How would you describe the historical style suggested by the Smithsonian Building which we know as the "Castle"? The architect’s specifications and Smithsonian documents used the term "Norman" to describe the building. Some critics at the time called it "medieval", in a derogatory sense. In our time the building has been called "Romanesque Revival", a term that describes as well the rock bound Richardsonian design of such buildings as the Old Post Office in downtown Washington and the Think Tank (originally Small Mammal House) at the Zoo.

The word "Norman" refers of the kingdom of William the Conqueror whose territory encompassed England and northern France. William and his forces conquered the Anglo-Saxon ruler of Britain, King Harold, in 1066.

Eleventh century Norman architecture in England was military. The Normans were imposing their order on a native population by force of arms. Castles were built to provide both residence and fortification to the Norman lords who received their authority as conquerors, not inheritors. There were many Castles built, but none of them resembled the Smithsonian Building. They were square towers surrounded by encircling defensive walls, not long, thin buildings with lots of windows. (fig 1)
The Normans brought to England the general style of the period in Europe at this period which is now known as Romanesque. Romanesque architecture structures were reused. The rebuilding stimulated by Charlemagne, who had himself crowned Holy Roman Emperor in 800 AD, was meant to resemble and thus evoke the authority of Rome, but was indeed rather a crude copy. The buildings featured Roman de-

tails such as classical capitals, domes and arches. In these uncertain times later called the "Dark Ages," the walls were massive, giving the interiors their sense of protective enclosure.

As political conditions in Europe and Britain became somewhat more stable in the late 11th and 12th centuries, building flourished. Most of the great buildings were church related. The protective sense of enclosure and the late Roman details persisted and yet changed as the churches and monasteries blossomed in size and height. (figs 2&3)

The distinctive style development of the 13th century featured the pointed arch and window, as opposed to the round window of

the Romanesque. This is the style known as Gothic. Its many monuments in Europe and Britain and their imitators here have made the style somewhat familiar. The National Cathedral, for instance, is in the Gothic style.

The double pointed-arch windows within a round-headed arch,
The early Gothic, shading over from high medieval to late medieval period (14th and 15th centuries), was identified for the 19th century as Early English by Thomas Rickman in *An Attempt To Discriminate the Styles Of Architecture In England* (1817). Fig 6 Early English was characterized as a 13th century pointed arch style with simple multi-part vaulting as in the

used on the Smithsonian building, represented a transitional affect between the Romanesque (round arch) and Gothic (pointed arch) styles. (fig 5) Take a look at how many of these early Gothic windows there are there on the "Castle".

The 19th century aspects of the building are the combination of the lighter walls and delicate proportions with a mixture of early, high and late medieval details. Though its motifs and details were technically medieval, the building had a decidedly early 19th century linear distinctiveness, with its tapering towers, thin walls pierced by numerous windows, and general picturesque qualities.

The medieval elements have been broadly chosen to conform to the principles of the influential designer and author Augustus Welby Pugin who dictated that ornament be used only to express structure or dramatize function. Neither was the building Norman. It owed very little to the massive walls and heavy, roughly articulated forms of traditional Norman architecture.

Renwick's Smithsonian Building is a masterful combination of correct details used freely. The medieval forms and details are picturesquely composed for the 19th century taste. The style is a romanticized Medieval Revival.

CRF
SAINT DUNSTAN

As you walk through the Enid A. Haupt Garden, you may pass by the south tower of the Smithsonian Building. As you look upwards, a statue rests in a niche on the east side of the tower. A glance shows a man wearing ecclesiastical garb, holding tongs in his left hand and a staff in his right hand. Who is this mysterious figure?

In December 1977, Secretary S. Dillon Ripley asked his Special Assistant, Richard H. Howland if there would be "any possibility that we could find, somewhere around the Smithsonian, a sculpture which would fit the niche on the east side of the central south tower of the Smithsonian building? I am thinking of something, of course, in the classic Italian tradition ranging from mourning figures to knights of old to Saints."¹

The word "saints" surfaced in the mind of Richard H. Howland when he visited Westminster Abbey in 1979. While there he discovered that the Abbey was undergoing restoration. Thirty-three of the thirty-six late 19th century limestone statues of Saints along the north facade of the Abbey were being recarved due to environmental deterioration. Howland discussed a possible donation of one of the statues to the Smithsonian, and the Abbey offered "St. Dunstan" to the Institution.

