

How Siena Came By Its Cathedral

The complex origins of the cathedral of Siena have challenged scientists for more than a hundred years. Over the past three centuries, primarily as a result of the Siena Project, our view of the building process has changed fundamentally. Only as a result of the collaboration between specialists in a variety of disciplines has it been possible to collate all of the material, documentary and intellectual findings. In addition to architectural and art historians, it has taken the combined efforts of architects, building researchers, restorers and archivists, as well as historians who have devoted themselves to aspects of political, social and ecclesiastical history.

The history of the preceding structure is shrouded in darkness. Remains of its apse, which dates from around the year 1000, were found during the excavations carried out since 1999. It was gradually abandoned and demolished in parallel with the construction of the present building, but was still functional until around the mid-13th century.

Nor do we have any information regarding the beginnings of the present cathedral. There are records that date back to the end of the 12th century regarding the creation of a Cathedral Masons' Guild (Opera di S. Maria), and that offer a clue as to the commencement of the building

works. The earliest stage of construction still preserved dates from the first half of the 13th century, when a new and substantially enlarged eastern section was built outside of the former eastern end of the church, with a straight two-bay choir, transept and dome area. The dome itself sits upon a hexagonal base at ground level, and moves into the round only above the supporting columns. This new eastern section was joined to the old nave some time in the 1260s. In the period from 1287/88, the great oculus in the east wall was fitted with glass to a design by Duccio di Buoninsegna.

HIDDEN BENEATH RUBBLE FOR 700 YEARS

Directly under the new choir, functioning as a substructure, lies the under-church, which was discovered only in 1999 and excavated by 2002. This was an integral part of the 13th-century cathedral, forming a separate east-facing façade with three portals that carried over into the end wall of the choir above. Situated high on the cathedral mount, this façade faced toward the new and upwardly mobile quarter of the city, as well as the Piazza del Cam-



Siena cathedral's famous marble floors.

po, the political center of Siena. Open-air terraces of steps led up to the under-church, with staircases extending from there to the cathedral itself.

Accordingly, the under-church afforded many citizens more convenient and quicker access than did the far-off western entrance. The cycles of frescoes in the under-church, which can be dated to around 1280 and depict large-scale scenes from the life of Christ and the Old Testament, were carefully revealed between 1999 and 2002 after having been hidden beneath rubble for almost 700 years. Besides the murals, the ornamental decoration of the structure itself is equally sensational, with architectural elements such as column shafts, capitals and wall brackets in vivid colors. Researchers are undecided as to whether the under-church acted merely as a vestibule for the cathedral above, or whether it served some ritual function in its own right. ▶



A view of the exposed under-church with its decorative frescoes dating from around 1280. The choir of the church above is supported by a modern system of stanchions.

In the decades beginning around 1250, when government passed from the old consular nobility mainly into the hands of cosmopolitan merchants and bankers, Siena experienced an extraordinary flowering of culture and prosperity. It is therefore hardly surprising that the cathedral was the focus of a rapid succession of ever greater projects, with existing designs either disappearing entirely or at least being called into question. No sooner were the eastern sections of the crossing and choir completed than the old nave was considered to be inadequate and unimpressive in comparison to the new additions. It was thus demolished and replaced between 1270 and 1285 with the present nave.

Almost without pausing for breath, work on the richly sculpted western façade began in 1284 under the aegis of Giovanni Pisano. The completion of this stage, in turn, led the builders to raise the height of the clerestory and the vaulting of the new nave that had only just been erected. This was not without consequences: ever since that time, the dome appears from outside to have sunk. It is entirely typical of the con-

struction of the cathedral of Siena that completion of one stage of development almost immediately triggered another. The lower section of the western façade was finished by 1296, with the upper story and rose window likely completed by 1317.

A ZEBRA PATTERN IN MARBLE

The cathedral was clad inside and out with white and greenish-black marble, with some additional pink marble on the west façade (and later on the east façade, as well). The zebra pattern gives the building its characteristic appearance. In the older parts, the light and dark stones are more or less evenly spaced; in later sections, the white dominates, as the quarries that yielded the green marble were by then largely exhausted. The marble cladding posed particular challenges for the structural researchers who were looking for joints, discontinuities and the building techniques used in the underlying brickwork.

Even when the west façade was completed in 1317, the cathedral was not considered to be finished. Instead, the focus shifted back to the

east sections. This put a question mark over the continuing use of the under-church, which at that time was not yet even 50 years old. Once the baptistry had been built on the eastern side – at a considerably lower level due to the extremity of the slope – the under-church was finally filled in with rubble. The new baptistry also had three entrance portals, and its vaulting reached to the height of the now concealed portals of the former under-church, which then served as a substructure for an eastward extension of the cathedral choir to provide two additional bays.

These new bays were broader than the two built around 1260, as they were oriented toward the width of the nave that had since been erected. The first two choir bays were therefore also widened as part of this construction stage, and the transepts were modified with the addition of further bays to accommodate the new situation.

In parallel with this work, between 1317 and 1360, the three-story façade in front of the baptistry was erected, which also covers large areas of the outer wall of the choir that aligns with it. However, contrary to the original design drawing that survives on parchment, the brickwork remained exposed in the area around the oculus in the clerestory. In the year 1366, Duccio's round glass window was set into the wall of the choir that had only just been completed. Since the construction of the baptistry, Siena cathedral has boasted costly marble façades on both the east and the west sides, with the eastern façade being set one story lower due to the nature of the slope.

By 1320, just three years after work had begun on the baptistry, initial ideas began circulating for a further enlargement of the cathedral. From 1339 onwards, Lando di Pietro began implementing a grandiose plan for an extended *duomo nuovo* that would have transferred the nave into the new transept. Some individual pillars, arcades and walls of the

planned new nave, which would have abutted the south side of the dome, and in particular the torso of the tall, two-story entrance wall, still stand as haunting traces of the monumental scale of the envisaged design.

STOPPED BY THE PLAGUE

In the midst of construction, and with some of the marble decoration already in place, work came to a halt. The plague of 1348 cut a swath through Siena's population and dealt a decisive blow to the cathedral undertaking, the fate of which was finally sealed by the change of regime in 1355. This was before the contradictions in design that would have arisen in adjoining the new structure to the hexagonal base of the dome had a chance to become glaringly obvious. From then on, every effort was directed toward the baptistry and the choir.

The following centuries saw further alterations to the cathedral. Around the middle of the 17th century, during the pontificate of Pope Alexander VII – a scion of one of Siena's ancient families, the Chigi – the square facing the southern side of the cathedral nave was remodeled following demolition of the old bishop's palace. This, in particular, necessitated the addition of more marble on the south-facing cathedral walls that, until then, had been concealed. The works from 1660 onwards were to adhere strictly to Gothic principles. In one of its many new findings, the Siena Project has revealed that the lantern atop the dome was added by no less a personage than Gian Lorenzo Bernini.

In the coming years, the Siena Project will devote itself to the vast cathedral furnishings and decoration. Along the works by Nicola and Giovanni Pisano, Ghiberti, Donatello, Jacopo della Quercia, Francesco di Giorgio, Michelangelo and Bernini make the cathedral a museum of Italian sculpture of the highest order.

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