

INSIDETRACK



MODELS OF INGENUITY





“No building, at least none of considerable size or consequence, should be begun until a correct and detailed model of all its parts has been made,” stated the architect Sir John Soane in a lecture he gave to the Royal Academy of Arts in 1815.

Soane wasn't the first to subscribe to this philosophy. The so-called Great Model of St. Paul's Cathedral that architect Christopher Wren had model-maker William Cleere build in 1673–74 reputedly helped Wren secure that commission from King Charles II. But it was also intended to serve as a guide for builders should the architect meet his demise during construction. (Considering that construction took 35 years, this was not an idle notion.) In generations before Wren, architects used models to experiment with designs, work out solutions to dilemmas, and communicate their ideas to clients.

Those are the practical reasons for the existence of architectural models. Then there are the aesthetic considerations: these are objects to be admired and collected for their beauty, craftsmanship, and historical significance. Constructed in precise scale with minute attention to detail, they are no mere dollhouse representations. Today, any lover of beauty in three dimensions should take a closer look at these unusual, and surprisingly diverse, expressions of creativity.

So, where to find them? In the mid-18th century, Sweden's King Gustav III owned a fine collection of architectural models that now resides at the Nationalmuseum in Stockholm. You'll find other examples at New York City's Cooper-Hewitt Smithsonian Design Museum, and it's easy to marvel at Wren's Great Model during the “behind the scenes” Triforium Tour at St. Paul's. Three other collections are noteworthy, and it's those we focus on here.

LONDON'S ROYAL INSTITUTE OF BRITISH ARCHITECTS

Of the more than 300 architectural models in the Royal Institute of British Architects (RIBA) collection, the oldest is a model of Easton Neston house in Northamptonshire, made by the architect Nicholas Hawksmoor (1661–1736) in 1694. Crafted from varnished oak with a stone-gray-painted exterior, it has a blue-painted roof that lifts off to reveal the upper floor of the house, with its four large rooms, a two-story hall, a grand staircase, and a central gallery. The upper floor lifts out to reveal the ground floor, with rooms detailed right down to a miniature mantelpiece carved with the insignia of Sir William Fermor, 1st Baron Lempster,

for whom the house was built. The ground floor, too, lifts out of the model for closer inspection.

The Easton Neston model came to RIBA relatively recently, purchased at Sotheby's in 2005 for £180,000 (including the buyer's premium and value-added tax). “When the auctioneer announced RIBA had bought it, there was a round of applause,” says Charles Hind, chief curator and H.J. Heinz curator of drawings at the RIBA British Architectural Library. “It's one of the things I'm most proud of.” Another is the model commissioned by I.M. Pei (b. 1917) for the Oare House Pavilion at Oare House in Wiltshire. Completed in 2004, the building resembles a futuristic glass pagoda. “For us, this model ticked all the boxes,” Hind says: “It is Pei's only project in the U.K. He's a RIBA Gold Medal winner. And we have a large collection devoted to garden architecture.”

In 2004 RIBA established a partnership with London's Victoria & Albert Museum, which led to the creation of a permanent gallery where a selection of models from RIBA's collection are on display. Others can be found at the RIBA British Architectural Library on Portland Place in central London. “The majority of our models are post-war, and the vast majority of our collection is British,” Hind notes. “Part of our remit is to be the collective memory of the profession.”

Donations have brought the collection some objects the curator never anticipated, such as a silver-colored metal model of the Imperial Chemical Industries headquarters that was commissioned by the client as a thank you for the architect Sir Frank Baines (1877–1933). Another model came from the son of an architect whose single-story bungalow design won a prize at Britain's annual Ideal Home

(OPPOSITE) GIOVANNI ALTIERI (active from 1767), cork model of the Temple of Vesta (Tivoli), 177?, Sir John Soane's Museum ■ (BOTTOM) NICHOLAS HAWKSMOOR (1661–1736), Easton Neston, Northamptonshire, England, 1694, RIBA Collections. Seen at left is its exterior after the interior (right) has been removed.





(ABOVE) I.M. PEI (b. 1917), model of Oare House Pavilion, Oare House, Wiltshire, England, c. 2000–03; RIBA Collections ■ (RIGHT) The newly opened model room at Sir John Soane's Museum, photo: G. Gardner





A painted wood model of Soane's Bank of England (London), northwest (Tivoli) Corner, design executed 1805, Sir John Soane's Museum

Exhibition in the 1960s. For purchases (which tend to be older models that help RIBA represent the continuum of British architecture), as well as restoration and conservation, the institution relies on funding from its members and donors, including the American Friends of the British Architectural Library.

