An Brief History & Analysis of the Cambridge Leper Chapel



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A Note from the Author

This paper was submitted to the University of Cambridge Institute of Continuing Education to fulfil the requirements of an Undergraduate Certificate in Historic Building Conservation in June 2020. It serves as an introduction to the Cambridge Leper Chapel and focuses on the history and construction of the building. Additionally, it seeks to document how the Cambridge Leper Chapel changed through time and analyses how these changes reflect the conservation practices of their time. Historic photographs, maps, and annotated contemporary photographs support the narrative and highlight visible changes to the historic fabric and overall character of the building.

Introduction

The Chapel of St Mary Magdalene Stourbridge, also known as the Cambridge Leper Chapel, was built in the early to mid-12th century. Dedicated to St Mary Magdalene, the patron saint of lepers, the chapel served as a place of worship for patients afflicted with Hansen's disease or leprosy for over one hundred years. The two-cell building served many functions after it became a free chapel in 1279 as a result of its association with the Stourbridge Fair. Evidence of its long use as well later repairs and restoration activities can still be seen in the historic fabric and workmanship of the building. After surviving several periods of decline during its nearly 900-year history, today, the building is owned by Cambridge Past, Present and Future (CambridgePPF) and remains an important landmark in Cambridge as well as the local community.

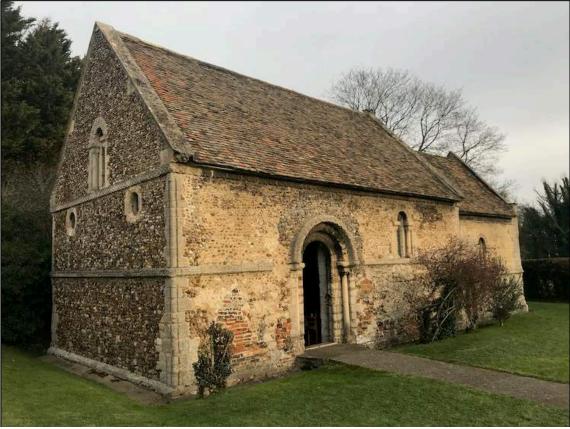


Figure 1: Photograph of the Cambridge Leper Chapel looking northeast showing existing conditions (Gjesfjeld 2019).

Significance

The Chapel of St Mary Magdalene Stourbridge is a Grade I listed building (1126144) (Historic England https://historicengland.org.uk/listing/the-list/list-entry/1126144). In 1954, after enduring many years of encroaching development, Pevsner wrote that the chapel '...stands desperately along below the road and the railway approach'; however, he noted that as '...visually unpromising as it is, its architectural value is high. It is one of the most complete and unspoilt pieces of Norman architecture in the county' (Pevsner 1954: 227-228). Today, the leper chapel continues to serve as one of the oldest and most complete Norman buildings in Cambridge.

The building possesses architectural interest as an example of a well-preserved chapel dating from the early to mid-12th century containing a representative assemblage of early Norman fittings and decoration. Character-defining architectural features of the chapel include round-headed windows and doors adorned with a concentration of Norman or Romanesque detailing such as chevron or zigzag motifs as well as accompanying en-delit nook-shafts with decorated capitals. The building also expresses historic interest as an example of an early leper chapel associated with the Sturbridge Hospital in Cambridge. Moreover, it conveys significance as a result of its community value as a place of worship and its continued use to support community-based events. Despite multiple restoration activities throughout its long history, including one completed on the west wall by Sir George Gilbert Scott in 1867, the building retains integrity and possesses high evidential value.

Location and Setting

The Cambridge Leper Chapel is located in Cambridgeshire in the Cambridge District Authority in the parish of St Andrew the Less (TL4716359483) within the Abbey ward. The site is situated in close proximity to the former municipal boundary, which extended roughly north to south along Coldham's Brook and served to separate the city of Cambridge from Fen Ditton until the boundaries were modified in 1934 (Wareham and Wright 2002). The underlying geology includes gault mudstone with chalk marl deposits (Rees 2017: 8). Adjacent historic properties include several Grade II-listed buildings such as the Round House, a former toll-house; Papermills, which originally served as a paper mill and later as a flour mill; and the Globe Public House (*British History Online* https://www.british-history.ac.uk/rchme/cambs/pp358-391).

Situated on the north side of Newmarket Road, the Cambridge Leper Chapel sits in a low-lying area that is bordered by various forms of encroaching development that have significantly modified its associated setting over the last approximately 150 years. The area directly north of the chapel is bisected by an access road known as Barnwell Junction that sits on the edge of a railroad embankment and provides access to a small linear cluster of buildings that are privately owned homes. Historically, the buildings were constructed to support the train station known as Barnwell Junction. The rail line extends just beyond the former station to the north and west and is still in use today. Newmarket Road, a busy thoroughfare, lies south of the chapel. In this location, the road is built-up as a causeway as it passes over the railroad tracks and past the chapel where a large earthen embankment was constructed to support the road infrastructure. The resulting development required the construction of a relatively steep set of stairs that provide access to the building from Newmarket Road. The eastern extent of the chapel is bordered by a green space that is owned by CambridgePPF and is managed as a pasture.

Leprosy

Leprosy, known commonly today as Hansen's disease, is an infectious illness that is caused by a bacillus (*Mycobacterium leprae*). The disease was first discovered in 1873 by the Norwegian scientist Gerhard-Henrik Armauer Hansen. Transmitted by droplets from the nose and mouth through close and frequent contact, the disease can cause damage to the skin, peripheral nerves, the lining of the nose, and the eyes (World Health Organization https://www.who.int/news-room/fact-sheets/detail/leprosy; Centers for Disease Control and Prevention https://www.cdc.gov/leprosy/about/about.html). If left untreated leprosy can result in skin lesions, loss of digits, gangrene, collapse of the nose, and blindness (Jarrett 2012: 9). While a multi-drug therapy was established as a form of treatment for the disease in the early 1960s, it still afflicts many people around the globe. In 2018, there were 208,619 reported cases of Hansen's disease in 159 different countries (World Health Organization, https://www.who.int/news-room/fact-sheets/detail/leprosy).

Based on documentary evidence, leprosy had entered England by the 4th century and had become endemic by 1050 (Jarrett 2012: 9). Simon Jarret writes in 'Disability in Time Place' that the reaction to leprosy in England was complicated. In the document he noted 'It could be seen as a punishment for sin but it was also believed that the suffering of lepers was similar to the suffering of Christ, thus placing them closer to God than other people. Enduring purgatory on earth, they would ascend directly to heaven when they died. Those who cared for them or made charitable donations could, through these good works, accelerate their own journey to heaven and reduce their time in purgatory' (Jarrett 2012: 9).

Between the 1000 and 1350, over 300 lazar houses (hospitals used to quarantine lepers) were established in England to treat people afflicted with leprosy (Jarrett 2012: 9). Notably, the 12th century saw the creation of more leper houses than any other period (Rubin 1987: 114). During this era there were generally two phases of leper hospital development. The period between 1100-1250, which saw construction of the Cambridge Leper Chapel, was characterised by 'autonomous, quasi-regular units' of leper communities that were built in response to the growing demands by the church to isolate or separate individuals afflicted with leprosy (Rubin 1987: 115). In contrast, the second phase of leper hospital development that was undertaken after 1250, included the founding of facilities in connection with secular authorities, which included hospitals, alms-houses, and chantries (Rubin 1987: 146-147).

