Material reward: Supply chains, labour and money in the rebuilding of London after the Great Fire

Judy Z. Stephenson 10th February 2022
Financing the rebuilding of the City of London after the Great Fire of 1666

D'Maris Coffman¹ | Judy Z. Stephenson¹ | Nathan Sussman²

¹ University College London, Bartlett School of Sustainable Construction
² Graduate Institute, Geneva

Abstract
This article presents archival data on rebuilding costs and interest rates from the Corporation of London, 1666–83, to analyse how, in the absence of banking or capital market finance, the London Corporation funded the rebuilding of London after the Great Fire. The City borrowed from its citizens and outside investors at rates much lower than previously thought to replace vital services and to support large improvement works. Lenders were reassured by the Corporation’s reputation, and its borrowing was partly secured by future coal tax receipts. The records show that funding from these sources was forthcoming and would have cov.
3 perennial questions about the rebuilding

- Why didn’t they make it like Paris?
- How did they do it so fast?
- Did wages and prices go up?
All of them are fundamental misunderstandings of the crisis, the institutional context... and the early modern building industry.
"governments must act"

A twenty-first century call to action
In London 1667 - 1710

- Rebuilding was well governed because it was co-operative
  - Between borough, corporation and state
- People and institutions contracted, and contracts were respected
- Risks (supply, price, time) were apportioned in the contracts
- Circularity and responsibility go ‘hand in hand’*

* as in ‘Hand in Hand’ insurance
Why not Parisian boulevards?
“The principle that losses from the fire should be distributed proportionately rather than allocated all to one party was perhaps the most radical innovation in the Act, and its linchpin. Its loss-spreading insight is modern, recognising society’s capacity when necessary to override private covenant and contract.”

Jay Tidmarsh
Contracts

17th C political economy is obsessed with contracts - Hobbes! The Restoration!

• The city is a complex network of property rights - many landowners
• The corporation is a contract with its citizens - for services
• Livery companies, landlords, widows and children, relied on income from leased property for their income – contracts
• Fire Courts “including the power ‘to order new or longer Leases or Estates not exceeding Forty yeares . . . at such Rents and Fines or without any Rent or fine as they shall thinke fit’”
Contract between City and Parliament

• The Corporation needed Parliament to alter or allow certain rights and contracts
  • Leaseholds
  • Coal tax
• And to co-operate on major projects
  • Commission for the rebuilding of St Paul’s
Parisian boulevards would only have been possible if all rights were destroyed

(John Evelyn, Christopher Wren, Robert Hooke plans)
Speed?
• The fire burned for two weeks
• Then…. the damage was surveyed
• Some say most houses rebuilt by 1673. Monument completed in 1677
• Spires and church projects went well into the 1700s. As did St Paul’s
• - the city was functional before it was finished
• Bulk of Corporation expenditure spent by 1675
**Figure 2** London Corporation expenditures and revenue from coal tax, 1667–79. *Sources:* For the Coal Cash Fund: LMA, COL/CHD/DM/01/001-003; for works and tax receipts: LMA, COL/CHD/CT/01/013-019 and COL/CHD/CM/10/004 for 1667
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Most developers / rebuilders were small scale

- Streets/ small plots
- Contracted ‘by the great’ for new building
- Speculative model - Nicholas Barbon - (McKellar 1999)
Wages and Prices?
Wages did not rise

• Statute of Artificers made it illegal to withhold labour
• No steady jobs – unskilled in gig market; skilled were traders
• Prices initially rose for materials but then declined
London Bridge 1666, 1667, 1668
St Paul’s 1672-1748 Labourers’ day wages: 16d. winter, 18d. summer.

Graphs by decade.
Labour had intensive margins to work first

- Unskilled labour got more work
  - Nominal wage rigidity
  - Tenure mattered [https://eprints.lse.ac.uk/108562/1/WP322.pdf](https://eprints.lse.ac.uk/108562/1/WP322.pdf)

- Skilled labour earned margins through contracting for goods through supply chains
  - The most successful contractors *owned* their supply chains
Supply chains

- Housing was brick and timber; public projects needed stone / masonry
- All relied on transportation, the cost of which determined price
- London brick fields “areas used for brickmaking until they were exhausted and then built over” (McKellar 1999 pp.74)
- London clay and ‘rubbish’ - including offal – stockpiled into areas before building / burning of bricks
- Stone, lead, timbers were sold and recycled
- But ... Fir imported as a building material for the first time
Buildings are unique entities, as they are often the results of one-off projects. This feature adds to their inherent complexity, where each of the materials used has its own specific life cycle and all interact dynamically in space and time. Furthermore, their long lifespan, and changes of use during their service life, lead to increased uncertainty about future scenarios. Therefore, although buildings are made up of components which are manufactured products, when assembled together those products create an entity which no longer fits into the logic of manufacturing. From a CE perspective, current research tends to focus mainly on short-lived manufactured products (e.g. Singh and Ordoñez, 2016), and therefore the complexities that are inherent within buildings are often neglected.
Circularity of risk and materials 1667 - 1700

- Contracts and co-operation determined the speed of rebuilding – access prioritised over ownership
- The Courts enforced cooperation through proportional alteration of contracts
- The Corporation borrowed from citizens to restore key services
- The income streams financed the building contracts /leases
- Which procured the materials through trade credit – material recycling a key part of financing works - designing out waste
- But... Labour only increased it’s share through this credit and supply/ or through extra work intensity
Questions?
References


• Relton, Francis Boyer (1893). An account of the fire insurance companies associations, institutions, projects and schemes established and projected in Great Britain and Ireland during the 17th and 18th centuries including the Sun Fire Office; also of Charles Povey the projector of that office, his writings and schemes. Swan Sonnenschein & Co

N.B. the calculation of costs

• Any relative calculation of costs depends on the cost of housing. The vast majority of housing had been in private hands and was rebuilt as such.

• Estimates of the cost of building are not as easy as taking the £300 figure per house given by Strype, however, because Strype’s figures are for the loss of rental income rather than the cost of labour and materials of a rebuild.