The expense of making models, coupled with advancements in digital capabilities that allow architects to create virtual “fly-throughs” of proposed buildings, has led to a decrease in the number of models produced by architectural firms today. Yet Hind anticipates that as three-dimensional printing becomes more refined and accessible, a resurgence in architectural model-making will follow. “The advantage of a model is that people can stand over it, move around it, discuss, and think,” he says, adding that the practice of making models will always appeal to the architect’s nature. “Historically, model-making was taught in architecture schools. The engagement of hand, eye, and brain in approaching a problem is an essential part of a good outcome. And architects like making things; they tend to be quite handy.”

SIR JOHN SOANE'S MUSEUM, LONDON

A prolific architect whose extant works include London's Dulwich Picture Gallery, Sir John Soane (1753–1837) was a collector whose passion for acquisition could be considered just this side of hoarding. In his lifetime, he amassed tens of thousands of architectural drawings along with thousands of books, artifacts, and “curiosities” ranging from an Egyptian alabaster sarcophagus to mummified cats, plus more than 160 models of his own buildings and structures from antiquity.

Four years before his death, Soane stipulated — through an act of Parliament, no less — that his London home on Lincoln's Inn Fields should become a museum for the study of architecture, his archives retained for research, and his collection of models opened for public viewing. It took more than 160 years for his wishes to be fulfilled, but in spring 2015, the museum's dedicated “model room,” re-created as Soane envisioned it, opened to much-deserved acclaim.

“Architectural models were very much part of Soane's design process and an essential part of his creative practice,” says Helen Dorey,

the museum's deputy director. “[They] illuminate that whole process, and their wide range of purposes is fascinating. Some were made to demonstrate certain kinds of construction and intended for workmen; others for grand committees for whom a model was perhaps more comprehensible than a drawing. [Soane] made a plan model of the Law Courts with different colored lines painted onto it to illustrate the different routes that might be taken through the building — so those considering whether or not to approve the scheme could see how the circulation would work.”

After his wife's death in 1815, Soane turned her second-floor bedroom into a model room, which he invited his Royal Academy students to visit, conceiving of his home as a veritable “academy of architecture.” At its center he placed an 8-foot-square, three-tiered showcase specially commissioned to display a large cork model of the ruins of Pompeii, with space for other models below and around it. In the decades following Soane's death, as responsibility for his museum changed hands, the model room was dismantled, and, shockingly, the display stand and its model of Pompeii were



sliced in two. It wasn't until 2009 that a plan was formalized to restore the room to Soane's specifications, which included conserving both the stand and the Pompeian model. Much of the ongoing work is being funded by innovative gift schemes such as "Adopt a Model." This program allows donors to contribute toward the conservation and care of individual objects, such as the Erechtheion, Athens; the Choragic Monument of Lysicrates, Athens; and individual portions of the Bank of England building, all of which have been "adopted" by American donors through the Sir John Soane's Museum Foundation in New York.

Some of the Soane Museum's cork models are attributed to Domenico Padiglione, chief model-maker for the Real Museo Borbonico in Naples (now the National Archeological Museum) at the start of the 19th century. As a sideline, professional architectural model-makers, such as Padiglione and Giovanni Altieri (active from 1767), a Roman model-maker whose best customer was Sweden's Gustav III, made cork models as souvenirs for tourists visiting ancient sites during their Grand Tour of Europe. "The surface texture of the cork models is so enticing, and the material perfectly matched to the function of depicting ruined stonework," Dorey says. "The color almost

seems to express the Mediterranean light falling on the ruins."

Asked to choose her favorites in the Soane collection, Dorey points to a plaster model of the tall monument at Palmyra and another of Rome's Pantheon, both made by François Fouquet (1787–1870) — two of the collection's 20 Fouquet models. "These are miniature masterpieces with tiny architectural elements cast or carved with surgical precision," she says. (François's father was model-maker Jean-Pierre Fouquet [1752–1829], whose earliest extant work is the model for the Capitol at Richmond, Virginia, made according to the designs of its architect, Thomas Jefferson.)