While 300 leper hospitals in England is not an insignificant number, it is likely that there were many more unrecorded hospitals located in rural communities around the country (Roffey 2010: 213). Notably, unlike monasteries, the form and layout of individual leper hospitals and their associated development varied according to available land, social status of patients, level of patronage, and intensity of the disease. As a result, many of these buildings are no longer standing and archaeological evidence is often difficult to differentiate from other developments such as small farmsteads or secular dwellings of the period (Roffey 2010: 213).

Attitudes regarding leprosy began to change in England after the Black Death (1347-1350) (Jarrett 2012: 9). By this time, the numbers of people infected with the disease in the country had begun to wane. As a result, some of the leper hospitals went into decline, while others were repurposed as alms-houses (Jarrett 2012: 9). By 1279, the Cambridge Leper Chapel had become a free chapel and the hospital was no longer functional. Despite the decline of leprosy in England, a new leper hospital was constructed in Cambridge in approximately

1361. It was known as the leper hospital of Saints Anthony and Elgius and was located on the east side of Trumpington Street fifty yards north of the intersection with Lensfield Road (Rubin 1987).

Historic Location of Leper Hospitals and Chapels in England

During the height of leprosy in England many leper hospitals and chapels were sited in strategic locations near the outskirts of towns or cities, or if in rural locations, near travel roads or major cross routes. Their location along roads ensured that patients afflicted with leprosy could remain part of mainstream society and beg for alms, trade items, or provide services such as offering prayers for the souls of benefactors (Roffey 2010: 219). Sufficient acreage was required in association with the leper hospitals to enable patients to be largely self-sufficient to produce and maintain their own foodstuffs including livestock. In addition to crops, the lands could also be used to support fairs, which provided an important source of income for the hospitals. The siting and location of the Cambridge Leper Chapel follows the above precedent. It was located a suitable distance from the city of Cambridge, was sited along a busy road approaching the city, which facilitated the collection of alms, had ample land for production of crops and the grazing of animals and was near a source of water (Atkins and Munby 2016: 41).

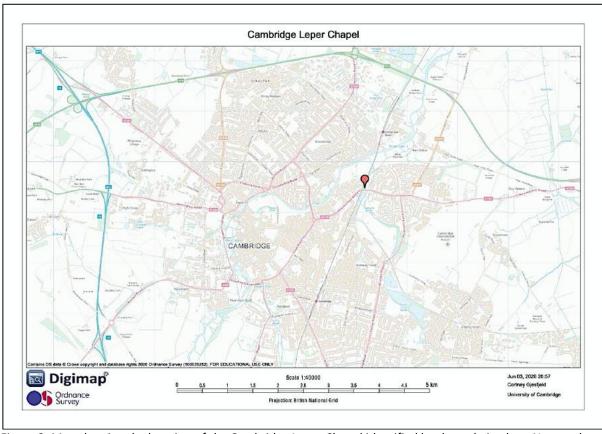


Figure 2: Map showing the location of the Cambridge Leper Chapel identified by the red pin along Newmarket Road northeast of the Cambridge city centre (Giesfield 2020).

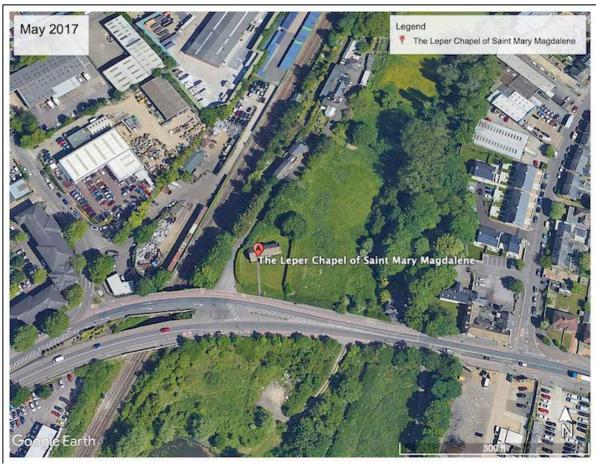


Figure 3: Aerial photograph showing the Cambridge Leper Chapel situated on the north side of Newmarket Road, Cambridge (Google Earth 2017).

History of the Cambridge Leper Chapel

The Chapel of St Mary Magdalene Stourbridge was constructed in the early to mid-12th century and served as a place of worship for patients afflicted with leprosy who were housed at the nearby Sturbridge Hospital for over one hundred years. It was likely established with assistance from the Cambridge burgesses, but may have also benefited from royal patronage (Atkins and Munby 2016: 16). The earliest known reference to the leper hospital dates from 1169 to 1172 when a yearly payment of 20s. was made to the Hospital of Barnwell under the 'customary alms' of the bishop (*British History Online* https://www.british-history.ac.uk/vch/cambs/vol2/pp307-308). During this period the hospital may have followed Augustinian rule, with an 'apostolic' community of a dozen or so patients and one master who were served by a group of brethren and sisters that acted as carers (Pearce 2003: 2; Rubin 1987: 115). While the location and character of the hospital facility at Cambridge remains unknown, leper hospitals built during this period often departed from standard medieval hospital plans due to fear of contagion in favour of '...scattered houses about a common chapel' (*British History Online* https://www.british-history.ac.uk/rchme/cambs/lix-lxxii).

In 1210 or 1211, King John granted the leper hospital a charter to host a fair on the eve of the feast of the Exaltation of the Holy Cross, held each 14 September (*British History Online https://www.british-history.ac.uk/rchme/cambs/xxxii-lviii*). The charter ensured that rent and tolls could be collected from the traders, which could then be applied toward the

welfare of patients housed at the Sturbridge Hospital. Eventually it developed into the Stourbridge (also known as Sturbridge and Steresbridge) Fair, which served as one of the greatest centres of trade in England and lasted several centuries (Ridout 2011). The fair was held in Stourbridge Field, which was part of the east fields of Cambridge, and not on the common (Atkins and Munby 2016: 39). It was situated in an advantageous geographical location near the River Cam, which formed a natural canal by which goods could be transported from the Wash and eastern ports to the fair. The site was served by several main roads that brought the 'Midlands-East Anglia and North-London' traffic in close proximity to Cambridge (Ridout 2011: 2). There was also ample open land in the locale that could support a large number of temporary booths. Reportedly at one time, the Stourbridge Fair covered a total area of half a square mile (James 1930: 35-36). Ultimately, the fair ceased in 1855 due to declining interest; however, it was proclaimed by the mayor of Cambridge through a special ceremony until 1933 when it finally ended (McBain 2011: 282).

By 1279, the leper hospital had ceased to function in its original capacity. At that time the Warden of Sturbridge Hospital was faulted that 'he did not maintain any lepers in that hospital as he ought of right to do' (Ridout 2011: 3). It was noted that he held 24 ½ acres of Cambridge fields (accumulated from various benefactions) and that right of advowson belonged to the Cambridge burgesses; however, they were usurped by Hugh Northwold, Bishop of Ely (Rubin 1987; *British History Online* https://www.british-history.ac.uk/vch/cambs/vol2/pp307-308). Consequently, the chapel would remain known as the 'Free Chapel of St Mary Magdalene' in the patronage of the Church of Ely until the Reformation (*British History Online* https://www.british-history.ac.uk/vch/cambs/vol3/pp132-133).

