIS PENDERGAST, Aldershot – Burlington (Vermont), 2000, p. 19-41.

[31] See for example the canopies designs in: Pacino di Bonaguida's Presentation in the Temple in a Florentine Missal of circa 1320 – Collegiata di S. Maria, Impruneta, Cod. A = II, initial A, fol. 126v (see Richard OFFNER, *A Critical and Historical Corpus of Florentine Paintings*, section III, vol. 6, New York, 1956, pls LVII-LVIII, p. 204); an early Trecento representation of the Three Maries at the Sepulchre – Duke of Northumberland Collection, London (see Günter BANDMANN, "Zur Bedeutung der romanischen Apsis", in *Wallraf-Richartz-Jahrbuch*, 15, 1953, p. 28-46, at 43, with fig. 34); an initial of the Vyšehrad Antiphonary, of circa 1365-70, here depicting a *Gnadenstuhl* – Vorau, Stiftsbibliothek Ms. 259, I-IV, vol. III, initial G, fol. 5r (see the entry by Hana HLAVAČKOVÁ in *Karl IV. Kaiser von Gottes Gnaden: Kunst und Repräsentation des Hauses Luxemburg 1310-1437*, ed. Jiří FAJT, (exhibition catalogue, Prague Castle), Munich – Berlin, 2006, p. 189 no. 62, with further literature); two panels painted around 1400 by a master from the Lake Constance area, showing the Deposition and the Three Maries at the Sepulchre respectively – Klerikerseminar des Herzoglichen Georgianums, Munich (see the entry in *Europäische Kunst um 1400*, (exhibition catalogue, Kunsthistorisches Museum), Vienna, 1962, p. 110, nos 44-45); a miniature showing a baptismal ceremony in a manuscript of William Durandus' *Rationale*, produced in Vienna in circa 1385-1406 – Österreichische Nationalbibliothek, Vienna, Ms. 2765, fol. 1v (see Andreas FINGERNAGEL, *Die illuminierten Handschriften und Inkunabeln der Österreichischen Nationalbibliothek, 11: Mitteleuropäische Schulen II (ca. 1350-1480): Österreich – Deutschland – Schweiz*, Vienna, 2002, p. 149-178, no. 31; my thanks to Dr Christine Beier for drawing my attention to this publication).

[32] See Leonard KÜPPERS & Paul MIKAT, *Der Essener Münsterschatz*, Essen, 1966, p. 78-80; Johann Michael FRITZ, *Goldschmiedekunst der Gotik in Mitteleuropa*, Munich, 1982, p. 198, nos 93-94.

[33] See Achim TIMMERMANN, "Designing a House for the Body of Christ: The Beginnings of Eucharistic Architecture in Western and Northern Europe, ca. 1300", in *Arte Medievale*, new series 4, 2005, p. 119-129, with further bibliography.

[34] See BOND, *Fonts and Font Covers*, chapter 17, for further examples and illustrations. For Ewelme's font cover see now also John A.A. GOODALL, *God's House at Ewelme: Life, Devotion and Architecture in a Fifteenth-Century Almshouse*, Aldershot – Burlington (Vermont), 2001, p. 67-69. For a brief discussion of Perpendicular font covers in Essex, see PAUL, "English Fonts and Font Covers", p. 142-145.

[35] See now Nikolaus PEVSNER & Bill WILSON, *Buildings of England: Norfolk I: Norwich and North-East*, Harmondsworth, 1997, p. 700 (for Trunch) and p. 249 (for Norwich). See also BOND, *Fonts and Font Covers*, p. 301.

[36] Hannelore SACHS, "Die Bronzetaufe der Marienkirche zu Frankfurt/O.", in *Metallkunst von der Spätantike bis zum ausgehenden Mittelalter*, ed. Arne EFFENBERGER, Berlin, 1982, p. 185-197.

[37] *Bildhandbuch Deutsche Kunstdenkmäler: Sachsen-Anhalt*, ed. Hans-Joachim KRAUSE & Albrecht DOHMANN, Leipzig, 1993, p. 464, with fig. 278.

[38] See in particular Monique DE RUETTE, *et al.*, "Étude technologique des dinanderies coulées: l'œuvre de Guillaume Lefèvre (Synthèse)", in *Bulletin de l'Institut Royal du Patrimoine Artistique*, 22, 1988-89, p. 104-160, esp. p. 105-106 (for the life and work of Lefèvre), and p. 112-124 with a detailed description and technical analysis of the font and its cover). Detailed views of the iconographical programme in André LOUIS, *L'église Notre-Dame de Hal (Saint-Martin)* (Ars Belgica, 6), Brussels, 1936, pls. 60-63, and p. 31.

[39] See *De doopvont van Aert van Tricht, St. Janskathedraal, s'Hertogenbosch*, s'Hertogenbosch, 1983, *passim* and p. 48 with further literature and antiquarian sources. See also Suzanne COLLON-GEVAERT, *Histoire des arts du métal en Belgique* (Académie Royale de Belgique, Classe des Beaux-Arts, Mémoires, 7), Brussels, 1951, p. 259-260, and Jeremy DUPERTUIS BANGS, *Church Art and Architecture in the Low Countries before 1566* (Sixteenth Century Essays & Studies, 37), Kirksville (Missouri), 1997, p. 27.

[40] See COLLON-GEVAERT, *Histoire des arts du métal*, p. 265-266, and DUPERTUIS BANGS, *Church Art and Architecture in the Low Countries*, p. 27-28.

[41] For these works, see respectively TIMMERMANN, "Das Taufziborium im Ulmer Münster", *passim*, and TIMMERMANN, "A Promise of Paradise", *passim*.

Hybrid Design Strategies around 1300: Indications of a "Post-classical" Gothic Architecture?

Norbert Nussbaum

A joint quest for the origins of the Late Gothic around 1300, undertaken in this volume, offers a great deal of hope for success. But my hope remains qualified: it is based on the assumption that these origins cannot be understood in formal stylistic terms. We are all familiar with Jan Białostocki's summary of the differing attempts to arrive at a consensus in describing the Late Gothic as a phenomenon of style. In the end Białostocki remained doubtful whether there is "a common denominator" to which we could reduce the heterogenous aspects of Late Gothic art, "or whether they are – on the contrary – an expression of quite different contemporary artistic attitudes affirming its wealth, nourished by the past, and yet contributing to the formation of the future".[1] What was impossible back in 1966 will certainly not be easily achieved today, especially when all subsequent attempts have been taken into consideration.

This volume is also concerned with the growing number of builders and building tasks around 1300. However, it would be naïve to assume that this process of multiplication and diversification was able to bring forth a wholly new architecture. Universally valid architectural concepts cannot normally thrive in an environment of highly contrasting demands.

The early fourteenth century saw the construction of the west façade of Strasbourg Cathedral and the nave of the Dominican church in Colmar, not far from one another in Alsace (Fig. 1 and Fig. 1 on page 78). To compare these two structures would be a futile enterprise, since we lack a *tertium comparationis*. They emerge as a type and an anti-type, just as they are meant to be. Because both structures, along with many other architectural models, continued to have impact as paradigms, the architecture of the subsequent 200 years developed as an accumulation of prototypes and their derivatives, new forms and their modifications. This is not surprising for a style which developed the *genera dicendi* for many levels of architectural expression.

An art history of the fourteenth and fifteenth centuries that broke with the notion of a regimented advance of architectural styles described such processes as an extended differentiation of multiple types and forms into a continually expanding inventory of what was architectonically possible. Since that time, architectural history of the Late Gothic can be best understood not as a series of mutually exclusive phenomena, but rather as a creative continuation and reformulation of competing concepts based partly on a variety of roots.

But the discourse would appear rather threadbare if someone had not emerged to declare that the very absence of formal unity was indeed an identifying characteristic of the Late Gothic. Focusing more on the interaction among the forms and less on the styles, Rosario Assunto pointed early on to the free unfolding of the individual and specific elements as the basic aesthetic thrust of Late Gothic architecture in contrast to the High Gothic: "What is understood as beautiful in Late Gothic art is already no longer the diversity which is organized to form a unity, but rather the diversity itself in which each element is shown to have an inde-

Fig. 1. Colmar, Dominican Church, nave (from N. Nussbaum, *Deutsche Kirchenbaukunst der Gotik*, 2nd ed., Darmstadt 1994).

pendent individuality, and the beauty of the whole consists in the abundance of those individualities and not in their subordination into an overall organism".[2] Before Assunto, Erwin Panofsky had already detected the *intuitus* of the nominalists, an approach which concentrates on the multiplicity of natural things, inscribed in the detailed realism in the paintings of the early Dutch masters.[3]

Assunto believes that this kind of aesthetic was well-grounded around 1300. Nikolaus Pevsner accurately localized its beginnings in the English Decorated style. He believed that the refined and exaggerated element that draws attention to itself in some works of this style as a virtuoso singularity has a scholastic parallel in the complex sophism of Duns Scotus and his pupil William of Ockham.[4]

Do we gain anything from this analogy between form and philosophical discourse, or does the diffusive nature of the process not perhaps give rise to doubts about such purported connections? Let me propose another path for identifying features of Late Gothic architecture. I will not examine the concept of the "Late Gothic" with all its problematic connotations. Nor do I wish to contend that the vantage I suggest can encompass all of the artistic phenomena in question in their totality. What I want to sketch out is solely an attempt at a methodological approach.

My initial guiding observation is that architecture from the middle of the fourteenth century onwards tends increasingly toward hybrid formations. Furthermore, that growing hybridism is one of the consequences of the rampant multiplication of the typological and formal repertory. If the supposition that the time around 1300 played a fundamental generative role for later concepts is correct, then strategies of hybrid design must have been widespread already at that point, heralding future developments.

The interest in such hybrid constructs is not limited to the decorative arts. Frequently it is symptomatic of the changing and increasingly more complex cultural habitus encompassing different spheres of life. In our present multimedia culture, for example, that interest in hybrid structures is almost ubiquitous. It can be seen as an artistic attitude that synthesizes elements not normally connected in a new and surprisingly meaningful construction. The phenomenon has been researched far better in linguistics than art history.

I shall, therefore, initially take refuge in the ideas of Mikhail Bakhtin, the acknowledged master of the theory of hybridity. The phenomenological and hermeneutical basis of his 1975 essay on the prehistory of the novelistic discourse can, I believe, be adopted for the purposes of architectural history.[5] In Bakhtin's view, in a linguistic hybrid formation differing components of language are perceived as styles. The stylistic profile of one component appears more sharply outlined and objective when seen next to the respective profile of the other, than when it stands alone.[6] This process of mutual illumination is thus a concrete creative benefit of hybrid formations in contrast to the monocultural forms. This simple definition has the charm of great clarity. Because it concerns style, I

would like to explore it further and apply it to the analysis of architecture.

In the 1430s, Hans Stethaimer decorated the choir wall of St Martin's in Landshut with a small musical gallery (Fig. 2). The massive substructure of the parapet is penetrated by a central wedged piece which rises, thinly-walled and light in texture, over a protruding ogee arch. The dainty swallow tail ends of the small supporting vault beneath the wedge, the fine tracery at its formeret arch and the tender paneling on the walls of the wedge stem from a totally different repertory than the heavy substructure of the parapet and its sculpturally rendered tracery. An aesthetic achieved by a harmonious combination of forms, characteristic of the earlier Gothic architecture, here becomes a strategy of consciously sought out and staged contrasts, a contrapuntal ensemble. Inveterate historians of style might contend that this is a case where forms belonging to a "soft" style interpenetrate those of an "angular" style. But according to the established models of stylistic change in the fifteenth century these two styles should follow one another consecutively and not appear side by side. Yet here they merge in an incomprehensible simultaneity and in a kind of forced disharmonious marriage of the disparate.[7] But Hans Stethaimer was apparently not much worried about formal and stylistic unity. The dialectical relationship between the two elements is suggested by the artifice of interpenetration: the finer element interpenetrates the more massive configuration. In so doing, it demonstrates the sharpness of its contour and at the same time it highlights the luxuriousness of the freely configured corbelled mouldings of the gallery's substructure. This dialectical texturing of the heavy and the light, the rough and the finely modelled, the pointed and the bulky, the active and the passive are all properties which comment on one another – or, as Bakhtin puts it, "mutually illuminate one another".[8]

This kind of architecture appeared suspect in the eyes of the practitioners of normative style theory around 1900. At the time, the unity and stability of form were seen as guarantors of the purity of style, whereas a lack of uniformity and changeability were considered poor taste.[9] By contrast, at Landshut we are summoned to uncover the actual creative accomplishment in the dynamic dialogue of the polarities that reciprocally rely on each other.

Fig.2. Landshut, St. Martin, musical gallery (Norbert Nussbaum, 1982).

Many dialogues of this sort are structured in the way that one voice comments on the other in a kind of architectural counterpoint. Thus, the torsion in the portal pilasters in the Vladislav Hall in Prague Castle, built between 1493 and 1502 by Benedikt Ried, provides a tectonic comment on the origin of the pilaster. In Ried's view it has descended from the coloumn. Thus its shaft can be converted into a spiral form as well. The reconfiguration of the pier and the vault ribs into a tree in one of the ground floor rooms in the castle of Bechyně in Southern Bohemia (circa 1515), comments, literally, on the roots of the architectonic forms in nature. At Burgos Cathedral, the perforation of the vault into a veiled upper light above the crossing symbolizes the transcendence of the church vault as the locus of heaven.

In their respective metier, all these hybrids constitute breaches of convention in the realm of pure theory. They are packed with subversive potential which reveals differing intentions to provoke. For example, by means of the staircase tower, added to the southern transept of St Vitus' Cathedral in Prague between 1372 and 1373 (Fig. 3), Peter Parler commented on the process of hybridizing as a transition of one elementary

Fig.3. Prague Cathedral, south transept staircase (from Karel Plicka, *Prague. Ein fotografisches Bilderbuch*, Verlag Werner Dausien, Hanau, 1961).

type into the form of another, which masks its true identity. The tower is the product of a daredevil intervention in the traditional hierarchy of structural elements, because the stairway – a structural element intended to serve an organized and light flooded interior, and which in earlier days of the Gothic style, at the time of the orthodox application of the Vitruvian theory of *decorum*, would have never been thrust into the foreground – here becomes an element that catches the eye, springing forth as a virtuoso piece for visual contemplation.

The stairway is worked fully into the eastern buttress of the façade, hollowing out its mass from the front. In the material sense of the word, the buttress is drained of substance, its function as a brace for the transept walls seriously compromised. Since the body of the buttress recedes in three stages, the individual flights of stairs are not placed vertically one above the other, but rather lean to the receding structure. At each level in the buttress, the direction of the stairway changes, as does the direction of the diagonally rising tracery bridges in the casing. The entire stairway tower is thus characterized by a triple fracture of the vertical and rising axes. The optical destabilization that this engenders makes the whole seem more fragile than it actually is.

This risky venture of transforming a buttress into a stairway of the same contour is unconcerned about the identity of form and function, laboriously worked out in the thirteenth century and later extolled by the rationalists of the nineteenth century.[10] Instead, it carries its own laws *ad absurdum*. Gothic design practice presents itself here in a state of lost innocence, a state in which it appears attractive to alienate architectural elements from their customary settings and to transplant them into totally unexpected milieus, while infusing them with new valences.

The described phenomena are not inventions *ex nihilo*. Many of them go back to the prototypical hybrid formations of the period around 1300. Thus, the dissolving of a massive buttress into a stairway finds its prototype in the tracery spires of the Freiburg and Cologne tower projects, which were derived by an irregular crossing of two structural elements. The pointed stone pyramid of the older Gothic spires was still a roof in the traditional sense. By breaking open its surface by means of window tracery, the protective hood becomes a filigreed, highlighted structure. It no longer contributed to the protection from the stormy elements but rather appeared itself to be in need and worthy of protection. Nonetheless, the perforated mass notwithstanding, the old silhouette was preserved.

The skeletal ribbed vaults obey a similar dematerializing principle by reducing bodily forms into a three-dimensional graphic structure. In the first examples around and after 1300,[11] and in a manner more rigorous than in later structures (Fig. 4), the arch skeleton as the putative support structure and the flat stone

ceiling with its ribs as orthogonal projection of the spatial configuration, are set one against the other. They appear almost like a didactic model of spatial design procedures.

The fan vault is also a hybrid design. Combined here in contraposition are the conoidal, convex form of the vault and the flat spandrel of the ceiling. As a result, the effect of an interpenetration of hollow forms typical in a conventional Gothic vault is here absent. From the point of view of spatial aesthetics, its predecessors are the so-called umbrella vaults of the English chapter houses. Having originated in the twelfth century,[12] in the decades around 1300 the umbrella vaults came to draw their quintessential character from the organization of space around the massive rotative figure of a free-standing support. Unequalled is the upper chamber of the chapter house in Wells Cathedral (begun 1298, finished by 1305) with a rich umbrella vault of radiating tiercerons.

In all these examples, hybrid designs appear as instruments of a strategy grounded in the aesthetics of effect. The type-historical and form-historical material is neither chosen in a one-sided way for the purpose of a stylistically pure selection, nor is it melded or combined in a harmonizing manner, nor as a kind of compilation. Rather, the designs attempt a contrastive heightening of the components, where the two principles illuminate one another in the Bakhtinian sense. What I am pointing to is not simply a syncretism of stylistic forms – it is a fundamental, in a sense a prestylistic conception of the direction that architectonic design can take. A final example may serve to illustrate this further.

The shaping of space is the first and actual task of an architectonic design. Spaces are imagined, projected into floor plans. The great tradition of Gothic orthogonal plan designs begins with the choir ground plans in the portfolio of Villard de Honnecourt (circa 1230). They show the cathedrals of Cambrai und Meaux, the Cistercian church of Vaucelles and a choir plan which was created by Villard and Peter of Corbie in a joint discussion, according to the commentary of the so-called Master 2.[13] All plans show the same guiding strategies for a chevet design: a centrifugal structuring of all partial spaces including an ambulatory and radiating chapels.

Fig. 4. Bristol Cathedral, vault in the sacristy of the Berkeley Chapel (Norbert Nussbaum, 1997).

In 1351, the foundation stone was laid at the Holy Cross Church in Schwäbisch Gmünd for a hall choir based on a design by Heinrich Parler (Fig. 5). Following his plans, rows of the cylindrical nave piers continue past the Romanesque flanking towers by three additional bays to the east. The arcade width of the straight part of the choir is essentially preserved in the curving bays of the chevet, and the central nave also remains of the same width. Only the pair of piers on the east are turned inward so that the internal end of the chevet approximates three sides of a pentagon. By contrast, the chevet's outer polygon, where the low chapels sit like pockets of space inserted between the buttresses, closes in seven sides of a dodecagon.

Something very decisive has occurred here. Within the centrifugal principle of the canonical Gothic design, the geometrical layout of the walls of the ambulatory is always in keeping with that of the internal choir arcades. An ambulatory bay and a radiating chapel are attached to each arcade interval: the internal order radiates uniformly towards the outer peri-

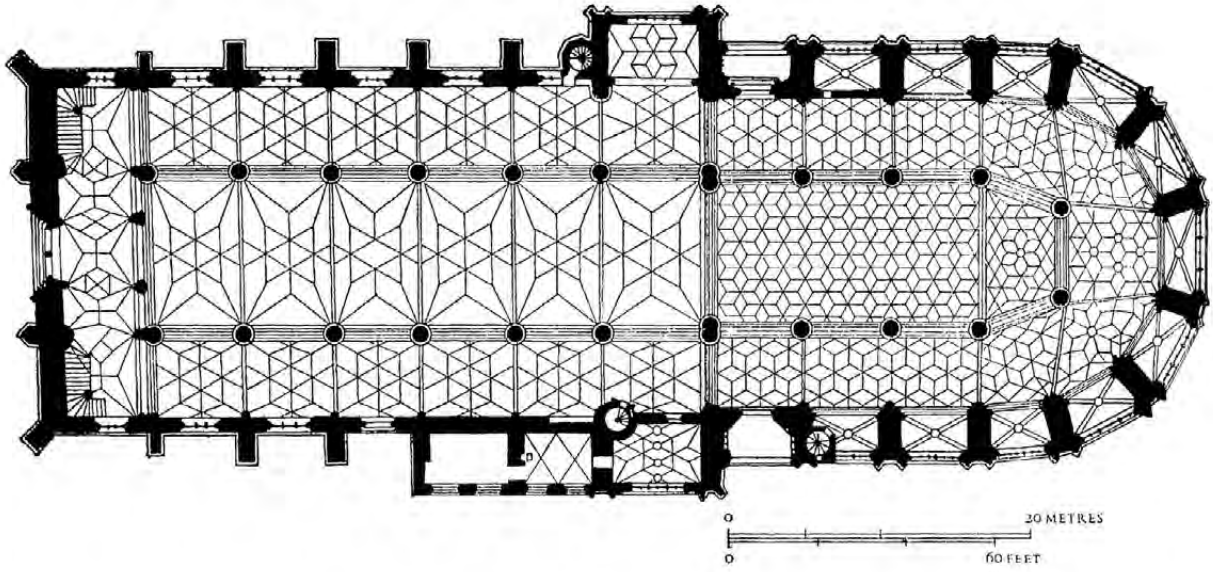


Fig.5. Schwäbisch Gmünd, Holy Cross, ground plan (from N. Nussbaum, *Deutsche Kirchenbaukunst der Gotik*, 2nd ed., Darmstadt 1994).

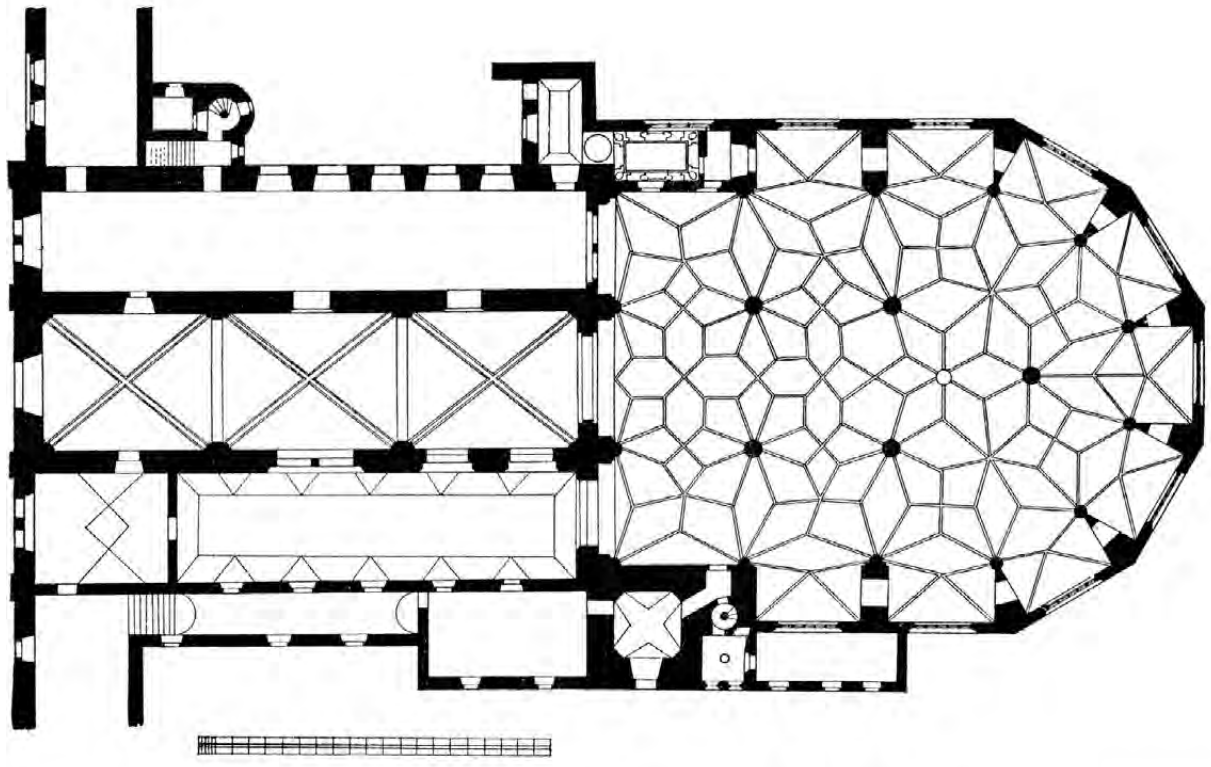


Fig.6. Salzburg, Franciscan Church, ground plan of the choir (from N. Nussbaum, *Deutsche Kirchenbaukunst der Gotik*, 2nd ed., Darmstadt 1994).

meter. In Schwäbisch Gmünd, however, there is no radial connection between the inner arcade and the outer walls, because the width of the chancel's arcades is exactly the same as the distance between the wall responds of the outer polygon. As a result, the spaces of the main choir do not fan out from a central point. Instead, internal and external order enter here into a dynamic tension based on a hybrid composition, and not on a regular geometric floor plan figure. Dominated by the outer choir walls, Gmünd's inner circle of pier arcades seems to have been added as an afterthought, as though it were of secondary importance to the space as a whole, while the ambulatory became an irregular spatial zone that extends out into the choir's polygon.

The consequences of this approach to choir design in Germany are well known. In the 1408 choir of the Franciscan Church in Salzburg, Hans von Burghausen radicalized the hybrid design from Schwäbisch Gmünd (Fig. 6). Here the five piers appear to be placed completely freely in space. For that reason, the umbrella vaults do not form bays but rather configure a vaulting landscape of their own. They break free from the geometry of the lower structure. The outer walls and the freely-ordered vaults form two heterogeneous systems.

An art historiography concerned with the spatial atmosphere of Late Gothic churches has rightly stressed that the dissolving of the plan geometries in Schwäbisch Gmünd and Salzburg attempt to generate spatial images which obscure the ratio of the architectonic design and create their own effect.[14] As long as the archetype of the modular and symmetrical cathedral choir remained dominant, such intention could not become a reality. But in somewhat later examples of the cathedral model we find the first indications of the intention to sculpt and reshape space.

Begun in 1259, the choir of the Cistercian church of Altenberg picks up on the solutions of the cathedrals of Amiens, Beauvais and Cologne. However, it transforms these models very distinctively into something original (Fig. 7).[15] The inner circle of piers corresponds to the seven points of a regular dodecagon. By contrast, the radiating chapels have as their geometrical base an irregular polygon that mediates between a dodecagon and a tridecagon. The external

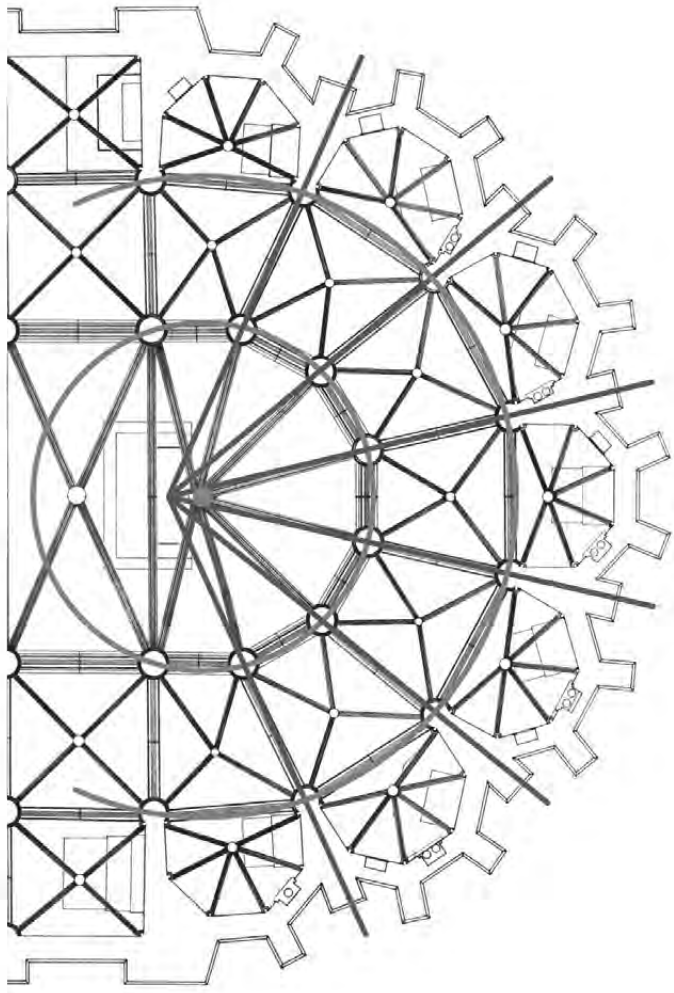


Fig.7. Altenberg, Cistercian Abbey Church, choir geometry (Norbert Nussbaum, 2005).

and internal polygon have the same constructional midpoint, made visible in the keystone of the chevet, but the arcade piers and their counterparts at the chapel entrances are not in the same radial axes. While the radial ribs of the inner choir retrace the partitioning segments of the regular dodecagon, these axes are broken in the doubleau arches of the ambulatory. As a consequence, all the ambulatory bays, except for the apex bay, appear as irregular trapezoids. The architect took this geometrical irregularity into the bargain in his attempt to realize a spatial configuration that he apparently considered important. If the doubleau axes of the ambulatory are extended into the center of the

choir, all the lines converge at a point on the main altar. Viewed from this point, a perspectival effect is achieved despite the actual shifts: the ambulatory piers recede into the shadow of the arcade piers, and we have an open view into the radiating chapels in their entire breadth, along with their side altars.

The position of the vault keystones in the chapels in relation to those in the ambulatory shows that this effect is not an accidental result of the choir's geometry. Rather it is the actual aim of a conscious design decision. Like arcade and ambulatory piers, the keystones lie behind one another on perspectival axes that extend from the focus point on the altar. In order to achieve this, the keystones in the entrance bays of the ambulatory have been slightly shifted outwards from the vault midpoints. Thus, through the positioning of the main altar, the liturgical centre point and perspectival viewpoint merge into one. The ordering of the spaces with their places for ritual is derived not just in an allegorical sense but also in a very concrete sense from the spiritual centre of the structure. Seen as a whole, however, two competing orders have been established here. Each revolves around its own fixed point, the geometrical midpoint of construction and the perspectival viewpoint. Only the ground plan of the choir reveals this riddle, and thus, echoing Erwin Panofsky, one could speak of a "disguised symbolism" inherent in the design, which utilizes a hybrid or contrapuntal figure. Who knows what potential lying within the artistic conception of the Late Gothic might have been revealed to us by the sketch books of the architects working around 1300 had they been preserved.

NOTES

[1] Jan Białostocki, "Late Gothic: Disagreements about the Concept", in *Journal of the British Archeological Association*, 29, 1966, p. 76-105, here p. 101.

[2] "Was in der spätgotischen Architektur als schön verstanden wird, ist bereits nicht mehr die Vielfältigkeit, die sich zu einer Einheit ordnet, sondern die Vielfältigkeit als solche, bei der jedes einzelne Glied sich der Anschauung als selbständige Individualität zeigt und die Schönheit des Ganzen in der Fülle dieser Individualitäten besteht und nicht in ihrer Einordnung in einen Gesamtorganismus", Rosario Assunto, *Die Theorie des Schönen im Mittelalter*, (first edition Cologne, 1963), Cologne, 1982, p. 120.

[3] Erwin Panofsky, *Gothic Architecture and Scholasticism*, 2nd edition, New York, 1958, p. 15; Erwin Panofsky, *Early Netherlandish Painting*, Cambridge (Massachusets), 1953, p. 8, *passim*.

[4] Nicolaus Pevsner, *An Outline of European Architecture*, 6th edition, Harmondsworth, 1960, p. 199.

[5] Mikhail M. Bakhtin, "From the Prehistory of Novelistic Discourse", in *The Dialogic Imagination. Four Essays by M. M. Bakhtin*, ed. Michael Holquist, Austin (Texas), 1981, p. 41-83 (appeared originally in *Voprosy literatury i estetiki*, Moscow, 1975).

[6] Bakhtin, "From the Prehistory of Novelistic Discourse", p. 76.

[7] On the criticism of the concepts of style involved, see Norbert Nussbaum, "Stilabfolge und Stilpluralismus in der süddeutschen Sakralarchitektur des 15. Jahrhunderts", in *Archiv für Kulturgeschichte*, 65, 1983, p. 43-88.

[8] Bakhtin, "From the Prehistory of Novelistic Discourse", p. 76.

[9] See for instance the entry "Stil" in *Brockhaus' Konversations-Lexikon*, 14th edition, Leipzig, 1908, vol. 15, p. 356: "Jede Kunst schreibt der künstlerischen Behandlungsweise ihre bestimmten, nur ihr eigenartig angehörigen Gesetze vor [...] Das Überspringen der einen Kunstart in die andere, das Vermischen z.B. des Plastischen mit dem Malerischen, heißt in diesem Sinne stillos".

[10] Pol Abraham, *Viollet-le-Duc et le rationalisme médiéval*, Paris, 1934.

[11] Inside the Easter Sepulchre at Lincoln Cathedral (1296); in the pulpitum of Southwell Minster (between 1320 and 1340); in the sacristy of the Berkeley Chapel in Bristol Cathedral (about 1340); in the so-called Tonsure of the cloister of Magdeburg Cathedral, (circa 1330-1340).

[12] The chapter house of Worcester Cathedral, built before 1125, might be the oldest example.

[13] Hans R. Hahnloser, *Villard de Honnecourt. Kritische Gesamtausgabe des Bauhüttenbuches ms.fr. 19093 der Pariser Nationalbibliothek*, 2nd edition, Graz, 1972, fol. 14v, 15r, 17r.

[14] Kurt Gerstenberg, *Deutsche Sondergotik. Eine Untersuchung über das Wesen der deutschen Baukunst im späten Mittelalter*, 2nd edition, Darmstadt, 1969, p. 152-168.

[15] Norbert Nussbaum, "Der Chorplan der Zisterzienserkirche Altenberg. Überlegungen zur Entwurfs- und Baupraxis im 13. Jahrhundert", in *Wallraf-Richartz-Jahrbuch*, 64, 2003, p. 7-52.

Architecture at the Crossroads: Three Examples from Bohemia circa 1300

Klára Benešovská

This contribution focuses on several important buildings, which are completely lost to us or have been fragmentarily preserved, and therefore are frequently overlooked or left unmentioned in surveys of European Gothic. Nevertheless, they are not fictive structures, but significant examples of architecture around 1300, considered to be key buildings for the understanding of architecture in the Central European region. In order better to understand the buildings in question we must turn briefly to the circumstances of their construction and to the personalities who built them.

Radical changes not only in the field of architecture but also in other arts and in the way of life in Bohemia are intimately linked with the reign of Wenceslas II of the Přemyslid dynasty (1283-1305). These changes mirrored his personal development, and went hand in hand with growing political and economic prosperity.[1] A seemingly young and weak ruler, Wenceslas assumed the reigns of power in 1283, five years after the tragic death of his father Otakar II, who was killed in battle against the Habsburg Duke Rudolf, near Dürnkrut (in Lower Austria). Thus he appeared to contemporaries through unfavourable comparisons with his chivalric and conquering father; Dante mocked him in the *Purgatorio*: "his name was Otakar, and in swaddling-bands he was better far than bearded Wenceslas, his son, who is fed by lust and idleness"; and again in the *Paradiso*: "It will show the lechery and the effeminate life of him of Spain and him of Bohemia, who never knew valour or wished to".[2]

As a ruler, Wenceslas was able to make up for his physical deficiencies through his incisive intellectual abilities. Under his rule Bohemia became again one of the leading countries in Central Europe: in 1300 Wenceslas obtained the Polish crown through his marriage to the Piast princess, Elizabeth Richenza[3] and secured the Hungarian crown for his son.[4] Economic prosperity, derived from the recently-discovered silver deposits, was symbolically typified by the new quality coins, the Prague groschen.[5] The growth of his power provoked the animosity of his neighbours, above all the Habsburgs.

These advancements came to a halt with the death of Wenceslas in 1305 and with the assassination of his sixteen-year old son in 1306. However, in his lifetime Wenceslas II's court was a meeting place for artists, poets, Italian lawyers and educated clerics. The most prominent among Wenceslas' closest advisors were Cistercians, and it is in two of their newly-erected churches in Sedlec and Zbraslav that we encounter the most distinguished features of royal architecture.

Sedlec is the oldest Cistercian abbey in Bohemia, founded in 1142 by the nobleman Miroslav, as a daughterhouse of the abbey at Waldsassen in the Upper Palatinate.[6] Unfortunately we know nothing of its older Romanesque structure.[7] Its sudden expansion at the end of the thirteenth century is directly connected with the discovery of the new deposits of silver on the land belonging to the monastery. In the vicinity of the monastery's silver mines a new settlement was established called Kutná Hora. Sedlec became in a short time the richest monastery in Bohemia with income

Fig. 1. Sedlec, Cistercian Abbey Church, east end (Photo Alexander Paul, Ústav dějin umění, Akademie věd České republiky, Prague).

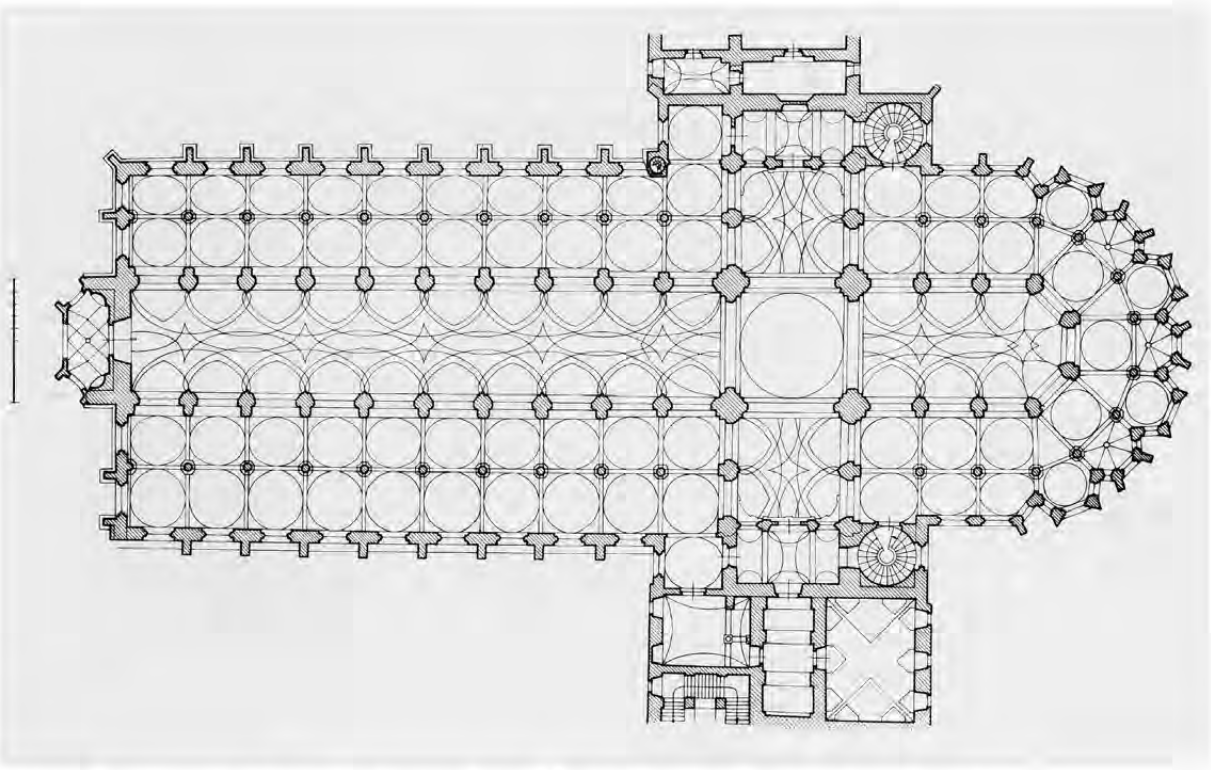


Fig. 2. Sedlec, Cistercian Abbey church, ground plan (Ústav dejin umění, Czech Academy, Prague).

flowing to its treasury from the silver mines as well as the houses, baths, and mills of Kutná Hora.[8] The Abbot of Sedlec, Heidenreich, elected in 1280, became one of the most influential men in the kingdom, the king's personal advisor, diplomat, and banker.[9] For his new abbey church Heidenreich chose a French cathedral-type structure with a chevet (Fig. 1). This building type is common in Cistercian architecture circa 1300 and has a long tradition going back to mid-twelfth century foundations such as Clairvaux and Pontigny.[10] In the course of the third quarter of the thirteenth century a series of new abbey churches emerged in the Ile-de-France formulating their individual response to contemporary cathedral architecture. Four of those projects – Longpont, Royaumont, Maubisson, Dammarie-les-Lys – were supported by members of the royal family, in particular Blanche of Castile and Louis IX.[11]

Considering the style of the Bohemian building I would like at this point to suggest some analogies. In 1227, the abbey of Longpont near Soissons was consecrated, in the presence of Louis IX and his mother.[12] Its ground plan, elevation and architectural forms derive from the contemporary cathedral of Soissons, although they are moderated for Cistercian purposes. The layout is simpler, the proportions are more modest and a fully developed triforium is substituted here by a continuous blind arcade. Soissons Cathedral, whose choir and transepts were completed by 1220,[13] became a model for Cisterician buildings from the turn of the century, including Sedlec, in the use of *en délit* piers, the simple forms of lancet windows without tracery and a juxtaposition of subtle sculpturally modelled architectural details alongside purely geometric shapes.

