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Introduction

Julie Franklin, Kimberley Gaunt, and Matthew Ginnever
with contribution by Suzanne McGalliard

Project aims

Julie Franklin

The project aimed to record the archaeological remains disturbed by the construction of the Freckleton Street Link Road in Blackburn, Lancashire. The planned road cut across the site of St Peter's Church (consecrated in 1821 and demolished in 1976) and its burial ground. The works involved the recording and removal of the church foundations, 176 memorial stones, and nearly 2,000 burials.

The resulting assemblage of human remains and associated artefacts from the burial ground was of national significance, being the largest recovered from a 19th-century burial site in the north of England and among the largest excavated outside of London. The burials predominantly dated from 1821 to *c* 1860.

The excavations aimed to recover and record as much information and materials as possible relating to the structure of the church, its memorial stones, and the burials within the proposed development area. The aims of the analysis of the archaeological remains recovered were to answer research questions in four broad themes: church remains; funerary practices; pathologies; and biography and demographics. These themes touch on aspects of life, death, and the approaches to mortality during the 19th century in Blackburn.

Church remains

- How does the establishment of the church of St Peter's relate to existing religious practice in the parish?
- Can St Peter's be seen as a response to the proliferation of non-conformist chapels during the industrial period?
- Who was involved in the establishment of the church, its construction, and management?

Funerary practices

- What patterns in burial practice can be identified from the finds assemblage? Can these patterns be linked to possible indications of wealth or social standing? Can these patterns be linked to different practices related to sex or age?
- What chronology can be established for the burials at St Peter's?
- Can trends or fashions in coffin design and associated finds be identified over time?
- What can the memorial stones tell us about burial practice at St Peter's? Is there an evolution in style over time?
- Can a regional burial practice be distinguished from this assemblage through comparisons with other local sites?

Pathology

- Epidemiology: Can signs of infectious disease be identified within the population? Do these coincide with recorded outbreaks?
- What evidence of childhood morbidity survives? How can this inform the record in terms of the treatment of children?
- Are any occupationally related pathologies identifiable?
- Are there any indicators of diet in the assemblage? Does this vary across identified social groupings or can it be used to help identify social and wealth classes among the individuals?
- Can any evidence be found for the date of use and deposition of the possible medical teaching collection? Documentary research may suggest where the collection was used. What were the origins of the material? Are there any pathologies that may suggest why those individuals were used for medical practice?

Biography and demography

- What basic demographic trends can be identified in the assemblage? How do the osteological results reflect the demography derived from memorial stones, depositum plates, and documentary research?
- What social statuses can be identified from the assemblage at St Peter's? Are these statuses reflected in the organisation of the graveyard? Is there any evidence for changes in a family's status over the course of this period?
- Are the names recorded on the memorial stones representative of the population interred in the ground? Are any discrepancies explained by potential social standing? Are other biases at work?

- What family groupings can be deciphered from the assemblage? Can these be used to name further individuals in the burial ground?
- Can origins be established for the congregation at St Peter's? Are these accounted for by newly arrived populations from outside of Blackburn? Does St Peter's show evidence for an influx of new families or a population boom among existing families?
- To what extent does the assemblage reflect the growth of textile and related industries in Blackburn, and can individual or family histories shine a light on this exciting period in the town's story?
- How do the trends and patterns found in the population of St Peter's parish fit into the broader context?

Site location and setting

Matthew Ginnever

The former site of St Peter's Church and burial ground is located to the south-west of the historical centre of Blackburn, Lancashire (Fig. 1.01). Prior to the works, the site was surrounded on three sides by roads; to the north was Chapel Street; to the east, Freckleton Street; and to the west, Byrom Street. To the south, the site was bounded by an industrial unit, which has subsequently been removed. The centre of the site was located at NGR SD 6800 2769, and the churchyard covered an area of some 4,200m^2. Prior to excavation, the site was an open green space, with recumbent memorial stones the only surface indicators of its earlier use. Beneath the surface were the remains of the church, which had been demolished in the 1970s, and its associated graveyard.

Project background

Matthew Ginnever

The works were necessitated by the planned construction of the Freckleton Street Link Road, part of Blackburn and Darwen Council's Town Centre Orbital Route scheme. This planned stretch of dual carriageway would cut through the centre of the site on a north-west to south-east alignment, disturbing all burials and church remains on the line of the route. In addition to the road itself, a small area of land in the north-east of the site would be required to create a turning head to allow part of Chapel Street to be closed. The total area of impact was *c* 1,500m^2, accounting for just over a third of the original churchyard.

A desk-based assessment (Newman 2007) was commissioned by Capita, who were appointed as consultant by Blackburn and Darwen Borough Council, to evaluate the impact of the overall road scheme on the heritage assets along the route. No historical or archaeological activity had been recorded on the site prior to the construction of the church. The location of the church was well documented, and the foundations were visible as crop marks during the drier months of the year. Few written records concerning the graveyard could be located. Parish records were unclear, and estimates based on them suggested between 200 and 2,000 burials would be disturbed by the works. An archaeological evaluation was undertaken by Oxford Archaeology North (OAN 2013), comprising a series of small test holes. This established the presence of undisturbed burials approximately 1m below ground level, and also suggested that the density of burials in the graveyard was higher than that estimated from the parish records.