Despite the fact that the statue was in extremely bad shape, Dr. Howland proposed to Mr. Ripley that the Institution "bring the wretched statue here to Washington and let it be examined, rebuilt, or left to lie fallow. We shall either have an attractive and historically/sculpturally/architecturally significant statue for our niche or we won't."² Mr. Ripley decided that the estimated cost of $750.00 for transporting St. Dunstan to Washington was worth the risk of restoring the statue and accepted the Abbey's gift.

When the statue was uncrated in January 1980 after its two-month Atlantic sea voyage, further damage had occurred during shipping, and more restoration was needed than had been anticipated. The contract for the restoration of St. Dunstan was awarded in July 1980 to Constantine Seferlis, a stoncarver at the National Cathedral.³ Seferlis determined that the head and shoulders, feet, arms, and hands had to be completely recarved. He recommended that a paste combination of crushed limestone and stone glue and metal pins and bars be used to rebuild the statue. Upon completion, St. Dunstan would be stained to match the Seneca sandstone of the Smithsonian Building. Seferlis worked on the decayed statue for three months. The 1,000 pound statue was hoisted upward to its present home in November 1980.

St. Dunstan, one of the most enlightened men of his time, was born circa 910 A.D. near Glastonbury, England, where he received a monastic education. After entering the priesthood at Winchester, where his uncle was Bishop, he returned to Glastonbury and lived near the church where he studied bell-making, metalworking and manuscript-writing.

In 943 he was made Abbot of Glastonbury by King Edmund I, who sanctioned Dunstan’s monastic reforms in England. These included the reconstruction of monastic buildings, the restoration of churches and the integration of monks with the secular clergy.

Dunstan continued his work under King Edgar who appointed him Archbishop of Canterbury in 959. For the 973 coronation of Edgar, Dunstan devised the English coronation rite which has remained in use throughout the centuries. Dunstan retired to Canterbury where he taught until his death on 19 May 988.
Dunstan’s life was truly one of intellectual pursuits. Besides his ambitious undertaking of monastic reform, Dunstan was known for his scribesmanship and his musical skill with the harp and voice. His early years as a blacksmith may have spawned the popular legend which remains a part of Dunstan lore to this day. Legend maintains that the devil was enraged by Dunstan’s preaching. He visited Dunstan in his blacksmith’s shop, disguised as a beautiful young woman, to tempt Dunstan into sin. A gust of wind blew up the devil’s skirt, revealing his true nature. Dunstan took his blacksmith’s tongs from the hot fire and tweaked the Devil’s nose.

S. Dillon Ripley stated that Dunstan "seems to symbolize much of the principles of the new Quadrangle." It seems appropriate that this saint of intellectual and artistic pursuits surveys the Quadrangle, home to two galleries, classrooms and an international center, from his perch on the south tower.

NOTES:


3. Since 1980, Seferlis has been under contract to the Institution for various stone repair projects. He also carved the Renwick Gates at the south entrance to the Enid A. Haupt Garden, the steps on the east entrance to the Castle, and the south tower transom window.


CENTENNIAL = COLONIAL?

For the most part, Americans of the Victorian era did not collect antiques; those who could bought fashionable, new furniture. Although most of that furniture was designed in historical styles, ancient motifs were being used in new ways and on new furniture shapes. Towards the end of the nineteenth century, a quantity of furniture was made in the style of fine eighteenth-century pieces; today, these are rather freely referred to as "Centennial" furniture. A few antiques dealers say that a "Centennial piece," strictly speaking, is a scholarly reproduction of an American antique, made in 1876 or produced specifically for the Centennial Exposition of that year. But many more people apply the term loosely to old Colonial Revival furniture, almost all of which was made after 1876, and in a wide range of quality.

There was popular living-history exhibit of a Colonial New England Kitchen at a Brooklyn and Long Island Fair in 1864. Here, "Quaint furniture and appointments, relics of the past, were displayed in what was considered to be New England style...The exhibit was an important precedent for another, more famous New England installation in the Philadelphia Centennial twelve years later."

Another influence on American design was a Chippendale revival taking place in England during the 1860s and '70s.

