'A More Beautiful City': Robert Hooke and the Rebuilding of London after the Great Fire

Robert Hooke (1635–1703) is a pivotal figure in the intellectual life of seventeenth-century Europe. In the study to hand, Michael Cooper intends to 'rectify some of the neglect and misunderstandings about Hooke by examining his work in London as City Surveyor after the Great Fire and relating this to his work in science' (p. 2). Roughly the first half of Cooper's book is concerned with biographical information related to Hooke's early life and training and his career as a scientist. While a youth at his home on the Isle of Wight, Hooke energetically observed natural phenomena and apparently taught himself to draw to a very high level of competence. That draughtsman's talent, it seems, helped lead Hooke, after his father's death in 1648, to a stint as an apprentice in the studio of the portraitist Peter Lely. Leaving his apprenticeship in short order, Hooke moved on to study at Westminster School and there enjoyed the support of its redoubtable headmaster Richard Busby. According to Cooper, Hooke ‘applied himself diligently to learning Latin and Greek [but] was no more than competent in those subjects’ (p. 16). I would have liked to learn what competence was or, more to the point, the evidentiary basis for that claim, especially since Hooke went on to earn an MA from Christ Church, Oxford, an environment in which such a command of the classical languages would have presented a considerable (if not insurmountable) impediment to the completion of any course of studies.

In 1662 Hooke began to organise the public experiments attended by members of the fledgling Royal Society in London, which had been granted a royal charter that same year. As historians of science know, Hooke devised a law of elasticity with respect to solid objects (Hooke's Law), built a telescope and made several important astronomical observations, and looked through a microscope at silk, a snowflake, the scales of a sole, the sting of a bee, a spider, a fly, a gnat, a louse and a flea. Startlingly detailed, large-scale engravings recording Hooke's small-scale observations illustrate his landmark book Micrographia, published in 1665, the same year that he became professor of geometry at London's Gresham College, which was also his residence. From a letter to Hooke dated 5 February 1676 [NS] comes Isaac Newton's famous phrase, 'If I have seen further it is by standing on ye shoulders of Giants'. Cooper writes that these words were meant to insult Hooke, who was short in stature, and the relationship between the two scientists was never good. In his groundbreaking Principia, Newton refused to openly acknowledge the generative role Hooke's observations – communicated by means of an epistolary exchange of 1679–80 – had played in the formation of the inverse square law of planetary motion. My speciality being the history of art, I shall not
comment further on either the more explicitly scientific side of Hooke's career or Cooper's recounting of it.

On 13 March 1667, just over six months after the Great Fire had been extinguished, the London Court of Common Council deputised Hooke, Peter Mills and Edward Jerman to measure the dimensions of parcels of private property and establish the location of former (and newly proposed) city streets, adjudicating the many competing claims arising between individual property owners on the one hand, and between individual property owners and City authorities intent upon rebuilding London as quickly as possible on the other. Cooper demonstrates that ‘95 percent of the foundations had been staked out by the end of 1671’; that nearly 22 percent of those measurements can be ascribed directly to Hooke; that Hooke in fact completed nearly 36 percent of all measurements; that his activity, occupying ‘at least three hours a day’ in the years between 1667 and 1673, proved extremely lucrative; and that Hooke's survey books, unlike those of Mills and Jerman, are lost, having remained in his personal possession because over time he recorded other information in them related to various of his interests (pp. 139–41).

A great strength of the second half of Cooper's book lies in the generally readable narrative he weaves through reference to numerous archival sources, sources that enable him to reconstruct many day-to-day activities that helped London rise from its ashes. For example, chapter 13 takes up the role of ‘viewers’ in post-fire London. The office of viewer was not new, but the tasks to be dispatched after 1666 were Herculean. Hooke and his colleagues examined building sites, investigated allegations of abuse, and determined whether new-built structures conformed to post-fire building codes and to the general good of the city and its inhabitants.

A particularly fascinating chapter treats of London's Fleet River. After the Great Fire, the plan was to clear the river of rubbish, to regularise its channel and to flank it with broad quays; these human interventions accomplished, the pronounced tidal action of the Thames, it was hoped, would restore to London a practical north-south artery for waterborne traffic. Sadly, natural forces deriving from the steep inclines bordering the northern reaches of the river contributed to difficulties in deploying sufficiently resistant component parts (retaining walls, pilings, and the like); additionally, during times of heavy rains, rubbish swept westward and downhill from the City into the Fleet and flowing southward from Clerkenwell contributed to Sisyphean campaigns of removal and dredging that caused costs associated with the project to rise. These cost overruns and the impressive rebuilding of the City Churches brought it to pass that plans for a quay stretching eastward to London Bridge were realised only in part, which no doubt disappointed Christopher Wren, John Evelyn and others who had commented on the chaotic and undignified visual aspect of the north bank of the Thames, and whose plans for rebuilding included a broad quay there.