By 1535, the chapel was valued at £10 10s. and was reserved to the bishop in 1544 (*British History Online* https://www.british-history.ac.uk/vch/cambs/vol3/pp132-133). At that time, the bishop leased the chapel and its associated lands to the Cambridge Corporation, who was responsible for managing the Stourbridge Fair. During this period the Corporation was challenged by the Crown to prove its right to run the fair. The University of Cambridge also put in a claim to operate the fair (Ridout 2011: 5). After decades of discontent amongst various parties, in 1597, a resolution was delivered by Elizabeth I who leased the chapel and its associated lands to the Corporation for another nine years (*British History Online* https://www.british-history.ac.uk/vch/cambs/vol3/pp132-133). As a result of the series of leases to the Corporation, it is likely that by the 16th century the chapel was no longer used as a place of worship. Eventually, following the termination of the last lease to the Corporation, James I transferred the chapel into the private hands of John Shelbury and Philip Chewte (Pearce 2003: 10). In the years that followed, the chapel and its associated lands were acquired by George Riste amongst many others.

Scholars suggest that survival of the Cambridge Leper Chapel can be attributed to its association with the Stourbridge Fair. During this period the building served as a 'storage place for the lumber of the fair, as a victualling house, as a drinking-booth, as a stable, and as a barn' (*British History Online* https://www.british-history.ac.uk/vch/cambs/vol3/pp132-133). In 1725, a detailed map was produced showing the layout of the fair, which was reproduced in a book by J. Nichols in 1786. The plan provides an illustration of the chapel as well as a glimpse into some of the natural features that characterise the site including the presence of what appeared to be a diverted section of Coldham's Brook that formed an enclave around the chapel (Rees 2017: 8-9). While it is unknown, it is possible that the brook

was rerouted to serve as a natural boundary delineation of the site as well as to provide a source of water for the patients.

By 1816, the chapel had deteriorated to such an extent that it was threatened with demolition. At this time, Reverend Thomas Kerrich, a Fellow of Magdalene College, purchased the building for £160 and raised an additional £174 for restoration efforts (Pearce 2003: 15). Reportedly, many of the later alterations that were made to the leper chapel to support secular uses associated with the Stourbridge Fair were removed by Kerrich at this time. In 1817, Kerrich transferred the chapel to the University of Cambridge under the condition that it was 'kept in good repair and preserved unaltered' (*British History Online* https://www.british-history.ac.uk/vch/cambs/vol3/pp132-133). Between 1843 and 1845, the son of Reverend Kerrich undertook another restoration of the chapel, which cost £84 15s 1d (Pearce 2003: 15). Between 1844 and 1845, the chapel was used as a place of worship by labourers who were constructing an extension to Ely for the Eastern Counties Railway. This development significantly modified the area west of the chapel (*British History Online* https://www.british-history.ac.uk/vch/cambs/vol3/pp132-133).



Figure 4: Photograph of a historic map showing development associated with the Cambridge Leper Chapel at centre near the Paper Mills and turnpike (Baker 1830).

Twenty years later, the building was once again in a dilapidated condition, which resulted in a special appeal for help by the Cambridge Architectural Society. In 1865, Sir George Gilbert Scott rebuilt the west wall of the chapel at a cost of £500 for the Cambridge Camden Society (Atkins and Mumby 2016: 40). The Cambridge Camden Society was '...founded in 1839 by J. M. Neale and B. Webb for the study of ecclesiastical art.' It was renamed the *Ecclesiological Society* in 1846 and survived until 1868 (Oxford Reference, https://www.oxfordreference.com/view/10.1093/oi/authority.20110803095544250). During

this period the chapel served a congregation of 200 people who were employed in the adjacent Barnwell Brick & Tile Works (Pearce 2003: 16). The area just west of the chapel continued to change throughout the late-19th century with construction of the Cambridge to Fordham line built by the Great Eastern Railway. On 2 June 1884, the Barnwell Junction station opened. The line was closed to the public on 18 June 1962 (Atkins and Mumby 2016: 23).

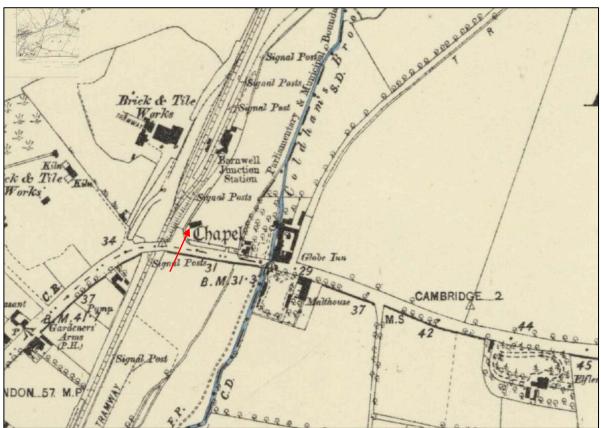


Figure 5: Ordnance Survey map showing the Cambridge Leper Chapel as well as associated industrial development west of the area. Note that the diverted channel, which had previously served to enclose the chapel, is no longer present, 1886 (Reproduced with the permission of the National Library of Scotland, Ordnance Survey 1886, https://maps.nls.uk/view/101571862).

During World War I the Cambridge Leper Chapel was utilised for worship services in support of operations associated with the Army Ordnance Corps and Barnwell Military Hospital, which had been constructed in the nearby fields. The hospital was demolished, once again leading to intermittent use of the chapel (Pearce 2003: 16). In 1925, members of the Westcott House Theological College committed to offering more frequent worship services at the chapel. At this time new flooring and heating was installed in the building (Pearce 2003: 16).

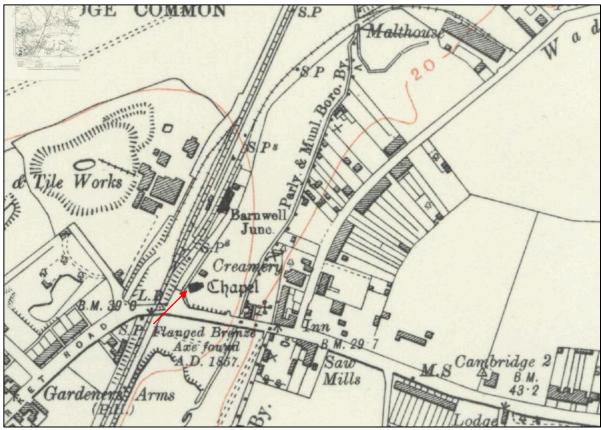


Figure 6: Ordinance Survey map showing the Cambridge Leper Chapel as well as the introduction of a creamy building just north of the chapel (Reproduced with the permission of the National Library of Scotland, Ordnance Survey 1927, https://maps.nls.uk/view/101571856).

While struggling to maintain their obligation, in 1949, the University of Cambridge put the building into 'sound condition' and made the interior '...fit for use for occasional services' (*British History Online* https://www.british-history.ac.uk/vch/cambs/vol3/pp132-133). Two years later, in 1951, the University conveyed the chapel to the Cambridge Preservation Society (CPS). At the time of acquisition, the CPS purchased six acres of pasture or meadow around the chapel, known as Chapel Close. In addition to the transfer of the building, the University also provided funds to support the purchase of one acre of land with the condition that if the CPS could not maintain the chapel it would be required to return the building and one acre of adjoining land (*British History Online* https://www.british-history.ac.uk/vch/cambs/vol3/pp132-133). In the years that followed, supplementary restoration work was performed on the chapel as a result of funding provided through a legacy from Mr Eric Bunsen (Pearce 2003: 16).