In 1873, a national financial panic brought uncertainty and instability to many Americans; this fostered an appreciation for old, established things, especially those inherently American. Old family furniture came to symbolize social status and old-family lineage. The American Centennial generated a nationalistic pride and a nostalgia for the supposed simplicity, honesty and heroism of the colonial past.
Furniture manufacturers strove to keep up with the new interest in American antiques. According to an article entitled The Antique Craze, published in the Cabinet Making and Upholstery magazine in 1884, "there is little doubt but the manufacture of antiques has become a modern industry..." Better companies and fine craftsmen did make faithful copies of period pieces, but since these were expensive, much new furniture was adapted loosely from documented antiques, and cheaply built. Furniture historian Oscar Fitzgerald has said that "the term Colonial revival applied indiscriminately to Queen Anne, Chippendale, Federal, and even Empire-style furniture manufactured after 1876."  

The Colonial Revival has achieved its own centennial, and the furniture it produced is now legitimately antique. At first sight, the best pieces can be deceptive in their historicism. But at a deeper level, like most Victorian furniture, these reproductions can reveal how craftsmen of our past have interpreted design idioms of their own past.  

MCH

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3. Fitzgerald, p. 262.

During the last quarter of the nineteenth century, American furniture from the colonial and early federal years began to be valued as antiques, reemerging from attics and carriage houses to take their domestic place in an eclectic mix of late Victorian styles. By the time of the United States’ 1876 Centennial celebration in Philadelphia, the furniture of the late eighteenth and early nineteenth century also began to be reproduced with some attention to authentic design and detail. These "Centennial" pieces were marketed to middle class consumers, who may not have had their own antiques but appreciated the simpler designs and nostalgic associations of early American furniture.

The recreation of early American furniture steadily gained momentum to become the dominant furniture style of the twentieth century. These reproductions are known collectively as "Colonial Revival" furniture, but the earliest pieces from the last quarter of the nineteenth century are sometimes called "Centennial" pieces. These early reproductions are now over a hundred years old and because of their age, can be difficult to distinguish from their prototypes. Manufacturers of Centennial furniture attempted to revive earlier furniture forms rather than create the distinctively freer, more interpretive revival styles of most Victorian period furniture.
The late eighteenth and early nineteenth-century inspirations for Centennial reproduction were the Philadelphia Chippendale, Baltimore Federal and the Empire period furniture of New York. These urbane prototypes were recognized as some of the finest examples of American decorative art. Their reinterpretation as Centennial furniture, however, often resulted in rather clumsy design and execution. The reason for this lies primarily in the social and technological circumstances under which these Centennial pieces were produced.

Centennial furniture is distinctively middle class in its popular appeal, imitative in its aesthetic and cheap in its production. Mechanized technologies make certain compromises of construction necessary. Since the nineteenth century was a period of rapid technological advancement and popular consumption, the design and construction of Centennial furniture reflects some of these changing markets and technologies and their resulting aesthetic limitations.

For the sake of cheapness, a certain degree of the skillful control of the craft is sacrificed to the parameters of the machine and its efficiencies. Woodworking machinery does a wonderful job of preliminary stock preparation. However, the Victorian innovations of machined ornamentation tended to degrade the unity of furniture designs, which was increasingly evident in the imitation of earlier, hand crafted styles. The machined effects on design and execution can be detected in Colonial Revival furniture, no matter how subtle.

If a reproduction is relatively accurate, then the surest signs of date can be the evidence of the increased use of machinery in construction processes that were developed during the middle of the nineteenth century. The characteristic semi-circular markings of the circular-saw and the regular, closely spaced, parallel striations of the bandsaw are indications that a piece dates from the latter-half of the nineteenth-century.

Joinery is a particularly important indicator of the manufacture date. A mortise and tenon joint is the traditional eighteenth century method of joining the vertical stiles and horizontal rail members of a furniture frame. The mortise and tenon is one of the strongest but most difficult joints to produce. Developed over centuries this joint is incorporated into the finest hand made furniture, even today. A mortise and tenon may or may not be of early construction, but a dowel joint certainly indicates a later date. The use of machine-made dovetails is also an indication that a piece dates from at least the second half of the nineteenth century.

The most interesting aspects of Centennial furniture are less in the qualities of the individual pieces than in the context of their marketing, manufacture and domestic use. As reproductions, these pieces tended not to be very accurate. They were incorporated into eclectic interiors for their associative connotations of colonial virtue. In the stylistic synthesis of late nineteenth-century interiors, Centennial furniture was one expression of a desire for a simpler life.

Fig 1. The clock tower of the Smithsonian Building, 1848.

