THE LIMITS OF COLLABORATION: ROBERT HOOKE, CHRISTOPHER WREN
AND THE DESIGNING OF THE MONUMENT TO THE GREAT FIRE
OF LONDON

by

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This article showcases my recent research into the professional relationship between Christopher Wren and Robert Hooke, two of the early Royal Society’s most prominent scientists and architects. There has been a recent tendency in architectural history to see Wren and Hooke as informal architectural collaborators, the co-designers of several important works in post-fire London. These include Greenwich Royal Observatory, the rebuilt parish churches in the City of London and, most prominently, the recently restored Monument to the Great Fire of London. In this article I argue that this reading of their relationship is a problematic one, ultimately dependent on an equally problematic account of their friendship. To do so I explore Wren and Hooke’s professional relationship with regard to the Monument. I show, using new evidence, that their roles in the designing of the column have been misunderstood and that the final design can now be attributed to Hooke alone. Rather than being informal collaborators, Wren and Hooke did not stray from their duties as Royal Surveyor and City Surveyor, respectively, and Wren’s contribution to the commissioning and designing of the Monument was as a consultant and ratifier only. In this respect their professional relationship as architects differed from their work as Royal Society scientists, in which informal collaboration was not only permissible but also encouraged. Overall, this conclusion has significant implications for our understanding of Wren and Hooke’s careers as architects and sheds new light on one of early modern England’s most important buildings.

Keywords: Hooke; Wren; architecture

The notion that Christopher Wren and Robert Hooke were informal architectural partners has been a prominent trait of recent writing on both men. Historians have long assumed that their friendship was able to sidestep the official channels of City and Court bureaucracy and operate on a collaborative model more familiar in the sphere of experimental philosophy; hence the now popular notion that Wren and Hooke ‘co-designed’ a number of buildings.\(^1\) These include Greenwich Royal Observatory, many of the rebuilt parish churches in the City of London, and—most prominently—the Monument to the Great Fire of London (figure 1).\(^2\) The enduring popularity of this collaborative model is

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understandable. Not only are Wren and Hooke two of the late seventeenth century’s most
charismatic historical figures, they were also clearly good friends who shared interests. They were also both privately commissioned architects employed to design prominent
buildings. In this article I will argue that recent readings of their relationship as architects
have been problematic and have been ultimately dependent on an equally problematic
account of their friendship. To do so I will explore Wren and Hooke’s professional
relationship with regard to the Monument, present a revised model of that relationship
and show how that model has profound implications for our understanding of this
important building.

**THE WREN–HOOKE RELATIONSHIP RE-EXAMINED**

That Wren and Hooke were friends is undeniable, but the recent tendency to portray
Hooke first and foremost as ‘Sir Christopher Wren’s close friend’ is perhaps unhelpful.³
Notably, it has led to the portrayal of Wren as Isaac Newton’s antithesis in terms of

![Figure 1. Robert Hooke, the Monument to the Great Fire of London, 1671–76. Engraving by Sutton Nicholls (ca. 1753).](http://rsnr.royalsocietypublishing.org/)

influence on Hooke’s career; the great friend and ally in contrast to the bitter enemy and rival. Indeed, a recent monograph on Hooke presented portraits of Wren and Newton as the first images in the book, side by side, in a Manichaean diptych of best friend and bitter enemy. Yet whereas Hooke and Newton were clearly intellectual rivals, such unequivocally positive summaries of Wren and Hooke’s relationship fail to realize that seventeenth-century friendships, intellectual or otherwise, were socially constructed and socially constrained in a way that is unfamiliar today.

Instead, Wren and Hooke’s friendship was, in the socio-scientific domain, a more formalized union, typical among Royal Society philosophers and by no means the dominant masculine relationship in either of their lives. This is apparent from Hooke’s diary, which reveals that his relationship with Wren and the rest of his social superiors and equals was, as Stephen Shapin observes, hierarchical in its nature. In his diary Hooke consistently refers to Wren as ‘Dr Wren’ until his knighthood in 1673 (dates are in New Style throughout), after which Hooke, almost without fail, styles him as ‘Sir Chr. Wren’. This suggests that Hooke’s relationship with Wren was somewhat deferential, although certainly less so than his friendship with the aristocratic Robert Boyle. As Shapin observes, Wren, unlike Boyle, did occasionally visit Hooke’s lodgings, but the two would tend to meet at Wren’s house or at a tavern. I do not accept Mordechai Feingold’s recent suggestion that Boyle, and to a lesser extent Wren’s, absence from Hooke’s lodgings was simply a result of the inappropriate size of his Gresham rooms, because Hooke entertained numerous guests, of either similar or lower social status than himself, in them on a regular basis. Further evidence from Hooke’s diary suggests that Wren rarely frequented the coffee houses where so much of Hooke’s social life took place. Instead, the people that we may term Hooke’s closest male friends seem to have been his regular coffee-house companions, who, unlike Wren, did frequent his lodgings regularly and invited Hooke to their homes for purely social engagements. Principal among these was Theodore Haak, the German émigré and Royal Society member, whose relationship with Hooke seems to have operated on a more informal footing than that of Hooke and Wren. Hence Hooke refers to just ‘Haak’ in his diary. Hooke and Haak’s union was conducted in a less professional atmosphere, with eating, drinking and activities, particularly chess, being a key ingredient in the friendship. Hooke would record them meeting, often with other close male friends, for games of chess in one of their lodgings.

Other prominent figures in his diary, whose similar social standing seems to have facilitated an equally balanced relationship with Hooke, include John Aubrey, the physicians Daniel Whistler and George Ent, the Royal Society treasurer Abraham Hill, the clerk of the Mercers’ Company John Godfrey, and the linguist Francis Lodwick. By contrast, it was rare for Hooke to socialize with Wren in this way. Although Hooke frequently collaborated with Wren on various experimental philosophical projects—as he did with numerous other Royal Society members—the two were perhaps not the inseparable friends that recent biographers have claimed that they were.