The monks of Longpont were the founding community of the abbey of Royaumont, established by Blanche of Castile and Louis IX as a burial church for the members of the royal family. The church, consecrated in 1235, has the same cathedral layout, while the contemporary Rayonnant style is here expressed through simple, clearly modelled forms and modest proportions: in the place of skeletal construction, the structure is dominated by the plain, unarticulated wall, oculi appear without tracery, and the shapes are sim-

Fig. 3. Sedlec, Cistercian Abbey Church, choir looking east (Photo Alexander Paul, Ústav dějin umění, Akademie věd České republiky, Prague).

plified throughout. This is also the case with the two female foundations of Queen Blanche: the Cistercian convent in Maubisson (1236-1242), chosen as her own final resting place, and Dammarie-les-Lys near Melun, where her heart alone is buried. Another church with a cathedral layout can be joined to this distinguished group, Ourscamp (choir 1233-1257), founded by the bishops of Noyon as their necropolis. Here the triforium also takes the form of a blind arcade, transforming a three-part elevation into two, while the sharp geometric forms alternate with the sculptural, and are distributed according to the overall effect of the building and its function.

Of all the buildings just mentioned, Louis IX's Royaumont, seen as an archetypal royal burial church, was certainly the most influential among the newly-founded Cistercian institutions.[14] One of its derivations can be found in Altenberg, rebuilt in 1259 as the burial church of the Counts of Berg, the allies of the Archbishop of Cologne, Konrad von Hochstaden, who was responsible for the construction of Cologne Cathedral.[15] Not only Cologne, but also Longpont, Ourscamp, and Royaumont have all been singled out as sources for Altenberg.[16] Altenberg is probably one of the most prestigious Cistercian foundations, which closely anticipates Sedlec, and Abbot Heidenreich would have certainly been aware of it through his contacts with the order.

Sedlec's ground plan may also have been the legacy of St Bernard's church in Clairvaux, where a new choir with radiating chapels was erected shortly after his death and burial (in 1153), which was followed by canonisation in 1174. It is therefore possible that choirs terminating in an ambulatory with radiating chapels became a popular choice in Cistercian architecture through this association.[17] On the other hand, because of the abbot's close relationship with the king, Sedlec is frequently categorised as a *Königskirche*, the term first used by Hans Sedlmayr.[18]

The architect in charge of the building[19] used in Sedlec a cathedral type of layout with three side aisles in the nave, two on the south side, one on the north, (the outer aisle on the north side consists of a row of chapels), a transept, and high choir encircled by an ambulatory with radiating chapels (Fig. 2). Although many of the internal architectural features have been barocised, the layout and the outer walls correspond to the original form. As in the group of royal foundations in France already mentioned, we find here (Fig. 3) a tripartite elevation, accentuated by stringcourses placed above the arcade arches and under the clerestory. A blind arcade substitutes the triforium in the choir, while slender triple responds provide a vertical accent in the nave. Between the clerestory windows these responds rest on the raised strips of masonry. This novel system of responds was highlighted by Václav Mencl in 1947 as one of the characteristic features of Bohemian Gothic from the second quarter of the fourteenth century.[20]

The arcade is treated as a series of openings cut out of the inert mass of the wall, its only remnant being

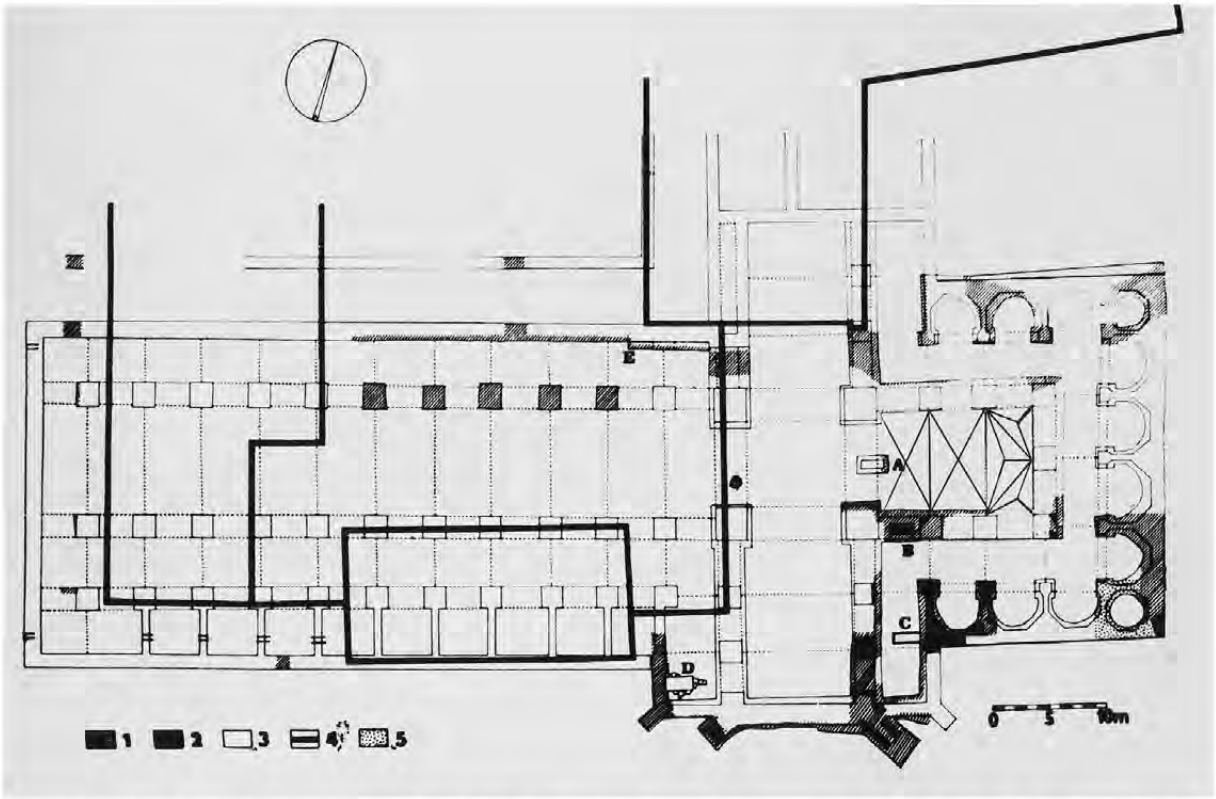


Fig. 4. Zbraslav, church plan based on archaeological investigations and reconstruction of vaults by K. Benešovská (Ústav dějin umění, Akademie věd České republiky, Prague).

the piers with simple octagonal forms and without any articulation save for the chamfered moulding of the arch. Like the abbey church of Salem, Sedlec also contains one of the earliest known examples of the T-shaped pier. The T-shaped or the so-called pier-buttress receives the thrust of the high vaults through an ingenious system of blind arches concealed under the side aisles' roof. The crossing piers have the same austere and powerful forms. The responds of the crossing are curtailed and rest on traceried corbels, another emblematic feature widely adopted by Bohemian architecture of the fourteenth century. The dichotomy of the delicate responds placed against a plain wall and the powerful but rigid forms of the arcade piers, creates an interesting aesthetic of contrasts characteristic of this architecture.[21]

Paricular attention should be given to the modelling of the eastern part of the church. The high choir is surrounded by a lower ambulatory and radiating chapels of the same height. The ambulatory bays are not of the usual trapezoidal shape, instead the transition between the inner apse and the wider outer circumference of the choir is accomplished by a system of triangular bays with triradial ribs which alternate with square bays vaulted by the more traditional quadripartite vaults. Focusing solely on the ground plans rather than their respective elevations scholarship has traced this solution to Le Mans (after 1220),[22] although in this case the triradial system heightens the separation of the deep radiating chapels, moreover, the ambulatory is higher than the chapels. At Sedlec the opposite effect is achieved using the same device, here the triangular bays helped to double the number of radiating chapels and create a more unified exterior appearance. Nevertheless, the distinction is subtly hinted at by the shape of the buttresses: thus chapels which correspond to the triangular bays are supported by triangular butresses. The integration is further emphasised on the interior by the use of open arches between the chapels, which rest on monolithic columns and create an impression of a double aisle.

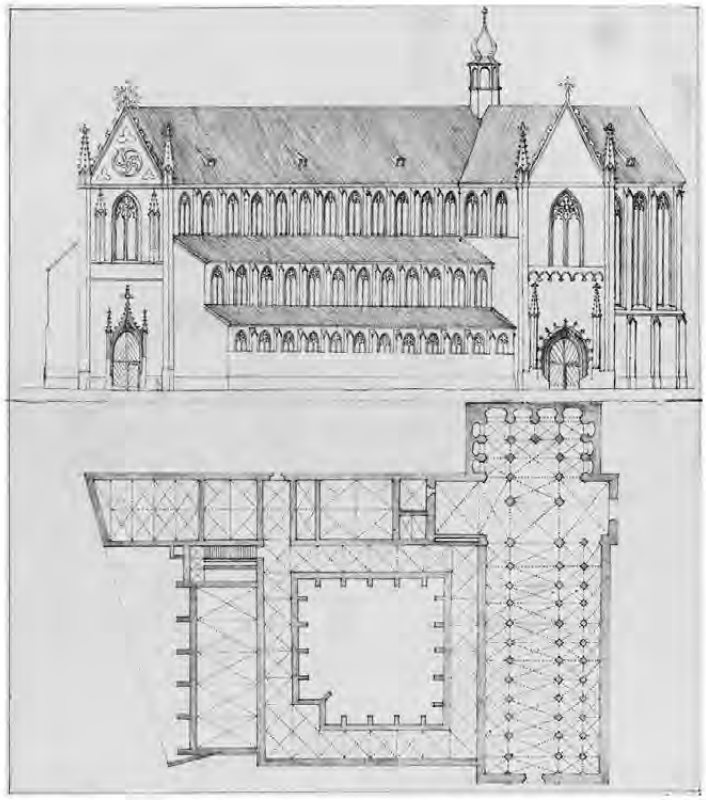


Fig. 5. Zbraslav, copy of the old drawings found in the tower of the Horní Mokropsy parish church in 1850 (F. Lorenz, Ústav dějin umění, Akademie věd České republiky, Prague).

Although the present ambulatory and chapel vaults are Baroque, as are the Tuscan columns, the original layout and the outer wall of the choir confirm that this was also their Gothic arrangement.[23] Finally, the choir of Kaisheim near Augsburg, built after 1352, follows the Sedlec solution with triradial vaults in the ambulatory and columnar supports between the chapels.[24]

The sophisticated spatial concept of the Sedlec choir leads us to that iconic building of French Gothic, the abbey of Saint-Denis near Paris. The luminous double ambulatory choir, with its vaults resting on monolithic columns, referred to by its patron Abbot Suger as *circuitum oratorium*, became through all its connotations one of the most influential medieval buildings. Like Altenberg, Sedlec too was perhaps planned in conscious evocation of that key French monument. Despite Bernard's critical attitude towards the lavish architecture exemplified by Saint-Denis, its choir quickly found followers in Cistercian buildings.[25] In its own context, Heidenreich's foundation was also a royal church. Because of its extraordinary rank and its royal connections, the new church was not only an influential model for other Cistercian foundations (such as the abbey church at Zwettl), but it also provided inspiration for Bohemian architecture of the following generation.[26]

In contrast to Sedlec, the Cistercian abbey of Aula Regia at Zbraslav was an entirely new foundation. The location was chosen by Wenceslas II (together with the Cistercian Abbots Heidenreich of Sedlec and Dietrich of Waldsassen, as well as Konrad, provost of Sedlec, Bernard, provost of Kamenz and other noblemen), in the vicinity of Prague, at the confluence of the rivers Berounka and Vltava, and on the site of a royal hunting lodge. Wenceslas signed the foundation charter in 1292, and the monks came over from Sedlec, using in the first instance the royal lodge and its chapel.[27] Wenceslas' coronation in 1297 was used as an opportunity to place the foundation stone of the monastery. On the second day after the ceremonies in St Vitus' basilica in Prague, the royal party travelled to Zbraslav, where following the mass (celebrated by the archbishop of Magdeburg over the church's foundations), Wenceslas, in full coronation vestments and insignia, knighted 240 noblemen.[28] In this way he symbolically inaugurated the new choir and designated it as the new royal mausoleum. In 1305 he was buried *in medio sanctuario* and from that time mass and offices were regularly celebrated (Fig. 4).[29] In 1329, his daughter Elizabeth Přemyslovna had nine new chapels erected alongside the south aisle. Shortly before, she commissioned a new tomb for her father with a bronze effigy, cast by John of Brabant; a stone gisant of the king from the older tomb was mounted on one of the piers in the choir. Tombs of the other members of the royal family were gradually placed around those of Wenceslas II, for example Wenceslas III (d. 1306) and his sister Queen Elizabeth (the mother of Charles IV, d. 1330).[30] Wenceslas II's great-grandson Wenceslas IV was the last member of the royal family to be buried at Zbraslav in 1419.[31] The church was badly damaged during the Hussite period but it still left a powerful impression in the fifteenth century on the Italian diplomat Aeneus Silvius Piccolomini (later Pope Pius II), who noted in his chronicle: "Among others, there was an exceptionally beautiful monastery, Aula Regia, on the bank of the River Vltava, where the river Berounka flows into it. The bodies of kings were buried there".[32]

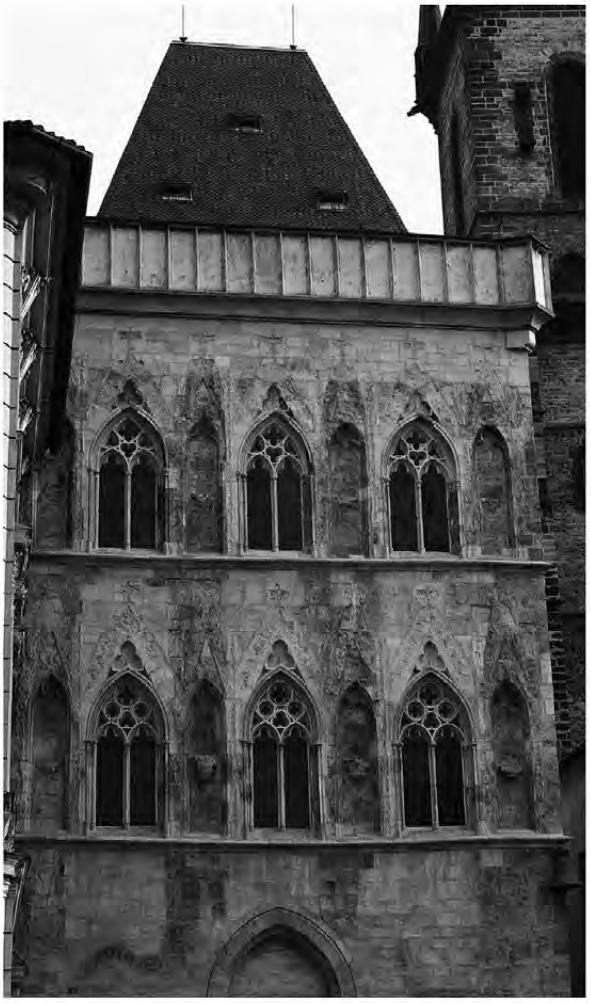


Fig. 6. Prague, House at the Stone Bell, west façade (Alexander Paul, Ústav dějin umění, Akademie věd České republiky, Prague).

Fig. 7. Prague, House at the Stone Bell, fragments of the façade statue of a sergeant at arms (Vlado Bohdan, Ústav dějin umění, Akademie věd České republiky, Prague).

Until 1985 the main source for the reconstruction of the church's original appearance was a copy of the Baroque drawing that recorded the monastery shortly before its demolition at the beginning of the eighteenth century.[33] Archaeological investigation partly confirmed and partly corrected the accuracy of that drawing (Fig. 5).[34] The church was laid out in the shape of a Latin cross, with a straight east end, and a basilical nave, with additional chapels on the south side and the cloister on the north side. In contrast to Sedlec, Zbraslav finds its sources in Cîteaux II and Morimond, to which all Bohemian Cistercian houses were affiliated.[35] The ceremonial approach to the royal necropolis in the choir was through a separate portal in the south transept. According to the already mentioned Baroque drawing, decorative emphasis was placed also on the west façade with the Parlerian curvilinear tracery, datable to the second half of the fourteenth century. Through the comparison of the excavated foundations and the drawing it is possible to piece together the choir's original appearance. The chapels in the choir are not simple niches carved out of the thickness of the wall (as they are in the Cistercian church of Schönau, for example) – the impression given by the drawing – but are fully articulated spaces. The thick walls between the chapels functioned as recessed buttresses, shouldering the thrust of the vaults.

The question still remains regarding the elevation of the eastern part of the church. A high choir, with an ambulatory and chapels of the same height, was

depicted in the Baroque drawing. The choir is placed under a single roof as tall as that of the transept. This suggests that the choir and the ambulatory with chapels were in fact of the same height, and that their windows illuminated the entire hall interior. If this arrangement is correct, it would have implications for the support system which could no longer rely on a staggered tripartite elevation. If we accept the hall solution for the choir with a central pier in the main axis, then a system of triradial vaulting must have been employed its east end (Fig. 4), similar to that found in Kraków Cathedral, built by Bishop Nanker after 1320.[36]

The hall shape of Zbraslav choir leads us to the complex relationship between Wenceslas II and the Habsburgs. In Vienna, as in Prague, the Cistercians played a prominent role in the court of Wenceslas II's brother-in-law Duke Albrecht I (1248-1308, king of the Romans 1298-1308). Albrecht's diplomat Benzo of Worms became the abbot of the Cistercian Heiligenkreuz monastery in 1288, and began the construction of a new hall choir added onto the existing Romanesque basilican nave.[37] The new choir was consecrated in 1294. In 1293 Wenceslas visited Albrecht in Vienna, and in 1297 Albrecht was present at Wenceslas' Prague coronation and the foundation of Zbraslav. Taking into account these family connections, the choice of a hall church for a royal mausoleum should be seen in the context of the contemporary Habsburg foundations which had chosen this type: for example the choirs of Heiligenkreuz and St Stephen's in Vienna, as well as the church of the Dominican nuns in Tulln (founded in 1281).[38] Unfortunately neither the foundations of the piers nor other surviving fragments can tell us with certainty Zbraslav's response to the style of Heiligenkreuz. The largest surviving fragments, which probably belong to the piers, indicate simple 'negative' (hollow chamfered) mouldings. At the same time, the drawing confirms the existence of richer forms of Rayonnant Gothic on the portals and the façade (Fig. 5).

Wenceslas II was one of the electors who supported Albrecht's bid for the imperial crown, but their relationship soured after 1300 when the Přemyslids acquired the Hungarian crown. In 1303 Wenceslas sought an alliance with the French crown against the Habsburgs, but the conflict ended with his death.[39] However, the sudden change of political and cultural orientation towards France was not a coincidence. The famous Zbraslav chronicle, written partly as Wenceslas II's biography and in the spirit of St Louis' life,[40] confirms the importance of the saintly French king for Wenceslas in the last phase of his life.[41] One of the buildings that Wenceslas looked to as a model for Zbraslav was St Louis' burial church at the Cistercian abbey of Royaumont, not so much in its form but in its concept. Like Sedlec, Zbraslav belonged to the most important royal foundations circa 1300. And although its details cannot be safely reconstructed, its influence is apparent in a generation of buildings that followed in Central Europe.[42]

The third example of Bohemian representational court architecture circa 1300 to be mentioned, in conclusion, is urban and domestic. The palatial house commonly known as the House at the Stone Bell occupies a plot on the east side of the main square in Prague's Old Town. This impressive structure consists of four wings erected around a rectangular courtyard and surmounted by a single corner tower (Fig. 6). But the main feature of the building is its ceremonial façade, facing the square, whose proportions are based on the Golden Section. The façade's cathedral-like arrangement formed a powerful backdrop to the main square of the city, where each new ruler (at least since John of Luxembourg in 1310) sat in judgement at his inauguration.[43] In contrast to both Sedlec and Zbraslav, this town residence provides an example of sophisticated court art: richly articulated architecture and exquisitely modelled architectural sculpture whose origins are in the Rayonnant style of the northern French cathedrals of the last quarter of the thirteenth century. In those parts of the palace that were not publicly visible simple forms prevail and the subtly modelled and refined features of Rayonnant Gothic are reserved only for the framing of the royal majesty. As in both Cistercian monasteries the complex forms of vegetal ornament, finials and rich tracery are to be found only on representative façades and their portals, or in the ceremonial interiors where sculptural decoration was complemented by wall paintings.

At the House at the Stone Bell the niches of the façade on the first floor contained seated figures of a king and queen, flanked by the two sergeants at arms (Fig. 7), with probably four Bohemian patron saints placed in the now empty niches above. The stone bell at the corner is there as a reminder of a dramatic

entrance of the new king, John of Luxembourg, into the besieged Prague in 1310, when a bell was used as a pre-arranged signal for the gates to be opened. The image of the enthroned ruler may, on the other hand, be understood as a reminder of the inaugural court held in the square and of the public pledge of allegiance to the new king and queen. The representation of the seated figures *en majesté* links these images to the ruler representations on royal seals from the previous century. The more up-to-date dress of the sergeants at arms dates these figures to around 1310. This corresponds to the stylistic dating of the paintings in the chapel on the ground level, showing the Man of Sorrows on the east and St Wenceslas on the west wall.

It seems most likely that the builder of this residence was the young John of Luxembourg, or his closest advisor, Peter of Aspelt, the archbishop of Mainz.[44] Another possibility is that the palace was commissioned by a member of a rich patrician family from Prague, from the circle of Wenceslas II and John of Luxembourg, who could afford the services of the best artists of the day. Seen in this light the façade may have been an architectural pledge of allegiance to the new king, and its interiors were used by municipal counsellors until the construction of a new Town Hall across the square (after 1330). Although the precise circumstances of its construction remain at present unclear, the House at the Stone Bell, together with Sedlec and Zbraslav is another testimony to the high quality and the variety of architectural output in court circles around 1300. Moreover, they are also evidence that art and architecture of the last Přemyslids, especially Wenceslas II and Wenceslas III, and their circle, were taken up and developed with the assent of the new Luxembourg dynasty after 1310. The continuity was provided above all by Queen Elizabeth Přemyslovna and other high-ranking individuals close the court, such as Archbishop Peter of Aspelt, the Abbots of Zbraslav and Sedlec, Abbess Kunigunda, and the Bishops of Prague and Olomouc.

NOTES

[1] Josef ŠUSTA, *Poslední Přemyslovci a jejich dědictví 1300-1308*, Prague, 1926; Josef ŠUSTA, *České dějiny 2/1: Soumrak Přemyslovců a jejich dědictví*, Prague, 1935; Josef ŽEMLIČKA, *Století posledních Přemyslovců*, Prague, 1998; Vratislav VANÍČEK, *Velké dějiny zemí koruny české III. 1250-1310*, Prague and Litomyšl, 2002. The main source of information about the reign and life of Wenceslas II remains the chronicle of the Cistercian monastery of Zbraslav composed by the Abbots Otto and Peter of Zittau between 1305 and 1338 and published as *Chronicon Aulae Regiae* in *Fontes rerum Bohemicarum*, ed. Josef EMLER, vol. 4, Prague, 1884, p. 1-337.

[2] Dante ALIGHIERI, *The Divine Comedy*, translated and with a commentary by Charles S. SINGLETON, *Purgatorio*, 1, Princeton (New Jersey), 1973, and *Paradiso*, 1, Princeton, 1975. "Ottacchero ebbe nome, e ne le fasce fu meglio assai che Vincislao suo figlio barbuto, cui lussuria e ozio pasce" (Purgatorio VII, 97-103, p. 72-73); "Vedrassi la lussuria e l'viver molle di quel di Spagna e di quel di Boemme, che mai valor non conobbe né vole" (Paradiso XIX, 124-126, p. 216-217).

[3] The wedding of Wenceslas II and the Piast princess Richenza, who was then also crowned queen of Bohemia, took place in Prague in 1303 (on this occasion she changed her name to Elizabeth). The event is described in *Chronicon Aulae Regiae*, p. 85-87.

[4] With the demise of the Hungarian Arpád dynasty in 1301, some members of Hungarian nobility offered the crown to Wenceslas II. He accepted it on behalf of his son Wenceslas, crowned as Ladislas V on 27th of August, 1301. However, he met with the opposition from the Curia (who put forward its own candidate, Charles Robert of Anjou) and the King of the Romans, Albrecht I of Habsburg. *Chronicon Aulae Regiae*, p. 83-85. See also, Zdeněk FIALA, *Přemyslovské Čechy, Český stát a společnost 995-1310*, Prague, 1975, p. 211-213.

[5] Jarmila HÁSKOVÁ, *Pražské groše (1300-1526)*, Prague, 1991.

[6] On the history of the abbey see, Josef ČELAKOVSKÝ, "Klášter sedlecký, jeho statky a práva v době před válkami husitskými", in *Rozpravy České akademie císaře Františka Josefa pro vědy, slovesnost a umění*, Series 1, 58, Prague, 1916; Jiří KUTHAN, *Počátky a rozmach gotické architektury v Čechách*, Prague, 1983, p. 180-206; Kateřina CHARVÁTOVÁ, "Sedlec", in: *Dějiny cisterckého řádu v Čechách 1142-1420*, Prague, 1998, p.103-154. My conclusions here are based on my two previous studies of this subject: Klára BENEŠOVSKÁ, *The Meeting of Gothic and Baroque: Sedlec Abbey in Bohemia circa 1300 and circa 1700*, paper delivered at the International Medieval Congress Leeds 13-16 July 1998, published as, Klára BENEŠOVSKÁ, "Způsob setkání baroka s gotikou (Klášterní kostel v Sedlci po roce 1700 a po roce 1300)", in *900 let cisterciáckého řádu. Sborník konference konané 28.-29.9.1998 v Břevnovském klášteře v Praze*, ed. Kateřina CHARVÁTOVÁ, Prague, 2000, p. 229-244.

[7] Of the Romanesque church only the remains of a chapel, rebuilt in the Baroque period and integrated into the new Baroque church, have been uncovered. Petr MACEK, "Románský sakrální objekt v areálu bývalého cisterciáckého kláštera v Sedlci u Kutné Hory", in *Zprávy památkové péče*, 56, 1996, p. 8-11. The on-going excavations of the site have not yet been published.

[8] ČELAKOVSKÝ, "Klášter sedlecký", p. 33-35.

[9] Jana Hynková, "Heidenreich Sedlecký", in *900 let cisterciáckéh*, p. 97-160. Marie Báhová, "Cisterciáci ve službách české politiky za posledních Přemyslovců", in *Klasztor w społeczeństwie średniowiecznym i nowożytnym*, Opole and Wrocław (Instytut Historyczny Uniwersytetu Wrocławskiego), 1996, p. 363-368.

[10] Wilhelm SCHLINK, *Zwischen Cluny und Clairvaux*, Berlin, 1970. Jiří KUTHAN, "Katedrální chór v cisterciácké architektuře", in *Památky středních Čech*, 7/2, 1993, p. 2-15. Jiří KUTHAN, "Der Kathedralchor in der Zisterzienserarchitektur", in *Denkmalkunde und Denkmalpflege. Festschrift für Heinrich Magirius zum 60. Geburtstag*, Dresden, 1995, p. 165-176. Jürgen MICHLER considered this issue critically in "Kaisheim. Zisterziensergotik in der Parlerzeit", in *Regnum Bohemiae et Sacrum Romanum Imperium. Sborník k poctě Jiřího Kuthana*, ed. Jan ROYT, Michaela OTTOVÁ, Aleš MUDRA, Prague, 2005, p. 211-232.

[11] The subject has been closely studied by Caroline A. BRUZELIUS, "Cistercian High Gothic: The Abbey Church of Longpont and the Architecture of the Cistercians in the Early Thirteen Century", in *Analecta sacri ordinis cisterciensis*, 25, 1979, p. 3-204. For Ourscamps and Royaumont see Maryse BIDEAULT & Claudine LAUTHIER, *Ile-de-France gothique*, Paris, 1987, p. 271-292; for Dammarie-les-Lys and Maubuisson see Dieter KIMPEL & Robert SUCKALE, *Die gotische Architektur in Frankreich 1130-1270*, Munich, 1985, p. 381-383, and p. 538; and esp. Alexandra GAJEWSKI-KENNEDY, "Recherches sur l'architecture cistercienne et le pouvoir royal: Blanche de Castille et la construction de l'Abbaye du Lys", in *Art et architecture à Melun au Moyen Âge* (Actes du colloque d'histoire de l'art et d'archéologie tenu à Melun les 28 et 29 novembre 1998), ed. Yves Gallet, Paris, 2000, p. 223-254; and Terryl N. KINDER, "Blanche of Castille and the Cistercians: an architectural re-evaluation of Maubisson Abbey", in *Citeaux, commentarii cistercienses*, 27, 1976, p. 161-188.

[12] Caroline A. BRUZELIUS, "L'abbaye de Longpont", in *Congrès archéologique de France, Aisne méridionale*, vol. 2, 1990, Paris 1994, p. 431- 444.

[13] Dany SANDRON, *La cathédrale de Soissons. L'architecture du pouvoir*, Paris 1998.

[14] BIDEAULT & LAUTHIER, *Île-de-France gothique*, p. 281-292; BRUZELIUS, *Cistercian High Gothic*, p. 35-156.

[15] Michael T. DAVIS, "The Choir of the Abbey of Altenberg: Cistercian Simplicity and Aristocratic Iconography", in *Studies in Cistercian Art and Architecture, vol. 2*, ed. Meredith P. LILLICH (Cistercian Studies, 69), Kalamazoo, 1984, p.130-160; Walter KRÖNIG, *Altenberg und die Baukunst der Zisterzienser*, Bergisch Gladbach 1973; Ulrich SCHRÖDER, "Royaumont oder Köln? Zum Problem der Abteilung der gotischen Zisterzienser-Abteikirche Altenberg", in *Kölner Domblatt*, 42, 1977, p. 224-244. The uniqueness of the founding concept of the Gothic church at Altenberg is discussed most recently by Norbert NUSSBAUM, "Der Chorplan der Zisterzienserkirche Altenberg. Überlegungen zur Entwurfs- und Baupraxis im 13. Jahrhundert", in *Wallraf-Richartz-Jahrbuch*, 64, 2003, p. 7-52.

[16] First discussed by SCHRÖDER, "Royaumont oder Köln?".

[17] The same meaning has DAVIS, "The Choir of the Abbey of Altenberg", p. 143.

[18] Hans SEDLMAYR, "Die Kathedrale als europäische Königskiche", in *ibidem, Die Entstehung der Kathedrale*, Graz, 1976, p. 466-475. Following Sedlmayr's definition, Sedlec was described in these terms by, for example, KUTHAN, "Počátky", p. 201.

[19] Lately thought to be the "honorabilis et providus vir magister Petrus Delphini", also cited as "honorabilis vir dominus Petrus murator", who, at the end of his life in 1352, paid for anniversaries for himself and his wife at Sedlec. Jakub VÍTOVSKÝ, entry on "Petr (Delfinův?)", in *Encyklopedie architektů, stavitelů, zedníků a kameníků v Čechách*, ed. Pavel Vlček, Prague, 2004, p. 492.

[20] Václav MENCL, *Česká architektura doby lucemburské*, Prague, 1948, p. 50-54. See also the contribution of Zoë OPAČIĆ in this publication. On the influence of Sedlec's architecture on Czech monastic architecture of the fourteenth century (Sázava and Roudnice, for example) see Klára BENEŠOVSKÁ, "Slohové souvislosti vrcholně gotické přestavby Sázavského kláštera (1315-1420)", in *Colloquia medievalia Pragensia 3, Historia monastica I. Sborník z kolokvií a konferencí, pořádaných v letech 2002-2003 v cyklu "Život ve středověkém klášteře"*, Prague, 2005, p. 163-187.

[21] The same approach is to be found in this period at, for example, the Cistercian abbey in Salem. Jürgen MICHLER, "Bemerkungen zur Entwicklung der oberrheinischen Gotik im 13. Jahrhundert", in *Architectura*, 33, 2003, p. 3-18.

[22] The comparison is made mainly with the ground plan and shape of the vaults and not with the actual spatial effect. The use of triradials in the Sedlec ambulatory has been linked with Le Mans, Coutances, and Toledo by Erich BACHMANN, "Architektur bis zu den Hussitenkriegen", in *Gotik in Böhmen*, ed. Karl Maria SWOBODA, Munich, 1969, p. 76-77. Joel HERSCHMANN, "The Norman Ambulatory of Le Mans Cathedral and the Chevet of the Cathedral of Coutances", in *Gesta*, 20, 1981, p. 323-332. François SALET, "La cathédrale du Mans", in *Congrès Archéologique*, 119, 1961, p. 18-58. Earlier still, between 1130-1142, at the Saint-Martin-des-Champs triangular bays were used to double the number of chapels.

[23] The present Tuscan columns in the Sedlec ambulatory replaced the original medieval columns in 1700 during the restoration of the church by the Abbot Jindřich Snopek. Further on that Viktor KOTRBA, *Česká barokní gotika*, Prague, 1976, p. 110. BENEŠOVSKÁ, "Způsob setkání", p. 233-234. Most recently Mojmír HORYNA, "Gotické inspirace v díle Jana Blažeje Santiniho-Aichela", in *Ars Videndi. Profesori Jaromíri Homolka ad honorem*, ed. Aleš MUDRA & Michaela OTTOVÁ, Prague, 2006, p, 91-116.

[24] On the connections between Kaisheim and Sedlec see MICHLER, *Kaisheim. Zisterziensergotik in der Parlerzeit*, p. 211-228, esp. p. 214-220.

[25] DAVIS, "The Choir of the Abbey of Altenberg", p. 145, note 65 and 66. For the comparison of the choirs of Sedlec and Saint-Denis see also BACHMANN, "Die Architektur", p. 77; BENEŠOVSKÁ, "Způsob setkání", p. 243-244; KUTHAN, "Katedrální chór", p. 10.

[26] See Zoë OPAČIĆ in this publication and BENEŠOVSKÁ, "Slohové souvislosti".

[27] The history of Zbraslav is summarized comprehensively in the following publications: Kateřina CHARVÁTOVÁ, *Dějiny cisterckého řádu v Čechách 1142-1420. 2. svazek. Kláštery založené ve 13.-14. století*, Prague, 2002, p. 183-264; Jiří KUTHAN, *Počátky a rozmach gotické architektury v Čechách*, Prague, 1983, p. 264-275; Klára BENEŠOVSKÁ, Hubert JEČNÝ, Dana STEHLIKOVÁ & Michal TRYML, "Nové prameny k dějinám klášterního kostela cisterciáků na Zbraslavi", in *Umění*, 36, 1986, p. 386, and p. 401-404; Zdeněk DRAGOUN & Dana STEHLÍKOVÁ, "Archeologické a stavebně his-

torické výzkumy v areálu prelatury zbraslavského kláštera v letech 1984-1989", in *Staletá Praha*, 22, 1992, p. 135-194; Klára BENEŠOVSKÁ, "Aula Regia près de Prague et Mons regalis près de Paris", in *Les Cisterciens dans le Royaume médiéval de Bohême, Actes du colloque de Kutná Hora 9-13 juin 1992* (Cîteaux, 47), 1996, p. 231-245. See also *Chronicon Aulae Regiae*, p. 77-80.

[28] The main source for the detailed description of this event is the *Chronicon Aulae Regiae*, p. 77-78.

[29] *Chronicon Aulae Regiae*, p. 255. On Wenceslas II's funeral see most recently Josef ŽEMLIČKA, "Král jak ubohý hříšník svých poklesků litoval v pláči. Václav II., Zbraslav a Svatý Ludvík IX", in *Verba in imaginibus. Sborník Františku Šmahelovi k 70. narozeninám*, ed. Martin NODL, Petr SOMMER & Eva DOLEŽALOVÁ, Prague, 2004, p. 193-210.

[30] See the contribution by STEHLÍKOVÁ in Klára BENEŠOVSKÁ, Hubert JEČNÝ, Dana STEHLÍKOVÁ & Michal TRYML, "Nové prameny", p. 400; Jiří KUTHAN, "Zisterzienserklöster als Grabläger mitteleuropäischer Herrschergeschlechter", in Jiří KUTHAN, *Gloria Sacri Ordinis Cisterciensis*, Prague, 2005, p. 65-95, esp. 83-84.

[31] During the Hussite war the body of Wenceslas IV was desecrated, then hidden away and ceremonially buried in St Vitus' Cathedral. František ŠMAHEL, "Blasfémie rituálu? Tři pohřby Václava IV.", in *Pocta prof. JuDr. Karlu Malému, DrSc., k 65. narozeninám*, Prague, 1995, p. 133-143.

[32] The river Berounka was known as Mze or Misa in Latin in the Middle Ages: *Fuit inter cetera monasterium Aulae regiae (apud ripam Multaviae, qua Misa fluvius illi iungitur, situm), in quo regum corpora condebantur, singularis excellentiae*, in *Aeneae Silvii Historia Bohemica*, ed. Dana MARTÍNKOVÁ, Alena HADRAVOVÁ & Jiří MATL, Prague, 1998, chapter 36, p. 36.

[33] The drawing was discovered in 1850 and described in Karel V. ZAP, "Zbraslav", in *Památky archeologické*, 1, 1855, p. 71 and 118; It was first published in Zdena NYPLOVÁ, *Zámek Zbraslav*, Prague, 1933, p. 21. See also BENEŠOVSKÁ et al., "Nové prameny", p. 385.

[34] BENEŠOVSKÁ et al., "Nové prameny", p. 402-404.

[35] CHARVÁTOVÁ, *Dějiny cisterckého řádu 2*, p.184. The basic layout of Zbraslav, including the number of the radiating chapels and vaulted ambulatory bays, looks back to Cîteaux II (consecrated 1193) and Morimond II (see, Henri-Paul EYDOUX, "L'église abbatiale de Morimond", in *Bulletin monumental*, 114, 1956, p. 253-261). It seems that this layout was chosen deliberately in order to underline the dependence of the two new Bohemian Cistercian houses with strong royal connections (Sedlec and Zbraslav) on the two prototypes of Cisterican cathedral choirs (Cîteaux and Clairvaux).

[36] In that respect we can return to the opinion of Paul Crossley (Paul CROSSLEY, "The Vaults of Cracow Cathedral and the Cistercian Tradition", in *Podług nieba i zwyczaju polskiego, Studia z historii architektury, sztuki i kultury ofiarowane Adamowi Miłobędzkiemu*, Warsaw, 1988, p. 63-72, and also since then, *ibidem*, "Cracow Cathedral and the formation of a dynastic architecture in southern Central Europe", in *Polish and English responses to French art and architecture: Contrasts and Similarities* (Papers delivered at the University of London, History of Art Conference, Januari and September 1993), ed. Francis AMES-LEWIS, London, 1995, p. 31-46), who first drew attention to the similarities between the choir terminations of Kraków Cathedral and Zbraslav, although his reconstruction of Zbraslav's vaults needs to be corrected in view of recent archaeological excavations (see BENEŠOVSKÁ et al., "Nové prameny"), not known to him at the time. Therefore, Kraków Cathedral responded to contemporary Bohemian architecture not only in its first (lost) phase of construction under Bishop Muskata, but also in the rebuilding after 1320 when it looked for inspiration to the monumental Cistercian churches in the Bohemian kingdom, a fact which does not exclude other influences arriving from the Cistercian church at Salem. See Tomasz WĘCŁAWOWICZ in this volume and ID., "Bohemi Cracowiam muraverunt", in *Umění*, 46, 1998, p. 410-419, and also *ibidem*, *Krakowski kościół katedralny w wiekach średnich. Funkcje i możliwości interpretacji*, Kraków, 2005, p. 65-88.

[37] Jiří KUTHAN, "Středoevropské metamorfózy pravoúhlého chóru (K interpretaci výsledků archeologického výzkumu na Zbraslavi)", in *Časopis Národního muzea* (řada historická), 156, no. 3-4, 1987, p. 33-67. For the German version of this article see ID., "Die mitteleuropäischen Abwandlungen der Klosterkirchen mit rechteckiger Choranlage", in *Gloria*, p. 245-275, esp. p. 248-249 for Heiligenkreuz with the most important bibliography.

[38] Renate WAGNER-RIEGER, "Bildende Kunst. Architektur", in *Die Zeit der frühen Habsburger. Dome und Klöster 1279-1379* (exhibition catalogue Niederösterreichischen Landesmuseums, new series, 85), Wiener Neustadt, 1979, p. 105-107.

[39] On the ambivalent relationship between Wenceslas II and his brother-in-law Albrecht Habsburg at the time of the construction both choirs see BENEŠOVSKÁ, "Aula Regia près de Prague", p. 241-242.

[40] Guillaume DE SAINT-PATHUS, *Vie de Saint Louis*, ed. Henri-Francois DELABORDE, Paris 1899.

[41] Josef ŽEMLIČKA, "Král jak ubohý hříšník svých poklesků litoval v pláči", in *Verba in imaginibus. Františku Šmahelovi k 70. narozeninám*, Eva DOLEŽALOVÁ, Martin NODL & Petr SOMMER, Prague, 2004, p. 192-210.

[42] See KUTHAN, "Středoevropské metamorfózy" (see above note 36) and also the essays by Tomasz WĘCŁAWOWOCZ and Zoë OPAČIĆ in this volume.

[43] Klára BENEŠOVSKÁ, "Les résidences du roi Jean de Bohême: leur fonction de représentation", in *King John of Luxemburg (1296-1346) and the Art of his Era* (Proceedings of the International Conference, Prague, September 16-20, 1996), ed. Klára BENEŠOVSKÁ, Prague, 1998, p.117-131. *Ibidem*, "Podoby královského majestátu v Českých zemích kolem roku 1300", in *Ars longa. Sborník k nedožitým sedmdesátinám Josefa Krásy*, ed. Beket BUKOVINSKÁ & Lubomír KONEČNÝ, Prague, 2003, p. 27-42.