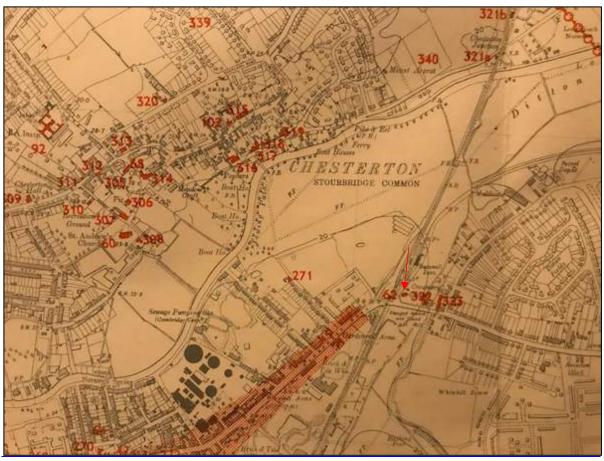


Figure 7: Photograph of a map produced by the Royal Commission on the Historical Monuments of England (RCHME) in 1959 showing the distribution of historic buildings identified in the locale in 1959. It includes the Cambridge Leper Chapel (62) that is identified by a red arrow, the Round House (322) and Paper Mills (323) (RCHM 1959).

The Cambridge Preservation Society, which was established in 1928, was the forerunner to the current owner of the chapel, CambridgePPF. The chapel is still used today and is part of the church of England in the parish of Holy Cross Cambridge. Worship services are held the first Sunday of every month as well as on Christmas and Easter. In addition, CambridgePPF hosts several special events in the chapel throughout the year including a small annual reenactment of the Stourbridge Fair, which first began in September 2014 (Ridout 2011: 90-91). Today, the building serves as a Cambridge landmark and remains a vital part of the identity of the local community.



Figure 8: Photo of Proctors from the University of Cambridge formally 'opening' the Stourbridge Fair reenactment outside the Cambridge Leper Chapel (Gjesfjeld 2019).

Building Description and Historic Use

Norman or Romanesque Architecture

Romanesque architecture was widely found across Europe from the year 1000 until the late 12th century when it was replaced by the new Gothic style. Its stylistic influence and name are derived from its similarities with elements of ancient Roman construction; however, it is also known as Norman in England and France as a result of its introduction to England after the Norman Conquest of 1066. The style is characterised by the use of thick walls, round arches, and heavy geometric motifs, which were likely derived from geometric patterns used by native tribes of northern Europe (Cragoe 2017: 30, 80). Often the entry doors into Norman buildings were heavily decorated in an effort to inspire awe and religious fervour, while also serving as a symbol of the '...transition from the secular world outside to the sacred world inside' (Cragoe 2017: 31). Other types of architectural features that are commonly associated with Norman architecture include interior and exterior arches accentuated with multiple orders that combined different motifs such as chevrons and roll mouldings; decorated column shafts and bases around windows and doors; fanciful or grotesque animal and human forms; and doors and windows with rounded heads.

Description of the Cambridge Leper Chapel

The Cambridge Leper Chapel consists of a nave and chancel. The nave measures 31 feet by 17 feet and is composed of a patchwork of flint rubble and brick with shafted stone quoins

(*British History Online* https://www.british-history.ac.uk/rchme/cambs/pp298-304). The straight-end chancel measures 18 feet by 12 3/4 feet and is dressed with Barnack or Weldon stone and has stone quoin shafts (*British History Online* https://www.british-history.ac.uk/rchme/cambs/pp298-304). The early to mid-12th century chapel is adorned with 'unusual architectural and carved decoration' of the period (Historic England https://historicengland.org.uk/listing/the-list/list-entry/1126144). The nave contains two external string-courses, which are similar to those found on the chancel. Other decorative elements include various geometric motifs that are concentrated around the windows and doors on both the interior and exterior of the building. The most common of these features are nook-shafts, capitals with scallops, and chevron (zigzag) voussoirs, as well as sawtooth and billet string courses (Pevsner 1954: 227-228). The window openings on the north and south elevations are round-headed and measure seven to eight inches wide at their narrowest point between the splays (Pevsner 1954: 227-228). While the west wall of the nave includes two original oculi windows, the round-headed window on the west wall and the square-headed window on the east wall of the chancel were later alterations.

The roof of the chapel is clad with tile that needs repair. In the late 14th or early 15th century, the vaulted chancel roof was rebuilt after it collapsed. Today, two cylindrical shafts, which served as the former vaulting supports are located in the northeast and southeast corners of the chancel (Baxter 2020). Markings associated with the former vault can also be seen on the east, north, and south walls of the chancel (*British History Online* https://www.british-history.ac.uk/rchme/cambs/pp298-304). The extant chancel roof is composed of three bays with '...moulded principals, plates, purlins and ridge; the principals have curved braces and wall-posts, both moulded, standing formerly on stone corbels' (only one remains today) Cambridgeshire Historic Environment Record https://www.heritagegateway.org.uk/Gateway/Results_Single.aspx?uid=MCB5775&resource_ID=1000). The roof of the nave is of a similar type and construction to that found in the chancel; however, it is composed of four bays. Also, four corbels remain in the nave and

The interior of the building also includes decoration over the windows on the north and south walls of the chapel as well as in the chancel arch, which contains two orders and is the most heavily ornamented feature in the chapel. The walls are thick and most of the original external and internal plastering is no longer extant. Additionally, two lockers, in the form of rectangular recesses are located on the north and south walls of the chancel (*British History Online* https://www.british-history.ac.uk/rchme/cambs/pp298-304).

include carvings of flowers and grotesques.

The key features identified above show all of the hallmarks of Norman or Romanesque architecture. While the architect and/or builders of the Cambridge Leper Chapel remain unknown; Ron Baxter suggested in the record for 'St Mary Magdalene, Cambridge, Cambridgeshire' found online at the Corpus of Romanesque Sculpture in Britain & Ireland that it is possible that masons from the workshop at Ely Cathedral may have been responsible for the decorative sculpture found at the chapel. Baxter noted, 'Specific features with parallels at Ely are the sawtooth and billet string courses and the forms of chevrons on doors, windows and chancel arch' (Baxter 2020). For additional detail regarding extant Romanesque decorative features associated with the leper chapel, please see the description for 'St Mary Magdalene, Cambridge, Cambridgeshire' online at the Corpus of Romanesque Sculpture in Britain & Ireland <a href="https://www.crsbi.ac.uk/view-item/en/state-chap

<u>item?key=WXsiUCI6eyJUZXJtcyI6ImxlcGVyIn0sIkYiOiJleUowSWpwYk5sMTkifQ&pg=2&WINID=1590151351328#FeatureSet:2.%20Interior%20Features.</u>

Historic Use of the Cambridge Leper Chapel

As mentioned above, after becoming a free chapel in 1279, the building was used to support various different types of activities associated with the Stourbridge Fair. In 1783, it was reported that the chapel was sold as a storeroom (Pearce 2003: 15). It is said that when Cotman illustrated the building in 1818 it was used as a stable (Baxter 2020). Around this time, Thomas Kerrich also completed restoration work on the chapel, which removed previous evidence of secular use (Atkins and Munby 2016: 40). Dr Barry Pearce, former director of the CPS, proposed that at one time the chapel may have also been used as a dwelling. He speculated that the rectangular east window of the chancel could have been installed to light an upper room. Moreover, the presence of a chimney in the nave of Cotman's illustration further supports the claim (Pearce 2003: 15). Pearce also considered how other changing uses may have impacted the interior configuration of the chapel. He suggested that the chancel was likely partitioned off from the nave and that the large doorway in the south wall of the chancel was inserted to improve access to the building. This could have helped support its use as a stable or to facilitate the movement of booths in and out of the building during the fair (Pearce 2003: 15).