THE 1671 DESIGN OF THE MONUMENT

A revised reading of Hooke and Wren’s friendship—one that places it on more formal footings—has significant implications for architectural historical scholarship and, in
particular, for the continually troublesome problem of attribution. To that end, this article will re-examine the origins of the design of the Monument, a building that has been placed at the heart of notions of informal architectural collaboration between the two men. Despite extensive research by recent historians, archival sources relating to the Monument, kept by the City of London, have so far not yielded the definitive account of the designing of the column. In the absence of conclusive proof the consensus has been that the Monument represents a joint design by Wren and Hooke. In this piece I wish to take a different approach, one centred on a detailed analysis of the surviving drawings for the column, and a lengthy comparison of them with the surviving documentary sources. This will demonstrate that Hooke, in his capacity as City Surveyor, can be considered responsible for the final design of the Monument. However, the various stages of the design were ratified, as was normal procedure, by Wren in his own capacity as Royal Surveyor: hence the presence of his signature on drawings for the column. Wren was also expected to be consulted by the City Surveyors on the design of the Monument, and it is this procedure that explains the survival of drawings in Wren’s hand. The design of the column was, of course, influenced by this process of formal consultation, but the final details of the design were Hooke’s responsibility. Furthermore, there is no contemporary evidence to suggest that either Wren or Hooke was working outside his formal remit as Royal Surveyor or City Surveyor, respectively. Instead I will describe a scenario whereby the Monument was designed, approved, and built by office-holders rather than informal collaborators.

The long-running attribution of the Monument to both Wren and Hooke originates with Parentalia and a somewhat erroneous claim by John Evelyn in 1697 that the Monument was Wren’s work. Parentalia’s promotion of Wren as the sole architect of the Monument is contrary to evidence outlined below, but is understandable given its almost hagiographical treatment of Wren throughout. As discussed below, a drawing of the Monument, in Hooke’s hand, survived among Wren’s papers and was passed to his son, Christopher Jr, on his death. Therefore, as Christopher Wren Jr, the author of Parentalia, was collecting material for inclusion in the final publication he must have assumed that the drawing was by his father and therefore represented Wren’s agency in the design. Why the Evelyn text should claim that Wren was the author of the design is more difficult to establish. As a friend of Wren and Hooke’s he should have known that the former’s involvement in the project was advisory. Furthermore, another friend of the pair, John Aubrey, was clear in his attribution of the column to Hooke. To look beyond these documentary claims, one must first establish the natures of Hooke and Wren’s post-fire Surveyorships and their subsequent individual responsibilities when it came to designing and building the Monument.

It is well known that Wren and Hooke were both consulted by the King and the City immediately after the fire, and were appointed to official positions soon afterward. Wren was appointed Surveyor of the King’s Works in 1669, having previously been one of His Majesty’s Commissioners for Rebuilding appointed immediately after the Fire. In Hooke’s case, after the Royal Society’s initial forwarding of his services he was appointed by the City to be one of their Surveyors on 13 March 1667. Despite the fact that the post of City Surveyor had been in existence before the Fire, the extraordinary circumstances of the rebuilding required a codification of the duties and, in particular, of the conduct expected of its incumbents. The 1667 Rebuilding of London Act had granted the two senior bodies of the City—the Court of Aldermen and the Common
Council—the power to appoint one or more Surveyors and had decreed that the persons chosen must swear an oath. On the day that Hooke was appointed, he and his fellow Surveyor Peter Mills had to swear the following:

You shall Swear that you shall well and duly see that ye Rules and Scantlings sett downe and pr[e]scribed in an Act of this Pr[esen]t Parliament for building within the City of London and Libtyes thereof bee well and truly Observed and that in all other things you shall truly & Impartially Execute the place or office of Surveyor or Sup[er]visor within the said City and Libtyes as by the same Act of Parl[iamen]t is directed intended according to the best of youre skill, knowledge and Power soo help you God.

The fact that the City Surveyors’ conduct was the subject of an official oath is important. It was rare in this period for any Surveyor to have to swear to their good conduct; Wren did not have to perform such an act on his appointment as Royal Surveyor. The City Surveyorship was a regulated position and its incumbents were expected to behave according to the limits set out in the oath. This seems to have been particularly important given the extraordinary circumstances behind the 1667 appointments.

The Monument itself was also conceived in the 1667 Rebuilding Act, which proposed:

the better to preserve the memory of this dreadful visitation; Be it further enacted that a Columne or Pillar or Brase or Stone be erected on or as neare unto the place where the said Fire soe unhappily began as Conveniently as may be.

The Act also stipulated that ‘the Mayor and Court of Aldermen in that behalfe be directed’ to oversee the construction of the column. The City’s sources are then silent until 1671, when on 26 January it was recorded in the Repertory of the Court of Aldermen that Hooke had produced a ‘draught . . . of the Pillar to bee erected in memory of the Late dismall ffire’, which was ‘well liked and approved’. As City Surveyor, Hooke was directly answerable to the Court of Aldermen and it was standard procedure that the Court should turn to their officer to procure a design. That the City Surveyors were expected to practise architectural design is apparent from the 1667 Act, which had decreed that the City ‘shall and may at their Will and Pleasure elect, nominate and appoint one or more discreet and intelligent Person or Persons in the Art of Building to be the Surveyors or Supervisors.’ It seems that by stipulating that the Surveyor or Surveyors be skilled in the ‘Art of Building’, Parliament intended the holders of the position to be capable of producing architectural designs for public buildings in the City. This became apparent early in the rebuilding, when the City ordered its Surveyors to produce and execute a variety of architectural designs, most notably for the new Royal Exchange, eventually designed by the City Surveyor Edward Jerman.