[44] Peter von Aspelt was the advisor and diplomat of Wenceslas II. Together with the Abbot of Zbraslav, Otto, he negotiated the marriage of Wenceslas' daughter, Elizabeth Přemyslovna, and the son of Emperor Henry VII of Luxembourg, John. Peter and Berthold of Henneberg were entrusted with escorting the fourteen-year old John to Bohemia, acting as his regents. Peter stayed in Prague until 1314. On the connections between Peter von Aspelt and the House at the Stone Bell see Jakub VÍTOVSKÝ, "Zeměpanská kurie s panovnickým trůnem, Eberlinovou mincovnou a palácem Přemyslovců a Jana Lucemburského na Starém městě pražském", in *Průzkumy památek*, 13, 2006, p.110-145. A detailed analysis of the House at the Stone Bell is the subject of my article in the forthcoming British Archaeological Association Conference Transaction volume for Medieval Prague and Bohemia, ed. Zoë OPAČIĆ.

Bohemia after 1300: *Reduktionsgotik*, the Hall Church, and the Creation of a New Style

Zoë Opačić

The rich and contrasting architectural legacy of the last Přemyslid rulers in Bohemia, which underlined their extraordinary but short-lived political successes (discussed in this volume by Klára Benešovská), provided a fertile quarry for central-European builders of the fourteenth century. Like the expanding and contracting boundaries of their kingdom, that legacy has resisted any narrow geographical, typological, or stylistic definition. In the last decades of the thirteenth century the Bohemian architectural landscape was transformed beyond recognition: from monumental but often simple Romanesque forms – such as the distinctive rotunda – to the most up-to date Cistercian and mendicant refinements, and to structures which displayed cosmopolitan influences ranging from Burgundy to the Rhineland, from Paris to Southern Germany and Austria. Emerging from that fertile ground, the royal foundations of Vyšší Brod, Zlatá Koruna, Sedlec and Zbraslav, became influential models for an entire generation of buildings, many of them situated outside Bohemia (Figs 3 and 5 on pages 154 and 155).[1]

These single representative projects went hand in hand with a more comprehensive urbanisation of the Bohemian and Moravian countryside through a chain of royal castles and new towns mostly founded during the brief expansionist surge of Otakar II's reign (1253-1278). Those enterprises not only foreshadowed the ambitious municipal projects of the early Luxembourgs, but they also provided a natural starting point and a continuing source of inspiration.[2] And yet the lasting influence of Bohemian architecture of circa 1300 on the widely-discussed patronage of Charles IV (1347-1378) has received little attention outside Czech scholarly circles in comparison to the more engaging and seemingly all-pervasive features of the Parlerian style.

In common with the rest of the Holy Roman Empire, Bohemian fourteenth-century architecture cannot be easily reduced to a single common denominator, but it does nevertheless display some formal and aesthetic affinities, or what older German scholarship described a shared sense of form. This is particularly apparent in the fondness for hall interiors with minimal or greatly reduced tectonic systems, which find their origins in the second half of the thirteenth century. The reductive tendencies in central-European architecture have been traditionally linked with Cistercian and mendicant buildings and their choice of lofty and austere interiors representative of their spiritual rigour and, in the case of the mendicants, their need to build cheaply.[3] The Dominican and Franciscan churches in the second half of the thirteenth century, at for example Regensburg (Dominican, begun circa 1240), Esslingen (Dominican, begun circa 1255), Erfurt (Dominican, begun in the 1260s), and Freiburg im Breisgau (Franciscan, begun circa 1262), introduced a new stylistic trend in Germany – possibly inspired by Italian examples[4] – towards plain interiors with less-articulated wall surfaces, characterised by a reduction of the vertical support system and the introduction of simple geometric forms. The new style was a partly a rejection, or at least a deliberate simplification of the dominant canon of *opus francigenum*. But it was also a reform, a shift of emphasis from the complexities

Fig. 1. Wrocław, St Mary Magdalene, interior looking east (Zoë Opačić, 2005).

of the High Gothic articulation system to a greater spatial liberation through the reduction of architectonic forms.[5]

Although richer, Cistercian architecture in Austria and Bohemia during Otakar II's reign displayed the same preference for simplified polygonal forms, in, for example, the octagonal and block-like geometrical capitals and responds of Heligenkreuz's dormitory.[6] But undoubtedly the most influential exponent of this style was Zlatá Koruna (*Aurea Corona*), the South Bohemian daughter-house of Heiligenkreuz, founded by Otakar II in 1263 in response to Louis IX's gift of a thorn from the crown of thorns.[7] As in the Dominican church in Regensburg, the emphasis in Zlatá Koruna was also placed on simple longitudinal vistas framed by large expanses of plain wall surface articulated only by thin rectangular responds without capitals. But in Otakar's foundation the architectural stripping-down was taken a step further with the consistent use of 'negative', that is, hollow-chamfered mouldings, whose sharp and scooped forms increased the flatness and weightlessness of the elevation.[8] The understated vocabulary of Austrian and Southern German *Reduktionsgotik* perfected at Zlatá Koruna would soon be taken up not only in the rest of Bohemia and Moravia, but also in Upper Hungary (the Spiš region, now in Slovakia), Lesser Poland,[9] and, in its most attenuated form, in Silesia, to which we now turn.

From the first decades of the fourteenth century Silesia, the prosperous and heavily colonised southwest corner of the old kingdom of Poland,[10] had been an area of prolific building activity, forging by the 1350s a distinctive and monumental style of architecture. Like the builders of the Hanseatic towns in the north and the Teutonic Knights in the southern Baltic, Silesian masons adopted brick as their main material, and erected a family of extended basilicas and hall churches whose soaring monumentality was only underlined by their sparsity of architectural detail (Figs 1 and 2). These generic similarities with other examples of *Baksteingotik* led to Silesia's classification by Dehio as the "deutschen Kunst der Ostkolonisationsgebiete" – an eastern outpost of German colonial art – whose pragmatic settlers naturally required practical and rational architecture.[11] Wilhelm Pinder and Georg Weise saw in Silesian architecture an expression of a new and particularly German colonial spirituality;[12] while others, especially Dagobert Frey recognised in this style and its *amor vacui* a reflection of the spiritual and creative dislocation of the merchant classes who commissioned it.[13] The taxonomy of this architecture proved almost as difficult as assessing the collective mentality of Silesian patrons. The terminology ranged from the post-classical Gothic, to Dehio's *Reduktionsgotik*, Mencl's Linear Gothic, and even Kutzner's Anti-Gothic.[14] Although not exclusive to Silesia, each classification was intended to emphasise the otherness of the new style; however, Mencl, Bachmann and most recently and decisively Marian Kutzner have consistently pointed out the striking analogies with the neighbouring Bohemia.[15]

In attempting to place Silesian architecture somewhere between a "common style" and a "regional

mode", Kutzner traced the architectural and aesthetic forces behind its reductionist style to the similar circle of German mendicant and parish churches that had previously been so influential in Bohemia and Moravia. The royal workshops of Otakar II and their successors, working for example on the later campaigns at Zlatá Koruna and České Budějovice (Dominican, begun after 1265) found an early response in the first wave of Silesian churches, such as St Elizabeth's in Wrocław and Sts Peter and Paul's in Legnica. The architects of the Holy Cross Church in Wrocław combined the "slow", "open" spatial rhythm of the lower Austrian churches, such as Heiligenkreuz and the choir of St Stephen's in Vienna, with simple monumental piers, a sense of tectonic elasticity and a degree of dematerialisation already encountered at Olomouc Cathedral, St Maurice's in Kroměříž, and the Cistercian churches of Vyšší Brod and Zlatá Koruna.

The fact that architecture on the Silesian territory, which was itself far from a homogenous entity, benefited from a patchwork of innovative developments of its regional neighbours does not diminish its own creativity. Romuald Kaczmarek's caution especially with regards to the uncertain dating of individual Silesian monuments and the complex genesis of one of their trademark features – the dynamic tri-radial and star vaults – is a useful warning to art historians seeking to establish one-sided patterns of influence.[16] It would be difficult, however, to deny the growing cultural and aesthetic affinity between the Bohemian Kingdom and Silesia in the period of their political union. Bohemia's covetous attitude towards its wealthy but politically fragmented neighbour developed gradually under the last Přemyslids and continued more systematically by their successors, the Luxembourgs. A preliminary agreement over parts of Silesia between the Bohemian and Polish kings, John of Luxembourg and Kazimir the Great, in 1335, was legally formalised by Charles IV in 1348 and 1355 in two documents which codified the boundaries of the Bohemian crown lands and confirmed Silesia's full incorporation.[17] Although the attempt to place the Wrocław bishopric under the newly-elevated Prague archbishopric ultimately failed,[18] the integration of Bohemia and Silesia was consolidated through a number of high-level contacts. In 1353 Charles IV married Anne of Schweidnitz (now Świdnica in Upper Silesia) – a thirteen-year old girl originally betrothed to his short-lived first son – who was to bear him an heir, Wenceslas, in 1361. The foundation of a university in Prague in 1348 drew a large number of Silesian students and teachers to the capital,[19] while its flourishing court attracted Silesian aristocracy and educated clergy, such as Emperor Charles' chancellor, religious advisor, and cultural attaché, Jan of Středa, formerly canon at the Holy Cross in Wrocław.[20] Wrocław established itself as an uncontested capital of the region and played a host to three Luxembourg emperors: Charles IV, Wenceslas IV and Sigismund.[21] Charles IV was personally involved with the rebuilding of the former ducal residence in the city and with the foundation of at least one of its many religious houses, the Augustinian church of Sts Wenceslas, Stanislas and Dorothy (1351). The elaborate Bohemian and imperial heraldry placed

Fig. 2. Wrocław, St Mary on the Sands, interior looking south-east (Polska Akademia Nauk, Instytut Sztuki, 1983).

Fig. 3. Prague (New Town), Emmaus Monastery, interior looking east (Klará Benešovská).

prominently on the façade of that church, on the vaults and corbels of the Holy Cross, and on the portal tympanum of the vast Town Hall publicly articulated the new political accord, while its spiritual dimension – always an integral part of Charles IV's policies – was underlined by the emperor's generous gifts of relics to the treasuries and altars of Wrocław Cathedral, St Elizabeth's, St Mary Magdalene's, and the Holy Cross.[22]

The political and cultural allegiances just outlined undoubtedly throw a helpful light on the genesis of Silesia's new architectural style but they do not entirely explain the motivation of its patrons and builders. Most scholars readily recognise the importance of a new spiritual value in the architecture created in this context. For Mencl the transformation from classical (High Gothic) to post-classical (Rayonnant and *Reduktionsgotik*) was not only a formal but also a cultural phenomenon, a change from the functionality of the past era to the "l'art pour l'art intellectualism". Kutzner pondered more specifically over the choice of predominantly mendicant architecture as a model for the wealthy patrician churches. The answer, he suggested, lay with the congregations who shared the religious outlook of the reformed orders and sought in their churches a house for prayer and a place for a mystical

Fig. 4. Egidius Sadeler's Panorama of Prague, 1606. Detail showing the New Town with Vyšehrad on the far right. The Emmaus Monastery is close to the embankment (lower right); the rotunda St Charlemagne's is directly above next to the town walls. The twin-tower façade of the Týn Church facing the Old Town Square is visible on the far left. (Zoë Opačić).

union with God, rather than an embodiment of the institutionalised Church.[23]

Contemporary examples in Bohemia, however, suggest that the choice of this building style – even in its novel urban context – may be more complex and ambiguous. The stylistically closest contemporary buildings to the Silesian reduced Gothic were no longer to be found in Otokar II's southern heartlands but in Prague. The first and frequently cited in this context is the parish church of Our Lady before Týn, begun in around 1350, which shares the monumental vision of Silesian town churches, setting it in stone rather than brick. Seen sometimes as an extension of the idiomatic style pioneered by the cathedral workshop in Prague Castle, or conversely as a patrician counter-statement to the regal, eccentric, and Francophile architecture it produced, the protracted and much-debated building campaign of the Týn Church hampers any definitive judgement on the channels of its varied stylistic influence.[24] While the stylistic patrimony of Týn is still hotly debated, another well-documented but frequently overlooked contemporary monument offers some interesting insights into the creative dialogue between Silesian and Bohemian builders and their concurrent interest in domestic traditions and international trends. Begun officially in 1348, the Emmaus Monastery was one of Charles IV's most prestigious religious institutions in the city (Fig. 3). Founded in honour of Sts Jerome, Cyril, Methodius, Adalbert, and Procopius, the saints deemed responsible for the creation and propagation of the Slavonic liturgy, the monastery was the seat of the esoteric order of Benedictine monks who still celebrated mass in the largely extinct Old Church Slavonic language and copied liturgical books in the Glagolitic script.[25] It was situated in the New Town district of Prague (also founded in 1348), along the royal route to the old Přemyslid fortified seat of Vyšehrad, where it acted as a symbolic reminder of the ancient roots of Bohemia's Christianity (Fig. 4). Yet none of these retrospective qualities are discernible in the monastery's strangely abstracted interior. The Emmaus stands boldly outside the corpus of Bohemian medieval architecture. Its church, badly scarred in 1945, with its utterly simplified but powerful features, has frequently been neglected in favour of its justly famous painted cloister. Like its Silesian cousins, however, the Emmaus represents both a radical departure and a logical culmination of domestic trends in the previous decades.

The church's combination of a staggered three-apsidal ground plan, usually associated with basilicas, and a hall elevation has sometimes been taken as evidence of a change of plan;[26] however, there are several well-known precedents for the Emmaus arrangement, such as Maria-zur-Wiese in Soest (choir completed by the 1340s) and the choir of St Stephen's in Vienna (consecrated in 1340),[27] the latter with bays of identical width and fractionally shorter side aisles. Closer to home, hall churches were still a rarity around 1300, but

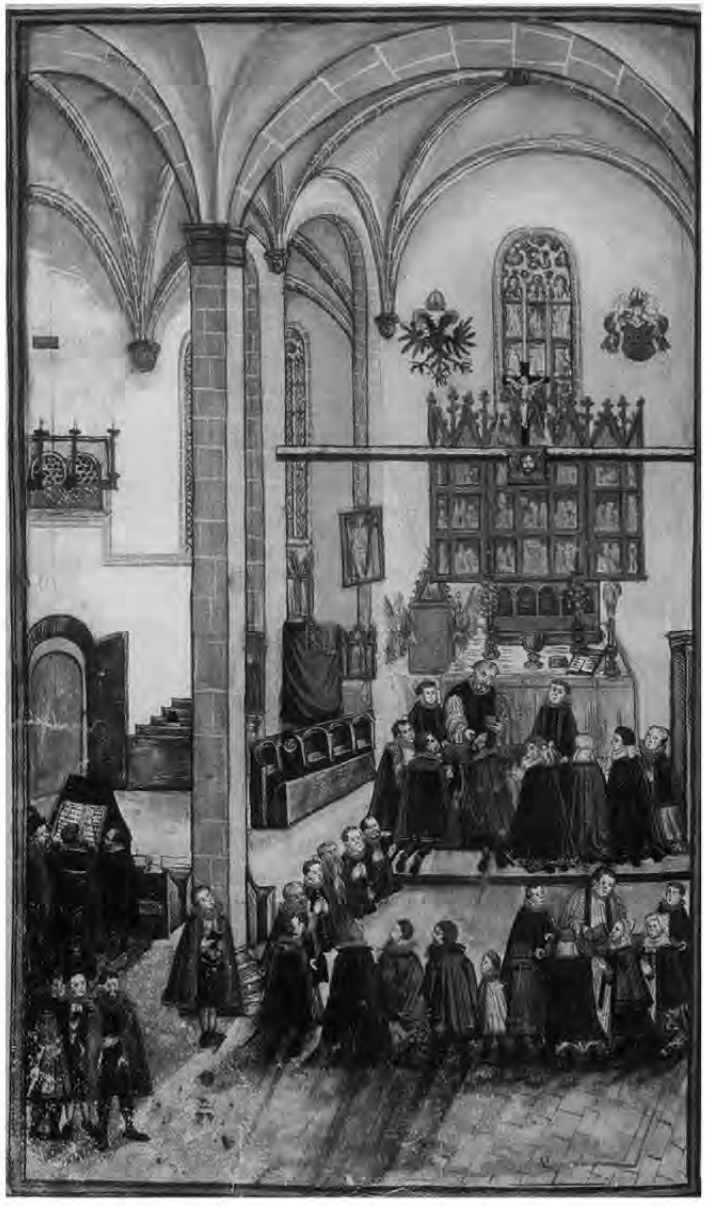


Fig. 5. Prague (Old Town), St Michael's, interior view from the sixteenth-century Bohemian manuscript "Písně chval božských Čech", Národní museum, Ms IA 15, fol. 218v, (from Pavel Brodský, *Katalog iluminovaných rukopisů Národního muzea v Praze*, Prague, 2000, p. 5, pl. 3).

they are to be found across the institutional spectrum: in mendicant foundations (Jihlava, Brno, and Cheb for example);[28] the Cistercians of Vyšší Brod; the metropolitan and parish churches of Olomouc, Kroměříž, Kolín and Kutná Hora; and, perhaps most influentially, the royal mausoleum of *Aula Regia* in Zbraslav (Fig. 5 on p. 156).[29]

In Prague, the first hall church was under construction from 1301, boasting initially the prestigious benefaction of the city's last bishop, Jan of Dražic. The choice of a *Hallenkirche* for the collegiate foundation of St Aegidius may have been guided by the fashionably austere and tall Austrian mendicant churches, such as the Dominicans' at Tulln;[30] in any case the cramped conditions of the Old Town site allowed just for a four-bay nave without a separate choir where the interior could only be maximised vertically. With its heavy western towers, tall windows and massive arcade piers, St Aegidius' is still an impressive exercise in confined monumentality, an effect vividly conveyed by a sixteenth-century view of another closely related Old Town hall church, St Michael's (Fig. 5).[31] Although St Aegidius' was finally consecrated in 1371, only a year before the Emmaus, the two structures had little in common, their difference partly born out of their respective locations. The New Town's heroic scale could easily afford a generous plot for a tall and elongated structure and its monastic quad. The commanding position of the Emmaus on the rocky plateau above the river Vltava diminished the need for an elaborate exterior or towers, a point sadly not understood by its many subsequent restorers (Fig. 4). Nevertheless, the simplified nature of this architecture cannot be explained solely in terms of its advantageous setting. On closer examination it reveals consistent references to the refined and reduced internal systems developed by the royal workshops of Wenceslas II, above all in Sedlec and Zbraslav, both eloquently contextualised in this volume by Klára Benešovská. The immediate effect of Sedlec (Fig. 3, on page 154) was first apparent on two neighbouring projects: the monastery's two-storey ossuary chapel and the parish church of St James in Kutná Hora.[32] Despite their functional and spatial differences, these buildings benefited from a similar architectural outlook, especially in the way they redefined the relationship between the wall surface and its support system. The choir of St James' integrates its wall ribs and wall shafts into strips of raised masonry framing the windows,[33] while in the nave (and in the Sedlec ossuary chapel) the ribs "die" without capitals into flat corbels – best described as plate corbels – foreshadowing those of the Emmaus monastery. Even more striking are the identical and rather awkward half-square half-round transitional responds found in the westernmost bay of St James' and in the north apse of the Emmaus.

The style generated by the local workshops operating in the vicinity of Prague quickly found its way into the capital. We see its early manifestation in the lofty, single-nave Dominican nuns' church of St Anne (founded in around 1313, completed before 1365),[34] whose construction was supported by King John of Luxembourg and his queen, Elizabeth Přemyslovna, where a similar form of wall articulation and plate corbel were employed. With Charles IV's foundation of the New Town (Fig. 4), south of the city's old core, these novel features became rapidly integrated into a coherent urban style. The first wave of churches founded in the new district – the Emmaus, Our Lady of the Snows, St Stephen's and St Charlemagne's[35] – consolidated local traditions of the first half of the fourteenth century as well as the older legacy of the last Přemyslids. Although the masons of the New Town churches responded to the particular and often unusual requirements of each foundation, there are strong reasons for observing these structures as a homogenous group, not least their setting, chronological proximity and the shared royal founder. The ambitious scale of the earliest foundations – Our Lady of the Snows and the Emmaus, for example – captured something of the grand vision of the entire New Town project and created powerful architectural accents in its developing landscape, comparable to the imposing structures of St Aegidius' and St Michael's in the Old Town. At the same time each church offered a different spatial solution, legible in their ground plans, contributing a sense of variety to the New Town prospect. Their capacious, intelligible, and brightly illuminated interiors betray the indebtedness of the "New Town style" to the simplified Gothic perfected by the Bohemian workshops of the preceding decades.[36]

The Emmaus Monastery clearly belongs to this family of churches, but its interpretation of "reduced Gothic" is even more radical and in many respects closer to the second phase of the monumental and austere style developing simultaneously in Silesia. For, in the mid fourteenth century the Cistercian- and mendicant-influenced architecture of St Elizabeth's in Wrocław, Sts Peter and Paul's in Legnica, and the controversially dated Holy Cross in Wrocław, has developed into the dramatic language of the second generation of buildings, at for example St Mary Magdalene's, St Mary on the Sands (Figs 1 and 2) and St Dorothy's (all in Wrocław). Many characteristics associate the Emmaus Monastery with this distinguished group of churches. First of all there are the similarities of planning. Silesian churches show a preference for a polygonal three-apsidal arrangement, found regularly in basilicas (St Elizabeth's, Wrocław; Sts Peter and Paul's, Legnica; Sts Stanislas and Wenceslas', Świdnica; Sts Peter and Paul's, Strzegom), all of which were well under way before 1340, with the Cistercian church of Jemielnica (1297) leading the group (Fig. 6).[37] St Mary on the Sands (from circa 1334) combines the staggered three-apsidal layout with a hall elevation and this added spaciousness may have particularly appealed to the architect of the Emmaus Monastery (Figs 2 and 6e). The long side aisles of the hall churches of St Mary and St Dorothy are usually half the width of the nave in order to heighten the sense of spatial integration. The interiors are dominated by tall, narrow windows, and by polygonal piers with the same unusual elongated cross-section found in the octagonal piers of the Emmaus. The outer walls envelop the interior like thin membranes, while the support system is reduced to insubstantial rectangular lesenes (St Mary on the Sands, St Elizabeth's, St Mary Magdalene's) (Figs 1 and 2), diminutive wall brackets (St Dorothy's, Holy Cross), or are removed altogether, allowing ribs to die into a pilaster or a column (St Barbara's, Wrocław; Sts Peter and Paul's, Legnica). The Emmaus Monastery built largely in the Czech *opuka* limestone could not match the colossal size of the Silesian *Backstein* churches, and it retains a simple quadripartite vault (Fig. 3). Although the Wrocław net, star and so-called jumping vaults created more complex internal vistas, their interiors have the same prismatic and abstract quality characteristic of the Emmaus' architecture (Fig. 2). The elongated hall interiors produced a similar ponderous barn-like effect on the exterior, accentuated by their tall roofs and the relative simplicity of their west façades.

All these analogies suggest an important stylistic affinity or at least a shared aesthetic outlook between the New Town architecture, inaugurated at the Emmaus Monastery, and the brave new world of Silesian Gothic. Seen in this context the lofty Týn Church becomes less of an anomaly, its "Silesian" ground plan likely to have been Emmaus-inspired. The evidence presented here makes it hard to justify the continuing exclusion of the Emmaus Monastery from the discussions of Bohemian-Silesian architectural exchange;

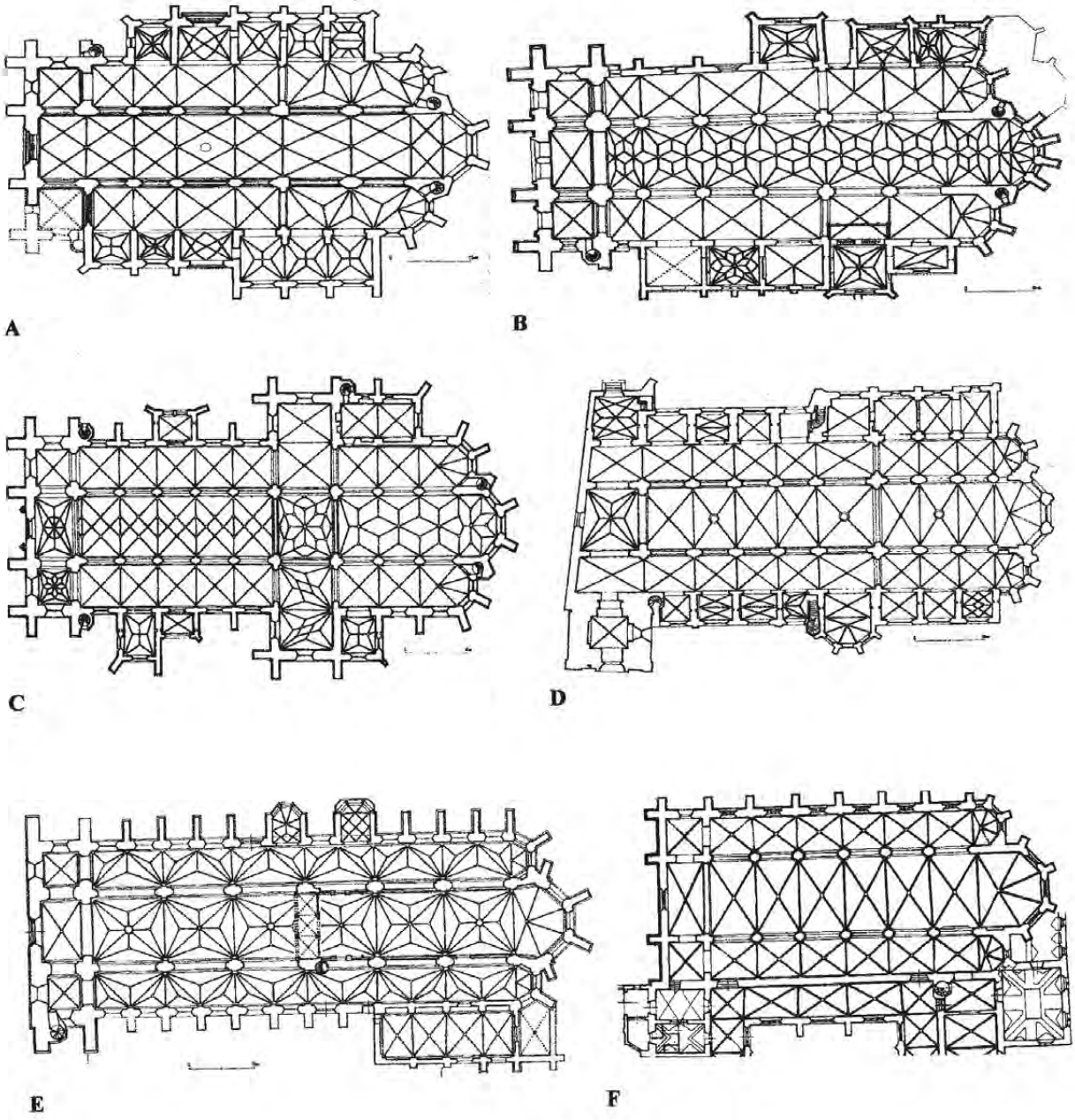


Fig. 6. Ground plans (not to scale): A. Legnica, Sts Peter and Paul's; B. Świdnica, Sts Stanislas and Wenceslas'; C. Strzegom, Sts Peter and Paul's; D. Wrocław, St Elizabeth's; E. Wrocław, St Mary on the Sands; F. Prague, Emmaus Monastery (A-E after Dalibor Prix in *Slezsko perla v české koruně. Historie-Kultura-Umění*, Prague, 2007, pls 4, 10, 12, 15 and 18; F. Z. Opačić).

Fig. 7 La Chaise-Dieu, interior looking north-east (Conway Library, Courtauld Institute of Art, London).

however, Václav Mencl and Dalibor Prix are right to note an important difference in scale between the Silesian and New Town churches.[38] The main reason is clearly not the lack of ambition or skill but the choice of building material, persistence of local traditions, and the magnitude of the New Town project which still outweighed the urban developments in Wrocław. Arguably, the more modestly proportioned New Town churches achieved greater spatial and symbolic variety within their particular architectural idiom. Although a crucial element in that symbolic network of religious foundations, the Emmaus stands apart within the group, since the immediate choice of its architecture is not easily explicable either by its Benedictine or Slavonic role. The foundation of the Emmaus' offshoot in Oleśnica, north of Wrocław,[39] at the end of the century may be further evidence of the longstanding links between Silesia and the Slavonic Monastery detectable in the latter's architecture, but it does not fully account for its unusual form. To Mencl and others the stark qualities of the Emmaus belonged to the world of secular architecture. Architectural simplicity, however, does not imply a lack of religious conviction. This was recognised by Kutzner for whom the "Anti-Gothic" character of the Emmaus and the corresponding Silesian architecture represented a new spiritual force.[40] The "ungothicising" of Gothic architecture in Silesia, or the "lack of style" in mendicant architecture in Germany and Austria and therefore also at the Emmaus Monastery, belonged to a process of regeneration which sought to revert to the stylistic principles of Romanesque and pre-Romanesque architecture. Krautheimer observed that the structures created in the process appeared both Late Gothic and pre-Gothic, and this stylistic polarity may also explain its presence at the Emmaus Monastery.[41] It could be argued that

Charles IV and his architect deliberately chose an up-to-date style that would in some way capture what they thought to be the ancient and "pure" character of the Slavonic liturgical tradition, without any literal or specific references to older architecture. A dependence of that architecture on the style developed by the workshops of Otakar II and Wenceslas II, with its profound debt to Cistercian building, would have emphasised both its modernity and its tradition, equally important qualities in the cosmopolitan environment of the New Town.

The high level of conceptual sophistication for which I have been arguing may appear to be inversely proportioned to the utterly plain structure it produced. However, I propose to go a step further and consider the Emmaus Monastery in a larger European context by speculating on its authorship. The evidence presented thus far has made a case in favour of a strong regional and domestic basis for the New Town style, which coexisted but had little in common with the late Rayonnant forms developed by the Prague Cathedral workshop across the river Vltava. It may come as a surprise, therefore, that in the final analysis, Matthias of Arras, the first architect of the cathedral, emerges as one of the likeliest authors of the Emmaus Monastery's austere design.[42] The crucial building in this creative chain is La Chaise-Dieu, near Clermont-Ferrand, built between 1344 and 1352, as a mausoleum for its most successful monk, Pope Clement VI, as well as for the relics of St Robert (Fig. 7).[43] The building is a cross between a hall church and a single nave with a series of interconnecting chapels. Despite the obvious differences, the architecture of La Chaise-Dieu displays intriguing parallels with the Emmaus, for example in the similarly proportioned nave with interpenetrating lateral spaces; smooth octagonal piers in the choir, and more strikingly, the same complex elongated octagons with flanking trapezoidal pilasters that run freely into the piers, although at La Chaise-Dieu the bay division is emphasised by thicker transverse arches. The east end of the two churches is different, but the absence of an ambulatory and the equal height of the radiating chapels and the choir at La Chaise-Dieu contribute to the sense of visual integration between the central vessel and the choir.

Although unusual, the layout of the La Chaise-Dieu is certainly not without its precedents in central and southern France, as Christian Freigang has amply demonstrated.[44] We also know that its construction was entrusted to three local masons working under Pierre de Cébazat, described as the *magister ecclesie Claromontensis*. However, a recent interpretation of the records singled out Clement VI and an unnamed architect in Avignon as the main devisers of the project.[45] Charles IV's visits to Avignon in the 1340s would have undoubtedly acquainted him with Clement's great project at its inception. There is equally no doubt that the two men would have discussed architecture as Charles IV brought the first architect of St Vitus' Cathedral, Matthias of Arras, from Avignon in 1344. Matthias' departure from Avignon in the year of the foundation of La Chaise-Dieu, opens the possibility that he, or someone in his professional entourage, may have been familiar with the plans for the papal mausoleum and that he brought some of the new ideas to Prague. Matthias' position as the chief architect in the service of Charles IV would have made him an obvious candidate as the main planner of the New Town and of some of its early churches. It would hardly be unusual for the chief royal architect working on the cathedral to be simultaneously engaged on other urban projects in the city.[46] But even if Matthias may have been responsible for transforming Charles IV's wishes into a concrete plan, the execution remained firmly in the hands of the local masons working in the eclectic tradition of Central European Gothic.

What conclusions then can we finally draw from this complex web of stylistic influences? Firstly, that the colossal and rapid growth of Prague from the middle of the fourteenth century provided an opportunity for the expansion of the most advanced and sophisticated forms of *Reduktionsgotik*, outside their usual Cistercian and mendicant context – a phenomenon encountered simultaneously in Silesia. And secondly, the example of the Emmaus Monastery has demonstrated the importance of international elements for the architecture created in this specifically Bohemian setting. The unknown architect of the Emmaus was undoubtedly well-informed of the most up-to-date papal projects in La Chaise-Dieu and Avignon, and the possibility of Matthias of Arras' involvement makes that link all the more palpable. Despite their obvious differences in scale and purpose, the Emmaus and Matthias' chief *oeuvre*, the chevet of Prague Cathedral, display a shared attitude to the contemporary French designs: they

both looked beyond its traditional cathedral forms and found their inspiration in the majestically simplified shapes of the *Reduktionsgotik*.

Given the unique historical and cultural conditions in Prague at this time, it is perhaps not surprising that the architecture championed by the New Town churches found little resonance outside the city, save for a few unlikely locations on the kingdom's provincial fringes. Nonetheless it is clear that by the late 1340s and '50s the Bohemian and imperial capital had become an artistic melting pot, developing a versatile architectural language that is at once deeply rooted in domestic circumstance and inspired by creative forces well beyond its national and political boundaries.

NOTES

[1] Jiří KUTHAN, *Die mittelalterliche Baukunst der Zisterzienser in Böhmen und Mähren*, Berlin & Munich, 1982 (also published in Czech as *Počátky a rozmach gotické architektury v Čechách*, Prague, 1983); Jiří KUTHAN, *Česká architektura v době posledních Přemyslovců*, Vimperk, 1994; Pavel VLČEK, Petr SOMMER & Dušan FOLTÝN (ed.), *Encyklopedie českých klášterů*, Prague, 1998, p. 328-335 (Sedlec), p. 590-596 (Zbraslav), p. 688-690 (Vyšší Brod), p. 696-700 (Zlatá Koruna). For Zbraslav and Sedlec see also the contribution by Klára Benešovská in this volume.

[2] For Otakar II's founding activity in Austria see Jiří KUTHAN, *Zakladatelské dílo krále Přemysla Otakara II. V Rakousku a ve Štýrsku*, Prague, 1991; for Bohemia and Moravia during the last Přemyslids, Jiří KUTHAN, *Česká architektura*; Dobroslav LÍBAL, "Přemysl Otakar II a Praha", in *Staletá Praha*, 9, 1979, p. 28-31; Anton HOENIG, *Deutscher städtebau in Böhmen*, Berlin, 1921, p. 42-74. Vilém LORENC, "Několik poznámek ke stavbě českých měst v polovině 14. století", in *Staletá Praha*, 9, 1979, p. 251-259.

[3] Jean BONY, *French Gothic Architecture of the 12th and 13th Centuries*, Berkeley, Los Angeles & London, 1983, p. 448-456; Paul FRANKL & Paul CROSSLEY, *Gothic Architecture*, New Haven & London, 2000, p. 174-175.

[4] BONY, *French Gothic Architecture*, p. 448-456; Norbert NUSSBAUM, *German Gothic Church Architecture*, New Haven & London, 2000 (first published in 1994 as *Deutsche Kirchenbaukunst der Gotik*, Darmstadt), p. 70-73, following on the question of Italian prototypes postulated by Ernst BADSTÜBNER, *Kirchen der Mönche. Die Baukunst der Reformorden im Mittelalter*, Berlin, 1980, p. 270-275. Wolfgang SCHENKLUHN, *Architektur der Bettelorden. Die Baukunst der Dominikaner und Franziskaner in Europa*, Darmstadt, 2000, p. 105.

[5] Although Mencl and more recently Kutzner saw these revived notions of simplicity as a direct opposition to the "aristocratic" architecture of the High Gothic, Nussbaum has pointed out instances of mendicant architecture accepting (to a varying degree) architectural forms employed by large cathedral workshops (for example the Franciscans at St Ursula's in Cologne). NUSSBAUM, *German Gothic*, p. 74-75; Václav MENCL, *Česká architektura doby Lucemburské*, Prague, 1948, p. 39 (abridged and translated into English as *Czech Architecture of the Luxembourg Period*, Prague, 1955); Marian KUTZNER, "Schlesische Sakralarchitektur aus der ersten Hälfte des 14. Jahrhunderts: Zwischen allgemeinem Stil und regionalem Modus", in *King John of Luxembourg (1296-1346) and the Art of his Era* (Proceedings of the International Conference, Prague, September 16-20, 1996), ed. Klára BENEŠOVSKÁ, Prague, 1998, p. 164-177, esp. p. 174.

[6] The church was consecrated in 1295. For a comprehensive bibliography on Heilignkreuz see most recently Marc Carel SCHURR, *Gotische Architektur im mittelern Europa 1220-1340*, Munich & Berlin, 2007, catalogue entry p. 311-312. KUTHAN, *Zakladatelské dílo krále Přemysla Otakara II*, p. 50-51, sees a formal allegiance (identified as "the style of polygonal forms") between Heiligenkreuz's dormitory and Lilienfeld (Cistercian), Třebíč (Benedictine) and the cathedral of Vienna Neustadt.

[7] KUTHAN, *Česká architektura*, p.482-494; VLČEK, SOMMER & FOLTÝN (ed.), *Encyklopedie*, p. 696-700.

[8] For an accurate cross-section of the nave pier which uses this type of moulding see SCHURR, *Gotische Architektur*, catalogue entry for Zlatá Koruna (Goldenkron in German), p. 304-305.

[9] Paul CROSSLEY, *Gothic Architecture in the Reign of Kazimir the Great*, Kraków, 1985, p. 76 and following; Klára BENEŠOVSKÁ, "Klášter minoritů a klarisek ve Znojmě a jeho středověká podoba", in: Marie BLÁHOVÁ & Ivan HLAVÁČEK (ed.), *Česko-rakouské vztahy ve 13. století. Rakousko (včetne Štýrska, Koruntan a Kraňska) v projektu velké říše Přemysla Otokara II.*, Prague, 1998, p. 217-236, esp. p. 223-226. See also the essay by Tomasz Węcławowicz in this volume.

[10] Most of the general historical literature on Silesia is in the languages of the region, however Norman DAVIES and Roger MOORHOUSE provide an accessible account of Wrocław in *Microcosm: Portrait of a Central European City*, London, 2002. Otherwise see, Karol MALECZYŃSKI (ed.), *Historia Śląska, tom 1 do roku 1763*, vol. 1 (*do połowy XIV w.*), Wrocław, 1960, vol. 2 (*od połowy XIV do trzeciej ćwierci XVI w.*), Wrocław, 1961; Hermann AUBIN, Ludwig PETRY & Herbert SCHLENGER (ed), *Geschichte Schlesiens*, vol. 1.: *Von der Urzeit bis zum Jahre 1526*, 3rd edition, Stuttgart, 1961; for Silesian post-war historiography in context and further literature see Wacław KORTA, "Badania nad średniowiecznym Śląskiem w polskiej historiografii w latach 1945-1980", in *Sobótka*, 43, 1988, p. 157-183, and Radek FUKALA, "Slezsko-Úvodem", in *Slezsko perla v české koruně. Historie-Kultura-Umění*, ed. Mateusz KAPUSTKA, Jan KLÍPA, Andrzej KOZIEŁ, Piotr OSZCZANOWSKI & Vít VLNAS, Prague, 2007, p. 9-20 (also translated into English as *Silesia a Pearl in the Bohemian Crown. History, Culture, Art*).

[11] Quoted in KUTZNER, "Schlesische Sakralarchitektur", p. 167; Georg DEHIO, *Geschichte der Deutschen Kunst*, vol. 2, Leipzig & Berlin, 1927, p. 61-63.

[12] Wilhelm PINDER, *Die Kunst der ersten Bürgerzeit bis zur Mitte des XV. Jahrhunderts*, Leipzig, 1937, p. 291 and p. 295-299 for a discussion of the 'mendicantisation' of German architecture circa 1300; Georg WEISE, "Stilphase der architektonischen Entwicklung im Bereich der deutschen Sondergotik", in *Zeitschrift für Kunstgeschichte*, 13, 1950, p. 68- 80.

[13] Dagobert FREY, "Die Kunst im Mittelalter", in *Geschichte Schlesiens*, ed. AUBIN, PETRY & SCHLENGER, p. 544-592. Frey's interest in German-Polish 'border-tensions' and the rich artistic creativity they generated led him to some more extreme views on the subject, deftly sketched out against the broader backdrop of the German 1930s *Ostpolitik* in Stephen MUTHESIUS, *Art, Architecture and Design in Poland. An Introduction*, Königstein im Taunus, 1994, p. 11.

[14] Georg DEHIO & Gustav VON BEZOLD, *Die kirchliche Baukunst des Abendlandes*, vol. 2, Stuttgart, 1901, (reprinted Hildesheim, 1961), p. 362, MENCL, *Česká architektura*, p. 37-39; KUTZNER, "Schlesische Sakralarchitektur", p. 169, Marian KUTZNER, "Kościoły bazylikowe w miastach śląskich XIV wieku", in *Sztuka i ideologia XIV wieku*, ed. Piotr SKUBISZEWSKI, Warsaw, 1975, p. 275-316. The term Anti-Gothic is used, dialectically, by WEISE, "Stilphase der architecktonischen Entwicklung", p. 73.

