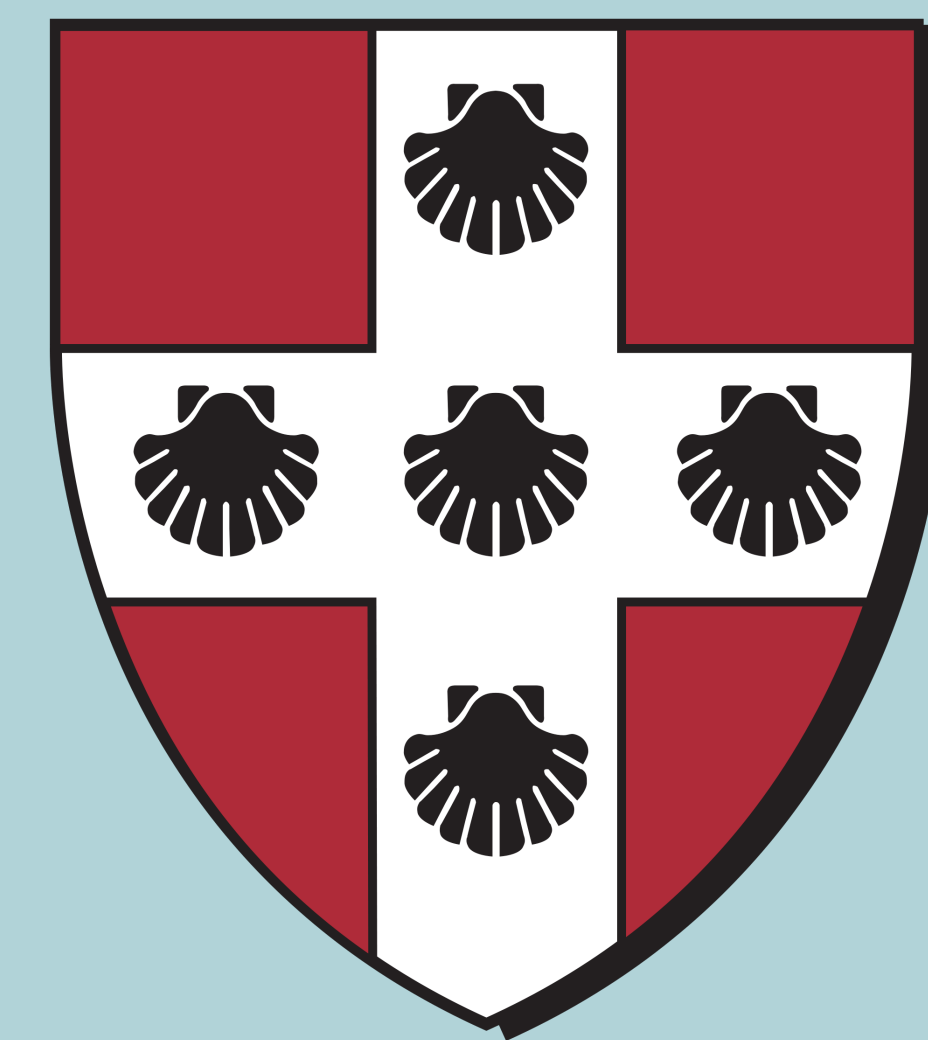


14TH CENTURY GOTHIC ARCHITECTURE: A NETWORK OF MASTER CRAFTSMEN

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ABSTRACT

The Late Middle Ages (c. 1250 - 1500 CE) saw a massive building and rebuilding of both private, public, and especially ecclesiastical buildings in national versions of the great Gothic styles. More specifically, the English Gothic Curvilinear and Perpendicular styles, each with their own characteristics and timelines, flourished in the 14th century as a result of master masons, carpenters, and other architects and their movement around the country. The main goal of this research project was to analyze, in terms of geography, mobility, and network connections the activities of the medieval architects of England during this time. In order to accomplish this goal, the creation of a digital database of the locations and projects of these craftsmen was necessary. This database was then used to facilitate geographic analyses of issues concerning temporality, synchronicity, regionality, travel, and project classification, among others. These analyses depict a network built around four key craftsmen and their work both individually and in conjunction with one another. However, there were also several other individuals operating outside of the spheres of influence of these key masons and carpenters with regards to time, location, and employment.