When they had approved Hooke’s ‘draught’, the Court then requested that he and his fellow City Surveyor John Oliver ‘estimate and certifye unto this court the charge of the Said Pillar.’ The only evidence that Wren was involved at this stage comes from Parentalia, which states that ‘prior to 1671 [Wren] made a Design of a Pillar’ and that in 1671 he ‘began the building of the great Fluted Column of Portland Stone and of the Dorick Order (commonly call’d the Monument of London in Memory of the burning, and rebuilding of the City).’ Because such claims contradict the considerably more reliable account presented by the City’s records—which contain no reference to Wren at this stage—I intend to ignore them entirely. To return to Hooke’s ‘draught’, there is a possibility that it was the drawing of the Monument, in his hand, and now in All Souls Library, Oxford, that incorporates flames running up the sides of the column shaft (figure 2). However, the fact that the All Souls
Figure 2. Preliminary design by Robert Hooke for the Monument to the Great Fire of London, 1671. (Courtesy of The Fellows and Wardens of All Souls College, Oxford.)
drawing does not show the column as executed suggests that it was a design that was abandoned in favour of another drawing that Hooke submitted to the Court of Aldermen on 16 January 1671. No surviving drawing showing the column as executed can be dated to before the commencement of building work in 1671, but it seems highly likely that Hooke did produce such a drawing. It must be presumed that Hooke’s drawing of the final design was lost at some point by the City. This would be consistent with the general situation regarding the Monument in the City’s records: not a single drawing for the building survives in the Corporation’s papers today. Nonetheless, the similarity of the surviving All Souls drawing to the final design indicates that it was prepared some time in early 1671.

This drawing demands further investigation and, in particular, the inscription it bears, in Wren’s hand: ‘With His Majesty’s Approbation Chr. Wren’. If the All Souls drawing is datable to early 1671 then, leaving aside the references in Parentalia, this signature represents Wren’s first reliably documented involvement in the project. This signature has been wrongly interpreted as evidence that Wren was responsible for the design of the Monument at this stage, with Hooke’s proven draughtsmanship counting for little in establishing who was ultimately responsible for the building’s appearance. Although it may seem odd that a drawing in Hooke’s hand would carry Wren’s signature, an examination of the Court of Aldermen’s relationship with Wren in the early 1670s reveals that a standardized model of ratification existed whereby the Royal Surveyor would be expected to sign, on behalf of the King, the designs for all major building projects in the City. This seems to have been expected by Parliament, for despite the fact that the Monument was not specifically mentioned in the Additional Act of Parliament for the Rebuilding of the City, passed in 1670, that document does include provision for the Royal Surveyor to approve a number of major City building projects. Consequently, City records demonstrate that the Court of Aldermen regularly sought the King’s approval, through Wren, for a variety of schemes. For example, on 26 April 1670 the Court ordered Hooke and Oliver to ensure that a drawing they had prepared showing the plot of the Fleet Canal be presented ‘to his Majesty: for his Royall approba[t]ion according to the said Act’. This would have involved sending the drawing to Wren to be signed on behalf of the King. In another example, this time involving the widening of a plot of land in the churchyard of St Lawrence Jewry adjacent to the Guildhall, the court desired ‘Dr Wren Surveyor General of his Majestyes workes to represent the same to his Majesty and to obtayne his Majestyes approba[t]ion thereof.’ Wren was also expected to approve and sign reports made by Hooke and Oliver relating to important public works, as he did for the construction of Bridewell Dock in June 1670 when their report was ‘presented to his Majesty and upon his Royall approba[t]ion to be staked & sett out accordingly.’ The presence of Wren’s signature guaranteeing the King’s approval on the All Souls drawing is therefore entirely consistent with City policy in the early 1670s and is in no way suggestive of his agency in the design of the Monument at this early stage. It represents his approval, on behalf of the King, of Hooke’s design.

The provenance of the All Souls drawing complements this hypothesis, given its survival among a collection of drawings that was in Wren’s possession on his death. The fact that it is in Hooke’s hand but represents an unexecuted design explains its presence in the All Souls collection. Had it depicted the design as executed, one would expect it to have entered the City’s records, just as a probable drawing of the final design—in Hooke’s hand with Wren’s
added signature—presumably did. It seems likely that Wren signed the surviving All Souls drawing but was then presented, by Hooke, with another drawing, this time showing the final elevation. Wren probably retained the All Souls drawing when it became apparent that Hooke had changed the design, removing the flames running up the shaft of the column and adding fluting in their place. Finally, Wren, in his 1675 report concerning the ornament at the top of the Monument (discussed below), recorded that a wooden model had been made in 1671 on his orders and, like Hooke’s design in the All Souls drawing and presumably like the design that the City eventually approved, had a phoenix atop the column.42 It seems strange that Wren would commission a model of the City Surveyor’s design. However, a document dating from 1667 outlining the responsibilities of the Royal Surveyor refers to the practice of the incumbent by which a model of any ‘work of considerable importance’ was made so that the project in question could be shown ‘to his Majesty for his more full satisfaction’.43 It seems that it was standard practice for Wren to prepare and present models rather than drawings to the King, and he evidently made no exception for Hooke’s design of the Monument.