A number of studies of the memorial stones within the churchyard had been undertaken over the years, primarily documenting the names recorded thereon. These will be detailed and discussed below (Chapter 4).

Headland Archaeology was commissioned by Capita, on behalf of Blackburn with Darwen Borough Council, to undertake full archaeological excavation of the burials and the church foundations along the proposed development route. Excavations took place between 29 June and 16 October 2015. Assessment of the osteological and artefactual material was completed and reported on by April 2016 (Ginnever *et al.* 2016). Full analysis of the assemblage was begun prior to this, in January 2016, and continued until September of the same year.

There were stringent time constraints on the project, both in terms of the time available for the excavation and the need for the reburial of the human remains after analysis and no more than 12 months after excavation. This led to a streamlined excavation, rapid assessment, and analysis methodology. Input was sought from the osteological and fieldwork teams to develop an excavation and recording protocol, which allowed for swift, safe lifting of the human remains while recording the burial, including coffins, coffin furniture, and grave goods.

The excavation and recording methodologies are detailed below. They conformed to the Written Scheme of Investigation (WSI) (Capita 2014) and adhered to national professional guidelines and protocols (English Heritage 2009 and 2011; English Heritage and The Church of England 2005; DCLG 2012; CIfA 2013a, 2013b, and 2014; Brickley and McKinley 2004; BABAO 2010a and 2010b).

Fieldwork methodology

Matthew Ginnever

Recording the memorial stones

The memorial stones were recorded prior to the main phase of excavation. Memorial stones within the development area were documented on pro-forma monument sheets, including full details of inscriptions. The stones were surveyed by dGPS, and photogrammetry was used to produce a permanent three-dimensional record. The stones were then moved to a safe location outwith the development area but still within the confines of the burial

Figure 1.01. Site location.

ground. Any stones outwith the development area that were visible on the surface of the site were also recorded. A number of memorial stones were recovered from beneath the topsoil during the course of the excavation and were recorded using the same methodology.

Excavation

During the excavation, overburden was removed in small spits by machine under constant archaeological supervision, to the depth of the first archaeologically

significant horizon. In the burial areas, this was encountered when either grave cuts or traces of burial remains started to become visible.

The foundations of the church were initially exposed to the level where wall cuts and other internal features were visible. The excavation area was extended outside the road corridor to encompass the entire foundations of the church (Fig. 1.02). They were fully cleaned, documented on pro-forma context sheets, and surveyed by dGPS and photogrammetry. The ground level in and around the church was reduced in spits by monitored machine