BACKGROUND

The later Gothic architecture movement was centered on two phases: the Curvilinear (1290 – 1380), and the Perpendicular (1380 – 1540). While the Curvilinear phase is marked by curves in the traceries of windows and the vaulting of arches (Figure 1), the Perpendicular phase is noteworthy for its use of strong vertical and horizontal lines and linear patterns (Figure 2). Both phases were crucial to the national Gothic style of England in the Later Middle Ages (Hendrix 104, 171).

In 1954, architectural historian John Harvey published the first edition of his biographical dictionary database, *English Mediaeval Architects*. In it, he outlines the recorded works, projects, and business dealings of many craftsmen in England during the Late Middle Ages. Parsed selections from the book, narrowed down to the 14th century, serve as the database for this project, accomplished using an Excel spreadsheet with entries for each work completed under the name of a particular architect. The fields necessary for geographic analysis of each entry are: the name of the craftsman, the name of the building or locality, the start year and span of the work done, a description of the project, and the type of work done based on the employer. The coordinates of each location were also necessary in order to construct a mapped layout of these entries. After the construction of the database, the spreadsheet was uploaded to an ArcGIS Pro project file for feature layer construction and analysis.

The master English masons laid out in Harvey's book were highly skillful in their use of both architectural styles described above, and the geographic components of their work led to the development of regional sub-styles such as "West Country Perpendicular" (Figure 3). The causes and effects of this sectioning are examples of questions raised for analysis on a geographic platform such as a GIS software.