For students of seventeenth-century English architecture and the work of Wren in particular, a startling assertion appears at the end of Cooper's chapter 15, where readers learn that Robert Hooke designed the Monument; that structure is the subject of Cooper's short chapter 16. Raised between 1671 and 1677 on the site of St Margaret's Church (burned in 1666 and never rebuilt), the Monument, a fluted Doric column 202 feet tall built of Portland stone, commemorates the Great Fire.
In attributing the design to Hooke, Cooper fails to engage the scholarship that precedes his own work, although he has uncovered some new archival material. He does cite Charles Welch's *History of the Monument*, a still-useful monograph published in 1893. Two more recent and fundamental studies – one published in 1928, the other in 1935 – gather together excerpted seventeenth-century archival and printed sources and, importantly, drawings related to the Monument that are now preserved either in the British Library or in the Codrington Library at All Souls College, Oxford. Cooper's text, footnotes and bibliography do not indicate that he consulted this documentation. If his goal was to recast the authorship of the Monument, he should have proceeded by means other than unsubstantiated authorial fiat; having studied the extant original drawings with a connoisseur's discerning eye, he should instead have established a detailed case both for subtracting those drawings (or some subset thereof) from Wren and for assigning them to Hooke. Evaluating the evidence thus presented, readers could then have found Cooper's analysis persuasive or not.

Cooper bases his claim for Hooke's authorship on a document dated 26 January 1671, in which the London Court of Aldermen ‘view[ed] the draught now produced by Mr Hooke one of the Surveyors,’ a draught that ‘was well Liked and approved’ (p. 200). That Hooke ‘produced’ a draught does not, however, unambiguously mean that he made it, for he very well could have carried someone else's work to the Court for its consideration and approval.

Later, in discussing different proposals for the summit of the Monument, Cooper misstates the case in claiming that in 1675, ‘the City Lands Committee thought a statue of the king would be an appropriate ornament’ (p. 202), and that the ‘City … rejected the idea of the statue [of Charles II]’ (p. 203). The written account the Committee obtained from Wren on 28 July 1675 refers to ‘the several designes which some monthes since I shewed his Majestie, for his [approbacon],’ and goes on to state that the king ‘was pleased to think a large ball of metall guilt would be most agreeable,’ so it was he who decided, not the Committee. The Committee was seeking direction; it did not presume to suggest (much less dictate) terms. Now it is certainly possible that Wren may have ‘shewed his Majestie’ drawings made by someone else, but his extensive written account of the various projects lend support to the assumption that he invented and drew them himself. And if Hooke had designed the column, one wonders, why he not have been solicited to design its summit? Hooke records in his diary that on 11 September 1675, he ‘r]eceived the Draught of [the] Urne’ from Wren, a drawing of the very urn that (with some changes) is to be seen at the summit today. Here, too, one could infer that Wren was giving back to Hooke a drawing the latter had made; still, Hooke's often laconic and maddeningly ambiguous mode of expression is not on its face enough to reverse the least complicated reading of his words.

What is more, we know that Wren was the first individual to single-handedly draft a Latin inscription for the Monument, a draft that was rejected by the Court of Aldermen sometime between 28 July 1675 and 14 October 1677. On the latter date, the Court of Aldermen convened a committee made up of Wren, Hooke and Dr Thomas Gale (then the master of St Paul's School, formerly Regius Professor of Greek at Cambridge) to compose another Latin inscription, namely the three independent inscriptions visible today and located on the north, east, and south faces of the dado. Hooke was quite capable of writing correct Latin prose, so if he was, according to Cooper, the designer of the Monument, one wonders why Wren was first charged to write an inscription.