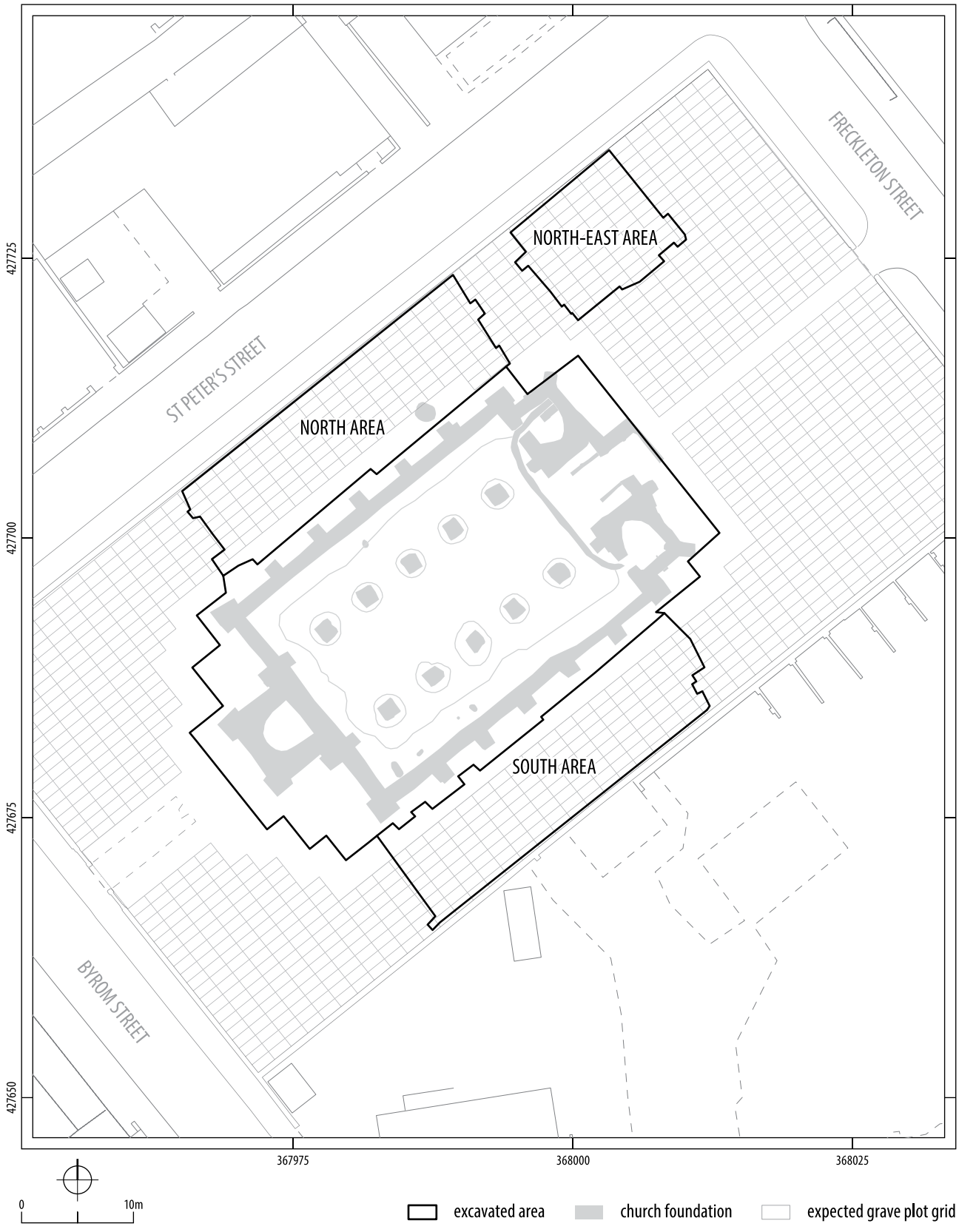

Figure 1.02. St Peter's Burial Ground, Blackburn: site overview, showing location of church, cut features, excavated burial areas, and extent of topsoil removal.

excavation to allow the foundations to be broken out. This proceeded in tandem with the graveyard excavation to maintain a safe working environment. In the north-east corner of the site, at the location of the turning head, a system of box-shoring was required to excavate to the required depth in very unstable sand.

The graveyard was encountered to the north and south of the church, and for the purposes of recording was divided into three excavation areas: North Area, South Area, and North-East Area (Fig. 1.02). It was excavated by hand typically from 1m below original ground level, where the first burials were found (Fig. 1.03). Each burial was located, cleaned, numbered, and documented on pro-forma burial sheets, which allowed for a full description of both the skeletal remains and those of the coffins. Where appropriate, significant details of the burial were individually photographed. An overall photographic and photogrammetric record of the burial was created and controlled by a total station to locate the burial on the site plan, as well as to provide a level for stratigraphic purposes.

Where safe to do so, any burials crossing the excavation boundary were exhumed completely. In some cases, partial burials were exhumed, where there were health and safety concerns associated with deep excavations and where safe excavation of the entire burial would have required excavation of further burials (e.g. those overlying) entirely outwith the excavation area. This is in line with best practice for the treatment of human remains (Historic England 2005). In all, there were 54 partial burials exhumed, mostly from the North-East Area, where deep excavation trenches in sand required shoring to prevent collapse.

On-site osteological and finds work

Each burial was assigned a unique four-digit context number, which was applied to the skeleton, coffin, grave fill, and grave cut. The number was pre-printed on pro-formas which were used for on-site recording and on pre-labelled bags used for collecting the skeletal remains. On identifying a burial, the excavator cleared soil around the skeleton and exposed the edges of the coffin (if visible). Once the skeleton and coffin were exposed, they were assigned a context number, photographed in situ, and recorded on a double sided proforma. One side of the form was used for recording the skeleton position, pre-lift condition, associated finds, and any other pertinent information. The reverse of the form was used for recording the coffin, including dimensions and associated furniture such as, grips, decorative plates, and depositum plates. If biographical information was visible on the depositum plate, this was recorded. The skeleton and coffin locations were then digitally recorded using a digital GPS device.

Once recorded in situ, the skeletal material was carefully lifted and placed in pre-labelled bags, keeping the left and right sides of the skeleton separate. These were then boxed

Figure 1.03. Working shot of burial excavation in South Area.

for safe storage. Bulk soil samples were routinely taken from the hands, feet, and head/neck areas. This maximised the recovery of small bones and teeth. Where skeletons were non-adult, the entire skeleton was bulk lifted as a soil sample and cleaned off site (following recommendations in Mays 2010; Brickley *et al.* 2006a). To minimise damage to bone, this approach was also undertaken for adult remains where the bone was clearly fragile whilst still in situ.

As coffin integrity was good, and graves were dug in fairly strictly defined plots, intercutting of graves and disturbance of previously buried incumbents was minimal during its active lifetime. As a result, only a small quantity of unarticulated (charnel) bone was encountered. Unless taphonomic processes had eroded some of the bone, skeletons were largely complete.

Each grave had a plot number. This was the same as the number of the stratigraphically lowest burial within that plot. Subsequent burials were given unique burial numbers but the same plot number, and an order number (1, 2, 3, etc.) based on the apparent order they were interred, numbered from the bottom up.

The boxed, unwashed skeletons were rapidly scanned by two members of the on-site osteology team (Fig. 1.04). A catalogue of the remains was created, and preservation, basic demographic data (adult sex and non-adult dental age), and any immediately obvious pathological changes were recorded. The osteologists undertaking the rapid assessment had access to the site records, some of which contained the biographical data; however, care was taken to minimise bias in sex and age assessment. The skeletons and samples were then moved to a laboratory for cleaning, sieving, sorting, and further analysis.

Coffin furniture and personal possessions were documented and bagged by burial number and material type. These were moved to a laboratory for cleaning, conservation, and analysis as appropriate.