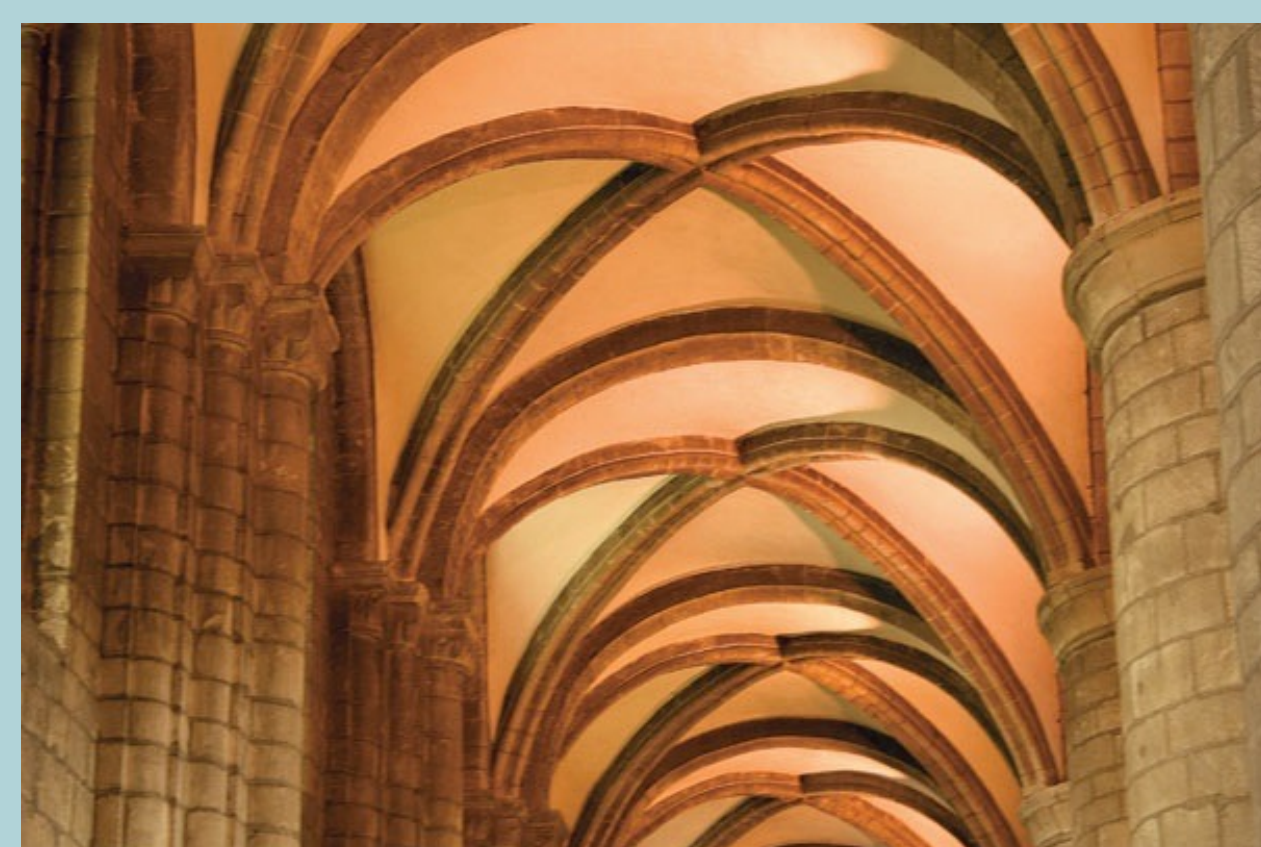


Figure 1: Curvilinear; Nave aisle vaulting. Gloucester Cathedral.



Figure 3: West Country Perpendicular; Exterior from the east. Bath Abbey.