Modifications to the Cambridge Leper Chapel

It is clear that the leper chapel has served many functions during its long history. Evidence of these changes can be seen in the remaining fabric of the building through a patchwork of repairs. Due to the relative shortage of quality building stone, Cambridge has always imported freestone from quarries from other parts of the country. Often during the Middle Ages materials were brought in from the limestone belt that extends across the southwest to northeast of England. During this period, the best-known quarries were located at Barnack, Weldon, and Ancaster (*British History Online https://www.british-history.ac.uk/rchme/cambs/xcviii-cvi*). Notably, Barnack or Weldon stone was used in the construction of the chancel of the leper chapel. In contrast to the relatively refined character of the chancel, the nave is composed of flint rubble and an assortment of different shapes, sizes, and colours of bricks, which attests to the relative shortage of local stone building materials with the exception of flint and clunch. Moreover, the varied assemblage of recycled materials may also suggest lack of financial resources throughout several periods of its history.

Chancel

In the late 14th or early 15th century the ceiling of the vaulted chancel collapsed. According to documentary evidence, it was repaired under the direction of Bishop John Fordham of Ely who granted a forty-day 'indulgence' to those who stepped forward to assist with the repair (Pearce 2003: 9). Today, evidence of this work is visible in the east gable of the chancel through the presence of bricks and rubblestone near the top of the gable, which is noticeably different from the Barnack or Weldon stone that dominates the chancel. The remnants of a possible stone voussoir can also be seen near the top of the building amongst the repairs suggesting that there may have been more than one roof repair.

There have also been many subsequent changes to the chancel throughout the years, some of which are more subtle that others. Modifications were first made to the east window in the 16th century, while the most recent alteration to the east wall was completed in the 19th century, after Cotman's illustration of the building. As a result of these changes an outline of

a blocked window is visible above the two string courses, while a square-headed window sits below (Atkins and Munby 2016: 40). It is possible that this window was constructed under the direction of Scott between 1865 and 1867. On the north wall, it is clear that the upper two feet of the wall was rebuilt with salvaged materials, including some 12th century reworked stones with a sawtooth pattern (*British History Online* https://www.british-history.ac.uk/rchme/cambs/pp298-304).

The floor plan of the leper chapel prepared by the Royal Commission on the Historical Monuments of England (RCHME) in 1959 also illustrates change through time (see Figure 9). The document notes that the window on the north side of the chancel was modified in the 15th century and that the window on the south side was modified in the 19th century or even later. Finally, the plan suggests that the door on the south wall of the chancel was modified in the 18th century. It was blocked at an unknown date; however, based on the presence of a path leading to door in Cotman's etching from 1818, it is likely that it was still in use at that time.

Nave

There is also evidence of numerous changes to the north and south walls of the nave through a patchwork of flint rubble and bricks of various ages. Early drawings and etchings show the former location of several windows that are no longer extant as well as a chimney on the south wall of the nave of the chapel. Some of the windows were located under the eaves, while others were repurposed using an existing window opening, which likely supported preservation of their decorative features. The floor plan of the chapel prepared by the RCHME also showed that the door on the north side of the nave was blocked at some point in the 19th century or later.

Another notable 19th century modification to the chapel included the rebuilding of the western wall of the nave, which was undertaken by Sir George Gilbert Scott and his son between 1865 and 1867. As a result of this effort, Scott inserted the present west window at the top; however, the two oculi are reportedly original (Pevsner 1954: 227-228). It is interesting to note that none of these windows were illustrated in Cotman's etching; however, it is possible that the oculi were extant, but covered with rendering (*British History Online https://www.british-history.ac.uk/rchme/cambs/pp298-304*). The character of the stone and the workmanship used in reconstruction of the west wall is different from the rest of the nave and chancel. While much of the nave is composed of a variety of irregularly placed materials, the west wall is composed of a highly uniform and dense arrangement of flint rubble set in mortar.

Please see photos below for a detailed visual analysis of the Cambridge Leper Chapel using historic drawings, etchings, and photos and well as contemporary repeat photography to identify change through time.

Sir George Gilbert Scott

In 1850, Sir George Gilbert Scott published his 'Plea' that outlined his principles in the practice of restoration. In it he acknowledged the negative effect of two of the most common destructive restoration activities, which included employing a heavy-handed approach to the replacement of old stonework, and using a conjectural approach to the replacement of building features (Stamp 1981-82: 91-92). Fifteen years later, between 1865 and 1867, Scott and his son rebuilt the west wall of the Cambridge Leper Chapel. While the precise details of

the condition of the west wall of the chapel in 1865 is not available, it was clear that the building had suffered from years of neglect and deterioration, and an intervention was necessary.

Documentary evidence suggests that Scott's work on the chapel was done with sensitivity to the original design and materials; however, it is difficult to know for certain. What we do know is that during this period, from roughly 1865 to 1872, Scott endured a series of family illnesses and deaths that some scholars suggest may account for a certain 'conservatism and tiredness' in the designs that he completed during this period (Stamp and Scott 1976: 59). Does this suggest a tiredness or conservatism in the work completed at the Cambridge Leper Chapel? Quite possibly. The remaining fabric associated with the west wall, which is composed of uniform flint rubble is in marked contrast to the patchwork of materials evidenced on other portions of the building. This work may suggest that Gilbert employed a 'tired' approach, which resulted in the heavy-handed replacement of old stonework and the potential introduction of new materials. Conversely, it may also suggest that his 'conservative' approach resulted in a rebuilding effort that was true to the original character and design of the building without the introduction of Victorian values about what a chapel should look like. While we don't have enough information to answer these questions, additional historical research may yield some insight into the details of his efforts.

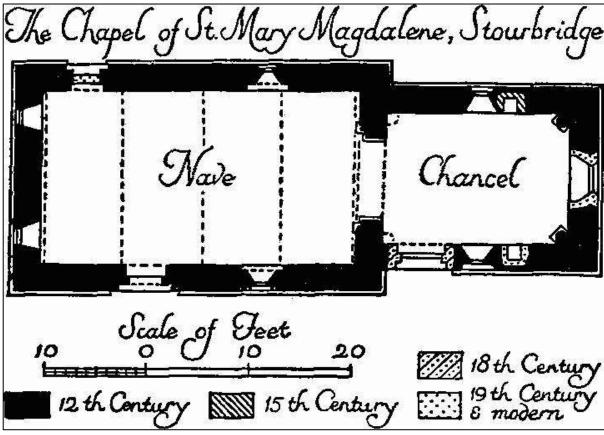


Figure 9: Drawing showing the floor plan of the Cambridge Leper Chapel and major modifications to the building since its construction in the 12th century (RCHM 1959).

Conclusions

Due to quarantine regulations imposed by Covid-19, this effort represents a compilation of secondary source materials as well as an analysis of historic and existing conditions photographs to identify change through time. While working on this paper, I encountered several additional research needs that should be considered to help illuminate details regarding 19th and 20th century restoration activities at the chapel. Research into exploring specific aspects of Scott's work on the chapel should be undertaken using materials found at a number of different repositories including the University of Cambridge Archives, the British Library (Manuscript Collections) and the Royal Institute of British Architects. In the future, a review of the records of the CPF held at the Cambridgeshire Archives should be undertaken to gain insight into the role that the CPF played in the maintenance of the chapel since the organization acquired the building in 1951. Another topic that would be interesting to explore is the similarities and differences found in the 12th century decorative motifs found at the Cambridge Leper Chapel and at Ely Cathedral in an effort to better understand the connection between these buildings and their builders, if any.