RICHARD MEIER MODEL MUSEUM, JERSEY CITY, NEW JERSEY

Pritzker Prize-winning architect Richard Meier (b. 1934) is also a believer in architectural models as a means of design development, experimentation, and communication. As the model is built, the architecture takes shape and becomes tangible. In the process, questions are answered: How do the buildings relate to the terrain that surrounds them? How will the interior space be partitioned and used? What will the occupants see when they look out their windows? When it's tactile, it's real, easier to com-

prehend, and easier to explain to clients who tend to respond more viscerally to the artistry of a three-dimensional model than they do to a computerized representation of a building in the concept stage.

Today, on your free, by-appointment-only visit to the Richard Meier Model Museum, you might well encounter groups of student interns looking closely. "Meier wants everyone who works in his office to be able to build a model," says director of archives and exhibitions Marie Penny. And, one can infer, Meier wants everyone who visits his museum at the MANA Contemporary cultural center in Jersey City to appreciate the significance of models to the creative process. "We've had visiting architects tell us that they do most of their work on computers. They find the models amazing," Penny says.

The stars of the collection are two vast models of the Getty Center complex in Los Angeles. Crafted from Malaysian birchwood, each took two years to build. The smaller is a 1/8-inch=1 foot-scale design development model measuring approximately 10 1/2 x 19 x 3 feet; it was made for a client presentation in 1991. The larger is a 1/4-inch=1 foot-scale construction document model measuring 21 x 37 x 5 feet. It separates into 17 components for

easier transport and is so big and detailed that photographing all of it had to be done on a Paramount Studios soundstage. During the course of the Getty Center project, some 200 models were constructed (by hand, of wood) – so many that Meier opened a model shop near the project site where 10 full-time model-makers and legions of interns were employed. All this before the first shovel hit the ground.

The oldest model in the collection is one Meier built himself for the Smith House in Darien, Connecticut. Made in the mid-1960s from basswood, it's a rudimentary rendition of the home, with its expansive windows and distinctive outdoor staircase. Another standout is the model for the Neugebauer House in Naples, Florida, built in the 1990s. Its "butterfly roof" was a concession to the requirement that all homes within the residential community have pitched roofs, even though Meier "doesn't build houses like this," Penny says, tenting her fingers.

Other models here include Meier's High Museum of Art in Atlanta, the Arp Museum in Germany, and the Ara Pacis Museum in Rome, as

well as proposed designs for the National Library of France and the World Trade Center Memorial in New York. Whether made from wood or from white acrylic, the models are sleek echoes of Meier's buildings and pure reflections of his design aesthetic. "They're abstract," Penny explains. "There is no color because they're not meant to be dollhouses." Thus, even the trees on the Getty Center models are rendered in Malaysian birch according to a patented design called "Mr. Tree."

With very few exceptions, Meier has kept and preserved all of the models related to his significant projects. Occasionally they are loaned out for exhibitions: the model of Barcelona's Museum of Contemporary Art is currently in that city, and the Museum of the City of New York has included the Twin Parks Northeast apartment complex model in its show *Affordable New York: A Housing Legacy*, which runs through February 16. More often, the collection remains intact at the museum, which is Meier's preference.

"On a micro level, the craftsmanship and beauty of the models is something you can

appreciate even if you're not an architecture fan," Penny says. "On a macro level, the collection represents 50 years of an architecture practice. It's a living archive."

Leslie Gilbert Elman writes about art, antiques, travel, and other subjects. Her article "Alix Aymé: A French Woman in Asia" appeared in this magazine's August 2015 issue.

Information: RIBA British Architectural Library, architecture.com/RIBA/Visitus/Library/TheRIBALibrary.aspx; V&A+RIBA Partnership, vam.ac.uk/content/articles/a/architects-models; American Friends of the British Architectural Library, afbali.org; Sir John Soane's Museum, soane.org; Sir John Soane's Museum Foundation and Adopt-a-Model, soanefoundation.com; Richard Meier Model Museum, richardmeier.com/?projects=richard-meier-model-museum; to make an appointment, e-mail m.museum@richardmeier.com.

(OPPOSITE PAGE) FRANÇOIS FOUQUET (1787–1870), plaster of Paris model of the Pantheon (Rome), 1800–1830, Sir John Soane's Museum ■ (BELOW) A view inside the Richard Meier Model Museum with a Getty Center model in the foreground; photo Chris Cooper, courtesy Richard Meier & Partners Architects