[15] KUTZNER, *Schlesische Sakralarchitektur*; MENCL, *Česká architektura*, p. 43- 45 and p. 132-137; Erich BACHMANN, "Architektur bis zu den Hussitenkriegen", in *Gotik in Böhmen*, ed. Karl M. SWOBODA, Munich, 1969, p. 34-109 presents an equally Bohemocentric view of architectural development in the region. A more critical assessment in relation to Silesa is offered by Dalibor PRIX, "O slezsko-českých vztazích ve středověké architektuře doby lucemburské", in *Slezsko perla v české koruně* (see above note 10), p. 149-172, esp. p. 149-154.

[16] Wide discrepancies in the dating of some of Silesia's key monuments, such as the Holy Cross church in Wrocław, are still apparent in Kaczmarek's recent observations (Romuald KACZMAREK, "Umění ve Slezsku, umění v českých zemích a lucemburský mecenát: mezi svízelným sousedstvím a bezvýhradným přijetím?", in *Slezsko perla v české koruně* (see above note 10), p. 115-147, esp. p. 115-122).

[17] The 1335 agreement was part of a larger Polish-Bohemian settlement which took place in Trenčín and Visegrád under the mediation of the Hungarian King Karl Robert. Charles IV's charters were major acts of state issued following his Bohemian and imperial coronations, respectively. For the so-called Silesian Charter of 1348 see Marie BLÁHOVÁ & Richard MAŠEK (ed.), *Karel IV., Stánické dílo*, Prague, 2003, p. 137-142, no. 2.2.2. The political process is summarised by Lenka BOBKOVÁ & Radek FUKALA, "Slezsko jako součást zemí české koruny", in *Slezsko perla v české koruně* (see above note 10), p. 23-78, esp. p. 23-44; and its general context by Otfrid PUSTEJOVSKY, "Schlesien und Polen – Ausgleich und Gleichgewicht", in *Kaiser Karl IV., Staatsmann und Mäzen*, ed. Ferdinand SEIBT, Nuremberg & Cologne, 1978, p. 173-182.

[18] Gerhard LOSHER, *Königtum und Kirche zur Zeit Karls IV.: Ein Betrag zur Kirchenpolitik im Spätmittelalter* (Veröffentlichungen des Collegium Carolinum, 56), Munich, 1985, p. 60-64.

[19] The estimate of the number of Silesian students in Prague between 1367-1409 varies from around 200 on individual faculties (such as law) to some 1100 in total. Mateusz GOLÍNSKI, "Čechy v dějinách Slezska", in *Slezsko perla v české koruně* (see above note 10), p. 81-95, here p. 84-85, note 21. See also BOBKOVÁ & FUKALA, "Slezsko", p. 38. On the high count of Silesian nobility in Prague see also František KAVKA, *Vláda Karla IV. za jeho císařství (1355-1378)*, vol. 1 (1355-1364), vol. 2 (1364-1378), Prague, 1993, here vol. 1, p. 43.

[20] Born in the Bohemian town of Vysoké Myto, Jan began his ecclesiastical career in Silesia and adopted his parish town of Středa (Neumarkt now Środa Śląska) into his name, before being taken up into royal employment at Prague. Joseph KLAPPER, *Johann von Neumarkt, Bischof und Hofkanzler, Religiöse Frührenaissance in Böhmen zur Zeit Karls IV.* (Erfurter Theologische Studien, 17), Leipzig, 1964; Samuel HARRISON THOMPSON, "Learning at the Court of Charles IV", in *Speculum*, 25, 1950, p. 1-20.

[21] *Karoli IV Imperatoris Romanorum Vita Ab Eo Ipso Conscripta. Autobiography of Charles IV*, ed. Balász NAGY & Frank SCHAER, Budapest & New York, 2001, p. 136-137 and p. 158-161. BOBKOVÁ & FUKALA, "Slezsko", p. 43.

[22] KACZMAREK, "Umění ve Slezsku", p. 126-127, and Romuald KACZMAREK, "Slezsko – lucemburský zisk", in *Karel IV. Císař z boží milosti. Kultura a umění za vlády Lucemburků 1310-1437*, ed. Jiří FAJT (exhibition catalogue, Prague Castle), Prague, 2006, p. 309-317 (also published in German as *Karl IV., Kaiser von Gottes Gnaden. Kunst und Repräsentation unter den Luxemburgern 1310–1437*, Munich, 2006).

[23] MENCL, *Česká architektura*, p. 66, KUTZNER, "Schlesische Sakralarchitektur", p. 164-177.

[24] The history of the Týn Church is outlined fully in Petr VLČEK (ed.), *Umělecké památky Prahy (Staré Město, Josefov)*, Prague, 1996, p. 100-109; a useful English summary is provided by Klára BENEŠOVSKÁ in *Architecture of the Gothic* (Ten Centuries of Architecture, 2), Prague, 2001, p. 94-95 and p. 105. For the attribution to Peter Parler (or his collaborators) see also, Anton LEGNER (ed.), *Die Parler und der Schöne Stil 1350-1400. Europäische Kunst unter den Luxemburgern*, (exhibition catalogue, Schnütgen Museum), Cologne, 1978 (vols 1-3) and 1980 (vols 4 and 5), here vol. 2, p. 633. However, this theory has been successfully challenged by Jan Jakub OUTRATA ("Kostel Panny Marie před Týnem v Praze – architektonický vývoj ve středověku a současná oparava", in *Staletá Praha*, 16, 1986, p. 147-69), whose analysis has pointed to several distinctive stylistic strands in the first phase of construction (from circa 1350s to 1370s and '80s) and ultimately traced the origins of Týn's ground plan to St Elizabeth's in Wrocław. Dalibor PRIX ("O slezsko-českých vztazích ve středověké architektuře", p. 161-167), casts a critical eye over these arguments suggesting a generic rather than specific Silesian influence.

[25] Zoë OPAČIĆ, *Charles IV and the Emmaus Monastery: Slavonic Tradition and Imperial Ideology in Fourteenth-Century Prague*, unpublished doctoral thesis, Courtauld Institute of Art, University of London, 2003 (currently in preparation for publication, forthcoming 2008). Main conclusions of that research are published as Zoë OPAČIĆ, "Emauzský klášter a Nové Město pražské: Slovanská tradice, císařská ideologie a veřejný ritual v Praze 14. století" in *Emauzy. Benediktinský klášter Na Slovanech v srdci Prahy* (Sborník conference, pořádané k znovuotevření chrámu Panny Marie a sv. Jeronýma benediktinského kláštera Na Slovanech

Opatství Emauzy 22.-23. 4. 2003), ed. Klára BENEŠOVSKÁ & Kateřina KUBÍNOVÁ-ENGSTOVÁ, Prague, 2007 (forthcoming). A shorter architectural analysis of the Emmaus Monastery and its New Town context has been published as Zoë OPAČIĆ, "Reduktionsgotik or Anti-Gothic? Hall-Church Development in Fourteenth-Century Prague", in *Current Work in Architectural History* (Papers read at the Annual Symposium of the Society of Architectural Historians of Great Britain 2004), ed. Peter DRAPER, Clifford, p. 11-18.

[26] By, for example, Dobroslav LÍBAL, "Gotická architektura v Praze doby Karlovy", in *Staletá Praha*, 9, 1979, p. 45-66, esp. p. 49.

[27] The protracted building history of both foundations is outlined by SCHURR, *Gotische Architektur*, p. 357-358 and p. 371-373, together with ground plans and bibliography.

[28] The Dominican church of the Holy Cross at Jihlava was begun in around 1260, the hall nave was probably planned from the beginning, that of the Franciscans at Cheb (Eger) dates from circa 1300, KUTHAN, *Česká architektura*, p. 163-166 and p. 135-139. For the Franciscan church in Brno consecrated in 1256 see Bohumil SAMEK (ed), *Umělecké památky Moravy a Slezska 1 [A-I]*, Prague, 1994, p. 175-176.

[29] See above note 1 and KUTHAN, *Česká architektura*, p. 251-255, for Olomouc (St Wenceslas', after 1266) and p. 192-201 for Kolín (St Bartholomew's, circa 1270s), BENEŠOVSKÁ, *Architecture of the Gothic*, p. 186 for Kroměříž (St Maurice's, from 1260), and p. 204 for St James' in Kutná Hora (originally St Mary's, from 1330). For BACHMANN, ("Architektur bis zu den Hussitenkriegen"), p. 89-99, Bohemian hall churches constitute a second architectural phase running parallel to the "cathedral Renaissance" initiated by the Parlers.

[30] Klára Benešovská has plausibly suggested that the similarity between St Aegidius' and the Dominican hall churches such as Tulln may have been driven by Jan of Dražic's desire to outdo his chief adversaries – the Dominicans settled in the nearby church of St Clement. See her entry for St Aegidius', in *Umělecké památky Prahy (Staré Město, Josefov)*, p. 84. For Tulln see also Renate WAGNER-RIEGER, *Mittelalterliche Architektur in Österreich*, ed. Artur ROSENAUER, Vienna & St Pölten, 1988, p. 124.

[31] Begun in 1348, now comprehensively rebuilt. *Umělecké památky Prahy (Staré Město, Josefov)*, p. 95.

[32] See above note 29. Pavel KROUPA, "K architektuře doby Václava II. a první poloviny 14. století", in *Zprávy památkové péče*, 58, 1998, p. 200-211, draws some preliminary conclusion on the relationship between these structures, which deserves further exploration.

[33] Discussed extensively by MENCL, *Česká architektura*, p. 47-50.

[34] *Umělecké památky Prahy (Staré Město, Josefov)*, p. 55-56; MENCL, *Česká architektura*, p. 49-50.

[35] For a more extensive discussion of the New Town churches see OPAČIĆ, *Charles IV and the Emmaus Monastery*, p. 118-126, and Paul CROSSLEY & Zoë OPAČIĆ, "Prague as a New Capital", in *Prague the Crown of Bohemia 1347-1437*, ed. Barbara DRAKE BOEHM & Jiří FAJT (exhibition catalogue, Metropolitan Museum of Art, New York), New Haven & London, p. 59-73, esp. p. 63-66.

[36] OPAČIĆ, "Reduktionsgotik or Anti-Gothic?", p. 11. The notion of a New Town style was first postulated by Klára BENEŠOVSKÁ, "Gotická podoba kostela sv. Jindřicha a sv. Kunhuty na Novém Městě pražském a jeho stavebník", in *Průzkumy památek*, 1, 1995, p. 87-89, esp. p. 89 and Klára BENEŠOVSKÁ, "Benediktínský klášter Na Slovanech s kostelem Panny Marie a slovanských patronů", in *Umění*, 44, 1996, p. 118-130, esp. p.128-129.

[37] For the dating of these churches and further bibliography see PRIX, "O slezsko-českých vztazích ve středověké architektuře", p. 161-167. The best survey of the material is available in Tereza MOROCZKO & Marian ARSZYŃSKI (ed.), *Architektura gotycka w Polsce*, vols 1-4, Warsaw, 1995, esp. vols 2 and 3.

[38] PRIX, "O slezsko-českých vztazích ve středověké architektuře", p. 161-167. By contrast see KUTZNER, "Schlesische Sakralarchitektur", p. 175.

[39] Luboš ŘEHÁČEK, "Emauzský klášter a Polsko (K založení a významu filiálních klášterů v dolnoslezské Olešnici a v Klepařích u Krakova)", in *Z tradic slovanské kultury v Čechách: Sázava a Emauzy v dějinách české kultury*, ed. Jan PETR & Sava ŠABOUK, Prague, 1975, p. 203-222; Marek DERWICH, "Benedyktyni czescy na Śląsku", in *Facta probant homines. Sborník příspěvků k životnímu jubileu Prof. Dr. Zdeňky Heldíkové*, ed. Ivan HLAVÁČEK & Jan HRDINA, Prague, 1998, p. 109-131, here p. 127-128; GOLIŃSKI, "Čechy v dějinách Slezska", p. 85.

[40] MENCL, *Česká architektura*, p. 74; KUTZNER, "Schlesische Sakralarchitektur", p. 175 and KUTZNER, "Kościoły bazylikowe w miastach śląskich", p. 287.

[41] Richard KRAUTHEIMER, *Die Kirchen der Bettelorden in Deutschland*, Cologne, 1925, p. 1-10 and p. 117. Before him, DEHIO & VON BEZOLD (*Die kirchliche Baukunst*, p. 286) have labelled this architecture as "Neoromanisch". The stylistic polarity of the mendicants is also discussed by FRANKL & CROSSLEY, *Gothic Architecture*, p. 174-175.

[42] I am grateful to Klára Benešovská for suggesting to me the analogy between La Chaise-Dieu and the Emmaus monastery in the course of my PhD research. The argument presented here is my own, but her analysis of Matthias of Arras' involvement with the planning of the New Town and the La Chaise-Dieu connection is published as "Emauzy a Nově Město: otázka architekta", in *Emauzy*, ed. BENEŠOVSKÁ & KUBÍNOVÁ-ENGOSTOVÁ (see above note 25).

[43] Alain ERLANDE-BRANDENBURG, "L'abbatiale de la Chaise-Dieu", in *Congrès archéologique de France*, 133, 1975, p. 720-755; Frédérique-Annne CONSTANTINI, "Les artistes de la Chaise-Dieu (1344-1352) d'après l'étude de la comptabilité pontificale", in *Revue de l'Art*, 110, 1995, p. 44-55; FRANKL & CROSSLEY, *Gothic Architecture*, p. 199 and p. 347, note 54a. For the reconstruction of Clement VI's tomb see also Julian GARDNER, *The Tomb and the Tiara. Curial Tomb Sculpture in Rome and Avignon in the Latter Middle Ages*, Oxford, 1992, p. 143-146.

[44] Christian FREIGANG, *Imitare ecclesias nobiles. Die Kathedralen von Narbonne, Toulouse und Rodez und die nordfranzösische Rayonnantgotik im Languedoc*, Worms, 1992, esp. p. 213.

[45] CONSTANTINI, "Les artistes de la Chaise-Dieu", p. 47.

[46] Marvin TRACHTENBERG, *Dominion of the Eye. Urbanism Art and Power in Early Modern Florence*, Cambridge, 1997, p. 122, has demonstrated this practice in the case of architects working on Florence's Duomo; a more directly relevant example is that of Matthias of Arras' successor, Peter Parler, who was also responsible for the construction of a new stone bridge (1357) and its tower. See also BENEŠOVSKÁ, "Emauzy a Nově Město".

The Bohemian King, the Polish Bishop, and their Church: Wenceslas II's Cathedral in Kraków (1295-1305)[1]

Tomasz Węcławowicz

This article focuses on the political and artistic ambitions of two main characters. The first is the Bohemian king and a celebrated representative of the Přemyslid dynasty, Wenceslas II (1278-1305), the son of the famous Bohemian monarch Přemysl Otakar II, who strengthened his realm politically and economically. Wenceslas II followed in his father's footsteps, enriching the royal treasury by developing silver mining on a hitherto unknown scale. In 1300 he claimed the Polish throne under the terms of a will drawn up in 1289 by his aunt Griphina, the widow of a Polish *princeps senioris* who had ruled Kraków.[2]

The second is the Polish Bishop Jan, called Muskata, who was born to a merchant family in Wrocław, the capital of Silesia. Educated in Bologna, he spent two years in Rome, whence he came back as a collector of *denari S. Petri* (tax paid to the Papal See). King Wenceslas II called him *amicus noster, delicissimus*, making him his honorary chaplain and vice-chancellor of Hungary, and in 1295 supported, or rather forced, the election of Muskata to the Kraków bishopric, where he remained bishop until 1320.[3]

In the 1290s Czech politics and patronage in Lesser Poland focused mostly on Kraków. Contemporary sources state that *eodem tempore Bohemi Cracoviam muraverunt*, and also that *rex Wenczeslaus civitatem Cracoviensem ex integro muravit.*[4] Historians usually interpret these words to mean that Kraków town walls were constructed in this period. However, Czech investment in Kraków did not focus solely on fortifications. In circa 1300 we observe a surge in building activity in general. Several large churches were begun at the time and the building process accelerated in others. Excavations show that on the cathedral hill of Wawel construction proceeded with equal fervour. Recently, the archaeologists Zbigniew Pianowski and Janusz Firlet have found remains of hitherto unknown foundation walls under the north part of the choir of the present Kraków Cathedral on the Wawel hill. The remains were sufficient to allow the reconstruction of a polygonal choir with radiating chapels. The choir was undoubtedly later than the Romanesque cathedral of the eleventh and twelfth centuries and earlier than the present Gothic structure begun under the Polish King, Władysław Łokietek, in 1320 and consecrated in 1364. The absence of architectural detail indicates that building work never progressed beyond the initial stages (Fig. 1).[5]

Taking into account these discoveries in connection with the patronage of King Wenceslas II and his Bishop Muskata, and placing them in the context of art and architecture in Central Europe of circa 1300, I would like to pose several questions. Firstly, what was the precise time of the foundation of the new Kraków Cathedral and the identity of its founder? Secondly, which buildings might have directly influenced its planning and structure? Thirdly, was the Kraków choir the first Gothic structure of its kind in Poland? And finally, what were the symbolic implications of the iconography of the foundation, and especially what motivated the choice of the specific models for the new building.

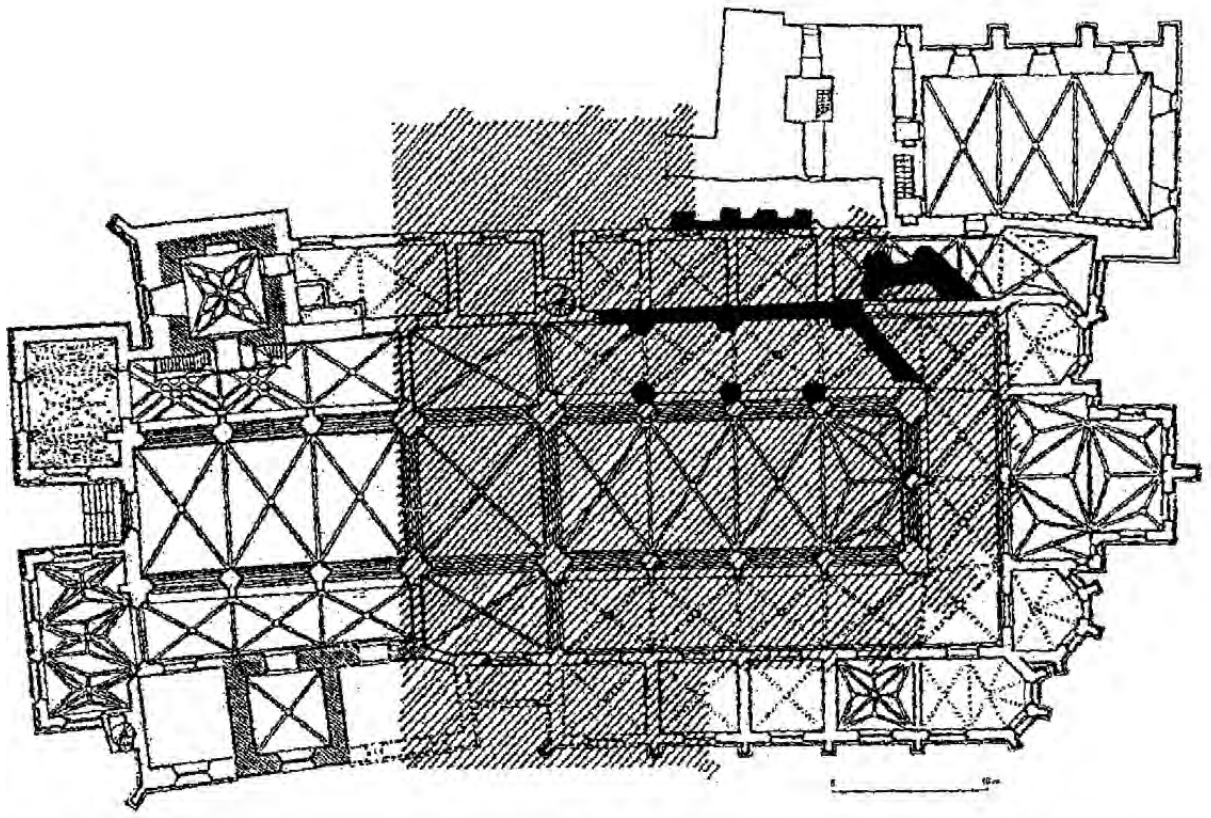


Fig. 1. Kraków, Wawel hill, remains of the foundation walls (marked black) of the polygonal "chevet" (hatched) on the ground plan of the present, late gothic cathedral (Tomasz Węcławowicz).

The model of a polygonal choir with ambulatory and radiating chapels could not have reached Kraków earlier than the mid-thirteenth century and not later than the very beginning of the fourteenth century. The canonisation of St Stanislas in 1253 and the subsequent flourishing of his cult could be regarded as a sufficiently powerful impulse for a rebuilding of the cathedral. Yet nothing of the sort took place. Bishops residing on the hill Wawel in the second half of the thirteenth century were involved in numerous feuds with the local dukes and their short tenures were not conducive to ambitious artistic enterprises. But the situation took a favourable turn in 1295 when Muskata took office.

Polish historiography has traditionally stigmatised Muskata as a destroyer rather than a constructor. His positive architectural initiative was overshadowed by the dramatic conflict with the Archbishop of Gniezno, Jakub Świnka, and Prince Władysław Łokietek, who became the ruler of Kraków after the demise of the Přemyslid dynasty in 1306. In the course of this conflict Muskata was accused of destroying the walls of the old cathedral together with the bishops' graves.[6] Paradoxically, these accusations constitute the key argument in attributing the foundation of the early Gothic cathedral to Muskata, for it was clearly necessary to destroy the old to lay the foundation for the new choir.

In order to determine the source of Muskata's inspiration for his new cathedral we should consider the architectural milieu in Central Europe in circa 1300. The type of the classic cathedral "chevet" with radiating chapels inspired by the High Gothic choirs of the Ile-de-France emerged relatively late in this area. Traditionally, the choir of the metropolitan cathedral at Kalocsa in Hungary is regarded as the earliest example of this kind east of the Rhine. Known only from the nineteenth-century excavations, it has been reconstructed as an apse planned on seven sides of a dodeca-

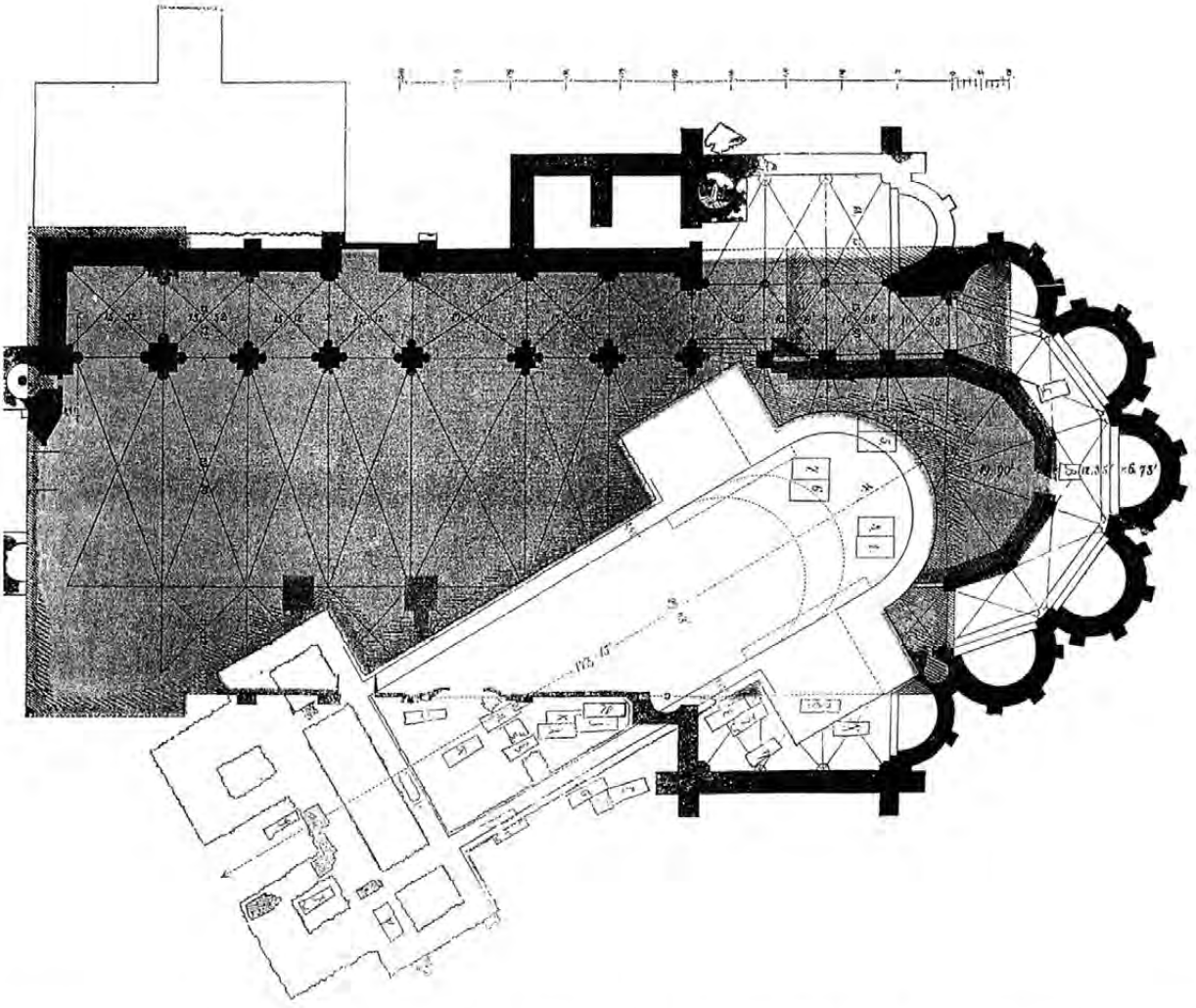


Fig. 2. Kalocsa, remains of the Romanesque and early Gothic cathedrals according to the nineteenth-century drawing (Imre Takacs, 2000).

gon, with an ambulatory and radiating chapels directly adjacent to a wide transept with eastern chapels. The apses of the ambulatory chapels were still Romanesque in plan, namely semi-circular. Because of these archaic features of Kalocsa, and the fact that we are unable to verify the conclusions of the nineteenth-century excavations, we should be cautious about including the Hungarian cathedral in our comparative survey (Fig. 2).[7]

Another building which we should mention in this context is the Ottonian cathedral of the Magdeburg archbishops. Its polygonal choir with ambulatory and radiating chapels was constructed during the second and third decade of the thirteenth century, but was not vaulted before 1266. Because of this slow progress the Magdeburg choir, with its many Romanesque features, is regarded as a good example of the gradual reception of cathedral Gothic forms, rather than a structure which could exert any considerable influence in Central Europe (Fig. 3).[8]

The monumental, fully developed Gothic choir *sensu stricto*, appears only at the end of the thirteenth century in Cistercian monastic churches. Usually these were rectangular but the church in Sedlec had a polygonal choir with an ambulatory laid out on seven sides of a dodecagon with radiating chapels. The role this

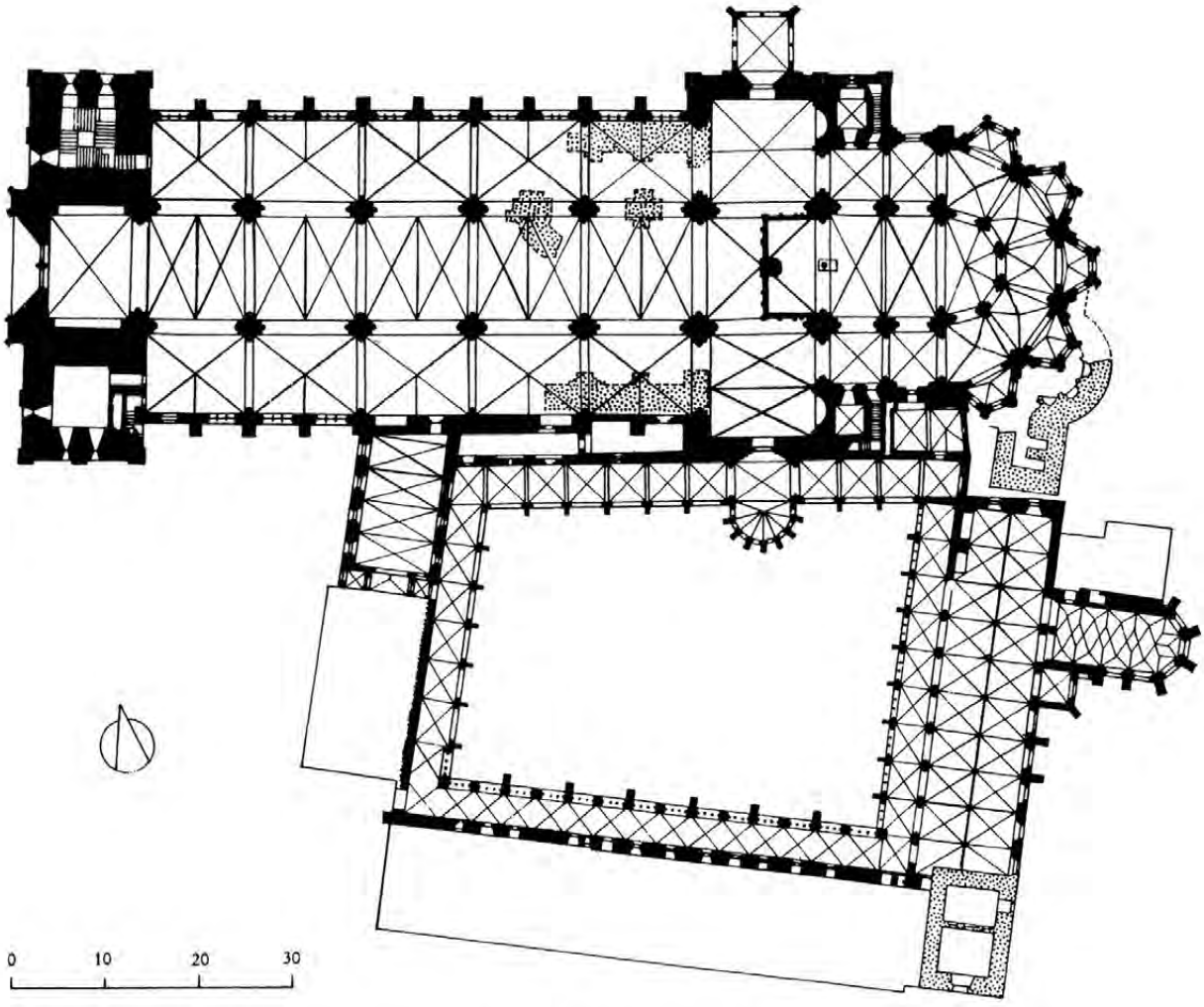


Fig. 3. Magdeburg Cathedral, ground plan (Paul Frankl & Paul Crossley, 2000).

church played in the transmission of the simplified type of the classic cathedral architecture of Central Europe has been emphasised on numerous occasions. Its initiator and patron, the new abbot of Sedlec, Heidenreich (or *Heydenricus*) (1282/3-1320), began the rebuilding of his abbey church in the late 1280s.[9] Like other Cistercian abbots of Bohemia, Heidenreich belonged to the circle of close advisors of King Wenceslas II. Thus, the Kraków Bishop Muskata could have met him in Prague in 1294, or even earlier during Wenceslas II's stay in Kraków in 1292. Furthermore, Muskata's numerous journeys to Prague may have taken him via Sedlec, where he might have taken advantage of Cistercian hospitality. It is thus probable that it was not the cathedral churches in Kalocsa and Magdeburg but rather Heidenreich's choir at Sedlec which became a model for Muskata's foundation (Fig. 4).[10]

Was therefore Muskata's church the first Polish cathedral with the classic Gothic choir? To answer this question we must turn to two thirteenth-century cathedrals in Wrocław and Poznań, the capital cities of Silesia and Greater Poland respectively. In the 1240s the bishop of Wrocław added a new choir to his cathedral, rectangular in shape with an ambulatory, which had no chapels but two corner towers. For over a hundred years this foundation has been interpreted by scholars in the context of the development of the rectangular ambulatories of Cistercian churches, such as

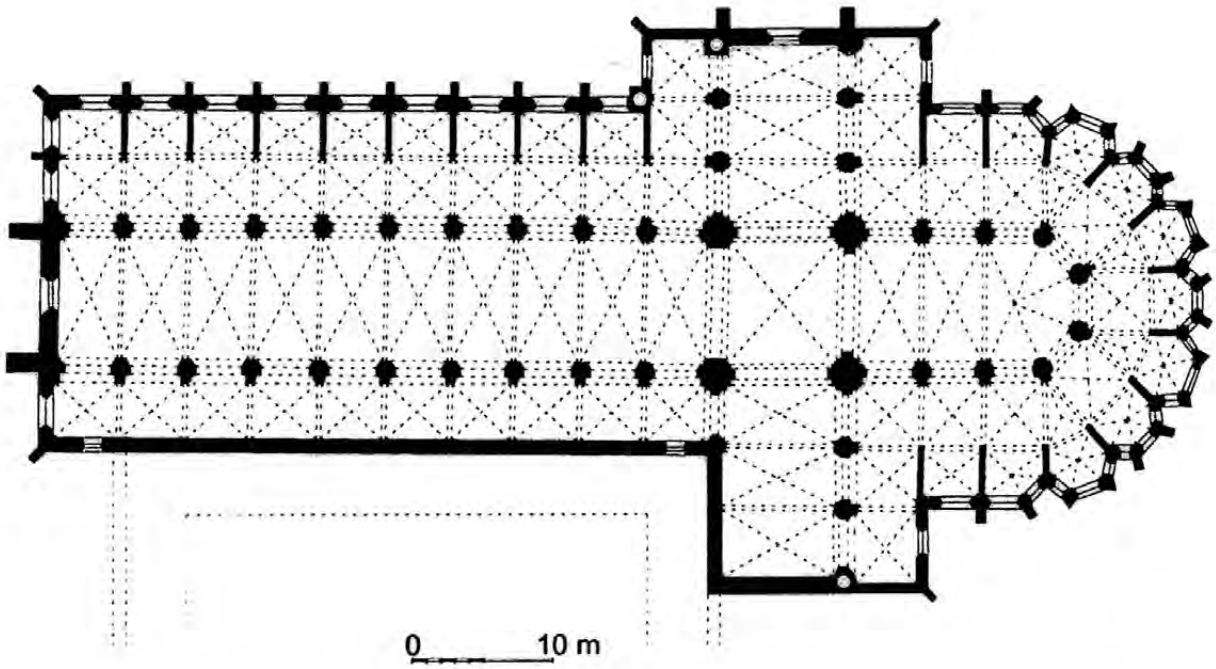


Fig. 4. Sedlec, Cistercian Abbey Church, ground plan with reconstructed Gothic rib vaults (Tomasz Węcławowicz).

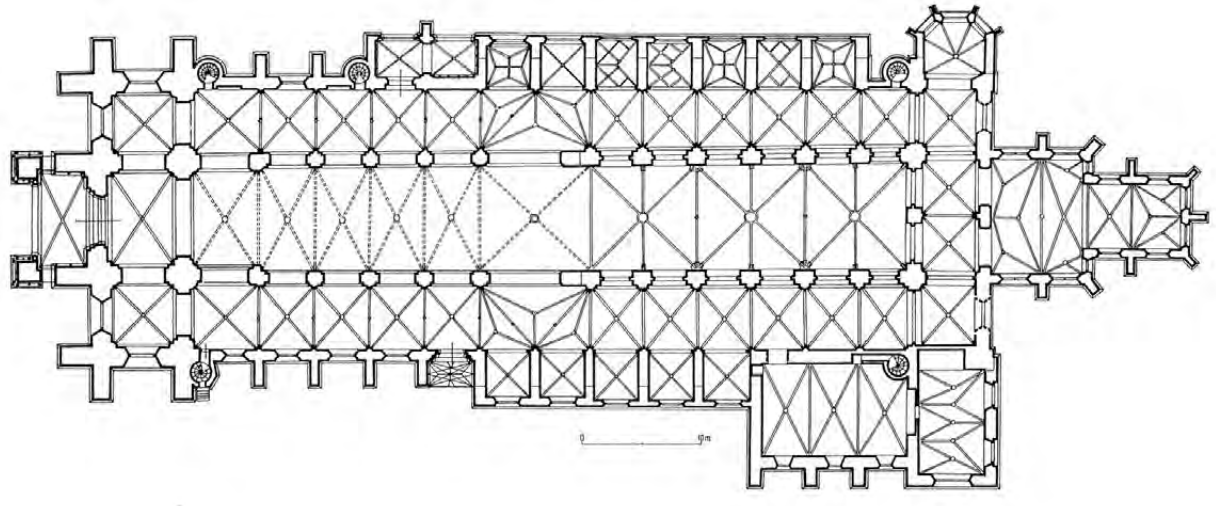


Fig. 5. Wrocław Cathedral, ground plan (Szczęsny Skibiński, 1996).

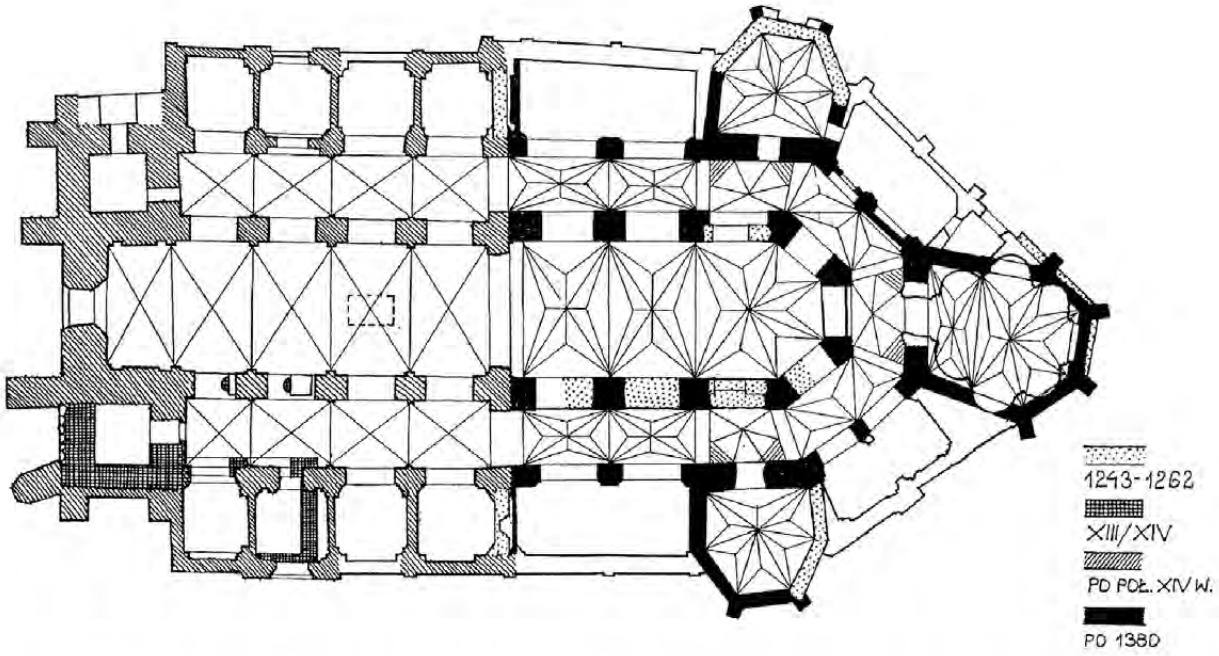


Fig. 6. Poznań Cathedral, ground plan: Early Gothic choir with controversial ambulatory and chapels marked with dots (Szczęsny Skibiński, 2001).

Cîteaux III and Morimond II.[11] However, the absence of chapels, and the Romanesque character of the corner towers suggests that Wrocław Cathedral is not a straightforward link in the chain of reception of classic cathedral Gothic architecture in Poland (Fig. 5).[12]

The Romanesque choir of Poznań Cathedral raises even stronger doubts. Written sources document the rebuilding of the choir between 1242 and 1256. Archaeological remains are so scarce, that from the moment of their discovery (circa 1960) their interpretation has been, and still is, controversial. The archaeologists who uncovered the remains concluded that it was an aisless choir terminating in five sides of an octagon, supporting this thesis with convincing analogies of the near contemporary western choir of Naumburg Cathedral and the eastern choir of Meissen Cathedral. It has also been suggested that the choir in Poznań could have had an ambulatory with three large radiating chapels, for which the direct, though more developed source was the Magdeburg choir. Yet, such an ambitious enterprise would have constituted an extraordinary precedent on the peripheries of Latin Europe (Fig. 6).[13]

In conclusion, all this leads me to believe that the Kraków choir was designed as the first classic Gothic structure of its kind in Poland.

