CHAPTER THREE

VIRTUAL PAUL’S CROSS: THE EXPERIENCE OF PUBLIC PREACHING AFTER THE REFORMATION

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The Virtual Paul’s Cross Project1 enables us to experience a Paul’s Cross sermon as a public event unfolding in real time, in the presence of large crowds of people, and in a space filled with the ambient noises of birds, horses, dogs, church bells, and the sounds of the crowd.2 It encourages us to explore the audibility of the sermon by allowing us to hear the preacher’s voice at different distances from the preacher and with different sizes of crowd, ranging from about 250 people to 5,000 people. This project also allows us to explore questions about style of delivery, about the congregation’s response to different kinds of passages in the sermon, and about the preacher’s use of the time of delivery in making his points.

The Project combines a visual model of the north east end of Paul’s Churchyard, including St Paul’s Cathedral, the Paul’s Cross Preaching Station, and the Yard’s bookshops, with an acoustic model of the same space. The visual model (Fig. 1) was made using architectural modelling software;3 it integrates the surviving visual record of this part of London in the 16th and 17th centuries, especially the work of Gipkyn (Fig. 2) and Hollar (Fig. 3), with several sets of measurements of the actual buildings and spaces being shown in the model. These include (1) measurements of the Cathedral done by Christopher Wren in the early 1660s, (2) measurements of the foundations of houses surrounding the Cross Yard taken

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1 See vpcp.chass.ncsu.edu. The Virtual Paul’s Cross Project is supported by a digital humanities start-up grant from the National Endowment for the Humanities.


3 The visual model was made by Joshua Stephens, a graduate student in architecture at NC State University, working under the supervision of David Hill, Associate Professor of Architecture at NC State. Three more graduate students in the College of Design at NC State worked on this project: Chelsea Sacks developed the graphics, Craig Johnson created the website, and Jordan Gray rendered the images.
Fig. 1. Paul’s Churchyard looking west, from the Visual Model.

by surveyors after the Great Fire of 1666, and (3) measurements of the foundation of the Paul’s Cross preaching station and the cathedral made by archaeologists working over the past century in Paul’s Churchyard (Fig. 4).⁴ The visual model also incorporates the appearance of the sky and the angle of the sun appropriate for the time of day and the season of the year (Fig. 5).⁵

A simplified version of the visual model was then imported into acoustic modelling software to produce the acoustic model.⁶ The acoustic

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⁴ Sources for this information were chiefly Peter Blayney’s *The Bookshops in Paul’s Cross Churchyard* (London: Bibliographical Society, 1990) and John Schofield’s *St Paul’s Cathedral Before Wren* (London: English Heritage, 2011).

⁵ 5 November 1622 in our model is a damp, chilly, overcast day, with the sun low on the horizon casting long shadows across the Churchyard. There is a light breeze. Because of the chill in the air, people in the surrounding buildings have built fires; their smoke contributes to the general atmosphere of greyness. These details are provided by the website http://weatherspark.com/averages/28729/11/15/London-England-United-Kingdom which provides average weather conditions for every day in London, including 15 November (5 November on the Julian calendar), informing us that the sun rises at 7:20 am and sets at 4:12 pm on this day. Between 10:00 am and 12:00 noon, the sun rises from about 18 degrees of elevation above the horizon to 20 degrees of elevation, casting, even at noon, a long shadow across the Churchyard. The temperature typically varies from 44°F to 50°F. The weather is cloudy 87% of the time and there is a 70% chance that precipitation will be observed at some point during the day—in other words, typical late autumn weather in London.

⁶ The acoustic model of The Cross Yard was made by Ben Markham and Matthew Azevedo at Acentech, Inc., in Cambridge, Massachusetts.