A mixed deposit which contained human and animal bone, was identified in the upper levels of the grave soil close to the southern perimeter of the burial ground. This was interpreted as the remains of a possible anatomical teaching collection (see p. 61). A minimum of three individuals were represented within the collection and they were not included as part of the burial ground assemblage or given burial numbers. This deposit was treated as a separate assemblage, as it was clear that this was not a typical interment.

Osteological analysis methodology

Kimberley Gaunt

The skeletons were subjected to a subtracted osteological analysis, due to the time constraints determined by the reburial (see p. 9). This analysis included selection of a sub-sample of the population based on qualifying factors.

Figure 1.04. On-site osteoarchaeology and finds station.

A photographic record was then compiled for each skeleton and bone preservation, completeness, age at death, sex, metric and non-metric traits, and pathological changes were recorded. An inventory of elements present was also compiled, which enabled prevalence rates for specific conditions to be calculated. A similar, rapid analysis had previously been undertaken at St Paul's Church, Hammersmith (OA 2009), producing insightful data which confirmed the merits of this approach. The osteological analytical approach employed followed internationally agreed methodological standards (e.g. Buikstra and Ubelaker 1994; Powers 2012a; BABAO 2010a and 2010b).

Sub-sample design

The 1,959 excavated individuals, which themselves represent only a sample of the total graveyard burial population (see p. 53) were further sub-sampled. Only selected individuals were subjected to full osteological analysis.

Selection of the analysed sub-sample was based on bone condition and completeness. This was in order to maximise the data that could be obtained from a full analysis. Only skeletons which were ≥30% complete were selected for analysis. This resulted in a strong bias towards adults due to the increased survivability of adult bone in the sandy grave soil. As a result, the fully analysed individuals represented a small proportion of the entire burial ground population. In total, this analysed dataset comprised a third (33.6%, 658/1,959) of the excavated assemblage, or about 9% (658/7638, see p. 10) of the total graveyard population.

Nearly two-thirds (65.4%, 1,280/1,959) of the entire excavated population were non-adults. However, in the analysed sub-sample, fewer than a third were non-adults (28.6%, 188/658). This bias has been considered in the discussion of the demographic data and should be born in mind for the discussions of pathological prevalence rates of the excavated assemblage.

The skeletal assemblage was analysed by three osteologists, but no intra-observer error tests were completed during this process. However, a subtracted error test was run on the named individuals of the population (see p. 10) in order to test the accuracy of the individual observers against the historical data for age and sex.

Preservation and completeness

Preservation and completeness for both adult and non-adult skeletons followed Brickley (2004) and used the Museum of London skeletal preservation grading system (Connell 2012) which graded skeletal preservation into:

- Good: fine surface detail, such as coarse woven bone deposition, would (if present) be clearly visible to the naked eye.
- Moderate: some post-mortem erosion on long bone shafts and/or erosion of articular and other prominences.
- Poor: extensive post-mortem erosion resulting in pitted cortical surfaces, with articular surfaces missing or severely eroded.

Surface preservation could be variable throughout each individual skeleton, and therefore the condition of the majority of the bones was used to assess the surface preservation of the entire skeleton.

To calculate overall completeness, the skeleton was divided into seven anatomical regions which were considered to make up a percentage of the total skeleton. These were the skull, torso, and pelvis, each consisting of *c* 20% of the total skeleton, and the upper and lower limbs, each consisting of 5% of the total bones for each side. Each skeleton was then estimated for completeness in 5% increments up to 95% based on the proportion of the bone present. No skeleton was ever considered to be 100% complete due to the likelihood of post-depositional damage, albeit minimal.

Sex

Sex was only estimated from adult skeletons, as sexual dimorphism in skeletal remains is generally only observable after puberty (Cunningham *et al.* 2016) using standard techniques (Phenice 1969; Ascádi and Nemeskéri 1970). Pelvic morphology, rather than the skull, was favoured for assessment as its shape is functionally linked to the requirements of childbearing and childbirth, whereas the variation between the sexes in the skull can vary significantly due to age and population variation (Walker 1995; Mays and Cox 2000). However, the skull was used if the pelvis was not present or was unsuitable for sex estimation. Based on the results of sex estimations, each adult was placed into one of six categories denoting the confidence level of the estimates, following Bekvalac (2012). These categories were:

- Male: M
- Probable Male: ?M
- Probable Female: ?F
- Female: F
- Indeterminate: I (although no individuals were classified as Indeterminate)
- Undetermined: U

Age

Non-adult skeletons were aged using patterns of dental mineralisation and eruption patterns (Ubelaker 1989, 63–65; Gustafson and Koch 1974) (n=818), stages of epiphyseal fusion (Scheuer and Black 2004) (n=18), and relative long-bone lengths using the population sample as a reference sample (n=3).

Age at death for adult skeletons was determined based on the morphology of the pubic symphyses (Brooks and

Suchey 1990) and auricular surfaces of the coxal bones (Lovejoy *et al.* 1985; Meindl and Lovejoy 1989). Each skeleton was assigned an age group, based on the Museum of London divisions (Powers 2012b).

Metrics and stature

Cranial and post-cranial measurements were taken of complete bones in adult skeletons following the suite of measurements outlined in Buikstra and Ubelaker (1994).