* * *

Historiographic tradition teaches us that even distant and simplified allusions to the classic cathedral choirs, such as those realised in Kraków and Wrocław, and maybe in Poznań, grow out of specific ideology. As Hans Sedlmayr emphasised that not every royal church in Europe was modelled on the French cathedral but that every church modelled on it was a royal church (*Königskirche*). Construction of such a cathedral was either an expression of a newly established royal church, or a claim to an entitlement to such, or a desire to maintain such a claim. The initiative could have come from a king, but more often from an interested bishop.[14]

However, searching for examples of Sedlmayr's blending of form and meaning in Polish thirteenth-century cathedrals we encounter serious difficulties. The rebuilding of the choir in Wrocław Cathedral

commenced in 1244 and thus came twenty five years late with regard to the centralising policies of the Silesian dukes. The foundation of the Poznań choir, in turn, anticipated by half a century the coronation of the duke of Greater Poland, Przemysl II, as the king of Poland in 1295.

King Wenceslas II, as well as Bishop Muskata were certainly aware of how powerful were the symbolic implications of the classic cathedral choir. The monumental monastic churches, the "Cistercian cathedrals" in Bohemia, in Zbraslav, Sedlec, and probably also in Hradiště nad Jizerou were well known to both. We know that the king personally supervised the construction of the abbey church in Zbraslav near Prague, which he described as his *Aula Regia*.[15] We should also remember that during that time, and until 1344, Prague was not a metropolitan seat and that the Czech kings were crowned by the archbishops of Mainz. In this situation the Cistercian churches in Zbraslav fulfilled in a sense the function of royal churches. The position changed completely after 1300 when, together with the throne of Poland, Wenceslas gained an independent metropolitan see in Gniezno. Kraków's Wawel could aspire to be the *caput regni,* the spiritual and political centre of the realm, which comprised not only Bohemia and Poland, but for the time being included Hungary, ruled by the young Wenceslas III. Undoubtedly with the approval of the king, and maybe on his initiative, Bishop Muskata planned to rebuild his cathedral as a royal church, hoping to secure the status of an archbishopric in the not too distant future. Medieval written sources clearly convey a very vivid tradition of the loss of Kraków's metropolitan status at the end of the eleventh century. The cathedral on the Wawel was destined to fulfil the role as the main church of the Přemyslids' domain thanks to its ancient dedication to St Wenceslas, the mythologized ancestor and patron saint of the dynasty. The new structure encapsulated the ambitions and high aspirations of its patrons and it is thus not surprising that, as the first church of the new state, it would boast a prestigious polygonal chevet with radiating chapels.

Muskata's project was interrupted in 1305 by the sudden death of King Wenceslas and the murder of his son, the last of the Přemyslids, a year later. Soon afterwards, the Polish Duke Władysław Łokietek withdrew the privileges granted by the Bohemian rulers to the Kraków bishops, thus cutting off the source of a large income from the salt mines, which had ensured the financial stability of the architectural enterprise.

The Přemyslid rule in Kraków was only a short episode, but its political and economic outcome was significant. Political and artistic ambitions of Bohemian rulers came to life half a century later with Charles IV's rebuilding of the cathedral in Prague, from 1344. By that time two monumental churches had already been built in Poland: King Władysław Łokietek and his son Kasimir the Great's coronation church in Kraków, erected on the site of the abandoned "chevet", followed shortly by the reconstruction of the metropolitan cathedral in Gniezno. Their history, however, is beyond the scope of the present essay.[16]

NOTES

[1] I am very grateful to Agnieszka Roznowska-Sadraei, who is also specialised in some problems of Kraków Cathedral, for her kindness in preparing the final version of this text.

[2] Many remarks in: *Fontes Rerum Bohemicarum. Prameny dějin českých*, ed. Josef EMLER, vol. 6, Prague, 1884, p. 44; *Monumenta Germaniae Historica*, ed. Georgius Heinricus PERTZ, vol. 5/6, Hanover, 1890, p. 277-300. See also: *Joannis Dlugossii Annales seu Cronicae inlicti Regni Poloniae*, ed. Jan DĄBROWSKI *et al.*, liber 7, Warsaw, 1974, p. 334-337; *Ibidem*, liber 9, Warsaw, 1975, p. 12-13.

[3] *Joannis Dlugossii Annales*, liber 9, p. 19. See also: Jerzy WYROZUMSKI, "Muskata Jan", in *Polski Slownik Biograficzny*, ed. Polish Academy of Sciences, vol. 22, Wrocław, Warsaw & Kraków, 1977, p. 291-295, and the recent monograph: Tadeusz PIETRAS, *Krwawy wilk z pastoralem. Biskup krakowski Jan zwany Muskata*, Warsaw, 2001.

[4] *Monumenta Poloniae Historica*, ed. Aleksander BIELOWSKI, vol. 3, Lviv, 1878, p. 77 and 208.

[5] Janusz FIRLET & Zbigniew PIANOWSKI, "Przemiany architektury rezydencji monarszej oraz katedry na Wawelu w swietle nowych badan", in *Kwartalnik Architektury i Urbanistyki*, 44, 2000, p. 207-236.

[6] *Acta inquisitionis Iacobi, archiepiscopi Gneznensis, contra Johannem Muscata, episcopum Cracoviensem*, in *Monumenta Poloniae Vaticana*, ed. Jan PTAŚNIK, vol. 3, Kraków, 1917, p. 82, 86 and 91; and also Slawomir GAWLAS, "Czlowiek uwiklany w wielkie procesy – przyklad Muskaty", in *Czlowiek w spoleczenstwie sredniowiecznym*, ed. Roman MICHALOWSKI, Warsaw, 1997, p. 391-401.

[7] Imre TÁKÁCS, "Egyelunt katedralis nyomában. Újabb töredékek a 13. századi kalocsai székesegyházból", in *A középkori Del-Alföld és szer*, ed. Tibor KOLLÁR, Szeged, 2000, p. 305-335.

[8] A brief summary of the state of research in: Paul FRANKL & Paul CROSSLEY, *Gothic Architecture*, New Haven – London, 2000, p. 148, and 329, note 58.

[9] Jiří KUTHAN, *Česka architektura v době posledních Přemyslovců*, Vimperk, 1994, p. 360-369; Petr KROUPA, "Klášterni kostel v Sedlci u Kutné Hory v kontekstu cisterského stavitelstvi", in *Průzkumy Památek*, 9/2, 2002, p. 51-73.

[10] See above note 2

[11] From Herbert LUTSH, *Verzeichnis der Kunstdenkmäler der Provinz Schlesien*, vol. 1, Wrocław, 1886, p. 16-26, until more recently, Marian KUTZNER, "Śląsk. Okres 1200-1350", in *Architektura gotycka w Polsce*, ed. Teresa MROCZKO & Marian ARSZYŃSKI, vol. 1, Warsaw, 1995, p. 128.

[12] Szczęsny SKIBINSKI, *Polskie katedry gotyckie*, Poznań, 1996, p. 12; Edmund MAŁACHOWICZ, *Katedra wroclawska*, Wrocław, 2000, p. 47-48.

[13] Szczęsny SKIBINSKI, *Katedra poznańska*, Poznań, 2001, p. 32-40; ID., *Polskie katedry gotyckie*, p. 49-51;

[14] Hans SEDLMAYR, *Die Entstehung der Kathedrale*, Zurich, 1950, p. 467: "Wo immer die nordfranzösische gotische Kathedrale außerhalb Frankreichs auftritt, steht sie in engster Beziehung zum Königtum der einzelen europäischen Königreiche. Nicht jede Königskirche Europas seit etwa 1200 ist eine 'Kathedrale', aber jede Kathedrale außerhalb Frankreichs, die dem Munster der französischen Königskathedralen folgt, *ist* eine Königskirche, oder genauer: eine Königsbischofskirche. Dieser Satz stellt die historische Regel auf. Ausnahmen sind wohl möglich, bedürfen aber jedesmal einer besonderen Begründung, während der Satz selbst sich generell begründen läßt (...)."

[15] *Fontes Rerum Bohemicarum*, vol. 4, p. 52-53. See also KUTHAN, *Česka architektura v době posledních Přemyslovcu*, p. 45-46; Klára BENEŠOVSKÁ, "Aula Regia près de Prague et Mons Regalis près de Paris", in *Cîteaux, commentarii cistercienses*, 47, 1996, p. 231-245.

[16] Among a large number of publications these are the most important: Paul CROSSLEY, *Gothic Architecture in the Reign of Kazimir the Great. Church Architecture in Lesser Poland 1320-1380* (Biblioteka Wawelska, 7), Kraków, 1985; Paul CROSSLEY, "Kraków Cathedral and the Formation of a Dynastic Architecture in Southern Central Europe", in *Polish and English Responses to French Art and Architecture. Contrasts and Similarities*. (Papers delivered at the University of London / University of Warsaw History of Art Conference, January and September 1993), ed. Francis AMES-LEWIS, London, 1995, p. 31-45; Paul CROSSLEY, "Bohemia Sacra and Polonia Sacra. Liturgy and History in Prague and Kraków Cathedrals", in *Folia Historiae Artium (series nova)*, 7, 2001, p. 49-68.

Belfries, Cloth Halls, Hospitals, and Mendicant Churches: A New Urban Architecture in the Low Countries around 1300

Thomas Coomans [1]

The view we have of the architecture in the years around 1300 is retrospective, and therefore our perception of that time is altered by our awareness of what happened later. What was modern then is today considered only a moment on the timeline in a centuries-long evolution. Most importantly, the knowledge we have of the generation of buildings created seven hundred years ago is very fragmentary and depends heavily on survival, on their present state of preservation, and on their dating – which is seldom accurate.

The enormous building activity that took place in the cities of the Low Countries in the fifteenth and sixteenth centuries resulted in a considerable loss of earlier architecture, especially of houses. Nearly all medieval wooden houses have disappeared thanks to the introduction of new fire prevention regulations in building construction in the fourteenth century and new sanitation norms in the nineteenth century.[2] Neither archaeology, which is generally limited to the subject of early medieval urban wooden housing,[3] nor iconographical sources provide us with much information, but one must assume that wooden architecture was predominant in towns around 1300.

In this contribution I would like to focus on the new urban architecture that was developed by a new class of patrons at the end of the thirteenth century. Never before had cities been so wealthy and as populated. A fundamental economic change occurred around 1300 when many towns ceased to hold annual fairs and began to export the products of the surrounding regions directly to a much larger network of consumers.[4] The new merchant elite had a strong sense of their own economic and political power, thanks to the freedoms that cities had gradually acquired from the princes. In this changing society, a new balance had to be found not only between the merchants and the nobility, but also between the church, the new urban religious orders, the lower social classes of craftsmen, the poor, and the sick.

A forgotten generation in the history of architecture

Historians of Gothic architecture in the Low Countries traditionally consider the turn of the fourteenth century as a period of transition between two great periods of economic growth.[5] The first period spanned the first generations of Early and High Gothic architecture, which was directly influenced by the nearby centres of the Île de France, Oise, and Picardie, and culminated in the building of the cathedrals of Liège, Cambrai, and Tournai in the first three quarters of the thirteenth century.[6] From the second half of the thirteenth century, Gothic influence also emanated from the workshop of the cathedral of Cologne.

The second period, from the mid-fourteenth century onwards, saw the flourishing of late Gothic architecture in the great merchant cities of the Low Countries and reached a high point in the refined Flamboyant style of the fifteenth and early sixteenth centuries.[7] Belgian architectural historians were so proud of their late medieval masterpieces that they defined a style and an architectural school and called it Brabantine

Gothic (*gothique brabançon*), after the duchy where the style was prevalent. In the first instance, this style was based on the use of local materials and the art of local architects and craftsmen, and it spread quickly and widely to other parts of the Low Countries.[8]

Because of the importance of this style for the Low Countries, traditional architectural history focused on the question of the origin of Brabantine Gothic at the turn of the fourteenth century. Were its roots French, German, or local? Obviously, after two world wars, that question was a very emotional one, and it was strongly influenced by ideas of national identity. The view historians took of the generation of the year 1300 was clearly retrospective, but their definition of a "Brabantine Gothic School" has only recently been questioned.[9] In other regions such as Hainaut, Zeeland, Holland, Utrecht, and Liège, only a small number of buildings or parts of buildings dating from around 1300 have been preserved.[10]

While German masters from Cologne are recorded in Utrecht and Kampen, two of the most important workshops of the northern Low Countries during the second half of the fourteenth century,[11] the masters active at the same time in the southern Low Countries seem to have been mostly French.[12] A medieval transcription of a lost dedication stone mentions that Master Pierre of Savoye began the construction of the choir of the church of St Sulpice in Diest in the year 1321.[13] The design of this choir with ambulatory and radiating chapels is quite unusual.[14] Architectural historians have defined the style of Pierre de Savoye as Burgundian and therefore attributed a Burgundian origin to the Brabantine School which developed from the 1340s onwards.[15] The name of another French architect is known from a dedication stone in the church of Our Lady in Aarschot: Iacob Piccart (from Picardie) who laid the foundations for the new choir in 1337.[16] One generation later, shortly after 1350, the names of local master masons are known from several important workshops, like Jan of Osy (from Oisy near Valenciennes in Hainaut) in Tirlemont and Malines, and Adam Gheerijs, the master mason of the Duke of Brabant.[17]

The workshop of the cathedral of Utrecht around 1300

The cathedral of Utrecht, which housed one of the most important workshops in the Low Countries around 1300, underwent successive changes in architectural design.[18] After a fire in 1253, a new cathedral was built starting with the radiating chapels, according to a design similar to that of the chapels of the cathedral of Tournai. From around 1300 to 1317, the aisles of the choir were built on the basis of a changed plan, which is linked to Master Johannes, the new architect of the cathedral of Cologne. In the meantime, another change occurred at the west end of the church. In 1321 the bishop decided to construct a huge freestanding tower in front of the Romanesque western facade. It is crowned by a 112 m high lantern and was built in no less than sixty-one years.

However, the most important changes in the context of this paper occurred in the early fourteenth century. Around 1300, a radical change occurred in the profile of the sanctuary piers. Instead of round shafts, keeled and filleted mouldings now appeared, accompanied by the suppression of capitals at the springing point of the arches.[19] One pier shows the transition between the two systems. The change in moulding profiles was combined with a slight enlargement of the choir.

The tower, started in 1321, is built like a belfry and represents the secular power of the bishop, who was also the landlord of extensive territories called the *Sticht* and the *Oversticht*.[20] The lower two levels consist of a passageway through the tower and a chapel on the first floor. The use of superimposed colossal arches instead of buttresses in the corners is borrowed from military building techniques and gives it a powerful, Roman appearance (Fig. 1). The lower storeys of tower are built in brick except for the quoins and the gate, which are in stone.

The layout of both the upper levels of the tower and of the unfinished choir and transept were changed again in the 1340s. The splendid lantern of the tower was completed only in 1382 and the clerestory of the choir in the 1380s.[21] Even in the middle of the fifteenth century when work on the cathedral re-started, the nave of the Romanesque cathedral was surviving

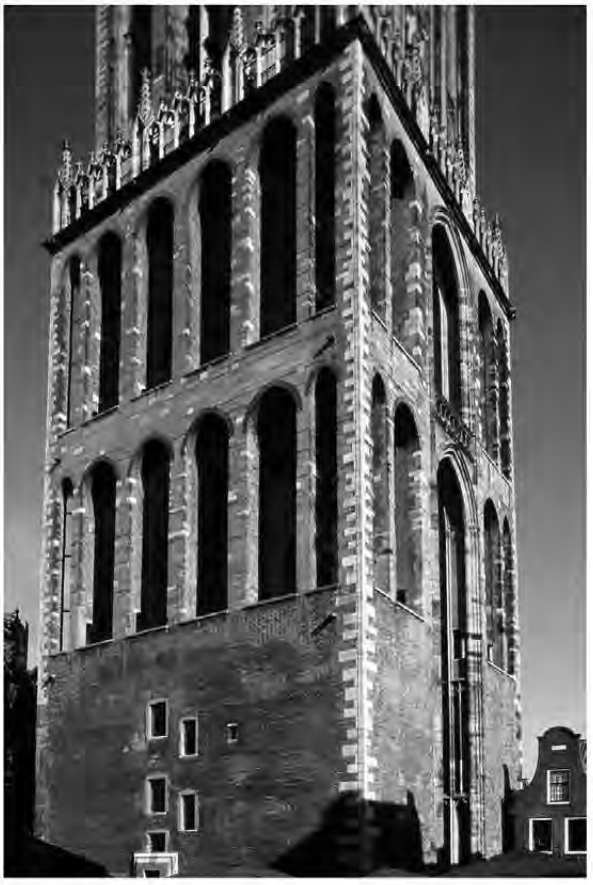


Fig. 1. Tower of Utrecht Cathedral: lower levels from the north-west (THOC, June 2005).

between the two Gothic extremities. Construction finally reached the tower in 1515.

The new ambitions of princes

There was no central power in the Low Countries before the fifteenth century and the advent of the rule of the dukes of Burgundy.[22] Around 1300, the principalities on the borders of the Kingdom of France and the German Empire were at the crossroads of the political ambitions and economic interests of the leading states of continental Europe. After more than a century of political balance, the years around 1300 witnessed a series of important geopolitical changes, resulting from wars and battles, alliances, and marriages. It is worth noting that several reference works on the history of the Low Countries consider the turn of the fourteenth century as a key moment and use it as a break between different volumes of the series.[23] The battle of the Golden Spurs in 1302, when Flemish citizens defeated the leading knighthood of France, is also considered a milestone in Flanders' history.[24]

One of the principal changes of this period occurred in 1288 when John I, Duke of Brabant, annexed the County of Limbourg after the battle of Woeringen against the Count of Gueldre and the archbishop of Cologne. In 1289, after a long war, the count of Holland had succeeded in conquering the western part of Friesland. From 1299, the counts of Hainaut of the Avesnes family also ruled the counties of Holland and Zeeland. The family of Avesnes, the new dynasty of the counts of Hainaut from 1280, descended from the first marriage of Marguerite of Flanders. The children of Marguerite's second marriage with William of Dampierre founded the new dynasty of the Counts of Flanders, who at that time also had acquired the county of Namur. Between 1297 and 1314 the king of France, Philip IV the Fair attacked Flanders and tried to annex the lands of his economically most powerful vassal to his crown domains. This war, in which England was indirectly involved – and that prefigured the alliance between Flanders and England during the Hundred Years War – ended only in 1314 and caused the loss of Walloon Flanders (Lille, Douai, Orchies).[25] Count Henry VII of Luxembourg was crowned Roman Emperor in 1308 and his son, the famous John the Blind, count of Luxembourg, became king of Bohemia. Finally, the bishops of Utrecht, Liège, Tournai, and Cambrai were lords and also had secular power.

In short, the princes of the Low Countries had great ambitions for territorial expansion and acquired an international influence broader than ever before. In this changing political landscape, the cities played a crucial role. They provided troops and financed military campaigns in exchange for more liberty and rights. The princes developed new political links with the urban elites, but economic crises pushed the craftsmen and the poor to revolts and "democratic" revolutions in the first half of the fourteenth century, notably in Ypres, Ghent, Bruges, Liège, and Brabant.

The court buildings of the period in question are lost, except one that brilliantly expresses the new ambitions of a prince of that generation. Floris V, count of Holland from 1256 to 1296, built a new *aula* in The Hague (Fig. 2). This extraordinary building, with

Fig. 2. Great Aula of Floris V in The Hague: western facade (THOC, April 2000).

an inner surface of about 630 square meters (c. 37 m. x c. 17 m), and an obviously royal "allure", still stands today in the middle of the Dutch parliament building complex (Fig. 9). Floris's father, William II, had been king of the Romans. Two of Floris's children were married to children of Edward I of England, and Floris himself was one of the claimants to the throne of Scotland in 1290. He withdrew his claim in 1292 in favour of John Baillol, after having received considerable financial compensation. He invested that money in the building of the *aula palatii* of The Hague – known as the *Ridderzaal* – which was intended to express his own royal status: he was the equal of kings. The hall was inaugurated in 1295,[26] but Floris was murdered one year later when he broke his alliance with the king of England and joined the camp of Philip the Fair.

Professor Aart Mekking has interpreted this large building as a combination of an *aula* referring to Westminster Hall, and a magnificent façade (*Schauseite*), which includes elements from religious buildings such as the rose-window, and the general silhouette made of gable flanked by two small towers, characteristic of the western front of the cathedral of Salisbury.[27] This original concept was implemented in brick and timber according to Flemish building techniques. The most remarkable element, as we will see later, is the decoration of the gable with moulded bricks, which, at the end of the thirteenth century, were an innovation.

A totally different kind of political act, in the context of the above mentioned war between Flanders and France (1297-1314), was the construction of a royal castle (*koninklijke dwangburcht*) by Philip the Fair in the heart of the city of Courtrai. This fortress is partially known from the excavations that have been carried out since 1990.[28] The castle had a typical polygonal layout and a surface of about 8500 square meters (circa 85m x circa 100m) with round towers at each corner. French military engineers built it in a very short time, between 1300 and 1302, by using mainly bricks of one format. The location on the bank of the river Lys and in the middle of the comital quarter was both strategic and symbolic. Not only was the new castle facing the old moat of the counts of Flanders, but a polygonal fortified advanced-work that included the collegiate church of Our Lady led into it and thus isolated this comital foundation from the rest of the town. Unfortunately, the castle was dismantled as soon as the French troops left the city and was completely destroyed before the end of the fourteenth century.

Belfries and cloth halls as symbols of new urban autonomy and power

Besides bishops, canons, and princes, the new patrons also came from the merchant class and the new urban religious orders. The cities of Flanders and Brabant were the first to develop a cloth industry and to import wool on a massive scale from England and Scotland.[29] Their financial power and the autonomy they acquired from the princes in exchange for supporting their ambitions led to prestigious urban architectural projects. The question of the city walls is not discussed here because work on these was continuous. Around 1300, most towns in the Low Countries had stone or brick walls, in some cases dating back well into the twelfth century. In the most populated towns, new

walls were built around some suburbs, as in Ypres from 1303 to 1325/1328,[30] but it was only from the end of the fourteenth century onwards that the largest towns would build a complete second wall. Around 1300, the cities also erected new buildings on the main market places such as belfries (*belfort*), aldermen houses (*schepenhuis*), and cloth halls (*lakenhal*).

In Flanders, the power and liberty of the cities was given expression in towers called belfries, in which the seal, keys, and the city's charter of privileges were kept.[31] In the belfry hung the city's bell or tocsin, which was rung for the opening of the city gates and for all kinds of alarms (fire, troubles, attack, etc.). The battlements that topped the towers and walls did not have any military role but were symbols of vigilance and guardianship. The belfry of Tournai is considered to be the oldest one.[32] The lower levels were built soon after Philippe Auguste had given the city its liberty in 1180, but the original tower was reinforced in 1294 and heightened in 1396. Situated less than 100m from the cathedral, it expressed the city's independece from the bishop.

The belfry of Ghent, which originally was a free-standing tower, was erected from around 1300 to 1376. An exceptional early fourteenth-century drawing on parchment (2,25m high) survives which shows an unrealised project with different proportions, Rayonnant traceries, decorations, and a complete programme for painting the outer walls consisting of false joints imitating regular masonry and a frieze with figurative wall paintings.[33] The present upper level and the spire of the belfry date from the World Exhibition of Ghent in 1913 and replace a previous spire of the early 1850s. A cloth hall was added on the eastern side of the belfry in the fifteenth century.

In other cities belfries were planned in combination with cloth halls. The most remarkable hall complex with a belfry can be found in Ypres.[34] It was reconstructed after having been almost totally destroyed during the First World War (Fig. 3). Construction of the eastern wing of the hall was started around 1260. Work on the western and back wings progressed in 1286. The whole complex was completed in 1304, but we know from various accounts that the façades were painted in 1330 with white, green, vermilion, and ochre colours enhanced with gold leaf. With a total length

Fig. 3. Cloth hall and belfry in Ypres: south façade facing the market place (THOC, July 1997).

of 133m, the hall of Ypres is considered to be the largest civic building ever built in the Middle Ages. A canal entered the hall at the back, so that small ships could load and unload cargo inside the hall. All the openings at the lower levels led into small shops that connected with the public space of the market place. The stone façades had no sculptural decoration, but the size of the building was emphasised by crenellations on top of the walls and colossal turrets on the corners of the hall and the belfry. Inside, the hall is a succession of huge covered spaces. A ceiling supported by a central row of columns covers the ground level, while the upper floor is spanned by the wooden beam structure of the roof. There are no stone vaults except in the passageway traversing the belfry at ground level (Fig. 9).

The belfry and cloth hall of Bruges are of similar design with two-storied wings, an inner courtyard, and a tower in the middle of the northern wall on the market side.[35] (Fig. 9) A first hall may have been built

around 1240, but we know that an earlier wooden belfry burned out in 1280. Recent tree-ring analysis dated the timber of the western wing after 1268, that of the eastern wing to between 1281 and 1291, and that of the southern wing to between 1270 and 1300.[36] It seems thus that the cloth hall was entirely rebuilt after the fire of 1280 and that the western wing is the most recent. The tower was heightened around 1345 when the present middle part was built, and the upper octagonal storey was added in 1482-1486. These changes prove how important a belfry was for the identity of the city. Clearly, the citizens did not hesitate to "update" the tower's silhouette in order to strengthen its symbolic meaning. In contrast to Ypres, the masonry was essentially made of brick and the outer walls were decorated with brick arches, cantilevers, and crenellations.

On the eastern side of the market place in Bruges was a water hall (*waterhalle*),[37] a longitudinal hall built upon a canal and accessible to small ships from the two short sides. The accounts of the city mention that the water hall was built in 1283-1294 and that shops were added between the buttresses on the market side in the years 1332-1337. The hall, about 95m long and 25m wide, had two levels. The lower level for the ships was divided into two aisles by a row of twelve columns standing in the water and supporting a wooden floor in which there were openings. The upper level of the hall was one huge space covered with a timber structure without any central support. Unfortunately, the water hall was destroyed at the end of the eighteenth century and therefore the unique juxtaposition of the water hall, the cloth hall, and the belfry on the market place of Bruges, which contributed to the economic and visual power of the medieval city, is lost.

Thanks to two dedication stones on the outer wall of the cloth hall of Louvain, we know that its construction began in 1317 and was led by the masters Jean Stevens, Arnould Hore, and Godefroid Raes.[38] The hall, which was badly damaged in 1914, is divided into two aisles by a row of columns supporting round arches (Fig. 9) and has a surface of about 1280 square meters (21m x 61m). The walls are made of local sandstone and are decorated with delicately carved niches and elongated figures, which are typical of early fourteenth-century sculpture in Brabant. Originally, small doors opened to the street on the four sides of the building, as in Bruges and Ypres. The *Lakenhuys* of Diest, dated 1346 by a dedication stone, is of the same type as that of Louvain, with a central row of columns and round arches supporting a wooden floor. Other cloth halls of the first half of the fourteenth century are partially conserved in Brabant and Flanders, such as the cloth hall of Malines, enlarged in 1311-1326,[39] the hall of Léau (Zoutleeuw), built after 1316, the cloth hall of Dendermonde, built in 1337 and flanked with a belfry in 1377, the single aisled cloth hall of Audenarde, which is not yet accurately dated, and the hall, now demolished, that stood next to the belfry in the middle of the market place in Courtrai.

No town halls of the generation of 1300 have survived in the Low Countries. Most of them were built or rebuilt in the more prosperous fifteenth and sixteenth centuries, but some include early fourteenth-century walls and cellars. Such remains are to be found in the town hall of Goes in Zeeland, Delft in Holland (a tower and prison of the count), and Utrecht, as well as in the town halls of the Hanseatic cities of Deventer, Zutphen, Kampen, and Zwolle, all four situated along the Ijssel river.

Hospitals

By the end of the twelfth century, merchant families had founded hospitals and separate leper-houses on the outskirts of all the important cities; half a century later, hospitals could be found within the walls of all the major towns.[40] Religious communities of women served the hospitals from their foundation, in accordance with the statutes of their institutions, almost always based on the rule of St Augustine. These specialised hospital communities were part of new socio-religious developments in the cities. In the following centuries, smaller institutions for old people, orphans, lepers, etc. were founded besides hospitals.

Hospitals and cloth halls, two of the new types of buildings in the growing merchant town, had similar functional layouts, they were also built with brick and timber, and they were sponsored by the same patrons. Medieval hospital buildings rarely survive, but four hospitals of the second half of the thirteenth century are preserved in Flanders. They are mentioned in all the histories of hospital architecture but, until now,

Fig. 4. St John's Hospital in Bruges: sick ward from the north (Stedelijke musea Brugge, André Deblieck, 1975).

they have been inaccurately dated.[41] Recent tree-ring analysis, that allows us to pinpoint building dates more precisely, shows that the main halls of the four hospitals belong to the period considered here.[42] The oldest, and also one of the finest medieval examples of European hospital architecture, is the great hall of the Bijloke Hospital in Ghent.[43] It occupies a space of 867 square meters (55.10m x 15.75m) and is the main building of a complex that includes a chapel and more halls, added at a later date. Tree-ring analysis has dated the unique trefoiled timberwork to the years 1251-1255.[44]

Another major example of medieval hospital architecture is St John's Hospital in Bruges. It was founded in the middle of the twelfth century and its sick ward was successively enlarged.[45] Segments were added over the next two centuries until the chapel occupied only one corner of an open space of about 1500 square meters (Fig. 9). The central vessel is tree-ring dated to between 1226 and 1241, the northern aisle with the chapel and the tower to about 1268, and the large southern aisle to about 1285.[46] The hospital is a functional building made of brick and timber and has no decoration at all. The tall windows generously illuminate the ward on the eastern and southern sides, in accordance with the theories of Galen and Hippocrates. The latrine blocks are situated on the canal side. Like the cloth halls, St John's Hospital is divided into two storeys. On the ground-floor, rows of columns and posts divide the ward into five aisles, added in diffirent campaigns (Fig. 4). The wooden posts belong to the late thirteenth-century extension phase. On the upper level, which was later used by the hospital used as a dormitory, each nave is covered with a separate saddle roof.

Two smaller hospital buildings of the last quarter of the thirteenth century survive in Flanders. The Poterie Hospital in Bruges,[47] built on the opposite side of the city from St John's Hospital, has a nave consisting of two parallel aisles and a chapel but no first-floor. Recent tree-ring analysis has dated the timber of the

Fig. 5. Church of Our Lady in Damme: hall choir from the south-east (Nels postcards, around 1950).

main ward to the years 1276-1296. In St John's Hospital in Damme,[48] the sick ward on the ground floor was covered with a ceiling supported by a central row of columns, while the upper floor housed the dormitory of the hospital sisters. The timber was also recently dated by tree-ring analysis to the years 1270-1285.

The first hall churches

It is not surprising that some urban churches adopted similar hall structures when they had to be rapidly enlarged to accommodate the growing number of churchgoers. The building phases of the church of Our Lady in Damme show how the idea of the hall was gradually applied to church construction during the second half of the thirteenth century.[49] Originally, the church, built during the second quarter of the thirteenth century, was composed of a western tower, an aisled basilican nave of two bays, a large transept, and a choir of two bays with an apse. The first enlargement took place during the second half of the thirteenth century, and consisted of flanking the existing choir with two chapels as high and deep as the choir itself and as wide as the transept. The chapels were open to the sanctuary and illuminated by large windows in the side walls, thus creating the first "hall choir" (Fig. 9). The second enlargement occurred in the early years of the fourteenth century and consisted of extending the hall choir by adding three new bays to the east (Fig. 5). In its final configuration, the hall choir, seven bays long and entirely built of bricks, was covered with three parallel wooden barrel vaults resting on two rows of columns and arches. Only the central vessel of the choir has a polygonal apse while the two side vessels end with a straight eastern wall. When Damme was reduced to a village, the nave was abandoned and, in the eighteenth century, it fell into ruins.

A similar process of enlarging a choir with tall side chapels had already taken place in the church of St Brice in Tournai around 1225; later, in the early fifteenth century, this hall choir was lengthened by adding two more bays.[50] The choir of St. Walburgh in Audenarde is another example of an early hall structure created before the end of the thirteenth century by flanking the choir with chapels of the same height as the choir itself.[51]

Thus, the Flemish hall church was first conceived during the process of enlarging older buildings. However, shortly before 1300, the hall type structure was adopted for new churches from the start of the construction, because it was spacious and bright. It was also economical, not only because of the use of brick and timber – the cheapest building materials in areas without stone quarries – but also because it was a simple, standardised structure that did not require brick vaulting. Amongst the earliest three-vessel hall structures are the nave of Our Lady in Poperinge (from 1290), the nave and the choir of the St Martin in Courtrai, and the choir of Our Lady in Nieuwpoort (early fourteenth century).[52] Brick and timber hall churches flourished from the middle of the fourteenth century until the early sixteenth century in the coastal areas, from French Flanders to Zeeland, Holland, and Friesland,[53] as well as in other parts of the Low Countries such as Hainaut, Gueldre, and Utrecht. Nonetheless, many of the major churches in the cities of the Low Countries were originally basilican structures that have subsequently been enlarged and converted into hall-churches.[54]

The churches of the mendicants

In the thirteenth century, urban society attracted new religious orders, such as the mendicant orders of the Dominicans, Franciscans, Augustinians collegiate and Carmelites. In the Low Countries, as many as seventy male convents of mendicants were founded between the 1220s and 1330. Around 1300 the four mendicant orders had houses in Bruges, Ghent, Ypres, Haarlem, and Liège.[55] Because of the opposition of the collegiate chapters and the parish churches, who considered the friars as rivals, establishing mendicant houses inside the towns was often a complex process.

Fig. 6. Church of the Dominicans in Ghent: southern wall before 1860 (KULeuven-KADOC, Archief Sint-Lukas Gent).

The mendicants developed new types of churches in accordance with their apostolate and their distinct identity.[56] One of the most remarkable mendicant churches in the Low Countries was the church of the Dominicans in Ghent, built between about 1260 and 1290, but unfortunately demolished in 1860.[57] It was a huge single aisled hall, on a rectangular plan with an area of about 1224 square meters (51m x 24m), and it was perfectly integrated into the urban structures of the city centre (Fig. 9). The wooden barrel vault was 29 meters high and had a span of 16 meters. The buttresses were drawn inside the church and strengthened with arches above the high windows. Thus, the outer walls were completely flat and opened up with large tracery windows under the gables (Fig. 6). The modernity of this church was remarkable: no apse, no transept, no aisles, no tower, no architectural distinction between choir and nave, just a brightly lit, unified space, destined for worship, devotion, and preaching.

Nevertheless, most of the mendicant churches built during the second half of the thirteenth century adopted a different layout, consisting of a basilican nave and a choir ultimately derived from the Sainte-Chapelle in Paris. The choir of the Dominican church in Louvain was built on the site of the palace of the dukes of Brabant, as a burial church for duke Henri III who died in 1261. The splendid 7/12 apse with explicit royal references introduced a totally new architecture to Louvain, radically breaking with existing types of church architecture.[58] The nave was built during the first half of the fourteenth century according to a much more modest design, since the dukes had moved their capital to Brussels and no longer supported the institution. This part of the church, designed for preaching, has a reduced clerestory and is covered with a wooden barrel vault.

The Franciscan church of Maastricht was also built in two phases.[59] Here, the reference to the *Minoritenkirche* of Cologne, the capital of the Franciscan province, is clearly evident. The choir with its beautiful apse consisting of five sides of a decsgon (5/10) and a semi-quadripartite straight bay was built around 1305, while the western part of the church dates from the 1390s. Like most of the mendicant churches of its generation, the Franciscan church of Maastricht has neither a transept, nor a tower, nor decorated portals. In comparison with the church of Louvain, the differences are in the building materials – always local but without any real effect on the architectural concept – and the traceries. The traceries at Maastricht are more Rayonnant and they cover the whole of the triforium zone, which, in that way, is integrated with the clerestory and gives the general impression of a two-storey elevation. Unfortunately, we have no indication how and in what colour the walls were painted, unlike the Dominican church in the same town. That church was also built in two main phases: first the choir was built between 1276 and 1277, dated by tree-ring analysis, and dedicated in 1294; later the four western bays of the nave were roofed with wood that was cut in the years 1392-1437. Architectural comparisons and chronological parallels reveal evidence of competition between the two mendicant orders, and it is clear that for each community the singularity of their church was part of their identity.[60]

The Dominican church in Zutphen (Gueldre) was built in the early fourteenth century. The date is known from an archival mention of toll-exemptions for the transport of building materials on the Rhine, dated 1306.[61] The plan and the basilican elevation of the church are similar to the mendicant churches of Maastricht and Louvain. The main difference is the use of brick as a building material, which is also used for the vaults and the flying buttresses. The decoration is limited to blind brick traceries at triforium level and at the top of the main gable. The only sculpted elements are the roughly carved capitals of the nave, and the corbels of the choir. The mendicant aesthetic generally favoured proportion and light over architectural ornament and certainly over figurative decorations.

When churches became too small, their naves were sometimes lengthened. In other cases new side aisles were added to the existing nave, resulting in hall structures similar to hospital wards.[62]. The timber of the Carmelite church of Ghent has been accurately dated by tree-ring analysis, and reveals an interesting sequence of campaigns to enlarge the church, extending into the early sixteenth century.[63] This phenomenon was common in Flanders, Holland, and Zeeland. The Carmelite church of Ghent has a fine brick decoration on its western gable, which belongs to the first phase of about 1325.

Beguinages

Each town of the Low Countries had one or several Beguinages.[64] Beguines were semi-religious women living a communal life, a hitherto unknown type of community. The origin of the movement goes back to the first years of the thirteenth century, and to the bishopric of Liège, and it climaxed in the years 1240-1280. The Church hierarchy controlled this womens movement by asking the Dominican and Franciscan friars to be its spiritual directors and by requesting the cities to build enclosed quarters for the communities, generally outside the city walls. In the early years of the movement, Beguines often worked in hospitals; later they were more strictly enclosed. In 1311, the council of Vienne, accused the Beguines of heresy and submitted them to the Inquisition. That was to be fatal for the Beguine movement, except in the Low Countries where the bishops protected them.

A small number of medieval Beguinage churches survive in the Low Countries. The most representative is the church of St John the Baptist in the Beguinage of Louvain. We know from a dedication stone that construction started in 1305.[65] The plan of the church consists of a rectangular area of 1566 square meters (54m x 29m), divided by two rows of ten columns into a central vessel flanked by two low aisles (Fig. 9). This rectangular plan is so simple that it could be that of a hospital or a barn; nevertheless, a huge window with Rayonnant tracery illuminates the choir and immediately identifies the building as a church (Fig. 7). The church was built in two main phases: first, from 1305, the seven eastern bays; later, in 1421-1444, the three western bays were added. Brick vaults were erected in the seventeenth century and the interior was re-furnished in the Baroque style. But above the vaults, the original wooden structure of the roof is still preserved, and reveals that the original space was much higher. This simple structure was similar to that of the nave of the Dominicans in Louvain, which also dates from the first decades of the fourteenth century.[66]

Three other churches of Beguinages in the diocese of Liège constitute a homogenous group of small and "poor" churches, with timber vaulting recently dated by tree-ring analysis.[67] The church of St Catherine in the Beguinage of Tongres was built from 1263 to 1281, and side chapels were added to the first bay of the nave in 1291-1305, forming a transept. The basilican nave of St Catherine's church in the Beguinage of Diest dates from the years 1284-1304, while the transept and the choir were built between 1321 and 1345. The church of St Agnes in the Beguinage of St Trond has a complex building history, with one of the phases (the heightening of the choir) dating to around 1300. The ruined church of Our Lady of the Beguinage of Tirlemont also has a choir from the early fourteenth century.

In short, the churches of the Beguines adopted a very simple layout, timber vaulting and eschewed architectural decoration. The columns are cylindrical and smooth, the mouldings are limited, and the capitals minimal, as in a cloth hall or a hospital ward. Around 1300, the churches of the Beguines, more than those of the Mendicant friars, expressed a sense of humility and poverty that was both religious and apostolic, and was inspired by the life of the first Christian communities as described in the Acts of the Apostles.[68]

Fig. 7. Beguinage church in Louvain: chevet from the south-east (THOC, July 2003).

For its adherents this ideal implied a clearly identifiable code of behaviour that expressed itself in the communal life, the financial precariousness of the institutions (begging), the dress (habits of rough cloth), the food (vegetarianism), etc., but also in distinct architectural and aesthetic choices.

The spread of brick architecture

Most buildings we have so far considered were built in brick, including the hall of Floris V in The Hague, the castle of Philip the Fair in Courtrai, the cloth hall and St John's Hospital in Bruges, the tower of the cathedral of Utrecht, the hall church and the hospital ward in Damme, etc. Shaped into moulded and standardised elements, brick became the ideal material for the increasing building activities in the most urbanised parts of the Low Countries.

Brick had been introduced in the Low Countries at the end of the twelfth century and its use spread quickly into the growing urban areas. Flanders, Zeeland, Holland, Utrecht, and Friesland, the coastal regions, had no stone quarries and very limited resources of wood, but were rich in good clay for brick and tile production.[69] The use of stone, which was expensive because it had to be imported, was limited to carved decorative elements and outer facings in exceptional buildings. In Brabant, local stone was combined with brick from the end of the thirteenth century. The area south of Antwerp, which was rich in good clay, also produced brick on a huge scale. Thus, at the end of the thirteenth century, brick production had become a real industry and brick was exported particularly to England. "Most of the bricks used in England before the second quarter of the fourteenth century seem to have been imported from the Low Countries. Enormous quantities of Flemish bricks were used at the Tower [of London] in 1278 (...). During the whole of the fourteenth century, Flemish tiles figure among the imports of the eastern ports".[70]

However, from around 1300, the brick moulds were reduced in size, both because small bricks could be made more quickly and cheaply, and because small bricks were less likely to burst or warp in the high temperatures reached in the big brick kilns.[71] Smaller bricks were also easier to transport and to manipulate in the workshop. This significant change of size – from c. 32/35 x 15,5/17 x 9/11cm (the *kloostermop*) to circa 28 x 13 x 6cm – allowed the masons to work in a new way: from then on they were able to hold a brick in one hand and a trowel in the other, and thus work more quickly. Another consequence was a change in the masonry's bond: the "Flemish bond" or "Gothic bond" (each layer consisting of an alternation of stretchers and headers) was abandoned in the early fourteenth century for the "English bond" (one layer of headers alternating with one layer of stretchers).