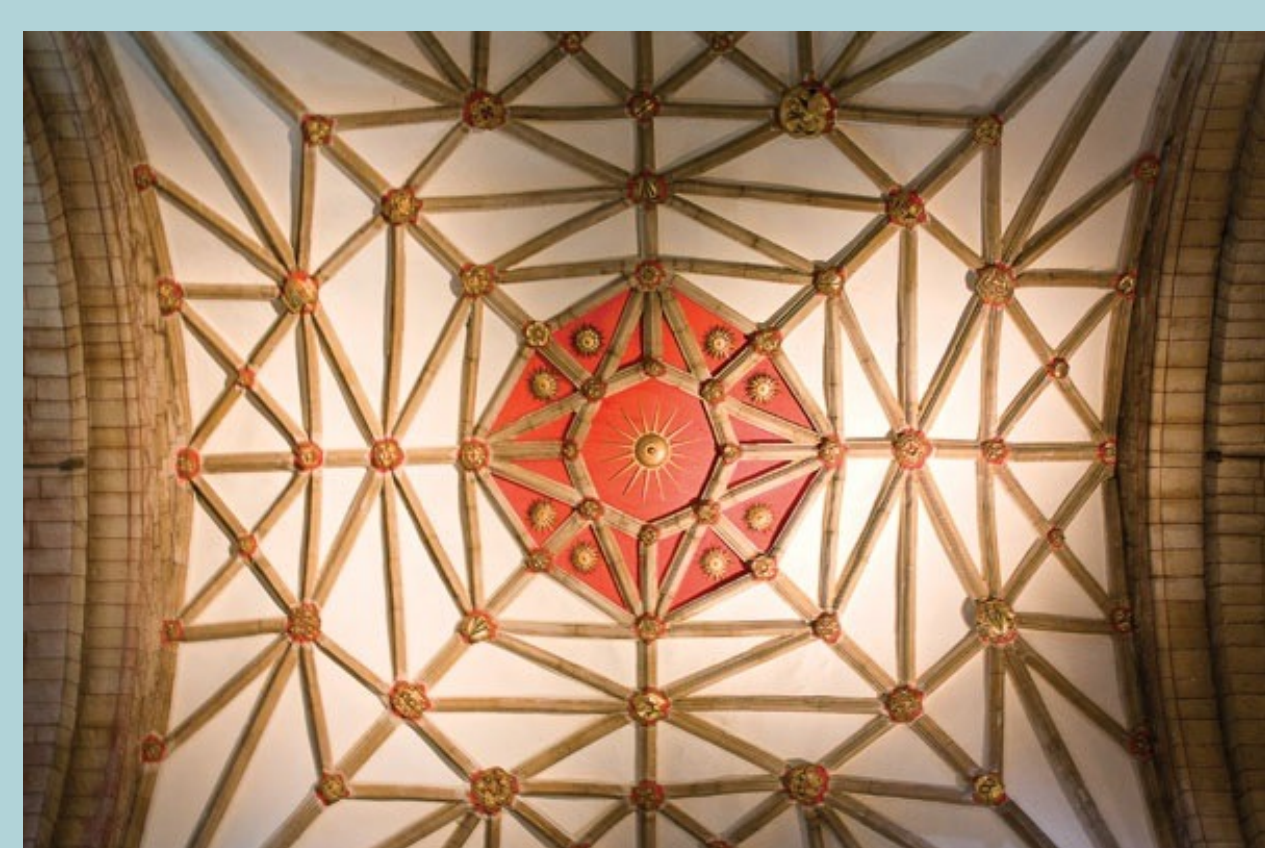


Figure 2: Perpendicular; Crossing vault, 1375-1390. Tewkesbury Abbey.

ANALYSIS

Preliminary research shows that there are four key individuals who can be identified as the most important craftsmen of the time and place: William de Ramsey III, mason (fl. 1323 – 1349), Henry Yeveley, mason (fl. 1353 – 1400), Hugh Herland, carpenter (fl. 1360 – 1404), and William Wynford, mason (fl. 1360 – 1405). These architects stand out due to their quantity and span of work entries as well as their connections with one another, factors which aid in the construction and observation of a geographic network. Figure 4 shows all entries plotted on a map, with the orange dots representing the combined works of the four key architects, and the blue dots representing the combined works of all other craftsmen. Displaying the network this way is important for visualizing a relationship between the works of the key figures and the works of everyone else, and measuring the influence of the key figures on a particular location at a given time.

For example, from the late-1370s to the mid-1380s, two mason - Thomas Barnet and Richard at Cherche - appear to follow Henry Yeveley into the City of London after being involved in a property dealing with him in Guildsford, 28 miles outside of the capital city. Following this initial encounter, both auxiliary masons are concerned with property transactions again in the City of London, near where Yeveley is working. In the 1380s, the two masons are joined by a third, Thomas Barnet, all involved with Yeveley's properties in the City of London while Yeveley is working there. In contrast to the Yeveley property connection, there were also craftsmen operating outside of the spheres of influence of the key masons, most notably the masons Robert Bath and William Brown, who are recorded working at Oxford in the 1370s. This type of non-royal work disconnected from the four key craftsmen is rare, but it continues in this manner into the early 15th century, after the deaths of Yeveley, Herland, and Wynford.

Instead of examining the key influencers together as one layer, analyzing them separately yields interesting results regarding the synchronicity and regionality of these four individuals with respect to one another. Figure 5 shows the works of each individual, where purple represents Wynford, green represents Herland, red represents Yeveley, and yellow represents Ramsey III. In addition, each larger circle represents the overall mean geographic center of the works of each craftsman. With this layout, it becomes clear that Yeveley and Herland have a tendency towards works in the east, while Wynford works in the west. However, towards the end of the century, Yeveley and Herland move towards the west and the three architects begin working together on royal projects in the south of England, signaling a sort of mutual territorial respect before a mutual camaraderie in shared work.