Non-adult metrics were undertaken in two phases. The first phase included measurement of femoral length on all available individuals. This was later followed by a second phase of data collection that consisted of a suite of metrics undertaken on the other available long bones. As this second phase occurred after reburial, measurements were obtained using 'ImageJ' software (Abramoff *et al.* 2004; Rasband 2023), which enables accurate calibration and measurement of photographic images, provided there is a visible scale in the original image. This secondary method of metric analysis was not possible for all non-adult skeletons but did enhance and expand the non-adult metric data set.

For adults, a suite of post-cranial measurements was undertaken to estimate living stature (Trotter 1970). The most reliable stature estimates were derived from the combination of the femur and tibia measurements; however, in this study, where this combination was not available (or deemed inaccurate, as is the case for the female population), the next most accurate measurement was used, with a preference for the left side of the body. All metric data are available as part of the project archive.

Cranial indices were calculated, which determined head shape within the population. In addition, a suite of non-metric traits was recorded (Buikstra and Ubelaker 1994), comprising 39 from the cranium and 54 in the post-cranial skeleton. Traits were recorded as present, absent, or unobservable. All metric and non-metric data are available as a data set in the site archive.

Pathology

Dentitions were assessed for antemortem tooth loss, caries, periapical lesions, enamel hypoplasia, and miscellaneous features (e.g. pipe facets) were also recorded by tooth, using the Fédération Dentaire Internationale (FDI) system (1971).

Pathological changes were recorded in the skeletons as areas of bone destruction (osteoclastic) or formation (osteoblastic). The distribution and severity of these lesions then informed differential diagnostic options.

Osteoarthritis was recorded as present or absent. To be classed as 'present', the following criteria applied (Waldron 2009, 34): the lesion was sufficiently advanced as to have altered the profile of the joint surface; formed osteophytic outgrowths around the joint capsule; and/or the joint surface was porous or polished in appearance.

Frequencies of disease and trauma were calculated as both crude and true prevalence rates where possible.

Artefactual analysis methodologies

Julie Franklin

Artefactual methodologies were dictated to an extent by the tight schedule necessitated by the reburial of the finds (see p. 9). This demanded rapid recording of the finds and an accelerated schedule of illustration. It meant there was not time to undertake some forms of analysis, for example analysis of the threads attached to the buttons or metallurgical analysis of the finger rings. Where questions arose later in the process, during research and reporting, there was no opportunity to re-examine the finds, relying instead on photographic records.

Artefact preservation

Preservation varied widely depending on material type. Copper alloys and lead typically survived well but ironwork, including most coffin grips, was badly corroded and details could only be discerned by X-radiographic analysis. Many of the cheaper coffin fittings were of thin tin or tin-dipped iron, and these had largely crumbled to small fragments. Glass, too, was generally well preserved, though some colours of glass beads were more prone to decay than others. Shell buttons were generally in poor condition, but tortoiseshell combs were well preserved.

Wood and textile were generally poorly preserved. Only a small fraction of the wooden coffins survived as more than a stain in the ground. The best preserved were those from a brick-lined grave. How well textiles survived after burial depended on the nature of the fibre and the location and conditions in which the coffin was buried. In churchyards, with the extremes of temperature and rainwater percolating through the soil, conditions tend to be hostile. In particular, the cellulosic fibres, cotton and flax (linen), degrade rapidly in the acidic conditions produced by a decaying body and wooden coffin (Jakes and Sibley 1983; Janaway 1993, 96–100; Walton Rogers 2006, 164). Sometimes the presence of these cellulosic fibres can be inferred in union textiles, where they are combined with wool or silk. These show empty spaces where the cottons and linens should have been.

Typologies

The report contains a number of typologies. These were developed early in the post-excavation process to help record and make sense of the large volume of finds data and are site-specific. They classify the depositum plates, grips, rope rings, grip plates, coffin lace, buttons, and glass beads. They are numbered numerically, sometimes subdivided alpha-numerically. Where these can be linked to other site-specific or synthetic typologies this is noted in the text.

Where St Peter's typologies are referred to in the text, these are prefixed with SPB, as in 'grip Type SPB1'. Where typologies from other sites have been referred to, these are clearly identified, for example, 'St Martin's Type 2'.

Reburial of the human remains

Matthew Ginnever

For health and safety reasons, all human remains thought to post-date 1914 (i.e. 100 years old or less) or that had significant survival of soft tissue or were still sealed within lead coffins, were exhumed by a specialist contractor (Peter Mitchell Associates) and stored in a separate facility on site. These were not numbered or assessed and were reburied within the designated areas available in the burial ground. The location of the reburial was recorded and clearly marked by protective sheeting and hazard tape.

In addition, nine individuals were reburied at the end of the excavation due to surviving soft tissue noted during assessment. These burials were numbered (SK1030, SK1067, SK1211, SK1469, SK1667, SK1844, SK2055, SK2636, SK2663), basic skeletal data were recorded, and some observations were possible of finds associated with a few. SK2055 and SK2636 had legible depositum plates and were among the named individuals; however, the skeletons could not form part of the analysis group, despite, in some cases, meeting the criteria of good preservation and completeness.

The remaining burials were removed for further study. However, there was a contractual requirement to rebury the remains of these individuals within the confines of the burial ground, together with any artefactual remains found within their specific coffins. The deadline for this was based on the construction schedule and provided a window for analysis of less than a year from the end of excavation to reburial, in which to undertake all osteological and artefactual analysis and illustration. While every effort was made to fit the necessary work within this window, there were some inevitable issues and a few resulting omissions.