In February 1671, after approving Hooke’s presumably lost drawing of the final design of the column, the Court of Aldermen recommended that ‘the Committee for public building . . . promote the building of the said Pillar with all convenient expedi[ti]on according to the said Draught.’44 The ‘Committee for public building’ was a subcommittee of the City Lands Committee, which oversaw the day-to-day rebuilding of the city.45 This Committee had taken control of all public building works in the city shortly before the Monument was entrusted to them, and on 31 January 1671 it ordered ‘that noe further buildings shall bee undertaken upon the public account without notice or speciall order of this Committee.’ The City Lands Committee was also the City Surveyors’ main point of contact with the City, and the group features regularly in Hooke’s diary for these years.46 Like the Court of Aldermen, the Committee had the authority to issue orders to Hooke and Oliver, and it quickly gave the two the task of constructing the column, which was completed by 1675.47 Hooke also designed (and subsequently commissioned) the various sculptures that would adorn the pedestal. A preliminary design for the statues around the east face of the base of the column, in Hooke’s hand, survives in the British Library (figure 3).48 The first mention of the carving in the City records comes in June 1673 when the sculptor Caius Gabriel Cibber was paid for ‘for carving the Hieroglifick Figures’ on the base of the Monument.49 Hooke’s drawing must therefore pre-date this payment. Cibber was paid a further seven times by the City; the last payment was dated 9 September 1675. These payments covered his carved relief panel of Charles II coming to the assistance of the City as well as the griffins and arms of the City that sat on top of the pedestal. There is no evidence from the City accounts that Wren was involved in the design and commissioning of the statuary. Hooke’s preliminary drawing and his persistent presence in the accounts show that he had full control over the work.

THE 1675 DESIGN FOR THE TERMINATION OF THE COLUMN

In 1675 the City’s attention turned to the ornament that would provide the termination for the column. Again a similar administrative process was followed. This time, however, the City Lands Committee decided to request formally that Wren, as Royal Surveyor, submit a report to the City, for their Surveyors to peruse, outlining his thoughts on what would be the most
appropriate ornament. Their motives for doing this were to ascertain Wren’s and, crucially, the King’s opinions before they approached them with final designs for approval. The Committee’s request, issued on 14 July 1675, reveals that Wren was to act as an intermediary between the City and the King, whose opinions were sought equally:

It is ordered that Sir Christopher Wren Kt., Surveyor General of his Majesty’s Works, be attended with the Request of this Committee that he would be pleased to signify in writing under his hand, upon or before this day sennight, what sort of Finishing upon the top of the new erected Obelisk in Memorial of the Fire [was] most approved by his Majesty, and the materials dimensions and an Estimate of the charges of each particular thereof and of the Balcony and Rails to be made near unto the top thereof for the better direction of the Compleating of the said work...
Wren then submitted his report, accompanied by several drawings. Both the report and the drawings seem to have been prepared without Hooke’s input, because the first mention of them in his diary comes in the entry for 27 July 1675, the very day that they were submitted to the Committee. That day, Hooke recorded that he had been ‘With Sir Ch. Wren about Report of Monument’. Fortunately the report and the drawings survive and they form a useful insight into the formal nature of Wren’s correspondence with the City at this time. In the report Wren records that he had consulted the King and that between them they had concluded that ‘a large ball of metal guilt would be the most agreeable, in regard it would give an Ornament to the towne at a great distance.’ This solution is shown in an accompanying drawing, in the hand of Wren’s draughtsman Edward Woodroofe, showing the column as executed but with a hypothetical gilded ball atop (figure 4). This drawing survives among Hooke’s papers in the British Library and has been used in recent scholarship as evidence that Wren designed the main shaft of the column, as it depicts it as executed, in the hand of his draughtsman. This scenario would date the Woodroofe drawing to 1671, when the shaft was designed. However, the drawing was undoubtedly produced in 1675 to accompany a set of smaller drawings also submitted with Wren’s report. In the text, Wren tells the Committee that he had discussed other possibilities with the King, including a statue and a phoenix. These possibilities are represented by smaller detailed drawings, either in Wren’s or in Woodroofe’s hand, which are crucially drawn to the same scale as the Woodroofe elevation of the whole column, allowing the City to see each contingent atop the already constructed shaft. Of these drawings, one depicts an alternative design for a gilded ball in Woodroofe’s hand (figure 5), a second shows a design for a statue of Augusta in Wren’s hand (figure 6), and the third and final drawing is of an urn, carrying the City’s arms, also in Wren’s hand (figure 7). A drawing of a phoenix was not submitted with the report as this possibility had been ventured in Hooke’s original designs for the column, prepared in 1671, and the model Wren had commissioned of that design. In the report Wren also advised the Committee that although a phoenix was ‘the ornanment of the wooden Modell of the Pillar’ he could not recommend this scheme as ‘it will be costly, not easily understood at that highth, and worse understood at a distance and lastly dangerous by reason of the sayle, the spread winges will carry in the winde.’

Wren then weighed up the merits of a statue, adding that it was ‘not that his Majestie disliked a Statue’ for it would carry ‘much dignitie with it; and that which would be more valuable in the eyes of Forreiners and Strangers.’ As the City had requested, Wren also estimated the cost of a brass statue. However, his final advice to the City was that the gilded ball option would be the most ‘acceptable of any thing inferior to a Statue, by reason of the good appearance at distance, and because one may goe up into it, and upon occasion use it for fireworks.’ Although the drawings and advice submitted by Wren would influence the final appearance of the termination, the tone and content of his report are consultative throughout. Ultimately the City Lands Committee had jurisdiction over the final design and Wren made it very clear that if they had other ideas he would happily approve them and sign them. For example, if a statue was ‘more acceptable to the City’, Wren was prepared to ‘most readilye present the same to his Majestie.’ Just as the report was consultative, the drawings accompanying it were illustrative: they were created to aid the City in its deliberations. They should not be treated as evidence of Wren’s authorship of the final termination, but rather as part of a process of consultation between the King, the Royal Surveyor and the City. They were
intended to give the City an idea of what Wren and the King thought would be best and although the drawings and the report were intended to influence the final design, Wren made it clear that it was the City's prerogative to either follow them or disregard them.
Initially the City followed Wren’s advice and on 28 July 1675, the day after the Committee had heard the report, Hooke recorded in his diary that he had ‘Received orders about the Ball and Railes about the Column.’ The journal of the Committee that day recorded:

After several debates, it was at length resolved and is accordingly ordered that a ball having been approved of by his Majesty should be placed upon the top of the new
Cullumne . . . in order thereunto that Mr Robert Hook be desired forthwith to treat with the Cityes founder, and such Workmen as he shall Judge to be honest and able, for making a globe of wood covered with Copper, double gilt and lined with brasse, of nine foot diameter. . . . And he is desired also to use the same care in discoursing and treating with the City smith and others concerning the Balcony Raile, which is to be placed neer the top of the said Pillar. 63

Hooke’s diary over the next few months records his negotiations with various London metal-workers over the contract for a gilded ball. 64 At only one point did he speak to Wren about it (presumably for further consultation), meeting him at Whitehall on 3 August 1675 to discuss ‘the Ball of the Columb’. 65
Hooke and the City were still working on the idea of a ball on 8 September when he recorded that he was given ‘power to agree [i.e. negotiate contracts] for Ball and Balcony’. However, a mere three days later their plans had changed. On 11 September 1675 Hooke visited Wren to collect the drawing depicting a hypothetical urn that had been shown to the City the previous month with Wren’s report (figure 7). It seems that at some point Hooke had changed his mind and was now investigating the possibility of an urn, hence his desire to see the relevant illustration that had accompanied the report. On 11 September 1675, the same day that Hooke collected the drawing, he also talked...

Figure 7. Advisory drawing by Christopher Wren of an urn for the termination of the Monument to the Great Fire of London, 1675. (Copyright © The British Library Board, Sloane MS 5238, fo. 77.)
‘about Urn’ with the Alderman Sir William Turner, who ‘approvd well of it if the King liked it’.68 He then presented his new idea to the City Lands Committee on 22 September, proposing that a ‘Figure of an Urne [was] most proper to be placed upon the Top of the new Cullumne on Fishstreet Hill.’69 Crucially, he declared that an urn ‘had been seen and approved of by his Majesty’ but that he was currently ‘undertaking to procure a testimony under Sir Christopher Wren’s hand of his Majesty’s approba[ti]on thereof.’70 As Hooke had yet to finalize the design of the urn, his assurance to the Committee that the King was content with the change of plan must refer to his possession of Wren’s suggested design. Certainly he did not record in his diary that he had any contact with the King himself.

Hooke then recorded designing the urn in the next few weeks. He ‘drew’ it on 1 October 1675 and on the next day took the drawing to a carpenter named Bullock, who made a wooden model of the final design.71 A preliminary drawing by Hooke for the urn survives, previously misidentified as a design associated with one of the City churches (figure 8).72 The drawing, which survives among the Royal Society’s papers, is in Hooke’s hand and depicts an urn approximately seven feet across—to big to adorn any City church. Instead, the dimensions are far closer to those of the final termination of the Monument. Crucially, the drawing shows an urn with a vertical hollow core allowing a clear sight line through it; this

Figure 8. Preliminary design by Robert Hooke of an urn for the termination of the Monument to the Great Fire of London, 1675. (Copyright © The Royal Society.) (Online version in colour.)
is further evidence of an association with the Monument and its internal zenith telescope, rather than with a City church. This drawing is also notable because it depicts an object very different from the urn as suggested by Wren. As the final structure more closely resembled Wren’s hypothetical suggestion, it is possible that Hooke drew this preliminary design before he had collected the Royal Surveyor’s drawing on 11 September 1675. Hooke then oversaw the founding and construction of the urn as well as the iron balcony that surrounded it. The finished article was placed on the column in July 1676. As is obvious from the executed structure, Hooke’s design was similar in spirit to Wren’s initial idea for the urn, but significantly different in its detailing. Although its form should be viewed as the product of a process of formal consultation, the specific details must be seen as the result of Hooke’s autonomous actions. As a disgruntled Christopher Wren Jr noted in Parentalia, ‘it was set up contrary to [his father’s] opinions.’

THE COMMISSIONING OF THE INSCRIPTION

Once the urn and the balcony were complete, the final task left to the Committee and its Surveyors was to complete the inscriptions on the Monument, including the long inscription that would adorn the north side of the pedestal. Although the conception of this inscription and its controversial history have been examined thoroughly by recent authors, the involvement of Wren, Hooke and others needs to be established for the purposes of this article. The Committee had ordered Hooke to gain Wren’s advice on appointing ‘such persons as they think most Fitting to make an Inscrip[t]ion for the said Collumne’ in July 1675 when they accepted Hooke’s plan for an urn. It seems that for the inscription the City wanted Hooke to consult a variety of authorities beyond Wren. Subsequently Hooke went to various acquaintances whose opinions he must have judged worthy of such a task. For example on 27 March 1676 he discussed the inscription with the mathematician and Royal Society member John Pell, and on 17 November 1676 with the Society’s former secretary and treasurer Abraham Hill. Eventually Hooke turned to Wren and Thomas Gale, the Master of St Paul’s School and previously the Regius Professor of Greek at Cambridge, to establish the wording. Over the course of two days in October 1677 Hooke, Gale, Wren and various members of the Court of Aldermen discussed the inscription, and by the end of their deliberations they were ready to dispatch Hooke to talk to masons about carving the lettering. The Lord Mayor approved their plans 10 days later. Although Wren’s and Hooke’s opinions were sought by the Committee and Hooke had overall administrative control, it was Gale who seems to have had the most influence over the inscription, as demonstrated by the Court of Alderman’s gift to him of a piece of plate ‘as a loving remembrance’ in gratitude for his work. Hooke recorded collecting the finished inscription from Gale to give to the carvers on 1 August 1678. Therefore, where the wording of the inscription was concerned, the City and Hooke were far more ready to obtain advice and outside help, eventually delegating the work to Gale. This should not come as a surprise. As City Surveyor, Hooke’s duties were clear, his position was dependent on his expertise in matters relating to surveying, building and architectural design; they did not require a detailed knowledge of classical Latin memorial inscriptions. The wording of the inscription was therefore the only part of the Monument that was not under the control of the City Surveyors, and even then it was delegated to Gale rather than Wren.
CONCLUSION

