

## Overruled

A review of the exhibition: *Compass and Rule: Architecture as a Mathematical Practice in England, 1500 – 1750* at the Yale British Art Gallery February 18, 2010. Sunday, May 30, 2010

By Geoffrey Detrani

Monarchs have their quirks. One of the cherished hobbies of Louis XVI was locksmithing. For George III of Britain it was architecture.

But unlike Louis, George's hobby was considered, in Britain, a practice of some prestige – the most artful of the sciences and the most scientific of the arts. With roots in the humble ground, architecture rose to the ivory tower. Documenting how this came to be, over the course of two and a half centuries, is the central point of the exhibition *Compass and Rule: Architecture as a Mathematical Practice in England, 1500 – 1750* at the Yale British Art Gallery. It is a story of how a craft underwent professionalization and separation into stratified roles.

Once, builder and designer were cut from the same cloth and designs evolved in tandem with the evolution of a building project. But over the course of 250 years, there was a gradual transformation wherein architecture came to be thought of, and practiced, as a distinct discipline and as a professional art. This new discipline embraced math, science and technology.

*Compass and Rule* is thick with drawings. They are the primary means of documentation. We see many works of various degrees of exactness spanning the shows historical purview. Some are just snippets of information, some are detailed schemes in two and even three dimensions. As the drawings progress from the Renaissance to the Enlightenment, they lose some of the awkward touches (quirky perspective, notational houses with smoking chimneys, rows of vegetation and other marginalia) that make early drawings so much fun to look at. What they gain is exactness and precision - yielding a product that wouldn't seem unfamiliar to architects today.

The exhibition prominently features the work of Christopher Wren, one of the superheros of English Architecture who was tasked with rebuilding London's St. Paul's Cathedral after the original was lost to fire. So massive was this building project that Wren was forced to employ a very ordered drawing studio to efficiently create the necessary designs - and in so doing further shape the craft into a regimented profession. A video demonstrates how the concise, all in one ground plan, elevation and transversal drawings communicated a lot of information in a little space.

But this economy of means isn't necessarily reflected in the tools and instruments displayed. Protractor, astrolabe, the eponymous compass and rule, theodolite and level - there are many of these on display and they are beautifully machined objects and delightful to look at. Most are small and precisely wrought. Among the exceptions to this

are the huge compass and level at the start of the show. These gargantuan tools are relics of a time when builders drew directly onto their materials in full scale. Then there is George III's ornate silver and glass microscope – a glimmering artifact marking the collision of precision technology and opulence. It nicely augments the narrative of the show – history through biography - though it isn't an architect's tool per se.

Of course, one is not surprised to learn that many innovations came out of military necessity. War births change. Designers of newer and better fortifications were cutting edge and moved to the forefront of architecture. A couple of beautifully illustrated books document some of their ideas and indulge in illustrative details that set them apart from dry architectural treatises.

But the notion of architects as elite professionals bridging science and art and enjoying the prerogatives of the privileged classes had its detractors. The show concludes with a critical riff on this new profession. The 18<sup>th</sup> century wit Hogarth skewers this potential snake pit of pretension in a hilarious etching in which the types of periwigs (ornate hairpieces) popular at the time are drawn and categorized like architectural columns. The disembodied, opulently bewigged heads of attendees to King George's coronation are shown with drafting lines and measurements mockingly indicative of scientific precision and stuffy taxonomy.