The reburials were made in a reserved area within the church footprint to the north-east of the new road, in order to avoid disturbing further burials. A service of remembrance was led by the Right Reverend Julian Henderson, Bishop of Blackburn, in September 2016 at the site of the reburial.

Number of burials

Julie Franklin

Remains of a total of 1,959 individuals were recorded from the site (discounting those that were immediately reburied and not recorded at all). The majority of these (1,936 individuals) were found in individual grave cuts identified on site, but in a small number of cases this was not the case (Table 1.01).

Table 1.01. Number of burials.

Type	Notes	Number	SK numbers	Osteological analysis number	Artefactual & stratigraphic analysis number
Simple burials	One individual in one grave cut	1,936		1,936	1,936
In utero foetus	Identified on site and given unique SK ID number, but buried in single grave and coffin	2	Adult females SK1392 and SK2038 Foetuses SK1404 and SK2120	4	2
Burials renumbered in PX	Assumed one burial on site but discovered in PX to be MNI2, largely due to mixing and poor preservation in non-adult burials, but not possible to distinguish two graves in finds and site stats. Given A, B suffixes	8	SK1747 (no finds) SK1834 (rope rings) SK1864 (rope rings) SK2572 (marbles) SK2581 (beads) SK2672 (beads) SK2847 (no finds) SK2962 (coffin lace)	16	16
Empty grave cuts	No human remains, due to very poor preservation, not in osteo database but all had finds 1,618 (beads), 1,707 (coffin remains, buttons, beads), 1,773 (coffin remains, hair)	3	SK1618 (beads) SK1707 (coffin remains, buttons, beads) SK1773 (coffin remains, hair)	0	3
Disarticulated skeletal elements	Given unique SK ID but o grave recorded on site	2	SK1376 SK2974	2	0
Amputated arm	Arm buried separately to rest of body, two graves, two coffins	1	SK1848 (Arm numbered SK2519)	1	2
Total		-		1,959	1,959

There were two cases of burials of pregnant women where the in utero foetus was identified on site and given an individual number, thus counting as two individuals found within one grave and one coffin. These have been counted as one grave for stratigraphic and artefactual analysis but as two for osteological quantification.

There were eight cases where burials, initially assumed to be of one individual, were found, during post-excavation work, to represent two individuals. Typically, these were poorly preserved burials of non-adults. They were distinguished using A, B suffixes (e.g. SK1747A, SK1747B). Thus, while each was recorded as a single grave on site, each probably represented two graves. Some of these contained finds, and it was not possible to distinguish which of the two burials these belonged to. For statistical purposes, it has been assumed that they belonged to one or the other, as there were no clear cases of distinctly different finds suggesting mixing of two sets of grave goods or coffin furniture.

There were three cases of burials that were so poorly preserved that no skeletal remains at all could be recovered, though all contained scant coffin remains or finds. Thus, these have been counted as graves for the purposes of finds statistics but not for osteological purposes.

There were two cases of disarticulated remains recovered on site and given individual skeleton numbers, though were not associated with a grave.

Lastly, there was one very unusual case of a man being buried separately from his own severed arm, thus resulting in one individual with two graves.

By coincidence, these variations cancelled each other out and the net result was that 1,959 individuals were found in 1,959 graves, though in 1.2% of cases, it was not a simple case of one individual in one grave.

Named individuals

Julie Franklin

Recording of depositum plates on individual coffins, analysis of on-site (though not in-situ) stone grave memorials and cross-referencing of documentary records enabled the identification of 64 individuals' names with reasonable certainty, along with their dates of death and ages. Details of these names and associated historic research are presented below (Chapter 11).

Some 33 of these individuals were fully analysed. The biographical information provided an opportunity to test the reliability of the osteological methods used, and details of occupation, biography, and cause of death allowed for further insight into the skeletal impact of these factors. The firm dates also aided artefactual work in terms of observing funerary practices and material culture over time, though the dated sample was so small (3.3%, 64/1959) that it could only be used with caution.

Historical research

Julie Franklin and Suzanne McGalliard

A certain amount of historical detail was recovered from the memorial stones and depositum plates, typically in the form of names, dates of death, and ages. In addition, there were a number of documentary sources available.

Parish Registers

The parish registers for baptisms, marriages, and burials are available in transcribed form online through the Lancashire Online Parish Clerks Project (OPC) website (http://www.lan-opc.org.uk/). The original registers are held in the Lancashire Archives and were compared to avoid transcription errors. Registers for baptisms at St Peter's church cover the period of 1821 to 1922 and include 10,731 records. Registers for marriages cover the period 1854 to 1919 and include 1,734 records. Registers for burials cover 1821 to 1947 and include 7,638 records. These records have been tabulated and presented as Appendix 3 (available online at https://doi.org/10.30861/9781407356495-Appendix3). The details in the burial register could be used to compare and contrast with archaeological results. Registers for the church of St Mary the Virgin, now the cathedral, and a number of other contemporary churches within Blackburn parish were also consulted.