In fact, Wren’s overall involvement in the designing and building of the Monument has been misunderstood, a scenario that presumably has its origins in the eulogizing pages of *Parentalia* and one that has been perpetuated by the Wren–Hooke collaborative model. Instead, the City Surveyor, in this case Hooke, can be credited with the design. With the exception of John Evelyn’s claim, most contemporary references to the Monument name Hooke as its architect. As mentioned above, Aubrey lists the Monument among Hooke’s ‘designs in architecture’, and Hooke himself made reference to his designs for the foundations of the structure in a lecture to the Royal Society in 1689. Furthermore, when Wren briefly discusses the column in his ‘Tract 3’ he does not claim credit for the design in the way that Hooke does in his 1689 lecture. Instead of designer, Wren’s input was limited to that of ratifier and formal consultant only. Although Wren’s advice was broadly followed and his influence and guidance shaped the design, the finished structure consisted overwhelmingly of Hooke’s original ideas.

Therefore, collaboration between Wren and Hooke, a common feature of the early Royal Society, did not extend to the designing of the Monument. Agency in architectural design, when under the control of institutional bodies such as the City of London, could not be an informal, collaborative phenomenon. Instead of being the product of a proto-architectural firm, the Monument was designed and administered by office-holders. The codified nature of the offices of Royal Surveyor and City Surveyor ensured that both Wren and Hooke could not, and did not, stray from the limits of those offices.

NOTES


4 Cooper, *op. cit.* (note 2), p. 5.


Shapin (op. cit. (note 7), p. 259) shows that Wren attended meetings of Hooke’s various clubs in coffee houses. However, Hooke rarely records Wren’s presence in coffee houses in the evening, when Hooke tended to frequent them. Perhaps one important reason for this is that Wren lived in Whitehall rather than in the City as Hooke did.

References in the diary to Hooke socializing with Haak are extremely numerous; a good summary of the close nature of their friendship can be found in Espinasse op. cit. (note 6), pp. 120–121.


On the rare occasions when Hooke does record Wren’s presence in his social life it tends to take the form of more formal, public activities such as trips to the theatre. For example, on 20 June 1674 Hooke accompanied Wren and John Hoskins to see a performance of The Tempest; Hooke, op. cit. (note 8), p. 108. See Inwood, op. cit. (note 13), p. 194.


Christopher Wren Jr, Parentalia, or Memoirs of the Family of the Wrens (London, 1750; reprinted in 1965 by Gregg Press, London), pp. 321–322. Evelyn called for a medal to be made of the column, which he believed was designed by Wren; John Evelyn, Numismata, a Discourse of Medals, Ancient and Modern, etc. (Printed for Benj. Tooke, London, 1697), p. 162.


Cooper, op. cit. (note 2), pp. 115–117.

Reddaway, op. cit. (note 16), p. 58; Cooper, op. cit. (note 2), p. 116. In the immediate aftermath of the Fire, these commissioners had to meet with the City Surveyors and make general plans for the rebuilding, including drawing up street plans and discussing the ‘manner forme and highth of Buildings in this City the Scantlings of Timber removeing of Conduits and Churches and...
Alteration of the Streetes’; cited in Reddaway, *op. cit.* (note 16), p. 56. As Reddaway (*ibid.*, p. 55n) shows, there is very little information about the exact duties of the King’s commissioners in the period immediately after the Fire. *Parentalia*’s suggestion that Wren was appointed ‘Surveyor-General and principal Architect for rebuilding the whole city’ is, as Reddaway points out, entirely untrue. It was not until the Rebuilding Acts that Wren’s role in the rebuilding became codified. As set out below, the Acts strongly regulated Wren’s influence on the City. For the circumstances of Wren’s appointment as Royal Surveyor see Howard Colvin (ed.), *The history of the King’s works* (Her Majesty’s Stationary Office, London, 1976), vol. 5, pp. 15–18; Jardine, *On a grander scale* (*op. cit.* (note 1)), pp. 162–163.

22 Cooper, *op. cit.* (note 2), pp. 132–133. Before his appointment, Hooke had been one of the City’s designated representatives in the immediate aftermath of the fire. He had also, like Wren and Evelyn, prepared an unexecuted plan for the rebuilding of the city based on contemporary European town plans.

23 Cooper (*ibid.*, p. 237n) suggests that the post of City Surveyor changed in nature after the fire, hence the tendency in official City documents to address the Surveyors as ‘the Surveyors of New Buildings’ rather than City Surveyors.


25 *Repertory of the Court of Aldermen*, 14 March 1667, vol. 72, fo. 80v, Corporation of London Record Office, London; see Cooper, *op. cit.* (note 2), pp. 133. The third surveyor, Edward Jerman, had been in place before the Rebuilding Act and did not swear this oath.

26 There were documents outlining what was expected of the Royal Surveyor’s conduct, including a patent issued by the treasury ordering financial stringency; see Colvin, *op. cit.* (note 2), vol. 5, pp. 6–7 and 21.