Finally, a comparative analysis of remaining leper chapels and associated hospital buildings in England should be completed using materials from the Historic England Archive and through field investigation to achieve a greater understanding of their group value. While many of the leper chapels were either destroyed during the dissolution of the monasteries or simply decayed; a handful of buildings remain scattered around the country. Jarrett notes that remaining leper hospitals and/or chapels include: the old leper church of St Nicholas, Harbledown, Canterbury (Kent); Chapel of St Mary Magdalen Stourbridge, near Cambridge (Cambridgeshire); Lazar House, Sprowston Road, Norwich (Norfolk); and the hospital of St Mary the Virgin, Ilford (London) (Jarrett 2012: 9). Additionally, Roffer identified the following sites: St Giles, Maldon (Essex); Chapel of St Margaret and St Anthony, Pamphill (Dorset); Chapel of St Mary Magdalen, Ripon (North Yorkshire); St Bartholomew's or Bartlemas Chapel, Oxford (Oxfordshire); and the chapel and infirmary at St. Margaret's, Glastonbury (Somerset). Roffey and Jarrett also reported the partial survival of leper hospital chapels as ruins or archaeological sites in other locations (Roffey 2010; 213; Jarrett 2012: 9).

Visual Analysis of the Cambridge Leper Chapel



Figure 10: Etching of the Cambridge Leper Chapel looking northwest. The window location and shapes appear consistent with those identified in the 1725 drawing; however, this image shows the introduction of a chimney in the nave. The roof appears to be in poor condition and the east wall of the chancel shows a small window above the string course. Note the open character of the landscape beyond the chapel and the uneven topography in the foreground with paths leading to both doors, 1818 (Cotman 1819).



Figure 11: Photo of the Cambridge Leper Chapel looking northwest showing the primary façade of the building (Gjesfjeld 2019).



Figure 12: Photograph looking north showing the Cambridge Leper Chapel in June 1927. Note formalized path with handrail leading to the principal entrance of the building (Historic England Archive ref CC001431).

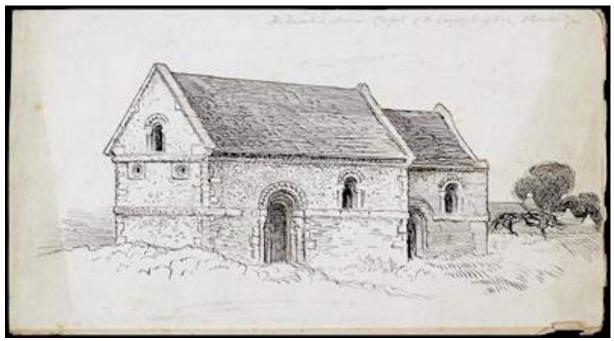


Figure 13: Drawing of the Cambridge Leper Chapel looking northeast, ca. 1892-1933 (Historic England Archive ref CGH01/01/0853).



Figure 14: Photograph of the Cambridge Leper Chapel looking northeast, 1908. The photo was taken after installation of the Barnwell Junction station (left) in 1884 and before installation of the formal path leading to the front door in 1927. The red arrow shows the location of a former window with a noticeable repair (Historic England Archive ref: CC72/02035).



Figure 15: Photograph of the Cambridge Leper Chapel and its associated setting looking northeast toward the adjacent pasture that is separated from the building by a 20th century hawthorn hedge (Gjesfjeld 2019).



Figure 16: Photo of the Cambridge Leper Chapel looking northwest showing the nave (left) and the chancel (right). The red arrows at the far left and centre bottom shows a patchwork of materials including multiple shapes and sizes of bricks that were used to repair the nave under the string course. The two diagonal red arrows near the roofline show the approximate location of former windows noted in the 1725 drawing and Cotman's 1818 etching. The diagonal arrow in the nave illustrates a visible change in patina, while it is more difficult to see the former location of the window in the chancel. Generally, this side of the chancel shows the most refined finishing techniques, while change through time is more obvious on the other elevations. The arrow at the right in the chancel shows a replacement shaft near the window (Gjesfjeld 2019).

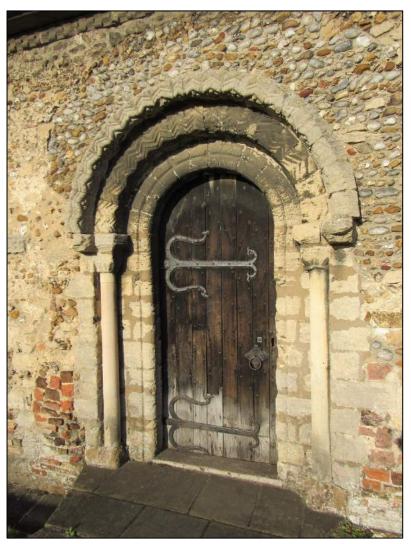
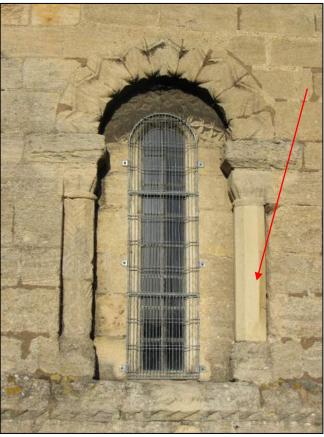


Figure 17: Photograph showing the front door of the Cambridge Leper Chapel and associated concentration of Norman or Romanesque ornamentation. Access to the building was modified at an unknown date when a drainage feature was installed around the chapel. Today there is a void under the walkway to the front door, which facilitates the drainage of water away from the building (Gjesfjeld 2019).





Figures 18 and 19: Historic photograph at the left shows the condition of the chancel window on the southern façade of the chapel on 25 May 1927 (Historic England Archive ref BB008139). The photograph at the right shows the condition of the window in 2019 with red arrow directed toward a 20th century replacement shaft (Gjesfjeld 2019).

Figures 20 and 21: Photograph at the left illustrates detail of one of the grotesque figures on the nave. The bottom right photo shows the nave window on the south facade of the building. The red arrows show a repair to the left shaft as well as the introduction of a replacement shaft on the right (Gjesfjeld 2019).



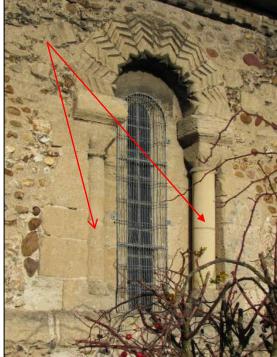




Figure 22: Photograph (above) looking east showing a drainage feature around the nave that was built to protect the building from dampness. The feature was installed at an unknown date, but further suggests modifications to the topography around the chapel (Gjesfjeld 2019).



Figure 23: Photograph (right) showing interventions associated with the roof and soffit board under the drip edge of the nave. Also note floral motif at corner with billet string course and shafted stone quoins below (Gjesfjeld 2019).