Lancashire Archives

Lancashire Archives (LA) hold a number of documents relating to the church of St Peter's. These include vestry minute books for the periods of 1838–1852 (LA PR 3087/5/1), 1862–1868 (LA PR 3087/5/2), and 1859–1933 (LA PR 3087/5/1). These handwritten notebooks primarily refer to annual meetings for the election of wardens and do not detail day-to-day activities and management of the church or churchyard. Other archives relate to faculties for alterations to the soft fabric of the church and to planting in the churchyard. Also included is a detailed architectural and structural assessment made in 1968 prior to the demolition of the church (LA PR 3087/4/17) and a number of photographs, church leaflets, and inventories. Some of these are discussed in greater detail throughout the text in relevant sections.

The most valuable Lancashire Archives documents for present purposes were three hand-drawn plans of the graveyard (LA PR 3087/4/26, LA PR 3087/4/27, LA PR 3087/4/28) (Figs. 4.05–4.07). They were undated, but it was possible to date them approximately based on cross-referencing the detail they contained with the burial register (see p. 48).

Other sources

Other documentary sources include contemporary histories such as:

- P.A. Whittle's *Blackburn as It Is: A Topographical and Historical Account* (1852)
- *The Diary of Charles Tiplady, 1839–1873*
- W.A. Abram's *A History of Blackburn Town and Parish* (1877)

The historical and documentary resources held by Blackburn Library were also consulted, as well as the Cotton Town website compiled by the Library and Information Services division of Blackburn with Darwen Borough Council (www.cottontown.org). Data held on this website include trade directories for the town of Blackburn from 1814, 1818, 1848, and 1854, and many historic images.

Other documents, such as birth, marriage, and deaths records, the UK census, and the national probate calendar, were accessed online (www.ancestry.co.uk). Various historic maps were also consulted (e.g. Figs. 2.03, 2.04, 2.06).

Comparative sites

Julie Franklin

St Peter's, Blackburn, is the largest assemblage of its type to be excavated in the north of England. However, there are many large and broadly contemporary burial sites in London that have been fully published, which provide useful data with which to compare the St Peter's results. There are also a number of smaller sites in the Midlands and North which provide useful comparative data, though few of these have been fully analysed and published, and thus only crude preliminary statistics are available. The exception to this was St Martin-in-the-Bullring, Birmingham, a sizeable burial assemblage comprehensively published in 2006, though subsequent discoveries have overtaken some of its conclusions.

The most directly comparable site is that of Redearth Chapel, Darwen, a near-exactly contemporary, if considerably smaller, burial site just 7km to the south. The two sites shared many similarities, most notably in the distinctive local burial material culture. Redearth was excavated in 2008, but publication of the results was also delayed, with the latter stages of the publication schedule running broadly parallel with those of St Peter's. Thus, while there was communication between the two teams, there were limits to the detail possible in the statistical comparison between the two sites.

A summary of the comparable sites and references used throughout this publication is given in Table 1.02.

Organisation of this book

Julie Franklin

The book begins with a general project background and methodology (Chapter 1), followed by a historical background (Chapter 2).

Table 1.02. Comparable burial sites referenced in this publication (sites are ordered from north to south, but for those in London which are listed alphabetically).

Site	Site type	Burial date range	Number of burials	Reference	Report type
St Hilda's Parish Church, Coronation Street, South Shields, Tyne and Wear	Anglican churchyard	1816–*c* 1860	191	OAN 2011	Analysis report
St Michael and St Lawrence, Fewston, North Yorkshire	Anglican churchyard	Middle Ages to 19th c.	145	Caffell and Holst 2010	Grey literature assessment
St John the Evangelist, Blackpool	Anglican churchyard	1821–1873	*c* 12	OAN 2010	Grey literature assessment
Ebenezer Chapel, Leeds	Non-conformist chapel graveyard	Late 18th c. to 1848	21	Martin and Weston 2015	Grey literature assessment
St Peter's, Blackburn, Lancashire	Anglican churchyard	1821–*c* 1860	1,959	this volume	Monograph
Redearth Chapel, Darwen, Lancashire	Methodist chapel burial ground	1832–1861	131	Gibson and Griffiths 2011	Grey literature assessment
Square Chapel, Halifax	Non-conformist chapel graveyard	1772–*c* 1860	217	Williams 2016	Analysis report
Wakefield Cathedral	Anglican cathedral intramural burials	Mostly 18th–19th c.	112	Burgess *et al.* 2012	Journal paper
Swinton Unitarian Burial Ground, Greater Manchester	Unitarian burial ground	1863–1899	119	OAN in prep.	Analysis in prep.

(*Continued*)

Table 1.02. (*Continued*)