33 Wren, *op. cit.* (note 17), p. 321. The ‘Design of a Pillar’ that *Parentalia* refers to is almost certainly the drawing of the Monument in All Souls Library. As Geraghty (*op. cit.* (note 18), p. 7) shows, this drawing was among those inherited by Wren’s son upon his father’s death. As discussed below, this drawing can be confidently attributed to Hooke rather than Wren.

Geraghty, *op. cit.* (note 18), catalogue no. 400. For the correct attribution of this drawing to Hooke see *ibid.*, p. 259. This drawing is incorrectly attributed to Wren in Moore, *op. cit.* (note 16), p. 517.

35 The only surviving drawing of the column as executed is the elevation in the hand of Edward Woodrofe in Hooke’s drawings in the British Library: *A Volume of Miscellaneous Drawings Containing Several by Robert Hooke* (British Library, London), Sloane MS, 5238, fo. 78. However, as I argue below, this must have been executed in 1675 and does not represent a final drawing of the column before construction began in 1671.

An Additional Act for the Rebuilding of the City of London, Uniteing of Parishes and Rebuilding of the Cathedrall and Parochiall Churches within the said City, 11 April 1670, Statutes of the Realm 22 Charles II, cap 11. These included the channel of Bridewell Dock and all public markets.

Repertory, op. cit. (note 25), 26 April 1670, vol. 75, fo. 168r. Wren was also requested by the City Lands Committee to prepare a report on the Fleet Canal and frequently liaised with the Committee over this project; see Reddaway, op. cit. (note 16), pp. 200–221. As Reddaway observes (ibid., p. 216), Wren’s responsibilities concerning the Fleet Canal project were considerably more extensive than for any other rebuilding project, and he was certainly involved in the designing of the scheme. However, special provision had been made in the second Act of Parliament for his involvement with the Fleet Canal. This set out a higher level of engagement with the project than would have been normal for City building projects and should not be taken as evidence that Wren was able to informally influence the designs for any building scheme in the City. In the case of the Fleet Canal, the City also sought the advice of Jonas Moore, in his capacity as Surveyor of the Ordnance; see Willmoth, op. cit. (note 2), p. 138.

A series of entries in 1671 in the Repertory of the Court of Aldermen reveal that Hooke, as City Surveyor responsible for that part of the City, with Wren’s (and therefore the King’s) approval, reconceived the northeast corner of St Lawrence’s churchyard; Repertory, op. cit. (note 25), 6 June 1671, vol. 76, fo. 173r.

For the provenance of the Wren drawings at All Souls see Geraghty, op. cit. (note 18), p. 7. Colvin, op. cit. (note 21), vol. 5, p. 21. Repertory, op. cit. (note 25), 14 February 1671, vol. 76, fo. 72v; see Cooper, op. cit. (note 2), p. 200. City Lands Committee Orders, 31 January 1671, vol. 2, fo. 5r, Corporation of London Record Office, London. The records of the City Lands Committee are in the form of orders that the Committee issued, which were taken, almost verbatim, from the rough minutes of the Committee meetings (previously known as the Journal of the City Lands Committee). These minutes survive today in City Lands Committee Minutes (Rough), Corporation of London Record Office, London. For the City Land Committee see Reddaway, op. cit. (note 16), p. 159; and Cooper, op. cit. (note 2), pp. 143 and 165.

In February 1671 Hooke and Oliver were ordered to attend every meeting of the City Lands Committee, on Wednesday afternoons, without fail; see Cooper, op. cit. (note 2), p. 165.

The first payment to the master mason Joshua Marshall occurred on 8 April 1671, having been ordered, by Hooke or Oliver, on 20 March 1671. The accounts for the building of the Monument are currently in the Guildhall Library: Copy of Accounts (Dated 1667–76) of Disbursements by the Chamberlain of London for Labour and Materials in Connection with the Restoration and Reconstruction of Various Buildings and Public Works after the Great Fire, MS 184/4, fo. 41v, Guildhall Library, London. For an overview of the building of the Monument see Moore, op. cit. (note 16), pp. 498–533; Cooper, op. cit. (note 2), pp. 198–205; and Matthew Walker, ‘Architectus ingenio: Robert Hooke, the early Royal Society, and the practices of architecture’ (PhD thesis, University of York, 2010), pp. 171–174.


Hooke, op. cit. (note 8), p. 171.
The report was transcribed from the original by James Elmes in 1823 and a copy can be found in The Wren Society, op. cit. (note 27), vol. 5, pp. 46–47. See Moore, op. cit. (note 16), pp. 516–522; Cooper, op. cit. (note 2), pp. 202–203; and Stevenson, op. cit. (note 2), pp. 55–57.


Sloane MS, 5238, fo. 78. For the attribution of this drawing to Woodroofe see Anthony Geraghty, ‘Edward Woodroofe: Sir Christopher Wren’s First Draughtsman’, Burlington Mag. 143 (1181), 479 (2001).


As is apparent from the original document in the British Library, the gilded ball atop the column elevation was executed on a separate piece of paper and subsequently attached to the main elevation.

These three drawings are all located among Hooke’s drawings in the British Library; Sloane MS 5238, fos 70, 71 and 77. They are reproduced in The Wren Society, op. cit. (note 27), vol. 5, pl. xxxvii. I am indebted to Anthony Geraghty for help in identifying Wren and Woodroofe’s draughtsmanship of these drawings.


The Wren Society, op. cit. (note 27), vol. 5, p. 47.

Hooke, op. cit. (note 8), p. 171.


Hooke, op. cit. (note 8), pp. 172–173.

Ibid., p. 172.

Ibid., p. 179.