From the fourth quarter of the thirteenth century, brick production had assimilated decorative forms of the Rayonnant style and a variety of bricks with elaborate profiles were developed. This evolution was widespread and also occurred in Denmark, Northern Germany, and Poland, the other brick areas of Northern Europe.[72] In the Netherlands, the prestigious main front of the hall of Floris V in The Hague, which was inaugurated in 1295, with its large trefoil niche, its blind tracery and its quatrefoiled oculus (Fig. 2), became a model for several other buildings, including the tower of the Cistercian convent of Loosduinen (around 1300), the upper part of the tower of the St Jeroen church in Noordwijk (circa 1303), and the right chevet of the church in Abbebroek (circa 1300). It is not impossible that the use of these decorative motifs was considered an indication of comital identity.[73]

The refectory wing of the Cistercian convent of Bijloke in Ghent, built in the 1320s, is one of the most refined buildings of its generation and a masterpiece of brick architecture (Fig. 8).[74] The convent was linked to a hospital and was patronised by the counts of Flanders as well as by the city's merchant families. The architecture and the decoration of the refectory demonstrate that not all the urban religious communities adopted the same "poor" architectural aesthetic which was prevalent among the mendicants and the Beguines, and that architecture was intended to reflect the prestige, social standing, and complex political links of the communities. The refectory occupies the first floor above the kitchen and the cellars. The room is illuminated from three sides and is covered with a high, wooden barrel vault. Some elements of the polychromy and a painted Last Supper are original. But the most extraordinary aspect of the convent is the complex geometric decoration of the western gable, which was made of moulded bricks. The refectory of Bijloke, built thirty years after the great *aula* of The Hague, is a building of the very end of the generation of the year 1300.

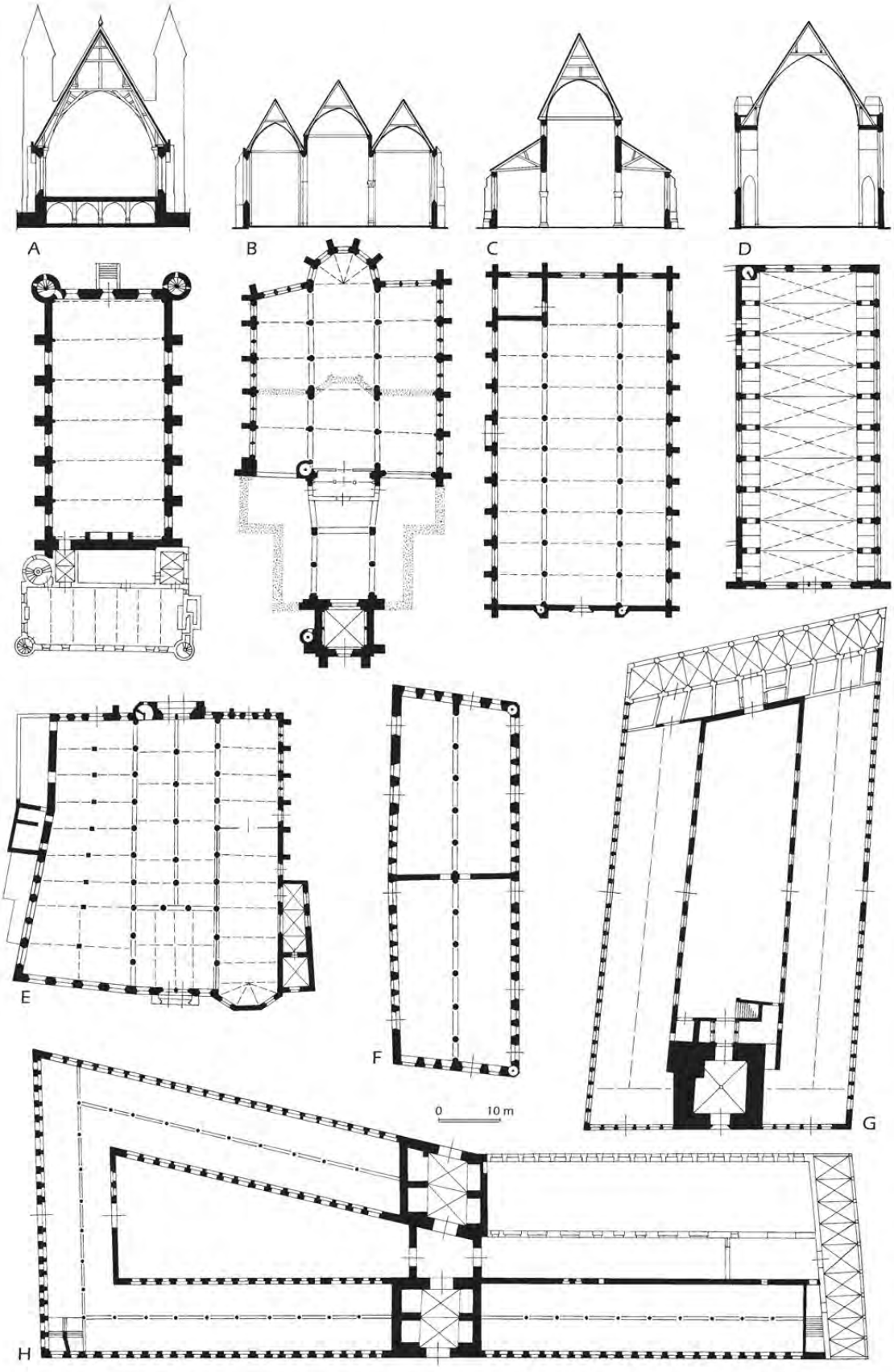
Space as an expression of power

Clearly, around the year 1300, Flanders and its rich cities had a leading position in the Low Countries and constituted one of the most dynamic areas in Europe. Flanders aroused the interest of Philip the Fair, who nevertheless did not succeed in annexing the county. At the Battle of the Golden Spurs in 1302, Flemish citizens defeated the flower of he French chivalry. Henceforth, the princes had to deal with the new class of merchants, who themselves had to maintain their authority over the working-class and the poor. Religious orders developed a new apostolic mission and worked for social peace. One can imagine how attractive such cities were for all kinds of people, and how complex the social problems were. Never before had cities been as large and as densely populated. Major social upheavals, resulting from industrial changes in the textile trade,[75] were common from the late thirteenth century onwards, as for example the "democratic revolts" in Ypres, Bruges, Ghent, Liège, and several towns in Brabant.[76]

The rationalisation of building techniques and the massive use of brick combined with carpentry made it possible to build quickly and to erect huge halls with different functions, whether for trade, worship, or health care (Fig. 9). Great halls in palatial complexes, like that of Floris V in The Hague, expressed the power of kings and princes. In the urban context, spacious halls were linked with another kind of power, of which the combination of a belfry and a cloth hall is the best architectural expression. The tower, a symbol of liberty, together with the hall, a covered space for exhibiting and selling the city's best products throughout the whole year, made the hall the vital heart of the merchant town.

Public architecture always materializes the needs and ideals of a growing urban society at a precise moment in its expansion. The architecture around the year 1300 developed a functional diversity and opened Gothic architecture to new formal systems. Belfries and cloth halls, as well as hospitals and mendicant churches are the most emblematic buildings of the Gothic town in the Low Countries before the onset of the Black Death.

Fig. 8. Bijloke nunnery in Ghent: western gable of the refectory wing (Vlaams Instituut voor Onroerend Erfgoed, Oswald Pauwels, 1997).


A
B
C
D
E
F
G
H
0 10 m

NOTES

[1] It is a pleasure for me to express my gratitude to Paul Crossley, Zoë Opačić, Alexandra Gajewski, Aart Mekking, Wim Blockmans, Patrick Hoffsummer, Jerôme Eeckhout, Dirk Van Eenhooge, Dirk Jan de Vries, Karel Emmens, Vincent Debonne, Anna Bergmans, Maria Kelly, Marie Christine Laleman and Véronique Cardon for their interest and assistance in the course of my research.

[2] The oldest known building regulation in the Low Countries concerned the covering of roofs in the town of Aardenburg and dates from 1232. Willy P. DEZUTTER & Marc J. RYCKAERT, "Een stedelijk bouwvoorschrift uit 1232 tegen brandgevaar (Aardenburg en Brugge)", in Willy P. DEZUTTER & M. GOETINCK (ed.), *Op en om de bouwwerf. Ambachtswezen, oud gereedschap*, Bruges, 1975, p. 59-67.

[3] With some exceptions: A.L.J. VAN DE WALLE, "Excavations in the Ancient Centre of Antwerp", in *Medieval Archaeology*, 1961, 5, p. 123-136; Marie Christine LALEMAN & Patrick RAVESCHOT, *Inleiding tot de studie van de woonhuizen in Gent. Periode 1100-1300. De kelders* (Verhandelingen van de Koninklijke Academie voor wetenschappen, letteren en schone kunsten van België), Brussels, 1991; Marc DEWILDE & Stephan VAN BELLINGEN, "Excavating a Suburb of Medieval Ypres (Belgium). Evidence for the Cloth Industry?", in Marc DEWILDE, Anton ERVYNCK & Alexis WIELEMANS (ed.), *Ypres and the Medieval Cloth Industry in Flanders. Archaeological and Historical Contributions* (Archeologie in Vlaanderen. Monografie, 2), Asse-Zellik, 1998, p. 57-76.

[4] David NICHOLAS, *Urban Europe, 1100-1700*, Bristol, 2003, p. 26.

[5] The most recent works on Gothic architecture in Belgium and the Netherlands are: Marjan BUYLE, Thomas COOMANS, Jan ESTHER & Luc Francis GENICOT, *L'architecture gothique en Belgique*, Brussels, 1997; Koos BOSMA, Aart J.J. MEKKING, Koen OTTENHEYM & Auke VAN DER WOUD (ed.), *Bouwen in Nederland 600-2000*, Zwolle, 2007 (p. 106-229). See also earlier publications: Adelbrecht L.J. VAN DE WALLE, *Belgique gothique: architecture, art monumental*, Brussels, 1971; Sybr J. FOCKEMA ANDREA, Engelbert H. TER KUILE & Robert C. HEKKER, *Duizend jaar bouwen in Nederland*, vol. 1, *De bouwkunst van de Middeleeuwen*, Amsterdam, 1957.

[6] There are several contributions in: Benoît VAN DEN BOSSCHE (ed.), *La cathédrale gothique Saint-Lambert à Liège: une église et son contexte. Actes du colloque international tenu du 16 au 18 avril 2002* (Études et recherches archéologiques de l'Université de Liège, 108), Liège, 2005; see, amongst others, Jeroen WESTERMAN, "Cathédrales aux confins du Royaume et de l'Empire: les églises-mères de Tournai, Cambrai et Liège", in *ibidem*, p. 129-137. Also: Thomas COOMANS & Luc F. GENICOT, "L'architecture religieuse: le XIII[e] siècle", in BUYLE, COOMANS, ESTHER & GENICOT, *L'architecture gothique en Belgique*, p. 33-46.

[7] Thomas COOMANS, "L'architecture", in Christian HECK (ed.), *L'art flamand et hollandais. Le siècle des Primitifs, 1380-1520* (L'art et les grandes cités), Paris, 2003, p. 7-120 and 541-591; Peter KURMANN, "Architektur der Spätgotik in Frankreich und den Niederlanden", in Rolf TOMAN (ed.), *Die Kunst der Gotik. Architektur, Skulptur, Malerei*, Cologne, 1998, p. 156-187.

[8] Raymond M. LEMAIRE, "L'architecture gothique", in Paul FIERENS (ed.), *L'art en Belgique du Moyen Âge à nos jours*, 4th ed., vol. 1, Brussels, 1957, p. 67-100; Herman JANSE, Rudolf MEISCHKE, Johannes H. VAN MOSSELVELD & Frieda VAN TYGHEM, *Keldermans. Een architectonisch netwerk in de Nederlanden*, 's-Gravenhage, 1987.

[9] Discussed in: Thomas COOMANS, "'Brabantse gotiek' of 'Gotiek in Brabant'? Ontstaan van een architectuurschool, status quaestionis en onderzoeksperspectieven", in *La Ville Brabançonne. Treizième colloque, Louvain 18-19 octobre 2002*, a special issue of *Bijdragen tot de Geschiedenis*, University of Antwerp, 86/3-4, 2003, p. 241-271.

[10] Elizabeth DEN HARTOG, "*Op dat eynde van onsen lande*. Kerkelijke architectuur in Holland en Zeeland ten tijde van de Henegouwse graven", in Dick E.H. DEN BOER, Erich H.P. CORDFUNKE & Herbert SARFATIJ (ed.), *1299: één graaf, drie graafschappen. De vereniging van Holland, Zeeland en Henegouwen*, Hilversum, 2000, p. 163-181; Simon BRIGODE, *L'architecture religieuse dans le sud-ouest de la Belgique, 1. Des origines à la fin du XIV[e] siècle*, Brussels, 1950, p. 229-235.

[11] Leo HELTEN, *Kathedralen für Bürger. Die St. Nikolauskirche in Kampen und der Wandel architektonischer Leitbilder städtischer Repräsentation im 14. Jahrhundert* (Clavis kunsthistorische monografieën, 13), Utrecht, 1994.

[12] Except the very hypothetical Westphalian influence at the Sint-Genoveva church of Oplinter around 1300-1310, attributed to a certain Franco of Linter. See: Raymond M. LEMAIRE, *Les origines du style gothique en Brabant: la formation du style gothique brabançon. Les églises de l'ancien quartier de Louvain*, Antwerp, 1949, p. 16 and 188-189.

[13] Jacques HALFLANTS, *De Sint-Sulpitiuskerk te Diest. Kunsthistorische studie*, vol. 1, Diest, 1992, p. 14 and 35-62.

[14] This was similar to the plans for the choirs of Saint-Père-sous-Vézelay (thirteenth century), and for the cathedrals of Séez (c. 1270), Uppsala (c. 1273), and Châlons-sur-Marne (c. 1285), Saint-Ouen in Rouen (c. 1318), and Vendôme (1306). In Diest, only the two first chapels were built, while the three other were left unfinished at the foundation level.

[15] Raymond M. LEMAIRE, *L'architecture gothique*, in FIERENS, *L'art en Belgique*, p. 67-100 (esp. p. 85) (see note 8). A first critic was: Michel DE WAHA, "À propos de l'influence de l'architecture bourguignonne en Brabant: l'église abbatiale de Villers", in *Bulletin de la Commission royale des Monuments et Sites*, 6, 1977, p. 37-63.

Fig. 9. Comparative plans and sections, to scale: A. Great aula of Floris V in The Hague; B. Church of Our Lady in Damme; C. Beguinage church in Louvain; D. Dominican church in Ghent; E. St John's Hospital in Bruges; F. Cloth hall in Louvain; G. Cloth hall and belfry in Bruges; H. Cloth hall and belfry in Ypres; (THOC, 2006).

[16] LEMAIRE, *Les origines du style gothique en Brabant*, p. 86-92 (see note 12).

[17] Thomas COOMANS, "Entre France et Empire: L'architecture dans le duché de Brabant au temps de Jeanne de Brabant et Wenceslas de Luxembourg (1355-1406)", in *Revue de l'Art* (forthcoming).

[18] Edward J. HASLINGHUIS & Cornelis J.A.C. PEETERS, *De Dom van Utrecht* (*De Nederlandse monumenten van geschiedenis en kunst*, 2/1), 's-Gravenhage, 1965, p. 203 (for the exterior), 404-447 (for the towers).

[19] HASLINGHUIS & PEETERS, *De Dom van Utrecht*, p. 227-261 and 316-317 (see note 18); HELTEN, *Kathedralen für Bürger*, p. 101-103 (see note 11).

[20] Aart J.J. MEKKING, *Het spel met toren en kapel. Bouwen pro en contra Bourgondië van Groningen tot Maastricht* (Clavis kleine kunsthistorische monografieën, 12), Zutphen, 1992.

[21] Timber is tree-ring dated 1386.

[22] Wim BLOCKMANS, Walter PREVENIER, Edward PEETERS & Lizabeth FACKELMAN, *The Promised Land: The Low Countries under Burgundian Rule, 1369-1530* (The Middle Ages Series), Philadelphia, 1999.

[23] Henri PIRENNE, *Histoire de la Belgique*, 2nd ed., Brussels, 1902-1908 (uses the beginning of the fourteenth century as a break between volumes 1 and 2); Jan A. VAN HOUTTE, Jan Frederik NIERMEYER, Jacob PRESSER, Jan ROMEIN & Hans VAN WERVEKE (ed.), *Algemene Geschiedenis der Nederlanden*, Utrecht-Antwerp, 1950-1951 (uses the year 1305 – the date of the Treaty of Athis-sur-Orge between France and Flanders– as a break between volumes 2 and 3). In the last version of the general history of the Low Countries, the year 1300 is presented as a key moment for the socio-economic history: *Algemene Geschiedenis der Nederlanden. Middeleeuwen*, vol. 4, Haarlem, 1980, p. 11-134.

[24] Today, the national feast of the Flemish Region on 11 July commemorates the Battle of the Golden Spurs.

[25] Theo LUYKX, *Het grafelijk geslacht Dampierre en zijn strijd tegen Filips de Schone* (Keurreeks van het *Davidsfonds*, 47), Louvain, 1952.

[26] This has recently been confirmed by tree-ring analysis: 1288 ± 6. See Dirk Jan DE VRIES, "Vergelijkend natuurwetenschappelijk dateringsonderzoek", in *Bulletin van de Koninklijke Nederlandse Oudheidkundige Bond*, 99/3, 2000, p. 74-84 (76-77).

[27] Aart J.J. MEKKING, "Die Aula Palatii in Den Haag", in *Zeitschrift für Kunstgeschichte*, 60, 1997, p. 308-333; Aart J.J. MEKKING, "De 'Grote zaal' van Floris V te Den Haag. Een onderzoek naar de betekenis van het concept", in *Holland in wording* (Muidenberg-symposium, 5), Hilversum, 1991, p. 65-90.

[28] See the archaeological reports by Philippe DESPRIET, in *Archeologische en historische monografieën van Zuid-West-Vlaanderen*, 21, 1990, to 45, 2001.

[29] Peter SPUFFORD, *Power and Profit. The Merchant in Medieval Europe*, London, 2002, p. 228-255; John H. MUNRO, *Textiles, Towns and Trade. Essays in the Economic History of Late-Medieval England and the Low Countries*, Aldershot, 1994; Marc BOONE & Walter PREVENIER (ed.), *Drapery Production in the Late Medieval Low Countries: Markets and Strategies for Survival (14th-16th centuries)*, Proceedings of the colloquium of Ghent, 28 April 1992, Louvain-Apeldoorn, 1993; Erik AERTS & John H. MUNRO, *Textiles of the Low Countries in European Economic History. Proceedings of the Tenth International Economic History Congress*, Louvain, 1990; DEWILDE, ERVYNCK & WIELEMANS (ed.), *Ypres and the Medieval Cloth Industry*, 1998 (see note 2).

[30] Octaaf MUS, "L'évolution de la ville d'Ypres depuis l'origine jusqu'à 1400", in DEWILDE, ERVYNCK & WIELEMANS, *Ypres and the Medieval Cloth Industry*, p. 43-53 (see note 3).

[31] Michiel HEIRMAN, *Vlaamse belforten, werelderfgoed*, Louvain, 2003, p. 19-39.

[32] Thérèse VAN DEN NOORTGAETE, "Tournai. Le beffroi", in Jacques DEVESELEER (ed.), *Le patrimoine exceptionnel de Wallonie*, Namur, 2004, p. 221-224.

[33] Firmin DE SMIDT, "Het verhoudingssysteem van 'dbeweerp vanden beelfroete' van Gent", in *Mededelingen van de Koninklijke Academie voor wetenschappen, letteren en schone kunsten van België. Klasse der schone kunsten*, 37/2, 1975, p. 3-30. Colour reproduction in BUYLE, COOMANS, ESTHER & GENICOT, *L'architecture gothique en Belgique*, p. 28 (see note 5).

[34] Alphonse VANDENPEEREBOOM, *Les halles d'Ypres*, Ypres, 1878; *Bouwen door de eeuwen heen, Inventaris van het cultuurbezit in België*, vol. 11n1, *West-Vlaanderen, Ieper*, Turnhout, 1987, p. 117-132.

[35] *Bouwen door de eeuwen heen, Inventaris van het cultuurbezit in België*, vol. 18na, *Stad Brugge, oudste kern*, Turnhout, 1999, p. 195-202.

[36] Jérôme EECKHOUT & David HOUBRECHTS, *De bekappingen van de Hallen in Brugge*, unpublished rapport, Centre Européen d'Archéométrie, Laboratoire de dendrochronologie, Liège, April 2006. Courtesy Nathalie Vernimme and Dirk Van Eenhooge.

[37] Luc DEVLIEGHER, *Van Waterhalle tot Provinciaal Hof*, Bruges, 1994, p. 9-39.

[38] René MAERE, *De Lakenhalle te Leuven en de Brabantsche hooggothiek* (Mededelingen van de Koninklijke Vlaamsche Academie van België, Klasse der Schone Kunsten, 6/1), Antwerp-Utrecht, 1944; L. HISETTE, "Halle aux draps, ou Halles universitaires de Louvain", in *Revue de l'Art Chrétien*, 52, 1909, p. 211-226 and 369-377.

[39] *Bouwen door de eeuwen heen, Inventaris van het cultuurbezit in België*, vol. 9n, *Stad Mechelen, binnenstad*, Ghent, 1984, p. 172-179.

[40] See general introduction with recent bibliography in: Griet MARÉCHAL, "Les hôpitaux au Moyen Âge", in Marjan BUYLE, Sigrid DEHAECK & Jacques DEVESELEER (ed.), *L'architecture hospitalière en Belgique* (M&L-Cahier, 11), Brussels, 2005, p. 26-35.

[41] John D. THOMPSON & Grace GOLDIN, *The Hospital: A Social and Architectural History*, New Haven-London, 1975; Dankwart LEISTIKOW, *Dix siècles d'architecture hospitalière en Europe. Une histoire de l'architecture hospitalière*, Ingelheim am Rhein, 1967; Ulrich CRAEMER, *Das Hospital als Bautyp des Mittelalters*, Cologne, 1963.

[42] With special thanks to Dirk Van Eenhooge and Patrick Hoffsummer, for having allowed me to use the unpublished results of recent tree-ring analysis in Bruges and Damme.

[43] Leo VAN PUYVELDE, *Un hôpital du Moyen Âge et une abbaye y annexée: La Biloke de Gand, étude archéologique*, Ghent, 1925, p. 11-52; Jeannine BALDEWIJNS & Marie Christine LALEMAN, "Gand, hôpitaux de la Byloke", in *L'architecture hospitalière en Bel-*

gique, p. 152-155 (see note 40). For its Cistercian context, see: Thomas COOMANS, "Cistercian Nunneries in the Low Countries: the Medieval Architectural Remains", in *Studies in Cistercian Art and Architecture, 6*, ed. Meredith P. LILLICH (Cistercian Studies Series, 194), Kalamazoo, 2005, p. 61-131 (119-123).

[44] Patrick HOFFSUMMER (ed.), *Les charpentes du XI^e au XIX^e siècle. Typologie et évolution en France du Nord et en Belgique* (Monum-Cahiers du Patrimoine, 62), Paris, 2002, p. 192-193 and 268-270.

[45] Jean-Pierre ESTHER, "Monumentenbeschrijving en bouwgeschiedenis", in *Sint-Janshospitaal Brugge, 1188/1976*, vol. 1, Bruges, p. 259-322 ; Eva TAHON, "Bruges, Hôpital Saint-Jean", in *L'architecture hospitalière en Belgique*, p. 110-115 (see note 40).

[46] *Bouwen door de eeuwen heen, Inventaris van het cultuurbezit in België*, vol. 18nb Zuid, *Stad Brugge, middeleeuwse stadsuitbreiding zuid*, Turnhout, 2004, p. 337-356.

[47] Eva TAHON, "Bruges, Notre-Dame de la Poterie", in *L'architecture hospitalière en Belgique*, p. 104-107 ; *Bouwen door de eeuwen heen, Inventaris van het cultuurbezit in België*, vol. 18nb Noord, *Stad Brugge, middeleeuwse stadsuitbreiding noord*, Turnhout, 2004, p. 406-412.

[48] Mieke DE JONGHE, "Damme, Hôpital Saint-Jean", in *L'architecture hospitalière en Belgique*, p. 134-137 (see note 40); *Bouwen door de eeuwen heen, Inventaris van het bouwkundig erfgoed. Provincie West-Vlaanderen, Gemeente Damme*, vol. 1, Brussels, 2006, p. 82-88.

[49] Luc DEVLIEGHER, "De opkomst van de kerkelijke gotische bouwkunst in West-Vlaanderen gedurende de XIII^e eeuw", in *Bulletin de la Commission royale des monuments et des sites*, 5, 1954, p. 179-345, especially p. 217-228.

[50] Paul ROLLAND, *L'église Saint-Brice à Tournai aux époques préromane, romane et gothique* (Recueil des travaux du Centre de recherches archéologiques sous le patronage du Commissariat général à la restauration du pays et de la Direction générale des beaux-arts, 4), Antwerp, 1944, p. 37-47; René MAERE, "Saint-Brice te Doornijk en de Vlaamsche Hallekerk", in *Mededelingen van de Koninklijke Vlaamsche Academie voor wetenschappen, letteren en schone kunsten van België. Klasse der schone kunsten*, 3, 1940, p. 3-10.

[51] Patrick DEVOS, *Onderzoek van het koor van de Sint-Walburgakerk te Oudenaarde. Bijdrage tot de studie van de hallekerk in Vlaanderen, met een voorstudie over het ontstaan van Oudenaarde*, Audenarde, 1976, p. 195-217.

[52] Philippe DESPRIET, *De Kortrijkse Sint-Maartenskerk. Bouwgeschiedenis en archeologisch onderzoek* (Archeologische en historische monografieën van Zuid-West-Vlaanderen, 27), Courtrai, 1992, p. 28-36.

[53] Jacques THIÉBAUT, "Les Hallenkerken de la Flandre Maritime française et leur place dans l'architecture religieuse médiévale", in *Flandria Maritima*, 1, 2000, p. 13-31.

[54] Good discussions and reconstructions of such complex processes are to be found in: Herman JANSE, *De Oude Kerk te Amsterdam, bouwgeschiedenis en restauratie*, Zeist-Zwolle, 2004, p. 23-220; Karel EMMENS, *De Sint-Joriskerk te Amersfoort, van hofkapel tot kapittelkerk* (Amersfortia reeks, 11), Amersfoort, 1998, p. 39-124.

[55] Pieter A. HENDERIKX, *De oudste bedelordekloosters in het graafschap Holland en Zeeland* (Hollandse Studiën, 10), Dordrecht, 1977; Walter SIMONS, *Stad en apostolaat. De vestiging van de bedelorden in het graafschap Vlaanderen (ca.1225-ca.1350)* (Verhandelingen van de Koninklijke Academie voor wetenschappen, letteren en schone kunsten van België, Klasse der letteren, 121), Brussels, 1987.

[56] Thomas COOMANS, "L'architecture médiévale des ordres mendiants (Franciscains, Dominicains, Carmes et Augustins) en Belgique et aux Pays-Bas", in *Revue Belge d'Archéologie et d'Histoire de l'Art*, 70, 2001, p. 3-111; Thomas COOMANS, "De middeleeuwse architectuur van de bedelorden (franciscanen, dominicanen, augustijnen en karmelieten) in Nederland", in *Bulletin van de Koninklijke Nederlandse Oudheidkundige Bond (KNOB)*, 101/6, 2002, p. 173-200; Panayota VOLTI, *Les couvents des ordres mendiants et leur environnement à la fin du Moyen Âge: le Nord de la France et les anciens Pays-Bas méridionaux*, Paris, 2003; Wolfgang SCHENKLUHN, *Architektur der Bettelorden. Die Baukunst der Dominikaner und Franziskaner in Europa*, Darmstadt, 2000.

[57] Walter SIMONS, Guido Jan BRAL, Jan CAUDRON & Johan BOCKSTAELE, *Het Pand. Acht eeuwen geschiedenis van het oud dominicanenklooster te Gent*, Tielt, 1991. On the stained-glass windows: Antoine DE SCHRIJVER, Yvette VANDEN BEMDEN & Guido Jan BRAL, *Drôleries à Gand. La découverte de fragments de vitraux médiévaux au couvent des dominicains*, Courtrai, 1991.

[58] Thomas COOMANS & Anna BERGMANS, "L'église Notre-Dame des Dominicains à Louvain (1251-1276)", *Bulletin monumental*, 166, 2008 (forthcoming); Thomas COOMANS, "De oudste dakconstructie in de Leuvense binnenstad: bouwhistorisch onderzoek in de predikherenkerk", in *Relicta. Heritage Research in Flanders*, 1, 2006, p. 183-212.

[59] Karel EMMENS, Jan KAMPHUIS & André VIERSEN, *Bouwhistorische documentatie: Minderbroederskerk Maastricht*, s.l., 1997; COOMANS, "L'architecture médiévale des ordres mendiants", p. 19-23 and 93-96 (with bibliography) (see note 56).

[60] Thomas COOMANS, "Assisi and Cologne on the Banks of the Meuse: The Two Mediaeval Churches of the Franciscans at Maastricht", in Uta Maria BRÄUER, Emanuel S. KLINKENBERG & Jeroen WESTERMAN (ed.), *Kunst & Region. Architektur und Kunst im Mittelalter. Beiträge einer Forschungsgruppe / Art & Region. Architecture and Art in the Middle Ages. Contributions of a Research Group* (Clavis Kunsthistorische Monografieën, 20), Utrecht, 2005, p. 96-117.

[61] Engelbert H. TER KUILE, *De provincie Gelderland, het kwartier van Zutphen* (De Nederlandse monumenten van geschiedenis en kunst, 3/2), 's-Gravenhage, 1958, p. 240-247 and 594-607; COOMANS, "L'architecture médiévale des ordres mendiants", p. 19-23 and 106-107 (with bibliography) (see note 56).

[62] Wolfgang SCHENKLUHN, *Ordines Studentes. Aspekte zur Kirchenarchitektur der Dominikaner und Franziskaner im 13. Jahrhundert*, Berlin, 1985, p. 62-68.

[63] COOMANS, "L'architecture médiévale des ordres mendiants", 32-34 and 75-77 (with bibliography).

[64] Walter SIMONS, *Cities of Ladies: Beguine Communities in the Medieval Low Countries, 1200-1565*, Philadelphia, 2001; Wim F. DENSLAGEN, "Begijnhoven in Noord-Nederlandse steden", in *Bulletin van de Koninklijke Nederlandse Oudkeidkundige Bond*, 77, 1978, p. 205-224.

[65] Anna BERGMANS & Chris DE MAEGD, "De Sint-Jan-de-Doperkerk van het Groot Begijnhof in Leuven", in *Monumenten en Landschappen*, 4/4, 1985, p. 6-28.

[66] Thomas COOMANS, "Les églises des Dominicains et du Grand Béguinage à Louvain: comparaisons typologiques", in Panayota VOLTI (ed.), *'Mulieres religiosae' et leur univers. Aspects des établissements béguinaux au Moyen Âge tardif. Actes de la journée d'études du 27 octobre 2001 à l'Université Paris X-Nanterre* (Histoire Médiévale et Archéologie, 15), Lille-Amiens, 2003, p. 25-41.

[67] Dieter NUYTTEN, "Middeleeuwse dakkappen in het voormalige hertogdom Brabant", in *Monumenten, Landschappen en Archéologie*, 24/4, 2005, p. 22-36; Thomas COOMANS, "De drie kapconstructies van de begijnhofkerk", in Benny BUNTINX (ed.), *Hout: bouwen met bomen in Sint-Truidense monumenten*, Saint-Trond, 2005, p. 24-35.

[68] Thomas COOMANS, "Saint-Christophe à Liège: la plus ancienne église du mouvement béguinal", in *Bulletin monumental*, 164, 2006, p. 359-376 (esp. p. 372-373).

[69] Johanna HOLLESTELLE, *De steenbakkerij in de Nederlanden tot omstreeks 1560*, Arnhem, 1976; Edward J. HASLINGHUIS & Hennan JANSE, *Bouwkundige termen. Verklarend woordenboek van de westerse architectuur- en bouwhistorie*, Leiden, 3rd ed., 1997, p. 46-49 and 314-316 (with bibliography). See also Several contributions in the proceedings of *Medieval Brick Architecture, 3rd international colloquium, abbey of Ten Duinen, 24-27 Oktober 2007*, ed. Thomas COOMANS, Johnny DE MEULEMEESTER & Harry VAN ROYEN, *Novi Monasterii: Jaarboek Abdijmuseum Ten Duinen 1138*, 7, 2008 (forthcoming).

[70] Louis F. SALZMAN, *Building in England down to 1549. A Documentary History*, Oxford, 1952, p. 140.

[71] HOLLESTELLE, *De steenbakkerij in de Nederlanden*, p. 100-132 (see note 69).

[72] Dirk SCHUMANN, "Zur Technik und Backsteinbaus in Norddeutschland. Eine historische Einführung", in Ernst BADSTUBNER, Dirk SCHUMANN & Claudia HENNRICH (ed.), *Backsteintechnologien in Mittelalter und Neuzeit* (Studien zur Backsteinarchitektur, 4), Berlin, 2003, p. 9-23.

[73] Hypothesis developed by: Elizabeth DEN HARTOG, *De oudste kerken van Holland. Van kerstening tot 1300*, Utrecht, Matrijs, 2002, p. 142-209.

[74] COOMANS, "Cistercian Nunneries in the Low Countries", p. 106-109 and 123-127 (with bibliography) (see note 47).

[75] Bruce M.S. CAMPBELL (ed.), *Before the Black Death. Studies in the 'Crisis' of the Early Fourteenth Century*, Manchester-New York, 1991.

[76] The *Cockerulle* in Ypres (1280); the *Moerlemaye* in Bruges (1280); the *Mal-Saint-Martin* (1307-1313) and the Peace of Fexhe (1316) in Liège; the Charter of Kortenberg (1312-1314) and the *Joyeuse Entrée* (1356) in Brabant; Jacques van Artevelde in Ghent (1338-1345), etc.

The Dead Come to Town: Preaching, Burying, and Building in the Mendicant Orders

Caroline Bruzelius

This essay represents the early stages of new research on mendicant architecture and the medieval city, especially in Italy. I am interested in how certain aspects of the relationship between the friars and the public shaped their sacred spaces and their approach to the construction of churches. I shall propose that the friars, in focusing their ministry on outdoor public places, especially *piazze,* markets, and streets, modified at least for a time, the concept of traditional Christian ritual space (the church). With the friars, preaching, confession, and penance now took place not so much inside as outside church. The mendicant's shift in the concept of "church" may have been one of the factors that contributed to a certain "culture of incompletion" in their religious structures, a phenomenon visible today only through an attentive analysis of the upper walls and in some cases the disjuncture between outer walls and inner supports of their naves. I shall also briefly examine some of the consequences of the mendicant phenomenon within the larger dynamics of the thirteenth- and fourteenth-century city, and suggest that the climate of conflict between the friars and secular clergy – conflict that usually concerned the administration of the sacraments to the lay public, and especially those concerned with death and burial – had an impact not only on mendicant buildings, but also on the late medieval city.

Questions of property and money are fundamental to architecture, and because these were especially vexed issues for the Franciscans, I shall concentrate on their churches through much of this essay. As is well known, conflict over property and possessions within the order of the Friars Minor became ever more intense as it grew in size and as the communities of friars needed ever larger buildings. After 1257, the process of growth and change was rationalized by St Bonaventure, Minister General of the order from 1257 to 1274, who, even as he lamented and deplored the excesses of the friars in the realm of building (as well as their cultivation of wealthy patrons and intrusion into the writing of wills and testaments), explained the need for larger and fireproof buildings, and sought to justify many of the obvious changes that were taking place within the order. Indeed, as we shall note at the end of this essay, by reverting to Roman law Bonaventure provided the intellectual frame for a process that by the 1270s and 1280s permitted a looser, more "generous" understanding of poverty, one that perhaps authorized *ex post facto* a number of either recently completed or on-going construction projects that greatly expanded the scale and complexity of Franciscan architecture. One of my main points, however, will be that church building in the context of the mendicant orders was not so much "project" as "process": the churches of the friars, as we see them today, were often the result of an additive and incremental process of additions and extensions that responded not only to the growth of the communities, but also (and perhaps above all) to the pressures of lay patrons, including the third-order confraternities tightly associated with most mendicant houses. The "amoeba-like" character of change and growth particular to mendicant architecture often continued for decades if not for centuries. As a result, the traditional system of dating mendicant churches offered in the literature, often based on the few sparse documents

that survive, needs to be reconsidered in the light of their different approach to (or procedure in) the construction of churches.

Burying

Just before Easter 1288, the canons of Salerno Cathedral stormed the funeral of a pious Florentine merchant who wished to be buried in San Francesco in the habit of the Friars Minor. The canons attacked the friars, kidnapped the corpse, and took it to the cathedral for the funeral and burial. Once the obsequies were over, the cathedral clergy returned to the Franciscan church, broke down the doors and windows, and, knocking over the reserved host, stoned the friars and dragged some of them naked through the streets.[1]

This disagreeable episode in Salerno, and many similar events elsewhere involving the friars and secular clergy, prompt a host of questions. Why were priests enraged to the point of committing violence? And since when were merchants buried in urban churches and their bodies disputed by different sectors of the clergy? Was lay burial within churches, after all, not generally discouraged? Did merchants not exemplify the practices of making profits, lending and borrowing money, all of which were venal sins abhorred by the clergy, and was their burial within churches therefore not especially problematic? Did the new urban religious orders, and especially the Franciscans and Dominicans, enter the scene when attitudes towards death and the commemoration of the dead were already in the process of changing, or did the friars in some way initiate and transform the "economy of death", along the way destabilizing the traditional dynamics of death and burial in the Middle Ages?

For those of us who work on medieval architecture, these questions lead to others: what effect did this sort of phenomenon have on church building? Could it be that the mendicant willingness – or, indeed, *eagerness* – to bury the dead, had not only architectural consequences for the orders, but also the secondary effect of eliciting various responses in architectural form from the secular clergy, a process that resulted not only in changes to churches, perhaps also to the shapes of medieval cities of the thirteenth and fourteenth centuries?