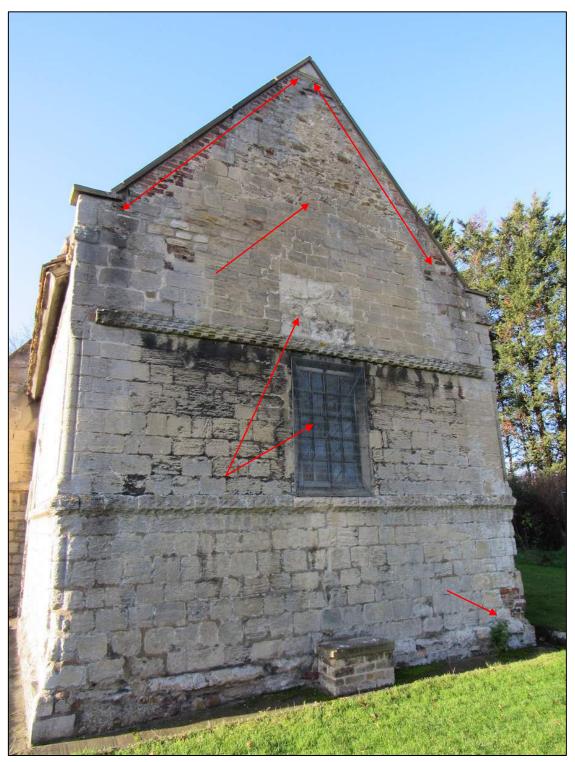


Figure 24: Contemporary photograph looking west showing the eastern elevation of the Cambridge Leper Chapel. The red arrows at the lower centre illustrates the former location of a window above the billet string course, as shown in Cotman's 1818 etching, and the 19th century square-headed window below. The red arrow at the centre top shows what appears to be the possible remnants of a chevron voussoir. The two arrows at the gable edge show modifications to the roof through the introduction of materials such as rubblestone and brick that are in contrast to the body of the ashlar-faced chancel. The red arrow at the bottom right of the image shows extensive damage to the stone due to salts crystallization (Gjesfjeld 2019).



Figure 25: Photograph of the Cambridge Leper Chapel looking south. The red arrow at the top of the chancel shows a substantial repair and the introduction of new rubblestone and brick materials near the roofline. The red arrow at the far left in the chancel illustrates a 12th century worked stone that was salvaged and used in the rebuilding of the wall. The red arrow pointing to the chancel window shows work that was completed on the window in the 15th century. In the nave, the arrow at the right shows the door that has been bricked-in (Gjesfjeld 2019).





Figures 26 and 27: Photograph of the detail of the windows on the north elevation of the Cambridge Leper Chapel. Photograph at the left is the chancel window that was reportedly modified in the 15th century and the window at the right is in the nave. It is nearly identical to the window on the southern elevation of the nave (Gjesfjeld 2019).





Figures 28 and 29: Historic photograph at left showing deteriorated condition of the door on the northern elevation of the chapel ca. 1875-1895 (Historic England Archive ref RBO01/05/OP22307). Photograph at the right shows the contemporary condition of the bricked-in door and its associated lintel and decorative features (Gjesfjeld 2019).

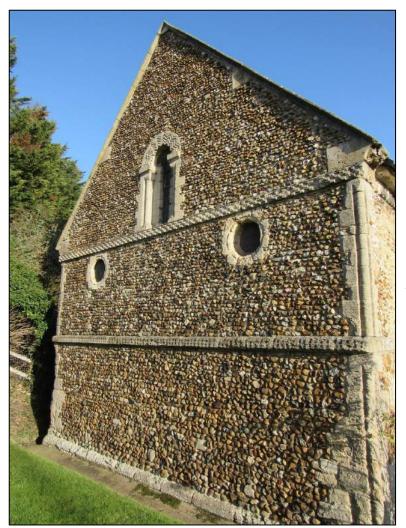
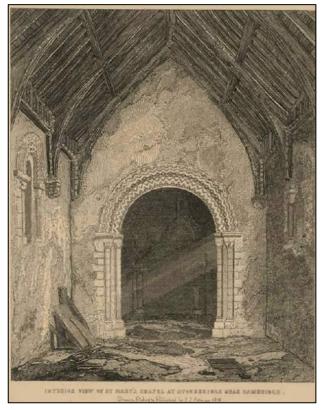


Figure 30: Photograph of the west wall of the Cambridge Leper Chapel, which was reconstructed by Sir George Gilbert Scott between 1865 and 1867 (Gjesfjeld 2019).

Figure 31: Photograph showing the detail of the window on the western elevation of the chapel. Stylistically, the window is the same as windows found on the nave; however, the crisp, clean lines associated with the carved Weldon stone serve as an indicator that the window was installed during the 19th century rebuilding of the west wall by Gilbert (Gjesfjeld 2019).









Figures 32, 33 and 34: Etching at the top left of the page shows the interior of the Cambridge Leper Chapel in 1818. Note the lack of a window opening in the chancel as well as the general state of disarray in the interior (Cotman 1819). Photograph of the interior of the chapel at centre right shows interior arrangement and the addition of a window in the chancel (RCHM 1959). The contemporary photograph at the bottom left shows many of the same furnishings that were present in 1959, including the harmonium, which was relocated to the chancel. The red arrows show two vault supports that were associated with the original vaulted ceiling. The principal rafters, wall plate, and posts of the timber roof are also visible (Gjesfjeld 2019).









Figures 35, 36, 37 and 38: Photograph at the top left shows the interior of the Cambridge Leper Chapel and detail of the chancel arch. The red arrow points to the north wall of the chancel where there is evidence of fabric decay due to the application of masonry paint on the walls, which has trapped moisture (Gjesfjeld 2019). The red arrow in the photograph at top right shows 19th century modifications made to the window opening in the chancel (Gjesfjeld 2019). The photograph at the bottom left shows the door on the northern wall of the nave that is blocked (Gjesfjeld 2019). The photograph on the bottom right shows the wall plate and associated timber posts in the nave. The posts conflict with the arched window openings and there is a gap between the corbel and the bottom of the post (Gjesfjeld 2019).





Figure 39: Photograph of the interior of the Cambridge Leper Chapel (above) looking toward the west wall that was reconstructed by Gilbert. This photograph illustrates the importance of the splayed window, which was designed to let more light into the chapel through the small windows (Gjesfjeld 2019).

Figure 40: Photograph by candlelight looking west from the altar showing the relatively simple design of the chancel arch from this perspective. Also note roof with curved braces and remaining half-angel corbel identified by the red arrow (Gjesfjeld 2019).

Bibliography and Sources Consulted

Books

Cragoe, C.D. 2017. How to Read Buildings. London, Herbert Press.

Pevsner, N. 1954, 2nd ed. 1970. *The Buildings of England: Cambridgeshire*. Harmondsworth, Penguin Books.

Ridout, H. 2011. Cambridge and Stourbridge Fair. Cambridge, Blue Ocean Publishing.

Rubin, M. 1987. *Charity and Community in Medieval Cambridge*. Cambridge, Cambridge University Press.

Journals and Technical Reports

Atkins, R. and Munby, J. 2016. 'Chisholm Trail cycle and pedestrian route Cambridge', Oxford Archaeology East, Desk-Based Assessment, Report Number 1886.

Brenner, E. 2010. 'Recent Perspectives on Leprosy in Medieval Western Europe', *History Compass* 8/5: 388-406.

Browne, S.G. 1975. 'Some Aspects of the History of Leprosy: The Leprosie of Yesterday', *Proceedings of Royal Society of Medicine*, 68, 485-493.