Hooke’s diary entry for 11 September 1675 has been misinterpreted in the past, for example in Moore, op. cit. (note 16), p. 520. In the entry Hooke records that he had been ‘To Sir Chr. Wrens. Received Draught of Urne’; this has been taken as evidence that he was picking up a design by Wren, the construction of which he would oversee. However, such an interpretation is contradicted by the fact that over the course of the next few weeks Hooke records making designs for the urn himself and receiving royal approbation for them. Instead the entry for 11 September could suggest that Hooke was picking up his own designs that Wren had been showing to the King for approval. Again, further evidence from the diary would seem to suggest otherwise, as Hooke makes no reference in entries before the 11 September entry to preparing designs for an urn or giving them to Wren for approval. Instead the entry must refer to Wren’s drawing of a hypothetical urn that was shown to the City with his report on 27 July 1675. Hooke was no doubt collecting it as a guide for when he came to make his own design, as to what exactly what the King might agree to. This reading of the diary reference is reinforced by the fact that on 28 July 1675, the day after Wren first submitted his report to the City, Hooke records in his diary that he had collected the two drawings ‘of Pillar Ball [this word was incorrectly transcribed in 1935 by Robinson and Adams as ‘Hall’] and Statue’ but crucially not that of the urn; Hooke, op. cit. (note 8), p. 171. That Hooke already possessed Wren’s other two drawings of hypothetical terminations for the column makes it more than likely that it was the third drawing, that of the urn, that he collected on 11 September 1675. Yet more evidence for this scenario comes in the form of the provenance of the drawings and the report. While Wren had evidently kept the text of the report—it was found in a private collection in 1823—it seems likely that Hooke was in possession of all the accompanying drawings (including that of the urn) at the time of his
death, because they were separate from the report in the early eighteenth century when they were deposited in the British Museum by Hans Sloane, either among Hooke’s drawing collection or on loose sheets.

69 City Lands Committee Orders, 22 September 1675, vol. 3, fo. 54r; Moore, op. cit. (note 16), p. 520.
70 City Lands Committee Orders, 22 September 1675, vol. 3, fo. 54r.
71 Hooke, op. cit. (note 8), p. 184.
72 The drawing is reproduced by Jardine but misinterpreted as a design for a decorative urn associated with a City church; Jardine, Curious Life, between pp. 85 and 87.
73 The City again desired Wren’s advice on the railings and balcony, as well as his approval on behalf of the King, and on 3 May 1676 the Committee ordered that Mr Hooke and Mr Oliver, Surveyors of new buildings, doe attend upon Sr Xpofer Wren Kt, Surveyor to his Majesty’s Works, to have his direcon and the King’s approbacon concerning the Copper and Iron Worke already done and to be done, about the Urne appointed to be set on the Top of the public Cullumne on new Fishstreet Hill; City Lands Committee Orders, 3 May 1676, vol. 3, fo. 96; The Wren Society, op. cit. (note 27), vol. 5, p. 48.
74 On 14 July 1676 the Committee ordered that the surveyors ‘doe take care for the speedy putting up of the said Urne’; City Lands Committee Minutes (Rough), 14 July 1676, vol. 3, fo. 59r. Hooke also recorded this order in his diary; Hooke, op. cit. (note 8), p. 242.
75 Wren, op. cit. (note 17), p. 321. Wren’s involvement with the Monument did not end here, and the City contacted him on a number of further occasions, mainly to approve the completed work and sign it on behalf of the King. On 14 June 1676 the Committee asked Wren to view, with Hooke and Oliver, Cibber’s completed stone carvings around the base of the Monument and to approve the overall value of the work; City Lands Committee Orders, 14 June 1676, vol. 3, fo. 103r; The Wren Society, op. cit. (note 27), vol. 5, p. 48. Additionally, in October 1676, after Hooke, Oliver and the City’s quantity surveyors had drawn up the final bill for the master mason Joshua Marshall, Wren was asked by the Committee to view and sign the final paperwork. On 18 October 1676 the Committee requested that ‘Sir Chr Wren to be attended with a copy of [Marshall’s] Contract and be pleased to inspect and view the worke and measures and quality and report’; City Lands Committee Orders, 18 October 1676, vol. 3, fo. 132r; The Wren Society, op. cit. (note 27), vol. 5, p. 49. After Marshall’s death in April 1678 Wren was again asked to join Hooke and Oliver in overseeing that the payments to his widow were correct. The Committee then ordered and desired that Sr Xopher Wren Kt. Etc together with Mr Hooke and Mr Oliver, the City Surveyors, attended by Mr Leybourn [William Leybourn, a quantity surveyor occasionally employed by the City in that capacity; see Cooper, op. cit. (note 2), p. 208], do forthwith Consider of the said Bills, and worke therein men[t]ioned to be done, and satisfy themselves of the Quantity, Quality and Rates of the same and Report; City Lands Committee Orders, 9 December 1678, vol. 3, fo. 216; The Wren Society, op. cit. (note 27), vol. 5, p. 49.
77 City Lands Committee Orders, 28 July 1675, vol. 3, fos 50–51.
78 Hooke, op. cit. (note 8), pp. 223 and 257.
79 Hooke first recorded consulting Gale on 17 October 1677; Hooke, op. cit. (note 8), p. 321.
80 On 18 October 1677 Hooke recorded that he had been ‘To Dr Gales about Inscription. To Court of Alderman. Attended all day on that affair’, having spent the previous day with Wren and Gale ‘till 10 at night’ discussing the wording; Hooke, op. cit. (note 8), p. 321. Hooke (ibid., p. 322)
then talked to Wren again on 20 October. *Parentalia* records an unexecuted draught of the inscription purportedly by Wren; Wren, *op. cit.* (note 17), p. 323. However, it would seem more likely that this was devised by Gale.


82 Hooke, *op. cit.* (note 8), p. 369. Eventually the inscription would be carved by the mason Thomas Knight.