Archives and chronicles attest to a history of strife between the friars and secular clergy.[2] Although there were numerous areas of contestation,[3] and although each city absorbed the friars and resolved (or not) its relationship to them in its own way,[4] disagreement and conflict seem to have occurred most intensely over funeral and burial payments. The conflicts were usually over matters related to funeral oblations, burial fees, and testamentary bequests, which represented a conspicuous and reliable source of income for the clergy.[5] Concurrently with the rapid growth of the new orders, it had become more and more common over the course of the thirteenth century for laymen to make wills and testaments, and these usually specified numerous donations *ad pias causas*[6] as well as the desired place of burial for the testator. As is well known, donations to pious causes were stimulated because concerns over the fate of the individual's soul in Purgatory was becoming an ever more pressing concern, especially in the highly developed commercial cultures in central and northern Italy.[7] Death (and testamentary bequests) had in themselves become something of a matter of exchange: the testator in his or her pious bequests tried to anticipate the need for intercession in Purgatory, thus piling up "credits" (in the form of prayers, good works, pious donations, and an advantageous location for the tomb) against the "debits" of one's lapses and sins.[8] Wills and bequests became the way in which individuals could influence, or manage, their fate in the afterlife, and as the practice of writing wills became more widespread, different factions of the clergy did their best to intervene on behalf of their own institutions or religious orders.[9] We therefore begin to find civic regulations and prohibitions about who could attend the writing of a will or attend the bedside of the dying.[10]

By the mid- to late thirteenth century, the middle-class body thus had acquired a value it had not possessed before: it was fought-over by the clergy; it was, as it were, an object of desire, or, at the very least, the object of a certain measure of "financial lust".[11] In previous centuries middle-class burial had been largely anonymous and normally in common graves outside the city walls (though there are of course exceptions, for example St Cuthbert's request to have a cemetery *intra muros* and the tombs of San Saba in Rome). But church burial was usually reserved for noble patrons and the upper clergy, and occurred for the most part

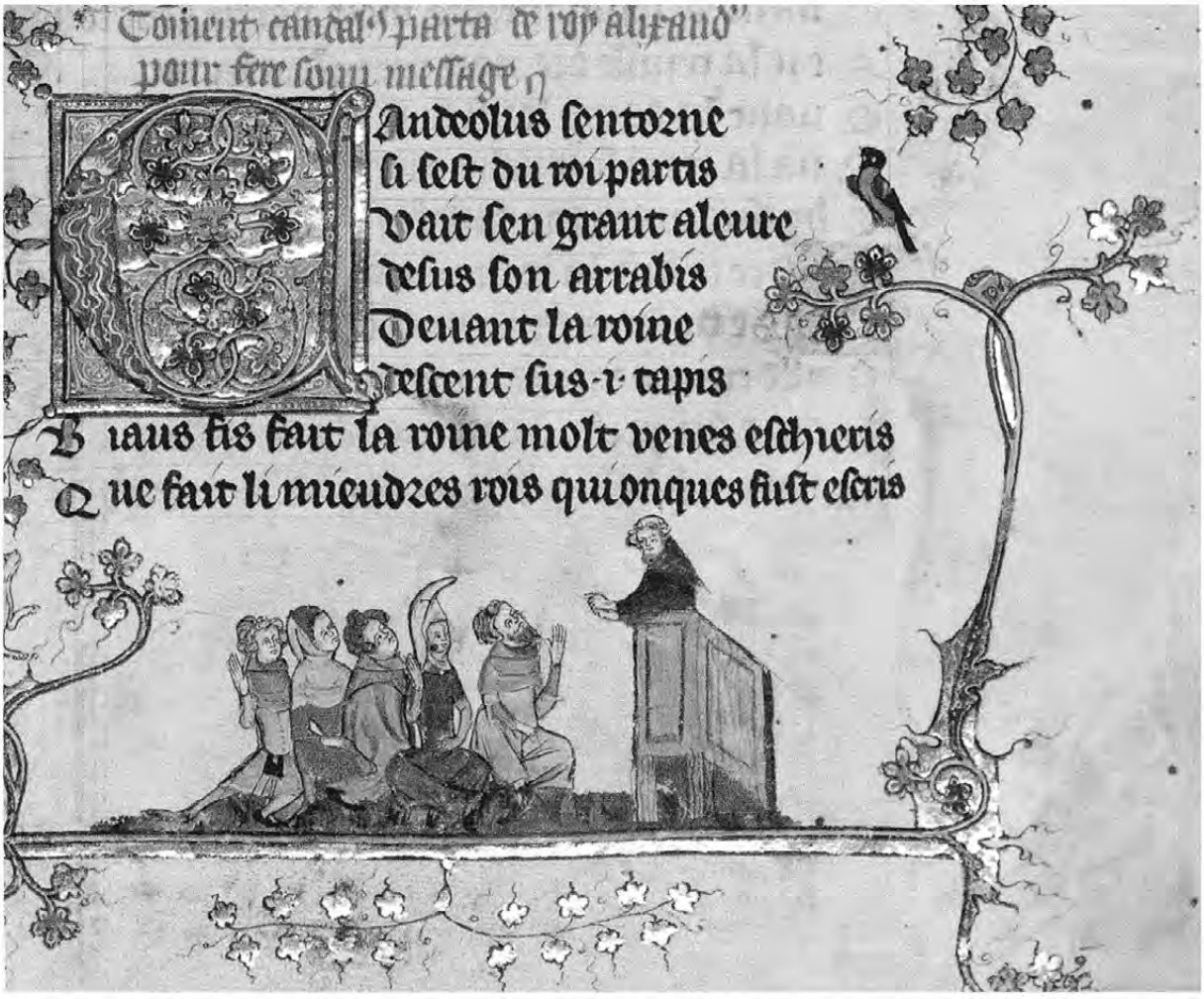


Fig. 1. A Dominican preaching from a portable pulpit, Oxford, Bodleian Library, MS. 264, fol. 79r, detail (published by kind permission of the Bodleian Library).

in monastic (and therefore rural) churches.[12] In Tuscany, on the other hand, middle-class burial around the exteriors of some churches, and especially the cathedrals on the periphery of the city, seems not infrequent, as can still be seen in the inscriptions on the outside of the cathedral walls at Pisa and Florence; the interiors, however, were strictly reserved.

But the late twelfth and thirteenth centuries were a period of rapidly-changing social practice in relation to burial.[13] New papal legislation, *jus sepulcri,* permitted individuals to choose the location of their tomb and no longer obliged burial in the parochial cemetery. Papal legislation and canon rule continued, however, to actively discourage the practice of inhumation within church interiors.[14] With the arrival of the new orders in the second and third decades of the thirteenth century, lay patrons requested the right of inhumation in the friars' churches, usually in return for donations or other sources of support that the mendicants, in particular, could ill afford to reject.[15] Soon the churches and cloisters of the friars came to be filled with tombs marked with the name of the deceased in return for unspecified donations *ad opus et utilitatem dicte ecclesie.*[16] In Italy, at least, requests for burial seem to have been particularly frequent (and urgent?) from those involved in banking and commerce, who no doubt felt themselves especially in need of prayer for the fate of their souls in Purgatory. As with the Florentine merchant in Salerno who introduced this narra-

Fig. 2. Pola, San Francesco, external pulpit on south flank (Caroline Bruzelius).

tive, the request for burial was often accompanied by the desire to die and be buried in the habit of the order. In some places, lay tombs may have been restricted (at least for a time) to the exterior periphery of the church, as seems to have been the case at San Francesco in Bologna.[17] That church burial became widespread by the last third of the thirteenth century is evident from numerous sources; even Aquinas commended the erection of funeral monuments because they incited the faithful to pray for the souls of the dead.[18] By the end of the thirteenth century it was understood that patrons should be honoured by memorials around and within church or cloister, and special efforts were made to erect monuments that would not be effaced by the feet of the faithful, in particular *arcosoliae, avelli,* and other kinds of wall monuments.[19] With the placement of tombs in and around city churches, marked with the name and/or arms of the deceased, death had come into town and it was no longer a harsh separation from the world of the living, but rather, as Robert Brentano put it, only a "soft barrier" between the living and the dead.[20]

Jus sepulcri or *jus sepeliendi* had never been intended to make churches into indoor cemeteries: what did so was rapid development of what one might call "an exchange of services" between laymen and the friars. This consisted above all in the commitment of commemorative prayer for the soul in Purgatory in return for pious donations from the lay patron. Luigi Pellegrini has noted that the text of the *Determinationes questionum super Regulam Fratrum Minorum*, probably composed between 1252/3 and 1270, explicitly speaks of pious donations as the just recompense in return for prayers and religious services,[21] but of course the language of such donations had to be circuitous in order to avoid the accusation of simony (*i.e.* purchase of the grace of the church).[22] Indeed, the language that requests burial in or around the churches of the friars is usually unspecific and even circuitous, as the 1296 testament discussed by Etienne Hubert attests; donations were made for burial *apud ecclesiam* for the most part, and we can perhaps assume that there was an unwritten "understanding" between the testator and the friars about the location for the tomb.[23]

Mendicant burial of laymen seems to have started in a Dominican context at least by the mid- to late 1220s. In 1227 their right to have cemeteries was declared by Gregory IX, legislation confirmed (against clerical opposition) in 1231 when the same pope found it necessary to defend the rights of the new religious orders to have their own cemeteries with the new decretal *Nimis iniqua*.[24] Since papal bulls almost always relate to (and often legitimize and confirm) actual practice, burial in the friars' cemeteries must already have been underway. In Pisa the cathedral canons and the Dominicans were already deeply in conflict over burial by 1236, a struggle renewed again in the 1250s.[25]

Why were the mendicants so susceptible to lay pressure? It must be recalled that in renouncing corporate wealth, the friars were particularly in need of other means of support. The absence of rents, produce from farms, and tithes meant that their main source of

support came from lay donations.[26] With the rapid growth of their religious communities, the friars needed ever larger living quarters and churches for their communities, and of course larger communities needed more food and other daily necessities. Small-scale almsgiving was no longer sufficient. Malcolm Lambert identified the 1240s as a period of rapid and urgent change in financial requirements of the Franciscan Order specifically because of the need to support the construction of bigger conventual complexes and churches for the growing numbers of friars.[27] Thus, at the same time that laymen were increasingly offering funds for prayers and burial, the friars were increasingly in need of their financial support. The development of pious confraternities (*in servizio dei frati*) by the middle of the thirteenth century effectively created associations of lay men and women dedicated to the assistance of the friars, and it is likely that for these lay communities burial in the conventual complex was an ultimate goal and perhaps a natural expectation; the confraternities in return were often directly engaged in seeking further support for the religious communities with which they were intimately associated and in whose hands they had effectively placed the fate of their souls.[28]

The deflection of donations *ad pias causas* away from the traditional recipients (local parish, cathedral, and hospitals), however, as well as the transfer of burial and associated funeral oblations to the friars, was a source not only of consternation and dismay, but also of severe financial hardship to the secular clergy. In the face of the vigorous and sometimes violent opposition, beginning in the 1230s, the papacy began to intervene to affirm the rights of the mendicants to burial payments, testamentary legacies, and other types of pious donations. For example, in 1238 Gregory IX wrote to the archbishop of Pisa insisting that the friars had the right to receive testamentary bequests from pious donors.[29] These struggles between the secular and mendicant clergy continued throughout the rest of the thirteenth century and well into the fourteenth, as has been described by Richard Trexler and Mauro Ronzani for Florence and Pisa respectively.[30]

Did the change in attitudes towards burial have implications for church architecture? I propose that the immense scale of mendicant churches, usually attributed to their role as preachers, was generated as much if not more by their need for burial space. Indeed, weather permitting, preaching in Italy would if at all possible take place *outside*, not within, the church. The friar's mission was, after all, to attract the attention of the urban population and convert the sinner to penitence. It was therefore vital, as we shall see below, that the preaching take place in open places with passers-by, so that preachers could most effectively "fish for souls" (see Figs 1 and 2). Although evidence for external pulpits has often been obliterated, numerous Tre- and Quattrocento paintings attest to wooden pulpits erected in front of the mendicant churches or in public *piazza*, and on occasion these pulpits survive (for example at Santa Maria degli Angeli in Assisi). It is tempting to imagine pulpits on wheels that could be rolled along the city streets like wheelbarrows, so that a friar could set up shop in any densely populated space (See, for example, Fig. 1). At some sites, such as the Franciscan church of Pola, there is a permanent stone pulpit along the exterior flank of the church overlooking the street (Fig. 2). This exterior pulpit was constructed as part of the nave, affirming the extroverted character of the friars' mission.

Fig. 3. Prato, San Domenico (Caroline Bruzelius).

The physical fabric of some churches indicates that the friars planned the building process in relation to the quest for funds. Liturgical choirs were almost always constructed first and put into use as rapidly as

Fig. 4. Florence, Santa Maria Novella, Chiostro dei Morti, detail (Caroline Bruzelius).

possible for the regular services of the religious community.[31] But the construction – or at least the *completion* – of the nave often seems to have been delayed, and I suggest that this second stage was predicated on developing commitments for funds from future donors in return for burial. It would have been important to demonstrate to potential donors that burial space was ready and available, and that in some way the church "awaited" and "expected" their participation.

Various types of evidence suggest that this was done in a speculative manner, with promised bequests and plans for burial tied to the construction of the nave. Sometimes the lower and outer walls of mendicant churches (Santa Maria Novella in Florence and San Domenico in Prato), were erected with series of tombs integrated into the structure of the walls as part of the building process (Figs 3 and 4).[32] In these monuments, it appears that the tombs were not added *ex post facto* but rather may well have been integrated into the conception and construction of the lower and outer walls from the outset. The example of Santa Maria Novella is particularly striking in this regard, because the church walls appear continuous with those of the "Chiostro dei Morti" off its right flank.

There are indications in the naves of various mendicant buildings that they were built from the outside in, often with possibility of considerable delays between the initial laying-out of the enclosing, or "precinct" walls, and the eventual erection of the inner and upper structure (the nave arcade and clerestory). In other words, the lower walls (sometimes with tomb niches incorporated on the exterior) were set out as a kind of open-air enclosure while the interior remained incomplete. This seems to have been the case at San Francesco in Siena where a brick cornice suggests a lower wall level for the first design of the nave. Eliza-

beth Smith's on-going research at Santa Maria Novella in Florence suggests a similar process.[33] We may wish to consider whether there might not have been, at least for some decades, a "culture of incompletion" in mendicant church architecture.[34] An incomplete church would, after all, have been an effective demonstration of poverty, and what could be better for the preacher in his wooden pulpit outside the façade than a conspicuously unfinished building lined with tombs as forceful reminders that with the inevitability of death the sinner should be repentant (Figs 3 and 4)? As noted, this type of scenography appears in any number of Trecento and Quattrocento images of Dominican and Franciscan preachers, and we might wish to revisit the texts of sermons with this type of preaching backdrop in mind.[35]

Christian Freigang and others have noted that the friars were among the first to add lateral chapels along the naves of their churches *ad jus patronatus*.[36] The evidence suggests, however, that long before the semi-systematic addition of chapels to new churches (San Domenico in Naples, begun in 1294 for example), the walls of many mendicant churches were encrusted with tomb niches and their naves were paved with tombs by the end of the thirteenth century.[37] This suggests that from an early date the construction of mendicant churches was predicated on the donations of laymen.[38]

Many and perhaps most mendicant churches were thus built "on spec," and often this was in relation to income generated by requests for burial (and by income I mean not only the bequests in wills and requests for intercessory prayers, but also the fees for funerals and burial services). The churches of the friars became vast cemeteries – first, possibly, as outdoor semi-enclosed spaces that corresponded to the walls of the as-yet-to- be-complete nave. By the last decade of the thirteenth century, and the first decades of the fourteenth, burials came to shape, and in some way *justify*, the scale of churches such as Santa Croce in Florence (begun 1294), or Santa Chiara in Naples (begun 1310) (Fig. 6). The vast Neapolitan church might in fact be seen as the culmination of the suggestion that burial and tombs generated space, for in this instance the area behind the main altar is dominated by the tomb of King Robert of Anjou, flanked on either side by those of his heirs. The chapels down the nave were adopted by nobles and the urban patriciate, so that the church became an eternal reproduction of the court in the afterlife, a permanent crystallization of the court within a Franciscan context. Indeed, in this "economy of prayer," it is no coincidence that Robert's tomb was placed over the grate to the nuns' choir, with a second and more modest effigy (also clothed as a Franciscan friar) on its interior, so that the king could receive the prayers of the friars and faithful on one side, and those of the enclosed nuns on the other.[39] A double convent offered double prayers prompted by double effigies.

As observed above, the friars were among the first to design churches from the outset with lateral chapels along the flanks of the nave, as at San Domenico in Naples. The success of the friars in attracting legacies and donations in wills in return for burial prompted the secular clergy to respond by adding appropriate spaces of their own. Sometimes new structures were added to older buildings or new enclosed urban and ecclesiastical cemeteries were created. I have suggested elsewhere that the chapels incorporated into the new cathedral of Naples, begun in 1294, were intended from the start as private burial areas for noble patrons.[40] In other cities, the desire of laymen to be buried in town led to the creation of new types of urban cemeteries, of which some examples are the Campo Santo in Pisa, the now-destroyed cathedral cemetery and the cemetery of Santa Caterina (adjacent to San Frediano) in Lucca, and the Chiostro del Paradiso in Amalfi, all instances of what I believe to be the new phenomenon of urban and ecclesiastical cemeteries.[41] These structures, which date from the second half of the thirteenth century or later, were added to create space for tombs around or adjacent to churches, or, in the case of the Campo Santo in Pisa, a more dignified setting for the venerable cathedral cemetery. The need to insert more formally organized cemeteries within the city must have required a deliberate re-allocation of space within the often densely-populated urban fabric, and in some places, such as Amalfi, the process required the acquisition of terrain and the clearing of land in a constricted site.

In Italy the profusion of tombs and the need to remember their locations (not to mention the commemorative prayers associated with each burial) can be recreated in part through the *sepoltuari*: lists of the

locations of tombs in and around churches.[42] A number of these were composed towards the end of the thirteenth century, and they represent the need on the part of the religious communities to keep track of the profusion of burials that clustered in and around all parts of mendicant houses (by that time, the inscribed names on some slab tombs had already been effaced, which was one of the reasons why the friars felt the need to keep track of who was buried where). Unfortunately, the *sepoltuari* do not include the date of death, a vital indicator of when certain parts of the church or its surroundings might have been "colonized" by private burials. Evidence from various *sepoltuari* and other sources suggests, however, that slabs in the pavement or table tombs around the outsides of mendicant churches preceded the construction of dynastic family chapels along the flanks of churches, a phenomenon which probably began in the 1260s or thereabouts.[43] The publication in 1902 of E. B. S. Shepherd's reconstruction of the tombs that once packed the church of the Greyfriars is a testament to the importance of that Franciscan house as a burial place for burghers, nobles, and members of the royal family in London (Fig. 7).[44] In the fourteenth century and later, the slab tomb continued to be used along with more expensive burial arrangements: the *avello* (a niche against the wall which could be either interior or exterior: Figs 3 and 4) and the private family chapel; the need for space for all of these, I suggest, was a strong generating force in the growing scale of mendicant churches.

Why do we not see this any more? Why have tombs, memorials, and monuments been erased? Why have we lost the sense of medieval churches as encrusted inside and out with the paraphernalia of death, like barnacles on a pier? The purgation of death from sacred space has been the result not only of the wear and tear on tombs (as noted, already by the late thirteenth century inscriptions had worn off some of the slabs in the Franciscan church of the Aracoeli), but also of successive generations of changed thinking about the character and use (even, perhaps, a different notion of the "sacrality") of religious space. On the Continent, the break came in 1804 and 1805 with the imposition of the Napoleonic code that forbade burial in towns.[45] New cemeteries were created outside cities, thus dissolving the intimate ties between the living and the dead within the city. Restorations have systematically expunged the memory of urban churches as public cemeteries, except in instances where the churches have become a "pantheon" to great men, as at the Frari in Venice or Santa Croce in Florence. We tend now to find tombs only in the "forgotten" parts of buildings, as for example in the cloister of San Francesco in Pisa, where a series of slabs and family coats of arms attest to the omnipresence of tombs and memorials. The population of the dead that once filled urban churches has been erased and forgotten.[46]

There are, of course, many difficulties with this topic apart from the disappearance of tombs. Few of the earliest mendicant churches and cloisters survive. Testaments and wills begin to proliferate only in the second half of the thirteenth century, and there is little written documentation of early requests for the burials.[47] As noted above, donors had to be discreet about leaving funds explicitly for burial in order to avoid the suggestion of simony, and the few surviving early tomb slabs are effaced by wear and tear. Many tombs were in particular clustered around the choir screens of churches, most of which were destroyed in the Counter-Reformation. Above all, few sites have been excavated, and only in the last few decades have the tombs been considered of importance; even when this has occurred, rarely can they be dated with precision.

It is therefore a challenge to reconstruct the appearance of thirteenth-century churches, with their walls encrusted with monuments and their floors paved with slabs. We have lost a sense of the cluttered and encumbered spaces of the medieval church, and, unfortunately, few images or paintings attest to the interiors of mendicant churches prior to the devastations of the Counter-Reformation, the Enlightenment "clear out", and the culmination of that process with the Napoleonic removal of bodies and tombs to the outskirts of towns.

The topics of death and burial are of course vast, and even if complete answers were possible they would be well beyond the scope of this essay. My task here is simply to sketch an outline of an approach to mendicant architecture that integrates the physical fabric of the buildings with the social and economic circumstances of the new orders. I suggest that we need to think differently about the construction of the architecture of the mendicants, and do so in relation to

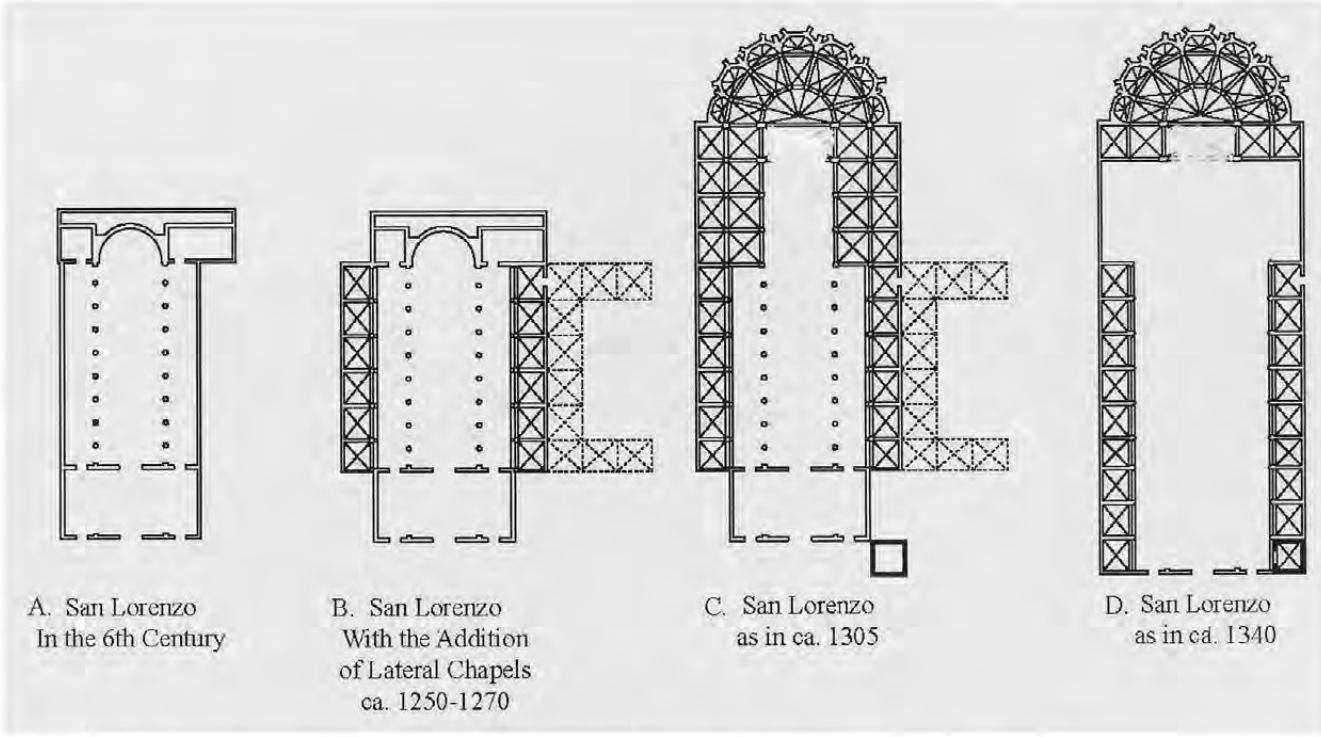


Fig. 5. Naples, reconstruction of building sequence at San Lorenzo, circa 1240-1330 (Caroline Bruzelius).

their economic and cultural systems of support. It was precisely because the friars largely rejected traditional sources of clerical income (tithes, lands, and rents) that they were dependent upon the donations of lay patrons. As the new orders grew and could no longer effectively beg for their sustenance (there were simply too many of them), they quickly developed an organic and responsive relationship to their primary sources of financial support – lay patrons. There was, in short, an exchange of services between the friars and their supporters.[48] Yet, as we have seen, the close tie between the friars and the lay public also led to a rapidly changing situation with the secular clergy (parish priests and cathedral clergy), who soon came to understand that the friars, in spite of their professed poverty, presented a distinct economic threat, and were indeed not, after all, quite as "apostolically poor" as they claimed to be.

Narratives on mendicant architecture do not generally discuss the friars' innovative role in relation to burying the dead in their churches and cloisters: for the most part the literature has been written as though the exigencies of financial support and the vital role of the patron in relation to these religious institutions in particular did not exist. It seems clear, however, that the naves of mendicant churches were constructed *as* donations came in and *as* the friars accumulated enough capital. Members of the orders were actively engaged in soliciting funds for the completion of their churches. The close ties between burial and construction are illustrated in any number of documents, especially wills and testaments, which stipulate that a donation is made for construction, or that funds will be provided only if construction is begun within a certain period (often ten years) of the testator's death.[49] A will of 1273 in Pisa, for example, requesting burial in the church of San Francesco, donated 20 lire for the funeral, 5 line for the commemorative masses, 10 lire for the *opera,* and one quarter of these funds to recompense the parish.[50] There seem to have been standardized formulae for each aspect of the donation, and no doubt the size of the bequest determined in large measure the location of the tomb.

Preaching

Both orders grew rapidly, but the Franciscans in particular expanded with stunning speed, so that by circa 1260 there may have been some 30,000 Friars Minor. The order almost as rapidly became fully clericalized, which led to a profound change in their character and mission (although of course certain factions resisted this process and tried to maintain rigorous adherence to Francis' initial concepts).[51] Indeed, the process of clericalization had begun already in the 1220s while Francis was still alive. As the Franciscans took on priestly functions they became engaged in the salvation of souls through good works, preaching and the administration of the sacraments, above all confession, contrition, and absolution.

Yearly communion had been imposed on all Christians in the 4th Lateran Council of 1215, and it was understood that confession and penitence were precursors to receipt of the host.[52] Sacramental duties, and especially preaching, confession and absolution, soon replaced begging (or physical labour in the case of the Franciscans) as a means of support in both orders, but as a clerical order, the Dominicans were in the forefront of this tendency from the outset: in 1227, Gregory IX confirmed that the Friars Preacher had the right to preach and hear confession.[53] The right of both orders to hear confession and to give penance was affirmed by Gregory IX in 1237 in *Quoniam abundavit*.[54] As their clerical capacity developed, it was also fundamental for the Franciscans to become more urbanized (there had been a strong eremitical tendency in the early years of the order) and as a result there was a general inclination to move convents closer to the centre of towns to reach the public more effectively.[55] Clericalization thus coincided, and strengthened, the progressive urbanization of the Franciscan Order.[56]

As has often been noted, the friars, by preaching in open spaces and in the vernacular, revolutionized the relationship between the lay public and the clergy.[57] In programs that we would now describe as "outreach", the friars focused on penance, confession, and absolution, all this, however, with a firm view of the fate of the soul after death. The new concern for the spiritual life of the lay public coincided, of course, with the heightened interest in Purgatory in the late twelfth and thirteenth centuries. As Jacques Chiffoleau has observed, the friars were the "most ardent propagandists" of the doctrine of Purgatory.[58] Preaching penance was described by Innocent III as the primary function of the new urban orders, and penitence is a fundamental condition of the soul at the time of death. As the friars increasingly adopted a parochial role in preaching, confessing, and offering absolution, engagement with the dying and the dead became a natural (and necessary) consequence of their spiritual responsibilities.[59]

The revolutionary relationship of the friars to the public and their adoption of a parochial function, along with the new importance of preaching and burial, suggest that architectural historians might do well to think differently about the architectural settings in which this new interpretation of the religious life took place. As Jacques Le Goff noted, the Franciscans bridged in some vital ways the separation between the religious and secular worlds. Might it be appropriate, in that context, to think of mendicant churches as expressing this new relationship in their largely utilitarian character, and in their concern for the exterior "presentation" of their values (Figs 1, 3 and 4)? At Santa Maria Novella in Florence, for example, the commune provided Dominicans with an ample piazza in front of the church guaranteed to remain open in perpetuity for preaching. Images of friars preaching, mostly from the fifteenth and sixteenth centuries, inevitably show them outdoors, often in wooden moveable pulpits (Fig. 1), and behind the pulpit one often sees the incomplete façade of a church. There were also interior pulpits (the *sepoltuario* of San Francesco in Bologna refers to a *pulpitum lapideum*).

With this in mind, it may be possible to enlarge our sense of the mendicant church as having not just two liturgical spaces (the choir for the friars and nave for the lay public) but in fact *three*: choir, nave, and also the "outside church" for preaching.[60] It is interesting that the setting of outside preaching is implicit in the words of the Dominican prior, Humbert of Romans, writing in the 1260s: "it is not appropriate to preach in undignified places, as some people do, preaching in markets and busy streets and at fairs."[61] This was a rationale for the creation of the "preaching piazza" outside the façades of Dominican churches (and may also have been a commentary on Franciscan practice,

as the latter were well-known for preaching in markets.) Humbert continued "men are already busy in such places (markets) and with worldly occupations, so it is liable to undermine their respect for the word of God to preach there".[62] It may therefore be that for the mendicants "church" meant something different from what it had been before: a "church" was perhaps a more "permeable", perhaps "less separate", and probably consisted less of a strict separation between "inside" and "outside."

In the climate of Italy, at least, there seem often to have been considerable delays and changes in design before a nave was completed. Interior piers and supports were generated *ex post facto* in relation to the outer shell, as can be seen at Sant'Eustorgio in Milan. Naves were often conceived as typologically different spaces from the vaulted choir of the friars. The best surviving examples of this type of "two church" structure is San Giovanni a Canale in Piacenza.

Building

A great deal has been written about mendicant architecture, especially in relation to establishing typologies and related groups of buildings (along the lines of analyses of Cistercian plans), but perhaps there is still much to be said about the architecture of the friars. Instead of reviewing the literature here, however, I would like to focus on an interpretation of mendicant architecture as particularly responsive to urban conditions and to social and economic structures. Several factors conditioned the circumstances in which mendicant churches tended to be built, and these circumstances were largely new ones for both the history of medieval architecture and for the religious orders. First, the new orders were urban, and were often inserted into densely populated areas where property values were high. Second, in the sense that mendicant architecture was singularly dependent on a combination of private and communal patronage (in short, particularly "opportunistic"), it may be that typological studies of the buildings (on the model of that of Hanno Hahn for the Cistercians)[63] are not the best approach.

At the outset both orders preferred to acquire and use older churches whenever possible, a practice that was consistent with the ideal of poverty and helped the friars avoid the expense constructing new buildings. Such was the case, for example, with San Pietro delle Vigne in Bologna, which was reconstructed to become San Domenico. Francis' attitude towards churches might be described as preservationist: at Assisi he repaired old, abandoned, and partially ruined churches of San Damiano and the Porziuncula outside the town. This established a pattern of acquiring older churches on the fringes of a city, often in uninhabited zones, in areas prone to flooding (as at Santa Croce in Florence), or in the poorer parts of a town. Sometimes these churches had been abandoned, but frequently they were occupied by a parish priest or a much reduced monastic community (often Benedictine) which had to be extracted, sometimes with difficulty. The latter was the case with the Franciscan communities in Pisa and Verona, and was not uncommon for women's houses as well, as at Alatri, Anagni, and San Cosimato in Rome.

The founding and rapid expansion of the mendicant orders occurred at a time of dramatic growth in urban populations, so that the founding of friaries in or on the edges of towns coincided with civic expansion beyond earlier rings of walls. Indeed, the friars were well-suited to these peripheral areas, where new communities of immigrants and workers needed the attention of a clergy well-suited to their concerns. As a result of the pressures of population growth, there was often less space available in towns, and property values were rising dramatically, thus making the acquisition of property difficult and expensive. The friars as a result developed some building strategies of remarkable originality – not only the creation of what I have described above as "cemetery precinct naves", but also the practice of "voiding out" an older church and "amoeba-like extensions", as can be seen in the two Franciscan houses of San Fermo in Verona and San Lorenzo in Naples.[64]

San Lorenzo is a good case in point. Here, in the second half of the thirteenth century, an early sixth-century basilica was extended to the east and widened on both the north and south sides of the nave with lateral chapels (Fig. 5A).[65] Since the new east end corresponded to the dimensions of the nave with its lateral chapels, the latter seem to have been added first, in clusters of three or four at a time. This first epi-

sodic expansion may have occurred as early as circa 1260-1265, as the chapels are constructed in a generic Gothic style found in many Franciscan churches in Italy (Fig. 5B). Those on the south would have been coeval with work on the cloister (of which nothing medieval remains).

The new chevet of San Lorenzo doubled the length of the church, and expanded it over one of the narrow north-south streets of the Graeco-Roman city plan into the block to the east (Fig. 5C). Unfortunately, no documents survive on the acquisition of this new property (as the friars minor were obliged to contract with a third party, a *nuntius* or *amicus spiritualis,* to handle their money affairs and property transactions, documents on property transactions were often kept outside the houses). A large donation in 1284 made for the "repair" of the church can probably be associated with the project of the new chevet, which was probably already underway.[66] Thus, in my reading of this monument, in about 1300 the church of San Lorenzo consisted of the Early Christian nave flanked by lateral chapels and joined to a new Gothic chevet by double aisles. There was originally no transept. The height of the vaults was probably roughly coordinated with the height of the wooden truss ceiling of the earlier church. The plan would have been similar to those of the Franciscan churches of Paris and Bologna, both also study centres themselves, so that we may wish to consider whether the Franciscans developed an architectural typology that distinguished the churches associated with their *studia*, as Wolfgang Schenkluhn has suggested.[67] With the new chevet added to the older basilica the church might have looked something like the Cistercian abbey of Ourscamp (Oise) – a bright and new Gothic extension to a darker, older, nave.

The church in this form was completed in around 1300 with donations from Charles II of Anjou, a date supported by the fragmentary remains of frescoes attributed to Montano d'Arezzo in what is now the south transept arm. In 1305 the southern aisles of this zone, those closest to the cloister, became a burial place for two members of the royal family.

By 1300 San Lorenzo had already undergone a series of additions and extensions. But, consistent with the "amoeba-like" character of many of these Franciscan building enterprises, the church was transformed again two decades later, when the old nave was dismantled and the vast open volume we see today was created. In effect, the Early Christian basilica was voided out, leaving the chevet to the east and the fringe of lateral chapels on each side (Fig. 5D). The columns from the old basilica were moved to the side walls and placed between the chapels to support an upper arch above the chapel entrances. This thickened the outer nave walls to permit the construction of the new and much taller elevation. This final phase of reconstruction started in 1324 and was probably stimulated by two important deaths in 1323: early in the year that of Catherine of Austria, wife of the heir to the throne, Charles of Calabria, and at the end of the year that of Giovanni Di Capua, son of the great protonotary (something like a chancellor) of the realm, Bartolomeo Di Capua. The Di Capuas were among the most important nobles in the realm, and their palazzo was in another part of the long narrow *insula* of San Lorenzo. Royal support for the extension of the church is suggested by the fact that in 1324 King Robert of Anjou forced the sale of a garden at the west end of the Early Christian basilica for the "completion" of the church to the west, a gesture perhaps requested by his "right hand man", the Protonotary Bartolomeo Di Capua, and assisted by the funds left by Catherine of Austria. I suggest that in large part the project was generated by the need to create the triple family Di Capua chapels at the southwest end of the nave, the westernmost of which absorbed the tower that once stood free outside the narthex of the old basilica. The family arms can still be seen at the top of the tower.

Why is all this important for our discussion? Documents suggest that by the time of the two deaths of 1323, the chapels of the nave and chevet had probably all been "colonized" by noble families seeking memorial chapels within the church. The need for more chapels, and especially the triple chapel for the Di Capua family, probably generated the entire expansion project. Extant tombs in the church date at least from the 1290s, but there is evidence from the post-war excavations at the site of a systematically-planned tomb series in the narthex of the previous church.[68]

The expansion of San Lorenzo to the west, and the voiding out of the interior with the dismantling of the old church, was a gigantic operation that expanded the church in width and length, and entailed the construc-

tion of a brand new façade to the west, a façade which bore the Di Capua arms on the portal and west tower. Prior to the Baroque redecoration (and the twentieth-century restoration), an attentive observer of Neapolitan churches in the seventeenth century described the Di Capua family shield as "everywhere" in the church.[69]

This new chronology for San Lorenzo, incidentally, places the final appearance this church in an interesting relationship to the other, and huge, Franciscan church of Naples, Santa Chiara, which had been founded by Sancia of Mallorca and Robert the Wise in 1310 (Fig. 6).[70] If it is correct to suppose that Santa Chiara represented an alternative view of the Franciscan mission, one closely associated with spiritual values, we might wonder if the reconfiguration of San Lorenzo in the 1320s was not in some way a "response" to the grandiose spaces of the new church founded by Queen Sancia.[71] In incorporating the system of lateral chapels into the plan from the outset, Santa Chiara also conformed to a fairly standard design for mendicant churches: a wide aisle-less nave flanked by side chapels (as in the Franciscan church in Paris, or Santa Maria del Carmine in Naples). If we reflect on the late fourteenth-century predilection for royal burial in mendicant houses in London, Paris, Barcelona, and elsewhere, court culture had thus come to imitate what had become a common middle-class practice in urban settings. So we now have a process that we might describe as "trickle up": in which the court adopted patterns of popular urban and middle class patronage and pious culture.

Fig. 6. Naples, Santa Chiara, interior (from Wolfgang Schenkluhn, *Architektur der Bettelorden*, Darmstadt, 2000, p. 102).

For our purposes here, however, the concept of progressive additions and extensions is fundamental to understanding the mendicant (and especially Franciscan) approach to architecture. At San Lorenzo in Naples the old basilica in the heart of the city that had been acquired by the Franciscans served as the core for various sequential additions. These were required by both internal (the growth in the size of the religious community; the role of the house as a *studium*) and external (the requests of patrons for burial) exigencies. This long process culminated with the final "subtraction" of the old nave in the last enlargement of the church. At that point, a vast interior was created within the envelope of the early nave and aisles.

If we think of Franciscan architecture as additive, sequential, episodic, and inventively creating "cavities" to be filled (and much of this process driven by the needs of patrons), it becomes evident that this was not unique to Naples: it was a logical and intelligent response to the limited space and high property values of a densely packed city. A similar example exists in the church of San Fermo in Verona, where the Franciscans acquired a site occupied by a community of Benedictine monks extracted with difficulty to make room for the friars. In a process similar to that at San Lorenzo, the church was modified by removing the columns between nave and aisles, absorbing the atrium to make a longer building, and remodelling the chevet in the Gothic style.[72]

Of course the friars were often obliged to build structures *ex novo*, and these ranged in type from sim-

ple rectangular halls (Lincoln) to small churches or a roughly Cistercian ground plan (the earlier church at Santa Croce of 1252). But even here, there was often an additive, or elastic, approach to expansion, as one sees at Salzwedel in northern Germany, where the initial hall was sequentially expanded until it became the church we see today.[73] The same was true of the Greyfriars church in Oxford. Another example of a similar approach was probably the now demolished church of San Francesco Grande in Milan, where an older church was extended and perhaps combined with another church at the site to make a very long and disjunctive structure.[74] The Dominicans sometimes also approached expanding their churches in a similar way, as can be seen at the Jacobins in Toulouse, where the initial rectangular church was enlarged by absorbing a cemetery to the east.

This type of architectural procedure of sequential additions *and subtractions* is a different process from traditional church building projects, as we have come to understand them, which usually envision the structure as an entirely new enterprise from the outset. Early mendicant buildings were often aggregative and episodic, and before the heavy hand of nineteenth- and twentieth-century restorations they must often have looked strange, sometimes asymmetrical and certainly utilitarian, especially if compared to other ecclesiastical architecture. We may wish to think of early mendicant architecture as "*process*" rather than "*project*": keeping the old, if it existed, progressively adding to it, fitting things in or taking things out – a practical and *ad hoc* process of expansion and growth.

The need to build sequentially was tied to the benefactions and legacies of donors, whose gifts supported the work. This means that dating the construction phases of mendicant churches is a particularly difficult enterprise, as been observed by Renato Bonelli and his protégé Gabriella Villetti, both of whom made important observations on this point.[75] (They did not, however, associate the difficulties of dating with the social and above all the economic circumstances of the orders.)

An episodic approach to building was in fact suggested (and lamented) by Bonaventure, Minister General of the Franciscans. In his first encyclical letter of 1257 he said: "The residences of the brothers are being changed frequently and at great expense, often impetuously and with considerable disturbance to the surrounding territory. This denotes capriciousness and compromises our poverty."[76]

Perhaps the strongest motivation for this "frequent" and "impetuous" tendency to expand the size of Franciscan churches was related to their willingness to entomb the lay public. We have seen this in the aggregative additions of churches such as Salzwedel, or the complete reconfiguration of the interior, as at San Fermo in Verona or San Lorenzo in Naples. The ultimate results could be very strange indeed, as with the plan of the Greyfriars in Oxford.[77]

In the matter of accommodating burial into the church structure as it was being built, the Dominicans, as in so many other aspects of their institutional life, seem to have been more systematic and more "organized". The flanks and façade of Santa Maria Novella in Florence and San Domenico in Prato (Figs 3 and 4) demonstrate the key role of burial in the process of the design and construction of the church, for the structures were conceived in terms of the tombs that circumnavigate the exterior walls.

As noted above, the tombs inserted into the exteriors of facades were in effect a backdrop for the preaching that took place in the piazza, a vigorous reminder of the inevitability of death and the importance of penance for the fate of the soul. At Santa Maria Novella, the nave may have remained incomplete for some long time.[78] Similarly, Santa Croce on the opposite side of Florence, begun in 1295, may also have been conceived as a huge interior necropolis: the crypt under the east end was entirely filled with tombs, the eastern chapels upstairs were provided to the wealthiest benefactors, and the pavement of the church was turned over to innumerable other patrons.[79] Even the unusual feature of covered galleries along the flanks of the nave seem to have been used for burial. One can infer without much difficulty that the costs of construction were supported by the arrangements for tombs made with patrons and donors.