THE SMITHSONIAN BELL

Architect James Renwick, Jr. designed the Smithsonian Building with a tall tower featuring four clock faces carved into the stone (fig 1). On February 27, 1851 the Smithsonian’s Regents approved a
resolution authorizing Secretary Henry to purchase a clock and bell for the tower. For reasons as yet unconfirmed, neither bell nor clock were installed at that time. One possible explanation is that the Regents approved the resolution provided that the city of Washington would defray one half of the cost of the bell, the Smithsonian would pay the other half. The clock faces in the north tower remained empty until the present clockworks were installed during the 1968-72 renovation of the building. A bell, though planned, was not installed at that time either. The Smithsonian’s 150th Anniversary year presented an opportunity to realize in total the intent of the 1851 resolution as well as to commemorate for future generations the Institution’s founding.

The Smithsonian’s 821-pound bronze bell was cast at the Whitechapel Bell Foundry, London, England. The foundry, which has been in continuous operation for 576 years, also cast Big Ben and the original Liberty Bell, as well as several working bells in Washington, D.C., including those in the Old Post Office and the Washington National Cathedral. Whitechapel foundry still follows bell casting processes which have remained virtually unchanged since medieval times; simply stated, bronze is heated to a molten state and poured into specially made bell-shaped molds.

The construction of the mold is the first step in the process of bell casting. Composed of an outer "cope," and an inner core, the empty space left between the two parts is filled with molten metal (fig.2). The mold is built of bricks and loam (an aromatic mixture of clay, straw, goat’s hair, and horse manure). Both parts of the mold are smoothed and polished, then dried in an oven, coated with graphite, and clamped together. The mold is then ready to receive the molten metal.

The metal used in bell casting is bronze, an alloy of 77% copper and 23% tin. Heated to 2140 degrees F (1171 degrees C), the molten metal is poured from the furnace into a massive ladle which is then brought to the mold on an overhead crane. The ladle is carefully tilted, discharging the liquid metal into the mold. After a day of cooling, the mold is broken open to reveal the bell.

After the newly cast bell is cleaned of any remaining mold loam, then it must be tuned in order to produce a pleasing tone when struck. Tuning takes place on a machine called a vertical boring mill that works like a potter’s wheel. While spinning upside down on the mill, metal is cut from the bell’s interior until the desired tone is achieved.

The Smithsonian bell was cast on September 21, 1995, and bears an inscription proclaiming the Institution’s mission, "for the increase and diffusion of knowledge..." The inscribed bell also recognizes the donor, A.T. Cross Company, which shares the Smithsonian’s year of origin, 1846. The bell will be lifted into its position on the clock tower roof, unseen from ground level, and will strike its D-flat notes for the first time on the Smithsonian’s birthday, August 10, 1996.

NOTES:
3. The bell is on exhibit in the Children’s Room in the Castle until August 10.
PHOTO-OP

The National Air and Space Museum building seems so well suited to its site on the National Mall and to its function as a home for the Smithsonian’s air and space collections that many people do not realize that the present structure was only the last in a series of designs for the museum. Congress originally set aside the Mall site for an air museum in 1958 and in the same legislation (Public Law 85-935) authorized the planning of the museum. The architectural firm Helmuth, Obata, Kassabaum was awarded the contract for the original design in 1964.

The original structure, depicted in the interior and exterior drawings, presented a very different image of the air museum than the one with which we are familiar today. The first drawing shows the Mall facade of the building with a series of projecting window bays through which aircraft in the interior could be glimpsed. A cornice level at the top of the structure housed the administrative offices with a continuous band of windows permitting views out of the building on all sides. The interior of the building was defined largely by a central "great hall" with air and space craft situated on platforms at various levels throughout the space. This version of the museum would have provided more administrative and exhibit space than the present museum and two levels of underground parking at a projected cost of approximately $40 million.

Due to unfortunate timing, this design was never executed. The beginning of the Vietnam conflict halted most Federal construction projects, effectively prohibiting the Smithsonian from acquiring any funds for new construction. In the intervening years, construction costs escalated so sharply that estimates of the cost of the structure quickly grew beyond the scope of a reasonable appropriation request. As a result, the building was later redesigned by the same firm with a reduced scale and program. The popularity of the new design, however, seems to have more than made up for the loss of the original - though I am sure the Smithsonian staff would have really appreciated that second level of parking!
Please Take Note

This is the first issue of the newly re-named "Smithsonian Preservation Notes," formerly "Smithsonian Preservation Quarterly."

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