Cunningham, W. 1916. 'Differences of Economic Development in England and Scotland' *The Scottish Historical* Review, 13, 50:168-188.

Horden, P. 1988. 'A Discipline of Relevance: The Historiography of the Later Medieval Hospital,' *The Society for the Social History of Medicine*, 361.

McBain, G.S. 2011. 'Abolishing Some More Obsolete Crown Prerogatives: Part 2', *Liverpool Law* Rev, 32: 275-315.

Rees, G. 2017. 'Medieval settlement adjacent to the St Mary Magdalene Chapel (Leper Chapel), Newmarket Road, Cambridge', Oxford Archaeology East, Archaeological Evaluation Report Number 2019.

Roffey, S. 2012. 'Medieval Leper Hospitals in England: An Archaeological Perspective' *Medieval Archaeology*, 56:1, 203-233.

Stamp, G and G. Scott, 1976. 'Sir Gilbert Scott's "Recollections'. *Architectural History*, 19, 54-73.

Stamp, G. (1981-1982). 'SIR GILBERT SCOTT and the 'restoration' of mediaeval buildings', *Architectural Association School of Architecture*, *AA Files*, 1, 89-97.

Unpublished Sources

James, S.H. 1930. 'Domestic commerce in England during the middle ages, with special reference to fairs and markets', Master's Thesis, Boston University, 1930. [online] https://hdl.handle.net/2144/7478. [accessed 20 May 2020].

Jarrett, S. 2012. 'Disability in Time and Place', English Heritage Disability History Web Content [online] https://historicengland.org.uk/content/docs/research/disability-in-time-and-place-pdf/. [accessed 31 May 2020].

Pearce, B. 2003. 'Stourbridge Leper Chapel Barnwell, Cambridge', Cambridge Preservation Society [online] https://www.cambridgeppf.org/Handlers/Download.ashx?IDMF=03052f0c-6d63-4f4e-9463-8c081b5b8c2a. [accessed 16 March 2020].

Maps and Photos

Alamy. 'Detail of SW-transept and west tower, Ely Cathedral' [online] https://www.alamy.com/detail-of-south-west-transept-and-west-tower-ely-cathedral-image239203292.html [accessed 01 June 2020].

Baker, R.G. 1830. 'Map of the County of Cambridge and Isle of Ely', Map Department, Cambridge University Library.

Cambridgeshire XL.SE (Cambridge; Fen Ditton; Horningsea; Milton; Teversham), 1886. OS Six-Inch England and Wales. National Library of Scotland https://maps.nls.uk/view/101571862.

Cambridgeshire XL.SE (Cambridge; Fen Ditton; Horningsea; Milton; Teversham), 1927. OS Six-Inch England and Wales. National Library of Scotland https://maps.nls.uk/view/101571856.

Cambridgeshire XL.SE (Cambridge; Fen Ditton; Horningsea; Milton; Teversham), 1952. OS Six-Inch England and Wales. National Library of Scotland https://maps.nls.uk/view/101571850.

Cotman, J.S. 1819. *Antiquities of St. Mary's Chapel at Stourbridge* (copies of images found online).

Historic England Archive. 'Leper Chapel of St Mary Magdalene' [online] https://historicengland.org.uk/images-books/photos/results/?searchType=HE+Archive+New&search=cambridge+leper+chapel [accessed 02 March 2020].

Royal Commission on the Historical Monuments of England. 1959, second impression 1988. *An Inventory of the Historical Monuments in the City of Cambridge, Part I and Part II*. London, Her Majesty's Stationary Office.

Internet Sources

Baxter, R. 2020. 'St Mary Magdalene, Cambridge, Cambridgeshire', The Corpus of Romanesque Sculpture in Britain & Ireland [online] https://www.crsbi.ac.uk/view-item?key=WXsiUCI6eyJUZXJtcyI6ImxlcGVyIn0sIkYiOiJleUowSWpwYk5sMTkifQ&pg=2&WINID=1590151351328#FeatureSet:2.%20Interior%20Features [accessed 18 May 2020].

'Cambridge: The Growth of the City', in *An Inventory of the Historical Monuments in the City of Cambridge* (London, 1959), pp. xxxii-lviii. *British History Online* https://www.british-history.ac.uk/rchme/cambs/xxxii-lviii [accessed 13 May 2020].

Cambridgeshire Historic Environment Record. 'Stourbridge Chapel (Chapel of Mary Magdalene), Cambridge' [online]
https://www.heritagegateway.org.uk/Gateway/Results_Single.aspx?uid=MCB5775&resourceID=1000 [accessed 03 May 2020].

Centers for Disease Control and Prevention 'Hansen's Disease (Leprosy)' [online] https://www.cdc.gov/leprosy/about/about.html [accessed 2 June 2020].

'Ecclesiastical Buildings: Miscellaneous', in *An Inventory of the Historical Monuments in the City of Cambridge* (London, 1959), pp. 298-304. *British History Online* https://www.british-history.ac.uk/rchme/cambs/pp298-304 [accessed 13 May 2020].

Historic England. 'Chapel of St Mary Magdalene Stourbridge Chapel' [online] https://historicengland.org.uk/listing/the-list/list-entry/1126144 [accessed 04 April 2020].

'Hospitals: Sturbridge', in *A History of the County of Cambridge and the Isle of Ely: Volume 2*, ed. L F Salzman (London, 1948), pp. 307-308. *British History Online* https://www.british-history.ac.uk/vch/cambs/vol2/pp307-308 [accessed 19 May 2020].

Kitson, D. 'Disused Stations Site Record' [online] http://www.disused-stations.org.uk/b/barnwell_junction/ [accessed 5 June 2020].

Oxford Reference. 'Cambridge Camden Society' [online] https://www.oxfordreference.com/view/10.1093/oi/authority.20110803095544250. [accessed 19 May 2020].

'Sectional Preface: Building Materials and Procedure', in *An Inventory of the Historical Monuments in the City of Cambridge* (London, 1959), pp. xcviii-cvi. *British History Online* https://www.british-history.ac.uk/rchme/cambs/xcviii-cvi [accessed 13 May 2020].

'Sectional Preface: Early Cambridge', in *An Inventory of the Historical Monuments in the City of Cambridge* (London, 1959), pp. lix-lxxii. *British History Online* https://www.british-history.ac.uk/rchme/cambs/lix-lxxii [accessed 13 May 2020].

'Secular Buildings: Houses, 251-338', in *An Inventory of the Historical Monuments in the City of Cambridge* (London, 1959), pp. 358-391. *British History Online* https://www.british-history.ac.uk/rchme/cambs/pp358-391 [accessed 13 May 2020].

'The city of Cambridge: Medieval chapels', in *A History of the County of Cambridge and the Isle of Ely: Volume 3, the City and University of Cambridge*, ed. J P C Roach (London, 1959), pp. 132-133. *British History Online* https://www.british-history.ac.uk/vch/cambs/vol3/pp132-133 [accessed 19 May 2020].

Wareham AF and A P M Wright, 'Fen Ditton', in *A History of the County of Cambridge and the Isle of Ely: Volume 10, Cheveley, Flendish, Staine and Staploe Hundreds (North-Eastern Cambridgeshire)* (London, 2002), pp. 118-123. *British History Online* https://www.british-history.ac.uk/vch/cambs/vol10/pp118-123 [accessed 3 June 2020].

World Health Organization, 'Leprosy' [online] https://www.who.int/news-room/fact-sheets/detail/leprosy [accessed 2 June 2020].