As is often the case, Bonaventure noted and deplored these phenomena. In his encyclical letter of 1257, he stated: "See to it... that the new constitution on burials is observed more strictly."[80] In the Constitu-

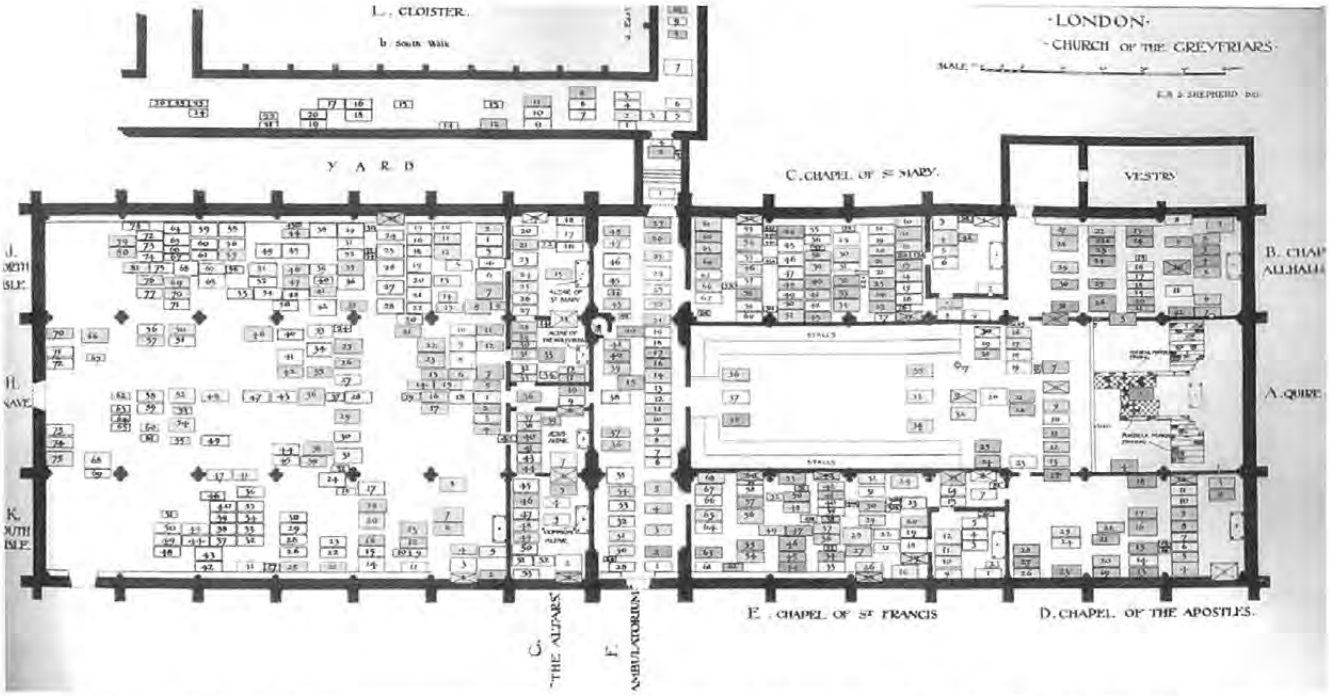


Fig. 7. London Greyfriars, reconstruction of the location of tombs (from E. B. S. Shepherd, "The Church of the Friars Minor", in *Archaeological Journal*, 59, 1902, plate 1).

tions of Narbonne of 1260, written under his administration, article 22 pronounced: "The burial of the brothers is to be strictly reserved, so that no one whom they could refuse without notable scandal is to be admitted there." The Second Encyclical letter of 1266 expanded on this: "A contentious and greedy intrusion into the domain of burials and legacies... has made us exceedingly hated by many clergy."[81]

In effect, the friars had reinvented the funerary basilica of late antiquity. Yet since these churches were in the cities rather than outside the walls as they had been in the past, the dead thus came to town, became part of the city, and the active interaction of the living with the dead became a central feature of medieval life.

The Friars and the Secular Clergy

The flocking of the public to the cemeteries of the friars stimulated a hostile – and sometimes violent – response from the secular clergy, as we saw at the introduction to this essay. Both parish and cathedral lost an important segment of their traditional revenues, as Samuel Cohn has demonstrated for various cities in Tuscany.[82] In cities such as Pisa, a quarter of all legacies and bequests were going to the friars by the end of the thirteenth century, which represented a substantial deflection of resources from the traditional recipients, the parishes, the cathedral, and the hospitals.[83] The loss of income provoked anger, resentment, and conflict against the friars in many cities and led to various episodes of battles over bodies. In Pisa, for example, the cathedral, according to custom, had the right of burial of all foreigners in the city, all members of its parish, and, finally, all those who "by family tradition" received burial there.[84] These burials were around the flanks of the cathedral, once thickly covered and encrusted with tombs, as seems to have been the case also in Florence. The canons of the cathedral of Pisa sued the Dominicans for burying a man from Lucca in their church.[85] In 1260 the *Operarius* of the cathedral, Gerardo del Verde, who should, according to custom and because of his office, have been buried at the cathedral, chose the Dominicans instead.[86] In some instances, the canons disinterred bodies that had

gone to the Franciscans or Dominicans and brought them back to the cathedral precinct. In other cities, funeral processions on their way to the mendicant churches were interrupted by an inflamed local clergy who took the corpses to the parish, claiming as payment not only the burial oblations but also the candles, shroud, and litter, sometimes handing over the naked corpse to the friars when the obsequies were over. In Exeter, the body of a nobleman who wished to be buried with the Dominicans was abducted by the cathedral canons, taken to the cathedral for the funeral, and then deposited, naked, back at the Dominican convent. The friars refused to touch it and finally, some days later, the canons, for reasons of public health, took the deceased back to bury him in the cathedral.[87]

Events culminated in Pisa in 1260 with a pact between canons and the friars in which the rights of the parishes were affirmed: all foreigners must be buried at the cathedral, but above all, one quarter of the estate of the deceased would pass to the cathedral or parish clergy irrespective of where the individual elected burial. In a city with a rapidly growing and ever richer population of tradesmen and merchants, this was no small matter – so much so that the agreement was confirmed by the Pope.[88]

Disputes of this kind had been going on since the 1230s in Pisa: already in 1236 the Dominicans had to reach a first compromise with the cathedral canons over lay burial. The second settlement, in 1260, seems to have "settled" very little, because well into the fourteenth century, and perhaps with ever greater intensity, conflicts over burial continued: in Pisa in 1355, for example, two canons are appointed to exact the testamentary quarter from the estate of any person who should "by right or custom" have been buried at the cathedral.[89] In 1300 Boniface VIII tried to resolve the controversy over bodies with a papal bull: whenever a testator elected burial with the friars, his executors were obliged to return one quarter of all bequests to the parish church.[90] Richard Trexler described the way in which the secular clergy flaunted this document in the face of the friars of Florence: "*Super cathedram* was thus heartily welcomed by the secular clergy.[91] In the presence of four clerical witnesses and a like number of clerical syndics and procurators of the Florentine secular clergy, the bishop (Francesco Monaldeschi) proceeded first to a chapter meeting at Santa Maria Novella, then Santa Croce. The bull was read aloud to the friars. A copy was furnished for each convent. A solemn record made in the bishop's register. The bull, the secular clergy no doubt thought, represented a turn for the better in its financial fortunes".[92]

There soon developed a more dignified solution than body grabbing: the construction by cathedrals, communes, and consortia of citizens of prestigious new cemeteries inside town. As noted above, the Camposanto in Pisa is one of the most extraordinary examples of this new phenomenon, together with the Chiostro del Paradiso at Amalfi, begun in 1266. There are other examples of extensions and additions to churches that were generated by the need to accommodate burial, as in the choir extension of Santa Maria Maggiore in Barletta. [93] Another example is the Gothic "burial" porch added to the collegiate church at Beaune, also a site of great conflict between the Franciscans and the canons of the collegial church.[94] These spaces were generated by the need to find a place for the dead (especially the wealthy dead). At the Campo Santo there was also space for the lower classes and the indigent as well as the wealthy; if the holy earth of the Campo Santo was an aid to salvation, permitting a citizen of Pisa to be buried in the Holy Land *and* in Pisa a the same time (what splendid "one-upmanship"!), it was also in some way an "equal opportunity" venture for all citizens of the city.

Burial was a problem in terms of the public relations of the friars. For the Franciscans, it presented difficulties within the order: friars were accused of being the medieval equivalent of "ambulance chasers" who cultivated the infirm – especially the wealthy infirm, and their soon-to-be widows, their critics said – so that donations would be made in testaments.[95] Bonaventure himself bemoaned "the contentious and greedy intrusion into the domain of burials and legacies".[96]

Among the many interesting aspects of this phenomenon is the commodification of the dead body, and its rapid transformation into an object of desire and a medium of exchange. Various economic historians have pointed out the importance of the friars in the development of early economic thought, and this was also very much part of the thirteenth-century tra-

dition of sermons, especially, perhaps, those of the Franciscans. Chiffoleau noted their precocious use of "market place thinking" in their approach to the sacrament of penance and the remission of sins,[97] and this mentality is reflected in the sermons of the archbishop of Pisa, Federico Visconti, who preached often in the Franciscan church of Pisa. In one of these he reminded the assembled congregation that not only had St Francis been a merchant, but also that *Christ himself,* too, "like a merchant", weighed and bargained for the fate of souls in the afterlife.[98]

The friars were at the forefront of the new phenomenon of intercessory prayer and the burial of the dead inside city churches. Their active participation in shifting the locus of familial piety away from the parish and cathedral to their own establishments on the one hand compromised their claims to poverty, and on the other created tension with the secular clergy. But their encouragement of lay burial in church and cloister also permitted – indeed, was indispensable to – the construction of the massive mendicant churches that we know today, churches that until the devastating transformations after Napoleon's Civil Code were cluttered and congested with tombs: vast indoor *intra muros* cemeteries.

Conclusion

The dead body in the thirteenth and fourteenth centuries was a hotly contested commodity. Some issues of this contestation emerge in the fresco cycles of the Camposanto in Pisa, which, moreover, interject a few more interesting dimensions to the urban tension over matters of burial and pious jurisdiction. In the Triumph of Death, the images of naked souls fought over by angels and devils might have had particular resonance to a fourteenth-century audience familiar with clerical battles over bodies in the streets. But in addition, the frescoes of the Camposanto suggest another component of the discussion: in the Last Judgment, an angel vigorously shifts a Franciscan friar from the side of the saved to that of the damned. If Gerd Kreytenberg is correct in suggesting that the painted programme of the Camposanto was developed by the Dominican archbishop of Pisa, Simone Saltarelli (appointed in 1323),[99] and if this identification as Franciscans is correct, they remind us that tension and competition were high not only between the secular clergy and the friars, but also between the two orders.[100] Revenge could be taken in monumental pictorial form.

The openness of the mendicant orders to the marketplace involved a new type of economic exchange in which the friars offered a more rapid passage through Purgatory in exchange for donations.[101] Their financial survival was viscerally linked to the emerging economic structures their day. This was especially true of the Franciscans,[102] as attested by any number of wills and testaments. Churches grew exponentially as a result of the "colonization" of the private sector into the space of the religious in the form of tombs and private chapels. Although many within the Franciscan order were troubled by certain aspects of this type of change and growth, as emerges clearly in Bonaventure's encyclical letters to the order, in 1269 he himself proposed a formal solution to the problem in the *Apologia.*[103] For the first time in the debates over apostolic poverty and papal ownership of Franciscan possessions, the saint utilized Roman civil law to support the Franciscan position. He stated that in accordance with Roman law, the Friars Minor were in the juridical position of children in relation to their parental home: like children, indeed, as "minors" they could have the "use" and "enjoyment" of parental property, but no claim to its "dominion" or "ownership".[104] As "minors", Franciscan property belonged not to a parent but instead to the Holy Father. With this rationale, now solidly planted not only in biblical precedent but also in Roman civic jurisdiction, the Franciscans after 1269 could move forward with untroubled – or at least somewhat less troubled – impunity to replace their hodge-podge agglomerations of "add-on, take-off structures" with large new churches – indeed, with what we might wish to call the vast indoor "church-cemeteries" – once replete with the tombs and memorials that brought the dead to town.

[1] *Bullarium franciscanum romanum pontificium...*, ed. Joannis Hyacinthi SBARALEAE, vol. 4, Rome, 1768, p. 38. See also Giuseppe DE BLASIIS, "La dimora di Boccaccio a Napoli", in *Archivio storico per le province napoletane*, 17, 1892, p. 71-102, p. 82-83.

[2] See for example Mauro RONZANI, "Il 'cimitero della chiesa maggiore pisana': gli aspetti istituzionali prima e dopo la nascita del Camposanto", in *Annali della Scuola Normale superiore di Pisa*, third series, 18, 1988, p. 1665-1690; also RONZANI, "Gli ordini mendicanti e la '*cura animarum*' cittadina all'inizio del Trecento: due esempi", in *Nolens intestatus decedere. Il testamento come fonte della storia religiosa e sociale* (Atti dell'incontro di studio (Perugia, 3 Maggio 1983)), ed. Attilio BARTOLI LANGELI, Archivi dell'Umbria: Inventari e ricerche, 7, Perugia, 1985, p. 115-130. On the mendicants and civic strife, see Michel-Marie DUFEIL, *Guillaume de Saint-Amour et la polémique universitaire parisienne 1250-1259*, Paris, 1972, *passim*, and p. 397-425 on Italy.

[3] See for example Penn R. SZITTYA, *The Antifraternal Tradition in Medieval Literature*, Princeton, 1986, *passim*, and DUFEIL as in note 2.

[4] Mauro RONZANI, "Gli ordini mendicanti e le istituzioni ecclesiastiche preesistenti a Pisa nel Duecento", in *Mélanges de l'École française de Rome*, 89, 1977, p.667, and RONZANI, "Gli ordini mendicanti e la '*cura animarum*' ", *passim*.

[5] The Salerno incident, for example, was all about money, as DE BLASIIS, "La dimora", put it, "per non farsi sfuggire il guadagno del grande mortorio", p. 83.

[6] Luigi PELLEGRINI, "Mendicanti e parroci: coesistenza e conflitti di due strutture organizzative della '*cura animarum*'", in *Francescanesimo e vita religiosa dei laici nel '200*, Assisi, 1981, p 138; Samuel COHN, *The cult of Remembrance and the Black Death: Six Renaissance Cities in Central Italy*, Baltimore & London, 1992, p. 11; Pierre Clément TIMBAL, "Le legs pieux au Moyen Âge", in *La mort au Moyen Âge* (Colloque de l'Association des Historiens médiévistes français, réunies à Strasbourg en juin 1975 au palais universitaire), ed. Danièle ALEXANDRE-BIDON, Strasbourg, 1977, p.23-226, notes that to die in 1227 without a will and the donation of pious legacies was equivalent to dying without having received last communion, p. 24. As he observes, the texts of wills usually consisted of the following sequence: choice of place of burial (usually accompanied by a donation), dispositions for the funeral ceremony, repayment of loans or debts, and pious legacies *pro remedio animae* which often consisted in commemorative prayer financed by regular payments. See also Ugolino NICOLINI, "I frati minori da eredi a esecutori testamentari", in *Nolens intestatus decedere. Il testamento come fonte della storia religiosa e sociale* (Atti dell'incontro di studio, Perugia, 3 Maggio 1983), Perugia, 1985, p. 31-33. This entire volume is fundamental to my study here.

[7] Jacques LE GOFF, *The Birth of Purgatory*, transl. by Arthur GOLDHAMMER, London, 1984.

[8] There is, of course, a fascinating parallel here with the development of double-entry accounting developed, according to some, at the end of the thirteenth century. See Peter SPUFFORD, *Power and Profit. The Merchant in Medieval Europe*, New York, 2002, p. 29.

[9] See on this topic in general the volume *Nolens intestatus decedere*, cited above n. 2.

[10] Synods and councils imposed the presence of a priest at the moment of composing a will. PELLEGRINI, "Mendicanti e parroci", p. 137. See also for example Richard TREXLER, "Death and Testament in the episcopal constitutions of Florence (1327)", in *Renaissance Studies in Honor of Hans Baron*, ed. Anthony MOLHO & John A. TEDESCHI, 1971, p. 29-74.

[11] Of course the bodies of saints had been highly contested and valued. But I suggest that the reification of the middle-class lay body was something new.

[12] The bibliography on burial practice is large, and of course there was wide variation in custom. But see, for example, Elsa MARANTONIO SGUERZO, "Evoluzione storico-giuridica dell'istituto della sepoltura ecclesiastica", in *Evoluzione storico-giuridica dell'istituto della sepoltura ecclesiastica*, vol. 4, Milan, 1976, esp. p. 58-78. In the mid-thirteenth century, Urban IV was obliged to defend St. Peter's from an invasion of tombs which, he claimed, mixed the pious with the impious and criminals with saints, see Lucien CROUZIL, "Cimitière", in *Dictionnaire de droit canonique*, ed. Raoul NAZ, vol. 3, Paris, 1942, p. 730.

[13] Fundamental to my thinking has been the work of Jacques CHIFFOLEAU, *La compatabilité de l'au-delà: les hommes, la mort et la religion dans la région d'Avignon à la fin du Moyen Âge (vers 1320-vers 1480)* (Collection de l'École Française de Rome, 47), Rome, 1980, *passim* but esp. p. 166-168; Jacques CHIFFOLEAU, "Perché cambia la morte nella regione di Avignone all fine del Medioevo", in *Quaderni storici*, 17, 1982, p. 449-465; and Jacques CHIFFOLEAU, "Sur l'usage obsessionnel de la messe pour les morts à la fin du Moyen Âge", in *Faire Croire. Modalités de la diffusion et de la réception des messages religieux du XI^e au XV^e siècle*, ed. André VAUCHEZ (Collection de l'École Française de Rome, 51), Rome, 1981, p. 235-256.

[14] On *jus sepulcri* see Raoul NAZ, "Sépulcre (droit de)", *Dictionnaire de droit canonique*, ed. Raoul NAZ, vol. 7, Paris, 1965, p. 730-735. For the tension between lay desire for church burial and clerical legislation in relation to this practice, see p. 730-731.

[15] In 1236 the Dominicans of Bordeaux were obliged to renounce lay burials in any of the parishes which depended on the cathedral. See Yves DOSSAT, "Opposition des anciens ordres à l'installation des mendiants", in *Cahiers de Fanjeaux*, 8, 1973, p. 292-293.

[16] Indeed, in Pisa the canons of the cathedral settled a controversy with the Dominicans of Santa Caterina as early as 1236 about the burial of Gerardo del Verde, *operarius* of the cathedral, who, according to custom, should have been buried at the cathedral. See Mauro RONZANI, "Il cimitero della chiesa maggiore Pisana ", p. 1673. Monasteries had for centuries buried their patrons, but the tombs for the most part were those of noble patrons, and the monasteries were rural, rather than urban. It is the particular proliferation of merchant-class tombs in the urban churches of the mendicants that interests me here.

[17] See Bruno BREVIGLIERE, "Tentativo di ricostruzione topografica del cimitero di San Francesco in Bologna", in *Atti e Memorie: Deputazione di Storia Patria per le province di Romagna*, Bologna,

new series, 44, 1993, p. 179-223, on the tombs at San Francesco in Bologna.

[18] Andrew MARTINDALE, "Patrons and Minders: the Intrusion of the Secular into Sacred Spaces in the Late Middle Ages", in *The Church and the Arts: Papers Read at the 1990 summer meeting and the 1991 winter meeting of the Ecclesiastical History Society*, 18, ed. Diana WOOD (Studies in Church History, 28), Oxford, 1990, p. 168-169.

[19] *Ibidem.*

[20] Robert BRENTANO, "Considerazioni di un lettore di testamenti," in *Nolens intestatus*, p. 8.

[21] Luigi PELLEGRINI, "L'Ordine Francescano e la società cittadina in epoca Bonaventuriana", in *Laurentianum*, 20, 1974, p. 154-200, esp. p. 189.

[22] See Joanna CANNON's effective description of this exchange in "Sources for the Study of the Role of Art and Architecture within the Economy of the Mendicant Convents of Central Italy: A Preliminary Survey", in *L'economia dei frati minori e predicatori fino alla metà del Trecento* (Atti del XXXI Convegno Internazionale, Assisi), Assisi, 2003, p. 219-262. Also on this subject, Étienne HUBERT, "Élection de sépulture", in *La Parrocchia nel Medio Evo economia, scambi, solidarietà*, ed. Agostino PARAVICINI BAGLIANI & Véronique PASCHE, Rome, 1995, p. 209-219.

[23] *Ibidem*, p. 209-210.

[24] However, Honorius III on 7th December, 1217 gave the Dominicans the right to establish cemeteries as well as build churches: PELLEGRINI, "Mendicanti e parroci", p. 146; also CROUZIL, "Cimitière", p. 734.

[25] RONZANI, "Gli ordini mendicanti e le istituzioni", p. 670 and RONZANI, "Cimitero della chiesa maggiore Pisana", p. 1672.

[26] Furthermore, as David HERLIHY noted, in towns like Pisa the entrance of the *popolo* into civic government meant that rents were pegged at the same time that inflation was increasing. The primary new sources of income came from commerce rather than fixed rents, which had been among the major sources of parochial and episcopal income: David HERLIHY, *Pisa in the Early Renaissance. A Study of Urban Growth* (Yale Historical Publications, Miscellany 68), New Haven, 1958, p. 35-47. On this general subject, see Giacomo TODESCHINI, *Ricchezza francescana. Dalla povertà volontaria alla società di mercato*, Bologna, 2004.

[27] Malcolm LAMBERT, *Franciscan Poverty: The doctrine of the Absolute Poverty of Christ and the Apostles in the Franciscan Order, 1210-1323*, London, 1961, p. 95-96.

[28] Servus GIEBBEN, "Confraternite e penitenti dell'area francescana", in *Francescanesimo e vita religiosa*, p. 179.

[29] Mauro RONZANI, "Il francescanesimo a Pisa fino alla metà der Trecento", in *Bollettino storico pisano*, 54, 1985, p. 19, and RONZANI, "Cimitero della chiesa maggiore Pisana", p. 1671

[30] See above, notes 10 and 29.

[31] There are innumerable examples of this phenomenon, but one that may stand for all is the church of San Niccolò in Treviso, where the nave remained unfinished until the nineteenth century. See Herbert DELLWING, *Studien zur Baukunst der Bettelorden im Veneto: Die Gotik der monumentalen Gewölbebasiliken* (Kunstwissenschaftliche Studien, 43), 1970, p. 38-46. Although Dellwing attributes the interruption between the construction of the choir and the completion of the nave to military conflict in 1318, the nave remained incomplete.

[32] Indeed, as Doralyne SCHLOSSMA PINES, *The Tomb Slabs of Santa Croce: a new 'sepoltuario'*, unpublished Ph.D. Dissertation, Columbia University, 1985, p. 12, points out, Santa Maria Novella was built over a cemetery that was laid out in the late eleventh century and also incorporated tombs into the crypt. The location of mendicant churches near or above cemeteries was not unusual, as was the case with the Dominicans in Toulouse.

[33] Some results of Professor Smith's research were presented at the annual meeting of the Society of Architectural Historians in Vancouver, April 2005, and will be published as Elizabeth SMITH, "Santa Maria Novella and the Problem of Historicism/Modernism/Eclecticism in Italian Gothic Architecture", in *Medioevo: I Convegni di Parma 6: Il Tempo degli Antichi*, ed. Arturo C. QUINTAVALLE, Parma, forthcoming, and "Santa Maria Novella e lo sviluppo di un sistema gotico fiorentino", forthcoming in *Arnolfo di Cambio e la sua epoca: costruire, scolpire, dipingere, decorare*, ed. Julian GARDNER, Margaret HAYNES & David FRIEDBERG, 2008.

[34] Archbishop Visconti was present at the laying of the first stone of San Francesco in Pisa in 1260, but Ronzani suggests that the church was not completed until the sixteenth century because there was a shortage of funds: see Mauro RONZANI, "La chiesa e il convento di S. Francesco nella Pisa del Duecento", in *Il Francescanesimo a Pisa (Sec. XIII-XIV) e la missione del Beato Agnello in Inghilterra a Canterbury e Cambridge (1224-1236)*, ed. Ottavio BANTI & Marina SORIANI INNOCENTI, Pisa, 2003, p. 43. This is in spite of the fact that from 1305 they were allowed 500 *fiorini d'oro* a year from *incerte*: RONZANI, "La chiesa e il convento di S. Francesco nella Pisa del Duecento," p. 35. The large ashlar foundations of the church are set out in consistent dimensions along its entire length, which suggests that the foundations of the east end, transept, and nave were set out in one building campaign, but the nave seems to have been left incomplete until the early sixteenth century. This of course reconfigures the traditional dating provided for this monument.

[35] As Nicole BÉRIOU, notes in her chapter, "Les circonstances de la prédication", in *Les sermons et la visite pastorale de Federico Visconti, Archevêque de Pise (1253-1277)*, ed. Nicole BÉRIOU & Isabelle LE MASNE DE CHERMONT, Rome, 2001, p. 105-106, the mendicants were among the first to preach at funerals and/or on commemorative anniversaries. See also on this David D'AVRAY, *Death and the Prince. Memorial Preaching before 1350*, Oxford 1994. Federico Visconti specifically exhorted the faithful who attended his sermon in the Dominican church of Santa Caterina in Pisa to make donations for construction and specifically to leave bequests for the opus in their wills: *quod elemosina data ad opus ecclesie liberat a morte etiam temporali et dat vitam...*, see BÉRIOU, "Les circonstances de la prédication", p. 682.

[36] Christian FREIGANG, "Chapelles latérales privées. Origines, fonctions, financement: le cas de Notre-Dame de Paris", in *Art, Cérémonial et Liturgie au Moyen Âge*, ed. Nicolas BOCK (Études lausanoises d'histoire de l'art, 1) Rome, 2002, p. 525-544, esp. p. 540.

[37] For the plan and a discussion of the chapels, see Caroline BRUZELIUS, *The Stones of Naples: Church Building in Angevin Italy, 1266-1343*, New Haven & London, 2004, p. 95-99.

[38] See above notes 22 and 23.

[39] For Santa Chiara in general, see BRUZELIUS, *The Stones of Naples*, p. 133-150; on Robert's tomb: Tanja MICHALSKY, *Memoria*

und Repräsentation. Die Grabmäler des Könighauses Anjou in Italien, Göttingen, 2000, p. 149-152 and 169-171.

[40] See BRUZELIUS, *The Stones of Naples*, p. 78-95.

[41] By the eighteenth century Paris had 18 cemeteries within its walls. The largest and most central was the Cemetery of the Innocents, which from 1186 until late eighteenth century had acquired 12 million bodies from the 22 city parishes. By 1720 the earth had risen 8 feet above ground level. See CROUZIL, "Cimitière", p. 731.

[42] For the *sepoltuario* of San Francesco in Bologna, Bruno BREVEGLIERI, "Tentativo di ricostruzione topografica del cimitero di San Francesco in Bologna", in *Atti e Memorie. Deputazione di Storia Patria per le Province di Romagna*, vol. 44, 1993, p. 179-223; for San Domenico in Bologna, Rinaldo RINALDI, "Dalla chiesa di San Nicolò delle Vigne al convento di San Domenico: strutture sociali, topografia urbana, edilizia conventuale", in *Archeologia medievale a Bologna: gli scavi nel convento di San Domenico*, ed. Sauro GELICHI & Riccardo MERLO, Bologna, 1987, p. 75-90; Sauro GELICHI & Rinaldo RINALDI, "Il Sepoltuario del 1291", in *Archeologia medievale a Bologna: gli scavi nel convento di San Domenico*, ed. Sauro GELICHI & Riccardo MERLO, Bologna, 1987, p. 98-106; and Bruno BREVEGLIERI, "Le aree cimiteriali di San Domenico a Bologna nel Medioevo (Ricostruzioni Topografiche)", in *Atti e Memorie: Deputazione di Storia Patria per le Province di Romagna*, new series, 45, 1995, p. 165-234. However, it is also apparent that *sepultuari* did not include all tombs, some of which were already effaced by the time of their composition, and indeed the very existence of these lists of tombs attests to the chaos and confusion that their proliferation was stimulating. The reader might also note that tombs almost always included multiple generations of a family, so one marker represented many interments.

[43] FREIGANG, "Chapelles latérales privées", p. 540. BREVEGLIERI, "Tentativo di ricostruzione", *passim*, suggests, however, that at least in Bologna slab tombs within the church are a later development, after the table tombs and *arche* on the outside. As I have suggested in my studies of San Lorenzo Maggiore in Naples, the chapels may in some cases have been added for liturgical reasons (the private masses of the ordained friars) but then been "adopted" or "colonized" by private families. In other instances, and especially in the fourteenth century, the secondary chapels seem to have been intended for this double function from the outset.

[44] E. B. S. SHEPHERD, "The Church of the Friars Minor", in *Archaeological Journal*, 59, 1902, p. 238-287.

[45] For this reason, I think, tomb memorials tend to be better preserved in England, in spite of the devastation of the Reformation.

[46] The only discussion of the tombs of which I am aware is in the unpaginated pamphlet by Ottavio BANTI, *La chiesa di San Francesco come luogo di aggregazione civile culturale e religiosa della società pisana nel Medioevo e nell'età moderna*, Pisa, 1984.

[47] See Martin BERTRAM, "Mittelalterliche Testamente. Zur Entdeckung einer Quellengattung in Italien", in *Quellen und Forschungen aus italienischen Archiven und Bibliotheken*, 68, 1988, p. 509-545.

[48] See Joanna CANNON, "Sources for the Study of the Role of Art and Architecture", esp. p. 231-251.

[49] In Florence, Donate Peruzzi left 200 pounds in his will for the construction of a family chapel in Santa Croce "if the Friars Minor of Florence enlarge or rebuild their church within ten years of my death". Howard M. COLVIN, *Architecture and the After-Life*, New Haven & London, 1991, p. 190.

[50] RONZANI, "Il francescanesimo a Pisa fino alla metà del Trecento", p. 34.

[51] On the clericalization of the friars, see Laurentio C. LANDINI, *The Causes of the Clericalization of the Order of Friars Minor, 1209-1260*, Chicago, 1968. See also Raoul MANSELLI, "La clericalizzazione dei Minori e San Bonaventura", in *San Bonaventura francescano* (Convegni del centro di studi sulla spiritualità medievale, 14), Todi, 1974, p. 181-208.

[52] See Roberto RUSCONI, "I Francescani e la confessione nel secolo XIII", in *Francescanesimo e vita religiosa*, esp. p. 254-257; RUSCONI, "De la prédication à la confession: transmission et contrôle de modèles de comportement au XIII[e] siècle", in *Faire Croire*, as in note 13, p. 67-85.

[53] RUSCONI, "I Francescani", p. 270. As Rusconi notes, Gregory IX saw the Dominicans as a special group of priests at the service of bishops for the pastoral ministry, p. 271.

[54] This was naturally a source of great tension with the secular clergy whose parochial duties and privileges were thus infringed upon. See RUSCONI, "I Francescani", p. 265. In England, Rusconi states, there had been a shortage of clergy, whereas in France the friars had great difficulty inserting themselves into the "connective tissue" between clergy and lay public. Already in 1225 and in 1232 there were difficulties with the clergy in France: RONZANI, "La chiesa e il convento", p. 267.

[55] For the Franciscan move towards the centres of cities, and their use of public space for preaching, see Jacques LE GOFF, "Franciscanisme et modèles culturels du XIII[e] siècle", in *Francescanesimo e vita religiosa*, p. 87-88.

[56] Rusconi cites a letter of the Bishop of Ravenna that concerned moving a Franciscan church "*a civitate ite remotos*" to the centre because of their need to preach and offer confession: RUSCONI, "I Francescani", p. 278.

[57] The Archbishop of Pisa, Federico Visconti, suggests this in various sermons: BÉRIOU, *Les Sermons*; see for example p. 350, the sermon in the church of San Francesco in Pisa, p. 775-781, or for example his sermon on Saint Peter Martyr, p. 576-581.

[58] Jacques CHIFFOLEAU, "Les transformations de l'économie paroissiale en Provence (XIII[e]-XV[e] siècles)", in *La parrocchia nel Medio Evo. Economia, scambi, solidarietà* (Italia Sacra: Studi e documenti di storia ecclesiastica, 53), ed. Agostino PARAVICINI BAGLIANI & Véronique PASCHE, Roma, 1995, p. 61-117, esp. p. 97.

[59] A visual connection of the relationship between death and preaching is visible in the façade of Santa Maria Novella in Florence, where the piazza in front of the church, given to the Dominicans by the city and reserved in perpetuity for preaching, was framed by a backdrop of the tombs placed in the façade and the external flanks of the building.

[60] Jacques Le Goff has stated something similar in his remark that the friars had a "certain detachment" from building churches: Jacques LE GOFF, "Franciscanisme", p. 89.

[61] Humbert de Romans on preaching, in *Early Dominicans. Selected Writings*, transl. and ed. by Simon TUGWELL, New York, 1982, p. 250.

[62] *Ibidem*. Nevertheless, as Murray has noted, Archbishop Federico Visconti of Pisa imitated the friars by preaching on occasion in the

piazze of Pisa, and even moved the episcopal residence near the market at Pietro in Vincoli. Alexander MURRAY, "Archbishop and Mendicants in Thirteenth-Century Pisa", in *Stellung und Wirksamkeit der Bettelorden in der städtischen Gesellschaft*, ed. Kaspar ELM (Berliner Historische Studien, 2), Berlin, 1981, p. 41. His sermon 28 was preached in the piazza of San Pietro in Vincoli.

[63] Hanno HAHN, *Die frühe Kirchenbaukunst der Zisterzienser: Untersuchungen zur Baugeschichte von Kloster Eberbach im Rheingau und ihren europäischen Analogien im 12. Jahrhundert* (Frankfurter Forschungen zur Architekturgeschichte, 1), Berlin, 1957.

[64] This process is described and illustrated at length in BRUZELIUS, *The Stones of Naples*, p. 47-73.

[65] *Ibidem*. In the case of San Lorenzo, the church was in the heart of the ancient city of Naples, so its expansion presented particular challenges.

[66] *Ibidem*, and as I have noted, the details of the San Lorenzo chevet are instead typical of a certain Franciscan version of "Frenchness", evident in many of their buildings, for example at San Francesco in Bologna or San Francesco in Piacenza.

[67] On this subject, see Wolfgang SCHENKLUHN, Ordines studentes: *Aspekte zur Kirchenarchitektur der Dominikaner und Franziskaner im 13. Jahrhundert*, Berlin, 1985, *passim*.

[68] See the illustration in BRUZELIUS, *The Stones of Naples*, p. 50, fig. 51.

[69] *Ibidem*, p. 65-66.

[70] *Ibidem*, p. 133-150.

[71] *Ibidem*.

[72] See Louise BOURDUA, *The Franciscans and Art Patronage in Late Medieval Italy*, Cambridge, 2004, p. 34.

[73] Wolfgang SCHENKLUHN, *Architektur der Bettelorden: die Baukunst der Dominikaner und Franziskaner in Europa*, Darmstadt, 2000, p. 136-137.

[74] *Ibidem*, p. 45-48.

[75] See for example Gabriella VILLETTI, "L'edilizia degli ordini mendicanti: prospettive di ricerca", in *Gli ordini mendicanti e la città*, ed. Joselita RASPI-SERRA, Milan, 1990, p. 179-193, and Renato BONELLI, "Nuovi sviluppi di ricerca sull'edilizia mendicante", in *Gli ordini mendicanti e la città*, ed. Joselita RASPI-SERRA, Milan, 1990, p. 15-26.

[76] Bonaventure's First Encyclical letter and the other decrees issued under his administration quoted here are taken from Dominic MONTI, *St. Bonaventure's Writings Concerning the Franciscan Order*, St. Bonaventure, New York, 1994, p. 60. In the same letter of 1257 he noted: "The construction of buildings on a lavish and extravagant scale is upsetting many brothers, becoming a burden to friendly benefactors, and leaving us prey to hostile critics." (p. 59-60)

[77] See E.B.S. SHEPERD, "The Church of the Friars Minor".

[78] See above note 33.

[79] The burial crypt at Santa Croce existed also to create a high platform for the church against flooding, which had been a repeated problem at the site. It is the first example of a crypt entirely devoted to lay burial that I know of, and seems to have been copied in the crypt under the new east end of San Stefano (now the cathedral) of Prato. To my knowledge the only study of the crypt at Santa Croce is by Franco CARBONAI, Gianni GAGGIO & Mario SALMI, "Nuove acquisizioni sulla cripta e sul transetto di S. Croce in Firenze", in *Città di Vita*, 38, 1983, p. 31-59. See also Gianni CACCIARINI, "In S. Croce la Chiesa del 1250", in *Città di Vita*, 23, 1968, p. 53-61. For San Stefano, see the forthcoming study by Alick MCCLEAN.

[80] MONTI, *St. Bonaventure's Writings*, p. 60

[81] *Ibidem*, p. 61.

[82] Samuel COHN, *The Cult of Remembrance and the Black Death: Six Renaissance Cities in Central Italy*, Baltimore & London, 1992, p. 33-37.

[83] *Ibidem*, p. 38.

[84] RONZANI, "Gli ordini mendicanti le istituzioni ecclesiastiche," p. 668-669, and Emilio TOLAINI, "I muricciuoli e i sarcofagi del duomo di Pisa", in *Bollettino Storico Pisano*, 67, 1998, p. 129-141.

[85] RONZANI, "Il cimitero della chiesa maggiore pisana", p. 1673.

[86] *Ibidem*.

[87] Carolly ERICKSON, "The Fourteenth-Century Franciscans and their Critics. II. Poverty, Jurisdiction and Internal Change", in *Franciscan Studies*, 36, 1976, p. 129.

[88] RONZANI, "Gli ordini mendicanti le istituzioni ecclesiastiche," p. 670. The rights to burial are vigorously affirmed in articles 42-44 of the statutes of the Synod of Pisa of 1258, see BÉRIOU, *Les sermons*, p. 1083.

[89] RONZANI, "Il cimitero della chiesa maggiore pisana", p. 1672

[90] CROUZIL, "Cimitière", p. 734.

[91] On 18 February 1300 Boniface VIII revised the legislation on the privileges of the mendicant friars in favour of the secular clergy.

[92] See Richard TREXLER, "Death and Testament in the episcopal constitutions of Florence (1327)", in *Renaissance Studies in Honor of Hans Baron*, ed. Anthony MOLHO & John A. TEDESCHI, Florence, 1971, p. 35.

[93] On Barletta, see BRUZELIUS, *Stones of Naples*, p. 163-168.

[94] For the addition of the porch to the collegial church of Notre-Dame see Éliane VERGNOLLE, "L'ancienne collégiale Notre-Dame de Beaune: les campagnes des XII[e] et XIII[e] siècles", in *Congrès archéologique de France*, 152 (Côte-d'Or), 1998, p. 196-197. I thank Éliane Vergnolle for this observation.

[95] See ERICKSON, "The Fourteenth Century Franciscans", p. 126-127, who notes that tertiaries had a fundamental role in persuading the faithful to request burial in Franciscan cemeteries and name Franciscans as their executors.

[96] This in 1266. MONTI, *St. Bonaventure's Writings*, p. 227.

[97] CHIFFOLEAU, "Sur l'usage obsessionnel de la messe", p. 250; also LE GOFF, *The Birth*, p. 96. See more recently Nicole BÉRIOU, "Le vocabulaire de la vie économique dans les textes pastoraux des frères mendiants au XIII[e] siècle", in *L'economia dei conventi dei frati minori*, p. 151-186. In his article on the language(s) of preaching, "La lingua dei predicatori. Tra latino e volgare", in *La predicazione dei frati dalla metà del '200 alla fine del '300* (Atti del XXII Convegno internazionale, Assisi, 13-15 ottobre 1994), ed. Enrico MENESTÒ, Spoleto, 1995, p. 21-46, Paolo DELCORNO cites a passage from a sermon by Ambrogio Sansedoni (d. 1287): "*In evangelio hodierno Domnus Noster intendit nos admonere de misericordia et curialitate per similitudinem ilius regis temporalis qui voluit facere et tenere rationem et curiam cum suis servis et factoribus de l'entrata e dell'escita vel de fructu et expensis.*"

[98] BÉRIOU, *Les Sermons*, p. 767-768.

[99] The cycle is now attributed to Bonamico Buffamalco and generally dated to circa 1330-1336. See Gerd KREYTENBERG, "L'enfer

d'Orcagna. La première peinture monumentale d'après les *Chants* de Dante", in *Gazette des beaux-arts*, 114, 1989, p. 243-262, esp. p. 248. On the attribution to Buffamalco and a survey of the literature, see Chiara FRUGONI, "Altri luoghi, cercando il Paradiso. Il ciclo di Buffalmacco nel Camposanto di Pisa", in *Annali della Scuola Normale Superiore di Pisa, Classe di lettere e filosofia*, third series, 18, 1988, p. 1557-1643. For Saltarelli's fundamental role in the reaffirmation of the authority of the church in the pivotal years of the 1330s (which saw the final extinction of the Ghibelline spirit of Pisa), see Michele LUZZATI, "Simone Saltarelli arvivescovo di Pisa", in *Annali della Scuola Normale superiore di Pisa, Classe di lettere e filosofia*, third series, 18, 1988, *passim*.

[100] For a discussion of rivalries and tensions between the orders, see Yves DOSSAT, "Opposition des anciens ordres", p. 267-269.

[101] On the development of mathematical or "accounting" thinking and the friars as "the pioneers of calculation," see CHIFFOLEAU & LE GOFF, as in notes 13 and 50. See also Alexander MURRAY, *Reason and Society in the Middle Ages*, Oxford, 1985, p. 182.

[102] CHIFFOLEAU, "Les transformations de l'économie paroissiale en Provence", p. 98.

[103] It will not be our concern here to discuss the dissent over property represented by the Fraticelli, or Spirituals, though clearly this issue must have lurked in the background of many building projects, and no doubt elicited internal dissent within those houses engaged in monumental construction projects, as at Santa Croce in Florence.

[104] See Virpi MÄKINEN, *Property Rights in the Late Medieval Discussion on Franciscan poverty* (Recherches de théologie et philosophie médiévales. Bibliotheca, 3), Louvain, 2001, p. 65-76.

Index of Persons

Page references for figures are in *italics*.

Index of Places

Page references for figures are in *italics*.

Key: A: Austria, — B: Belgium, — CH: Switzerland, — CZ: Czech Republic, — D: Germany, — E: England, — F: France, — H: Hungary, — IT: Italy, — NL: The Netherlands, — PAL: Palestine — P: Poland, — SP: Spain.