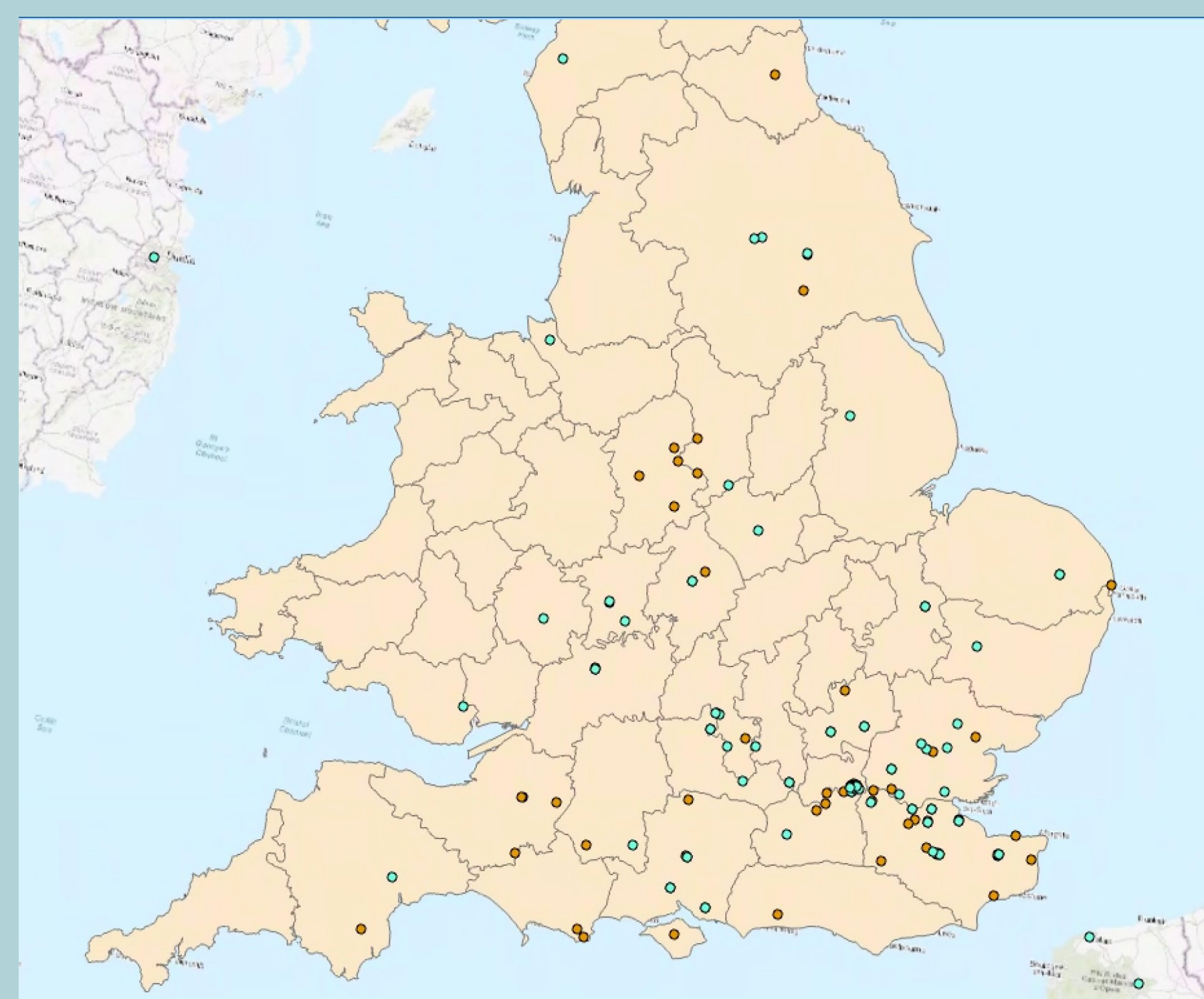


Figure 4

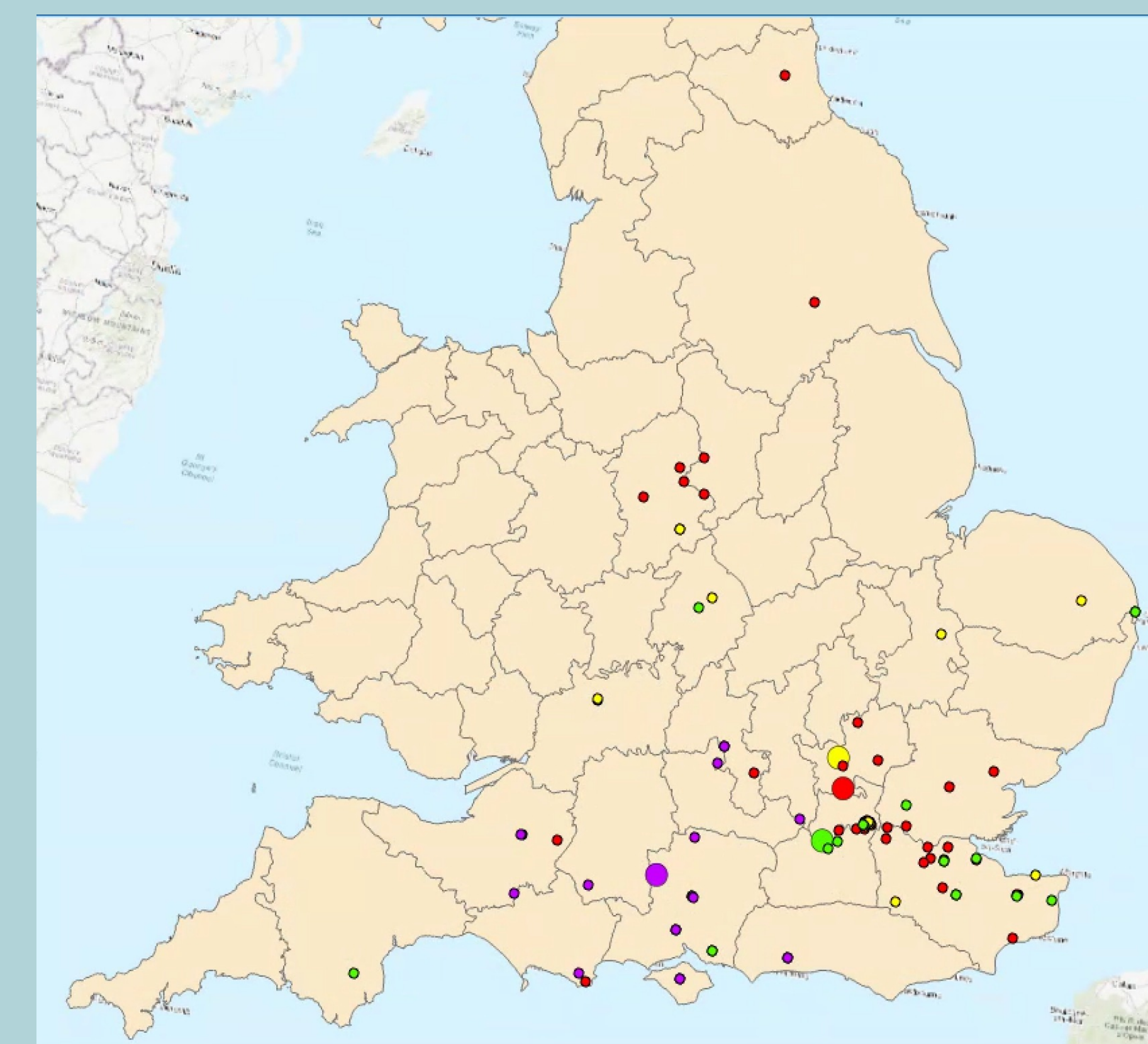


Figure 5

LIMITATIONS/CONTINUATIONS

One limitation of the data was the skew of records towards royal works (recorded in The King's Works) centered around the City of London. While it is likely that these works did make up a significant portion of works done, it is also true that they were better maintained and protected than other types of work in other areas, thus having a better chance at surviving until today. Searching for more data sources outside of Harvey may remedy this bias.

The large dictionary of data available meant that the project was scalable in terms of breadth and depth of entries and analyses. The relatively low number of entries present were selected based on preliminary knowledge of the key masons of the time as well as their associations with one another, but a more thorough selection of craftsmen and works could yield different results, or potentially bolster already present patterns.

REFERENCES

Hendrix, John Shannon. *The Splendor of English Gothic Architecture*, Parkstone International, 2012.