One of the most glaring and peculiar lacunae in Cooper's discussion of the Monument is the absent acknowledgment that the work of art is extensively inscribed in Latin, following well-established ancient and contemporary Continental (and, for that matter, English) patterns for monumental public art. The north dado bears a long narrative of the destructive course of the Great Fire; the south dado consists of a similarly long text that enumerates the various interconnected efforts to rebuild the city. Finally, the east dado efficiently provides a brief building history located within actual elapsed time through the device of naming (in the ablative absolute) the seven lord mayors of London under whose respective one-year terms the column was built. I do not know what impelled Cooper to omit any mention of these complex and
extraordinarily instructive inscriptions, but that omission has produced a discussion that is severely deficient, even though a recently published, widely available article on the Monument offers (among other things) a detailed study of its inscriptions and its ancient and modern formal antecedents. (3)

To be sure, Cooper's presentation makes it seem as though the column sprang into existence fully formed and ex nihilo, or as if it were wholly normal that a colossal column, however briefly and unsuccessfully used a site for scientific experimentation, was raised in seventeenth-century London at all. Until 1915 (when Perry's Victory and International Peace Memorial National Monument, standing 325 feet tall, was completed in Ohio) the Monument was the tallest freestanding column in the world, so its seventeenth-century commissioning and construction – to say nothing of the process of invention, even experiment, that underlies its form – was a phenomenal and unique occurrence that calls for wide-ranging historical analysis. ‘Apart from the Monument, there is nothing in London to commemorate [Hooke's] life and work’, Cooper writes confidently at the beginning of his seventeenth and final chapter (p. 206). Yet nothing that Cooper has put forward can or should alter specialists' understanding that Wren designed the Monument. Written records demonstrate that Hooke made numerous and painstaking measurements, wrote reports, gave testimony and visited building sites, yet those same records unfortunately give historians no legitimate occasion to infer that the activities performed, taken singly or as a unit, should be equated with design responsibilities. If Cooper wanted to resurrect Hooke's purportedly ignored or overlooked architectural career, he should have done more than write a few paragraphs at the end of chapter 15 that consist primarily of the names and dates of buildings. Whether one or another of these buildings is still extant is not something Cooper unfailingly tells us (and he should have), but even in the case of buildings that no longer stand, we do not learn if surviving plans, sections, elevations, painted views, photographs or written documents might prove helpful tools for reconstructing lost entities. Beyond that, one longs to discover what, in visual terms, makes Hooke's buildings typical or distinctive with respect both to his own career as a designer, to his contemporaries' works, and to buildings of his time or earlier. Which specific elements, for example, are ‘more Italianate than Dutch’ (p. 197) at Bedlam Hospital? Headings under ‘Hooke, Robert’ in the detailed index would lead readers to infer that he did not travel widely (or at all), so how did he learn about architecture?

Cooper provides a brief description of the west dado of the Monument, which consists of a relief carved by Caius Gabriel Cibber; that relief is illustrated not by a photograph of the work of art we see today, but by a small-scale reproduction of an unidentified engraving (p. 202, ill. 68). The description is marked by a hurried catalogue of iconographical motifs not unlike the simple list of buildings at the end of chapter 15. The discussion of Cibber's relief includes one error, for there is no representation of Victory there; instead, a standing male figure behind Charles II, traditionally identified as his brother, James, duke of York (later James II), holds in his left hand a laurel-leaf crown, which is an emblem of victory.

When discussing plans advanced in 1666 for rebuilding London, Cooper writes that ‘Hooke's layout plan is lost’ but errs in claiming that the absence of a site for ‘a New St. Paul's Cathedral’ is evidence that a small Dutch-captioned plan (a detail from a larger, fascinating trilingual map published in Amsterdam in 1666) and other such images embody ‘anything more than stylised representations of Hooke's original plan’ (pp. 112–13; see also ill. 41, p. 113 and 39, p. 102). The error arises because it is impossible and thus unproductive to examine whatever number one pleases of alleged copies in the vain hope of retrieving a lost original. This mode of analysis has bedeviled the study of so-called Roman marble ‘copies’ of long-lost Greek bronze statuary (lost already, it must be stressed, in antiquity), producing pages of ludicrous modern assertions with no factual or rational basis. Be that as it may, the absent siting of St Paul's neither supports nor discounts the shadowy existence of Hooke's lost and therefore unknowable original.

The primary usefulness of Cooper's well-organised study is the reconstruction of Hooke's activities as a surveyor in post-fire London, although their exposition is at times drawn out longer than perhaps strictly necessary. Twenty-seven pages of footnotes arranged in two columns to the page point readers to many archival sources, but it would have been worthwhile to find verbatim transcriptions now and again,
especially when inferences from those sources contradict received wisdom. Cooper stands on less-secure
ground when proposing to reattribute built works, because he demonstrates little or no engagement with the
relevant scholarly literature and little ability to make visual sense of works of art. Wishful thinking and a too-
single-minded focus on Hooke led Cooper astray here, rendering that part of his book of limited use to
historians of art.

Notes

2. The Fifth Volume of the Wren Society, 46. Back to (2)
   498–533. Back to (3)

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