Site	Site type	Burial date range	Number of burials	Reference	Report type
Cross Street Chapel, Manchester	Unitarian chapel graveyard	Early 18th to mid-19th c.	241	Bell *et al.* 2017; Bell *et al.* 2021	Grey literature assessment; Booklet
St Peter's Church, Manchester	Anglican church crypt	*c* 1794 to 19th c.	Not stated	Bell *et al.* 2021	Booklet
Manchester Cathedral	Anglican cathedral graveyard	Early 18th to mid-19th c.	48	WA 2013	Grey literature assessment
Rotherham Minster	Anglican minster graveyard	Late 18th to mid-19th c.	60	Moretti *et al.* 2011	Analysis report
Sheffield Cathedral	Anglican cathedral graveyard	18th to mid-19th c.	100	O'Neill *et al.* 2007	Analysis report
St Peter's Collegiate church, Wolverhampton	Anglican church overflow burial ground	1819–1853	152	Adams and Colls 2007	Monograph
Park Street Burial Ground, Birmingham	Anglican church overflow burial ground	1810–*c* 1873	4,327	Franklin *et al.* 2021	Grey literature assessment
St Martin's-in-the-Bull Ring, Birmingham	Anglican churchyard	Mostly early 18th to mid-19th c.	857	Brickley *et al.* 2006b	Monograph
Rycote Chapel, Oxfordshire	Private family chapel crypt	1649–1884	24	Boston 2008	Grey literature assessment
Littlemore Chapel, Oxford	Baptist chapel	*c* 1850–1900	31	McCarthy *et al.* 2012	Journal paper
Quaker burial ground, Kingston-upon-Thames	Quaker burial ground	1664–1814	364	Bashford and Sibun 2007	Journal paper
All Saint's Chelsea	Anglican churchyard	*c* 1700 to mid-19th c.	290	Cowie *et al.* 2008	Monograph
Bow Baptist Church, Tower Hamlets	Baptist churchyard	1816–1854	416	Henderson *et al.* 2013	Monograph
Christ Church, Spitalfields, London	Anglican church crypt	1729–1852	*c* 1,000	Reeve and Adams 1993, vol. 1; Molleson *et al.* 1993, vol. 2; Cox 1996, popular pub.	Monograph
City Bunhill, Islington, London	Non-conformist burial ground	1833–1853	248	Connell and Miles 2010	Monograph
Cross Bones burial ground, Southwark, London	Unconsecrated burial ground	Mid-19th century	148	Brickley *et al.* 1999	Monograph
New Bunhill Fields, Southwark, London	Non-conformist burial ground	1821–1853	827	Miles and Connell 2012	Monograph
St George's church, Bloomsbury, London	Anglican church crypt	1800–1856	781	Boston *et al.* 2006	Analysis report
St Luke's church, Islington, London	Anglican churchyard and crypt	1751–1880	1,053	Boyle *et al.* 2005	Analysis report
St Mary and St Michael, Tower Hamlets	Catholic burial ground	1843–1854	705	Henderson *et al.* 2013	Monograph
St Marylebone, Westminster, London	Anglican churchyard	1740s–1850s	349	Miles *et al.* 2008	Monograph
St Marylebone, Paddington Street north burial ground	Anglican burial ground	1772–1853	386	Henderson *et al.* 2015	Monograph
St Pancras burial ground	Anglican burial ground	1792–1854	1,383	Emery and Woolridge 2011	Monograph
St Paul's Hammersmith	Anglican churchyard	1828–1853	80	OA 2009	Grey literature assessment
Sheen's burial ground, Tower Hamlets	Privately owned burial ground	1763–1854	254	Henderson *et al.* 2013	Monograph
St Nicholas' Church, Bathampton	Anglican churchyard	19th c.	*c* 40	Cox and Stock 1994	Journal paper

The results of and the information gleaned from the excavation and the post-excavation research and analysis are presented in Chapters 3–10. These begin with the history and archaeology of the church itself (Chapter 3). There is then an account of the archaeological results of the graveyard excavations (Chapter 4), followed by the artefactual findings. The finds assemblage was unusually large and rich compared to most contemporary sites, and thus the finds have been divided into groups based on function: coffins (Chapter 5), dress (Chapter 6), jewellery (Chapter 7), and grave goods (Chapter 8). The osteological analysis is presented next (Chapter 9), followed by the results of scientific analysis (Chapter 10; Appendices 1–2).

The final two chapters bring all the strands of evidence together. First there is a presentation of the historical research on select named individuals buried in the churchyard and combines this with available archaeological, artefactual, and osteological evidence to present as full a picture of their lives as possible (Chapter 11).

The last chapter draws all the results together and discusses them under themed headings related to the project aims and research questions (Chapter 12).

Project data is presented as a series of online digital appendices, covering osteological, artefactual (divided into coffins and other), and historic burial records.

Reporting conventions

Julie Franklin

Each burial has one number which covers the grave cut, fill, coffin, and skeleton. These numbers are given without brackets and prefixed SK. Numbers for other types of context are distinguished by round and square brackets. Thus conventions are as follows:

- Burials/graves/coffins/skeletons SK1234
- cut/structure [1234]
- fill/deposit (1234)

The church and burials are orientated distinctly north-east to south-west, but for ease of reference, this has been 'straightened out' in the text, and described based on a standard east–west orientation of the church and graves.

The following information is given for burials within the text and tables, where relevant, to locate them within the site:

- Area: the three excavation areas: North Area, north of the church (N); South Area, south of the church (S); and North-East Area, a separate area to the north-east of the church (NE) (Fig. 1.02).
- Row: the burials are arranged in rows that are numbered, and each row is prefixed with the area abbreviation, e.g. NE01, etc. (NB: while these rows followed the number markers on the churchyard wall, the row numbers applied to the archaeological remains are not the same as the historic row numbers) (Fig. 4.10).
- Plot: each grave plot within the row has a plot number based on the SK number of the lowermost burial.
- Order: the order denotes the place of the burials within the vertical stratigraphy of the plot, beginning with the lowermost.